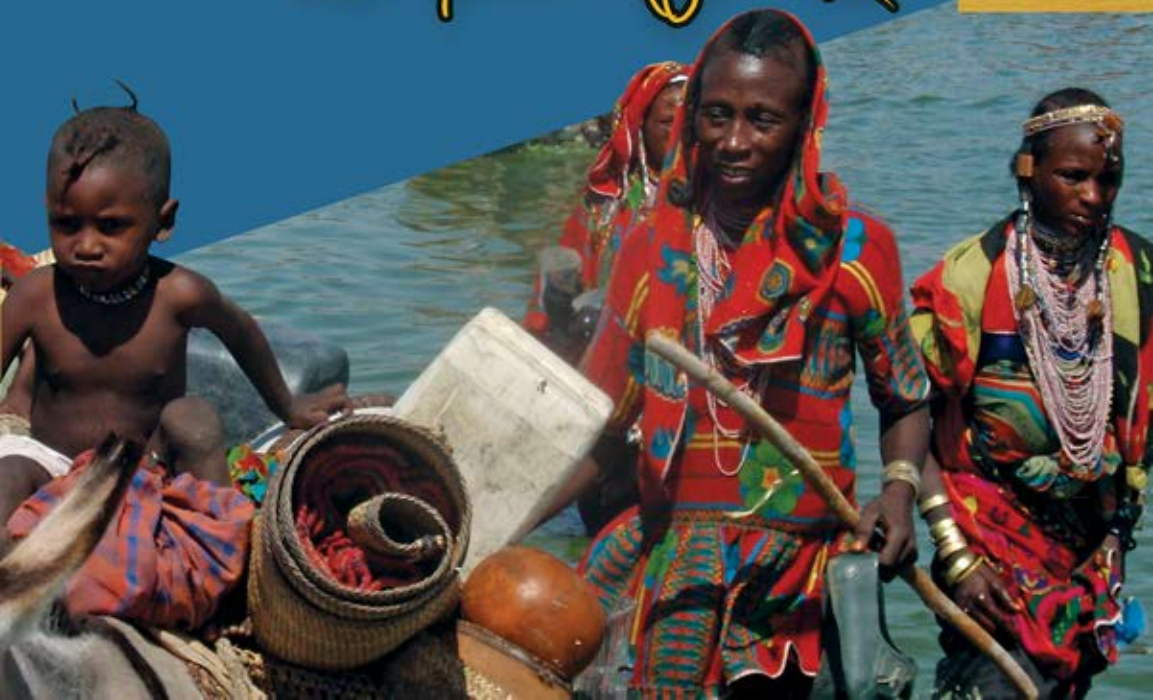


Sustaining and Enhancing Indigenous Peoples' Self-Determined Development

20 Years After Rio

Volume 2



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1 Indigenous Peoples' Thematic Papers on Sustainable, Self-Determined Development



PERSISTENCE OF INDIGENOUS PEOPLES' TRADITIONAL LOCAL ECONOMIES AND LIVELIHOODS: A KEY ACHIEVEMENT FOR SUSTAINABLE DEVELOPMENT

Victoria Tauli-Corpuz
Executive Director, Tebtebba

Introduction

Indigenous peoples' traditional local economies and livelihood systems, which are place-based or ecosystems-based, still exist. The persistence of these systems is directly linked with how indigenous peoples protected their territories and ecosystems, continue to practice their cultures and use their traditional knowledge and customary governance systems. We can still find such economic and livelihood systems among indigenous peoples who were able to fight for their rights to their lands, territories and resources, and their traditional knowledge and governance systems. Their economic and livelihood systems, which are still linked with their cultures, are underpinned by values of harmony with nature, reciprocity with neighbors as manifested in mutual labor exchanges, etc.

Looking more deeply into these communities, one would see that they still retain much of their traditional knowledge and customary governance systems.

Traditional economies would have long disappeared if these ecosystems were destroyed or indigenous peoples were displaced from their territories where these ecosystems are found. The extent of their abilities to adapt to environmental, economic, social, cultural, and political changes also determines the vibrancy of these traditional economic systems. This means that they also have to adapt to economic changes such as the entry of the cash economy into their communities. In spite of the fact that many indigenous peoples are displaced from their traditional territories, forcibly or otherwise, there are still many who opt to stay behind and continue making their local economies work.

Indigenous peoples' capacities to ensure the continuing existence and viability of their traditional economic and livelihood systems are one of their key contributions to sustainable development. Most of the world's remaining biodiversity and cultural diversity are still found in their ancestral territories and speaks volumes of what these contributions are. It is also in these same communities where thousands of indigenous languages are still spoken. According to UNESCO and the UN Permanent Forum on Indigenous Issues (UNPFII), out of the remaining 6,000 languages in the world today, 4,000 of these are spoken by indigenous peoples.[1]

A significant number of the remaining tropical and semi-tropical forests, as well as boreal forests, are found in indigenous peoples' territories. But these are still highly threatened, especially if the rights of indigenous peoples, enshrined in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), are not respected, protected and fulfilled by States and corporations.

Indigenous peoples' traditional livelihoods include, among others, shifting cultivation or rotational farming, foraging, trapping or hunting and gathering, fishing, agroforestry, pastoralism and herding; high montane agriculture and fixed-field agriculture, animal husbandry, small-scale mining, weaving, bead-making, blacksmithing, etc.

The produce of those engaged in shifting cultivation or rotational agriculture is mainly for subsistence and the little surplus produced is sold in local markets. Pastoralists and

herders usually produce surplus meat, dairy, hides and wool, which go to the market. The great majority of indigenous peoples, which are estimated to be around 400 million, still practice their traditional economic and livelihood systems, mixed with other economies. This is contrary to projections that these systems will disintegrate, especially with the dominance and globalization of the capitalist market economy.

In this paper, I am making a case that the Heads of States and ministers who will take part in Rio +20 should recognize that sustaining the traditional economies of indigenous peoples and protecting the ecosystems upon which these are based is a key factor in transforming the world to become more sustainable and just. Twenty years after Rio and 10 years after Johannesburg, it is us, indigenous peoples, who are among those who can claim that we are among those who have implemented some of the goals of Agenda 21 and the Johannesburg Plan of Implementation. This we did in the face of tremendous obstacles and challenges. Some of these achievements were done jointly with governments, such as the adoption of the UN Declaration on the Rights of Indigenous Peoples and the setting up of bodies like the UN Permanent Forum on Indigenous Issues, the Expert Mechanism on Indigenous Peoples' Rights, and the Special Rapporteur on the Rights of Indigenous Peoples.

The dominant economic model, which is the global capitalist market economy, remains as the biggest challenge we face in our attempts to protect our ecosystems and our economies.

How we, indigenous peoples, were able sustain our economic systems, traditional knowledge and customary norms and laws and prevent these from disappearing is a story worth telling. Part of this story is an analysis of the challenges we face as we assert the viability and validity of our own economic and livelihood systems.

Some of the questions which I will try to answer are the following: How are we protecting our ecosystems and how are we sustaining our local economic and livelihood systems amidst a bigger world where infinite economic growth is king? What are our counter-proposals to change this dominant eco-

nomic development paradigm? How are we using the gains we won to further pursue our vision for a just and sustainable world which we would like to live as a legacy to our seventh generation?

Confronting Challenges and Realities in Rio +20

Twenty years after the Rio 1992 UN Conference on Environment and Development (UNCED),[2] Heads of States, diplomats, representatives of the nine Major Groups, other civil society groups and the private sector will show up again in Rio. We are hoping that this process includes a serious examination on how States and the world at large implemented Agenda 21 and the Johannesburg Plan of Implementation on Sustainable Development. For us, the gravity of the multiple economic and ecological crises, which continues up to now, is one evidence that generally the States failed in shaping an economic system that is sustainable. The financial market played the key role in bringing about the financial and economic crisis and yet, financialization is still being pushed as part of the "green economy" agenda.

Promotion of individual self-interest, sustained capital accumulation, infinite growth, competitiveness, profit maximization, short-term profitability, overexploitation of natural resources and hyper-consumption—all these are the values and behaviors fully encouraged by the capitalist market economy. These, in fact, are regarded as key drivers for progress and economic growth, which are the avowed goals of most governments, colonial or post-colonial, capitalist or socialist. Even the term "sustainable development," when used by corporations, usually means how they can sustain their economic interests. Ecological sustainability and economic, environmental and social justice and equity usually occupy the back seat. The promise is that economic growth will bring about development and modernity for "underdeveloped" countries and for "backward and primitive people," like indigenous peoples.

If these cultural underpinnings of the capitalist economy are not changed and individuals keep on internalizing and living these, there will not be much hope for real economic transformation.

The defining characteristic of the dominant economic system is the incessant pursuit of economic growth through the unhampered production and consumption of goods and services. To further remove obstacles to the global capitalist market economy, further liberalization, deregulation and privatization were prescribed to most countries. The international and sexual division of labor, which relegates most developing countries as sources of raw materials and cheap labor and women into the reproductive realm or the care economy and to subsistence production, made production more efficient.

As the subsistence economies of indigenous peoples were the square peg, which did not fit into the round hole of infinite economic growth, steps were taken to undermine these economies. Countless resistance struggles were fought and continue to be waged by our ancestors and us, present generations. Most of our fights are mainly against the systematic attempts of states and corporations to expropriate our lands for their development projects and investments and their efforts to extract natural resources. These include the struggles for our rights to our lands, territories and resources, campaigns around food sovereignty and against genetically modified organisms and seeds, hydroelectric dams and mining, logging and monoculture plantations, as well as campaigns against militarism.

The protection of territories and ecosystems from destruction and appropriation and the assertion of basic human rights, particularly the right to self-determination, have been indigenous peoples' preoccupation since time immemorial. The challenges we face are even greater in these times because the last remaining frontiers of the most coveted natural resources are found in our territories. Even if we achieved some gains, such as the UNDRIP, which adds to our instruments for resistance and re-building, there are many attempts from states and corporations to disregard or coopt these gains. One classic example, which is has already been experienced by

indigenous peoples in various parts of the world, is the way states and corporation distort the interpretation and implementation of the right to free, prior and informed consent (FPIC).

The gross power imbalance between us and the nation-states and corporations is one reality we have to deal with. A developed or emerging country, which wants to have access to resources found in our territories, will find this easy to do because most of the governments in our countries already adopted laws that weakened their capacities to regulate the market; and have liberalized investment laws to provide greater ownership and control to foreign corporation and privatized state institutions that provide social services.

These are the key elements of the neo-liberal ideology which have been in place for the past 30 years. Institutions like the World Bank, the International Monetary Fund, the Organization of Economic Cooperation and Development (OECD), and the World Trade Organization, helped in pushing for these neo-liberal policies. New formations like the G-20 (Group of 20), composed of the richest countries in the world, are also wielding greater power to facilitate extraction of our resources to feed their own economic interests and agenda.

There is no question that neo-liberalism has facilitated the further encroachment of state and corporate interests into our territories. This is seen in the increase in investments in our communities, such as in mining, agribusiness plantations, oil and gas extraction, and logging, among others. Liberalized laws trump indigenous peoples' rights laws where these exist. In countries where there are no indigenous peoples' rights laws, the chances of getting such legislations in place are becoming slimmer.

The United Nations, which we actively engaged with and which we are grateful to, because it finally adopted the UNDRIP, is still generally weak, especially in terms of making its members comply with their obligations to international human rights law and environmental law. Getting States to comply with their international obligations and to implement their own laws, which are consistent with these standards, is difficult.

We basically rely on our own strength and agency and the solidarity support we can get from other social movements and communities and individuals who can identify their causes with ours. Among many of the realities we face is the daily brainwashing from the mainstream education system and the media on the superiority of infinite economic growth and extractivist development under the capitalist market economy. The reality remains that legal and illegal ways are used by powerful vested interests to continue encroaching in and exploiting our lands, territories and resources. Political, economic and military might of the powerful elites are deployed against any resistance to their grand schemes of exploitation. The military and police forces and armed paramilitary groups are used to perpetuate their interests. It is not any wonder that massive violations of our civil, political, economic, cultural and social rights continue, together with the demonization of our movements, organizations, and institutions.

We are addressing many of these issues at all levels and we link up with other peoples' and social movements, as well as with academia, churches, and even governments who are willing to support our struggles. We have to admit, however, that fragmentation and non-coordination between social movements, within NGOs, and even within government and intergovernmental bodies remain a problem. There is not much coordination and working together between peoples and social movements in the national and global arenas. As far as governments and intergovernmental organizations are concerned, bodies dealing with human rights and environmental issues are also not coordinating their efforts and programs. The more powerful and better-funded agencies of governments are those promoting investment liberalization and extractivist programs and projects. Those involved with human rights and environmental issues are weak and underfunded, to say the least.

Some of us are hoping that Rio +20 will be one global space where there will be more serious, coordinated efforts to address economic, environmental, social and cultural issues in a genuinely holistic and comprehensive manner. This is what is asked of all of us—governments, civil society, and the private

sector, especially in this time where we face multiple economic, ecological and social crises. Seeing the slow progress, however, in reaching agreements on the outcome document called "The Future We Want," this might not be a realistic wish. And knowing how multilateralism works within the United Nations and the divergent interests of member-states and non-state actors, we cannot be over optimistic.

Building On Our Gains

On balance, however, we cannot also afford to be pessimistic and become doomsday prophets. We have to recognize and use the gains we have achieved in more than 500 years of struggle against colonialism and neo-colonialism. The fact that many of us still continue to inhabit our traditional territories and ecosystems is because of our resistance struggles. The fact that we still maintain some of our traditional knowledge, continue to speak our own languages, and practice some of our indigenous socio-political systems and cultures, as well as maintained several of our own economic and livelihood systems, are matters worth celebrating.

Chapter 26 of Agenda 21, which is entitled "Recognizing and Strengthening the Role of Indigenous People and their Communities" identified as one of its objectives in paragraph 26.3.a.:

> *[The] stablishment of a process to empower indigenous people and their communities through measures that include: i. Adoption or strengthening of appropriate policies and/or legal instruments at the national level; ii. Recognition that the lands of indigenous people and their communities should be protected from activities that are environmentally unsound or that the indigenous people concerned consider to be socially and culturally inappropriate; iii. Recognition of their values, traditional knowledge and resource management practices with a view to promoting environmentally sound and sustainable development; iv. Recognition that traditional*

and direct dependence on renewable resources and ecosystems, including sustainable harvesting, continues to be essential to the cultural, economic and physical well-being of indigenous people and their communities.

Under the heading "Activities," Paragraph 26.4. identified measures, which governments should take, that include "a. Consider the ratification and application of existing international conventions relevant to indigenous people and their communities (where not yet done) and provide support for the adoption by the General Assembly of a declaration on indigenous rights"; and "b. Adopt or strengthen appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property and the right to preserve customary and administrative systems and practices."

So if we were to assess what were achieved from these objectives, getting the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted, undoubtedly, is one of the most important gains. Almost 25 years of work by us, indigenous peoples, were spent in working jointly with experts and states to draft, negotiate and adopt the UNDRIP. In 13 September 2007, 15 years after Agenda 21, the UN General Assembly finally adopted the UNDRIP. I have been actively engaged in the work around the UNDRIP, before and after Rio 92, so it was extremely gratifying to be able to help achieve this goal.

The UNDRIP is slowly becoming recognized as international customary law as several Supreme Court decisions of some States and decisions of UN Treaty Bodies and other intergovernmental bodies, like the Inter-American Court of Human Rights, invoked this in rulings they made in favor of indigenous peoples.[3] Several bodies and procedures within the UN addressing indigenous peoples' rights and issues were also established within the first decade of the 21st century. These are the UN Permanent Forum on Indigenous Issues (UNPFII), the UN Special Rapporteur on the Rights of Indigenous Peoples (UNSRRIP) and the Expert Mechanism on the Rights of Indigenous Peoples (EMRIP). The visibility and participation of indigenous peoples in sessions of the Convention on Biological Diversity (CBD) and the UN

Framework Convention on Climate Change (UNFCCC) has significantly increased.

Slowly, indigenous peoples are learning to use UN Treaty Bodies and complaints mechanisms of other intergovernmental bodies to raise their grievances over oil palm plantations, mining, oil and gas companies, and big infrastructure projects like mega-hydroelectric dams.

Our ancestors have instructed us that it is our pre-ordained responsibility to ensure that our children and grandchildren, seven generations ahead, will inherit a livable and humane world. This is our challenge. The implementation of the UNDRIP and the ILO Convention No. 169, as well as all human rights instruments, is crucial if we want to ensure this. Likewise, we cannot give up in pressuring States to comply with their obligations to environmental legal conventions like the ones agreed in Rio in 1992, the CBD, the UNFCCC and the UN Convention to Combat Desertification.

It is within this context that we are more keen to work on how we, ourselves, are going to operationalize our right to self-determination in our own communities and territories. The right to self-determination, which is Article 3 of the UNDRIP, says, "*Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development*." This lays the foundation for strengthening indigenous peoples' economic and livelihood systems.

Buen Vivir, Sumak Kawsay and Indigenous Peoples' Concepts of the Living Well

Some progressive governments, which won the elections in Latin America, such as the Morales government in Bolivia and the Correa government in Ecuador, were elected on the basis of their pronouncements that they would fight against neo-liberalism. Strong indigenous peoples' movements in

those countries contributed in bringing these governments to power. These governments worked for the adoption of new national constitutions, which embedded the concepts of *buen vivir/sumak kawsay* (good life, living well but not better than others) and the rights of nature or Mother Earth. Such concepts, which are based on indigenous values and practice, have become more visible as President Evo Morales and President Rafael Correa adopted these to be part of their constitutions. There are now very vibrant and dynamic debates around these, especially in relation to the search for alternatives to neo-liberal thinking and practice.

The speech, which Evo Morales made during the General Assemby of the UN in September 2009, still rings loud in our ears and in our hearts:

> *For the indigenous movement, the Planet Earth is something sacred… I want to tell you that if we talk, if we fight, if we work for the well-being of our peoples, first we have to guarantee the well-being of Mother Earth. If we don't guarantee the well-being of Mother Earth, it is impossible to guarantee the well-being of our people who live in this planet.*

Sumak kawsay *(*Quichua*); suma qamaña (*Aymara) and buen vivir or *vivir (*Spanish), are traditional concepts which reflect the lifeways and identities of the Aymara and Quechua peoples. There are many equivalents of these concepts among other indigenous peoples, such as *laman laka (*Miskitu), *mino-bimaatisiiwin* (Anishinaabeg, Cree), *gawis ay biag (*Kankana-ey Igorot). All of these are phrases used to capture our concepts of the "good life," "good living," "living well," "well-being," "life to the fullest," or "commonweal."[4] These English translations, however, are not substantially equivalent to the essence of these indigenous concepts.

Maybe this is due to the limitations of the English language, itself. Or because the common use of these terms refer more to the human individual's well-being or good life in the here and now; and if this refers to the present, it is within the context of capitalism and neo-liberalism. Well-being in the

Western world is more about individual well-being, whereas in the indigenous world, this refers more to collective and individual well-being. Another explanation is that the grammatical organization of English is usually noun-based, which is consistent with linear thinking and polarity. So, well-being can be linked with other nouns such as food, money, wealth, power, etc.

Indigenous languages, on the other hand, are usually verb-based, process-related, relational and linked to cyclical thinking and duality. Thus, the closest translations of sumak kawsay, buen vivir, laman laka or gawis ay biag are "living well, living to the fullest, relating well with others, sharing one's wealth and good fortune." For many indigenous peoples, "good living," "living well" or "living to the fullest" refers to maintaining the balance between the well-being of the human collective and the individual; and promoting relationships of harmony, reciprocity and solidarity with other human beings, with nature and all living and non-living creatures, as well as with the ancestors of the past and the generations of the future.

When we speak of community, it is not just the present community. Our community includes our ancestors, the seen and the unseen, and the yet-to-be-born generations (Mairin Iwanka Raya, 2008). The community also includes deities and the spirits in the forests and trees, and in various bodies of water like the lakes and the springs. Community includes the entirety of nature as we see ourselves as part of nature.

This way of defining a community is reflected in our cultures, our values, and our spirituality. Living well is very much linked to collectivity and as being part of the whole. The whole is the community and nature. Since we regard ourselves as part of nature, we believe that whatever we do to nature will directly affect us. Whatever we do to others, whether good or bad, will come back to us.

Among the things, we, Kankana-ey Igorot, are taught at a very young age are matters which are *lawa* (taboo) in English, *innayan*, which is translated as beware or "do not do it" and *ayew*, which is not to waste anything such as food, water,

firewood, etc. It is lawa to pollute water sources, to steal, and to lie. It is ka-a-ayew and innayan to gather fruits more than you can consume or throw away food you cannot eat because you are already full. So when President Morales explained in an audience we had with him, that in Aymara, *suma qamaña* includes, among others, "do not be lazy, do not steal and do not lie," these resonated very well with me and the rest of my indigenous colleagues present in that meeting.

One of the events we, Kankana-ey Igorot, try our best to be present are the funeral wakes of any of our relatives. This is where stories about our genealogy are told so you will be able to know the members of your extended clan and who your ancestors were. In this event, the character of the dead will be dissected. If you were good while you were alive, participants in the wake who know you will talk endlessly about this. But if you were bad, they will also recall how bad you were. Some of your deeds, which shall be talked about, is what you did in performing your responsibility in sustaining the communal forests, rice fields, swidden farms or water sources. Since most people would like their children and grandchildren to be proud of them even in death, this is a very good incentive to be a good person and neighbor while one is alive.

Many of us have rituals to honor our ancestors. Anthropologists call this ancestor worship. In our day-to-day lives, we also need to remind ourselves that whatever we do will have repercussions for our future generations.

In shaping our economic systems we just do not think of the present economy but that of the past and the economy for the future. Our traditional knowledge came from the past—from our ancestors. We are using this now, and we are trying our best to pass this to the young and instructing them to pass this to their own children and grandchildren.

When we do swidden farming or rotational agriculture, which is one of our traditional livelihoods, we ask permission from our ancestors and from the spirits of the land, the water and the trees. When we harvest, we always leave something for other living beings and we have a system of sharing this harvest with our neighbors. We need to maintain the fertility of the soil and preserve the forests from where the fertility and

the water come from. This is to ensure that future generations would still be able to use the same ecosystem to meet their basic needs.

Buen vivir, as explained to me by David Choquehanca, the Foreign Minister of Bolivia, "is living well but not better than others or at the cost of others."[5] He described this as a basic principle, which forms the foundation of a new development model, different from a neo-liberal one.

Sumak kawsay is the Quechua phrase for "fullness of life in a community, together with other persons and Nature" (Gudynas, 2011). Rene Ramirez, the former Minister of Higher Education Science and Technology of Ecuador, further explains that sumak kawsay is:

> *[A] complex concept, non-linear, historically developed, and constantly under revision, which identifies as goals the satisfaction of needs, the achievement of a dignified quality of life and death, to love and be loved, the healthy flourishing of all in peace and harmony with nature, the indefinite prolongation of cultures, free time for contemplation and emancipation, and the expansion and flourishing of liberties, opportunities and pote ntials (Thomson, 2011).*

Article 275 of the 2008 Constitution of Ecuador acknowledges that individuals, communities and nations possess rights and responsibilities and they should exercise their responsibilities by engaging in intercultural dialogues, respect for diversity and ensuring harmonious relationships with nature.

It is worthwhile looking into more depth into how the Morales and Correa governments are reinforcing indigenous peoples' traditional economies and livelihoods within the framework of buen vivir and sumak kawsay. We are seeing some inconsistencies in relation to this. Some indigenous peoples of Bolivia are vigilant in making Morales abide with his pronouncements, in terms of respecting rights of indigenous peoples and rights of Mother Earth. The 65-day long march in late 2011 of the Yucaré, Moxeño and Chimán indigenous peoples, together with other Amazonian and Andean Indians,

to stop Morales from building a highway cutting across their territory located in the TIPNIS (*Territorio Indigena y Parque Nacional Isiboro Sécure)* showed this vigilance. Apparently, no process to get their FPIC has been done.

What is most ironic about this Cochabamba-Beni Highway Project is that it is actually part of IIRSA (*Iniciativa para la Integración de la Infraestructura Regional Suramericana*). This was one of the most reviled projects repeatedly denounced by Via Campesina and other movements in South America as a project which promotes neoliberalism. The second section of this project, which is a 306-kilometer highway cutting across TIPNIS, will be paid by a loan of around US$45 million from the Brazilian National Economic and Social Development Bank (BNDES). This will help Brazil link with the Pacific Ocean, which will allow for cheaper and faster exportation of Brazilian products like soybeans, to Asia (Hines, 2011). This will also facilitate the marketing of coca leaves produced in cash crop monoculture farms in Chapare, the political base of Morales (Canessa, 2012).

A similar situation exists in Ecuador. Pres. Correa came into power through the support of social movements. The coming into being of the Correa Constitution was hailed by the movements and environmentalists the world over, because this constitution recognizes the rights of nature, rights to water, guarantees food sovereignty, and enshrines sumak kawsay. In addition, Correa established the Yasuni-ITT program, which will keep oil in the grounds of the Yasuni Park so that Ecuador will contribute in decreasing global greenhouse gas emissions.

Unfortunately, amidst all these, the government has also allowed the entry of mining companies from Canada, like Ascendant Copper, which is being charged of physically attacking people who are against the mine. Other Canadian mining companies, called Ecuacorriente and Kinross, have also been involved in dividing indigenous peoples through payments of money.

In 2010, the Correa government criminalized protests and branded some environmental organizations and indigenous peoples' organizations in Ecuador as terrorist organizations. Several leaders and activists who have opposed oil extraction,

mining, deforestation, pollution of waterways, etc. have been charged with terrorism, assault and robbery. Now they are criticizing Correa for being a neo-extractivist (Webber, 2010, interview with Gloria Chicaiza, Acción Ecológica).

These stories are distressing as one hopes that there will be real social transformation efforts in these countries where government leaders have been brought to power by social movements. But what these tell us, is that it is easy to rave and rant against neo-liberalism and speak the rhetoric of living well or good living. But if the dominant social, cultural and economic structures are not transformed to truly give more power to those who will thoroughly pursue a different track away from neo-liberalism, then the chances of success will be diminished.

Revalorization of indigenous peoples' traditional economies is one way of veering away from neo-liberalism. These are small-scale economies, decentralized and local, which will not fit easily within centralized schemes of economic development.

Compromises with those who have wielded power for so long in these countries need to be balanced with commitments to the victims of oppression, racism and exploitation. Maybe, there is a need to revisit the strategies of social movements to examine and explore what it will take to thoroughly restructure systems, change mindsets and behaviors of the general citizenry so that a core of the population who are dedicated to pursue social and economic transformation will be supported from beginning to end. How this can be done is not within the scope of this paper.

In the meantime, indigenous peoples, with their organizations and communities, will just have to continue empowering themselves and persist in strengthening their economic and livelihood systems and protecting their territories. They also have to work out how their customary governance systems over their ecosystems will be adapted and also practiced by the broader society as these have proven to be the ones that continue to save the remaining ecosystems in the world today.

Resistance and Adaptation of Indigenous Economic Systems to Mainstream Economic Development

An aspect of indigenous peoples' struggles against colonization and neo-liberalism is the fight for their right to continue practicing their traditional economies and livelihoods.

Colonization, in indigenous peoples' experiences, does not just refer to external colonization, which means acts of foreign colonizers from other lands. This also refers to internal colonization which took place after post-colonial nation-states had been established.

The settlers and the local elites of states, which gained political independence, became the new political and economic masters. Most of them basically continued the economic system brought in by the colonizers. Economic independence has not been achieved because the post-colonial economies are still tied up with the global market economy, which is controlled by the industrialized countries.

Nation-state building, accompanied by modernization and economic development, became the bane of indigenous peoples' lives. Our distinct identities and diverse nations, cultures and economic and livelihood systems were regarded as obstacles to national development and sovereignty. The concepts of one nation, one culture, one national language, territorial integrity, and national sovereignty were heralded as the main characteristics of a nation-state. Discrimination against indigenous peoples was promoted because they do not accept the policy of one national language, one culture and one nation and people. Assimilation policies, forced or not, were established and implemented by governments.

Loans, grants and technical assistance from multilateral organizations like the United Nations and from development aid bodies of so-called developed countries were all aimed at integrating national economies of ex-colonies into the global market economy. These led to the further denigration of the

indigenous peoples' local economic systems, which are basically for subsistence. Customary ownership and governance of indigenous lands, territories and resources were denied through constitutional provisions and laws declaring these as state lands, crown lands, military reservations, and national parks.

History has progressed and the demographics and economic systems in many of our communities started to change. Other people moved in because of many factors such as the setting up of local government units, schools and health centers manned by outsiders because there are no qualified indigenous persons; building of roads; transmigration policies of governments which came along economic activities like mining, logging, agricultural expansion; and displacement of other indigenous peoples from their communities.

Our economic and livelihood systems, which used to be mainly for subsistence, were being reshaped by the state to be integrated into the global market economy and to contribute to economic growth. Obviously, our subsistence economic systems, if these remain as they are, would not contribute to the cash economy. So governments facilitated the entry of private corporations, such as the mining industry, the forestry industry or agri-businesses, into our territories. Cash cropping was introduced through the departments of agriculture where agriculture extension workers were sent out to train indigenous subsistence farmers to shift to cash crop production. Workers from the dominant communities were brought in to do mining and logging activities.

Initially, subsidies or loans in the form of hybrid seeds, chemical fertilizers and pesticides were provided to push indigenous farmers to use these. In some places, irrigation systems were built to water these fields. In some communities, like those of ours in the Cordillera region in the Philippines, where we have our own irrigation systems already existing for thousands of years, the government tried to change these systems. Fortunately, most of our people resisted such attempts. When the conversion of some of the lands to monocropping for cash took place, subsidies disappeared and people had to shell out money from their pockets to buy these agricul-

tural inputs. Buying commercial agricultural inputs, paying for irrigation fees, selling cash crops in the market are the ways where economic growth takes place and Gross Domestic Product (GDP) is increased.

Economic growth and progress in the capitalist economy are mainly measured by GDP or Gross National Product (GNP). Indigenous peoples are among the many who are strongly critical of the dominant economic model and the use of GDP to measure progress and development. And this is for very good reasons. Unfortunately, up to now, GDP (even if this measure has been substantially debunked) is still used by most governments and the UN.

Like other critics, we do not see that GDP reflects accurately what is happening to people and nature. This measure does not factor in the social and environmental costs of economic activities, nor does it show how wealth is distributed among the population. These costs are considered externalities, and despite persistent recommendations that these so-called "externalities" be internalized or incorporated fully in what is being measured, this has not happened yet in any satisfactory manner.

GDP increases even if more people are in debt because of loans they incurred in buying agricultural inputs. GDP increases, even if more indigenous peoples are being displaced from their communities because of mining operations or because of dam building. GDP increases even if the lands of indigenous peoples are polluted by toxic mine tailings and toxic chemical fertilizers and pesticides and they can no longer use their lands to raise food for their domestic consumption. GDP increases when military operations are launched against indigenous peoples who are resisting government development projects because the government buys guns and hires more soldiers.

Reclaiming Indigenous Territories and Economic Systems

During colonization and in the earlier days of nation-state building, one form of resistance is moving away from valleys, where state control was much more entrenched, to the hills or mountains. This seems to be the case for several indigenous peoples in Southeast Asia. Scott, a historian who has done extensive research in this region, referred to these peoples as "barbarians by design." That "the 'barbarian' are not just 'there' as residue but may well have chosen their location, their subsistence practices, and their social structure to maintain their autonomy…" (James C. Scott, 2009). He further stated:

> *The characteristics that appear to stigmatize hill peoples—their location at the margins, their physical mobility, their swidden agriculture, their flexible social structure, their religious heterodoxy, their egalitarianism, and even the non-literate, oral cultures—far from being the mark of primitives left behind by civilization, are better seen on a long view as adaptations designed to evade both state capture and state formation.*

Whatever the histories of indigenous peoples are, especially those who maintained their traditional economic and livelihood systems, it can be said that these systems are still in place because of their conscious efforts to sustain these. These they have done and continue to do even in the face of aggressive and systematic efforts by governments to destroy such systems. Decisions and actions by governments have direct impacts on indigenous peoples' economic and livelihood systems. This is one reason why some indigenous peoples' organizations, institutions and movements continue to wage campaigns and engage in policy advocacy work to be able to influence these decisions. These we do from the local, national and global levels.

The struggles of indigenous peoples, particularly those who still live in their territories and whose livelihoods are mainly land-based, are struggles to have their rights to these lands, territories and resources respected, protected and fulfilled by governments. They want to continue to relate with their ecosystems in ways where these will continue to provide their basic needs for food, water, clean air, shelter and energy. In situations where the state, corporations or individuals try to curtail these relationships of reciprocity and solidarity with their ecosystems, indigenous peoples, almost always, fight back. These struggles, which also meant tremendous sacrifices in terms of lives and limbs, are significant contributions to the mosaic of indigenous peoples' contributions to the transformation and sustainability agenda.

While the implementation of the dominant development model is rammed down their throats, many indigenous peoples have not totally given up in doing their traditional livelihoods. Parts of their territories are still preserved so they can continue engaging in these economic activities. This is why there are still indigenous peoples who are shifting cultivators, pastoralists, hunters and gatherers, artisans, blacksmiths, small-scale miners, etc.

They are found in almost all the regions of the world—Asia, Africa, Arctic, Latin America and the Caribbean, North America, Russia, Eastern Europe and Transcaucasia, and the Pacific. There are still reindeer herders in Finland, Sweden, Norway, Russia and Mongolia. There are still foragers/hunters and gatherers, fishers and whalers in Africa, the Arctic, Asia, Latin America, North America, Greenland, Russia and the Pacific. There are still pastoralists in Kenya, Ethiopia, Tanzania, Uganda, Cameroon, Somalia, West Africa, India, Iran. There are still shifting cultivators or rotational farmers in many countries in Asia, Latin America, Pacific and in Africa. And the list goes on and on.

They have ensured that their territories and ecosystems are still protected and the biodiversity and cultural diversity in these spaces still exist. They have decided that they cannot accept the development plans of governments and multilat-

eral bodies and did what they can to resist some of these and persist in practicing their traditional economic systems.

Many of those who have gone through the development schemes of governments and have seen how many of these have failed to provide them the good life are now reverting back to their traditional livelihood systems. Even mainstream development thinkers today are now grudgingly recognizing the sustainability and economic viability of indigenous systems. The fact that ideas such as buen vivir, sumak kawsay, suma qamaña are gaining currency is one proof of this. It is not just indigenous peoples who are marginal to the state who are saying these. Now there are governments like Bolivia and Ecuador who are enshrining these concepts in their constitutions. How coherent these governments are in their actions remain to be seen.

Suffice it to say that they did positively contribute to making the discourse highly visible. Whether these governments will succeed in standing up against the capitalist market economy and its values remain to be seen. One measure is to evaluate how these governments are enhancing sustainable indigenous economies and livelihoods as well as the worldviews and cultural norms which underpin these. It goes without saying that we also need to see how well the rights of indigenous peoples to their lands, territories and resources and to self-determination are concretely fulfilled.

In the face of the recurring multiple economic and ecological crises, this is now the time to seriously challenge the unsustainability of capitalist market economy and work towards more pluralistic economic and socio-cultural systems, including those of indigenous peoples.

Indigenous Peoples' Sustainable, Self-Determined Development

To address some of these issues, Tebtebba organized a series of activities from 2008 around the issue of indigenous peoples' self-determined development. These included some research and a series of global consultations on the issue and the publication of a book,[6] which contained these researches and results of the workshops. We held dialogues among ourselves, key indigenous leaders and activists from various regions in the world, to share our own stories in terms of resisting the dominant development model and asserting our rights to determine what kind of development is appropriate for our communities. Then we also came together with kindred friends and colleagues from the donor community, the UN system, other NGOs and the academe to share our thoughts and cross-pollinate with each others' thinking and views.

It was in these series of meetings and dialogues where we coined the phrase "indigenous peoples' self-determined development." We were debating between popularizing the phrase "development with culture and identity" or this formulation. Most of us were convinced it should be self-determined development and thus, this is what we consistently used. There were long debates on whether we use the term development, considering that dominant development policies and actions created many of our problems. In the end we agreed we would still use this, but qualified this to be self-determined development. Article 3 of the UNDRIP, which is the foundational article of the Declaration, states, "*Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.*" The UNDRIP still used the term "development," so for the sake of consistency, we decided to still use this.

As the Chair of the UNPFII, I was able to convince the UN Permanent Forum on Indigenous Issues to adopt for its 2010 to 2011 sessions, the theme "Indigenous Peoples'

Development with Culture and Identity: Articles 3 and 32 of the UN Declaration on the Rights of Indigenous Peoples." Here we officially we presented the report of the series of global workshops we held and received some recommendations on how the indigenous peoples, UN member-states, UN agencies, funds and programs can support further the efforts of indigenous peoples to achieve self-determined development.

I would like to quote some of what I wrote in this book on self-determined development (Tauli-Corpuz, 2010):

> *Self-determined development for indigenous peoples is not a grand paradigmatic, generic alternative to mainstream development. It is simply part of our assertion of our right of self-determination and to remain as diverse and distinct cultures and communities. It captures the essence of our struggles since colonization to define our own development within the framework of our inherent rights and in consonance with the relationship we have with nature. It is our attempt to protect whatever remains of our indigenous cultural, economic and political systems and values which we want to sustain.*
>
> *These values include equity, reciprocity, solidarity, harmony between us and nature, collectivity and conservation of natural wealth for the seventh generation, among others. Our indigenous systems or parts of these and our traditional livelihoods still exist because we actively or passively resisted development, modernity and the violation of our human rights. We adapted to the changes, which came into our communities and accommodated some aspects of modernity. But this does not mean that we have totally abandoned our systems, worldviews and values. Some of our perspectives and values resonate with the essence of the human rights-based approach (HRBA) to development and the ecosystems approach, thus we are partial to the use of these frameworks to promote self-determined development.*

Conclusion

In this paper, I examined how indigenous peoples are addressing and managing to survive and surmount the present multiple economic, environmental and cultural crises. The fact that we still have vibrant ecosystem-based local economies and livelihoods, which we have adapted and sustained through generations, tells us that there is something right and sustainable in how we do things.

Many of us, who were brought up and lived or continue to live in such communities still have faith in the viability and sustainability of our economic and livelihood systems. Our ways of seeing, knowing and doing, which define who we are, especially in terms of how we assert our identities, relate with others and with nature, are crucial determining factors in sustaining our ecosystems. We see our efforts to assert our identities and strengthen our economic, socio-cultural and political systems as part of our responsibility to co-create a world that is more sustainable and just, which we can leave to our future generations.

Endnotes

[1] NEED TO SECURE SOURCE!!

[2] UNCED 1992 is commonly known as the Rio Summit or the Earth Summit. The outcome document of this process is Agenda 21, which contains Chapter 26: "Recognizing and Strengthening the Role of Indigenous People and their Communities."

[3] Bolivia also adopted the UNDRIP as their national law (2008). Several decisions such as the Belize Supreme Court Decision, which invoked UNDRIP in Maya vs Govt. of Belize (Oct. 18, 2007); Inter-American Court on Human Rights Judgement: Saramaka peoples vs Surinam – (Feb. 2008); Constitutions of Bolivia and Ecuador, contain some articles of the UNDRIP.

[4] Myrna Cunningham Kain proposes to use "commonweal," which goes beyond merely consuming things but enjoying social life in community with associated producers and members.

[5] I had several discussions with David Choquehuanca in two visits I did in Bolivia in my capacity as the Chair of the UNPFII. In my second visit in 2009, when the Bolivia government sponsored the pre-meeting of the UNPFII in Lake Titicaca, I asked him how they reconcile the concept of buen vivir with the increase in mineral, gas and oil exploration in the country. He admitted that this is still a matter being discussed within their political party, MAS (Movement for Socialism).

[6] This book, which was published in 2010, is entitled "Towards an Alternative Development Paradigm: Indigenous Peoples' Self-Determined Development."



THE ANDEAN WORLDVIEW OF EVER, INDIGENEITY & INDIGENOUS SUSTAINABLE, SELF-DETERMINED DEVELOPMENT IN A CONTEXT OF CLIMATE CHANGE & CLIMATE CRISIS[1]

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For many years development and preservation of ethnic, cultural and social identity were considered to be two conflicting objectives: attaining the first would inevitably mean sacrificing the second. Even more, it was often argued that the very culture of indigenous peoples (and of the poor in general) stands in the way of their development. As a result, programs to help indigenous peoples sought to replace their language, culture, and productive and agricultural practices.

But we are finding a better way: development based on indigenous peoples' own identity. In this view, the start-up capital for development is the cultural and social assets of native peoples, catalyzed by the addition of new mechanisms and resources.

- Victor Hugo Cardenas. Aymara, Former Vice President of Bolivia (1993-1997) Webstories. Jul 1, 1997. IDB

Introduction

The history of the encounter between the European colonizer and the indigenous peoples of *Abya Yala* (the Americas) has been the abusive dominance and forceful over-imposition of the colonizer's Western worldview/cosmovision and paradigms upon Abya Yala's indigenous bio-cultural landscapes. On this central issue, Luis Guillermo Lumbreras, an indigenous Quechua scholar from Peru, sharply notes:

> *At the time the Spaniards arrived, in […] 1531, Andean society had reached a stage of development comparable to that of Europe in the times of classical Greece and Rome. Tawantinsuyo, the great Inka…[confederation] extending through the Andes from Colombia to Chile, was a sophisticated urban society… The victorious Spaniards introduced an alien technology, which had been developed through thousands of years of experimentation, from the Old World's Paleolithic age to the Renaissance. It had served Europe well, but in a very different ecosystem. Convinced that the same techniques would work anywhere, the newcomers scorned those of native societies and set out to make the New World like the Old. Much of our continent's economic weakness and dependency can be traced to that fateful decision…*
>
> ***In the Andes, where the great Inka…[confederation] and its predecessors had achieved economic success on entirely different principles, the consequences were disastrous****…. **We Andeans began to measure our success by an 'index of modernity' which meant nothing other than how close our systems were to those of Europe.[…] (and later North America)***
>
> ***The West became our paradigm****; no time or resources would be invested in developing or reproducing the methods of the indigenous world, considered the antithesis of development and modernization.*
>
> *- Lumbreras 1991: 18-19, 22 (emphasis mine)*

Global, regional and country-level assessments about the linkages between development and indigenous peoples indicate that, aside from the colonial period, seven decades of mainstream development have caused more harm and threats to indigenous peoples than substantial benefits at all possible levels. In the Latin American region, according to Western standards, indigenous peoples continue being the poorest among the poor and face serious problems, in relation to health, employment, domestic violence, alcoholism, the loss of native languages, identity, land/territory, and the erosion of traditional governing structures/organizations. This trend in the region is similar to the indigenous peoples' global trend (Deruyttere 1997, Psacharopoulos and Patrinos 1994, Patrinos and Hall 2005, Carino 2009). A central question to this critical issue has been: Why has the development enterprise failed?

From its inception, the demise of the development enterprise has been a self-defeat. This demise is founded on the imposition of a mono-cultural Euro-American centered approach that is, simultaneously, top-down, colonial, assimilationist, extractivist, exogenous, and unsustainable. Above all, within its blueprint, is the dominant Western mechanistic worldview. Currently such approach(es) and worldview are facing a global crisis. For the first time in Earth's history, we are witnessing this crisis of sustainability through the openly global (environmental, ecological, economic, political, moral, spiritual, social) crisis (Tauli-Corpuz, Enkiwe-Abayao and de Chavez 2010, Mander and Tauli-Corpuz 2006, Battiste and Henderson 2000, Escobar 1995, Huizer 2000, Merchant 1992, Noorgard 1994, Pilgrim and Pretty 2010, Haverkort and Reijntjes 2006).

From the perspective of Andean elders, the answer to the failure of development and the current multiple global crises has been articulated with simplicity. The crises we are living and witnessing, Andean elders note, are due to the lack of respect of humans to nature, to the deities and among humans. The answer is then, "we have to come back to respect."

In various ways and degrees, indigenous peoples have not only resisted development's dominant approach and worldview but also strengthened their own indigenous ways.

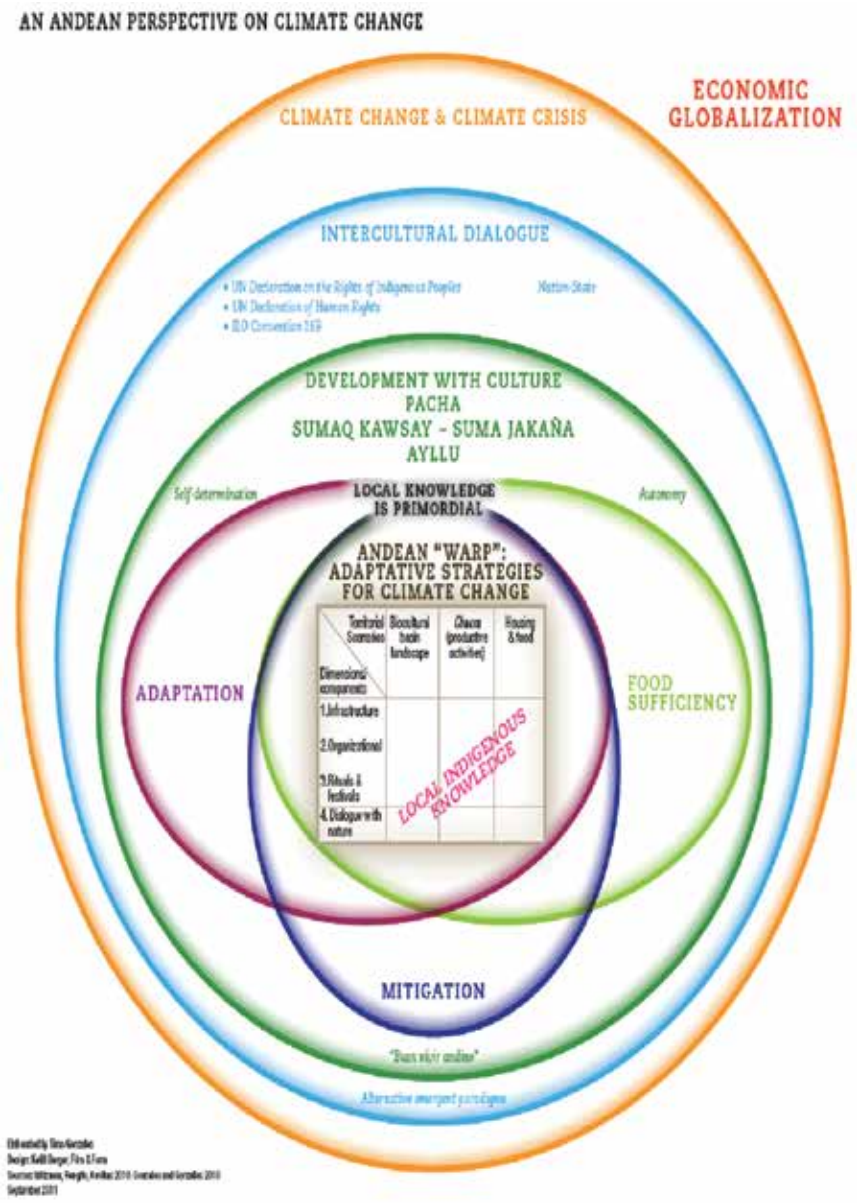
Through millennia these indigenous pre-colonial ways and principles have proven to be holistic and respectful of the web of relationships between humans, the environment and all living beings within both the visible and invisible living worlds. These principles, embedded within the indigenous peoples worldviews, have contributed to resilience and sustainability as a whole. Throughout colonization and neo-colonization, the clash of worldviews and the colonial over-imposition at a global scale have been detrimental for the health and loving nurturance of indigenous bio-cultural landscapes.

In this millennium the challenge for us all (indigenous peoples, development practitioners, institutions, governments and civil society) is to deepen and advance deconstructing colonization and development. This will allow in time, for the decolonization and regeneration of Mother Earth, our minds, democracy, development, society and bio-cultural landscapes: in short, life as a whole.

This intercultural challenge has multiple paths and names.[2] One of them, for the USA and beyond, has been suggested by Wes Jackson (1996) in "becoming Native to this Place." Another path has been named "cultural affirmation and the affirmation of life." This will be suggested by illustrating a unique ongoing case in the Peruvian Andes: the 20-year experience of the *Proyecto Andino de Tecnologias Campesinas*, (PRATEC, Andean Project for Peasant Technologies) and its associated Nuclei of Andean-Amazonian Cultural Affirmation (NACA), in a context of climate change. When presented with the choice between cultural affirmation or development, PRATEC-NACA have opted for the former option. Cultural affirmation's blue print and guidance are grounded on the principles of the millennial Andean cosmovision.

This paper will show that PRATEC and the Andean peasant Quechua and Aymara communities associated to NACAs have elaborated a sound holistic proposal and conceptual framework to cope with food sufficiency, biodiversity, agriculture, and climate change as crosscutting issues, among other relevant community issues. Such elaboration is grounded in a) their own diagnoses of the key issues linked to climate change, b) livelihood strategies based on their traditional knowledge

Figure 1.



Elaborated by Tirso Gonzales

and practices, and c) their own understanding of community governance and modalities of consultation for consensual decision making. All of these have the Andean cosmovision as their foundation and, at the same time, are interwoven within it (see Figure 1).

Local indigenous Andean knowledge is primordial and instrumental in their diagnostic and adaptation/mitigation strategies on climate change. A central tenet of their diagnostic is that the alterations of the weather are due to the lack of respect that humans have for nature, for the deities and for one another.

Today in the Americas there is a rich, diverse, and fast growing process of indigenous community-based resurgence. It is a conscious effort of cultural affirmation, regeneration, and decolonization supported by a contemporary indigenous intelligentsia. This intelligentsia is informed by their resilient indigenous worldviews, in response to the failure and crisis of modernization in the countryside. Innovative use of research methodologies and techniques is central in this long-term endeavor, requiring full commitment.

Andean Worldview And Indigeneity: A Blue Print and a Path to Regenerate the Sustainability of the Andean Biocultural Landscape

Despite development aggression and erosive colonization, today, indigenous bio-cultural landscapes and agricultural diversity are the result of indigenous peoples' ancient ingenuity, knowledge/saberes[3] and cultural-place-based agri-*cultures*.[4] The interrelations that this worldview sustains take place within each rural community. Their agricultural systems are largely informed by a worldview based on place, balance, interdependence, nurturance, reciprocity, and respect.

Conceptual Framework: The Andean Cosmovision

Concepts are embedded within a particular culture and worldview. For instance, development, agriculture, place, sustainability, nature, culture, knowledge, seed, kinship, biodiversity, environment, ecosystem, and conservation do not hold the same meaning in every culture. The Euro-American concept of "the good life"[5] is far removed from that of indigenous peoples.

For the case of the South American Andes, an important indigenous-peasant contribution is based on the conscious and fine reconstruction and regeneration of the Andean indigenous philosophical, theoretical, methodological, research, and knowledge generation-validation corpus, informed by the Andean-Amazonian cosmovision of *ever*[6] (see Figure 2).

The Andean indigenous proxy for development is synthesized in the complexity of the term Sumaq Kawsay[7] Allin Kawsay in Quechua, and Suma Qamaña in Aymara (the good life, good living[8]). Sumaq Kawsay takes place within the local pacha (local bio-cultural and ritual landscape; macrocosm at the microcosm level). Within the local pacha we live in Ayllu. Ayllu is composed of three communities (human beings/Runas, nature/Sallqa, deities/Wacas, Apus). It is a community of equivalent beings, where everything, the visible and invisible is alive. Ayllu is a kinship group, but it is not restricted to human lineage/blood kinship; it includes each member of the local pacha (three communities). Harmony is procured through dialogue, reciprocity, rituals, ceremonies, festivities and a mutual communal nurturing (Ayni) relationship, respectfully, among the three communities conforming to the local, pacha and for all its members; nobody is excluded.

Figure 2.

Place and the Andean Cosmovision / Worldview
Local Pacha: Representation of the Macrocosm at
the Microcosm Level



Source: (Valladolid 1992; Gonzales and Gonzalez 2010; IAASTD 2009b).

For the last 60 years, international development and Latin American rural and agricultural development agencies have

worked with concepts and paradigms that are unsustainable and foreign to indigenous peoples' "agri-*cultures*" (IAASTD 2009b; Escobar 1995; Gonzales et al. 2010). This has precluded intercultural dialogue between Western scientific knowledge and indigenous knowledge systems and the recognition of the potential of indigenous peoples' worldviews and systems. It has also precluded the relevance of those community-based mechanisms and cultural practices, based on traditional knowledge, from fostering the revitalization of food security, and biodiversity conservation.

In order to overcome such a situation, it is extremely important to understand that when dealing with indigenous peoples, key issues such as food security, climate change and biodiversity conservation have to be approached from the indigenous perspective. From the perspective of the Andean indigenous worldview of Ever, culture and nature are not separate. This is a fundamental distinction from the dominant, Western worldview (Pretty and Pilgrim 2010; Forbes 2001; Ishizawa 2009). Andean life revolves around agriculture. The Andean indigenous proxy for development is synthesized in the complexity of the term Sumaq Kawsay,[9] in Quechua, and Suma Jakaña or Qamaña in Aymara (good living) (Tauli-Corpuz et al. 2010, 118-149; Walsh 2010) (see Figure 2).

Through dialogue and conversation, Andean indigenous peasants have developed sophisticated responses to the variety of beings inhabiting a particular agricultural place or *chacra*, the small plot of land at the centre of everyday practices and rituality. The chacra is harbored within pacha, the bio-cultural landscape that Andean indigenous peoples have become intimate with, the landscape that they have come to know in all its expressions over time. Through ritual, the Andean worldview purports to sustain the creation and recreation of diversity in all of its expressions and practices. The contemporary concept of sustainability is intrinsic to this millenary worldview; the Andean cosmovision is devoted to the attainment of balance and harmony among all living beings demonstrated both in daily and ritual practices.

This unique approach to life has rarely been understood by the colonizing mentality and its dominant Euro-American

centered view of the world that has dominated for the last 500 years, thus marginalizing and threatening the Andean way of life (Chuyma 2006; Huizer 2000; Van Kessel and Condori 1992). It is important, therefore, to identify where and how such colonial mindsets continue to obstruct the growth, regeneration and strengthening of the indigenous worldview, such as the Andean worldview.

Emerging "Invisible" and Culturally Sensitive Alternative Approaches to Indigenous Peoples' Endogenous Development: Naca-Pratec's Proposal

NACA-PRATEC's proposal takes up the challenge by focusing on Andean community-based mechanisms, traditional knowledge and cultural practices that contribute to the conservation of biodiversity and food security as the foundation and engine for Andean-Amazonian cultural affirmation and the affirmation of life as a whole. This foundation is rooted in the Andean cosmovision of Ever. This is precisely what is already informing the next generation of groundbreaking culturally sensitive projects involving external intervention/players (e.g., international development agencies, nation-state, and multilateral organizations). The outcomes of NACA-PRATEC's accompaniment of Andean-Amazonian communities are already contributing to a fundamental reconsideration of mainstream rural development, biodiversity conservation and food security strategies in the context of climate change. They also recognize the centrality and soundness of the Andean indigenous community. For the last 20 years, NACA and PRATEC have worked patiently and diligently advocating for respectful dialogue between different knowledge systems and "saberes," which requires moving beyond false epistemic superiorities.

The perspectives of indigenous communities in their assessments and proposed solutions to address climate change, food security and biodiversity conservation challenges are grounded in (i) their own diagnoses of the issues involved in the regeneration of biodiversity and food security, (ii) livelihood strategies based on their traditional knowledge and practices,

and (iii) their own understanding of community governance and modalities of consultation for consensual decision making. NACA and PRATEC have gathered and systematized crucial information that has generated in-depth, ground-based data. Through this data, it is possible to build strategies for including indigenous communities as key global partners in the discourse of mitigation and/or adaptation to climate change and to assure food security and the sustainability of global biodiversity (Ishizawa et al. 2010a,b; Ishizawa 2009).

NACA and PRATEC's goal is to strengthen the Andean-Amazonian cosmovision, the nurturer of bio-cultural diversity. This takes shape in four ways. First, through strengthening the nurturance of the local pacha (chacras/crop fields, mountains, and natural pastures) through community work (Ayni, Minga, Choba Choba). Second, through the organic strengthening and nurturance of the Ayllu's organicity-traditional governance (traditional authorities). Third, through the recovery of respect and love for deities and nature, through the strengthening of the nurturance of rituals and festivities. Lastly, through the strengthening of regional spaces (seed's paths), where seed diversity and saberes regenerate through visits among indigenous peasants at the local, regional and national levels. In the Andes, without the strengthening of respect and affection for the diversity of Kawsay Mama (Mother-Seed), there will not be Sumaq Kawsay (good living in community) (Valladolid 2010, 20). Tables 1 and 2 briefly outline what is part and parcel of a more comprehensive work done by PRATEC and NACA. In particular, the project was carried out by means of the 2002-2009 *Fondo de Iniciativas para la Afirmacion Cultural* (FIAC), (Initiatives Fund for Cultural Affirmation), supported by the Swiss Foundation Traditions for Tomorrow.

Movements of cultural affirmation such as PRATEC and NACA are also an affirmative form of deprofessionalized intellectual labor and the firm assertion of the existence of other worldviews and paradigms, which do not conform to the Western dominant worldview and related paradigms. PRATEC-NACA's movement of cultural affirmation is one concerned with the affirmation of life as a whole, in order to nurture a culturally diverse world through the recovery

Table 1. Conceptual Frame/Matrix

Andean "Warp"/Tapestry: Community-Based Adaptive Strategies for Climate Change			
Territorial Scenarios (8 Natural Regions. 82 of the planet's 103 life zones) **Dimensions/Components**	Basin's bio-cultural landscape	Chacra (productive activity)	Housing & Food
1. Infrastructure			
2. Organizational			
3. Rituals & Festivities			
4. Dialogue with Nature			

Elaborated by (Tirso Gonzales 2011).

and revitalization of the agricultural/cattle raising and cultural practices of Andean-Amazonian indigenous peoples. It is aligned with the interests of indigenous communities in a process of acompañamiento, walking side by side with, and facilitating the collection and systematization of, indigenous epistemologies. These epistemologies are grounded in a deep sense of pacha, place, time that is, the world, but also pacha mama, the portion of the world visible on the surface of the earth (Ishizawa 2009; PRATEC 2001; Valladolid 2001).

Table 2. Traditional Andean Warp: Adaptive Strategies for Climate Crisis in the Sallqa or Puna Andean Landscape[10]

Scope of Nurturance Adaptive Community Practices	**Intermediate Activities** Quechua landscape: *sallqa or puna* (4,000 to 5,000 masl)			
	Nurturance of Water	Nurturance of Woodlands (Andean-Amazonian)	Nurturance of Sacred Woodlands	Nurturance of Grassland
1. Infrastructure	Recovery of lagoons for water harvesting Construction of irrigation canals Repairing of *acequias* Fencing of *puquiales* (spring water)	Closing of woodlands Reforestation with bushes and native trees Construction of barnyards (corrales) for the protection of native trees	Construction of crosses and shrines in the tutelary hills Recovery of the appearance of the Apus, Wamanis (mountain protectors)	Construction of pasture irrigation systems: *bofedales* (wetlands) Recovery and improvement of the grasslands Construction of temporary houses in the Puna
2. Organizational: family, communal and inter-communal	Recovery of the water's traditional authority	Recovery of the woodlands' traditional authority Chaku[11] of woodlands Chaku ritual of trees & bushes	Recovery and strengthening of Andean priests	Recovery of the authorities for the areas of rotational grazing *(Astanas)* Construction of temporary housing in the Puna

3. Rituals and Festivities	Festivity of *acequias* (irrigation ditch/canal) cleaning Festive and ritual visits to the "ojo de agua" (waterhole) Ritual consumption of the puquios' (spring water) water	Festivities to the woodlands: the vigawantuy[12]	Rituals to the *Apus* and Achachilas (mountain protectors) Protection of the ceremonial centres	"Herranzas" (branding and mating) ritual with the animals
4. Dialogue with nature		Conversation with trees and bushes' flowering		Conversation with climatic indicators of the grassland

Source: Ishizawa, Rengifo, and Armillas 2010a:22. Translated by Tirso Gonzales.

Towards the Next Generation of Indigenous, Community-Based Generated Projects: NACA and Pratec's Proposal for the Andes

For 70 years, mainstream agricultural development projects have failed when dealing with indigenous communities. Today, we are witnessing emerging alternative eco-centered, sustainable, intercultural and trans/interdisciplinary models and paradigms. Among others (e.g., Agroecología Universidad Cochabamba, AGRUCO and Asociación Andes, Cusco-Perú), the case of NACA and PRATEC in Peru situates itself at the cutting edge of emerging indigenous, culture-based paradigms for indigenous research and development (Tauli-Corpuz et al. 2010; Haverkort and Reijntjes 2006; Ishizawa 2009). This contrasts with the mainstream, monocultural, Euro-American approach (Escobar 1995; Noorgard 1994) of most governments and NGOs working in the Latin American and Andean region.

The Peruvian Andes are, after Bangladesh, among the most vulnerable regions to climate change (IPCC 2007). In Peru, the indigenous population is over nine million. As of July 2001, there were 5,827 *Comunidades Campesinas*, (CCs/Peasant Communities).[13] Today, however, CCs own only 10 percent of the total agricultural land, despite peasant communities comprising 90 percent of the agricultural and pastoral units in the Peruvian Andean territory and producing between 45 and 60 percent of the country's total food output (Maffi and Woodley 2010).

The main characteristic of the Peruvian Andes is its ecological diversity. Of the planet's 103 life zones, Peru contains 82 or 80 percent of the eco-climate zones that exist on the planet (Valladolid 1998). Such complexity and uncertainty is matched by the Andean worldview, which informs and enhances the Andean indigenous farmers' ingenuity and sophisticated decision making process involved in the management of their bio-cultural landscape. The challenges posed by this environment are met by these indigenous peoples' communities with a repertoire of knowledge that allows them to "converse" with any kind of climate, in such a way that agricultural produce

is always generated (Valladolid l994). This unique complexity has not been considered yet, in full, by international development agencies and the Latin American Andean state.

For the Andean indigenous peoples' communities, the Andean worldview is the bedrock, the blueprint of an indigenous Science, Knowledge and Technology (SKT) and Agricultural Research, Extension and Education (AREE) system towards food security.

The indigenous communities' contribution to participatory action research and action reflection is a major contribution to a necessary inter-cultural dialogue and re-envisioning of the SKT and AREE systems, both nationally and worldwide. Such contributions, among other things, break the monopoly of scientific validation and knowledge generation within current Agricultural Knowledge, Science and Technology, (AKST) and AREE, nationally and internationally. This contribution, in the Andes of Peru for instance, is guided by honoring Iskay Yachay (two ways of knowing, the Andean indigenous and the Western way). For the Central Andes (Peru, Bolivia, Ecuador), within each country's specific socio-political contexts. Two major projects are vital (Huizer 2000). One, in Peru, is the Proyecto Andino de Tecnologias Campesinas, (PRATEC)—the Andean Project of Peasant Technologies,[14] and the 21 Nucleos de Afirmacion Cultural Andina-Amazonica—Nuclei for Andean-Amazonian Cultural Affirmation—(NACA) associated with it. And in Bolivia, there is the *Agroecologia Universidad Cochabamba*, (AGRUCO, Agroecology Cochabamba University).[15] Their unique work within indigenous communities in different parts of their respective countries has capitalized upon 20 years of fieldwork. In the face of a dominant development paradigm crisis, global climate change and bio-cultural erosion crisis, the implications of PRATEC/NACA and AGRUCO proposals would go beyond their current associated partner indigenous-peasant communities. Their solid ethical, theoretical, methodological, publishing record, and field experience is, without a doubt, a fundamental cornerstone towards intercultural sustainability in the Central Andes and Latin America.

Reasons to Reposition Small-Scale Farming and Boost Their Agri-Cultures: Indigeneity and Indigenous Intelligentsia

Conventional, productivist agriculture is not sustainable, nor ecologically and culturally appropriate for all farmers around the globe. Today, the transnational network of institutions related to agriculture, as well as national and international NGOs, are rediscovering, at different degrees and paces, indigenous-peasant-traditional-local small-scale farming and its inextricable bio-cultural potential. In 1990, the total population related to small-scale farming (less than 5 hectares) for 17 selected countries was almost 1.5 billion individuals.[16] Here there is an opportunity for re-indigenizing small-scale agriculture. Let us remember that most peasants have an indigenous background. Most of them, not so long ago, had their two feet, so to speak, within the indigenous world.

Indigenous ecological knowledge is the powerhouse that has made it possible for indigenous farmers to contribute significantly to food output. Today, at the global level, "peasants feed at least 70 percent of the world's population,"[17] and in the case of Latin America and the Peruvian Andes, indigenous peasant farmers produce 60 percent of the total food output,[18] respectively.

From the vast population noted above, some small-scale farmers (indigenous peoples and peasants), with growing support from donors and multilateral organizations, have opted and are increasingly opting for agro-ecology, organic farming and permaculture, in which agriculture is understood under a holistic environmental/ecological scientific approach. Those who have done an in-depth assessment regarding modernization and development are progressively opting for their ancient ways of doing agriculture, the indigenous ways of doing agriculture (IPAF 2010). In this latter approach, agriculture is informed by the indigenous worldview and is part of the web of life ("all our relations," world of relatives beyond blood/human kinship). Here sustainable agriculture is not isolated nor objectified; it is a complete way of life. As such, agriculture

is part of a respectful process to procure balance among every visible and invisible living being that exists on this earth and the cosmos.

Having as a backdrop and guideline the principles underlying the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the challenge for agricultural funding today is to create a broad based plan with several objectives. First, to integrate respect the rich diversity of small-farmers and their agri-*cultures*, into within the global and national society and state institutions, done on their own socio-cultural terms. This would allow for intercultural dialogue within the process of policy formulation. It will require the reorganization of state institutions around the globe, and the whole transnational network of institutions related to agriculture, CGIAR-IARCs included. Second, to support the strengthening of local indigenous agri-*cultures* and their autonomous alternative systems of research and learning, as part of their portfolio of indigenous self-determined projects around the globe and towards a truly productive dialogue of knowledges.

Indigenous Peoples and the Sustainability of Local Indigenous Agro-biodiversity and Agri-*cultures*: Relocating Agricultural Research and Funding

For most of its existence, national and international agricultural funding has been heavily oriented towards the conventional productivist agricultural system. This system is flawed in many senses: economically, socially, culturally, environmentally, ecologically, and scale-related. It is about time that agricultural funding be directed towards sustainable indigenous and agro-ecological agricultural systems, in order to enable indigenous, peasant, and local farmers' agri-*cultures*[19] and their autonomous alternative systems of research and learning, are able to participate and contribute as equal partners within a renewed international, regional, and national system of AREE.[20]

This requires, first and above all, to understand what each type of agricultural system is about and what they entail in their own cultural/cosmovisional terms.[21]

The above would mark four main changes. First, it would mark the beginning of a change of epoch regarding development: democratizing AREE systems and funding paradigms from the international to the local level. Second, it would enable decision makers to bring a richer multi and intercultural base of knowledge to bear on policy and management decisions on AREE issues previously viewed in isolation and from a dominant, exclusive, techno-scientific-bureaucratic, Euro-American centered approach. Third, it would facilitate intercultural and interdisciplinary dialogue and collaboration among the key stakeholders related to the three systems of agriculture (indigenous, agro-ecological, and conventional). Lastly, it would facilitate the transition towards intercultural, sustainable agri-*cultures* that are socio-economically just, culturally-sensitive, and environmentally and ecologically benign, while at the same time tackling food insecurity, climate change and the bio-cultural diversity crisis.

Endnotes

[1] The author wishes to thank Hailey Troock for her editorial support.

[2] Another path is suggested by (Haverkort and Reijntjes 2006).

[3] The notion of saberes is something different than Western scientific knowledge. "The Andean peasant's learning is not the result of a separation between subject and object. In the Andean world, *los saberes* (knowing) is a result of the here and now, of living in conversation with and between everyone and everything (Gonzales and Gonzalez 2010, 92).

[4] "Eighty-five percent of the world's food is grown and consumed—if not within the '100 mile diet'—within national borders and/or the same eco-regional zone. Most of this food is grown from peasant-bred seed without the industrial chain's synthetic fertilizers. Peasants breed and nurture 40 livestock species and almost 8000 breeds. Peasants also breed 5,000 domesticated crops and have donated more than 1.9 million plant varieties to the world's gene banks. Peasant fishers harvest and protect more than 15,000 freshwater species. The work of peasants and pastoralists maintaining soil fertility is 18 times more valuable than

the synthetic fertilizers provided by the seven largest corporations" (ETC Group 2009, 1).

[5] Tauli-Corpuz (2010, 118-149) notes that "among the Quechua, it is Sumaq Kawsay (Sumaq, beautiful, good; kawsay, to live); the indigenous peoples in Bolivia [and Ecuador] and now the[ir] government[s] have the concept of buen vivir (living well); the Maya use the word utzil (utz, well being; il, well living).

Among the Kankana-ey Igorot, we say "gawis ay biag" (good life), which is loaded with many rules and taboos. These taboos are embedded in the concept of innayan, which generally means "do not do it."…The Miskitu peoples of Nicaragua have similar rules linked to development called laman laka, which can be interpreted as rules of coexistence, offering harmony within the family regardless of age or gender."

[6] Gonzales and Gonzalez 2010; Pimbert 2009, 42 & 44-46; IAASTD 2009b, 98-99.

[7] Tauli-Corpuz 2010, 118-149.

[8] Cunningham, Mirna (2010, 111) on the "good life" and, "good living" concepts notes. "There is not really any English equivalent in the idiomatic sense. "Good living" does not have the same sense, partly because terms like it and the "good life" have all been tainted by the egoistic and consumerist culture of capitalist civilization, explained in the paper. There is a term from the period of transition from feudalism to capitalism— "commonweal." It is the source of the word Commonwealth, as in the British Commonwealth (Mancomunidad). But its original meaning was much similar to the indigenous concept of Buen Vivir, that is living together and sharing the wealth, conceived not just as consuming things but enjoying social life in the community of associated producers and members. The Oxford entry for the term: commonweal/kommnweel/noun (the commonweal) archaic the welfare of the public. Oxford uses the term welfare in its sense of "well-being," not charity or government handout."

[9] Sumaq Kawsay unfolds within place, the local pacha (local bio-cultural and ritual landscape; macrocosm at the microcosm level). At the core of the Andean cosmovision is the nurturing of life as a whole. Such nurturance takes place within the local pacha and comprises a natural collectivity of equivalent beings: runas (humans), sallqa (nature) and apus/huacas (deities). Humans, nature and deities make up Ayllu, a kinship group. It is not restricted to human lineage/blood kinship, but includes each member of the local pacha. Learning how to nurture and letting oneself be nurtured with respect, empathy, reciprocity and joy are primordial principles and practices in the Andes.

[10] The Andean landscape is sacred. Table 1 is related to a specific Quechua landscape denominated sallqa or puna (4,000 to 5,000 masl),

a zone where natural grasslands, creeks, puquios (spring waters), native bushes and trees are located (Ishizawa et al. 2010a, 14).

[11] Chaku or chaco: thinning of nature (animal or plants/trees. In Ayacucho Chaco of Vicuñas or gathering wood fire is Chaco).

[12] "In peasant communities of Huancavelica the ritual of removal of the poles or beams is known as viga want'uy. A ritual of regeneration. It is an ancient custom, the duty of the Varayoq (indigenous peasant community's major), who organized the transfer of the beams, accompanied by music and songs played with musical instruments appropriate for this task: the pinkullo and the tinya. The poles or beams are used in communal buildings or houses, as well as firewood for the communal and religious festivities."

[13] Out of the 5,827 CCs, 4,224 had their property land titles registered at the Public Registrar and claimed ownership of land, covering a geographic area of more than 18 million hectares (Gonzales and Gonzalez 2010, 86).

[14] http://pratecnet.org/.

[15] http://www.agruco.org/agruco/.

[16] FAO Statistical Yearbook. Cited in V. Toledo and Barrerra-Bassols (2008) La memoria biocultural. La importancia de las sabidurias tradicionales. Icaria Editorial.

[17] ETC Group 2009, 1.

[18] Altieri and Koohafkan 2008.

[19] Gonzales 2000; Gonzales, Chambi, and Machaca1999.

[20] IAASTD 2009b.

[21] Gonzales et al. 2010. There are important efforts in this direction (e.g., COMPAS, ILEIA, ETC Foundation-The Netherlands, AGRUCO, PRATEC).

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SACRED SITES & RELIGIOUS FREEDOM IN NORTH AMERICA

Sean Cruz and Winona LaDuke

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) assures that all indigenous people have the right to be who they are, that they have the right to exist as distinct peoples, and that they have the right to "maintain, protect and develop the past, present and future manifestations of their cultures." We have the stated right to "practice and revitalize" our sacred cultural traditions and customs.

The Declaration affirms the rights of indigenous peoples to "manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies," and "to maintain, protect, and have access in privacy to their religious and cultural sites."

The Declaration recognizes that much of what indigenous peoples hold sacred in this world has been taken or otherwise lost "without their free, prior and informed consent or in

violation of their laws, traditions and customs," and it calls for states to provide redress "through effective mechanisms" and "through fair, transparent and effective mechanisms developed in conjunction with indigenous peoples concerned."

The phrase "through effective mechanisms" appears twice in Articles 11 and 12, serving to underscore the fact that nation states should utilize the power of regulatory, legislative and other authorities to assure that the rights of indigenous peoples to practice and worship in sacred sites and continue religious and cultural ways of living are secure.

In this documentation, we will discuss the lack of compliance with these essential elements of the UNDRIP in the North American context.

It's not like a church where you have everything in one place. We could describe how sacred sites are the teachers…

- Calleen Sisk
Winnemum Wintu

Since the beginning of times, the Creator and Mother Earth have given our peoples places to learn the teachings that will allow us to continue and reaffirm our responsibilities and ways on the lands from which we have come. Indigenous peoples are place-based societies, and at the center of those places are the most sacred of our sites, where we reaffirm our relationships. These sites must be preserved to continue our existence, and we believe the existence of all living beings.

We are in the midst of a great planetary crisis, a holocaust of lost species and disappearing indigenous peoples. In the Western hemisphere alone more than 2,000 indigenous nations and tribes have become extinct in the last 500 years. Languages and species are rendered extinct that we may never know existed. This speaks to the pace of extinction, the pace of the holocaust. Changes in technology (some would call these changes advances) deepen and widen the threats we face as indigenous peoples, and accelerate the pace of destruction. We must recognize the vast scale and urgency of the common threat. The ability to pray remains an essential element of the

preservation of Mother Earth. As indeed, the converging crisis broadened by climate related disasters and industrial expansion is planetary.

> "…While traditional Western religions view creation as the work of a deity 'who institutes natural laws which then govern the operation of physical nature,' tribal religions regard creation as an ongoing process in which they are morally and religiously obligated to participate. Native Americans fulfill this duty through ceremonies and rituals designed to preserve and stabilize the earth and to protect humankind from disease and other catastrophes. Failure to conduct these ceremonies in the manner and place specified, adherents believe, will result in great harm to the earth and to the people whose welfare depends upon it. In marked contrast to traditional Western religions, the belief systems of Native Americans do not rely on doctrines, creeds, or dogmas… Ceremonies are communal efforts undertaken for specific purposes in accordance with instructions handed down from generation to generation."
>
> *From the U.S. Supreme Court decision in Northwest Indian Cemetery Association v. Lyng, dissenting Opinion by Justice Brennan.*

Everywhere there are indigenous peoples, there are sacred sites, there are ways of knowing, there are relationships. The people, the rivers, the mountains, the lakes, the animals, and the fish are all related. We know this, as did our ancestors in these lands long ago. The sacredness is specific to its place and its people that speak to the sacred relationships between humans and their relatives. Within the place and the cultural practice of indigenous peoples are many of the answers that are essential to our collective survival. The protection of sacred sites is, therefore, a UN recognized essential right, and it is an essential strategy for preservation of our future.

The Absence of Effective Mechanisms in the U.S. to Protect Indigenous Sacred Sites

Over the course of the past 20 years, the United States government has paid lip service to the religious and cultural freedom of indigenous peoples through passage of the American Indian Religious Freedom Act, and Religious

Freedom Restoration Act of 2003, which insured that the practice of Native religions was legal in the United States. The fact, however, that Native American religious practices are land based requires that access to cultural sites, land, ceremonial foods and all essential elements of a religious practice are accessible. In this, the United States had continued to fail consistently.

Two legal cases in the United States—one in l987, and a second decision in 2012 (we refer to the 2008 decision in this document), frame the boundaries of U.S. judicial compliance with the UNDRIP and illustrate the lack of protection of sacred sites for the religious practice. In a case known as *Northwest Indian Cemetery Association v. Lyng*, (then Secretary of Agriculture), the foundation of this problem was illustrated.

Absence of Legal Recourse

In 1987, the U.S. Forest Service was considering building a road through a culturally sensitive area of the Six Rivers National Forest, lands taken from the Yurok, Hoopa and Karuk peoples of the Klamath River watershed in northern California. The indigenous peoples exhausted their recourse in the federal court system and were rebuked by the U.S. Supreme Court.

In a 5-to-3 decision, the U.S. Supreme Court held that the Forest Service was free to build the road and harvest the lands. Justice O'Conner wrote: "Even assuming that the Government's action here will virtually destroy the Indians' ability to practice their religion, the Constitution simply does not provide a principle that could justify upholding the Indians' legal claims."

In his dissenting opinion, Justice Brennan wrote:

> *Native American faith is inextricably bound to the use of land. The site-specific nature of Indian religious practice derives from the Native American perception that land is itself a sacred, living being...*

Today, the Court holds that a federal land use decision that promises to destroy an entire religion does not burden the practice of that faith in a manner recognized by the Free Exercise Clause. Having thus stripped respondents and all other Native Americans of any constitutional protection against perhaps the most serious threat to their age-old religious practices, and indeed to their entire way of life, the Court assures us that nothing in its decision 'should be read to encourage governmental insensitivity to the religious needs of any citizen.' I find it difficult, however, to imagine conduct more insensitive to religious needs than the Government's determination to build a marginally useful road in the face of un-contradicted evidence that the road will render the practice of respondents' religion impossible. Nor do I believe that respondents will derive any solace from the knowledge that, although the practice of their religion will become "more difficult" as a result of the Government's actions, they remain free to maintain their religious beliefs. Given today's ruling, that freedom amounts to nothing more than the right to believe that their religion will be destroyed. The safeguarding of such a hollow freedom not only makes a mockery of the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the[ir] traditional religions, it fails utterly to accord with the dictates of the First Amendment. I dissent.

Twenty years later, a similar case came to the U.S. Court system in that of the San Francisco Peaks case in what is today known as Arizona.

San Francisco Peaks

The volcanic highland area of Arizona began forming over six million years ago with the eruption of nearly 600 volcanoes. The most dramatic of those eruptions created a place sacred to 13 tribes, a cluster of three 12,000-foot mountain peaks, known as Doko'oo'sliid, the Sacred Mountain of the

West to the Navajo; Hvehasahpatch or Huassapatch-Havasu 'Baaja to the Havasupai; Tsii Bina-Aa'ku to the Acoma. To the Yavapai Apache, Dził Tso-Dilzhe'e is the place "where the earth brushes up against the unseen world."

The highest point in Arizona, the only arctic-alpine vegetation in the state grows here in a fragile two-square-mile zone, and Arizona's best examples of Ice Age glaciation can be found here. It has been a place for the gathering of sacred herbs and the practice of religious ceremonies since the dawn of time. To the Zuni, this is Sunha K'hbchu Yalanne-A:shiwi; and the Mojave know these sacred sites as 'Amat 'Iikwe Nyava-Hamakhav.

Over the past two decades, expansion of a ski resort on the slope of a mountain taken from the Dine or Navajo people has been promoted as an essential economic development strategy by non-indigenous businesspeople in the region. In the time of climate change, recharge at the top of the mountain, and a snow pack for a ski resort has become increasingly elusive. Thus, the proposal to use recycled water from the sewage treatment facility in the City of Flagstaff has been promoted as the solution. In an ongoing set of legal battles, the Dine and other indigenous nations have forwarded all arguments to protect the so-called San Francisco Peaks from desecration. The U.S. courts, citing the Lyng case, have ruled against the indigenous peoples.

From the 2008 U.S. Court of Appeals for the 9th Circuit opinion:

> *In this case, American...claim the use of such snow on a sacred mountain desecrates the entire mountain, deprecates their religious ceremonies, and injures their religious sensibilities. We are called upon to decide whether this government approved use of artificial snow on government-owned parkland violates the Religious Freedom Restoration Act of 1993, the National Environmental Policy Act of 1969, and the National Historic Preservation Act. We hold that it does not, and affirm the district court's denial of relief on all grounds.*

Citing the Lyng Court decision

The Lyng Court held the government plan, which would "diminish the sacredness" of the land to Indians and "interfere significantly" with their ability to practice their religion, did not impose a burden "heavy enough" to violate the Free Exercise Clause... Like the Indians in Lyng, the Plaintiffs here challenge a government-sanctioned project, conducted on the government's own land, on the basis that the project will diminish their spiritual fulfillment. Even were we to assume, as did the Supreme Court in Lyng, that the government action in this case will "virtually destroy the...Indians' ability to practice their religion," there is nothing to distinguish the road building project in Lyng from the use of recycled wastewater on the Peaks. We simply cannot uphold the Plaintiffs' claims of interference with their faith and, at the same time, remain faithful to Lyng's dictates.

Dissenting opinion

"The San Francisco Peaks have been at the center of religious beliefs and practices of Indian tribes of the Southwest since time out of mind. Humphrey's Peak, the holiest of the San Francisco Peaks, will from this time forward be desecrated and spiritually impure. In part, the majority justifies its holding on the ground that what it calls 'public park land' is land that 'belongs to everyone.' There is a tragic irony in this justification. The United States government took this land from the Indians by force. The majority now uses that forcible deprivation as a justification for spraying treated sewage effluent on the holiest of the Indians' holy mountains, and for refusing to recognize that this action constitutes a substantial burden on the Indians' exercise of their religion.

RFRA was passed to protect the exercise of all religions, including the religions of American Indians. If Indians' land based exercise of religion is not protected by RFRA in this case, I cannot imagine a case in which it will be. I am truly sorry that the majority has effectively read American Indians out of RFRA."

W. Fletcher, Circuit Judge, dissenting, joined by Judge Pregerson and Judge Fisher.

These two legal cases frame the lack of recourse under the laws of the United States for the protection of sacred sites and places of worship as recognized in the UNDRIP…to "manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies," and "to maintain, protect, and have access in privacy to their religious and cultural sites."

Case Studies

In the following section, we discuss three present cases which illustrate the lack of U.S. compliance with various international protocols in the protection of sacred sites.

Winnemem Wintu and the Shasta Dam Project

In Northern California, the Winnemem Wintu have known since time immemorial of their relationships to the Nur, the salmon people. They have known that they have a sacred responsibility to protect and care for the salmon that has sustained them on the slope of Boyum Patuk, the sacred mountain, now known as Mt. Shasta. It was the Nur who gave the Winnemem their voice, who taught them to sing. The Winnemem were told long ago that if the salmon disappeared, so would they. All is under threat, the salmon, the river, the mountain and the people, and all imposed from the outside, from powerful and distant interests.

A millennium on the river did well for both the people and the salmon. Three rivers meander through the foothills of Shasta, filled with spring runoff from the mountain, and eventually turn into the Sacramento. Then came the hard times. First came the plagues of small pox—wiping out 90 percent of the people in the region, none of them immune to any of the European diseases. Then came the bounties on Indian scalps, sparing only a few of the people, a practice which enabled the California Gold Rush. The Wintu continued to be pummeled by federal and state Indian policies. Although signatories

to an ungratified l85l treaty and identified as the tribe who would be drowned in the l941 federal act which created the Shasta Dam, the Winnemem Wintu ceased to exist as "Indians under federal law." This strange irony, that the government of settlers and intruders who took your land and killed your people gets to determine if you are still an Indian, remains particularly bitter to many tribes. The Wintu are particularly caught in this quagmire.

In what Bruce Granville-Miller at the University of British Columbia calls "termination by accountant" a convenient set of legal determinations make the Wintu all but invisible to federal law, and subsequently the protection of a trustee. Miller, who studies unrecognized indigenous peoples on a worldwide scale, notes, "It's easy for nations to find ways to disqualify them, to make them simply disappear." This is particularly convenient in the case of the Wintu, whose way of life is tied to a river others want, a fish that industry seeks to replace, and face a huge set of agricultural lobbyists. Federal recognition would mean that the federal government would help you protect your way of life. And, in the case of the Wintu that would be problematic to a large set of interests.

So it is that through a set of massacres, and later a set of legal maneuvering the U.S. and California governments made the Winnemem Wintu disappear—hid them under that cloak of invisibility of federal Indian law. It turns out that even if the federal government says you do not exist (as it does for an estimated 250,000 native people in the U.S. who are part of unrecognized tribes). The people, despite all, remain on the river, holding their young women's coming of age ceremonies, their doctoring ceremonies and their sacred sites—spanning some 77 miles of the McCloud River in northern California. Finally, as a last insult, in l941, the Shasta Dam drowned more than 26 miles of the lower McCloud River system, burying sacred sites, villages and history under a deep pool of water destined to benefit cities far away and tourists who could afford the way of life. The dam drowned the history of the Wintu and the dam blocked the passage of the salmon people—the McCloud River salmon, the Nur, either interbred with the Sacramento River Salmon, or died out in California.

Then came the next round of demands as populations increased, and the greed of American agriculture aggregated itself into California's central valleys. The Shasta Dam would provide the lifeblood for the agriculture and the cities, all at the expense of the Wintu and the Nur. California's biggest dam by a million acre feet is the Shasta Dam. In the spectrum of the big dams, it is to some a bit of a disappointment, shadowed by Hoover, Glen Canyon, Three Gorges and every other mammoth dam of new. It did, in its first round, however, swallow l25 Wintu ceremonial sites including Salmon Heart rock, where the Winnemem Wintu gathered to catch and dry salmon. In turn, Fish Rock was blown up to make room for a railroad track in l9l4, which was, like everything else, drowned by the waters. What is left of Dekkas Rock, a prayer site, protrudes from the reservoir as, as one reporter notes, "a malformed atoll." It was here, next to the river, the Winnemem held what other tribes in the region call Big Times, where disputes were adjudicated, songs and ceremonies were held and marriages were arranged.

A new round of destruction is proposed with the motivation of the almond industry in California. As of 2009 California is in the third year of a drought, and with 68 percent of the world's almonds produced in California, this is a challenge. The almond monocrop orchards have been pushing further and further out. What they need is water. The primary source of water is Shasta Dam. An additional l8 feet of water would provide water for a million Californians and water to the almond orchards. Proposals are under consideration to raise the Shasta Dam water levels from 6.5 to l8.5 feet, with corresponding increases of reservoir storage from 256,000 to 634,000 acre feet. "How do they justify flooding the Winnemem Wintu people out twice?" Calleen asks. "They still haven't fulfilled the 1941 Act of Congress that said they are to provide like lands and pay for all the allotment and communal lands. And the Shasta Dam is still not paid for by the public." Calleen Fisk has reviewed the Environmental Impact Statement on the dam and refers to it as a "dehumanizing document—it takes our beautiful culture and summarizes it into a couple paragraphs, and just names a couple sites." The Environmental Impact Statement, "…doesn't describe the

importance of the sites to our people or the heartache and psychological destruction it would cause to us if these places were submerged," Sisk said. "They don't talk about us as the people most impacted, or the fact we have nowhere else to go to practice our religion. We can only teach our distinctive life-way to be Winnemem here. It will be extremely hard to teach the tribal youth when you can't go to the sacred site, see it and feel it and develop a relationship with it to be Winnemem.

Celilo Falls and Celilo Village

From time immemorial, Celilo Falls was the epicenter of a vast salmon-based fishing and trading economy that spanned thousands of miles. It was here that the Creator supplied the first nations with countless millions of salmon and other sustenance, where the Columbia River begins to carve deeply into the high desert plateau, where ancient petroglyphs line the canyon walls where the people fished.

Celilo Falls was a natural wonder of the world, by volume the largest waterfall in North America and the sixth largest in the world. Salmon runs on the Columbia River numbered in the millions well into the 20th Century. Native fishers dip netted and speared their catch from hundreds of wooden platforms. There was no reason to believe that any of this would ever change.

The United States came to Celilo Falls in 1805 in the form of the Lewis and Clark military expedition, however, and in a matter of a few decades unimaginable destruction would follow. In the 20th century, dam building and widespread habitat destruction rendered every fish species upriver from Celilo threatened, endangered or extinct.

Among the several villages that clustered around the Falls when Lewis and Clark reached the area was Celilo Village. At that time, dozens of Northwest tribes occupied hundreds of villages along the Columbia River. Just 50 years later, however, U.S. Army troops and white vigilante mobs, aided by lethal waves of epidemic diseases, had taken over all of those village sites and forced the surviving Indians onto distant reservations. All but one village was destroyed.

So strong were the tribes' connections to Celilo that despite the many depredations they suffered, the people remained at Celilo Village, becoming today the oldest continuously inhabited settlement in North America, stretching back more than 12,000 years.

Here, as Lewis and Clark noted in 1805, was a "great emporium…where all the neighboring nations assemble." Yet, today, Celilo Falls and Celilo Village are rarely marked on any maps. The flooding of Celilo Falls destroyed the ages-old economy and neither site is listed in the National Register of Historic Places, or on the Oregon and Washington state registries.

It was unthinkable that any of this would ever be lost, but on March 10, 1957, the Army Corps of Engineers deliberately ordered the gates closed at the new dam downriver at The Dalles, and its backwaters covered the falls just six hours later, flooding many sacred sites, petroglyphs and burial grounds.

The people mourned. This was the era of both the federal Termination and Relocation policies, designed to destroy tribal communities. Tribes were devastated and weakened by the wholesale abrogation of treaty rights and loss of land, the scattering of the unwilling to distant bus stations, and the continued policy of forced removal of Indian children to boarding schools.

There are treaties that ostensibly guarantee certain reserved rights "to take fish at the usual and accustomed places" to the tribes. The Columbia River Treaty tribes are the Yakama, the Nez Perce, the Confederated Tribes of Warm Springs, and the Confederated Tribes of Umatilla. The Columbia River Intertribal Fish Commission today represents their treaty fishing interests. The treaties do not grant rights that the tribes already had. The tribes reserved their rights to fish at Celilo Falls.

In 2008, the U.S. Army Corps of Engineers conducted a sonar survey, which confirmed that the rock structure of Celilo Falls was intact, unchanged under the surface of the lake. Flooding Celilo Falls may have inadvertently preserved the falls, saving the site from being dynamited to oblivion.

Now, in 2012, organizing efforts are under way to recover and protect Celilo Falls and its environs, spurred by the awareness that the last generation of those who saw Celilo Falls with their own eyes are still with us, and by the growing pressure to use the Columbia River Gorge as an industrial corridor for heavy haul equipment to the Alberta Tar Sands and for Rocky Mountain coal shipments for export.

Surprisingly, the recovery of Celilo Falls does not require the removal of the dam that has kept it flooded for the past 55 years. Celilo Falls was not flooded for the sake of hydropower generation, but in order to engineer barges past the Celilo portage. Due to the steep drop in elevation, there is ample storage in the pool behind the dam at The Dalles for hydropower even with Celilo Falls exposed.

Barge passage on the middle Columbia River has always required massive public subsidies. Even so, there is only enough commerce on the river to support a single barge company, and the public bears all costs to maintain and operate the multiple lock systems for the benefit of a small number of actual shippers. Maintaining the Columbia River as a series of slackwater ponds is beneficial to barging operations on the river, but harmful to salmon species, and the public bears the additional expense of recovery as well.

Eagle Rock and the Return of Multinational Mining Corporations to Anishinaabe Akiing

The Keweenaw Bay Indian Community (KBIC), along with other bands, submit this statement of information describing destructive mining activities impacting our lands and waters. Our community is confronted with overwhelming prospective mine development in all directions, and within our established reservation homeland. The State of Michigan, with essentially no federal authority due to regulatory loopholes and delegated programs, has permitted Rio Tinto (through its subsidiary Kennecott) to blast and drill its mine portal directly into our sacred place, Migi zii wa sin (Eagle Rock). As we submit this letter, Rio Tinto continues to construct this

controversial underground sulfide mine upstream from Lake Superior. Our concerns and rights as a people continue to be ignored, and numerous domestic remedies have proven to be non-protective and discriminatory.

Currently, an aggressive mining boom throughout Anishinaabeg territory, of present-day Michigan, Wisconsin, Minnesota and Ontario, threatens the water quality and ecosystem of almost every sub-watershed of Lake Superior. This is due to our region's valuable geology, increases in global metal market prices and friendly political administrations at state government levels—whose political representatives are focused primarily on short-term job prospects. Mining, with its potential widespread, destructive and long-term affects to the natural environment that we depend upon, threatens our culture, health and well-being as a people.

> *We urgently seek your assistance and intervention to promote domestic recognition and protection of our rights as recognized in the United Nations Declaration on the Rights of Indigenous Peoples and stipulated in treaties signed by the United States of America.*[1]

Eagle Rock is known as the "Home of the White Wolf," and is a sacred site and prehistoric navigation site located today on what is known as the Upper Peninsula of Michigan. The Rock correlates to the Bighorn Medicine Wheel and other rock formations and sites in Wisconsin and east of the Mississippi River. The rock is considered sacred to not only the Anishinaabeg, but also the Hochunk and Cheyenne peoples. Today, the Keewenaw Bay Band of Anishinaabeg and Lac Vieux Desert bands of Anishinaabeg live in this territory, and the tribes, as well as the National Congress of American Indians have requested that the rock should be protected as a site of religious worship. The Michigan regulatory authorities, which have taken jurisdiction over the area, have ruled against the tribes, the water and the sacred site, stating essentially that the site could not be sacred or did not have spiritual significance because a place of worship must be a building. The state, on this grounds approved the mining permit. In

response, the leadership of the HoChunk Tribal Court noted, "consultation should include learned tribal members who are the leaders of our ancient societies. Their knowledge spans the time prior to Christianity and Christopher Columbus. It is this understanding that makes who we are. There is no other place where tribal people can gain this understanding..."

This is the difference between worldviews—where one society, an industrial society, views a rich ore body, and another society views this as a source of great spiritual and cultural wealth. So it is, that, the copper ore body appears in GIS imaging as a baby—Miskwaabik Abinoojiins and awaits its scheduled end like a convict on death row. Rio Tinto Zinc, a United Kingdom-based mining company, through it's subsidiary Kennecott, plans to demolish Eagle Rock for the sake of mining primarily nickel and copper, but also gold and other precious metals. It has been a seven-year battle for the sacred site, marked by arrests and legal actions, and now a petition to the United Nations for intervention under the UNDRIP to not only protect their sacred sites but to be protected from mineral exploitation which will destroy their life ways. A separate petition to the United States Environmental Protection Agency, by the National Congress of American Indians requests, "that requirements be imposed on Kennecott Eagle Minerals to mitigate the negative aesthetic impact of the proximity of the mining operation to Eagle Rock and that members of the various Native American communities be provided unfettered access for traditional use of the sacred ceremonial place."

The mine will also impact the larger ecosystem and the wolves themselves, numbered at an estimated 500 in this area. According to the complaint registered at the United Nations, the mine is controversial due to its location within a delicate watershed and underneath the Salmon Trout River, which flows directly into Lake Superior—which contains approximately 20 percent of the world's freshwater. In addition to the Eagle Project, Rio Tinto intends to open up six additional mine sites. The company is heavily focused on exploration throughout the western Upper Peninsula of Michigan. Mining infrastructure is also proposed, which would serve the expansion proposals in the region. In particular, the Rio Tinto Humboldt

Mill where ore would be processed from the proposed Eagle Mine. This milling site is located within the Escanaba River Watershed of Lake Michigan and on traditional Anishinaabeg territory. The Humboldt Mill site is contaminated from previous disposal of sulfide-bearing tailings from the Ropes Gold Mine from 1983-1991. The State of Michigan already permitted Rio Tinto to slurry over two million tons of sulfide bearing tailings into the bottom of this already contaminated pit lake. A Superfund investigation is currently under review. Additional mining projects are proposed in Anishinaabeg territory in Wisconsin, Gogebic Mine in the Penokee range which will impact the Anishinaabeg bands of Minnesota, particularly the First Nation at Bad River; and a set of copper and taconite mines proposed in the Boundary Waters Canoe area, one of the most pristine aquatic ecosystems remaining in the world, and central to the cultural practice of the Anishinaabeg.

Partial List of Threatened Sacred Sites in the U.S. and Canada

Athabascan River Delta: The largest industrial site in the world, the Alberta Tar Sands, threatens the Athabasca River and vast areas of boreal forest that are home to the Cree, Chipewyan Dene, Dunne-za, and Métis peoples. Through the proposed Keystone XL pipeline, the Tar Sands catastrophe threatens sites many hundreds of miles away, including the Ogallala aquifer, which provides 82 percent of the drinking water and 30 percent of crop irrigation water for eight states in the Great Plains. The construction of the Keystone XL pipeline has become a significant issue in the 2012 Presidential campaign.

Badger-Two Medicine: "The isolation of the area and its ties to creation stories make Badger-Two Medicine an integral part of the Blackfeet religion," and it is critical habitat for bison, grizzly bear, bighorn sheep, and elk. The Blackfeet nation and its coalition of allies have succeeded in defeating attempts to desecrate the sacred sites by oil and gas drilling interests.

Bear Butte - Mato Paha: This mountain in the Black Hills of South Dakota, called Mato Paha by the Lakota, is sacred ground for as many as 17 American Indian tribes. Believed to be the spot where the Creator communicates with his people through vision and prayer, the mountain earned its nickname because of its resemblance to a bear sleeping on its side. For thousands of years, American Indian tribes, including the Lakota, Dakota, Nakota, Cheyenne, Arapahoe, Kiowa, Arikara, Hidatsa, and Mandan have traveled to Bear Butte to perform annual prayer ceremonies. The National Trust for Historic Preservation lists Bear Butte among its 11 Most Endangered Historic Sites for 2011. Last November, the South Dakota Board of Minerals and Environment approved a plan to establish a 960-acre oil field adjacent to Bear Butte. The sacred mountain has been threatened with tourism and exploitation in the interests of expanding use for the world's largest motorcycle rally, and oil and gas interests are eyeing the area for hydraulic fracking.

Bighorn Medicine Wheel and Medicine Mountain: Sacred to many Plains tribes, the Medicine Wheel in Wyoming dates back more than 7,000 years, and Medicine Mountain remains threatened by logging interests.

Black Hills - Paha Sapa: The Black Hills and their thousands of archaeological and burial sites have always been sacred to the Lakota, Northern Cheyenne and Omaha tribes, and the land was guaranteed in perpetuity by treaty. Then, white prospectors found gold and the entire region was stolen. Today, uranium mining companies retain an interest in the sacred Black Hills.

Black Mesa: To the Hopi and Navajo who inhabit this desert region, what could be more sacred and precious than water? Many thousands do not have running water in their homes, yet mining operations pumped billions of gallons out of the aquifer for decades, and the threat of further depletions persists.

Blue Lake, New Mexico: Recognition of its sovereignty and land rights in the Treaty of Guadalupe Hidalgo was no protection for the Taos Pueblo when the U.S. appropriated sacred Blue Lake. The tribe won its return in 1970.

Boundary Waters Canoe Area: The largest non-motorized watershed in the world, the Boundary Waters is the heart of the Anishinaabeg people, full of pictographs, wild rice, sacred medicine plants, and the solace of a thousand years. New proposals for taconite mining are being forwarded at state legislatures, and gold mining proposals are moving forward in Canadian administrative processes, which will contaminate the waters of the region.

Cahokia Mounds: One of several large pre-Columbian settlements of the Mississippian period (800–1350), the Cahokia Mounds are a UNESCO World Heritage Site and exemplify prehistoric cultural, religious and economic traditions and practices. Other important mound complexes include Great Serpent Mound, Great Circle Earthworks, Octagon Earthworks, and Alligator Mound. All are endangered, facing multiple threats.

Celilo Falls and Celilo Indian Village: The oldest continuously inhabited settlement in North America, dating back more than 12,000 years, is where the Wyam people await the recovery and protection of the sacred and awesome roar of Celilo Falls and its environs, to see the salmon leap again among the dip nets.

Chaco Canyon: In 2011, the National Trust for Historic Preservation placed the Greater Chaco Canyon Landscape on its 11 Most Endangered Historic Sites list. The legacy of the Chacoan people in what is now New Mexico includes thousands of ancient pueblos and shrines, along with an extensive road network that provided a physical and cultural link for people across the region. Although one of only 20 UNESCO World Heritage Sites in the United States, Chaco faces multiple threats from human activity, most importantly energy exploration and exploitation.

Da ow ga - Cave Rock: The Washoe people call this 360-foot high rock on the shore of Lake Tahoe, Da ow ga. It is a place of great spiritual importance. To outsiders it is known as Cave Rock, and they brought dynamite and rock climbers.

Desert Tortoise: The desert tortoise (*Gopherus agassizii)* is traditionally revered by five lower Colorado River tribes, and

threats to the fragile habitat of this endangered species in Ward Valley, California are cause for great concern.

Dzil ncha si an (Mount Graham): Known to the San Carlos Apache and White Mountain Apache as Dzil ncha si an, the sacred mountain is known to the astronomical community as Mt. Graham, and is a prime place to site observatories. In order to pray on the mountain, Apaches must request permission in writing 48 hours in advance.

Eagle Rock - Migizi Aasiin: In the heartland of the Keewenaw Bay is Eagle Rock, a sacred rock from which emerges the Great Wolf Spirit, the fellow traveler in this world of the Anishinaabeg. The rock is situated on top of the Miskwaabik Abinoojiins, a copper ore body which appears as a child in a fetal position. Rio Tinto Zinc is seeking to pulverize Eagle Rock over vociferous tribal opposition.

Glen Cove - Songorea Te shellmound: Hundreds of ancient burial sites once ringed San Francisco Bay, but nearly all have been bulldozed or covered over. Glen Cove Songorea Te shellmound in the City of Vallejo is 3,500 years old. In the winter of 2012, a battle was won to protect remaining shellmounds in the San Francisco area from shopping mall developers.

Haleakala Crater: "The holy site or wahi pana of Haleakala Crater is known to native Hawaiians as the 'House of the Sun.'" To astronomers and scientists, it is a place to build observatories. To the U.S. Pacific Military Command it is a place to monitor satellites, rockets and spacecraft.

Hanapepe Salt Ponds: Belief in the wisdom of elders and importance of family are central reasons as to why the ancient Hanapepe salt beds still exist today. Hanapepe salt cannot be sold, it can only be given away. It is valued for its medicinal properties as well as its taste. Pa'akai (salt) farmers have been tending these ponds for many generations. The elders teach the cultural practice to their children from a very young age, integrating the cultural and sustainable practice into their life and what they will then eventually pass on to their children. An airport bustles close by, and the salt ponds are also impacted by climate change.

Haskell-Baker Wetlands: The sacred aspect of these wetlands was created by Native youth during the infamous Boarding School Era of the 19th and 20th centuries, when U.S. Indian policy imposed the forcible removal of Indian children from their homes and families and their sequestration into harsh, concentration camp-like conditions.

The Haskell Indian Industrial Training School near Lawrence, Kansas, was one of those shameful, horrific institutions. "The wetlands became a place of comfort and ceremony for many of the students… (who) often went to the wetlands to perform ceremonies, pray, commune with nature and the environment, and even to bury their dead. The children's deaths were caused by disease, suicide, sometimes the environment itself, as runaway students died of exposure in the wetlands. Students were secretly buried in the wetlands by their fellow students, who performed spirit release ceremonies using a lock of hair."

The "unknown and unmarked graves in the wetlands are a constant reminder of the brutal realities which boarding schools forced on the children. Because of these graves, the history of the wetlands, and the experiences that these native children experienced as chattel of the United States government, many tribes consider this land sacred. Indian people continue to use the area for prayer, and in 1992, Haskell students constructed a Medicine Wheel, which is a site of ceremony. Its historical and cultural significance also makes this land worthy of protecting as a National Historic Site."

Heart of the Monster: The most sacred site of the Nez Perce, from where the Creator helped them emerge and defeat evil, is threatened by attempts to build an industrial corridor along the banks of the Clearwater River for large equipment destined for the Athabascan tar sands. Thus far, this has been averted, but the threat remains.

Indian Pass-Running Man Area of Traditional Cultural Concern: This is Quechan land, a sacred landscape in the Southern California desert that has been subjected to open-pit mining and cyanide-leaching operations since whites discovered gold there in the 19th century.

Kaho'lawe Island: More than 600 archaeological and cultural sites testify to the importance of the island to Native Hawaiians, yet the U.S. Navy turned Kaho'lawe into a bombing range until 1990. Cleanup will take many years.

Klamath River: The Yurok, Hupa, Karuk, Shasta, and Klamath tribes lived on the Klamath River in harmony with the salmon for thousands of years. Then came the dams, water diversions, and massive fish die offs caused by low water levels and agricultural and industrial pollution.

Mashkiki Ziibi: The heartland of the Bad River Ojibwe reservation sits at the base of a watershed which emerges from the Penokee Range. The Penokees have the single largest iron ore deposit in North America, and the Anishinaabe have been working for a number of years to oppose the opening of a new mine.

Mato Tipila - Devils Tower: The Lakota call this sacred place Mato Tipila (The Lodge of the Bear) or Ptehé Ǧí (Brown Buffalo Horn). The Arapaho, Crow, Cheyenne, Kiowa and Shoshone all know the monolith by their own names, their own creation stories. White intruders renamed it Devils Tower in 1875, and despite its status as the first declared National Monument, it is recreational rock climbers who defile this sacred ground.

Mauna Kea: The high volcanic summit of Mauna Kea "is sacred to Native Hawaiians as an elder ancestor and the physical embodiment (or kinolau) of deities revered in Hawaiian culture and religion." The clear air at that altitude has drawn the infrastructure supporting 13 major telescopes so far.

Medicine Bluffs - Fort Sill: Listing on the National Register of Historical Places offers scant protection to Medicine Bluffs, sacred to the Comanche Nation since time immemorial. Fort Sill was established as a cavalry outpost to wage war against the Plains Indians, but was transformed to house the U.S. Army Field Artillery School and other major artillery units. For more than a century the southern sides of the bluffs have been used by the military as firing ranges, but through negotiations of the Comanche Nation Historic Preservation Office the attacks have ceased, and the hazardous lead materials

removed. However, in spite of litigation and a formal agreement in 2010 between the Comanche Nation and Fort Sill, the encroachment to Medicine Bluffs through expansions of the built community is ever looming.

Medicine Lake Caldera: The Medicine Lake Caldera northeast of Mount Shasta is sacred to the Pit River, Modoc, Shasta, Karuk, and Wintu people, and gained recognition as a Traditional Cultural District in 1999. Drilling and geothermal operations threaten water quality and spiritual practices.

Newe Sogobia - Mount Tenabo: Newe Sogobia translates as "the people's earth mother." This is Shoshone land, and despite the fact the tribe has never agreed to this use, it is used by government and industry as the U.S.' own "Ground Zero" for nuclear testing, and other uses that foul the land and poison the air with mercury, cyanide and nerve toxins.

Nine Mile Canyon: The more than 10,000 documented petroglyphs, pictoglyphs and archaeological sites left here by the Archaic, Fremont and Ute people are estimated to be at most 10 percent of the total. Gas exploration and drilling threatens.

Ocmulgee Old Fields: "Ice Age mammoth hunters, archaic hunter-gatherers, woodland horticulturists, and Mississippian temple and burial-mound builders left a continuous, still-visible cultural record in the earth of the Ocmulgee Old Fields."

Onolai-tol, Histum Yani - Sutter Buttes: The Wintu and Maidu names for these eroded volcanoes rising out of the vast, flat Sacramento Valley are ancient and speak of creation and a portal to the spirit world. Then came the holocaust, epidemics and bounty hunters, and a renaming. Now it is the developers who threaten.

Papahānaumokuākea - Marine National Monument, Hawaii: For at least the past thousand years, this remote island group northwest of the main Hawaiian island chain has been crucial to indigenous cultural traditions. This is where Hawaiian way finders develop their skills at traveling the open ocean without instruments, using traditional double-hulled sailing canoes. Wayfinders learn to navigate by observing the sun, stars, ocean swells, seabirds and other signs to guide them

during long trans-oceanic voyages. Recently inscribed as a UNESCO World Heritage Site, efforts are underway to remediate damage to the atolls from prior military use and invasive species. A Presidential Proclamation forbids activities such as mining or other extractive practices. Federal regulations for Papahānaumokuākea prohibit anyone from removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any of its living or nonliving resources, or attempting any of these actions unless authorized by a Monument permit. The chief threat to the near-pristine waters comes from marine debris. Although no fishing is permitted in Papahānaumokuākea's waters, derelict nets and gear, plastics and other ocean-borne debris are concentrated by ocean currents and wash up on the reefs and beaches of the property. Entanglement in marine debris has been identified as a major threat to the endangered Hawaiian Monk Seal. Debris entanglement also threatens sea turtles, seabirds, cetaceans and coral reef organisms.

Petroglyph National Monument: Twenty-four thousand petroglyphs and National Monument status was not enough to stop a developer from pushing a road through the sacred site, with the support of the City of Albuquerque, New Mexico.

Pipestone Quarry and the Three Maidens: For centuries the Lakota, Dakota and Yankton Sioux made ceremonial pipes quarried from a sacred site near the Three Maidens, three huge rocks that figure in their creation stories. Pipes made from the distinctive smooth red stone from Pipestone Quarry were traded over vast areas, and the quarry itself a site so sacred that no weapons could be brought upon it. It has been a site of conflict ever since whites intruded into the area.

Porcupine Caribou herd: The Gwich'in people and the Porcupine caribou herd inhabit a region above the Arctic Circle. Oil drilling in the Alaska Arctic National Wildlife Refuge threatens caribou calving areas and migration routes, polar bears and other wildlife, and the Gwich'in language itself is threatened.

Rainbow Bridge: its remote desert location preserved the world's largest natural bridge for the five Native American

nations who have held it sacred since time immemorial: the Navajo, Hopi, San Juan Southern Paiute, Kaibab Paiute, and White Mesa Ute. Flooding caused by the Glen Canyon Dam covered many sacred sites in the vicinity and created easy access for thousands of tourists.

San Francisco Peaks - Kachina Peaks Wilderness Area: Sacred to 13 tribes, named in 15 languages, Arizona Snowbowl, a ski resort in the arid Arizona desert threatens to desecrate the "protected" mountain with "treated" sewage water.

San Nicholas Island: Hundreds of Native American burial sites, middens and other sacred sites cover San Nicolas, a Navy-owned 33-square mile island gunnery range off the coast of Southern California that became overrun with feral cats. They were feasting on cormorants, threatened species of foxes and lizards, so six agencies combined forces and spent US$3 million to catch and remove the cats for adoption, using humanely padded traps. Now, comes what may be a larger problem for ecosystem protection: the fact that the U.S. Navy continues to bomb and conduct maneuvers on the ecologically and culturally sensitive area.

Six Rivers National Forest: Road-building and logging projects mar and threaten sites like Doctor Rock, Chimney Rock and Little Medicine Mountain, sacred to Pohlik-lah, Karuk and Tolowa people.

Snoqualmie Falls: Named for the Washington tribe to whom the falls are sacred, Snoqualmie Falls has suffered from hydroelectric development, water diversions, dynamite and tourism. The Snoqualmie tribe and its allies fight to see the site returned to its natural state and preserved.

Tsimontukwi - Woodruff Butte: To the Hopi, Tsimontukwi is one of nine major pilgrimage sites that encircle Hopi traditional territory and a place sacred to the Zuni and Navajo for thousands of years as well. A gravel-making operation destroyed eagles' nests and many shrines before concerted action ended the desecration.

Valley of the Chiefs - Weatherman Draw: The largest collection of polychromatic pictographs in the Northern Plains, dating

back more than 1,000 years, resides in this traditional place of peace. Many tribes, including the Comanche, Northern Arapaho, Northern Cheyenne, Eastern Shoshone, Crow, and Blackfeet held ceremonies and vision quests here. Also called the Valley of the Shields for its numerous paintings of shield-bearing warriors, it was saved from oil exploration by a coalition of 10 tribes, the Sierra Club, the National Trust for Historic Preservation and other allies.

Wao Kele O Puna: This remote rainforest, considered by Native Hawaiians to be the most sacred in the island chain, was taken when the U.S. overthrew the Hawaiian monarchy. Long threatened by geothermal development, in 2007 Wao Kele became the first of the Crown Lands to be returned to Native control.

Winnemem Wintu and the Nur: Sixty-five years after Shasta Dam inundated nine tenths of the traditional lands of the Winnemem Wintu and cut off the Nur from their spawning grounds, a proposal to increase the height of the dam threatens all that remains of their sacred sites, just as the tribe works to bring the Nur home.

Wounded Knee - Čhaŋkpé Ópi Wakpála: This site along Wounded Knee Creek on the Lakota Pine Ridge Indian Reservation became sacred when U.S. Army troops ambushed and massacred a camp of more than 300 mostly-unarmed Lakota men, women, children and infants in the ice and snow of December 29, 1890. Eighteen Congressional Medals of Honor were awarded among the murderers, who buried the frozen bodies of their victims in a mass grave. The site was declared a U.S. National Historic Landmark in 1965 and was listed on the U.S. National Register of Historic Places in 1966. In 1973, it was the scene of the Wounded Knee Incident.

Yucca (or Snake) Mountain: The Shoshone have never deeded over the land the U.S. nuclear industry proposes to use to store its radioactive waste. Although those plans have been halted, no other site is under serious consideration.

Zuni Salt Lake: Here is the home of "Salt Woman, called Ma'l Oyattsik'i by the Zunis. Sacred trails, like umbilical cords, tie the lake to the Zuni villages and to other sacred

sites around the area. Zuni men follow these trails to gather the salt which embodies the flesh of the Salt Mother herself. Other pueblos, including the Hopi, Acoma, and Laguna use the salt for their ceremonies, as their clan ancestors from Chaco Canyon did a thousand years ago. Apache and Navajo also claim use. A 185,000 acre area around the lake, known as 'The Sanctuary'or A:shiwi A:wan Ma'k'yay'a dap an'ullapna Dek'ohannan Dehyakya Dehwanne, contains burial grounds and shrines and by tradition is a neutral zone where members of various tribes may come together without conflict." Threats come from strip mining, rail infrastructure and billions of gallons of pure water to be drawn from the aquifer for industrial use.

Endnote

[1] From Statement of Information on Mining Activities Occurring on Anishinaabeg Territory in the Great Lakes Region of the United States of America. Submitted to the U.N. Special Rapporteur on the rights of indigenous peoples, S. James Anaya; Submitted by Keweenaw Bay Indian Community, others, March 2012. Prepared with the assistance of: Jessica Koski, Keweenaw Bay Indian Community Tribal Member, Nicole Friederichs, Independent Legal Consultant Philomena Kebec, Bad River Band of Lake Superior Ojibwe Staff Attorney.



INDIGENOUS PEOPLES & THE EXTRACTIVE INDUSTRIES[1]

Andy Whitmore
PIPLinks

Introduction

Of particular concern are the long-term devastating effects of mining operations on the livelihood of indigenous peoples and their environment. These activities are often carried out without their prior, free and informed consent, as the law stipulates. Communities resist development projects that destroy their traditional economy, community structures and cultural values, a process described as 'development aggression.' Indigenous resistance and protest are frequently countered by military force involving numerous human rights abuses, such as arbitrary detention, persecution, killings of community representatives, coercion, torture, demolition of

houses, destruction of property, rape, and forced recruitment by the armed forces, the police or the so-called paramilitaries.

- Rodolfo Stavenhagen
Former UN Special Rapporteur on the human rights and fundamental freedoms of indigenous people[2]

The surviving lands of indigenous peoples include many of the most vulnerable and threatened ecosystems on our planet. Indigenous peoples have always made clear that they are culturally, spiritually, and economically interlinked with those lands. It is partly for this reason that indigenous peoples have been recognized for providing models for sustainable living. However, they continue to suffer abuse of their rights, because of the desecration of these ecosystems that they hold sacred. Nowhere is this more keenly felt than with regard to the extractive industries.

In this chapter, extractive industries refers primarily to mining, oil and gas, although logging, and large-scale hydro and mono-culture are also often referred to as extractive industries. Of the core extractive industries, hard-rock mining is the one that will be focussed upon, primarily because the Johannesburg Plan of Implementation (JPOI) referred directly and without justification, to so called "sustainable mining" and highlighted a claimed contribution to sustainable development.[3]

While indigenous peoples would welcome any genuine efforts from the mining industry to respect human rights and raise environmental standards around mines, there is also a serious concern that modern large-scale mining cannot be squared with their own visions of a truly green economy. The very idea of "sustainable mining" misrepresents the fundamental nature of mining, which is founded on the primary extraction of a non-renewable resource from the earth.

Currently the main trends in the extractives sector are for more rapid exploitation and consumption of minerals. Because earlier generations have already exploited some of the richest deposits, increasingly the global trend is for the exploitation of lower grade ore bodies, which requires mining

projects to increase in scale, and extend over wider—and often virgin, or "green-field," territories. In the last 10 years alone, iron ore production has increased by 180 percent, cobalt by 165 percent; and even coal production, already clearly identified as a major cause of global warming, has increased by 44 percent. Demand for metals that feed sustainable energy and/or new technology needs, such as lithium and certain rare earth elements, has similarly grown. It is estimated that by 2020 up to 70 percent of copper production will take place in territories claimed by indigenous peoples. In 2009 the European Commission recorded that approximately 70 percent of uranium used in nuclear reactors is sourced from the homelands of indigenous peoples worldwide.[4]

This unsustainable land/mineral-grab is on a collision course with the rights and futures of indigenous peoples,[5] and is described by them as "development aggression."[6] Research conducted by Prof. John Ruggie, the former UN Special Representative on Business and Human Rights, concluded that:

> *"The extractive sector—oil, gas, and mining—utterly dominates this sample of reported abuses."[7] The UN Special Rapporteur on the Rights of Indigenous Peoples, Prof. James Anaya, has highlighted this issue, announcing his focus on the issue in the next three years. He noted that indigenous peoples' responses to an initial questionnaire "were dominated by a great deal of scepticism and, in many cases, outright rejection, of the possibility of benefiting from extractive or development projects in their traditional territories. The vast majority of indigenous peoples' responses... rather emphasized a common perception of disenfranchisement, ignorance of their rights and concerns on the part of States and businesses enterprises, and constant life insecurity in the face of encroaching extractive activities."[8]*

The rest of this paper seeks to map out some of the main concerns, drawing on brief case studies. First it reviews the environmental impacts of mining on indigenous peoples, then the social impacts. Next it looks at the legal framework

in which indigenous peoples are articulating their rights in relation to the extractive industries, followed by some of the routes of redress sought by indigenous peoples. Finally, it concludes with focusing on the indigenous statement from a 2009 conference of indigenous peoples reflecting on the extractive industries, called the Manila Declaration.

Environmental Impacts of Mining on Indigenous Peoples

The major environmental impacts fall into the following inter-linked, areas: water and waste, air quality, health and livelihood.

Water and waste: Large-scale mining uses huge quantities of water in its operations, for activities, which include *inter alia* ore separation, washing, dust suppression, slurry transportation, and waste disposal. Water can also be lost to use if it is pumped out of open pits or mine shafts that are below the water table. Particularly where indigenous peoples are living in arid or semi-arid areas, access to potable water can be a serious concern. On the ancestral lands of the Western Shoshone, in Nevada, the US Geological Survey has found a decline in water tables by as much as 300 meters around some of the state's largest open-pit gold mines.[9] Such a drastic reduction in the water-table has led to serious deterioration in the local soil quality, through salination.

People living below the High Andes, and other mountain regions, are often heavily dependent on snow or gradual glacier melt, as opposed to rainfall, for their water. Mining activities in high mountains are accused of increasing the melting of glaciers and polluting vital water resources and extracting excessive quantities of water primarily for industry use over local farmers.[10]

The volume of waste rock involved, its chemical composition and the addition of often toxic chemical separators frequently result in adverse affects on water quality, despite the

best efforts of companies to contain or purify contaminated water. They can contain as many as three dozen dangerous chemicals including arsenic, lead, mercury and processing chemicals such as petroleum by-products, acids and cyanide. Formerly, it was common practice to irresponsibly pour this waste into rivers, lakes and inshore waters. These practices remain legal in some countries, including Papua New Guinea, and are still practiced even by international mining companies claiming a responsible image. Overall, mining companies are dumping more than 180 million tons of hazardous mine waste each year into rivers, lakes and oceans worldwide, threatening vital bodies of water with toxic heavy metals and other chemicals poisonous to humans and wildlife. The amount of mine waste dumped annually is 1.5 times as much as all the municipal waste dumped in U.S. landfills in 2009. This threatens the health of those indigenous peoples and others who live nearby and downstream.[11]

The most common practice today for the containment of mine waste (tailings) is through the construction of tailings dams, which are then filled with waste materials kept underwater to minimize their contact to oxygen. Independent sources report an average of 2-4 major accidents per year. Recent incidents, including the fatal alumina tailings spill in Ajka, Hungary in October 2010 that reached the Danube, show serious incidents are continuing to occur.[12] When such dams are breached, the threat to life, environment and livelihoods downstream are often catastrophic. Bridges and riverbank structures are eroded and collapse. In some regions of the world—including the Americas and Southeast Asia—climate change is already manifesting in the increased number and increased intensity of hurricanes and typhoons. Such events increase the pressures on tailings dams with construction strength measured based on the ability to withstand infrequent weather extremes. They can also be threatened by seismic activity, poor construction and poor design.

Mine wastes contain many potentially toxic materials, and may become acidic when they come into contact with oxygen, creating the phenomenon known as Acid Mine Drainage (AMD). This is a serious global problem affecting millions

including many states of the USA, and particularly in South Africa where, according to a recent study, AMD from nearly 6,000 abandoned mines is acidifying rivers and streams, raising metals levels and killing fish.[13] Another recent study from Canada stresses that while in one case a more modern mine may have a mine closure plan to deal with waste for up to 50 years, the reality is the effects are likely to continue even for thousands of years.[14]

Upon reaching the sea, studies report bleaching and killing of corals by contact with mine chemicals even in dilute form, smothering of corals by silt resulting in the death and migration of fish. Dumping waste into the sea has caused pluming; the release of fine particles into the ocean that choke and drive away sea life and spreads, blanketing large areas of the sea floor. This has recently caused great controversy, for instance around the Newmont Minahasa Raya gold mine, which dumped 2,000 tons per day of wastes into the tropical, coral-rich waters of Buyat Bay or around the plans for dumping waste from the Ramu mine in Papua New Guinea.[15]

Rio Tinto in Kakadu, Australia[16]

The traditional estate of the Mirarr people lies within the bounds of the World Heritage-listed Kakadu National Park in the Northern Territory, Australia. Since uranium was discovered on their country in the 1970s, the Mirarr have been fighting to protect their homelands from mining. Today, Mirarr country encompasses the Ranger and Jabiluka Mineral Leases, the mining town of Jabiru and parts of Kakadu National Park. Uranium mining has operated on Mirarr land for more than 25 years. Mirarr opposed the establishment of uranium mining on their lands and continue to oppose further development of the Jabiluka uranium mine.

The Mirarr Senior Traditional Owner Yvonne Margarula leads the Mirarr in their fight to protect country. Yvonne's father, Toby Gangale, opposed plans for uranium exploration and mining on his country in the 1970s.

The Ranger Uranium Mine (operated by ERA) was imposed on traditional owners when the 1977 Ranger Uranium Environmental Inquiry acknowledged the Mirarr opposed the mine but determined that "their opposition should not be allowed to prevail." Mining began at Ranger in 1981. Today it is the second largest uranium mine in the world and supplies around 10 percent of the global uranium market.

Ranger mine has been the subject of ongoing scrutiny by the environment movement as well as the Australian Parliament and has been vexed by management issues over its 30-year history. Recurring water and tailings management problems have plagued the mine and it contaminated water regularly leaks into the adjacent Kakadu National Park. Hundreds of spills, leaks and license breaches have been recorded since Ranger opened and the mine has contributed to growing social problems in the region. The head of the Australian Federal Government agency that monitors Ranger recently indicated that the Ranger tailings dam is seeping at a rate of around 100,000 l/day. In December 2009, a dam burst sending six million liters of contaminated water into the National Park.

The year 2011 saw multiple setbacks for ERA's operations at Ranger with the company forced to suspend mining operations for six months due to water management issues. ERA also abandoned plans for a controversial "acid heap leach facility" at Ranger following strong Traditional Owner and community opposition. ERA's licence to mine at Ranger runs until 2021 followed by five years for rehabilitation. The company is committed to developing underground mining operations and plans to commence work on an exploration tunnel in mid-2012 with a view to exploiting the 34,000 ton Ranger 3 Deeps deposit.

In 2005 the Mirarr succeeded in halting the development of the proposed Jabiluka mine by securing the agreement of Rio Tinto's Energy Resources of Australia (ERA), the Northern Land Council and Federal Government that no mining at Jabiluka can proceed without the written consent of the current generation of Mirarr. This basic right of veto over development took over a decade of Mirarr-lead national and international struggle.

The Mirrar never accepted the inevitability of mining at Jabiluka, despite constant company, industry and government assurances that the project would go ahead. In their struggle to protect their country and culture, they made Jabiluka a millstone for one of the world's largest resource companies and have redefined future resource conflicts in Australia and internationally by elevating the rights of indigenous peoples everywhere to determine what happens to their country and their community.

In January 1998, the European Parliament passed a resolution in support of Mirarr and their struggle against uranium mining on their country. This resolution calls on member states to ban all imports of uranium from mines where the land rights of indigenous peoples are compromised. It also calls for the establishment of an independent study into the imports of EU member states analyzing the impacts of uranium mining and processing on the health, environment and rights of indigenous people.

Full resolution text available here: http://www.mirarr.net/docs/Euro-Parliament.pdf.

Air quality: Mining and ore processing often generate high levels of dust. This dust can also contain toxic chemical substances. Emissions from mining activities and processes threaten the health and well-being of peoples and the environment.

Dust from mining and particulates from related vehicles create health, cleanliness and agricultural problems for nearby communities. In China, an ethnic Mongolian herder was shot dead in a protest against the dust created by the coal trucks near his village, while in Pachuwara in India locals agriculture has been so blighted by coal dust that they have been forced to steal coal from the trucks to survive.[17]

The original Maranao communities whose land was taken for the limestone quarrying and cement manufacture operations of Iligan Cement Corporation in the Philippines live under such a weight of dust that their capacity to grow essential food crops is severely reduced. Limestone quarrying and cement manufacturing choke and damage tree crops as the weight of dust on flowers restricts pollination.[18]

Health: There are a number of direct health impacts from mining. A 2002 Toxic Release Inventory by EPA, called the TRI Data, documents that gold mines are the largest source of mercury emissions in the tri-state region of Utah, Idaho and Nevada. Overall, TRI reveals the hard rock mining industry is the nation's largest toxic polluter for the eighth year in a row."[19]

Coal mining results in high levels of respiratory illness including silicosis and pneumoconiosis among miners and local communities. Respiratory illness has been shown to increase in surrounding communities, particularly affecting the young and the old.[20] Studies in the coal-affected communities in the Appalachian regions point to high rates of mortality, and chronic heart, lung and kidney diseases.[21]

Both uranium and asbestos mining have records of association with the development of cancers, and both have historical concentrations on the lands of indigenous peoples. The current search for low carbon energy has done something to revive the nuclear industry, despite health concerns raised

—most notably by the Fukushima disaster—but the dangers inherent in mining of uranium to the workers and surrounding communities is too often ignored.[22]

Another issue is the increase in the spread of infectious diseases including sexually transmitted infections (STIs) brought about by interaction with those immigrating into indigenous territories to work on extractive industry projects. Also waste and chemical materials that find their way into local food systems, link with environmental degradation to lead to the loss of traditional livelihoods, which consequently threatens food security and increases the possibility of malnutrition.[23]

Social and Cultural Impacts of Mining on Indigenous Peoples

The prime social and cultural impacts fall into the following inter-linked, areas: economic, women and mining, internal conflict, cultural and spiritual impacts, and human rights violations.

Economy: Large-scale extraction can jeopardize the very survival of indigenous peoples as distinct cultures that are inextricably connected to the territories they have traditionally owned, used and occupied.

Mining activities have devastating impacts on pre-existing indigenous economies. Large-scale mines deprive flora and fauna of food and natural habitat. In hunting communities, game often flees from the noise, lights and disruption generated by mining. Livestock animals suffer from poisoning by polluted water and air. Agricultural activities are frequently destroyed during mining. Some mining companies now increasingly engage in interventions in agriculture. However these frequently remain premised on the belief that indigenous practices are backward and need improvement. Such an approach enables the company to claim increased credit for introducing change, yet such changes may actually erode longer-term and more sustainable indigenous food security and traditional agricultural practices.[24]

Forced emigration of indigenous peoples from their traditional lands can take place either because of direct removal, harassment or from loss of livelihoods caused by resource extraction projects. The UN Special Rapporteur on the Rights of Indigenous Peoples quotes this migration process as the transition of "ecosystem people" into "ecological refugees," describing the negative effects of the continuous relocation of a significant number of the Adivasi of India as a result of large-scale developments projects.[25]

Mining companies emphasize the employment and livelihood opportunities they claim to bring, yet employment levels in mining are in severe decline, thanks to increasing automation that almost certainly require skilled operators from outside the local area. Employment opportunities for locals are often limited to unskilled short term labor or security positions. Mining remains as one of the most hazardous industries in which to work, with regard to levels of accidents at work, fatalities in the industry and long term health impacts.[26]

The true costs and benefits of mining are seldom understood due to a serious failure to recognize and respect more sustainable livelihood activities that are adversely affected by mining. The loss of livelihoods in small-scale mining, hunting, agriculture, fisheries, and other traditional and alternative modern livelihoods frequently far exceeds the number of paid jobs generated in mining. Such livelihood losses are rarely recorded. While the mining companies may report billions of taxes paid to the government, the state has seemingly failed in redistributing the benefits, especially to those directly impacted by the mines. Poverty and poor social services remain endemic, particularly in communities hosting the mines. Research in the indigenous Benguet region of the Philippines shows a direct, long-term correlation between poverty and large-scale mining in towns, and a recent article has drawn attention to the poverty of Canadian Aboriginals living next to a De Beers diamond mine in Attawapiskat, northern Ontario.[27]

Vedanta Vedanta in Orissa, India[28]

The Nyamgiri mountain is regarded by local tribal inhabitants as Nyam Raja – roughly translated as “Lord of the Law” or “Lord of Dharma.” There have been plans to mine the hills from Bauxite since 1997, latterly by UK-registered mining company, Vedanta Resources.

In September 2005 an inquiry by a leading advisory committee to India’s Supreme Court (The Central Empowered Committee, or CEC) concluded that inter alia Vedanta had “falsified information” to obtain environmental clearances for the alumina refinery under construction on plains below the mountain. The company had also destroyed more than 10 hectares of forest land. The CEC urged the mining venture be rejected on environmental grounds, and also because it would violate the constitutional rights of the Kondh people.

Despite the CEC’s forthright recommendation, during the succeeding five years Vedanta continued battling to clear the mining project. Many Khonds rose up in vociferous opposition to what they perceived as an unprecedented threat to their land and livelihoods.

The strength of their campaign attracted the backing, not only of several leading Indian human rights and environmental NGOs, but also that of international organizations such as Amnesty International and Action Aid.

The UK-based Tribal Peoples’ campaign group, Survival International, in September 2009 submitted a complaint about Vedanta’s activities around Lanjigarh to the British government’s National Contact Point (NCP) for a ruling under guidelines set by the OECD for the conduct of multinational corporations.

The NCP ruled that Vedanta “did not respect the rights of the Dongria Kondh”; did not “consider the impact of the construction of the mine on the [tribe’s] rights”; and that it “failed to put in place an adequate and timely consultation mechanism.”

The British government body concluded that a “change in the company’s behavior” was “essential.” Moreover, it criticized Vedanta—despite repeated requests—for “fail[ing] to provide any evidence during the examination.” According to Survival International, this was “the only time a [UK] company has refused to participate in an OECD investigation.”

In February 2010, Amnesty International published detailed allegations about the company’s social and environmental violations in the Lanjigarh area which it has neglected to answer. Finally, in August 2010, a high-level independent report, commissioned by India’s Ministry of Environment and Forests (MoEF), unequivocally rejected the Nymgiri mining project and also urged a halt to

Vedanta's planned sixfold expansion of its Lanjigarh refinery. The report's authors concluded that:

"The Vedanta Company has consistently violated the FCA, FRA, EPA7 and the Orissa Forest Act in active collusion with the state officials. Perhaps the most blatant example of it is their act of illegally enclosing and occupying at least 26.123 ha of Village Forest Lands within its refinery, depriving tribal, dalits and other rural poor of their rights."

Shortly afterwards the MoEF minister, Jairam Ramesh, went on record to criticize India's Supreme Court for permitting construction of the Lanjigarh refinery in the first place; and he placed a ban on expansion of the refinery.

At the time of writing, Vedanta is trying to overturn this ruling before India's Supreme Court. However, within the past two months further evidence of mismanagement at the refinery has emerged, specifically relating to involuntary (and illegal) on-site releases of highly alkaline toxic solid wastes, commonly-known as "red mud."

On several occasions between 2007 and 2009, the Orissa State Pollution Control Board (OSPCB) had criticized Vedanta for the poor construction of this pond, issuing three "show cause" notices to the company and ordering that it prevent these wastes entering into the adjacent Vamsadhara river.

On April 5 2011, part of the pond wall burst open, causing many tons of these wastes to cascade into the river for around three hours. Although a video, clearly showing evidence of the violation was swiftly posted on YouTube, the CEO of Vedanta Aluminium denied that there had been any breach of the wall, even suggesting the footage (whose veracity is not in doubt) was part of a "dirty tricks" campaign by those opposed to the mining.

A mere six weeks later (on 16 May 2011) the pond wall broke once again, prompting Amnesty International on 1 June to issue a statement drawing attention to what the human rights body called a "toxic sludge leak" that threatens rural communities."

Amnesty estimated that "four to five thousand people in 12 villages are threatened by the leaks, which could worsen during heavy monsoon rains."

It maintained that "[l]ocal people have protested that they have not been given any information by Vedanta Aluminium or the government about efforts to prevent further leaks…Vedanta Aluminium denies that there were any spills from the red mud pond and has reportedly not repaired the damaged areas."

Recently, too, the Indian National Human Rights Commission identified 3.66 acres of land within the refinery that it said legally belonged to the Tribal Khond; as a result of which the local administration registered a case of land grab against Vedanta.

Women and Mining: Indigenous women often have respected and recognized roles in the management of the subsistence economy. The destruction of these livelihood options and their partial replacement by paid employment in mining most often filled by skilled male outsiders (with some lesser opportunities for local men) results in a double reduction in the position and status of women. Out-migration, in search for employment and sex work, has increased for women, exposing them to more vulnerable situations. Mining camp communities studied reveal increased incidences of gender violence, including rape and trafficking, domestic violence, marital breakdown, infidelity, and sexually transmitted diseases.[29] Stories from Burma reveal that the influx of transient mine workers in the gold rush site in Kachin State, and the lack of economic options for women has led to increasing incidences of sex work, while at Barrick's Porgera mine in Papua New Guinea there have been six recorded incidences between 2008-2010 of the use of gang rape by mine security personnel as a tool of repression.[30]

Internal conflict: There are widespread cases of extractive industries causing a significant deterioration in communal social cohesion and the erosion of traditional authority structures among indigenous peoples. Companies are widely accused of generating and exploiting such divisions. Community members can take opposing positions regarding the perceived benefits of resource extraction, resulting in conflict that, at times, erupt into violence. Social conflict appears to be particularly prevalent when economic benefits are transferred directly to individuals, either in terms of compensation or jobs. It can also exacerbate divisions across generations or between men and women. The risk of corruption and bribery of leaders, or even the setting up or recognition of false leaders who are more amenable to accepting projects, is prevalent. The World Bank's own Extractive Industries Review pointed to the link between mining and corruption at both the national and local levels.[31]

Non-indigenous migration into indigenous territories and its consequences can also have a negative effects. These can include the direct entry of non-indigenous workers brought

in to work on specific projects, as well as the increased traffic into indigenous lands owing to the construction of roads and other infrastructure. In Colombia, the arrival of extractive industries in indigenous areas has reportedly triggered the infiltration of indigenous territories by drug traffickers and guerrillas, together with the militarization of those territories.[32]

Cultural and spiritual impacts: The result of these influxes and loss of livelihoods can be a significant impact on important aspects of indigenous culture, such as a loss of language and moral values. Additionally, large-scale projects can lead to the destruction of graves, cultural, sacred and archaeological sites. This has been a particular issue for Australian Aboriginal people, where a lack of understanding of their indigenous spirituality has resulted in the destruction and damage to important sacred sites.[33]

In New Mexico, USA, the proposed Mt. Taylor mine would create a uranium mine in an area officially designated as Traditional Cultural Property to the Navajo Nation, the Hopi, the Zuni, and the nearby Laguna and Acoma Pueblos.[34] In the case of the Canatuan Subanon, in the Philippines the TVI mining company caused the destruction and desecration of the Subanon's sacred mountain, breaking the ritual requirements of the sacred ground. This sacrilege was denied by the company at the time, but subsequently acknowledged only after the damage was done.

Violent rights violations: Serious human rights abuses associated directly with the extractive industries continue at a high rate. These include murder, wounding, torture, intimidation, militarization, forced displacement, gender violence, and illegal detention. These acts are perpetrated by state forces, or private security forces and/or paramilitaries. Where opposition is strong, there are clear reports of governments intervening with police and military forces in partisan support of the mining interests. This leads to a cycle of political instability, violent upheavals and the potential rise of armed rebel groups in indigenous areas, to the point where indigenous peoples can be caught between government and rebel forces, for example with the Naxalite movement in India or the New Peoples Army in the Philippines.

Attempts by Peruvian indigenous peoples in 2009, to assert their right to say no to unwanted oil, gas and gold exploration within their territories resulted in a clash with government forces at Bagua, and the deaths of at least 33 people. Yet this event, that has become known as "Amazon's Tiananmen" continues to reverberate, despite efforts by the government to deal with the demands of indigenous peoples. This has most recently manifested itself in a "Grand National March for the Right to Water and Life" on the Peruvian capital, calling for Newmont's Conga project (and two others, controlled by Anglo American and Grupo Mexico) to be cancelled.[35]

In Papua New Guinea, mining company security have been accused of shooting at local people as well as burning their houses and using gang rapes at Barrick's Porgera mine. Subsequently, the company acknowledged that forced evictions occurred in violation of international law.[36]

Security forces have repeatedly been accused of serious abuses at Freeport McMoRan's Grasberg mine in West Papua (Indonesia). Recently these have included the killing of striking local Papuan workers in protests in October 2011, but the mine has brought massive conflict to the area ever since it was created in a deal between the U.S. mining company and the Suharto dictatorship against the will of the local Amungme people. The ensuing unrest has meant the company is effectively operating a counter-insurgency policy, to the point where it has been revealed to be paying the state security forces around the mine, including US$14 million to the infamous "Brimob" Police Mobil Brigade.[37]

The Burmese military continue in a culture of impunity to provide military backing for mining expansion. The government had reportedly opened up 18 percent of the Hugawng Valley in Kachin State to mining concessions. As of 2006, there were eight mining companies operating 31 mine sites in the valley. To facilitate such interest, the government had beefed up military forces in the area from 26 battalions in 1994 to 41 battalions at the time of writing.[38]

Artisanal Mining

Mining can be a significant traditional economic activity in some indigenous territories, where indigenous peoples have developed their own artisanal or small-scale mining activities. Such mining can be a feasible and sustainable activity, especially if indigenous rights are protected. The range of minerals mined by artisan miners is diverse, including gemstones, gold, copper, cobalt, coltan, coal, and other industrial minerals. The World Bank report on artisanal mining found that it is practiced in about 50 countries by people who live in the poorest and most remote rural areas, with few employment alternatives. At least, 20 million people are engaged in artisanal and small-scale mining and a further 100 million people depend on it for their livelihood; as many as 650,000 women in 12 of the world's poorest countries are engaged in artisanal mining and it locally makes significant contributions to local development.[39]

In Benguet, Philippines, there is a long history of traditional gold mining by the indigenous Ibaloi people. The distribution of the mining rights is carefully socially controlled and surrounded with ritual observance and gold is subject to some community sharing, much to the frustration of the colonizers who complained the artisanal miners "do not even try to become wealthy, nor do they care to accumulate riches." Much of this was displaced by large-scale mining introduced by the US colonial administration in 1903, and further accelerated when opencast mines started in the late 1980s. These mines removed the gold that had been worked for generations, but also destroyed the fields and farms worked by local women farmers, and desecrated graves.[40]

The Legal Framework for Indigenous Peoples' Rights

All too often extractive projects are justified—with an accompanying denial of indigenous rights—under the guise of "national development."[41] The argument is that such "development" supersedes the rights of communities to defend their more sustainable economy and values. This not only ignores the basis of "rights-based development," but it specifically denies the right of indigenous peoples to free, prior and informed consent (FPIC). The current Special Rapporteur on the Rights of Indigenous Peoples, Professor James Anaya, has

highlighted the development of an international norm requiring the consent of indigenous peoples when their property rights are impacted by natural resource extraction.[42]

FPIC is central to indigenous peoples' exercise of their right of self-determination with respect to developments affecting their lands, territories and natural resources. FPIC refers to the right of indigenous peoples to give or withhold their free, prior and informed consent in non-coercive negotiations prior to operations being established and developed on their customary lands.

The 2007 passage by the UN General Assembly of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) was a major international advance in the international recognition of indigenous rights. The UNDRIP sets out the minimum standards for the survival, dignity and wellbeing of indigenous peoples. One of those is the principle of FPIC, specifically in Article 32. It also affirms, however, related rights including indigenous peoples' right to be represented through their own institutions, to exercise customary law, to the ownership of the lands, territories and natural resources that they traditionally own or otherwise occupy or use, to self-identification; and, more fundamentally, to self-determination.[43]

The UNDRIP has guided the UN treaty bodies, which review the application of the UN human rights conventions in practice, to clarify how human rights apply to the special circumstances of indigenous peoples. The Committee on the Elimination of Racial Discrimination (CERD) and the Committee on Economic, Social and Cultural Rights (CESCR) have instructed states that indigenous peoples' consent is required in the context of extractive industry projects.[43] In 2009, in its ruling on the *Poma-Poma v Peru* case, the Human Rights Committee stated that for indigenous participation in decision making to be effective, their FPIC was required and that "mere consultation" was inadequate to ensure protection of their rights under Article 27 of the International Covenant on Civil and Political Rights (ICCPR).[45]

Perhaps the most significant jurisprudence to affirm the requirement for FPIC is the November 2007 ruling on the *Saramaka People v Suriname* case, from the Inter-American

Court on Human Rights (IACHR). The Saramaka people's customary lands had been distributed to mining and logging companies without any regard for their rights. The judgement reaffirmed that the property rights of indigenous peoples derive from custom and not from any act of the state, and noted their rights are exercised jointly with the right to self-determination and their right "to freely dispose of their natural wealth and resources." The Court affirmed the right of the Saramaka people to FPIC, making decisions in line with their traditional methods of decision making.[46] Moving across continents, the African Commission on Human and Peoples' Rights (ACHPR) also affirmed the rights of indigenous peoples to own their customary lands and to FPIC rights in the 2009 *Kenya v Endorois* case. The ACHPR referred to both the UNDRIP and the Saramaka case in coming to their conclusions.[47]

Jurisprudence at the national level has also recognized the duty to obtain indigenous peoples' FPIC. In its October 2007 landmark ruling in *Maya Villages of Santa Cruz and Conejo v The Attorney General of Belize and the Department of Environment and Natural Resources*, the Supreme Court of Belize, similar to the ACHPR, referred to the FPIC requirements in both the UNDRIP and CERD's General Comment 23. The Court ordered that the state cease and abstain from any acts, including the granting of mining permits and the issuing of regulations concerning resource use, which impacted on the Mayan indigenous communities "unless such acts are pursuant to their informed consent." In 2010 the Court reaffirmed the applicability of its 2007 ruling to all "the Maya villages in the Toledo Districts."[48]

At the national level, a number of jurisdictions have also recognized the requirement to obtain indigenous peoples' consent, or something resembling it, including Australia's Northern Territories via its 1976 Aboriginal Land Rights Act, Greenland in its 1978 Home Rule Act; the Philippines, through its 1997 Indigenous Peoples Rights Act (IPRA); and in the Constitutions of Venezuela and the Plurinational State of Bolivia.[49] It is clear that states taking steps to promote responsible mining, including establishing specific policy frameworks

that address the sustainability of the mining sector, should refer to the UNDRIP and its key provisions.

The World Bank Group has, to date, failed to include FPIC as a requirement in its policies pertaining to indigenous peoples, despite its role as a specialized agency of the United Nations and strong recommendations that it do so emerging from two major international reviews it had commissioned, one on dams and the other on the extractive industries. The Bank opted to include the significantly lower standard of "Free, Prior Informed *Consultation*" resulting in broad community support, although it's private sector arm, the International Finance Corporation (IFC) in the latest update of its safeguards has felt the need to recognize the UNDRIP, and therefore, FPIC in certain circumstances.[50] Both the European Bank for Reconstruction and Development (EBRD) and the Asian Development Bank (ADB), have in recognition of the UNDRIP, included requirement to obtain FPIC, even if the ADB includes a definition of consent as "broad community support."[51]

As a manifestation of "corporate social responsibility," FPIC has been included in an increasing number of company policies. For example it has been endorsed by the Roundtable on Sustainable Palm Oil (RSPO) as a key principle in its Principles and Criteria (P and C), and it is a requirement of the Forest Stewardship Council.[52] Sadly the mining sector remains behind others in recognizing FPIC for indigenous peoples.[53]

Routes of Resistance and Redress

Given the international framework to protect the rights of indigenous peoples in the context of extractive industries, the question becomes how well these are implemented in practice.

It is worth noting that most of the action taken is local in nature, and very often relies on the bravery of indigenous leaders and human rights defenders. National and interna-

tional action when taken, is usually based on a great deal of community organising and courageous local action.

United Nations human rights system: Various UN human rights bodies have done a great deal to advance the rights of indigenous peoples. The UN Permanent Forum on Indigenous Issues and the Expert Mechanism on the Rights of Indigenous Peoples have both engaged in research on issues around indigenous peoples and also provided valuable fora in which community leaders can raise human rights violations and map out their visions for a sustainable future.

Under the UN Special Procedures, the creation of the Office of the Special Rapporteur on the Rights of Indigenous Peoples has provided another useful route for complaints. Indigenous peoples have also been able to take advantage of raising issues for the relevant country under the Universal Periodic Review under the Human Rights Council.

The UN CERD particularly, through its General Comment 23 on indigenous peoples, which notes a requirement for FPIC where rights will be affected, has been hugely beneficial. It has also provided a mechanism for individual complaints, through its Early-Warning Measures and Urgent Procedures, and has made a number of recommendations to states in their concluding observations that they should enact legislation in their home countries to ensure that their corporations are held accountable for violating the rights of indigenous peoples abroad.[54]

Carrie Dann, a Western Shoshone Nation elder, stated after a decision that was critical of the U.S. government with respect to mining issues, "The struggle of the Western Shoshone Nation is the struggle of all indigenous peoples. It is not just about abuse of power and economics—it is about the stripping away of our spirit… The UN CERD decision confirms what the Western Shoshone and other indigenous peoples have been saying for a very long time."[55]

However, despite surprisingly strongly worded recommendations from the CERD in the case of the Western Shoshone, the U.S. government has still failed to take the relevant action to remedy the situation.[56]

Regional human rights mechanisms: There have already been some favorable decisions under regional courts and human rights commissions. The Inter-American Court and Commission on Human Rights has led the way in progressive decisions, but the African African Commission on Human and Peoples' Rights (ACHPR) has contributed through the Endorois case. There is less relevance, so far, for the European Court on Human Rights and although the ASEAN region has recently created a human rights body, it has yet to move much beyond human rights promotion as opposed to protection.[57]

Extraterritorial legal action: Theoretically, a litigant may consider legal action in the home countries of multinational corporations. However practically there remain many serious obstacles to such a course of action. These include finding the necessary legal advice and support, having to prove that the parent company is responsible and that the courts in the home country have jurisdiction, producing evidence and witnesses and finding necessary legal arguments. It also requires patience, given that most of the cases quoted below have been ongoing for 10 years or more. The assertion that justice delayed is justice denied is particularly true in the extractive industries sector, as litigants may die of mine-related disease or companies may cease to exist before claims are considered, and projects can advance causing irreparable social and environmental damage despite ongoing legal action.

International law has held that human rights abuses can be prosecuted around the globe, but practically litigants tend to use civil, rather than criminal law, to bring cases, for instance under the Alien Tort Statute Act of 1789, which gives United States courts the jurisdiction to rule on human rights abuses perpetrated against foreign citizens outside the U.S. There are still ongoing arguments on its applicability, including over whether corporations are covered by the Act, but well-known current cases include *Kiobel v Shell*, in relation to Shell's support for the violent suppression of the Movement for the Survival of the Ogoni people in Nigeria, and *Alexis Holyweek Sarei v. Rio Tinto PLC* over the human rights violations in the secessionist way of the people of Bougainville because of Rio Tinto's Panguna mine.[58]

In Ecuador, a historic class action lawsuit against Chevron oil company found favorably for thousands of victims who, 18 years after the trial, will be compensated for damages resulting from the contamination of water by the company, which was fined $9.5 billion. The challenges that lie ahead for the implementation of this decision are numerous, especially as the Hague's Permanent Court of Arbitration has become involved.[59]

Human Rights chief Navi Pillay, referring to *Kiobel v Shell*, said, "governance gaps created by the rising reach and influence of business actors have not been matched by a similar rise in the capacity of societies to manage their impact and ensure accountability for adverse human rights impacts resulting from business activities."[60]

Voluntary mechanisms: The most widely known voluntary mechanism for complaints is the OECD Guidelines for Multinational Enterprises. The Guidelines constitute recommendations addressed to companies by the OECD member countries and other signatory states, with a mechanism if a company has failed to respect the Guidelines. There have been a number of problems with the Guidelines as a complaints mechanism, which are voluntary in nature and are implemented at the national level. In the former case, a complaint that was brought to the UK National Contact Point (NCP) on behalf of indigenous communities in Orissa, India was effectively ignored by the company involved, Vedanta, but no action was taken on the company's part to the NCP's request that it now "change its behavior."[61]

But there have been times where complaints have been more effective. A complaint was submitted on behalf of the Mangyan communities of the Philippine against Intex Resources, a Norwegian mining company. The Norwegian NCP confirmed breaches of the Guidelines, specifically around inadequate consultations and failure to obtain legally required consent, lack of transparency and failure to adequately assess projects environmental risks. It was particularly important that although the NCP recognized the primacy of national law in regard to indigenous peoples in the Philippines, where there was obvious poor implementation it insisted there were inter-

national norms that the company should follow. Although the company has argued against this, the environmental compliance certificate (ECC) for large-scale mining which had been revoked has at the time of writing has not been reinstated.[62]

In May 2011, the OECD updated its Guidelines to raise standards for corporations in the field of international human rights, including those pertaining to indigenous peoples.[63]

Engagement with companies, financiers and shareholders: The final route listed here is for direct advocacy with the companies, or their financiers and shareholders. This can have mixed results depending on the ethical and financial situation of the company and its investors, the capacity of the community and their allies to bring pressure to bear and the level of any violations. A number of individual activists and organizations have been targeting company Annual General Meetings or working on disinvestment campaigns for a number of years. Rio Tinto has had its own shareholder advocacy organization, Partizans, campaigning around its activities since 1978, while dedicated campaigning by a number of organizations has led to disinvestment from Vedanta Resources by a large number of ethical funders, including Norway's Sovereign Wealth Fund, the Church of England and the Marlborough Ethical Fund.[64]

Conclusion

The Four Corners region of the United States is an area of primarily indigenous lands.[65] In 1973 it was officially declared a "National Sacrifice area" owing to the sacrifice that was requested of its indigenous inhabitants to strip its resources of uranium, coal, oil, and gas to fuel the U.S. Cold War military machine. The consequences, both in terms of poverty, environmental damage and health issues from the uranium and coal, have been dire.[66] This example of wholly unacceptable and unsustainable development has been repeated in so many different places for indigenous peoples.

Despite advances in international law, there is still a gross lack of adequate protective measures for indigenous peoples or their communal lands.

The mining industry has laid increasing rhetorical emphasis on its commitment to sustainability. Given the nature of mining, it is clear that the industry cannot be left to direct its own patterns of development. Various stakeholders must, for example, work to minimize overall fossil fuel use and production. Since the recovery and recycling of most metals can lead to a significant reduction in global mining impacts, especially to green field mining activities, an emphasis on recycling and substitution are a necessary contribution to a more sustainable world. But the mining industry alone is unlikely to take such steps while current practices remain viable and profitable by externalizing many costs onto nearby communities and the environment. Yet for "Green Economies" to be realized, they must maximize the recycling and reuse of extracted minerals rather than allow an increasing expansion into new and wider green field areas.

Global Oversight

The Rio +20 Political Declaration include provisions for global oversight of the mining sector and its economic, social and environmental outcomes in relation to sustainable development and poverty eradication.

Human Rights

Consistent with the UNDRIP, future mining activities shall uphold full recognition and respect for indigenous peoples' rights to their land, territories and resources; to free, prior and informed consent to land use, environmental and mining policies, programs and projects affecting them; to full and effective participation at all stages of mining development; and to safeguard and redress mechanisms for economic, social and environmental harm.

Specifically, indigenous peoples are concerned that 10 years after the Johannesburg Summit, and five years after the acceptance of the UNDRIP, the mining industry has failed to respect and implement its provisions, including respect for FPIC, thus contributing to and exacerbating ongoing natural resource conflicts.

Safeguard Critical Ecosystems and Indigenous Lands

Indigenous peoples call for a shift in priorities towards strengthening legal protections for biological diversity, cultural diversity and plural economies from destruction and impoverishment through extraction.

A moratorium on new mining developments is needed unless and until effective measures are in place to adequately protect affected communities and environments and promote mutual respect and benefits.

There is a need to identify and recognize mining “no go zones” for critical ecosystems and productive landscapes and seascapes for indigenous and local communities. Territories of uncontacted tribes and peoples in voluntary isolation should be identified as no go zones. All other indigenous territories require their free, prior and informed consent as a safeguard to protect environment and people.

Independent Monitoring

Credible and independent monitoring of mining will be vital to adequate protection of people and environment. Indigenous peoples need access to a range of complaints and redress mechanisms

Sustainable Consumption and Production

Mining entails exploitation of non-renewable resources, thus requiring government regulation and planning to conserve and protect valuable non renewable resources, including minimizing extraction and the opening of new mines, as well as maximizing substitution, recycling, reuse and reduced use.

Governance

Multistakeholder processes to address critical areas relevant to mining and sustainable development are needed at multiple scales—global, regional, national, and project levels. These need to be broad in character and alert to both the benefits and threats posed by mining. The disproportionate negative impacts of mining on indigenous peoples is central to present and future governance of mining. Indigenous peoples should be full and effective participants, alongside others in elaborating standards for effective regulation, responsible management and development of future strategies for extractive industries.

Safeguards and Redress

Legally-binding mechanisms are needed for access to justice and redress of grievances for victims of mining operations at home or abroad.

Corporate Accountability

Corporations and investor groups and regulators all have responsibility for any and all violations of rights in which they are invested.

Health and Pollution

Mineral extraction should only be allowed if and where effective measures are taken to avoid negative health impacts

particularly on the old and young in nearby communities and all who work in the industry. This means that mining for minerals with clear and serious health risks including uranium and asbestos should not proceed. Uranium mining and use is not compatible with sustainable development.

Endnotes

[1] This text draws heavily in places from previous materials submitted to the Commission on Sustainable Development authored by Geoff Nettleton, and on the work of Cathal Doyle and Jeremie Gilbert with regard to the legal framework for indigenous peoples. The author would like to recognize and thank them for their contribution.

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[3] The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, Report for UNCSD 18, p. 1-2

[4] R. Moody, 2007, *Rocks and Hard Places*, London: Zed Books; R. Moody, 2001, "Presentation to the Communities Confronting Mining" Corporations Seminar, London, England; W.E. Falck, 2009, "Towards a Sustainable Front-End of Nuclear Energy Systems," JRC Scientific and Technical Reports, European Commission Joint Research Centre Institute for Energy, p. 8, p. 32.

[5] Ibid.

[6] Permanent Forum on Indigenous Issues, 4th session, New York, 16–27 May 2005, Special Theme: Millennium Development Goals Information Received from the United Nations System, E/C.19/2005/4/Add.13, 28 March 2005, paras 3-6.

[7] Interim Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, UN Doc. E/CN.4/2006/97. paras 25, 29.

[8] Report of the UN Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive industries operating within or near indigenous territories. UN Doc. A/HRC/18/; quote from para 65.

[9] Earthworks and Oxfam America, Dirty Metals: Mining, Communities and the Environment, 2004.

[10] Latin American Observatory of Environmental Conflicts (OLCA), "Barrick turns glaciers to dust in Chile," 7 February 2011, http://www.minesandcommunities.org/article.php?a=10694.

[11] Earthworks and MiningWatch Canada, Troubled Waters, How Mine Waste Dumping is poisoning our oceans, rivers and lakes, February 2012; The most obvious examples of waste are the Grasberg mine in West Papua/Indonesia, owned by Freeport MacMoran and Rio Tinto, and the OK Tedi mine in Papua New Guinea formerly owned by BHP Billiton. The Freeport mine has been quoted as dumping 110,000 tons of tailings per day into the Ajikwa river, and by the time it closes in 30 years it will have excavated a 230 sq km hole in the forest that will be visible from outer space.

[12] Red Mud Disaster: Hungary aims to take-over culprit company, Mines and Communities, 23 August 2004, http://www.minesandcommunities.org//article.php?a=10439 Interestingly this spill reflected on the fact that similar spills happening at Vedanta's Lanjighar refinery on tribal land in India have been under-reported.

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[14] J. Kuyek, "The Theory and Practice of Perpetual Care of Contaminated Sites" July 2011, Alternatives North submission to the Mackenzie Valley Environmental Impact Review Board.

[15] R. Moran, A. Reichelt-Brushett, and R. Young, Out of Sight, Out of Mine: Ocean Dumping of Mine Wastes; World Watch - Volume 22, No. 2, March/April 2009; R. Moody, "Into the Unknown Regions: The hazards of STD," April 2001, SSC and International books; Secret government report says Ramu mine dumping flawed, Mines and Communities, 23 May 2008, http://www.minesandcommunities.org//article.php?a=10115.

[16] This case study is an edited version of a report prepared for submission to the UNCSD process authored by Kirsten Blair.

[17] Inner Mongolia's Deadly Coal Drive, 13 June 2011 http://www.minesandcommunities.org//article.php?a=10969; Behind the Murder At Pachuwara, India, Mines and Communities, 31 January 2012 http://www.minesandcommunities.org//article.php?a=11460.

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[19] T. GoldTooth, 2005, "The Price of Gold: Gold Mining and Impacts on Indigenous Communities," presentation to Goldsmith's Annual Conference.

[20] Coal's Assault on Human Health: A Report From Physicians For Social Responsibility, November 2009, http://www.psr.org/resources/coals-assault-on-human-health.html).

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[22] WISE Uranium Project, Uranium mining and Indigenous People, http://www.wise-uranium.org/uip.html.

[23] Report of the UN Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive industries operating within or near indigenous territories. UN Doc. A/HRC/18/.

[24] In the Philippines, faced with criticism of it's abuses and local opposition to its operations, TVI Pacific, with direct funding from the Canadian Government through CIDA, launched a goat rearing project targeting support on the wives of their workers. The project is locally identified as failing as most of the goats were eaten rather than becoming a breeding herd for more sustainable livelihood. Meanwhile the open pit mine adversely affected food security (based on testimony collected by PIPLinks).

[25] Report of the UN Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive industries operating within or near indigenous territories. UN Doc. A/HRC/18/.

[26] Mine Safety and ILO Convention 176: A Continued Priority for the ICEM, 24 April 2011 - http://www.icem.org/en/209-ILO/4383-Mine-Safety-and-ILO-Convention-176:-A-Continued-Priority-for-the-ICEM.

[27] A. Boquiren, Validating policy prescription from benefit-cost assessments of mining though comparative analysis and hest of hypotheses, November 2007, University of Philippines; Canada mining boom leaves natives in the cold, 11 February 2012, http://www.aljazeera.com/indepth/features/2012/02/201221017545565952.html.

[28] This case study is an edited version of a case study published subsequently in London Mining Network report, UK-Listed Mining Companies and the Case for Stricter Oversight: Case studies and recommendations, March 2012.

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[31] There are many other examples recorded, specifically in materials from the Philippines, which review the implementation of FPIC under the 1997 Indigenous Peoples Rights Act. See: ALG et al., "Discrimination Against Indigenous Peoples of the Philippines: Shadow Report Submission to the UN CERD 75th Session," August 2009, p. 56-62; E Salim, Final Report of the Extractive Industries Review, December 2003, World Bank, p. 19.

[32] Report of the UN Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive industries operating within or near indigenous territories. UN Doc. A/HRC/18/.

[33] Australia's Yindjibarndi People continue battling Fortescue's Pilbara expansion, Mines and Communities website, 30 November 2011, http://www.minesandcommunities.org/article.php?a=11326.

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Annex

Manila Declaration (abridged)

In March 2009, indigenous peoples and their support organizations from 35 countries around the world gathered in Manila, Philippines, for the International Conference on Extractive Industries and Indigenous Peoples. Cases of long-running issues and concerns brought about by extractive projects of oil, gas and minerals in their lands and territories were presented. Resolutions and recommendations, addressed to their communities and supporters, civil society organizations, mining companies, investors, states were put forward in their Manila Declaration.

An abridged version follows. For full text see: http://www.minesandcommunities.org//article.php?a=9147

We, Indigenous Peoples and support organizations from 35 countries around the world and representing many more Indigenous Nations, have gathered together in this International Conference on Extractive Industries and Indigenous Peoples. As Indigenous Peoples we have a unique cosmic vision, diversity of languages, histories, spirituality and territories which have existed since time

immemorial. However, we now find ourselves within the borders of States which have established norms and laws according to their interests. On account of this situation, we have suffered disproportionately from the impact of extractive industries as our territories are home to over sixty percent of the world's most coveted mineral resources. This has resulted in many problems to our peoples, as it has attracted extractive industry corporations to unsustainably exploit our lands, territories and recourses without our consent. This exploitation has led to the worst forms of, environmental degradation, human rights violations and land dispossession and is contributing to climate change.

Environmental degradation includes, but is not limited to, erosion of our fragile biological diversity, pollution of land, air and water, and destruction of whole ecological systems. Extractive industries, and particularly those relating to fossil fuels, also have significantly contributed to the climate change that is destroying our Mother Earth.

Human rights violations range from violations of Indigenous Peoples' right to self-determination (which includes the right to determine one's own economic, social and cultural development), rights to lands, territories and resources, as well as displacement and violations of the most basic civil and political rights, such as arbitrary arrests and detention, torture, enforced disappearances and killings.

Our cultural diversity has also been grossly eroded because of the destruction of biological diversity and lands, territories and resources by extractive industries upon which our cultures are based. This erosion of our cultural diversity is also a result of the imposition of colonial systems and the settlement of non-Indigenous Peoples. Corporations enter into our territories with the promise of "development" through employment, infrastructure building and payment of governmental taxes. Despite these promises, there still exists a situation of dire poverty in those living close to extractive industry projects. This situation has fuelled conflicts between Indigenous Peoples and the State and extractive industry corporations, as well as causing divisions within the Indigenous communities themselves.

Based on the foregoing observations, we assert that:

- Indigenous Peoples are rights holders, with an inextricable link to their lands, territories and resources, which they have traditionally owned, occupied or otherwise used or acquired, and should not be treated merely as stakeholders. We have a right to self-determination of our political condition and to freely choose our economic, social and cultural

development (UNDRIP Article 3);

- Our rights are inherent and indivisible and seek recognition not only of our full social, cultural and economic rights but also our civil and political rights;
- All doctrines, policies and practices based on the presumed superiority of colonial peoples and worldviews should be condemned;
- We contribute to the diversity and richness of the cultures that make up humanity and believe that we can teach valuable lessons to the rest of the world through our values and world views in how to tread gently upon the earth;
- Destruction of Indigenous Peoples' sacred sites and areas of spiritual and cultural significance by extractive industries must stop;
- The vulnerable position of women and youth with regard to the impacts of extractive industries, including loss of livelihoods, violence and impacts on health and wellbeing must be recognized;
- The development model premised on unsustainable consumption and production, and corporate globalization, which fuels the entry of extractive industries onto our lands, must be rejected;
- Respect for the preservation of life on earth, and our right to food, must have precedence over extractive industry projects;
- Extractive industry projects must not take precedence over our right to land—regardless of whether our rights are based on legal recognition or usufruct rights;
- There must be an immediate end to the criminalization of community resistance, the violent intimidation, harassment, and murder of our leaders, activists and lawyers, who are working for the defence of our lands and lives;
- Extractive industry projects must not take precedence over the human right to water. Water is especially important in our lives and is sacred to us. In addition the major reserves of fresh water are found in our territories;
- The right to water is a fundamental human right which must be recognized. We therefore condemn the conduct of the World Water Council which demotes the right to water

a “basic need”;

- Negotiations about climate change should not be conducted by States and international organizations unless there is full and effective participation of Indigenous Peoples. Furthermore, mitigation and adaptation measures related to climate change must be designed and implemented in keeping with Indigenous Peoples’ rights;
- The failure to hold extractive industries to account in host and home countries must be addressed and mechanisms for accountability and enforcement must be created immediately; and
- Implementation of interstate infrastructure initiatives—such as the South American Regional Infrastructure Initiative (IIRSA)—that lead to mega-projects on our lands and territories without first obtaining our free prior and informed consent (FPIC) are destructive to our cultures and survival, and a denial of our right to self determination.

Given the above, in order to ensure respect for the rights recognized in the UNDRIP, as well as the ecological integrity of our planet and communities, we call for:

- A stop to the plunder of our lands, territories and resources;
- A moratorium on further extractive industry projects that affect or threaten our communities, until structures and processes are in place that ensure respect for our human rights. The determination of when this has been realized can only be made by those communities whose lives, livelihoods and environment are affected by those projects;
- Due process and justice to victims of human rights violations who are resisting extractive industries;
- Review of all on-going projects that are approved without respect for our FPIC and self determination rights; and
- Compensation and restitution for damages inflicted upon our lands, territories and resources, and the rehabilitation of our degraded environments caused by extractive industry projects that did not obtain our FPIC.



INDIGENOUS WOMEN OF ASIA & SUSTAINABLE DEVELOPMENT

Asia Indigenous Peoples Pact (AIPP)

Indigenous societies are as diverse as are the peoples. As with other societies, indigenous societies define gender roles on men and women, which are then reflected in the roles and responsibilities they assume; and in the needs, desires and interests that they require and aspire for. In Asia, traditionally, indigenous women are generally respected by indigenous men and have had equal access to and control over collective land and natural resources. However, these access and control have been eroded or are being supplanted through time by the introduction by the state of institutions of private property. Some indigenous women of South and Southeast Asia, like those belonging to some indigenous nationalities of Nepal and certain tribes of India, Thailand and Cambodia, enjoy a high social position and their status is not low in comparison to their male counterparts. Property is owned by both men and women in the communities of matriarchal Tharus of India,

and women spend their income freely without any advice from their men relatives. In several matrilineal tribes such as Khasi, Garo and Jaintia of North-Eastern hills of India and among the Karen in Thailand, women are entitled to hold exclusive land rights and inherit ancestral properties. However, their elevated status within the family is not reflected in the community. Certain influences of colonial and dominant cultures and traditions on indigenous peoples have placed indigenous women in a difficult situation in terms of playing effective roles as custodians of their cultures.[1] With the loss of access and control over land and resources, indigenous women's role and participation in sustainable development is compromised. This chapter looks at the issues of indigenous women and sustainable development and proposes recommendations to address such issues.

Key Issues of Women Relating to Sustainable Development

Indigenous women throughout the world often face similar experiences and challenges, such as multiple forms of discrimination; poverty; lack of access to education, health care and ancestral land; the depletion of their natural environment and resources; as well as violence and domestic abuse.[2]

As the achievement of sustainable development equally requires the integration of environmental protection, economic growth and social justice, it is crucial to consider indigenous women's key issues at these different levels of sustainability.

Indigenous Women's Role in Natural Resource Conservation and Biodiversity

Most indigenous communities subsist largely on swidden farming/shifting cultivation and wet rice cultivation on terraced fields. These are supplemented by hunting and gathering of

forest products. Although men and women are both involved in agriculture and other productive work, indigenous women bear the brunt of the work. While men are generally involved in doing work that is regarded to be heavy, in general, women are responsible for farm work such as sowing, planting and harvesting, and farm maintenance; as well as for childcare, fetching water, fuelwood, fodder for domestic animals, forage wild vegetables and catching fish. They are in charge of managing household consumption, and thus, of the whole family's health. Women often provide for critical protein, vitamin and mineral-rich vegetables both from gardens, fields, rivers and forests.

Because of the close links between their daily lives and the environment, indigenous women play crucial roles in the management and conservation of natural resources and biodiversity. As keepers of very varied knowledge systems, including ecosystem management and technologies, locally adapted seed varieties and medicinal plants, they transfer this crucial knowledge to their children and younger generations. The Karen women in Thailand are known for the variety of seeds that they maintain and propagate. At least 40 different foods with many varieties continue to be grown in their swidden fields.[3]

Impact on Indigenous Women Due to Land Conversion and Forest Degradation

In many cases, globalization and economic liberalization processes have destroyed indigenous subsistence economies. Indigenous women are particularly vulnerable to the effects of environmental degradation brought by the encroachment of mining, plantation, or logging and the like. They often suffer disproportionally from the loss of land and especially forests as a result of unsustainable development policies since they have fewer economic resources and less control over shared resources. They also are mostly excluded from decision making processes.

Many indigenous women have lost their livelihoods as they are not longer able to produce their own goods. For example, in most of the countries in Asia, non-timber forest products are an important source of income for indigenous women. They gather, process and sell them independently of men, which gives them a source of cash income and certain level of economic independence, and thus, a stronger position and better status in the society. Scarcity or the loss of access to forests and non-timber products have made women become more dependent on men and contributed to the deterioration of their status. With the increase in environmental problems and shrinkage of land and natural resources, the workload and responsibilities of women have also increased. Sometimes they are forced to join labor markets as they cannot find enough fuelwood, fodder, vegetables, etc. for their households. As a consequence, there are adverse impacts on the living standard of the family and on gender relations.

Discrimination of Indigenous Women in Relation to Access to Education, Health Services and Decision Making

Sustainable development refers to the balancing of environmental, economic and social concerns. As these different aspects are tightly interconnected, it is essential to highlight some aspects of the socio-economic situation of indigenous women.

They still are confronted with inequality in many social and economic concerns. Indigenous women face lack of livelihood and employment opportunities as well as access to credit, capital markets and other economic activities. They are especially deprived of educational opportunities, because they not only face the same barriers to accessing school as men (such as economic restrictions or geographic obstacles), but additionally encounter gender-based discrimination, like family preference for girls to remain at home to help in domestic chores and child care, or to be married off at a young

age.[4] Most often, the lack of accessibility to schools make it unsafe for girls to proceed with their schooling.

Indigenous women often do not have adequate access to health care services and facilities. Frequently, modern health care services are hardly accessible or completely out of reach for them, physically, financially and culturally.

Indigenous women disproportionally suffer from a lack of participation in decision making processes and institutions, both in state structures and in the traditional decision making processes, which are still mainly a man's domain. The under-representation of indigenous women in the public domain, in decision making bodies of the government, in community councils, or in civil society organizations deny them the voices to input their perspectives and needs.[5]

In sum, addressing the gender dimension of indigenous peoples' issues is a prerequisite for sustainable development processes. Indigenous women in particular play a fundamental role in the stewardship of available natural resources, and they have a high potential as custodian and sustainer of biodiversity. As a consequence of their socio-political exclusion, the socio-economic development of indigenous communities as a whole is constrained. Thus, in order to achieve sustainability, there is a huge capacity and potential to tap through an increased consideration and recognition of indigenous women's issues, priorities and needs. Indigenous women hold the key to fighting poverty and realizing approaches to sustainability.

Recommendations to Governments on Securing the Rights of Indigenous Women in Development[6]

1. Formulate strategies that include considerations of gender perspectives on the rights of indigenous peoples, and to integrate the special needs and concerns of indigenous women in policies, programs and budgets relating to economic and social development, includ-

ing the adoption of national legislation and measures to eliminate and reverse the multiple discrimination suffered by indigenous women. Measures have to be taken to ensure that indigenous women shall fully and effectively participate in all levels of governance—locally, nationally, and internationally.

2. Adopt measures to enhance indigenous women's participation in development processes. Indigenous women should be provided with opportunities to further enhance their capabilities and to gain control over valued resources that will help them to gain gender equality. Data disaggregation on key indicators on the well-being and development of indigenous women shall be conducted systematically and regularly, taking into account local and regional cultural/social/economic differences with regards to indigenous women's issues.
3. Take measures to recognize, promote and strengthen the vital role and contribution of indigenous women in natural resource management and protection of environment, including ownership rights to lands and access to resources that seek to effectively control and prevent the destruction of other natural resources. Indigenous women's effective participation shall be mandatory in consultation and decision making processes in relation to natural resources. Women should be able to fully and effectively participate in the design, implementation, monitoring and evaluation of environmental programs or projects, including the conduct of impact studies on large-scale development projects.
4. Develop policies to promote special measures for the improvement of indigenous women's economic and social conditions through the expansion of employment/livelihood opportunities, including the professionalization of their traditional skills, especially in arts and crafts, and increased access to resources including micro credit, new technologies, agricultural inputs and other outputs. Women's groups should be entrusted

with the direct management of financial resources for development work[7] as part of their capacity building.

5. Improve rights-based education systems to increase the access of indigenous women and girls to education and skills training, including the implementation of bilingual education both in the formal and non-formal education systems. Targeted literacy programs for indigenous women and girls, using culturally appropriate education approaches and methods, should be pursued.[8]
6. Improve health care systems to foster rights-based approaches to health, including the adoption of culturally acceptable and appropriate strategies on health care services, recognition and development of traditional healing practices and better access to health education and training.

Endnotes

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WATER & THE SITUATION OF INDIGENOUS PEOPLES: 20 YEARS AFTER RIO

Mirna Cunningham Kain

Introduction

The indigenous peoples' implementation plan on sustainable development drafted in Johannesburg[1] had the following objectives in relation to water:

1. Demonstrate our power and our common interest to protect water and life, by building water alliances and networks worldwide;
2. Call for the creation of an International Regulatory Body to track the trade of water. Oppose and denounce the privatization of water, as well as any diversion which affects the water resources of our territories;
3. Demand the establishment of systems for restoration and compensation, to reestablish the integrity of water and ecosystems.

For the preparation of this document, we have analyzed these objectives as benchmarks to assess the current situation of indigenous peoples regarding access to water and assess the degree of compliance of these objectives.

The Situation: Water and Indigenous Peoples

"What does it mean for the international community that so many indigenous women and children risk their lives to travel miles and miles to have access to water sources, and when they arrive to one of them, the water is contaminated?"[2] That question sums up some of the approaches of indigenous peoples around the world in recent decades. The position of indigenous peoples on the subject of water reflects their great concern regarding the various aspects of survival, quality of life and environment. Below I make reference to some these.

The Lack of Access to Water.

The lack of access to water is a widespread problem among the poor and is often caused by power actors. An example is the case of the Turkana District in Kenya, inhabited by nomadic pastoralist populations in the plains and isolated mountain areas, which is considered to be one of the most arid and semiarid areas of the country even though the Kerio and Turkwel rivers run through there. The first river has dried up because of a hydroelectric dam built in Turkwel Gorge.[3]

Due to inaccessibility to water, the population is forced to walk 10 km or more in search of water, a task performed mainly by women and children. One study reported that the district had barely 122 wells (boreholes) and 172 shallow wells in 2005, for a population of approximately 184,000 inhabitants.[4] The impacts caused by the construction of the hydroelectric dam has changed the population's life pattern and reduced the use of traditional knowledge.

Before the construction of the hydroelectric dam, the forest area was dominated by *Acacia tortilis*. The river had a

seasonal and highly "flashy" flow regime, and floods are vital to refill the floodplain aquifer. Flood regime, bruchid beetle infestation of Acacia pods, and the role of domestic herbivores in killing beetle larvae and grazing seedlings are important influences on Acacia regeneration. The riparian forest is a vital element in the grazing ecology of Turkana pastoralists, particularly in the dry season and in times of drought. Dam construction threatened the degradation of the forest both through reduced survival of existing trees and reduced regeneration. Such degradation has serious implications for the Turkana.[5]

Another factor that causes shortages is the variety of uses of water sources. In the case of indigenous peoples in Mexico, the approach has been that people who drank water from springs, suffered a decline in the amount of water available to them because of a series of bottled water companies that came to the area and were allowed to take water from the Seven springs. These companies now sell that water to indigenous communities that previously had the customary use of these springs. This has caused a drop in the amount of water, not because it disappears but rather because of its commercial use by others.[6]

A third identified factor that causes water shortage is the transfer of water, as is the case of the Lerma River basin to the Federal District in Mexico, which has affected rural and indigenous communities of Mexico State, who have seen the disappearing of wetlands and ponds used for fishing and obtaining other lacustrine products. The transfer of water has also affected agricultural production because of the loss of moisture for crops.[7]

This situation has also been documented in areas affected by hurricanes. This has caused the disappearance of water collecting sources of surface water such as ponds and reservoirs, together with basin and micro-basin overflows that have reduced the flow in rivers and permanent streams, and have created a limited duration capacity in time of temporary sources.[8]

Deforestation has been one of the factors that have affected water sources—linked to the advancement of the colo-

nization frontier, occupation of ancestral lands, replacement of traditional livelihoods, and by a perception among many indigenous peoples that the Spirits—the Dawan—have lost their habitat due to the destruction of natural resources. In a study made by NITLAPAN and CADPI in Nicaragua,[9] the Miskitu community of Pahra refers to this perception in the following terms:

> *The little river that runs through the community was the habitat of Liwa Mairin who protected the river. She eventually lowered the flow level. We know she needed deeper waters, this made her depart in search of other sites, she left! This also happened with other spirits. They left, but they watch us, because when we disobey they punish us with their power (disease). We have also contributed to the changes that occur in nature because we have made them leave, for example, by cutting trees and causing rivers and lakes to dry (lake sedimentation) and by starting unnecessary forest and agricultural fires.*

In other indigenous communities of Nicaragua, they claim that elves or Duhindus have made the animals disappear because people have invaded the place where they inhabit. Liwa Mairin has taken all the fish since she is upset of how people have contaminated water and cut down the trees that border the rivers. Niki Niki—in the face of forest destruction and hunting of animals, and for not caring for the environment— has been angered, making the earth tremble.

Some consequences of the discontent of the deities are reflected in nature, through less capture of lobster and turtles, contaminated ponds (high sedimentation) and sand that flows down the rivers. Indigenous peoples also believe that hurricanes form part of the punishment, and that when the masters of nature return to their original places, they will provide richness in water and other resources.

Contamination of Water Sources.

The other factor affecting water supply of indigenous communities is contamination from various causes. One of these is because of the mining and quarrying industry that has become a widespread nightmare for indigenous peoples. This theme was the central approach of the water march organized by indigenous communities and social and other groups in Peru in 2012[12] demanding the government to preserve water resources and, therefore, oppose mining in the headwater areas. This why they demand the annulment of the Conga mining project[13] to be held in Cajamarca, the prohibition of the use of cyanide and mercury in mining activities, and the use of a compulsory social license for the operation of the mines.

Large-scale mining operations in Palawan: negatively affects the health and livelihood of communities in the Philippines

Nickel mining operations of RTNMC and the nickel processing facility of Coral Bay Nickel Corp. (CBNC) were financed and pursued in partnership with Japanese multinational corporations and institutions—the Japan Bank for International Cooperation and the Nippon Export and Investment Insurance.

Environmental activists from Friends of the Earth Japan (FoE-Japan) and the Kalikasan People's Network for the Environment (Kalikasan PNE) presented findings from an environmental field research study conducted in a river located downstream near the Rio Tuba Nickel Mining Corporation's (RTNMC) mining operations and the Coral Bay Nickel Processing Plant's operations. They found that the mining operations in Palawan Island have contaminated a nearby river system with unsafe levels of carcinogenic or cancer-causing chemicals.

Water samples revealed that present levels of hexavalent chromium (Cr-VI), a toxic and carcinogenic chemical, had already exceeded safe levels in the Togupon River. Levels of Cr-VI contamination in water samples from the Togupon River ranged from 0.1 to 0.3 milligrams per liter (mg/L). This exceeds the Philippines's Cr-VI effluent standard of 0.1 to 0.2mg/L.

The levels of Cr-VI contamination in water samples taken from the Togupon River's estuary ranged from 0.05 to 0.15mg/L—exceeding both the Philippine's Cr-VI environmental standard of 0.05 to 0.1mg/L and the Japanese environmental standard of 0.05mg/L by one to three times over.

The Cr-VI contamination in Tagupon River exceeds by two to six times the Philippine Standard for Drinking Water and the Philippine Water Quality Criteria for Toxic and Other Deleterious Substances for Coastal and Marine Waters for the Protection of Public Health. The toxic chemical's presence in estuarine basins also connotes possible effects on the area's fisheries. The Philippine's maximum allowable limit for Cr-VI for fresh waters and drinking water is 0.05mg/L.

Cr-VI is a human carcinogen. People exposed to high levels of Cr-VI from drinking water have increased rates of stomach cancer. People exposed to Cr-VI from breathing dust and fumes are considered more at risk for health problems.

The organizations are calling on the government to: a) suspend all mining operations in the area and immediately conduct an investigation; b) urge the erring companies and relevant authorities to immediately clean up and rehabilitate the contaminated water bodies to immediately avert possible impacts on surrounding communities and ecosystems; c) they are exploring the possibility of pursuing a legal case against the mining operations.

Source: Kalikasan-PNE Press Statement. 22 February 2012. http://www.piplinks.org/irresponsible-mining-behind-palawan-river-contamination—-environmental-activist-groups.

Another cause of the pollution of water resources used by indigenous peoples is waste water. A documented case is the one of the irrigation of the Mezquital valley with waste water from Mexico City. That region, inhabited by peasant and Otomi indigenous communities, receives for over a century, the largest volume of contaminated waters from the capital.[12] In the case of Nicaragua it was documented that contamination of the river Coco (Wangki) and other rivers was caused by solid waste, car washing, honey water and coffee pulp and waste water or sewage coming from septic tanks.[13]

Climate change: Studies have shown that heavy rains or the rapid melting of the snow peaks and increased gastrointestinal diseases have wreaked havoc among indigenous peoples, for they have allowed the proliferation of different strains of E. Coli, which can cause gastroenteritis, neonatal meningitis and peritonitis (in some cases), and other serious diseases.[14]

Privatization of water.

Indigenous peoples have staged numerous demonstrations against the proposed privatization of water, in which sometimes various arguments have been presented. Here are the arguments used in the case of Ecuador:[15]

a. Water is a living being, a provider of life and animation of the universe; with water you interact, it is treated and raised with love. This view has been an essential factor for proper harvesting, conservation and reproduction of water resources;
b. Water comes from Wirakocha, God creator of the universe, who fertilizes the Pachamama (Mother Earth) and allows for the reproduction of life. It is, therefore, a deity that is present in lakes, lagoons, sea, rivers, and all sources of water;
c. Water allows the integration of living beings and the articulation of nature and human society. It is the blood of the earth and the Andean universe. It allows the practice of reciprocity with the family, family groups and Andean communities. It orders peoples lives, it presents being different not as an opposition but as complementarity, and facilitates the resolution of conflicts on the basis of community agreements;
d. Water "belongs to everyone and anyone." It belongs to the earth and living things, including humans. It is equally distributed according to needs, customs and community norms, depending on its cyclical availability;
e. Water behaves according to ecosystems, circumstances and situations, without following rigid rules. It depends on the weather, climate and topography. Andean society, as water, is constantly opening up to what it faces, selectively incorporating elements of other cultures and groups to complement its culture;
f. Water follows the laws of nature, according to seasonal cycles and conditions of the territory. Its sustainable use involves the generation and application of knowledge and skills obtained during centuries, as well as the construction of hydraulic infrastructure to reap

and distribute water, on the basis of joint and efficient management;

g. Water is the recreation of diversity in space and time, in community organizations and in the participation of the population, allowing for self-determination of communities, in discussion and dialogue with nature.

Water: A Human Right

As it can be seen, for indigenous peoples, it is not possible to separate their efforts to reclaim their water rights and their struggle for the recognition of their fundamental rights as peoples. For us, water, apart from being a basic human right, is the source of life and a fundamental element of our world-view and spirituality. The waters, territories and lands are the physical, cultural and spiritual foundation of their existence and identity as distinct peoples.

The UN General Assembly through Resolution 64/292[16] took an important step by recognizing that the right to drinking water and sanitation is a human right essential to the full enjoyment of life and all human rights. And the Special Rapporteur on the right to water and sanitation concurred with this when he raised the importance of indivisibility, interdependence and interrelation of indigenous peoples' human rights in the context of their right to water.

The types of violations of the right to water suffered by indigenous peoples has also been noted. Some of these are due to the following factors:[17]

- Policies and politics that exclude certain segments of the population, which translates as the lack of attention towards improving the situation of indigenous peoples and the absence of specific, targeted and deliberate policies and measures to make sure that progress also reaches the excluded segments of the population, including indigenous peoples;
- Pollution of water sources due to the impacts of mining operations and projects that seek to generate new sources of energy, such as dams and geothermal

exploration that limit the access to clean water, and affect their way of life and culture;
- Water sources that have been used for spiritual and ceremonial purposes have now been turned into recreational camp grounds or conservation reserve areas.

Over two decades, indigenous peoples have raised their viewpoints on access, use and management of water in various areas, and have submitted proposals to address the global water crisis.[18] Indigenous peoples believe there is a collective responsibility and obligation to ensure the protection, availability and purity of water for present and future generations, as well as for the rest of creation. We consider that the development of water resources requires a mechanism to ensure the balance between the roles of the state, market and local communities. The current paradigm is dominated by market forces and does not attribute an important role and participation of indigenous peoples and local communities in designing policies and programs on water.

Meanwhile, the UN Permanent Forum on Indigenous Issues[19] has reaffirmed that the right to water is part of the fundamental human rights and has called for the development of international standards for the use, management and regulation of water. It has also urged states and state enterprises to consult and cooperate in good faith with indigenous peoples in order to obtain their free, prior and informed consent before any adoption of policies, plans and projects on their lands or territories and other resources, particularly in relation to the development, utilization or exploitation of water resources under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

Other recommendations of the Permanent Forum refer to how:

a. States should ensure access to water that is safe for health, clean, accessible and reasonably priced for personal, domestic and community use;
b. Water should be treated as a social and cultural good, not as a commodity, and the way by which the right to water is made effective must be sustainable for present and future generations;

c. Indigenous peoples' access to water resources of their ancestral lands must be protected from encroachment and pollution and that indigenous peoples should have the necessary resources to determine their form of access to water and to make its control effective;
d. Indigenous peoples should be included in decision making processes in all aspects of water management, including commercial use, irrigation and environmental management;
e. Seek to make decision making processes consistent with the principles of the UNDRIP, in particular, with Article 32, under which it requires the free, prior and informed consent of indigenous peoples before the approval of any project affecting their lands or territories and other resources;
f. Increase funding to indigenous peoples and communities for water supply systems and wastewater treatment to improve the quality of drinking water and wastewater infrastructure, and to address the problem of pollution and water degradation within indigenous communities;
g. States should recognize and protect the cultural rights of indigenous peoples to water, and that, by its law and policy, they should support the right of indigenous peoples to hunt and remove food from water sources for cultural, economic and commercial purposes.

One thing to note is that the Permanent Forum recognizes the rights under the treaties, including the rights associated with water, as a key element of a comprehensive discussion on understanding and interpretation by the indigenous peoples of treaties, agreements and constructive arrangements between indigenous peoples and states.

The main strategies of indigenous peoples

Indigenous peoples have participated in World Water Forums. In the Third World Water Forum held in March 2003 in Kyoto, Japan, the following proposals were made, summarizing the Andean indigenous peoples approach:[20]

a) Water as a common heritage. From the vision and experience of the Andean world, any plan of action with regard to water should be directed to its protection and preservation, ensuring equitable availability to ensure the existence of all living beings on the planet. This requires securing and protecting water systems, both in its geographical area and in its natural cycle; reaching consensus on actions and mechanisms that maintain the integrity of ecosystems, animal species, plants, and the life of communities with dignity; and recreating their cultural identity.

Water is the heritage of the earth and all forms of animal, plant and human life. Therefore, any legal framework in relation to water resources should be based on this principle.

b) Water as public domain. This principle implies the definition of water, within Constitutions, as a public good under the control of society as a whole. At the same time it should make use of fair mechanisms to meet the needs of nature and human communities, prioritizing subsistence rights, food sovereignty and local development.

c) Water is a common good, not a commodity. The monopolization of water by the dominant sectors of the economy such as the mining, industrial, agricultural business, exporting, and other sectors, is bad for the vast majority of users and of nature itself. Therefore, no national, transnational company, or individual has the right to claim domain for water or hoard it for private profit at the expense of the rest of the community. Since water is a public good, it is a vital resource that cannot be treated as a commodity, be reduced to market value, and subject to market laws. Hence, water cannot be subject to international trade agreements such as the World Trade Organization (WTO) and the Free Trade Area of the Americas (FTAA), or bilateral and multilateral treaties.

d) Revaluation of knowledge, technologies and Andean organization. The knowledge of the Andean world, its technological and social systems of water management are based on the principle of living in harmony with Mother Earth and are on collective ownership in their own legal and social system. They managed to ensure sustainability of the ecosystem from time immemorial and therefore must be preserved, respected and recognized. The traditional systems of water management—developed and validated over hundreds of years, but now marginalized—are proven alternatives for sustainable water resources. Therefore they must be better understood, valued, restored, and disseminated as technologies for sustainable development.

e) Integrated and participatory management systems. Water management systems should be based on a concept of integrity, from a territorial conception of watershed to compatible uses and sustainability of the resource. The prioritization of water uses must be based on participatory mechanisms to ensure their conservation and equitable access. Sustainable management projects require public information on the current status and availability of surface water and groundwater—information that is almost nonexistent, poorly organized and unsystematic or expensive to access.

f) Participatory institutionality and social control. Legislative norms and forms of water management should ensure the availability of water in terms of quantity and quality to ensure sustainability and the needs of ecosystems and human communities. For this purpose, governance systems, both at the local and national levels, must be based on existing local water authorities, such as indigenous communities, farmers, irrigation associations, and other water users. The governments of the Andean countries should respect and value the management and the inherent communitarian and integral rights that are part of indigenous and peasant communities. They must be recognized as a world heritage.

g) Appropriate economic policies. All public investment policies should be considered prior to resource conservation, sustainable management, and local and regional development based on indigenous and peasant uses and customs. Any pri-

vate investment in the water sector should be subject to these criteria.

Another strategy used by indigenous peoples has been through legal recourse, such is the case of the litigation in Botswana by the Basarwa concerning their right to water. In 1961, the Central Kalahari Game Reserve was set up with the purpose to ensure the Basarwa's[21] survival. Botswana's national wealth has been founded on its diamond reserves, and in the 1980s exploratory drills were done in the Game Reserve and diamonds were found. Although the government claimed there was no connection between diamonds and subsequent events, in 1997, 2002 and 2005, there were a series of forced evictions of the Basarwa. Many Basarwa were moved into squalid resettlement camps where there was no opportunity to pursue their traditional way of life. They faced high rates of unemployment, alcoholism and were exposed to HIV infection. Botswana has one of the highest rates of HIV in the world. Hunting in the game reserve was banned, and any Basarwa caught breaking the law was arrested.[22]

The Basarwa had been denied access to a well, which they had been using for decades, as part of an attempt to get them to move out of the game reserve where they had been living even before its designation as a reserve. In 2006, the Botswana High Court found that the evictions were unlawful and ruled that the hunter gatherer community had the right to use and occupy the land. However, the Government of Botswana has been slow to implement the judgment, putting obstacles in the way of accessing Basarwa ancestral land, such as capping the well. The well is the only source of water for indigenous communities in one of the driest regions on Earth. At the same time, however, the government granted permission for the building of a tourist camp within the Reserve, complete with a swimming pool.[23] In 2011 an appeals court in Botswana ruled that indigenous Bushmen can drill wells for water in the Kalahari Desert. The court said that the Basarwa Bushmen could use an existing well on their traditional land in the Kalahari Game Reserve and excavate new wells.[24]

The Special Rapporteur on the human right to safe drinking water and sanitation[25] said that the decision was very important, not only adding to jurisprudence regarding the protection of indigenous rights to remain on their ancestral lands, but also to further solidify the status of the right to water under international law. The court referred to the recent General Assembly resolution on the right to water and sanitation, and found that denying the Basarwa permission to use, at their own expense, the well located on the land where they resided amounted to degrading treatment—which is prohibited, inter alia, in the Convention Against Torture.

She added that the court very wisely observed the indivisibility of human rights, talking about water, traditionally considered an "economic, social and cultural right," in the same breath as degrading treatment, generally known as a "civil and political right." She also mentions that "too often we lose sight of the indivisibility of human rights. And especially for indigenous peoples, we need to consider the enjoyment of human rights in a holistic way. This holistic understanding is crucial for analyzing indigenous rights and the right to water and sanitation."

Another strategy promoted by indigenous peoples has been the agricultural and environmental recovery of degraded areas by mining. This strategy is part of the proposals on Good Living or with development with culture and identity that indigenous peoples are promoting around the world. Some essential components of such strategies include the legal security of territories, integrated territorial management, water management, and recovery of degraded areas.

For example, for the Mayangna nation of Nicaragua, territory is the geographical area where the population of human communities lives, where you can find resources—flora and fauna, water resources, groundwater, renewable and nonrenewable natural resources, organic and inorganic materials—forming a territorial unit, developed in accordance with their customs and traditions on which they are entitled to possession of ancestral domain and/or entitled by the Nicaraguan state. In this territory they practice social, economic, cultural, and environmental activities, as well as conservation of sacred

sites, natural boundaries, hunting, fishing, and sustainable agriculture.[26]

For territorial management and the formulation of the spatial development plan, the Environmental Standards of Indigenous Land Management must be respected. Territorial distribution is made up of areas with defined uses for agriculture, artisanal mining, hunting and gathering, history and culture, and for the reproduction of plants and animals.

An example of consciousness, fellowship, community awareness and understanding in the management of water resources, is seen in the community of Musawas, Mayangna Sauni. The Water Committee installed collective water gathering sources in several areas of the community, which are used to obtain water for household consumption; while for washing clothes or bathing the community goes to the river. Can we follow their example?

Endnotes

[1] Indigenous Peoples' Plan of Implementation on Sustainable Development, Johannesburg, South Africa. http://www.google.com/search?client=safari&rls=en&q=Johannesburg+indigenous+plan+of+aplication&ie=UTF-8&oe=UTF-8.

[2] Dallee Sambo, 10th Session of the UN Permanent Forum on Indigenous Issues, http://radio.rpp.com.pe/cuidaelagua/onu-condena-carencia-de-agua-que-sufren-pueblos-indigenas/.

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[5] Land Degradation & Development. Vol 1, Issue 3, Article first published online: 31 July 2006. http://onlinelibrary.wiley.com/doi/10.1002/ldr.3400010303/abstract.

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[13] (CASE) Document, Forum for the formulation of a water strategy for Las Segovias. http://www.fidamerica.org/agua/documentos/segovias-nicaragua.pdf.

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[15] Leonidas Iza, 2003, "Indigenous Rights and Access to Water." *Boletin ICCI-ARY Rimay*, 5(48), March. http://icci.nativeweb.org/boletin/48/iza.html.

[16] http://www.un.org/spanish/waterforlifedecade/pdf/human_right_to_water_and_sanitation_media_brief_spa.pdf; http://www.europarl.europa.eu/meetdocs/2009_2014/documents/droi/dv/201/201101/20110124_302garesolution64-292_es.pdf.

[17] Statement to the Permanent Forum on Indigenous Issues Catarina de Albuquerque, Special Rapporteur on the human right to safe drinking water and sanitation. May 2011. http://www.un.org/esa/socdev/unpfii/documents/session_10_statement_SR_water.pdf.

[18] UNESCO, 2007, Water and Indigenous Peoples.

[19] E/2011/43-E/C.19/2011/14; http://www.un.org/esa/socdev/unpfii/documents/session_10_report_EN.pdf.

[20] Leonidas Iza, 2003 "Indigenous Rights and Access to Water." *Boletín ICCI-ARY Rimay*, 5(48), March. http://icci.nativeweb.org/boletin/48/iza.html.

[21] The San (or Basarwa) people of the Kalahari are more commonly known as the Bushmen. The San are considered to be the oldest culture in the world dating back over a hundred thousand years. Beautiful San rock art can be seen throughout Southern Africa where the San lived as hunter-gatherers. In the past 2,000 years, the San were slowly pushed to live in the arid sands of the Kalahari Desert by Bantu tribes and white farmers who took the more fertile land for their crops and livestock. http://goafrica.about.com/library/bl.san.htm.

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[23] Court's ruling rides roughshod over Basarwa right to water, says MRG, 6 August 2010, http://www.minorityrights.org/?lid=10189.

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FOOD SOVEREIGNTY & SUSTAINABLE DEVELOPMENT: AN OVERVIEW OF ADVANCES CHALLENGES & SOLUTIONS FOR RIO +20

Andrea Carmen and Saul Vicente Vasquez
International Indian Treaty Council

Taking into account that the right to development is a collective right of Peoples as well as of individuals, and that the Right to Food forms a part of the development process, creating conditions for the enjoyment of all human rights, fundamental freedoms and well-being,

- Declaration of Atitlan
1st Indigenous Peoples' Global Consultation on Food Sovereignty and the Right to Food
Sololá, Guatemala, April 17-19, 2002

Food Sovereignty: "A Precondition for Food Security"

> *Food Sovereignty is the right of Peoples to define their own policies and strategies for sustainable production, distribution, and consumption of food, with respect for their own cultures and their own systems of managing natural resources and rural areas, and is considered to be a precondition for Food Security.*[1]

Food sovereignty, as affirmed in the Declaration of Atitlan, is referenced as a component of the international legal framework used by the United Nations Food and Agriculture Organization (FAO) in its Policy on Indigenous and Tribal Peoples.[2] It is has been affirmed as a fundamental principle in a number of international indigenous peoples' declarations. Indigenous peoples have also recommended that "Food Sovereignty" replace the term "Food Security" at the World Conference on Sustainable Development, also known as "Rio +20."[3]

Obstacles and Challenges to Food Sovereignty

From April 17-19, 2002, 143 representatives of indigenous peoples, Nations, and organizations from 28 countries and all regions of the world met in Panajachel, Sololá, at Lake Atitlán, Guatemala at the First Indigenous Peoples Consultation on the Right to Food. The Consultation was coordinated by the International Indian Treaty Council in conjunction with the FAO. Participants included farmers, hunters, gatherers, fishers, herders and pastoralists, as well as human rights activists, spiritual leaders, human rights activists, and traditional indigenous authorities.

The following obstacles to food security and food sovereignty for indigenous peoples were affirmed by consensus:

1. The implementation and domination of globalization and free trade, which act without limits nor morality in the theft of our lands, territories, and other resources necessary for our food security and food sovereignty;
2. The imposition of industrial models by the governments, particularly in the form of industrialized mono-agriculture, that causes an erosion of genetic diversity and the resulting loss of our seeds, species and breeds of animals. This only impoverishes our lands, generating a growing emigration of members of our communities to urban areas in search of employment that does not exist. In addition, the adoption of alien market systems imposes foods on us that do not nourish, but instead cause diseases and problems of all sorts for our health and problems in the physical development of our children;
3. The extension of intellectual property rights in favor of multinational corporations that has increased biopiracy and the illicit appropriation of our biological diversity and traditional knowledge; and the introduction of genetically altered food, which is causing the loss of our traditional foods, of our health, of our relationship with Mother Earth, of our traditional plants and medicines, and of our very cultures;
4. The growing imposition of the use of pesticides and chemical fertilizers that poison Mother Earth, the communities that work The Earth, and the food resources on which indigenous peoples depend worldwide, affecting food production and hence nutrition and health, and increasing morbidity and mortality rates, in particular for our women and children;
5. The imposition of unsustainable projects by governments and private companies in our territories without consultation or prior informed consent, and without taking into account the rights and values of the indigenous peoples affected;
6. The policies and demands of international financial institutions such as the International Monetary

Fund (IMF), the World Bank, the Inter-American Development Bank (IDB), and their structural adjustment programs;

7. Militarization and repression in Indigenous territories, in particular Plan Colombia and the fumigation of indigenous crops that is now expanding as policy into other countries of the region;
8. National policies that impose inadequate and exclusionary models and practices, which in turn result in the loss of our lands, territories and collective indigenous identity, generating increased food insecurity.[4]

Today, 10 years after the Declaration of Atitlan was adopted and 20 years after the Earth Summit, these policies and practices continue unabated. They remain the primary obstacles to indigenous peoples' exercise of their right to food and food sovereignty. They have also caused and/or contributed to climate change, environmental degradation, toxic contamination of food resources, and reduction of biological diversity. These conditions have further undermined local and global food sovereignty and directly threaten the survival indigenous peoples.

These obstacles also highlight the specific policies and practices which must be abandoned by the international community as we work together to define and implement a new model of development which is truly just and sustainable. This is the collective task to be undertaken with utmost seriousness, urgency and political will at the UN Conference on Sustainable Development in June 2012.

"Cultural Indicators": The 4th Pillar of Food Sovereignty and Sustainable Development

The content of the Right to Food of Indigenous Peoples is a collective right based on our special spiritual relationship with Mother Earth, our lands and territories, environment, and natural resources that provide our traditional nutrition; …emphasizing that the denial of the Right to Food for Indigenous Peoples not only denies us our physical survival, but also denies us our social organization, our cultures, traditions, languages, spirituality, sovereignty, and total identity; it is a denial of our collective indigenous existence[5]

– The Declaration of Atitlan, 2002

I spoke to my nephew last right regarding deer hunting. He stated that he has not seen any in the fields or even on the roads! We feel the loss for our brothers and sisters in nature.

- Cree Grandmother
Cultural Indicators Field Testing Workshop, Beaver Lake Cree Nation, speaking about the impacts of the Tar Sands development in Northern Alberta Canada
January 22, 2009

In 2003, UN FAO asked IITC to coordinate another indigenous consultation process focusing on development of "cultural indicators" as a component of global food security policies and a mechanism for to guide FAO's programs. The development of the cultural indicators was based on the Declaration of Atitlan's strong affirmation of the essential cultural value of indigenous peoples' agriculture and other traditional food systems and the important role of indigenous cultural practices in their maintenance resiliency and transmission

IITC received 128 completed responses from indigenous communities, organizations and community practitioners from 29 countries to its "Traditional Culture and Right to

Food Questionnaire." Indigenous Peoples also submitted a number of collective inputs completed at conferences and gatherings. The responses overwhelmingly confirmed the direct relationship between traditional foods and community cultural practices for Indigenous Peoples in all regions. It also provided a basis for assessing the Indigenous participants' experiences with current and past development projects, noting the impacts, and identifying the planning, evaluation and consultation processes that were (or more often were not) conducted in their territories.

IITC's assessment of the questionnaire responses provided a framework of common concerns and issue areas ("themes") as a basis for the next steps in the development of "Cultural Indicators." It identified common problems and harmful activities impacting Indigenous Peoples' traditional foods, cultures and subsistence practices. These include policies limiting land/water rights and access, introduction of new types of foods and methods including GMO's, large-scale (industrial) farming methods, introduction of development programs without community consultation and consent, ecosystem and habitat destruction, and erosion of traditional knowledge and practices including their transmission to new generations.

The *Cultural Indicators for Food Security, Food Sovereignty and Sustainable Development* were finalized at the 2nd Global Consultation on Right to Food, Food Security and Food Sovereignty for Indigenous Peoples (September 7-9, 2006, Bilwi, Nicaragua), focusing on the inextricable link between the traditional Indigenous food systems and the cultural practices upon which they are based. They provide a framework and practical tool for Indigenous Peoples to assess and measure the positive and negative effects of programs, methods and technologies coming from outside their communities, environmental impacts such as mining and climate change, the resiliency of traditional practices and methods and their transmission to new generations. They also reflect, demonstrate and underscore the inextricable links between human rights, in particular self-determination and free, prior and informed consent, access to traditional lands and natural resources and the vitality of cultural and biological diversity.

Participants included indigenous experts, human rights activists, community leaders, cultural leaders, and traditional food producers from six regions (North America, Latin America, Africa, Asia, Pacific, Arctic), as well as members of the local Miskitu community. Representatives of UN FAO, the UN Permanent Forum on Indigenous Issues, the UN Educational, Scientific and Cultural Organization (UNESCO), the UN Development Fund for Women (UNIFEM) and the UN Development Progam (UNDP) also participated in this historic gathering and committed to disseminate and apply the results.

The second consultation affirmed the Declaration of Atitlan and its definition of food sovereignty as the framework and basis for next steps. It also affirmed a "rights-based" approach, which upholds "the Rights of Self Determination, Free, Prior and Informed Consent and full and effective participation of Indigenous Peoples at all stages."[6]

Participants identified 11 thematic areas with three to nine specific indicators listed under each. An innovative 3-part model for indicators under each of the following theme areas measured impacts and changes over time through structural, process and results indicators and has been widely duplicated in the development of indicators throughout the UN system. The 11 thematic areas reflecting impacts, concerns and priorities relevant in all regions, are as follows:

1. Access to, security for and integrity of lands, territories and natural resources for traditional food production, harvesting and/or gathering;
2. Abundance, scarcity and/or threats to traditional seeds, plant foods and medicines, and food animals, as well as cultural practices associated with their protection and survival;
3. Consumption and preparation of traditional plant and animal foods and medicines, including in ceremonial/cultural use as well as daily household use;
4. Continued practice and use of ceremonies, dances, prayers, songs and stories and other cultural traditions related to the use of traditional foods and subsistence practices;

5. Preservation and continued use of language and traditional names for foods and processes (planting, hunting, gathering, harvesting, fishing, food preparation, etc.);
6. Integrity of and access to sacred sites for ceremonial purposes related to use of traditional foods;
7. Migration and movement away from traditional lands as a result of rural-to-urban migration, conflict, forced relocation, land appropriation, climate change, and economic necessity; return patterns and relationships to continued use of traditional foods;
8. Effective consultations for planning, implementation and evaluation applying the principles of free, prior and informed consent and full participation by community members when development programs are implemented by states, outside agencies or other entities and the extent to which cultural concerns are considered and addressed;
9. Existence and viability of mechanisms and institutions created by and accessible to indigenous peoples for transmission of food related traditional knowledge and practices to future generations;
10. Capacity within indigenous communities and peoples for adaptability, resilience, resistance and/or restoration of traditional food use and production in response to changing economic, political and/ or environmental conditions;
11. Ability of indigenous peoples to utilize and implement recognized rights, legal norms and standards as well as self-government structures to promote and defend their food sovereignty on the local/tribal/community, national and international levels.

From October 2007 to February 2010, IITC carried out a project to field-test the cultural indicators. Over 450 indigenous representatives from 66 indigenous communities and peoples from five countries/territories participated in ten "field testing" workshops and training sessions focusing on implementing the cultural indicators. Many participants were designated representatives of indigenous organizations and communities whose responses reflected broader collective

input. In the responses of the 216 participants who completed and submitted evaluation questionnaires from these workshops, a total of 10,085 community members were reported to be represented.

Throughout the field testing process, the cultural indicators demonstrated their utility as a practical tool for indigenous peoples to assess and measure the positive and negative impacts of programs, development projects and technologies from both outside and within their communities, and address urgent concerns threatening their food sovereignty. They also were able to provide an effective framework for collective discussions which lead to the development of community-based initiatives addressing threats and strengthening traditional systems.

Environmental impacts on traditional foods and ecosystems from mining, pesticide use, damming, deforestation, and climate change, as well denial of land and water rights were the most urgent and consistent concerns of the participating communities from all regions. Other priority themes included the vitality and resiliency of, and threats to, traditional practices and methods for food production as well as the transmission of food-related knowledge to new generations. Participants also consistently underscored the essential importance and continued relevancy of a human rights approach including free, prior and informed consent, self-determination, cultural rights, and rights to land, territories and resources. They also continued to affirm the vital interconnections of cultural and biological diversity as the foundations for food security and food sovereignty for indigenous peoples.

As a direct result of assessments and responses using the cultural indicators during the field testing phase, new programs and initiatives were developed by indigenous peoples to reestablish, protect and defend their food sovereignty resources and practices, and generate responses to identified threats.

Examples include: a project to gather and use traditional knowledge in response to climate change, reestablishing the use of drought resistant traditional seeds and rain water

collection methods (Rio Yaqui Sonora Mexico); building a major campaign (now underway) to oppose the distribution of genetically modified foods (Guatemala); implementation of a program to transmit traditional knowledge about wild plant gathering methods and related cultural practices from tribal elders to youth (Chickaloon Village, Yah Ne Dah Ah Tribal School, Alaska); and launching a law suit to stop contamination of Treaty lands, as well as water, plants and animals used traditionally for subsistence, by the tar sands development in Alberta, Canada (Beaver Lake Cree Nation).

To expand on one community's experience, Yaqui indigenous peoples in the agricultural areas of Sonora, Mexico were exposed to frequent aerial and ground spraying of pesticides since the Mexican government's implementation of the "Green Revolution" in the late 1940s. Traditional seeds used for thousands of years were replaced by hybrid, and later, genetically modified varieties of corn, beans and squash that required greater levels of pesticide and chemical fertilizers. Their use was required for Yaqui farmers who sought bank loans for farming.

In addition to the devastating health impacts of pesticides applied using airplanes by large-scale growers from outside their communities, Yaqui farm workers were not provided protective gear in the fields. Workers unintentionally carried poisons home in pesticides-soaked clothing and skin, unknowingly spreading the contamination to their families. Scientific studies as well as many community testimonies confirmed that cancers and birth defects were increasing.

After two workshops to train community members in the use of the cultural indicators for food sovereignty, community farmers, cultural leaders, traditional authorities and healers identified the dual impacts of high pesticide-use and the loss of traditional seeds as key factors which also affected their ability to adapt to increasingly dry conditions caused by climate change. They started a traditional seed bank for food and traditional medicines, including drought resistant varieties, began to trade seeds with other indigenous communities and collect varieties still in local use; re-implemented traditional water collection systems; and declared a halt to aerial spraying

of pesticides based on their rights to free, prior and informed consent as affirmed in Article 29 of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). As one Yaqui elder commented after the first cultural indicators community training in 2008 where participants identified primary threats and begin to discuss community-based solutions, "This training was like planting a seed which can grow into something strong and good for our community."

Cultural Indicators, Food Sovereignty and Climate Change

> *Climate change is upsetting the delicate balance in many ecosystems. This affects our people's ability to sustain our subsistence livelihoods. The lakes are dry… The plentiful fish of the past are gone. The changes are happening at an alarming rate… But our elders tell us that we are just beginning to see the long term effects on our peoples' lives and our traditional subsistence foods which have always sustained us, our cultures, and allowed us be who we are.*
>
> - Faith Gemmill, Neets'aii Gwich'in/ Pit River/Wintu Arctic Village Alaska[7]

> *Climate change constitutes the single most important threat to food security in the future.*
>
> - UN Rapporteur on the Right to Food Olivier de Schutter[8]

During the field-testing process, cultural indicators were effectively used by communities to assess the rapidly increasing threats and impacts of climate change on their subsistence food systems. They also provided a framework for advancing community-based adaptations, responses and solutions, based on revitalizing, strengthening and protecting traditional habitats, subsistence practices, seeds and knowledge as well as efforts to halt causes including deforestation and fossil fuel extraction.

In addition to field testing workshops in communities, the cultural indicators provided a framework for discussion at a number of international gatherings. These included the Indigenous Peoples' Global Summit on Climate Change (April 2009, Anchorage Alaska), specifically in the breakout sessions on "Food Sovereignty and Traditional Lifeways," which included sharing the severe and increasingly devastating impacts on indigenous traditional food systems in all regions. These discussions focused on community-based strategies for resiliency and adaptation based on traditional food-related knowledge, cultural understandings and practices, as well as recommendations for solutions to halt and reverse climate change. It also challenged states and UN bodies to abandon false, market-based solutions such as carbon trading, forest offsets and biofuels, which further threaten indigenous peoples' rights, including their and right to food.

The Anchorage Declaration, adopted at the Summit, included the following paragraphs, which were submitted by the participants in the Food Sovereignty theme area's breakout sessions, and were adopted by consensus of all participants:

> *13. In order to provide the resources necessary for our collective survival in response to the climate crisis, we declare our communities, waters, air, forests, oceans, sea ice, traditional lands and territories to be 'Food Sovereignty Areas,' defined and directed by Indigenous Peoples according to customary laws, free from extractive industries, deforestation and chemical-based industrial food production systems (i.e., contaminants, agro-fuels, genetically modified organisms).*
>
> *14. We encourage our communities to exchange information while ensuring the protection and recognition of and respect for the intellectual property rights of Indigenous Peoples at the local, national and international levels pertaining to our Traditional Knowledge, innovations, and practices. These include knowledge and use of land, water and sea ice, traditional agriculture, forest management, ancestral seeds, pastoralism, food plants, animals and medicines and are essential in developing climate change adaptation and*

mitigation strategies, restoring our food sovereignty and food independence, and strengthening our Indigenous families and nations.[9]

Indigenous participants in the "Food Sovereignty" track also developed innovative strategies for seed revitalization and trading (corn in particular) among indigenous peoples facing dramatic changes in their ecosystems, weather patterns and rainfall levels, which has been ongoing through a number of gathering since that time The participants also decided to call upon UN FAO's Director General to create a new working group on Indigenous Peoples, Food Sovereignty and Climate Change, which was presented in an oral intervention, with signatures from indigenous peoples around the world during the UN Permanent Forum on Indigenous Issues 8th Session in May 2009.

The International Human Rights Framework for Addressing Food Sovereignty and Assuring Full Participation at Rio +20

…In no case may a people be deprived of its own means of subsistence.

- Article 1 in Common
International Covenants on Civil and Political Rights
and on Economic, Social and Cultural Rights

Human rights are integral to the promotion of peace and security, economic prosperity and social equity… A major task for the United Nations, therefore, is to enhance its human rights programme and fully integrate it into the broad range of the Organization's activities.

- UN Secretary General Kofi Annan[10]

Indigenous peoples have affirmed that unless the discussions and decisions at Rio +20 are firmly grounded in respect for human rights, including the collective rights of indigenous peoples, there is little hope for an effective outcome. The human rights to health and culture for indigenous peoples are closely linked to the right to food and subsistence. These rights are affirmed in a number of international conventions and declarations, building upon the fundamental affirmation in the Universal Declaration on Human Rights (1948) Article 25 that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food…"

Many of the obstacles and threats to the exercise of their food sovereignty, as identified in the Declaration of Atitlan and the Cultural Indicators for Food Sovereignty and Sustainable Development, also constitute recognized human rights violations addressed by UN Human Rights mechanisms. Since the first Earth Summit in 1992, a number of the core issues for discussion and action at Rio +20 have also been addressed by the UN Human Rights Council and its mandate holders. These include human rights impacts of the global transport of Persistent Organic Pollutants, proliferations and export of toxic wastes and banned pesticides, ongoing emissions of mercury (the subject of a new international treaty currently under development by UNEP), climate change and lack of access to clean water. They are also identified as direct threats to the right to food and food sovereignty in particular.

When subsistence foods are contaminated, indigenous peoples are often forced to choose between the cultural and nutritional value of traditional foods and subsistence way of life, and their own health as well as, in many cases, the health and development of their unborn children.[11]

The impacts of environmental contamination have been affirmed as constituting violations of indigenous peoples' rights to food by the United Nations Rapporteur on the right to food, Jean Zeigler. Responding to a submission by the International Indian Treaty Council on behalf of indigenous tribes and peoples in Northern California addressing mercury contamination, and St. Lawrence Island, Alaska regarding

military toxics and the impacts of this contamination on their traditional subsistence foods:

> *The Special Rapporteur believes that the contamination of indigenous peoples' land and water affecting their livelihood (traditional fishing) may contribute to a violation of the Government's obligation to respect the right to food.*[12]

The United Nations Convention on the Rights of the Child also affirms the connection between human rights, environmental contamination, health and right to food in Article 24:

1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health…
2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
   (c) To combat disease and malnutrition, including within the framework of primary health care, through inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.

There have, however, also been notable signs of progress. The "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security" were adopted on March 9, 2012 in a process initiated by UN FAO and the UN Committee on Food Security (which in 2011 established two seats for indigenous representatives). The Guidelines recognize the rights of indigenous peoples in a number of provisions, including in section 9, which is dedicated specifically to indigenous peoples.

For example, paragraph 9.3 reads:

> *States should ensure that all actions are consistent with their existing obligations under national and international law, and with due regard to voluntary commitments under applicable regional and international instruments. In the case of indigenous peoples, States should meet their relevant*

obligations and voluntary commitments to protect, promote and implement human rights, including as appropriate from the International Labor Organization Convention (No 169) concerning Indigenous and Tribal Peoples in Independnt Countries, the Convention on Biological Diversity and the United Nations Declaration on the Rights of Indigenous Peoples.[13]

The Treaty Right to Food

Considering also that treaties, agreements and other constructive arrangements, and the relationship they represent, are the basis for a strengthened partnership between indigenous peoples and States.[14]

- Preamble
UN Declaration on the Rights of Indigenous Peoples

Our ancestors in some areas have secured our traditional ways and food systems in Treaties. These international agreements were signed for "so long as the sun shines, the grass grows, and the rivers flow[15]

- Chief Wilton Littlechild
Ermineskin Cree Nation
Treaty No. 6 Territory, Canada

As noted by Chief Littlechild, many of the legally binding Nation-to-Nation Treaties concluded between Colonial States, including the British Crown and their successors, affirm the right of indigenous treaty nations to subsistence (hunting, fishing and gathering), as well as land and water rights, which are essential for the exercise of food sovereignty.

To cite one of many examples, the 1837 United States Treaty with the Chippewa Nation affirmed that "The Privilege of hunting, fishing, and gathering the wild rice upon the

lands, the rivers and the lakes is guaranteed..."[16]

These Nation-to-Nation Treaties, as well as other types of agreements between states and indigenous peoples and the consensual relationships they are based on, if honored and upheld, can also be the foundation and model for respectful partnerships to address food sovereignty, sustainable development and a range of related issues. This is true, in particular, when there is an urgent need for joint and or/shared decision making in order to correct current injustices, respond to critical violations, redress and provide restorative measures to correct historic and ongoing wrongs that undermine indigenous peoples' food sovereignty and treaty right to food.

In September 2011, the Treaty 1-11 Chiefs met in Calgary Canada, Treaty No. 6 Territory, and adopted a resolution on the Treaty and Inherent Right to Food. "On behalf of the Chiefs, Headmen and citizens of the First Nations of Treaties 1-11," they declared that they:

1. Affirm that our Right to Food is an Inherent Right affirmed in our Treaties, and that Food Sovereignty is an essential aspect of our Sovereignty as Treaty Nations;
2. Affirm that our traditional foods are essential to our physical, cultural and spiritual health, identity and survival;
3. Recognize that the Creator placed us on our traditional lands and provided clean food and water for our health and survival and that we have an inherent and Treaty right and responsibility to care for and protect the land, plants, animals and water, and our sacred Mother Earth as a whole, from destruction and contamination;
4. Affirm that any attempt to restrict or curtail our rights to hunt, fish, grow or gather our traditional foods and to use the water on our Treaty lands by federal, provincial or municipal government laws, regulations or ordinances are fundamental violation of our human rights and Treaty rights, including our Treaty Right to Food;

5. Recognize the negative impacts of imposed development such as mining, damming, drilling, Tar Sands extraction and clear cutting, as well as climate change and environmental contamination on our traditional foods and water sources. We recognize our Inherent and Treaty rights and responsibilities to care for and protect the food and water sources that have been the basis of our survival since time immemorial;
6. Recognize that we continue to have the traditional knowledge and wisdom within our Nations about how to use and protect our traditional foods, and that our elders, spiritual leaders and other traditional practitioners carry this knowledge as passed down from our ancestors;
7. Recognize the urgent need to make sure that our children, young people and future generations learn about our Treaty Rights, including our Treaty Right to Food and how to use and care for our traditional subsistence foods, waters and medicines. This is fundamental for our continued survival;
8. Recognize the importance of re-establishing the traditional trade relationships that always existed between our Nations as part of our Indigenous development, Nation-to-Nation relations, and food sovereignty; we recognize the importance of reestablishing these Indigenous trade relations that include the exchange of traditional foods and knowledge as a response to the urgent situations now facing many of our Nations as their traditional foods become more scare (such as urbanized areas);
9. Call upon all of our Treaty Nations to assert and put into practice these rights and responsibilities, to exercise their Inherent and Treaty Right to Food and Food Sovereignty on their traditional and Treaty lands, to protect these resources from contamination and destruction, and to accept this responsibility for the survival of our Nations, especially our children, grandchildren and future generations.

In light of such important contributions to this theme in the context of the Treaty and Inherent Right to Food, and the overall importance of an approach to this theme based on human rights and full and effective partnership, indigenous peoples have recommended that "an objective of Rio +20 shall be to ensure the implementation of Treaty Rights to Food and Food Sovereignty in accordance with these internationally binding treaties and agreements made between indigenous peoples and colonialist states and their successors"[17]

Indgenous Peoples in Route to the Rio +20 Conference: Overview of Recommendations Supporting Food Sovereignty

Indigenous peoples from around the world met in Manaus, Amazonia, Brazil at a Global Preparatory Meeting on August 22-24, 2011 in Manaus, Amazonia, Brazil to define core priorities and make recommendations for consideration by states and the UN. Several of these recommendations have been referenced in the body of this paper. In addition, the preparatory meeting outcome document:

- Called upon states at Rio +20 to recognize and support indigenous traditional practices related to agro-ecology, and various forms of food production (fishing, hunting, farming, gathering, and pastoralism) as a basis of food sovereignty, which also serve to protect biological diversity and traditional knowledge as alternatives to the non-sustainable industrial food production models, based on genetically modified seeds, plants and animals, and the use of toxic pesticides and other agro-chemicals;
- Recommended that the "Cultural Pillar" be adopted at Rio +20 as the missing "4th Pillar" of sustainable development based on the perspectives, rights, traditional knowledge, cultural integrity, identity, and sustainable practices of indigenous peoples, which are

integral to our vision, practice and understanding of development, thus effectively reflecting the international accepted definition of the right to development, as a fundamental component of self-determination of all peoples;

- Recommend that the "precautionary approach" (principle 15 of the Rio Declaration on Environment and Development) be reaffirmed at Rio + 20, together with a renewed commitment by states to eliminate the production, use and dumping of chemicals that are toxic, persistent and hazardous that pose dire threats to the health of impacted communities and ecosystems, and most of all violate human rights; including the rights of indigenous peoples to free, prior and informed consent as stated in Article 29 of the UN Declaration on the Rights of Indigenous Peoples. We call upon states to make a commitment to utilize and implement the Precautionary Principle as an alternative to the models of "risk assessment" and "management" of toxic chemicals presented in sections 19 and 20 of Agenda 21; and that agricultural methods and practices used traditionally by indigenous communities based on safe alternatives to toxic pesticides be recognized and supported.
- Recommended that the practice of exporting banned pesticides and other chemicals by the USA and other states cease immediately and that provisions within UN conventions and national laws, which permit this practice without the free, prior and informed consent of the indigenous peoples and communities who may be impacted at the source of exposure as well as through global transport, be reviewed immediately and revised.

These and other recommendations by indigenous peoples, if adopted, will contribute to a sustainable future where food sovereignty and sustainable food systems can be ensured for our future generations. They constitute an invaluable contribution to the Outcome Document and Plan of Action which will be put into place at Rio +20.

LINKS:

1. "Cultural Indicators of Indigenous Peoples' food and agro-ecological systems" (2007, Ellen Woodley with Eve Crowley, Andrea Carmen, et al.). http://www.fao.org/sard/common/ecg/3045/en/Cultural_Indicators_paperApril2008.pdf.
2. A policy brief [E/C.19/2009/CRP. 3, 17 February 2009] based on this paper was also submitted as Conference Room Paper jointly by IITC and FAO for the UNPFII 8th session, and is posted the web page of the UNPFII: http://www.un.org/esa/socdev/unpfii/documents/E_C_19_2009_CRP3_en.pdf.
3. The complete report from the 2nd Global Consultation with the comprehensive list of the "Cultural Indicators for Food Security, Food Sovereignty and Sustainable Development" is available on IITC's Web page (www.treatycouncil.org) in both English and Spanish. It is also available in a publication by the Tebtebba Foundation "Indicators Relevant for Indigenous Peoples: A resource book" in Spanish and English via www.tebtebba.org.

Endnotes

[1] The "Declaration of Atitlan." 1st Indigenous Peoples' Global Consultation on Food Sovereignty and the Right to Food. Sololá, Guatemala. April 17-19, 2002.

[2] UN Food and Agriculture Organization (FAO) Policy on Indigenous and Tribal Peoples, November 26, 2010, International Legal Framework Concerning Indigenous Peoples, Declarations: "The Declaration [of Atitlan] emphasizes the importance of indigenous peoples' rights to lands, natural resources and self determination to their overall food security and food sovereignty."

[3] "We recommended that the term Food Sovereignty rather than Food Security be adopted at Rio +20, using the definition which was developed and agreed to by indigenous peoples in the Declaration of Atitlan from the first Indigenous Peoples' Global Consultation on the Right to Food and Food Sovereignty, Guatemala, 2002," Recommendation # 8, "Indigenous Peoples in Route to the Rio +20 Conference" Global Preparatory Meeting of Indigenous Peoples on Rio +20 and Kari-Oca

2 Conclusions and Recommendations, August 22-24, 2011, Manaus, Amazonia, Brazil.

[4] The "Declaration of Atitlan." 1st Indigenous Peoples' Global Consultation on Food Sovereignty and the Right to Food. Sololá, Guatemala. April 17-19, 2002.

[5] Ibid.

[6] United Nation Permanent Forum on Indigenous Issues, Ninth Session, 19-29 April 2010, Agenda item: Indigenous Peoples: Development with Culture and Identity, Articles 3 and 32 of the UN Declaration on the Rights of Indigenous Peoples, Co-Submitted by the International Indian Treaty Council (IITC) and the United Nations Food and Agriculture Organization (FAO), Final Report to the UNPFII: "Field Testing the Cultural Indicators for Food Security, Food Sovereignty and Sustainable Development in Indigenous Communities."

[7] Testimony of Faith Gemmill, Neets'aii Gwich'in/Pit River/Wintu, Arctic Village Alaska.

"Global Warming, Right to Food and US Energy Policy Impacts on Alaska Native Peoples." Submission by the International Indian Treaty Council to the United Nation Rapporteur on the Right to Food Olivier de Schutter, January 25th 2010

[8] UN Rapporteur on the Right to Food Olivier de Schutter reporting to the UN Human Rights Council 10th Session, March 2009.

[9] The "Anchorage Declaration." Indigenous Peoples' Global Summit on Climate Change, April 2009, Anchorage Alaska.

[10] "Human Rights in the Report of the Secretary-General on Renewing the United Nations: a Programme for Reform. Extracts from the report of the Secretary-General to the General Assembly, A/51/950, para. 78 and 79, 14 July 1997.

[11] "Indigenous Women and Environmental Violence," A Rights-based approach addressing impacts of Environmental Contamination on Indigenous Women, Girls and Future Generations submitted to the United Nations Permanent Forum on Indigenous Issues Expert Group Meetin. "Combating Violence Against Indigenous Women and Girls." January 18-20, 2012, by Andrea Carmen, International Indian Treaty Council and Indigenous Women's Environmental and Reproductive Health Initiative, and Viola Waghiyi, Native Village of Savoonga, St. Lawrence Island, Alaska and Alaska Community Action on Toxics.

[12] UN Special Rapporteur on the Right to Food Jean Ziegler, report to the 4th session of the UN Human Rights Council [A/HRC/4/30/Add.1, 18 May 2007].

[13] UN Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.

[14] United Nations Declaration on the Rights of Indigenous Peoples, preamble.

[15] Chief Wilton Littlechild, Ermineskin Cree Nation, addressing the United Nations World Food Summit. Rome, November 1996.

[16] 1837 United States Treaty with the Chippewa Nation.

[17] Input and Contributions to the Rio +20 compilation document to serve as a basis for the preparation of Zero Draft of the Outcome Document, submitted by the Dene Nation (Northwest Territories, Canada), the Nishnawbe Aski Nation (Thunder Bay, Ontario, Canada), the International Indian Treaty Council (IITC), the Indigenous Environmental Network (IEN), the Indigenous Peoples Council on Biocolonialism (IPCB), Indigenous World Association IWA, as well as Alaska Community Acton on Toxics (ACAT), and Ms. Mirna Cunningham, President, UN Permanent Forum on Indigenous Issues and on behalf of CADPI (Nicaragua), October 31, 2012.



INDIGENOUS PEOPLES & RENEWABLE ENERGY

Winona LaDuke and Sean Cruz
Honor the Earth

"We are the Keepers of this Earth. Those are divinely mandated instructions to us. We are at an incredible challenge at this point of our journey. We have been blessed by being Indigenous. What a blessing, and what a responsibility."

- Dr. Henrietta Mann
Southern Cheyenne

Overview

In this time of global climate destabilization, rising fossil fuel costs and egregiously inefficient energy economies in most "developed" nations, it is essential for indigenous peoples to deploy and implement efficient, appropriate technologies for energy production and distribution. This means that obtain-

ing adequate access to technical, intellectual and financial capital is vital to securing this future.

This also means making deliberate choices in community-based economic development, spanning cultural and spiritual decision making, analysis of food and housing sectors, and the creation and promotion of indigenous paradigms for appropriate development or a path forward.

Anishinaabe teachings in this arena speak of a phrase, Ji-Misawaabandaaming, or "the positive look towards the future." That vision, grounded in intergenerational teachings, is essential for the well-being of future generations and ecological sustainability on Mother Earth.

The right to develop resources is a fundamental right of self-determination. With that right are certain responsibilities, including the determination of culturally appropriate nature of development, environmental sustainability, social responsibility, and economic justice and viability. This briefing paper explores some of these issues.

Energy Economics

The world energy market is the largest and most profitable sector in the world economy. The world's largest companies are energy extraction and refining corporations, owned by private individuals, by other corporations and holding companies or by nation states.

Energy has been equated with economic prosperity in a growth paradigm, which couples consumption with gross national product, *not* efficiency. This is reflected in most economic sectors of the American economy, and where the American economy exists as an exported model worldwide.

There are two significant elements to this economic argument, which require analysis and deconstruction: first, consumption does not equate with good economic planning.

Indeed, sector-based analysis of the American economy finds that food production consumes a vast amount of natural resources, from agricultural inputs to packaging and transportation. In total, the food industry represents the single largest consumer of energy in the U.S. economy. In the initial analysis of these facts, it is essential to note that oil by-products of agrochemical fertilizers and pesticides added to the land and crops have a long-term detrimental impact on the food system. This is evidenced in the runoff into the Mississippi River system, which has resulted in a 1,000-square mile dead zone at the base of the Mississippi Delta.

This habitually poor economic planning is also reflected in the ongoing need to create new petrochemical additives as fertilizer, pesticides and herbicides become less efficient in subsequent applications.

A second essential facet of this problem is the fact that the average distance traveled for an American meal is 1,546 miles from farmer to table. This globalization of food markets under a misrepresented economic strategy of "economies of scale" means that the carbon footprint of American agriculture and food systems is unsustainable. Indeed, the system is so inefficient that it now requires 10 fossil fuel calories to produce a single food calorie. (For more information: Honor the Earth, 607 Main Avenue, Callaway, MN 56521, www.honorearth.org.)

Fortunately, the simple and elegant solution to this "system" of poor choices is a relocalized, organic food economy, which not only supports the restoration of indigenous and other localized agriculture and food systems, but also creates the essential opportunity to restore a locally wealthy economy. A transition towards an organic and localized agriculture system would not only reduce carbon emissions significantly, but also sequester additional carbon in the soil and reduce significantly the inefficient link between fossil fuels and food.

Materials economies are similarly inefficient, with their manufacture and marketing of products designed to become obsolete, to be thrown away, to become waste. Production of wastes represents a linear economic model, and yet constitutes

a primary product of an industrial system. This is reflected in all sectors of the economy.

> *Just as the human body adapts itself to the regular intake of 'hard' drugs, its systems coming to depend on them to such an extent that the user goes through a period of acute distress if they are suddenly withdrawn, so the use of 'hard' fossil energy alters the economic metabolism and is so highly addictive that in crisis, a user community or country will be prepared to export almost any proportion of its annual output to buy its regular fix.*
>
> - Richard Douthwaite, Short Circuit

Indeed, the hard drug habit of energy in the U.S. consumes one fifth of the economy. The United States energy economy, although a robust sector, is highly inefficient. This is because the production and consumption of energy are counted as essential elements of the national economy and there is no economic reward for efficiency. Thus, in a 2009 study completed by the Lawrence Livermore Laboratory and the U.S. Department of Energy, some 57 percent of energy was "rejected" in the system between point of production and point of consumption, with the two largest sectors of waste found in the transportation and industrial sectors.

The rising costs of fossil fuels are causing increased hardship to indigenous communities worldwide, particularly those in island and in more remote northern communities. On the Island of Hawaii, the price per kWh for electricity is US$.40 cents while on the mainland of the U.S. it is $.09 cents. The fossil fuel transfer payments for the US economy represent the single largest transfer of wealth in world history.

The State of Hawaii alone exports $7 billion annually off the Islands in exchange for fuels that it literally sends up in smoke, while its potential geothermal, solar and wind resources lay only marginally tapped.

Fuel poverty is a term indicating that the expense to a household or a community to meet fuel bills is exceptionally burdensome. Nationally, more than 13 million U.S. households (2006) spent an average of 25 percent of their income

on energy bills to maintain their modest levels of use. This is in large part related to systemic inefficiencies and lack of adequate weatherization in most impoverished households, with roughly 90 percent of reservation homes lacking adequate weatherization, and fully one third of tribal housing is trailers and motor homes.

The combination of these factors means that the industrial development model requires a constant set of inputs with a demand that exceeds regeneration capacity on the Earth, and consistently and inevitably causes violations of the rights of indigenous peoples.

In summary, creating an efficient economic model at an indigenous scale will require indigenous peoples' economic systems to be secure and modeled after essential principles and practices, which insure sustainability and do not replicate the industrial models of unsustainable, ecologically and culturally destructive economic development.

Indigenous Renewable Energy Development Strategies and Models

Energy is an essential element to indigenous economies in this critical millennium, and investments must be made in strategic planning to ensure that development is subject to the criteria of: (1) meeting energy needs; (2) is culturally appropriate; (3) is environmentally sustainable; (4) is socially responsible; and, (5) is economically just and viable. In addition, criteria of interspecies and intergenerational justice need to be considered in this arena.

These responsibilities are faced with a number of challenges in all facets of energy development, including a history and networks of relationships and built infrastructure, which are, in many cases, part and parcel of the U.S.' unsustainable fossil fuels, nuclear or centralized power production system.

A second challenge involves lack of access to financial capital for indigenous self-determination in energy, as the vast

majority of energy investment capital is habitually committed to large-scale corporate and government controlled projects.

A third set of challenges involve the technology itself, as renewable energy in the North American context lags far behind the world standard, due to misprioritized investments and the lack of political will at federal, state and local levels of governance.

This is to say that whether the renewable energy strategy involves tidal generation, mid-sized wind, or scaled solar, the intellectual and technical capital for most of these projects and prospects lies either in a foreign country or in the military sector of the American economy, and has not been released for civilian use, even though energy self-sufficiency is a key element of national security.

A fourth challenge faced by indigenous peoples in energy self-determination is gaining and keeping access to intellectual capital. This challenge is a result of both a brain drain of tribal intellectuals to large corporations (who recruit successfully most indigenous engineers, economists, geologists, etc.), and the fact that the actual technical and intellectual capital for renewable development exists by and large outside of North America. Scandinavian or European countries have come to address the energy issues with far more commitment.

All of these challenges must be addressed to create sustainable indigenous renewable energy and self-determination, and all have mechanisms to provide for a solution.

Mandate for the Indigenous Renewable Energy Agenda

When considering energy production, resource extraction, housing and energy efficiency, it is essential that the Administration and the Congress take into account the disproportionate impacts of climate change and energy development on American Indian reservations and Alaska Native villages, and the potential for catalyzing green reservation economies

A just nation-to-nation relationship means breaking the cycle of insisting that Native America chooses between economic development or preservation of its cultures and lands. Renewable energy and efficiency improvements provide opportunities to do both simultaneously. A green, carbon-reduced energy policy has major national and international human rights, environmental and financial consequences, and we believe that the President of the United States can provide groundbreaking leadership on this policy. The reality is that the most efficient, green economy will need the vast wind and solar resources that lie on Native American lands. This provides the foundation of not only a green low carbon economy but also catalyzes development of tremendous human and economic potential in the poorest community in the United States—Native America.

Indigenous Nations request that nation states redirect the billions in subsidies they plow into fossil fuels instead to actualize clean sustainable energy development in North America. Subsidies for the nuclear, coal, gas and oil industries should be rapidly phased out with a proportional ramp-up of subsidies for renewable technologies and locally administered conservation/efficiency improvements.

In particular, we believe that any climate change legislation should not allocate funds for nuclear or clean coal technologies, and proposals to provide liability guarantees to nuclear plants and capitalize research on uranium *in situ* mining practices must be eliminated.

Native America: In Need of Green Economic Development

Ironically, while some Native Nations and their reservation communities have borne the brunt of destructive energy development that has reaped massive profits for some, they are the poorest in the country, with high unemployment rates and inadequate housing.

- The unemployment rate on Indian reservations is more than twice the national rate;
- The median age in Indian Country is about 18 years, with a young and rapidly growing population in need of both jobs and housing;
- The poverty rate for Native Americans is 26 percent; more than twice the national average;
- More than 11 percent of Indian homes do not have complete plumbing. About 14 percent of reservation households are without electricity, 10 times the national rate;
- In rural Alaska where Alaska Natives predominately reside, 33 percent of the homes lack modern water and sanitation facilities;
- Energy distribution systems on rural reservations are extremely vulnerable to extended power outages during winter storms, threatening the lives of reservation residents;
- Reservation communities are at a statistically greater risk from extreme weather related mortality nationwide, especially from cold, heat and drought associated with a rapidly changing climate;
- Reservations are waiting on more than 200,000 needed new houses;
- About 1/3 of reservation homes are trailers, generally with completely inadequate weatherization;
- Inefficient homes are a financial liability, leaving owners vulnerable to energy price volatility;
- Fuel assistance programs provide millions of dollars of assistance to tribal communities. While necessary in the short term, they do nothing to address the cycle of fuel poverty due to leaky inefficient homes, and the need for a localized fuel economy;
- Internationally, the present levels of deforestation and climate-related disasters are creating huge populations of environmental refugees. It is anticipated that within 20 years, we will be spending some 20 percent of world GDP on climate change related mitigation and disasters.

Unemployment rates, poverty and the need for efficiency improvements and renewable energy provide an ideal opportunity on tribal reservations and Alaska Native villages for maximizing the impact of a green jobs initiative. Local jobs weatherizing buildings and constructing, installing and maintaining renewable energy technologies could be created. Such an initiative would have huge financial implications for rural economies, and for the overall U.S. economy.

Green Economies in Native Communities: Massive Potential, Maximum Impact

Providing clean renewable energy development and reversing the trend from exploitation toward energy justice should be a top priority in administration energy decisions. Tribes must be provided federal support to develop, own and operate new renewable electricity generating infrastructure providing the dual benefits of lower carbon emissions and green economic development where it is needed most. Tribes should be targeted with efficiency programs to reduce consumption of fossil fuels for heating and cooling and creating local jobs weatherizing and retrofitting buildings, helping reduce the tremendous amount of money that exits communities to import energy.

- Tribal lands have an estimated 535 billion kWh/year of wind power generation potential;
- Tribal lands have an estimated 17,000 billion kWh/year of solar electricity generation potential, about 4.5 times total U.S. annual generation;
- Investing in renewable energy creates more jobs per dollar invested than fossil fuel energy;
- Efficiency creates 21.5 jobs for every $1 million invested;
- The costs of fuel for wind and solar power can be projected into the future, providing a unique opportunity for stabilizing an energy intensive economy.

A green economy is key in the development of just relations with Native Americans—and can place the U.S. in an excellent light internationally.

According to the U.S. Energy Information Administration (EIA), with data through December 31, 2011, renewable energy sources expanded rapidly during the first three years of the Obama Administration while substantially outpacing the growth rates of fossil fuels and nuclear power.

Between January 1, 2009 and December 31, 2011, renewable energy sources (i.e., biofuels, biomass, geothermal, solar, water, wind) grew by 27.12 percent. By comparison, during the same three-year period, total domestic energy production increased by just 6.72 percent with natural gas and crude oil production growing by 13.66 percent and 14.27 percent respectively. Moreover, during the same period, nuclear power declined by 1.99 percent and coal dropped by 7.16 percent.

Looking internationally, it is clear that a renewable energy agenda is key to a stable economy, particularly considering the vagaries of a fossil fuel based economy in a time of climate change. Of all Danish electricity, some 53 percent is co-generated and 30 percent is renewable. The average Dane releases 52 percent less carbon than the average American, yet Danes have an excellent quality of life, and some of the lowest power prices and most reliable electricity in Europe.

In terms of the larger picture, a renewable energy agenda and economy will significantly benefit tribal communities for a number of reasons: first, reduction of fuel poverty by local generation, and energy security. And second, appropriate technology and green technology employment opportunities, which are several times as more labor intensive and less capital intensive than nuclear or fossil fuels technologies.

Tribal communities were unfortunately not at the top of this set of appropriations and political agenda for a host of reasons.

Case Studies: Renewables in North American Indigenous Territories

Wind

Fort Peck Reservation, Montana

The Assiniboine and Sioux tribes of Fort Peck in Montana installed two Entegrity 50 kW wind turbines near the tribal headquarters building in 2006, funded by the Department of Energy. The turbines reduce the amount of electricity that the tribe must purchase from outside sources and represent phase one of the tribe's wind development plans.

Kumeyaay Reservation, California

The Kumeyaay project, a 50 MW wind farm on lands held by the Campo and Viejas bands of Kumeyaay people in Southern California, is the only reservation-based commercial wind farm in the country. Undertaken with a developer, the tribe receives revenues from the lease of the land and the developer receives the revenues from the sale of the energy. The project uses 25/two MW Gamesa wind turbines. Plans are underway to expand the installation to a total of 160 MW, serving some 104,000 homes during peak production.

Mille Lacs, Minnesota

The Mille Lacs Band of Ojibwe has become a major investor in Mariah Power, a manufacturer that builds ultra-quiet vertical-axis wind turbines, called Windspires, for residential and commercial use. This tribal investment has the potential to create 15 new jobs and a reservation-based manufacturing facility to house operations.

Spirit Lake, North Dakota

The Spirit Lake Dakota put up a 100 kW Micon brand wind turbine in 1996. The turbine provides about one fourth of Spirit Lake Casino's power. The tribe and the Department of Energy jointly funded the turbine, and casino employees maintain it.

St. Paul Island, Alaska

The St. Paul Island Aleut (Alaskan Native) community has taken advantage of wind in combination with diesel, building a first of its kind hybrid wind and diesel power plant. This facility supplies affordable energy to the community as well as providing a profit for the tribal corporation, Tanadgusix (TDX) Corporation. The project supplies electricity and space heat to an industrial/airport facility. The TDX power plant is a commercial project that did not utilize any grants in the funding process.

Toksook Bay, Alaska

Three Northwind 100 kW turbines have been operating in the Native village of Toksook Bay, Alaska, since July 2006. Owned and operated by the nonprofit Alaska Village Electric Cooperative, these turbines produce over 600,000 kW/year, power that otherwise would have been generated by the use of diesel-burning generators.

Turtle Mountain Community College, North Dakota

The Turtle Mountain Band of Chippewa Indians has installed a 660 kW turbine at Turtle Mountain Community College that is expected to cover 90 percent of the college's annual electrical costs. Turtle Mountain plans to seek out other clean energy sources (possibly solar photovoltaic) for the remaining 10 percent, making the college powered by 100 percent clean energy.

White Earth Reservation, Minnesota

A 75 kW refurbished Lolland brand turbine is poised to supply power to White Earth Land Recovery Project's office building, a former middle school. Any excess power generated will be sold back to the utility on the grid.

Siting, Respect and Control

Renewable energy can easily suffer the same fate as extractive industries if indigenous communities are not involved from the beginning, not only in a consensual manner, but also as owners. The tendency in the U.S. to create utility scaled projects without local consent and support has placed a number of projects in a precarious situation. A historical ill-fated project proposed by the Enron Corporation was opposed by the Yakama Nation as the project would have been in a sacred cultural area of the Yakama Nation. Similarly, Cape Wind, a utility scaled project is proposed for the traditional territory of the Wampanoag Nation in present day Massachusetts, or Cape Cod, and has met with indigenous opposition**.**

The Wampanoag Tribe of Gay Head (Aquinnah) has filed a lawsuit to stop the development of a massive offshore wind energy plant in an area of Nantucket Sound that is sacred to the People of the First Light. The action cites multiple violations of the National Environmental Policy Act, the National Historic Preservation Act, and the Administrative Procedure Act.

In April, the Bureau of Ocean Energy Management, Regulations and Enforcement (BOEMRE) approved Cape Wind's developers' proposal to build 130 turbines, towering 440 feet above ocean level spread across almost 50 square miles of Nantucket Sound approximately 3.5 miles off the coast of Massachusetts. The project also includes plans for a 10-story electrical service platform with 40,000 gallons of transformer oil and 1,000 gallons of diesel fuel and a helicopter pad, a 66.5-mile submarine transmission-cable system, and two 115-kilovolt lines totaling 25 miles connecting to the mainland

power grid. The wind installation would be approximately 3.5 miles offshore.

"The Project will harm the Tribe's religious, cultural, and economic interests by degrading Nantucket Sound ecosystem and, in particular, disturbing the currently unblemished view of the eastern horizon, both of which are of immense spiritual importance to the Tribe; by disrupting or preventing fishing on Horseshoe Shoal (within Nantucket Sound) as a source of sustenance, subsistence, and income for individual tribe members; and by disturbing the sea bed, which may result in irreparable damage to historically significant and culturally and spiritually important archeological resources," the lawsuit says.

These pending challenges against the Cape Wind Project could ultimately stop the construction of the project

Solar

Hopi Reservation, Arizona

The phrase "Hopi potskwaniat" means "Hopi pathway to the future" and it can be aptly applied to the work of NativeSUN on the Hopi Reservation in northeastern Arizona. NativeSUN has brought over 800 household-size solar units to Native peoples in the region. Many Hopi have resisted electrification by major utilities, and one-third of the villages have never allowed electric power lines in their communities, objecting to their intrusive ugliness in a sacred landscape and unwilling to cede rights of way to outside power companies.

There are also profound spiritual considerations. As the Hopi Foundation states, "The force field of electricity emanating from the power lines is considered to be disruptive to the atmosphere, ambience and balance of the plaza and ceremonial areas, at the same time blocking the aesthetics of the sky and the panoramic vistas of the mesas."

Jóhonaá éi (Sun) Project, Diné College, New Mexico

After over two years of research to determine the best location and identify partners, the Jóhonaá éi (Sun) Project installation at Diné College's Shiprock Campus was completed in October 2010. The 19+ kW rooftop solar photovoltaic array was built to help offset the tribal college's power costs, but also provides ongoing opportunities for students to gain hands-on experience in clean energy development. The partners, including Grand Canyon Trust, Diné College, Honor the Earth, and Albuquerque-based solar manufacturer Sacred Power, hope to inspire tribal peoples throughout the Southwest to adopt similar projects.

Navajo Reservation, Arizona

Founded in 1998, Native American Photovoltaics (NAPV) has constructed 44 solar systems for off-grid homes on the Navajo Reservation. NAPV staff installs PV panels, offers monthly maintenance services and also teaches conservation and efficiency, translating solar terminology into Navajo and explaining cultural concepts that are still new to many people.

Pine Ridge Indian Reservation, South Dakota

Lakota Solar Enterprises produces and installs Lakota-built solar heating panels on tribal houses and buildings, creating local employment on the Pine Ridge Reservation. The company and its partners are also developing the reservation-based Red Cloud Renewable Energy Center, which will house manufacturing and training facilities for solar heating panels along with a greenhouse, organic garden and model wind and solar electric systems. LSE has installed more than 200 solar heating panels on 10 reservations. From Utah to Montana, Minnesota to Oklahoma, tribal homes are harnessing the sun's energy to provide heat during bitter-cold Great Plains winters.

Small-scale solar power allows remote communities access to electricity without power lines and also maintain Hopi self-

sufficiency. "When you get your own system," says Tewa, "It's yours. There's no power line, no right of way into the villages." NativeSUN started with the support of a set of foundation grants and a revolving loan program to help the community buy the solar panels. Today, a local bank has absorbed the loan program and NativeSUN now operates as a small business.

Pyramid Lake Reservation, Nevada

The Natchez Elementary School on the Pyramid Lake Reservation in Nevada now has a grid-tied, medium-sized solar project, the result of a collaboration with Black Rock Solar, that benefits the community by saving the school more than $13,000 a year in energy costs. More than three quarters of financing for the 240-panel installation came from utility and state rebates, and the school was able to pay for the rest.

Skull Valley Goshute Reservation, Utah

A 2007 partnership between Honor the Earth and Solar Energy International resulted in the installation of a "take-apart" 1.8 kW solar system using an array of 10 panels, 180 watts each, and is tied to the electrical grid. The installation took place at the home/office for the local grassroots group Ohngo Gau-dadeh Devia (OGD). OGD led a successful campaign against a nuclear waste dump for more than a decade. Their office now hosts a solid example of a safe alternative to nuclear energy, as well as a system used for community trainings. When the panels produce more power than the home/office is using, the power goes back into the grid, the meter spins backwards and OGD's electricity bill goes down.

Geothermal

Hawaii is the most oil-dependent and energy-insecure state in the U.S. Hawaiians pay the highest electricity rates in the nation, as much as three times the national average, and

the island chain burns up nearly a quarter of the entire U.S. consumption of foreign-sourced and Alaskan oil. Only eight percent of total electrical production in Hawaii comes from renewables.

Yet, scientific estimates show that there is approximately 42 million megawatts (MW) of potential geothermal electrical power boiling up in the Islands. The benefits are greater still when used as a heat source.

Exploration of geothermal electricity generation in Hawaii began in 1881, when King David Kalakaua discussed with Thomas Edison the possibility of using power from Hawaii's volcanoes to produce electricity to light Hawaii's capital, and transmitting this energy throughout the islands via an undersea cable.

Without the necessary technology and infrastructure to produce such an ambitious feat, the plan for geothermal technology to be incorporated into a viable electricity generation source was halted until the 1960s. The first modern geothermal well was drilled in the Puna area of the Big Island of Hawaii in 1976 and went online in July of 1981, producing three MW of power continuing for eight years. This was the first well of many that were proposed by the public/private development team to meet the islands' electricity generation needs. However, the plant production stopped in 1989 as the development was met with intense community opposition, and failed to meet rising community and regulatory standards.

Some of the major issues relating to geothermal electricity generation resulting in the proposed developments being delayed and eventually shut down by the widespread community opposition are as follows:

- Hawaiian cultural issues relating to site selection, cultural access for gathering, worship, heritage protection and preservation, and a negative impact to their "religious belief system," specifically regarding Pele, the Goddess of Fire, who lives in the Halema'uma'u Crater at the summit of the active volcano, Kilauea.
- Environmental issues due to no environmental impact assessment ever conducted as well as having exploratory problems and no conservation options.

- Perception that geothermal development on Hawaii Island was for the residents of Oahu, holding no perceived benefit for local (Hawaii Island) consumers, native Hawaiians, residents of Puna and the City and County of the Big Island.

Most importantly, the project was perceived as a lucrative private development of public resources for the benefit of a few; there was no broader vision for the islands of Hawaii and its residents (native and others)

However in 2010 the residents of Hawaii are once again faced with a renewed need to re-examine the geothermal possibilities in the islands. Information obtained from a June 2000 GeothermEx, Inc. Statewide Geothermal Resource Assessment Report confirmed a huge potential for geothermal being a key contributor to the state transitioning away from its current method of generating over 90 percent of its total electricity output from the burning of fossil fuels. Hawaii Island currently rests above a volcanic "hot spot" that draws its heat and magma from a deep underground source, making the Kilauea Volcano one of the hottest and the most active in the world. It was also determined that geothermal electricity generation potential was found in all but one of the main islands in the Hawaiian island chain. Geothermal production from Hawaii Island via an interisland power bridge could single-handedly solve the state's present and future power generation challenges.

GeothermEx Report Hotspots (June 2000)

The IDG team is a unique group of individuals poised to undertake the challenge of reexamining the possibilities held with potential developments of geothermal in Hawaii. Currently there is only one geothermal power plant, located in the Puna area of Hawaii Island producing approximately 30-37 MW of firm load electricity for the Big Island community. IDG believes that this small portion of geothermal electricity generation can be significantly increased as a result of the following factors:

- The previous geothermal situation from the 1970s and 80s classified as the Pele Defense Fund case has set standards for public and native Hawaiian participation, rights to access for worship and for exercise of cultural rights, including gathering, etc. that IDG is committed to following;
- The environmental situation has changed significantly because of climate change, landfill problems (leaching and carbon emissions), and environmental issues relating to fossil fuel use and the increasing costs of fossil fuel. Development of subsurface estate need not destroy the surface estate;
- Environmental Impact Statement (EIS) laws (HRS Chapter 343-State of Hawaii) now amended to include cultural impacts, including impacts to cultural resources, practices and belief systems; law requires extensive "consultation," ethnographic interviews, etc.;
- Proposed development of geothermal resources will be for Big Island as well as Oahu, Goal #1 is for Big Island to be energy self-sufficient in 15-20 years;
- Socially responsible approach will include direct benefits to State/County governments in revenues and energy, island consumers (residential and commercial), the district community impacted (Puna), and the native Hawaiian community. Community-Based Collaboration Development model;
- Project development to include hiring of community monitors and others with expertise for CIS, CAR, Archeology, etc. and cultural practice and protocol, and burial issues.

Hydro

Micro Hydro

Small-scale, sustainable hydro development can be an exceptionally dependable and cost-effective source of clean, renewable energy to consider if you live in a location with falling water from a river or stream on or near your property.

Micro hydro is often considered to be the ideal small-scale renewable energy system because while solar and wind rely on less predictable, intermittent weather phenomena, energy can be derived from micro hydro systems 24 hours a day year-round if you have a consistent flow of water.

Micro hydro systems convert the energy from falling water into usable electricity. The technology is relatively simple. All that is required to set up a microhydro system is falling water, piping, a turbine generator system, and wiring to connect the power to your home. Only a small amount of water flow (as little as two gallons per minute) or a drop as low as two feet is needed to generate electricity.

Micro hydro systems are commonly known as "run-of-river" systems because water runs straight through the generator and back into the stream. Since there is no loss of water in the generation process, micro hydro has a minimal environmental impact on local ecosystems. The possibility of low-level environmental effects from diverting part of a stream's flow must be considered prior to construction. Careful planning to ensure there is no impact on local fish stocks may result in designing a smaller system with a lower energy output.

Wiindigo Lake Power: Run-of-the-River Hydroelectric Northern Ontario Power

Wiindigo Power Partnership, Inc. is developing a partnership in a water-rich region. A project being proposed by MoCreeebec (from Moose Factory Island) in northern Ontario

is a three MW project, which will feed into the Ontario Hydro Power grid. The project is a joint agreement between Ontario Power Authority, the provincial government and MoCreebec Hydro I. MoCreebec was one of the first First Nations to secure a feed in tariff agreement. In the agreement energy produced in "green" energy projects can be sold into the grid. Large-scale hydroelectric dams would also qualify for this feed in tariff, but internationally are recognized as not "green projects." MoCreebec, as part of a dozen tribal communities working on renewable energy in the region, is one of a few run-of-the-river water projects, or "small scale hydroelectric projects."

In the pending project, there is no dam site, and the water goes through a turbine into the flume line, allowing fish to continue to move in the river. The project will use a pre-existing flume line or channel, essentially an 8-foot in diameter barrel several kilometers in length. The initial structure was created in the early part of the 1900s for a small generator to feed a hard rock minerals mine in Northern Ontario. The mine did not come to fruition, but the Teddy's Falls/Wiindigo Lake project is expected to come on line in the next few years.

Biomass and Biofuels

Southern Ute Indian Reservation, Colorado

The Southern Ute Tribe has invested in a facility that makes biodiesel out of algae grown next to a natural gas processing facility. Carbon dioxide (CO2) emissions from the natural gas plant are piped to the pools where CO2-gathering algae plants grow and feed on the CO2. The algae are harvested and their oil is used to produce biodiesel. In reference to the project's dual benefits of being a good investment and environmentally conscious, Tribal Chairman Matthew J. Box stated, "It's a marriage of an older way of thinking into a modern time."

Taos Pueblo, New Mexico

The GARN is a highly efficient wood-fired hydronic heater that makes optimum use of sustainably harvested fuel and emits very little smoke, reducing carbon emissions. The Taos system functions by heating a large metal tank in a firebox that channels the water into a radiant floor heating system. The GARN system has good potential to be replicated in Native communities and can heat a cluster of houses as well as a single facility.

Economic Analysis

Efforts should be made to invest locally, first, from training green jobs workers locally to using local building materials to producing energy locally, as closing the financial loop will help revitalize Native America's strangled economies, making them less vulnerable to volatile external costs and maximizing the positive impact of the new green revolution. Strategies which are essential:

- Increase the capacity of tribes, tribal colleges and tribal institutions to train the next generation of green job workers and continue to boost the capacity of technical training programs. Included in these programs should be training to use natural local materials with lower embedded energy costs and greater passive survivability in the face of climate extremes;
- Create financial support for efficiency in federal fuel assistance programs and for the installation of solar heating panels and other innovations, which deflect rising fuel costs and provide local employment, especially in rural areas;
- Ensure the Production Tax Credit for renewable projects is renewed for at least 10 years and made applicable to tribes to encourage tribal ownership, as currently it penalizes tribal ownership of projects;
- Provide a renewable production refund for tribal projects that cannot utilize tax credits. A refund at face value of the tax credit (valued at 2.1 cents) would be

more economical to the federal government than the applied tax credit (valued at 3.5 cents);
- Provide special financial matching grants to capitalize renewable energy potential in tribal communities;
- Create a renewable energy specific Investment Tax Credit for tribes to attract the decreasing number of investors that have tax credits;
- Resolve timeline issues with Clean Renewable Energy Bonds (CREB); history shows that predicting the timeline for any kind of major energy development can be difficult; a reasonable amount of flexibility ought to be built into the program to ensure that project delays do not result in payback starting before a project is completed;
- Ensure priority access to the electrical grid for green energy, particularly in the Western Area Power Administration (WAPA) and Bonneville Power Authority (BPA) regions;
- Direct the WAPA and BPA to regard tribal projects as a "governmental instrumentality" much like the federal dams in terms of transmission preferences on the federal grids (see Sovereign Power decision [Sovereign Power, Inc., 84 FERC P 61014 (1998)]);
- Fully authorize the reconducting of the WAPA transmission system in the Upper Great Plains and the integration of tribal wind power and federal hydropower on the WAPA grid to supplement diminishing federal hydropower and reduce regional carbon emissions;
- Fully authorize the implementation of a tribal solar project to cover the 355 miles of an open federal Central Arizona Project canal with solar photovoltaic cap to reduce 50,000 acre feet of evaporation, generate over 1,500 MW of clean, efficient solar power in the desert Southwest, and provide a just transition for tribal economies displaced by the closing of dirty coal plants;
- Continue Federal Energy Regulatory Commission (FERC) consideration of destructive dam projects like those on the Klamath, Snake and other rivers, and

replace such hydroelectric sources with renewable sources from tribal communities;

- Support Tribal Energy Resource Agreements (TERA) only if funded sufficiently to develop standards at least as strong as federal law, hire qualified staff, and not make approval any slower than it is now for tribal projects with U.S. Fish and Wildlife Service and Bureau of Indian Affairs approval. Tribes need to have the legitimate ability to implement and the capacity for enforcement;
- Ensure international debt reduction programs to reduce the pressure on governments and indigenous communities to cut down their forests or issue large lease holdings. Support preservation of biodiversity and indigenous rights in these areas;
- Impose international sanctions and wood tariffs to prevent deforestation.



NATURAL SACRED SITES, AN EMBERA HERITAGE FOR THE WORLD

Hernan Dario Posada Garcés
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Introduction

Different authors argue that indigenous peoples are experiencing a new form of conquest, a new form of invasion, a new form of extermination: "megaprojects." "A community and its environment can be condemned because of an investment project that the community does not know of but that has been in gestation for years at the offices of transnational companies and their partners." This is the motivation behind the following document, a plan of the Indigenous Organization of Antioquia in pursuit of defending the territory and natural sacred sites of indigenous peoples threatened by extractive global policies in favor of transnational companies, especially the ones involved in mining; jeopardizing not only indigenous peoples, but all of humanity's natural heritage that, thanks to indigenous peoples, has been preserved.

What are Sacred Sites for Indigenous Peoples?

To learn the importance sacred sites have for indigenous communities, it is enough to point out a definition of a *Jaibana*[1] from Dabeiba:[2] "A sacred site is like a school where indigenous people learn, communicate, explain dreams, a place where each plant is thought to the new Jaibanas. There the new Jaibanas learn from their parents and, over the years, teach their children." Words so simple reflecting that behind the intent of preservation of sacred sites is the conservation of communities themselves.

Sacred sites for indigenous peoples are deeply rooted in cosmogony—it is where you recreate the different ways of seeing the universe and transmit them from generation to generation. "A sacred site is an untouchable site, it is there where if one enters, there is the risk of getting ill or even dying." This is why it is essential to keep a balance between nature and traditional medicine, not only because it acts as a medicinal plant reservoir, but also because each traditional healer has his/her own sacred site keeping three or four spirits, as defined by indigenous peoples themselves as good or bad. Improper access, without any type of ritual and loss of sacred sites, causes spirits to be released—bringing illness to indigenous peoples, especially children.

Apart from this indigenous concept, it is not less true that sacred sites have been established for centuries as "the most effective strategy for the protection of natural resources" despite aggressive processes of colonization, irrational exploitation of logging companies and other factors. They remain there, but with a growing risk.

According to the IUCN (International Union for Conservation of Nature and Natural Resources), a sacred site is an area of special spiritual significance to the peoples and communities. Sacred natural sites are also important for the ecological balance and, perhaps, the best strategy that humanity has had in order to preserve the fundamental basis of their natural resources.

There is no doubt, however, about the rapid deterioration of natural resources and an increasing vulnerability of indigenous territories, in some cases, reaching critical levels. This degradation, even though much lower than in the rest of the country including its protected areas, challenges the autonomy of indigenous communities since autonomy without natural resources is unimaginable.

We have examined the conservation potential of indigenous communities, starting from points discussed in different events with indigenous leaders of the country. First, it is considered that the environmental and conservation policies of the Colombian state are nonexistent, incoherent and favor corporate interests; second, that although there is an indigenous policy on conservation, it is believed that several aspects still need to be defined or rebuilt.

Why Rebuild?

1. Indigenous peoples are mediated by cosmovision in relationship with natural resources, and from the sacred they have developed their own strategies for conservation; but likewise, the processes of acculturation has been altering this relationship with their environment;
2. Indigenous territories are now an environmental reserve of the country;
3. The natural degradation of indigenous territories is much less than the degradation suffered in rural territories, often less than the degradation of black collective territories, and even much lower than many protected areas;
4. Despite everything, it is undeniable that the degradation of indigenous territories is increasing.

It is in this last clause where we find the need to assess the causes of this degradation and reconstruct a new joint commitment to protect the territory and its natural resources, and evaluate the possibility of declaring them indigenous pro-

tected areas (term to be defined), or embrace the term used by the IUCN—Indigenous Territories of Conservation, or the proposal by the Latin American indigenous movement of Indigenous Bio-cultural Territories. The term chosen should also be recognized by the state within their "protected areas" but under governance, management and ownership of indigenous authorities exclusively, as the environmental authorities they are, according to the national constitution, Articles 246 and 330.[3]

With regards to article 330, in view of the "misinterpretations" of some state organisms, particularly UAESPNN (Special Administrative Unit of Natural National Parks), as John Houghton[4] mentioned that in numeral 5 when it speaks of ensuring "it makes reference to enforce the adoption of appropriate measures, and while it is clear that legal norms are not limited to those issued by central level agencies, but include those of local authorities, such as indigenous territories."

Finally, the author says on the other hand that "It is clear that the recognition of territoriality, which has constitutional status, cannot be infringed by any ordinary law as in the case of the environment law. Thereby, the political authority that recognizes the Constitution over territory legally precedes other authority established by means of law. But essentially indigenous authority is prior to the state's (as high courts have recognized), and by that fact competencies that cannot be denied by ordinary legislation."

A search to create a proposal regarding Indigenous Territories of Conservation of exclusive indigenous management arises from the consensual notion of the indigenous movement and in the complete absence of a coherent environmental policy by the Colombian state. The indigenous communities of Antioquia on July 31, 2009 in the Community of Jaikerazavi (MUTATA) submitted a declaration that addressed these issues.

In Colombia, the law takes the definition of "protected areas" according to the United Nations Convention on Biological Diversity ACT 165 of 1994, as "a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives."

Under the proposed amendment to Decree 622 of 1977, the national conservation objectives are: 1) Ensure the continuity of ecological and evolutionary processes to maintain natural biodiversity; 2) Guarantee the supply of environmental goods and services for human welfare; 3) Guarantee the continuity of the natural environment, or of some of its components, as the basis for maintaining the country's cultural diversity and social value of nature.

Justification for a New Category of Protected Area for Indigenous Peoples

Despite significant advances in recent years in terms of political strategies and regulations related to indigenous participation in the management of protected areas, mainly from the World Parks Congress in Durban, the IUCN categories still do not incorporate the indigenous vision of conservation based on the integration of man with the natural environment, which is to keep the areas inhabited by indigenous peoples.

Indeed, the debate that has been underway at the international level on the subject has focused on the governance of these areas, ignoring to discuss and adopt a conciliatory position agreed upon, and that respects the pre-existing rights concerning protected areas that are created or on the way to be created, on pre-existing territories.

In some way the current categories continue to primarily respond to the concept of parks without inhabitants, only tolerating, and in best cases with some exceptions, the presence of the human population, responding to an approach based on the restriction of rights rather than the conciliation of interests and objectives, and prioritizing conservation versus livelihoods rather than to supplement them.

Defending Sacred Natural Sites as a Strategy of Resistance

> *Communities should have the option to enforce their rights, but they usually go to the saga, merely limiting to resist a posteriori, when facts descend upon them.*
>
> - Héctor Mondragón

For over a year of discussions with the indigenous communities of Mutata, Dabeiba, Frontino, Middle Atrato, and Urrao in a participatory process with authorities, men and women, a first strategy proposed was to address megaproject issues in defense of sacred sites. This proposal was discussed and validated in decisions of the regional movement, their Boards of Directors, the Regional Council of Authorities and the still missing Departmental Congress of Indigenous Peoples.

With regards to sacred sites, the strategy arises from two key areas—an internal or ancestral and an external or political—considering the autonomy of indigenous peoples and within a framework of human rights and the rights of indigenous peoples.

Internal Field

Securing sacred sites

Securing[5] sacred sites is a traditional and cultural practice, in which traditional healers or jaibanas through rituals "enclose" spirits and condition these sites to be entered only with permission, being practically restricted to the mobilization of other indigenous and non-indigenous people. There are different beliefs and realities concerning sacred sites. Sites that are abused could result in the release of spirits that may sicken

community members, disrupt normal conditions when entering these sites, and create a sudden rain or "fog" which causes travelers to get lost. The securing of sites is a practice that has historically helped, given that even today many sacred sites remain practically untouched.

Securing the magical and the political

The securing of sacred sites also includes a political decision by the autonomous communities, a decision that is validated in municipal assemblies. In this regard the authorities and leaders have already issued a declaratory resolution of sacred sites and have committed to take care and protect them.

There is already a declaration on JAI KATUMA (sacred hill) appealing to the exercise of proper law, and that by way of mandate, authorities have chosen not to keep calling them CERRO CAREPERRO and point out some clear guidelines for dialogue of our communities and authorities before the state, government, multinationals and private companies. This mandate makes clear to the public that the indigenous resistance in defense of JAI KATUMA (Sacred Hill) USAKIRA DARRA is the same for all the Embera that share the mining block Batolito de Mande area.[6]

Once again indigenous peoples have in mind that besides being a sacred territory, it is also integral and indivisible. Therefore, we do not accept decisions of the West in which it imposes political-administrative division leading to disregard us as one people, with only one worldview.

It is reaffirmed then, that there is integrity and interdependence of a territory (posed by the United Nations concerning human rights), but also from the logic of the Embera in which the spiritual and the earthly are not separate, which is the main reason why these territories are Embera.

Community Empowerment for Territorial Control

The protection of sacred sites against megaprojects demands communitarian empowerment from three different scenarios: the group of traditional healers (Jaibanas), "mingas" of resistance, and the indigenous guard.

The 'Entre Bastones' Minga

The Mingas act as an instrument of protection, which consists in conducting verification visits to indigenous territories, especially to sacred sites, for evidence of environmental and territorial issues generated by foreign actors. The Mingas are reflected in:

1. Permanent visits to indigenous territories to identify outsiders, prevent the establishment of camps of armed actors or companies with mining concessions whose presence cause environmental damage and indiscriminate abuse of natural resources;
2. Permanent visits to communities where there are internal difficulties due to the lack of clarity of development policies from the national government;
3. Continuous analysis on megaprojects and their political and legal implications for indigenous peoples;
4. Ongoing dialogue with businesses and public institutions through indigenous authorities, which do not involve an agreement or consultation**;**
5. Permanent complaints of abuses by armed actors since their presence threaten indigenous peoples' resistance and self-determination;
6. Georeferencing, inventory and characterization of sacred areas;
7. Community reflections in meetings about the importance and significance of sacred sites, and the recognition and protection of these as indigenous protected areas by public institutions;
8. Rituals for healing and protection of the territory, which is done with the Jaibanas.

The Indigenous Guard

The guard is consolidating in this region with a group of leaders to form the indigenous guard, whose main function is territorial control as well as identify and act upon violations of the territory and inform indigenous authorities of anomalous events that occur. These include invasion of settlers, illegal exploitation of natural resources, among others.

Unfortunately, in the journeys trough these territories, authorities and the indigenous guard have found a lot of military presence, especially in the highest mountains (sacred sites). Here there is a large vast area of forest classified as primary forest that has been devastated.

Military presence accompanies those territories that have mining concessions. Such is the case of the Atrato Medio y Bajo Atrato areas: Murindó, Vigia del fuerte; and within the limits of Carmen del Darien Choco, Murindó, and the area West of Antioquia (Dabeiba and Frontino).

During permanent visits, communities—in coordination with the authorities and the indigenous guard—have identified that communities never knew of the supposed previous consultation conducted in the communities of Guayabal, Nuevo Canaveral and Urada (Carmen del Darien) and continue to ratify the rejection of the Muriel Company megaproject and others that may enter their territories.

Indigenous Women and Resistance

We emphasize the resistance of women that is jointly made with men. They have exalted the work of men and are the ones that are constantly warning us of the risks of negotiating behind the community's back. Throughout this process, women have shown to be strong and clear about the defense of life for the future of their children and grandchildren, avoiding to accept a plate of food or liquor from those who instigate them. They have recalled their efforts to educate with a cultural thought to care for the territory and not sell it, let alone give it away.

Visibility Campaign

Among the strategies proposed by indigenous communities is the upcoming launch of a campaign that must be accompanied by graphic materials—posters, videos, newsletters—with the following title, "Sacred Natural Sites, Embera Heritage for the World." This campaign intends to denounce before the public, the permanent violations of human rights to which indigenous communities are subject to by multinationals in complicity with the Colombian government.

It also aims to demonstrate to the larger society the current development model and the aberrant relationship that the Colombian government has with transnationals to whom it has created all favorable conditions —commercial, legislative and military—discriminating against the natural heritage, not only affecting indigenous communities but society as a whole.

We want the world to understand through the campaign that in Antioquia, Colombia there are indigenous communities that for thousands years have protected large natural areas, and that now by the actions of transnationals and the Colombian government through mining concessions and large infrastructure projects, an important natural heritage for humanity is at risk. These hold the last remaining forests in these areas and therefore indigenous communities of the Embera Katio are virtually condemned to disappear.

External Field

Declaration of sacred sites as indigenous conservation territories.[7]

In the exercise of their autonomy, indigenous people have declared sacred sites as indigenous conservation territories. This declaration was ratified in the document signed by local authorities in a meeting with the indigenous community of Jaikerazavi, Mutatá municipality in July 2008. The next step is for the Colombian state to recognize this declaration.

This legislation supports the declaration proposal of sacred sites as "protected areas."

National Legislation.

Under Colombian legislation, there is little or no reference to indigenous sacred natural sites. The proposal made by the Antioquia indigenous movement is that these sites should be recognized by the Colombian government, *warning that the administration and governance of this area is non-negotiable and exclusively indigenous*.

Within the political Constitution, the following articles stand out:

- ARTICLE 7. The State recognizes and protects ethnic and cultural diversity of the Colombian nation.
- ARTICLE 63. Assets of public use, natural parks, communal lands of ethnic groups, lands of safe haven, the archaeological heritage of the nation and other assets determined by law are inalienable, imprescriptible and indivisible.
- ARTICLE 246. Indigenous people's authorities may exercise jurisdictional functions within their territories, in accordance with their own rules and procedures, as long as they are not contrary to the Constitution and laws of the Republic. The law will establish the forms of coordination of this special jurisdiction with the national judicial system.
- ARTICLE 330. In accordance with the Constitution and laws, indigenous territories will be governed by councils formed and regulated according to the customs of their communities and will exercise the following functions:
    1. Ensure the application of legal norms on land use and settlement of their territories;
    2. Design policies, plans and programs of economic and social development within their territory, in harmony with the National Development Plan;
    3. Promote public investment in their territories and

ensure their proper implementation;
4. Collect and distribute their resources;
5. Ensure the preservation of natural resources;
6. Coordinate programs and projects promoted by the different communities within its territory;
7. Collaborate with the maintenance of public order within its territory in accordance with National Government instructions and measures;
8. Represent the territories before the National Government and other entities to which they will integrate; and
9. The matters stipulated by the Constitution and the law.

Additional Clause. The exploitation of natural resources in indigenous territories will be done without detriment to the cultural, social and economic integrity of indigenous communities. Decisions taken with regards of such exploitation, the Government will encourage the participation of community representatives.

Law 99 of 1993 with Regards to Protected Areas

Law 99 states that the Ministry of the Environment, Housing and Development needs to demarcate the different areas that make up the National Parks System. However, under the supervision of the Ministry, regional autonomous corporations will be able to manage the National Parks System. This management can be made with participation of local authorities[8] and civil society.

Decree 2372 of 2010 (Decree Law 2811 of 1974 Law 99 of 1993, Law 165 of 1994, Decree Law 216 of 2003)

This decree regulates the National System of Protected Areas, the management categories that shape it and other provisions. It defines protected area as a "geographically defined

area, which has been designated, regulated and managed to achieve specific conservation objectives."

Article 10 of this decree defines the following protected areas:

Public Protected Areas:

a. The System of Natural National Parks
b. Protective Forest Reserves
c. Regional Natural Parks
d. Districts of Integrated Management
e. Soil Conservation Districts
f. Recreation Areas
g. Private Protected Areas
h. Civil Society Natural Reserves

Additional Clause. The term public protected area refers only to the character of the competent entity for its statement. It does not make any reference to indigenous protected areas.

International Agreements

UNESCO

In 1972 UNESCO adopted the Convention on the Protection of the World Cultural and Natural Heritage in which it warns that their destruction or damage leads to an impoverishment of the heritage of all peoples of the world.

In the UNESCO Universal Declaration on Cultural Diversity of 2 November 2001, it states in its preamble: "Reaffirming that culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs."

Convention for the Safeguarding of the Intangible Cultural Heritage

October 2003 regarding the rightful role of government stated in Article 11. Role of States Parties: Each State Party shall: a) take the necessary measures to ensure the safeguarding of the intangible cultural heritage present in its territory.

United National Declaration on the Rights of Indigenous Peoples

Articles 12, 24, 25, 34.

Convention on Biological Diversity

According to Article 8 j "Subject to its national legislation, *respect, preserve and maintain knowledge*, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity..."

In Article. 10. Sustainable use of components of biological diversity. "c). *Protect and encourage customary use of biological resources in accordance with traditional cultural practices* that are compatible with conservation or sustainable use requirements"

The Akwe: Kon Guidelines

The Akwe: Kon guidelines assess implications of cultural, environmental, and social development projects that are to take place on sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities, or which may affect those places.

The ILO Convention 169 of 1989

The articles that stand out from the ILO Convention are the following:

Article 13 states that each state government "...shall respect the special importance for the cultures and spiritual values of the peoples concerning their relationship with the lands or territories, or both..."

Article 14. "... Governments shall take steps as necessary *to identify the lands which the peoples concerned traditionally occupy, and to guarantee effective protection* of their rights of ownership and possession."

Also, recalling law 21 of 1991 adopted by the ILO Convention 169. This policy in articles 13 states that "The use of the term lands in Articles 15 and 16 shall include the concept of territories, which covers the total environment of the areas which the peoples concerned occupy or otherwise use."

Other IUCN Considerations

The IUCN recognizes "that one of the oldest forms of culture-based conservation has been the protection of the sacred natural sites of indigenous communities and of mainstream religions, these sites often harbor a rich biodiversity and safeguard valuable landscapes and ecosystems."

In 2008 the IUCN published the Guidelines for Sacred Natural Sites and Guidelines for Protected Area Administrators. "These guidelines are a contribution of the Work Team on Cultural and Spiritual Values of Protected Areas of the IUCN and of the Man and Biosphere Program of UNESCO to support the efforts of a broad spectrum of religious groups and traditional indigenous peoples of the world to preserve its natural sacred sites in the long-term."

Second Latin American Congress of National Parks and other Protected Areas (Bariloche, 2007)

In this conference it was recognized that "Indigenous Conservation Territories are a legitimate model of governance for protected areas established in the ancestral lands of indigenous peoples, model whose key features are the integration of culture and nature, the role of customary law, traditional institutions and the exercise of indigenous authority in those territories."

IUCN World Conservation Congress - Barcelona, October 5-14, 2008

The IUCN World Conservation Congress is the highest decision making body of the IUCN and meets every four years. From this congress we can highlight the historical role of indigenous peoples in contributing to conservation. It also emphasizes the restitution of territory not only through the recognition of indigenous territories, but the need for states to return indigenous peoples to their ancestral territories that were "seized" or "taken away" in the creation of protected areas, without prior and informed consent of the peoples.

From this congress several resolutions and recommendations were derived that are of great importance for indigenous peoples and protected areas.

IUCN resolutions to consider:

- Resolution 4,038, Recognition and conservation of sacred natural sites in protected areas;
- Resolution 4-048, Indigenous peoples, protected areas and implementation of the Durban Accord;
- Resolution 4.049, Supporting Indigenous Conservation Territories and other Indigenous Peoples' and Community Conserved Areas;
- Resolution 4.050, Recognition of Indigenous Conservation Territories;
- Resolution 4.052, Implementing the United Nations Declaration on the Rights of Indigenous Peoples.

IUCN Recommendations

Biodiversity, protected areas, indigenous peoples and mining activities.

By way of summary we can highlight the following conclusions:

1. Sacred natural sites are essential for the survival of indigenous peoples;
2. Sacred natural sites are a manifest evidence of how indigenous peoples have contributed to the conservation of biodiversity and the natural heritage of humanity;

3. Sacred natural sites are threatened by global policies of extraction of natural resources both renewable and nonrenewable;
4. Indigenous peoples' sacred natural sites are recognized as one of the oldest forms of conservation;
5. The IUCN recognizes the importance that indigenous territories have in the conservation of biodiversity, denominating their areas as Indigenous Conservation Territories (ICT) and Indigenous Peoples and Communities Conserved Areas (IPCCA);
6. The Latin American indigenous movement requests the IUCN to create a new category of conservation called "Indigenous Biocultural Territories";
7. Sacred sites are considered Indigenous Conservation Territories (ICT) and/or other Indigenous Peoples and Communities Conserved Areas (IPCCAs);
8. Neither environmental policies nor the Colombian legislation protects indigenous peoples' sacred natural sites;
9. It is necessary for Indigenous Biocultural Territories to be included within the national system of protected areas, with the management, governance and exclusive ownership of indigenous peoples;
10. Protection and use of all natural sacred sites is a right of indigenous peoples recognized by standards, conventions and declarations;
11. The IUCN REQUESTS government agencies and non governmental organizations (NGOs) to recognize the rights, abilities and knowledge owned by local and indigenous custodians and of major religions in relation to the management of resources and ecosystems associated with sacred natural sites;
12. The IUCN SUPPORTS the United Nations Declaration on the Rights of Indigenous Peoples, and CALLS UPON all IUCN members to approve and adopt the UN Declaration and to apply it in their relevant activities;
13. The IUCN INVITES governments to work with indigenous peoples' organizations to reform legislation, policies and practices in such a manner that it respects

and recognizes the rights of indigenous peoples in the planning, creation and management of protected areas.

Endnotes

[1] Traditional Healer of the Embera Community.

[2] Municipality of the Western part of Antioquia-Colombia, with a predominant presence of the Embera people.

[3] Article 246. The authorities of the indigenous (Indian) peoples may exercise their jurisdictional functions within their territorial jurisdiction in accordance with their own laws and procedures provided these are not contrary to the Constitution and the laws of the Republic. The law will establish the forms of coordination of this special jurisdiction with the national judicial system. Article 330. In accordance with the Constitution and the laws, the indigenous (Indian) territories will be governed by councils formed and regulated according to the customs of their communities and will exercise the following functions:

1. Supervise the application of the legal regulations concerning the uses of land and settlement of their territories. 2. Design the policies, plans, and programs of economic and social development within their territory, in accordance with the National Development Plan. 3. Promote public investments in their territories and supervise their appropriate implementation. 4. Collect and distribute their funds 5. Supervise the conservation of natural resources. 6. Coordinate the programs and projects promoted by the different communities in their territory. 7. Cooperate with to maintain public order within their territory in accordance with the instructions and provisions of the national government. 8. Represent the territories before the national government and the other entities within which they are integrated; and 9. Other matters stipulated by the Constitution and the law.

[4] John Houghton Case Study on "The situation of indigenous territories overlapped by protected areas in Colombia" IUCN World Conservation Congress - Barcelona from 5-4 October 14, 2008. Cecoin Almaciga, intercultural working group.

[5] The term "enclose" is also used and it refers to non-intervention in sacred sites.

[6] Check the Jaikerazavi Declaration Annex.

[7] The term indigenous conservation territory is used with caution, since it is a definition under construction.

[8] Keep in mind that the constitution conceived indigenous reserves as municipalities, i.e., it gave them the category of local authority, Article 330.



MONITORING THE STATE OF THE WORLD'S INDIGENOUS PEOPLES THROUGH THE USE OF RELEVANT INDICATORS

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Introduction

The first Rio Summit ushered in Agenda 21, and its recognition of Indigenous People as a major group in the implementation of sustainable development. Subsequently, the 2002 Johannesburg political declaration reaffirmed the vital role of indigenous peoples in sustainable development. Additionally, the environmental agreements signed at Rio, notably the Convention on Biological Diversity (CBD), acknowledged the importance of traditional knowledge, innovations and practices of indigenous and local communities for the conservation, sustainable use and benefit-sharing arising from the use this knowledge. These political statements preceded the proclamation of two UN Decades for the World's Indigenous People, the establishment of the UN Permanent Forum on Indigenous Issues (UNPFII), and the General Assembly adoption of the UN Declaration on the Rights of Indigenous

Peoples (UNDRIP) in 2007. These have stimulated the adoption of development policies on indigenous peoples by UN agencies, international financial institutions and development agencies.

Given these policy developments, it is timely to ask:

- What has been achieved in the 20 years since the 1992 Rio Conference?
- Has the situation of indigenous peoples improved?
- What data is available to assess what changes have taken place?
- How can we improve local-global monitoring of the state of the world's indigenous peoples?

This chapter will reflect on the experiences of the Working Group on Indicators of the International Indigenous Forum on Biodiversity (IIFB) to promote the adoption of indicators on traditional knowledge within the strategic plan of the CBD and associated monitoring framework. More broadly, it discusses the importance of indigenous peoples' full and effective participation in local-global reporting about the state of ecosystems, sustainable development and indigenous peoples' human rights, through monitoring and the use of indicators relevant for indigenous peoples.

It is also a reflection on the potential contributions offered by inclusive global policy and indicators processes to kick-start the establishment of national and local information systems, which are useful for indigenous peoples for community-based governance and monitoring of territories, ecosystems, and self-determined development.

On Governance for Sustainable Development

Governance to address the contemporary global crises confronting peoples and planet needs to be democratic and inclusive, and supported by robust local-global knowledge platforms which are fully inclusive and respectful of the contributions of indigenous peoples and local communities.

Indigenous peoples have direct experience and knowledge about social and environmental problems in their communities and territories over long periods of time; and they are committed to maintaining and revitalizing healthy communities and ecosystems.

How then can indigenous peoples ensure their full and effective participation in local-global policy processes such as the UN Conference on Sustainable Development (Rio +20), the CBD, the climate change convention (UNFCCC), as well in the establishment of knowledge platforms such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and similar platforms proposed on sustainable development?

Convention on Biological Diversity

Within the Convention on Biological Diversity, global governance is realized through the adoption of the Strategic Plan on Biodiversity, 10-year biodiversity targets, and associated monitoring frameworks and selected indicators. To implement this global strategic plan, Parties are obliged to adopt their National Biodiversity Strategy and Action Plans (NBSAP) to monitor progress in implementation and to submit periodic reports.

The policy framework—the setting of goals, targets and indicators—is decided through a political process in the CBD, through decisions made by the Conference of Parties (COP).

The development and selection of indicators require inputs and expertise in the methodologies of collection, generation and handling of data, hence a knowledge process. In the CBD, this is carried out through the scientific, technical and advisory bodies of the CBD—the Subsidiary Body on Scientific, Technical and Technologial Advice (SBSTTA), Technical Expert Groups, its open-ended Working Group on Article 8j and Related Provisions, and the through the Biodiversity Indicators Partnership.

This engagement with the Strategic Plan on Biodiversity, and its monitoring framework and indicators, was simultaneously a governance or policy process, a knowledge generation process, as well as an indigenous process to have voice or full and effective participation at each stage of the process—policy formulation, planning, implementation and monitoring, and at multiple scales—global, regional, national, sub-national, and at community levels.

The indigenous peoples' process was to articulate the "voice" of indigenous peoples in both the policy and the technical processes of the CBD. This was done through the IIFB Working Group on Indicators. The formation of the IIFB Working Group on Indicators (2004) was an effort by indigenous participants participating in CBD processes to make visible the inextricable linkages between biological and cultural diversity, between the resilience of ecosystems and communities, as well as the need for collaboration between science and traditional knowledge in understanding the status and trends relating to biodiversity and human well-being, especially for indigenous peoples and local communities.

The IIFB Working Group on Ondicators functions as a research and information network, with discrete projects and activities that are linked and organized to deliver specific outputs. Its work includes indicators relevant to the CBD and the Millennium Development Goals (MDGs), as well as indicators relevant at national and local levels. Such indicators work contributes towards a global overview and understanding of indigenous peoples' situation, based on concrete research at local, national, regional, and international scales.

Indigenous Peoples and Social Statistics

The United Nations Permanent Forum on Indigenous Issues (UNPFII) at both its first (2002) and second (2003) sessions identified adequate collection and disaggregation of data on indigenous peoples as a priority. Subsequently, an Expert Workshop on Data Collection and Disaggregation for Indigenous Peoples was held at which the acting head of

the UN Statistics Division described the issues of indigenous peoples and data collection as "ground breaking." Reliable data would allow judgements to be made about the effectiveness of programs that have a direct impact on the quality of life of indigenous peoples—but little, reliable and comparable data exists.

Later in 2004 an Inter-agency Support Group on Indigenous Peoples technical report on the "MDGs and Indigenous Peoples" again underlined the need for disaggregation if the situation of indigenous peoples was to be accurately represented. The International Labor Organization also recognized these problems in 2005 with a report titled (ILO) "Ethnic Audit of Selected Poverty Reduction Strategy Papers," which concluded that the absence of indicators reflecting indigenous peoples' own perceptions of poverty and wealth is a key challenge in overcoming ethnic poverty and social exclusion. The audit showed that mainstream poverty indicators may disregard indigenous-specific circumstances and may even erroneously consider certain indigenous practices or assets as evidence of material deprivation.

Data collection and disaggregation concerning indigenous peoples poses unique challenges: data is needed for global and national comparative purposes, but it must also be useful to indigenous peoples in their communities. The indices commonly used to measure human well-being—the Human Development Index (HPI), the Human Poverty Index (HPI) and the Gender Empowerment Measure (GEM)—lack elements that indigenous peoples consider essential. These elements need to be incorporated in the form of additional indicators. Further challenges include the need to collect quantitative as well as qualitative data, and the need for coordination among international agencies, government institutions and indigenous peoples' organizations.

The importance of the issue was brought center stage at the UNPFII in 2005 and again in 2006 when the UNPFII made MDGs and Indigenous Peoples a central theme. The UNPFII called for the entire UN system to work together in refining existing indicators to better reflect indigenous peoples, not only in relation to the MDGs, but also opening out the issue to

the Human Development Reports (HDRs), Poverty Reduction Strategy Papers (PRSPs), Common Country Assessment-Development Assistance Frameworks (CCA-UNDAF), and other global, regional and national development framework plans.

Parallel to these events in the UNPFII, the issues of indicators and data disaggregation also came to the forefront of work on indigenous peoples' rights in the CBD, particularly in relation to traditional knowledge and article 8(j) of the CBD.

In 2004 the CBD identified the protection of traditional knowledge, innovations and practices as an important focal area among its 2010 Biodiversity Targets. This gave impetus to the formation of the IIFB Working Group on Indicators by indigenous peoples' organizations seeking to collaborate in identifying indicators that would deepen knowledge and understanding about indigenous peoples' rights, knowledge and welfare.

At that time, the suite of indicators identified to monitor progress in meeting the 2010 Biodiversity Targets was geared towards measuring "biodiversity" outcomes, and did not include metrics for analyzing "human well-being." It was the Millennium Ecosystem Assessment (MA) process, which subsequently framed the issues in terms of "Ecosystem Services and Human Well-being." Furthermore, the challenges of bridging local-global scales and the epistemologies of scientific knowledge and traditional knowledge were only addressed at a late stage of the MA process and were not fully integrated in its work program and report.[1]

The IIFB Working Group on Indicators started by working through regional focal points. It has an international coordinating committee, a technical working group and an international network of collaborators. Tebtebba performs the secretariat functions for the working group. The IIFB also works through collaboration with various international agencies on indicators relevant for indigenous peoples.

In collaboration with the UNPFII, the IIFB Working Group organized a series of regional and thematic workshops in 2006-2007 where indigenous peoples' organizations iden-

tified key issues and proposed some relevant indicators. In 2007 the Working Group organized the "International Expert Seminar on Indicators Relevant for Indigenous Peoples, the CBD and the MDGs," which brought together the outputs from the regional and thematic workshops, and other related work such as that on Cultural Indicators on Food Security. After the seminar, the IIFB working group published a *Resource Book on Indicators Relevant for Indigenous Peoples*.

Regional and Thematic Workshops on Indicators

Date	Activity
September 2006, Oxfordshire, UK	Workshop on Customary Sustainable Use (CBD Article 10c)
November 2006, Mindoro, Philippines	Asia Regional Workshop
November 2006, Nairobi, Kenya	Africa Regional Workshop
December 2006, Quito, Ecuador	Latin America and Caribbean Workshop
March 2007, Brisbane, Australia	Pacific Regional Workshop

Related Indicators Workshops

September 2006, Bilwi, Nicaragua	Meso America Workshop
September 2006 Bilwi, Nicaragua	2nd Global Consultation on Cultural Indicators on Food Security
September 2006, Akureyri, Iceland	Arctic Indicators Project

Strategic Plan for Biodiversity and Indicators on Traditional Knowledge

One output of these processes was a set of indicators on traditional knowledge proposed for the monitoring of the CBD Strategic Plan and Biodiversity Targets.

CBD COP 7 had previously adopted one indicator on traditional knowledge on linguistic diversity. This is being monitored by UNESCO. Two additional indicators proposed by the IIFB were subsequently agreed by the CBD's COP 10 held in Nagoya, Japan to become part of its monitoring framework of the Strategic Plan for Biodiversity and the 20 Aichi Biodiversity Targets. The meeting also agreed a new component in the program of work relating to traditional knowledge—on customary sustainable use in accordance with Article 10c of the Convention. After COP 10, a meeting of the CBD Technical Expert Group on Indicators proposed an additional indicator to monitor progress made in the implementation of Target 18 of the Strategic Plan for Biodiversity.

The proposed indicators under the CBD are:

- Status and trends of linguistic diversity and numbers of speakers of indigenous languages;
- Status and trends in the practice of traditional occupations;
- Status and trends in land-use change and land tenure in the traditional territories of indigenous and local communities;
- Trends in degree to which traditional knowledge, innovations and practices and customary sustainable use are respected through: full integration, participation and safeguards in national implementation of the Strategic Plan.

Strategic Plan for Biodiversity (2011-2020) and Aichi Biodiversity Targets

Strategic goal E. Enhance implementation through participatory planning, knowledge management and capacity building

***Target 17*:** By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

***Target 18*:** By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

***Target 19*:** By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

The first phase of the efforts of the IIFB Working Group on Indicators was to advocate (successfully) for the inclusion of traditional knowledge indicators for the monitoring of the CBD 2010 Biodiversity Targets and the subsequent Strategic Plan for Biodiversity and Aichi Biodiversity Targets (2011-2020). This part of the work was highly significant as a learning process and a dialogue among governments, scientists and indigenous peoples about the need and importance of including social and cultural dimensions in CBD programs and associated monitoring by relevant indicators.

Through discussions during regional and thematic workshops on indicators relevant for indigenous peoples, the meetings of the WG8j and Related Provisions, SBSTTA and the COPs, and associated meetings of the Biodiversity Indicators Partnership (BIP), there is a growing awareness and understanding about the importance of traditional knowledge in support of biodiversity conservation and ecosystem resilience and the special role and contributions made by indigenous peoples and local communities' customary territorial and land use management and sustainable use practices.

This advancement in the CBD conceptual approach and programming is evident in the new Strategic Plan for Biodiversity, much influenced by the Millennium Ecosystem Assessment (MA), which more fully incorporates the linkages between biodiversity and human well-being in an integral way.[2]

The Relevance of Monitoring and Indicators Processes for Indigenous Peoples

These processes inside the CBD involved a global process to promote the full and effective participation of indigenous peoples and local communities in global "indicators" processes, which have previously been the purview of government and scientific experts. Work on indicators is generally perceived as highly technical processes irrelevant for indigenous peoples. This view separates indicators work from the political processes, which frame the strategies and plans about sustainable development, biodiversity, health, human rights, education and all aspects of economic, social, cultural, and environmental and legal policies. The impacts and outcomes of global policies on the rights and well-being of indigenous peoples comprise the reality of our day-to-day lives. Organizing these observations into a monitoring system, including through the use of relevant indicators, makes indigenous peoples important knowledge generators and information providers about the state of indigenous peoples and their communities in different parts of the world.

Indicators in the Context of Monitoring Systems

What is an Indicator? It is a summary measure to show positive or negative change. The evaluative nature of an indicator distinguishes it from the descriptive nature of statistics. Indicators are measurable aspects of a situation that can be used to monitor its progress and direction. A key function of an indicator is to reduce the volume of information to which decision makers must attend.

Governments and international agencies all collect data to give them a picture, in quantifiable terms, of the state of society and the environment. The information they gather depends on the indicators they have selected to measure and monitor progress on issues they have defined as important.

Relatively few institutions, however, collect statistical information about indigenous peoples. For the most part, the situation of indigenous peoples is not reflected in statistics, or remains hidden in national averages. Nevertheless, policies continue to be made and programs continue to be implemented that have an enormous impact on indigenous peoples. There is a need for data to be collected to measure this impact.

At international level, some of the key development frameworks, including the MDGs, were drawn up without the participation of indigenous peoples. Not surprising then to find that indigenous peoples' concerns are missing from the statistical picture, thus failing to monitor the poverty situation of indigenous peoples.[3]

Process of Indicators Development

- Clarifying the policy objectives and targets
- Consideration of frameworks
- Development of suitable indicators
- Gathering of data
- Improving and developing new indicators
- Development of monitoring systems

The process of indicators development begins with clarifying the policy objectives and targets, and the consideration of frameworks to understand deeply the subject matter under consideration. Guided by the policy objectives and targets, suitable indicators are developed, which would allow assessments to be made about the progress being made (or lack thereof) in realizing the policy objectives and targets. This is followed by the gathering of data, the improvement and development of new indicators, and the development monitoring systems.

The experience of indigenous peoples in relation to the MDGs illustrates why defining the contextual framework and the selection of appropriate indicators about poverty are important for indigenous peoples. Concerns have been raised by indigenous peoples about the need for poverty indicators, which are not constructed around solely on cash incomes and expenditures and framed within a market and cash-based economy. The poverty indicator of living with US$1/day cannot adequately capture nor reflect poverty as perceived by indigenous peoples.

Such indicators processes, which emphasize technical measurements by experts over participatory approaches to indicators development, meet resistance from indigenous peoples who wish to apply holistic approaches and the cross-cutting inter-linkages among policy areas and specific targets identified for measurement. Invariably, issues of quantitative measurement and qualitative assessment are also strongly debated.

Poverty strategies must start from indigenous peoples' own definitions and indicators of poverty, and particularly address the exclusion and lack of access to decision making at all levels. Rather than being merely lack of money and resources, poverty is also defined by power deficits and absence of access to decision making and management processes. Social and ecological inequalities and injustice breed and perpetuate the impoverishment of indigenous peoples.

Cultural poverty: A Dayak perspective

The following seven principles summarize the way in which the Dayak achieve their ideal of life, based on their cultural values and how they compare with modern values:

- Sustainability (biodiversity) versus productivity (monoculture)
- Collectivity (cooperation) versus individuality (competition)
- Naturality (organic) versus engineered (inorganic)
- Spirituality (rituality) versus rationality (scientific)
- Process (effectiveness) versus result (efficiency)
- Subsistence (domesticity) versus commerciality (market)
- Customary law (locality) versus state law (global)

Failure to achieve these ideals is believed to result in *barau* (Jalai Dayak): a situation when nature fails to function normally, and thus results in chaos. *Barau* is a result of *Adat** transgression—a broken relationship with nature. "Poverty" for the Dayak is linked directly with failure to exercise the Adat that governs the way in which the people should live.

* Adat: set of local and traditional laws.
Source: Bamba 2003.

On the Arctic Social Indicators Project

The need for disaggregated data to understand better the particular situations of indigenous peoples cannot be overemphasized. The Human Development Report (HDR) in its issues from 1994 to 1998 stressed that it is important to disaggregate the human development indicators on the basis of factors such as gender, race and ethnicity, and geography in order to portray more accurately and act appropriately in response to such indicators.

One example of the Human Development Report applied regionally was the Arctic Human Development Report (ADHR)[4] published in 2004—the first comprehensive assessment of human well-being covering the entire Arctic region. But the AHDR did not provide time series data regarding the various elements of human development in the Arctic nor present a suite of quantifiable indicators to facilitate

the tracking and monitoring of human development in the Arctic over time. This follow-on work was carried out by the Arctic Social Indicators Project. The objective of the ASI was to devise a limited set of indicators that reflect key aspects of human development in the Arctic under six domains: (1) Fate control and or the ability to guide one's own destiny; (2) Cultural integrity or belonging to a viable local culture; (3) Contact with nature or interacting closely with the natural world; (4) Material Well-being; (5) Education; and (6) Health/demography.

In addition to the standard indicators used in the human development index covering Material Well-being, Education, and Health/demography, three additional domains were included, which were considered essential to the well-being of the peoples of the Arctic: Fate Control, Culture Integrity, and Contact with Nature. Upon completion of its work, ASI identified the following additional indicators relevant to peoples of the Arctic, and which are also highly interesting and relevant for indigenous peoples:

- Fate Control;
- The percentage of surface lands legally controlled by the inhabitants through public governments and Native corporations;
- Contact with Nature;
- Consumption and harvest of country food;
- Cultural Integrity;
- Cultural vitality index.

Global Core Themes and Issues for Indigenous Peoples' Well-being

Underlining that indigenous peoples themselves are the "experts" on traditional knowledge and community well-being, the activities carried out by members of the IIFB Working Group on Indicators tapped into a strong enthusiasm by community members to work together with partners to identify indicators relevant for indigenous peoples, which are useful

for community monitoring processes, and also for inclusion in the monitoring of the CBD Strategic Plans, the MDGs, and for the protection, promotion and fulfilment of human rights.

Regional and Thematic Workshops

Date	Activity
September 19-21, 2006 Oxfordshire, UK	Workshop on Customary Sustainable Use (10c)
November 8-10, 2006 Mindoro, Philippines	Asia Regional Workshop on Indicators
November 26-28, 2006 Nairobi, Kenya	Africa Regional Workshop on Indicators
December 8-10, 2006 Quito, Ecuador	Latin America and Caribbean Workshop
March 12-15, 2007 Brisbane, Australia	Pacific Regional Workshop

Another outcome of this global work on indicators is a global list of core themes and issues for indigenous peoples' well-being identified through regional and thematic workshops, which are important for measuring the "well-being of indigenous peoples." Changes in these areas can give a picture of trends in the well-being of indigenous peoples. Future work on global indicators on indigenous peoples' well-being could very well build on these results, which should also inform efforts to identify human rights indicators to monitor progress in the implementation of the UN Declaration on the Rights of Indigenous Peoples. These themes or domains include:

1. Security of rights to territories, lands and natural resources;
2. Integrity of indigenous cultural heritage;
3. Gender dimensions - elders, youth, men, women;
4. Respect for identity and non-discrimination;
5. Fate Control or Self-Determination;
6. Culturally-appropriate education;
7. Health;
8. Full, informed and effective participation (FPIC);

9. Access to infrastructure and basic services;
10. Extent of external threats;
11. Material well-being;
12. Demographic patterns of indigenous peoples.

Work is also proceeding to develop human rights indicators relevant to indigenous peoples. The purpose of this work, which is supported by the Office of the UN High Commissioner for Human Rights and the ILO, aims to identify structure, process and outcome indicators for monitoring progress on implementing the UNDRIP and ILO Convention 169.

The 10th Session of UNPFII recommended that the ILO, the Office of the United Nations High Commissioner for Human Rights (OHCHR) and the secretariat of the Forum continue to work with the Inter-Agency Support Group on Indigenous Peoples Issues to develop a common framework for monitoring the situation and well-being of indigenous peoples and the implementation of the Declaration, including through the identification of indigenous-appropriate indicators, possible data sources and linkages to relevant mechanisms.

From Global Indicators Processes to National and Local Monitoring: Philippine Pilot Work on Indicators on Traditional Knowledge

The foregoing sections described a global consultative process involving governments, scientists and indigenous peoples to identify indicators on traditional knowledge, which were proposed for adoption in support of monitoring the Strategic Plan on Biodiversity. How applicable are these globally adopted indicators for national and local monitoring?

In the Philippines, indicators work focused on several components—advocacy work to make indigenous peoples visible within the Philippine Statistical System in the 2010 National Census on Population and Housing (CPH) and the Philippine Standard Classification of Occupations, the development of

methodologies for community-based monitoring of the CBD Traditional Knowledge indicators—land use change and land tenure, traditional occupations and other relevant indicators, including the pilot testing of these indicators and methodologies with the Mangyan Tagabukid people in Sibuyan Island, Romblon and with the Kalanguya people in Tinoc, Ifugao.

Tebtebba commissioned two research papers to better understand ways of including indigenous peoples in official statistics. The first paper—"A guide to using ISCO-08 and its relevance for collecting data on traditional occupations"—written by Harishwar Dayal from the Institute on Human Development in India, provides useful information about the ILO's International Standard Classification of Occupations (ISCO). The second paper—"Overcoming the Statistical Divide: Indigenous Peoples and the Philippine Statistical System"—written by Benjie Navarro, provides basic information about the Philippine Statistical System and entry points for indigenous peoples. The paper is very helpful to understand the Philippine Statistical System and gives insights on other national surveys that can benefit from including an ethnicity variable to disaggregate data on indigenous peoples. Ms. Joji Cariño, Tebtebba's Project Coordinator, also wrote a paper on "Indigenous Peoples and Governance of Land Tenure" as a contribution to FAO's work on Voluntary Guidelines on the Responsible Governance of Land Tenure.

Tebtebba participated in Philippine government work to include an ethnicity variable in the 2010 CPH as a contribution towards generating disaggregated data on indigenous peoples in the government statistics. The project produced and disseminated 3,000 copies of a primer on this theme as part of the public information campaign. In addition to the census of population and households, work is also being undertaken for the inclusion of traditional occupations in the Philippine Standard Classification of Occupations (PSOC), which is currently under review. This work includes library research to generate a preliminary list of traditional occupations in the Cordillera region, a workshop to inform indigenous communities on the national government's plan to revise the PSOC, and generating a list of traditional occupation of indigenous

peoples, with a description of occupations for inclusion in PSOC.

Vitality Index of Traditional Ecological Knowledge (VITEK) – A Training Workshop was conducted by Dr. Stanford Zent, an anthropologist who has pioneered this methodology in Venezuela. The VITEK is an experimental tool or methodology for measuring the vitality of TEK across generations, and between sexes within a given community or population, covering both conceptual knowledge and practical skills. Vitality is defined as the rate of retention of knowledge over a specified time period. The inverse of the retention value is effectively the amount and speed of change. Thus the VITEK can reveal how much of the knowledge base is or is not being transmitted from one generation to the next. The workshop was attended by 24 participants who expressed appreciation and interest in the methodology, while others found the whole methodology complicated and expressed interest in simplifying or adapting it for use in their local community.

Several workshops were organized in the Philippines to operationalize the CBD indicators on Traditional Knowledge:

Workshop on Promoting Community Mapping for Indigenous People's Land Use and Security. Participants shared experiences on participatory community mapping and the potential for using maps to show and monitor land use change, traditional occupations, language vitality, and the practice of customary law and governance within indigenous territories. Most of the participants expressed interest to carry out community-based monitoring using traditional knowledge (TK) and other indicators, and requested that the methodology developed be implemented in their communities. To develop the methodology further, it was agreed to pilot test the methodology among the Mangyan Tagabukid of Sibuyan Island in Romblon province.

It was observed that in the sharing of experiences, participants are proud of their community 3D (three-dimensional) maps. At the end of the workshop, the participants realized that their maps can be enriched by additional information overlays, using GIS technologies, on: traditional place names in the local language and on language vitality; areas and extent

where traditional occupation is practiced; extent of the practice of customary law and governance. An important outcome of this workshop was the formation of a network of indigenous communities with experience in participatory mapping, who are also interested to carry out community-based monitoring using TK and other indicators. Other participating communities also expressed their desire to carry out participatory community mapping in the future.

A "Community Workshop on Indicators relating to indigenous languages, traditional occupations, land use change and secure land tenure, customary governance, and well-being" was held in Panagintingan, Sibuyan Island, Romblon. Eighteen participants representing seven clusters of communities attended. The workshop validated the digitized maps of the ancestral domain of the Mangyan Tagabukid indicating different land uses including sacred sites, and used participatory mapping to plot areas where customary governance and traditional occupations are practiced and where the language of the Mangyan Tagabukid is spoken. The overall effect of the workshop was to inspire and motivate the Mangyan Tagabukid to continue protection of their ancestral lands and revitalization of indigenous knowledge systems and practices.

Aside from pilot testing the methodology on community-based monitoring using TK and other indicators among the Mangyan Tagabukid of Sibuyan Island, an important finding is the corelation of sacred sites with conservation areas of high biodiversity. The Mangyan Tagabukid were reticent to talk about the location of sacred sites and the secret traditional knowledge associated with these sites to outsiders. The experience also raised issues of how to map sacred sites, since this has a bearing on asserting rights to their ancestral domain. Another finding is that a species of riverine shrimp (*ulang*) is an important indicator of water quality.

The results of the above workshops served as inputs to the "National Workshop on the status and practice of traditional occupations" attended by 25 participants from different parts of the Philippines. The workshop enriched the list of traditional occupations in the Cordillera region and generated a preliminary list of traditional occupations in the Philippines.

The questionnaire on traditional occupations was further developed. Participatory mapping—as a methodology for monitoring changes in land use, traditional occupations, language, customary law and governance at the community-level—was also presented. The workshop heightened awareness among the participants about the practice of traditional occupations in their communities, including reasons for their demise and strategies to revive some of these occupations. There is a need to strengthen indigenous communities to continue to practice their traditional occupations in the face of threats to their land and resources. There is a diversity and richness of traditional occupations whose descriptions are embedded in indigenous peoples languages.

Conclusions

These experiences underline that monitoring the status of indigenous peoples' well-being and enjoyment of human rights is an important part of governance processes. This is true for evaluating indigenous peoples' own efforts towards self-determined development as it is for national and local governments' fulfilment of their obligations towards indigenous peoples. Monitoring generates the information needed to know whether or not progress is being made towards fulfilling agreed goals and objectives.

Indigenous peoples have made significant advances in their advocacy efforts to make the United Nations and members states more responsive to indigenous peoples' concerns. More UN bodies and governments have adopted policies, plans and programs, which include indigenous peoples. The full and effective participation of indigenous peoples in the conceptualization, elaboration and implementation of such policies, plans and programs has an important bearing on their success or failure on the ground. Furthermore, monitoring implementation of these processes, including through the use of relevant indicators, can empower indigenous peoples and governments to decide on appropriate actions and next

steps, guided by concrete knowledge and evidence, in a continuous cycle of improvement.

The IIFB Working Group on Indicators has taken some important steps to strengthen local-global monitoring status and trends in the promotion and protection of traditional knowledge. The challenge for indigenous peoples is to make monitoring and use of indicators part and parcel of our practices in strengthening self-determination and increasing the accountability of governments to uphold indigenous peoples' rights and to fulfil their obligations towards improved well-being of indigenous peoples.

Endnotes

[1] Maria Tengo.

[2] Strategic Plan for Biodversity and Aichi Biodiversity Targets.

[3] Maria Stankovitch, ed, 2008, *Indicators Relevant for Indigenous Peoples: A Resource Book*.

[4] http://www.sus.is/ahdr/.



INDIGENOUS PEOPLES' CLIMATE CHANGE MITIGATION & ADAPTATION & THE SUSTAINABILITY OF PROGRAMS TARGETING PASTORALISTS

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Introduction

This paper focuses on the great ability of pastoralists to adapt to climate change and on their coping strategies, which are culturally, environmentally and traditionally bound. It gives a general overview of the pastoralists' resilience mechanisms in situations of drought and how these have helped and will help sustain pastoralism as a livelihood and lifestyle for the indigenous pastoralists.

It also looks at the impacts and consequences of unsustainable programs that have been reactionary in addressing the plight of pastoralists during drought periods. It further recommends what pastoralists need, and how their issues could be addressed.

Indigenous Peoples' Climate Change Mitigation and Adaptation Techniques

Challenges for Pastoralists

As a result of their historical marginalization, high poverty levels and strong reliance on natural resources and fragile ecosystems, indigenous peoples are highly vulnerable to shocks such as drought, famine and floods. The adaptive measures taken by the pastoralist community against climate change are, to a certain extent, successful. If the degree and frequency of disturbances increases, however, their adaptive capacity will be eroded.

Pastoralists have traditionally experienced droughts and rainfall variability, forcing them to move their livestock from one area to another in search of pasture and water. The increased frequency with which droughts are occurring lately is, however, alarming. The dry periods also seem to be lasting longer. For instance, 2005-2006 saw one such drought that forced many pastoralists in the Horn of Africa, especially in Kenya and Ethiopia, to move to faraway places in an attempt to save their lives and livestock.

Resources on the land, such as natural salt licks, water points and market routes have, at the same time, been interfered with or blocked altogether by non-pastoralists who fence off their farms and hence the access routes. Because of the need to move further away, as well as seeing their access to pasturelands restricted, pastoralists have also experienced an increasing concentration of their livestock on less space and it is consequently expected that this will lead to the degradation of the ecosystem, especially along the river banks and adjacent wetlands, ultimately leading to increased erosion, river siltation and the disappearance of surface water.

In the southern rangelands of Kenya, the main rainfall occurs during the months of March, April and May. Short rains

are also experienced in the months of October, November and December. In 2005, however, the long rains were poor. By June, most households (approximately 80%) had moved their livestock, starting with the cattle and then sheep and goats, in search of pasture and water. The movements lasted between 10 and 12 months. The rains finally came in March 2006. As most of the pastoralists had been forced to move outside the ordinary grazing range and into other livelihoods zones other than their areas of origin, the cattle faced different challenges, including diseases, change of diet and different weather conditions.



The long search for pasture and water for livestock as well as wildlife. Photo: David Nkedianye

The poor performance of livestock and other environmental services has severe social effects and is leading many households into a chronic poverty trap. School dropout rates, particularly during dry season, remain on the increase, affecting an already under-educated population. Children are also highly vulnerable to disease due to a combination of fatigue and poor diet, hence raising the morbidity levels.

At the same time, traditional knowledge of herbs, grasses, fruits, tubers, etc. is diminishing because much of the plant and wildlife is disappearing and the youth cannot be taught effectively about them.

The pastoralists' traditional diet has changed drastically, as demonstrated by the case below.

Mr. Ole Moonka is a Maasai elder aged 65. He lives in Lenchani village in Isinya Division of Kajiado District. He was born and brought up in the same Kaputiei plains. He has a wife and eight children. He says that climate change has altered their diet for the worse. "As we grew up in this area, there were all sorts of fruits that we could eat while herding livestock. There were Ilama, Ilamuriak and Olmankulai, just to mention a few. There were beehives all over and plenty of water sources… Now the situation has changed so much. The bees are no more, while the tree species have mostly disappeared and, where they still exist, they no longer bear fruit. The seasons are not understandable, even to the plants… The main diet has now been reduced to a little milk, stiff porridge made from maize, flour and tea. When the family has no money, it is difficult to feed the children. The milk is little because the cattle are spending a longer period away from home in search of pastures." He goes on, "…When the rains come and some milk is available, my wife has to sell some to raise money to cater for some of the family's other basic needs. Now the source of our staple diet is the shop…when you have no money, you have no food…" Many families, he says, are going through a similar, if not worse situation. Sadly, when members of a family are poorly fed, they tend to spend more time seeking medical attention, or just away from productive work. He says the good times (when the cattle are within home range and there is enough for the whole family) have become rare as suppressed rains have become more frequent.

Source: Ole Moonka, February, 2009 (interviewed by Joseph Ole Tuleto): Some impacts of climate change, as experienced by a local elder

Pastoralists' Adaptation Strategies

The pastoralists have survived major environmental and socio-economic stresses by relying heavily on social reciprocity. The poor get a great deal of support from those who are better off, especially during hard times such as drought or sickness. During a drought, relatives and friends team up to

move livestock so that they can assist one another in the provision of labor, finances and to take advantage of social capital (a process of communally sharing and reciprocating goodwill) to find pastures for the livestock. If the poor cannot provide a financial input, they may provide labor and look after the livestock.

Another adaptation measure is livestock spreading, which is a common practice in which livestock is spread over several ecologically different areas to take advantage of varying levels of greenness and availability of pasture. When the rains fall, the community members whose livestock survived the drought lend their cows to those whose livestock died during the drought, so that they can continue to have a milk supply. These practices have survived over time and seem to be helping to cushion many families from the extreme effects of droughts.

Neighborhoods also have mechanisms for supporting one another in order to either avoid or survive socio-economic shocks:



Pastoralists milk goats mainly in the dry season. Photo: Nanta Mpaayei, MPIDO

- Teaming up with relatives and friends to move livestock, share costs and hence increase the chances of finding pasture;
- Spreading the risks by ensuring that the livestock are not all in one area but in different places takes advantage of available but spatially differentiated pasture and water.

Pastoralists do better if they continue to support one another during difficult times. They have a saying that "no one is self-sufficient," and also that "reciprocity is a fair game." Small groups (especially women) who support one another help to build resilience.

Sustainability of Programs Targeting Pastoralists

Programs Targeting Pastoralists: A Reactionary Response!

In his analysis of programs targeting pastoralists, Simon Levine of the Overseas Development Institute (in an article entitled "The New Agriculturalist" 2011), states that, to prevent famine, pro-pastoralist policies and reform of the humanitarian system is required. Until these are in place, drought will regularly cost the lives of people and livestock.

It is essential to develop an overall strategy for supporting pastoral systems before looking at specific technical fixes, as the problem is much deeper and more political. For example, it is common for government offices or NGOs to fund projects such as the reseeding of degraded rangelands. Yet these organizations do not understand why the rangelands are degraded and overgrazed, which is related to the mobility issues described above.

Pro-pastoralist policies should recognize that nothing works as well as pastoralism in dry-land areas. Policymakers

and donors need to understand how pastoralists move, why and when, and how they can be supported to improve their mobility systems. Ensuring the mobility of pastoralists within the country is paramount; cross-border mobility is also highly desirable but much more difficult to achieve.

International donors need to support programs which demonstrate a respect for mobility and pastoral land rights. This, however, demands "joined-up" thinking. For example, a donor may have one budget supporting pastoralists and another to improve access to water. If the water budget is used to enable settlement on grazing lands, this may improve access to water but deny access to the grazing reserves pastoralists depend on. Pastoralists also suffer from enormous political marginalization, and this has to be taken into consideration whenever programs are designed that might affect them.

Increasing pastoralists' mobility could prevent future food crises in drylands, a new study by the International Livestock Research Institute (ILRI) (An Assessment of the Response to the 2008-2009 Drought in Kenya) has found. The report on the response to the 2008-2009 drought in Kenya identifies that the greatest problem herders faced were the obstacles to moving their herds, and suggests that the best way to avoid famine is to ensure that pastoralists have access to grazing and watering areas.

The report suggests that herding makes better economic sense than crop agriculture in many of the arid and semi-arid lands that constitute 80 percent of the Horn of Africa. It further suggested that supporting mobile livestock herding communities in advance and with timely interventions can help people cope the next time drought threatens.

The authors say that recommending that most livestock herders switch to arable farming or move to cities is simply unrealistic in this region's great drylands, which will not support row crops without extensive irrigation—something that is scarce and often impractical, according to the ILRI report. An estimated 70 million people live in these drylands, and many of them are herders. In Kenya, the value of the pastoral livestock sector is estimated at US$800 million. And

the Intergovernmental Authority on Development in Eastern Africa, which takes a regional approach to combating drought in six countries of the Horn, estimates that over 90 percent of the meat consumed in East Africa comes from pastoral herds.

"Drylands in the Horn of Africa are too large to ignore," says Jan de Leeuw, an ecologist at ILRI and a lead author of the drought report. "With only 20 percent of Kenya's land suitable for arable crop production, and with an expanding population, the country cannot continue ignoring these dry areas without hurting people's food production and livelihoods. Some of the worst impacts of the drought can be avoided if the region's dryland livestock systems are well regulated."

Support for a cultural curriculum supported by institutions and run by communities (clearly involving the elderly) would bring about much needed learning

The best way to prevent famine in arid lands is to ensure herder access to critical dry-season grazing and watering areas. All the herders interviewed in this research assessment reported that obstacles to the movement of their herds—caused by lack of roads, land conflicts and demographic pressures—constituted the largest problem they faced in terms of protecting their animals and livelihoods (An Assessment of the Response to the 2008-2009 Drought in Kenya).

The ILRI study findings thus reinforce what others have already found—that migratory herding is the most productive use of much of this land.

Emergency Response: Reforming the Humanitarian Aid System

Our humanitarian aid system needs reforming. For example, early warning systems provide warnings but they do not trigger early action. News alerts giving warning of drought or impending famine may be clear but no one has overarching responsibility for the necessary humanitarian response. National governments are ultimately responsible for the

welfare of their people but, in most cases, they are simply not doing enough to ensure an adequate humanitarian response to protect the lives and livelihoods of their citizens.

The humanitarian system is also primed to respond to the wrong signals. At the moment, our response is like a fire alarm that goes off when the temperature reaches 200 degrees. The alarm needs to go off at the first sign of smoke, however, so that we can make the necessary decisions. We have the information needed to predict when there will be problems.

Donors might try to justify waiting to see if a crisis really does materialize or not, in order to ensure the best use of limited funds; but this is false logic. Firstly, the loss of people's assets during these situations is enormous: in terms of lost livestock, hundreds of thousands of dollars disappears each day. Secondly, there are significant cost-benefits to acting early. Animal health services and vaccination of children against diseases such as measles are basic services that governments should be providing, irrespective of whether there is an emergency.

Having a plan, identifying supplies of food in advance, and negotiating at a local level so that things can be implemented quickly if and when the time comes are all actions that cost very little, but improve emergency responses.

There is currently no sense of responsibility or accountability. At the end of the day, no one is responsible. So how do you get system accountability when you have multiple organizations all with different mandates and different priorities, responding to different political constituencies? It is very hard but, until we can sort that problem out, it is going to be "Here we go again" every three years.



IMPACTS OF MINING ON INDIGENOUS PEOPLES IN THE ANDEAN REGION

Coordinadora Andina de Organizaciones Indigenas (CAOI)

Abya Yala, the original name of the American continent, is home to one of the largest indigenous populations on the planet: 50 million persons from more than 400 indigenous peoples of the world. In particular, 90 percent of indigenous Americans live in the Central Andes and Meso-America. They are heirs to great civilizations abruptly interrupted with the European conquest.

We, the Andean indigenous peoples, have conserved the essential elements of territory, political organization, a distributive economy, and spirituality tied to Mother Earth (Pachamama). Our identity is rooted in our territories, which are the spaces where our laws and our history are written. Without our territories, we would not be peoples with different cultures. Our territories include their natural assets, which we consider to be living beings. And we have known how to care for them and live in harmony with them for thousands of years.

Mining Activity in South America

In South America, the Andean region was the birthplace of metallurgy. There were two great centers in what today is the Peruvian-Bolivian plateau (Tiahuanaco) and the Peruvian northern coast (Mochica), from which such knowledge was disseminated to Chile, Argentina, Colombia, Panama, and Mexico. Specialized artists elaborated items for adornment and for spiritual ceremonies. The extraction of metals was not considered an economic activity until the European invasion of Abya Yala.

As of that invasion and up until the present, primary extraction of raw materials has been the pillar of the development model for the region. Starting in the 1940s, a number of studies promoted by the World Bank and the Inter-American Development Bank (IADB) served as the basis for designing trade agreements and economic integration plans for the hemisphere. Since then, the countries with greatest commercial interest in the region, such as Canada, Switzerland, Great Britain, and the United States, have been involved in technical and financial cooperation on matters concerning infrastructure, land zoning and transformation of the regulatory and legal systems of our countries, with the objective of promoting a short- and long-term development model based on the extraction of raw materials. That model has accentuated poverty, inequality and dependence.

In the 1990s neoliberalism reduced the regulatory powers of the state, restructuring such powers to bring them in line with market needs, in order to guarantee conditions for the free flow of investment. In other words, democracy was subordinated to market objectives and to the interests of specific sectors that obtained institutionalized advantages for themselves under the pretext of development. One of the sectors that has benefitted the most has been the mining sector.

This promotion of mining has been supported by international financial institutions, above all by the World Bank, which portrayed extractive industries as a valuable instrument

for overcoming poverty. According to Peruvian researcher José de Echave,[1] the World Bank played a decisive role that can be summarized in three dimensions: programmatic, by promoting and providing guidance for the reform of mining legislation in order to promote private investment; as the financier of mining projects;[2] and as a partner of mining projects through its financial arm, the International Finance Corporation (IFC). As a result of these policies, mining investment throughout Latin America expanded considerably, as discussed below.

Part of this process is the increase in prices of the principal metals in the international market over the past decade. This trend started approximately in the year 2002, and prices continue to rise today. An example is the price of gold.[3] On January 1, 2002 an ounce of gold was priced at US$278; on January 1, 2006 its price went up to $530, and on January 1, 2010 its price was $ 1,120. By the end of November 2011 the price of an ounce of gold was approximately $1,750, slightly below the record price of $1,920 of September 6, 2011.

The price of copper, another metal of great importance for the mining sector, has also risen sharply over the past decade: on January 1, 2002 a pound of copper had a price of US$0.70, while on December 2, 2011 it was trading at $3.54.[4] As a result, during this period the principal mining companies obtained profits exceeding those of any other economic sector in the world, including the pharmaceutical sector and telecommunications.[5]

As prices of metals increased, mining companies increased their expenditures on exploration in Latin America from approximately $450M in 2002 to $3.1B in 2008. Five countries (Mexico, Peru, Chile, Brazil, and Argentina) traditionally attract the majority of the exploration expenditures. According to the figures provided by the Peruvian NGO CooperAction, in 2008 investments in these five countries amounted to $2.568B, representing 82.8 percent of all investments in the continent.

Today it can be said that the entire Andean region is the site of the most accelerated growth in mining investments

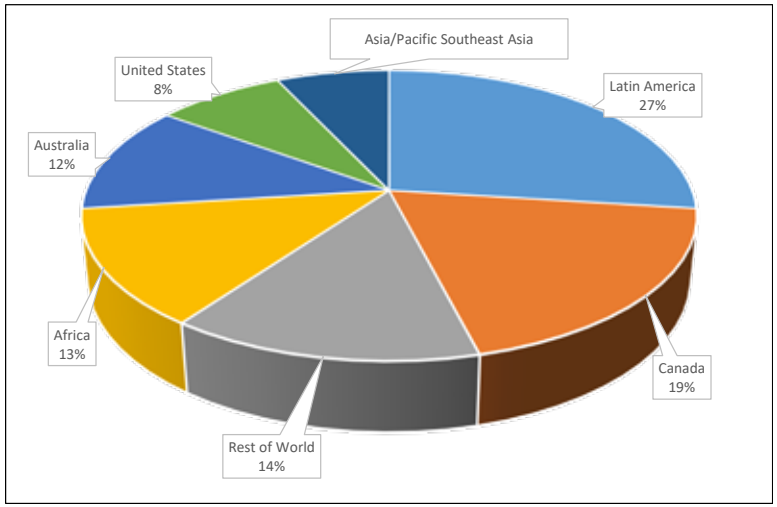
over the past decade. Similarly, Latin America consolidated its position as the principal recipient of investments from mining companies in the world. In fact, in 2010 it received 27 percent of the international budget for exploitation of non-ferrous metals (see Figure 1).[6] During 2010, gold was the principal focus, attracting more than half of the total worldwide exploration budget, with copper at a distant second place (Metals Economics Group, 2011).

The various metals are coveted or required in the global economy, where they are fundamental for manufacturing all types of products. In other words, they are essential raw materials for the energy, metallurgy, jewelry, telecommunications, and infrastructure sectors, among many others.

The multinational mining companies claim that their increased investments in Latin America are principally the result of the political stability of the countries, favorable structures for investment and mining operations, and support from the current governments for the mining sector. But without question, the increase in prices of metals and consequently the tremendous profits attained by the sector have enticed the mining companies, principally those of Canada, the United States, Great Britain, Switzerland, Australia, South Africa, and Brazil, to find veins of metals that can be exploited while the price increase remains. Accordingly, the mining companies have established offices in several countries, along with affiliates and extraction zones, creating an entire international network of operations. We believe that these striking figures in terms of investments, production, and exportation represent nothing other than the growing penetration of large-scale capital into the Latin American continent.

In addition to national governments and multinational companies, it is important to note the role of governments of the countries of the North and of international institutions in actively promoting the mining of metals in the continent and at a global level. The magnitude of power that these players possess exerts influence through financing, economic pressure and the design of policies aimed at applying a large-scale mining model that, in a great number of countries, faces few restrictions. Among these entities are the United

Figure 1: Exploration Budgets for non-ferrous metals worldwide, by region.
Exploration budgets by region, 2010.
(Budgets of 2,089 companies, totaling 10.680 billion dollars)



Nations Development Programme (UNDP), the Canadian International Development Agency (CIDA), the Canadian Energy Research Institute (CERI), diplomatic corps, and supranational entities such as the International Monetary Fund (IMF) and the World Bank Group. This curiously includes the direct participation of the IFC (a member of the World Bank Group) as a shareholder in two mining megaprojects in South America: the Yanacocha gold mining project in Peru, whose principal shareholder is the United States mining company Newmont; and the Aguilar mine in Argentina, controlled by the Swiss mining company Glencore.

In Latin America mining concessions often overlap forestation or reforestation concessions, reserves of indigenous peoples, communal lands, national parks, ecotourism zones, wetlands, and other areas that enjoy some type of protection. In the case of Latin America, the granting of mining rights to multinational companies often encroaches on the rights of indigenous and peasant communities. These communities see how these companies receive explicit governmental support

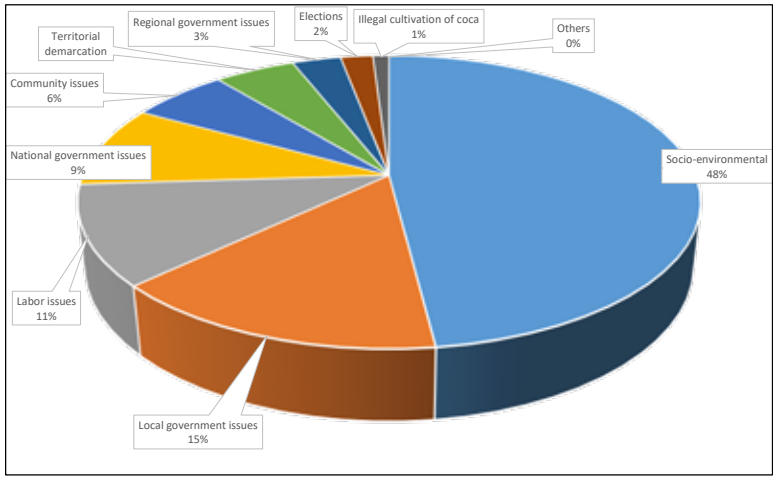
under slogans that are hardly convincing, such as job creation, development, and the welfare of local communities and of the country, but in the end, their territories are usurped and their knowledge and the sustainability of their economic and social processes are lost.

In addition to the above, one must consider the increased competition for water, since the metal mining industry needs enormous quantities of freshwater to separate the metals sought from other minerals present in the rock. The industry also has a serious impact associated with the use of large volumes of extremely dangerous chemicals, causing environmental contamination and health problems for people who inhabit zones close to a mine. In view of all these different impacts, we cannot reach any conclusion other than that mining activity is presently one of the most destructive and contaminating activities on the planet.

It thus comes as no surprise that this imposition of public policies, which reinforces the pillage of mineral resources and territorial control on the part of multinational companies, has generated numerous conflicts between populations, on the one hand, and governments and companies, on the other. In all of the continent's countries, indigenous peoples and nationalities, peasant communities, users of water, and ecologists have risen up to demand the cancellation of the mining endeavors, and to demand respect for their collective rights and territorial rights.

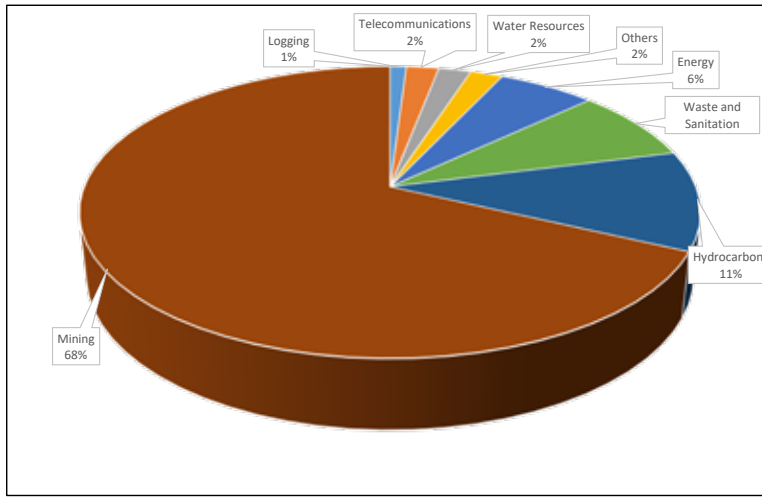
In fact, mining activity is one of the principal sources of conflict throughout the continent. Below, we provide certain data obtained from the Peruvian government's Ombudsman Office, which keeps track of social conflicts in the country. According to this data from the Ombudsman's Office, in August 2009 there were a total of 284 social conflicts in the country, of which 48 percent (135 cases) were socio-environmental conflicts (see Figure 2). Furthermore, the Ombudsman's Office determined that 68 percent of these 135 cases were conflicts specifically related to mining activity (see Figure 3).[7]

Figure 2: Social Conflicts by Type



According to Argentine researcher Maristella Svampa, "there is no Latin American country with large-scale mining projects that does not have social conflicts between the mining companies and the government versus the communities: Mexico, several Central American countries (Guatemala, El Salvador, Honduras, Costa Rica, Panama), Ecuador, Peru, Colombia, Brazil, Argentina, and Chile."[8] In fact, throughout Latin America, as the number of extractive projects and their territorial areas has grown, the conflicts they have provoked have grown without cease.

Figure 3. Breakdown of Socio-environmental Conflicts



In general, it can be said that each mining project unleashes a conflict that starts with the exploration activity but does not end when the life cycle of the deposit is exhausted. Experience shows us that the conflict lasts far beyond the period of exploitation of the metals, as can be seen in emblematic cases of mining in Latin America, such as Cerro de Pasco, Yanacocha and La Oroya (Peru), Valle de Siria (Honduras), Cerro San Pedro (Mexico), and Esquel (Argentina).

In this context of conflict and protest against mining enterprises, Latin American governments have been applying severe restrictions upon traditional means of expression and opposition. Social protest and mobilization are ways to publically exercise freedom of speech and association. Common tactics such as the blockading of highways and demonstrations tend to be the product of many months or years of unsuccessful efforts to be heard through dialogue. It is clear that the democratic states have to fulfill their duty of authorizing protest and protecting protest participants. But in Latin America, protests have been directly suppressed and judicially prosecuted as crimes, especially when what is involved are major projects funded by foreign investors, as is characteristic of many mining projects being promoted in Latin America.

The objective of this criminalization on the part of the state is to create fear, destroy the reputation of opposition leaders, weaken resistance, force opponents to devote their time and resources to defending themselves (instead of devoting themselves to the struggle) and, finally, justify the use of force against opponents. The strategies used include baseless denunciations, media campaigns to condemn the growing social protest,[9] application of violence by the security forces, or changes in the legal framework in order to reduce the opposition to the policies proposed by whichever government is in office. It is clear that such strategies are developed by governments and companies with a view towards weakening and neutralizing resistance, so as to allow extractive projects to take place.

This is particularly grave, because the states throughout the continent continue to promote various mining projects and other extractive projects without adequate processes for prior consultation with the communities, thus violating the obligations they have assumed under international law.[10] Failure to fully implement the right to consultation has generated much criticism from international bodies, as well as from members of civil society in the South and the North. In order to cover up their clear support for extractive endeavors, several governments of the continent have been passing laws to regulate the obligation to conduct such consultations. Nonetheless, to date not a single consultation has taken place in the continent that specifically addresses the implementation of any mining project consistent with the spirit of consultation found in international law and approved by the representative organizations of indigenous peoples.

Despite the application of these criminalization strategies and of measures to ensure access to minerals, the task —at least in Latin America— has not been so easy for them. Though repressive policies seek to annihilate them, indigenous peoples, peasant communities and ecology activists, joined together in resistance movements, time and again rise up to claim their rights, justice, and equity, and respect for and protection of Mother Earth.

The Struggle of the Indigenous Peoples Against the Imposition of Mining

As indicated above, we, the indigenous peoples and our organizations, have not been passive in the face of this neoliberal onslaught. On the contrary, the assault on our rights has made us all the more visible as a political player and has led to a growing articulation on a continental level, moving from mere resistance to proposal making and action. Below, we present examples of resistance of the communities against companies and states that fail to safeguard our rights.

Peru: Protagonists of Resistance

Peasant and native communities have been become the mainstay of resistance to the indiscriminate advance of mining. It is estimated that out of 5,680 communities whose land titles are recognized, 3,326 at the end of the 20th Century had part of their territories occupied by mining concessions. The expansion continues, and today mining concessions occupy nearly 22 million hectares, representing 17 percent of Peruvian territory.

The imposition of mining activity in Peru has generated "emblematic conflicts," such as the cases of the mining projects of Río Blanco (in Piura), Tía María (in Arequipa) and more recently Minas Conga (in Cajamarca), characterized by a lengthy, sustained community protest, violent confrontations between the state or the mining security forces on the one hand and the communities on the other, the imposition of "States of Emergency," as well as severe human rights violations. Similarly, there are several latent conflicts in the country, that is, zones where the government in office and the mining companies are seeking to take advantage of the current international situation and promote new mining projects, despite the fact that the peoples have already made known their opinion against mining activities in their territory.

Seeing their territorial rights, environment and production activities adversely affected, the communities make use of a variety of strategies: mobilizations, strikes, and sometimes referenda called by the local authorities.[11]

Protest actions —undertaken once all attempts at dialogue have been exhausted— are criminalized. Alan García's second administration (2006-2011) issued a package of legislative decrees that distort the definition of crimes to be applied against protesters. One such measure[12] defines acts that are customary practices for social mobilizations as acts of extortion. Such acts include sit-ins, blocking traffic, interrupting the normal operation of utilities or of legally authorized public works. The measure provides for sentences of up to 25 years for such acts.

As a result, there are now approximately a thousand indigenous leaders who are being persecuted and prosecuted for defending the rights of their communities.

The cases we present below demonstrate the disconnect between a centralist state and the reality of the indigenous communities, the violation of national and international norms, and the persistence of indigenous peoples in the defense of their own model of life.

Candarave: Defending Water

The Tacna region is located in the southern Peruvian coastal region, to the north of the Atacama Desert, considered one of the most arid regions in the world. It is characterized by a shortage of water resources, aggravated in recent years by the effect of climate change and the expansion of mining. In its high altitude provinces, such as Candarave and Tarata, the communities are Aymara.

Given the increasingly severe water shortage, the regional government issued Regional Ordinance 015-2007-CR, which stated as follows: "declaring an emergency for the water resources of the Tacna region, due to a lack of balance with respect to water." This ordinance considered that "it is urgently necessary to adopt protective measures related to the use of

the region's water resources. Thus, there must be safeguards to ensure that water consumption is related to vital priority needs, either for use by the regional population (human consumption), and for agricultural uses, preferentially." The objective of this ordinance was to propose that Tacna's water resources should be restricted, so that the executive branch would not continue to grant licenses for private use of the water, as in the case of mining activities.

Candarave is an extremely rural zone. According to the 2007 National Census, 62 percent of its population works in agriculture and livestock-raising. But since 1965 groundwater and surface water sources in its high altitude areas are being exploited. The company currently involved in exploitation is the Southern Copper Corporation, a Mexican company, which uses water in its mining operations in Toquepala and Cuajone, located in the provinces of Jorge Basadre (Tacna) and Mariscal Nieto (Moquegua), respectively. Southern Copper has licenses for extraction of surface water and groundwater for a total of 1,950 liters per second, whose sources are in Candarave.

As a consequence of this activity, 69 water sources that empty into the Callazas, Salado, and Tacalaya rivers have disappeared. The volume of the Callazas River has also diminished: farmers in this basin have a license to use water at a rate of 2,346 liters per second for irrigated agricultural production, but the average flow ranges between 1,000 and 1,200 liters per second. In addition, exploitation of groundwater has desertified 27,500 hectares of wetlands used by the community of Huaytiri for livestock. In response, Southern Copper has bought lands from community members of Huaytiri and Vizcachas, turning the areas where the water sources are located into private property and installing gates that impede free circulation.

Despite these negative impacts, the central government continues to grant mining rights in the province's territory. Companies such as BHP Billiton, Newmont Perú and Río Tinto Mining, among others, have mining concessions in Candarave. If implemented, their mining projects would require much more water, which would further reduce the

quantity available for agricultural activities and human consumption.

In January 2008 the District Municipality of Candarave, through a Municipal Ordinance, called for a referendum so that "the population of the peasant communities and peoples of the province of Candarave may define their position with respect to current mining activity and the possible introduction of new mining companies; said decision of acceptance or rejection should be considered by central government bodies. All of this is in defense of life, water and the environment and so that new generations may be heirs to an environment where they can still live in dignity, without contamination or destruction of biodiversity."

The legal whereas clauses of the ordinance make reference to rights recognized by national and international instruments, such as ILO Convention 169 (Articles 6 and 15.2), the Constitution of Peru, Law 26300 (Law on Civic Participation), and Law 27972 (Law on the Structure of Municipalities).

The referendum was held on February 17, 2008 and resoundingly rejected the exploitation of water resources for mining activities and the introduction of new mining activities in the province. The population of Candarave understands very well that the continuity of their culture and their sustainable economic model depends on their struggle to halt the development of mining activities in their territory.

Successful Referendum in Arequipa

The Arequipa region is home to 100 peasant communities, 57 of which have land titles. This region has seen an accelerated increase in mining concessions in recent years, to the point where mining concessions now cover 30 percent of its total territory. The concessions are principally concentrated in the Provinces of Arequipa, Islay and Castilla.

The District of Uchumayo (Province of Arequipa) is the site of the Cerro Verde copper mine, which belongs to the U.S. mining company Freeport McMoran Copper & Gold,

one of the principal producers of copper and gold worldwide. Recently, the local population's discontent towards this company has grown, since it failed to fulfill its environmental commitments, despite millions of dollars in profits earned year after year.

Also notable is the number of mining concessions granted in Natural Protected Areas, concretely in the Sub-basin Landscape Reserve of Cotahuasi and in the Salinas and Aguada Blanca National Reserve. These zones were included on the list of protected areas with the objective of conserving their biological and cultural diversity, landscape and ecosystems.

In the District of Cocachacra, Province of Islay, Southern Copper Corporation is seeking to exploit a copper mine in the Tía María deposit, which requires an investment of almost $1B. Implementation of this project would affect the availability of water, harming local production of rice, sugar cane and paprika for farmers from Quechua and Aymara communities in the high altitude regions and in Puno.

In August 2009 the Province of Islay, where the District of Cocachacra is located, called a referendum to decide upon the future of such mining investment. The referendum was held in September of that year, and more than 93 percent of the population of Islay rejected the implementation of the Tía María project. The referendum was successful despite a campaign against it by the mining company and the central government. The mayors of the Districts of Cocachacra, La Punta and Dean Valdivia held rallies calling for the rejection of Southern Copper Corporation, which seeks to control Arequipa, Moquegua and Tacna.

Huaytará, Huancavelica, Among the Poorest

For decades the Huancavelica region has been considered by the National Statistics and Information Institute (INEI) as the poorest in the country, with a total poverty rate of 66.1 percent and an extreme poverty rate of 46.5 percent (the national average is 14.9%).[13] The World Health Organization indicates the Huancavelica region's malnutrition rate among children

at 54.6 percent, the highest in the country, with zones where that rate surpasses 70 percent (Angaraes 73%, Churcampa 71.6%). In this region, the communities are Quechua.

At the same time, Huancavelica continues to be one of the regions with the greatest number of mining concessions in its territory. Since the year 2002 the percentage of territory granted as concessions in Huancavelica has grown from 13 percent to 40 percent, practically affecting every district and every peasant community.

The province with greatest area under concession is Huaytará (almost half of its territory), located in the zone that borders the Regions of Ayacucho and Ica. The principal mining project of the zone is Antapita, run by Inversiones Mineras del Sur, a subsidiary of Compañía de Minas Buenaventura, which is Peru's leading mining company.

After commencing its gold and silver production in 2001 in the Districts of Córdova and Laramarca, Antapita now seeks to expand into the Districts of Ocoyo, Querco, Santiago de Chocorvos, San Isidro, and Pilpichaca, precisely where the headwaters are located for the basins of the Grande and Ica Rivers.

The majority of peasant communities have expressed their opposition to the establishment of the mine, based on increased air and water pollution during the eight years of mining presence in the zone. According to community members of Laramarca, now many of their puquials (springs) have dried up, and in other cases consumption of water from the springs is not even recommended for animals, given the presence of toxic metals such as lead. This situation has severely affected livestock production of sheep and goats, as well as milk production.

Ecuador, Criminalization of Protest

The government of Rafael Correa has established mining activity as one of its priorities. In keeping with such priority, a Mining Law was passed and Empresa Nacional Minera (National Mining Company - ENAMI EP) was founded in December 2009. This governmental position of turning Ecuador into a mining country reflects the continuity and intensification of the model based on the extraction of natural resources.

One of the greatest concerns of the populations directly impacted by mining activity is the contamination of water sources in fragile zones rich in biodiversity, such as the Cóndor Cordillera, where the Mirador, Fruta del Norte, Río Blanco, Panantza, San Carlos, and Quimsacocha megaprojects, among others, are located. All these projects have as a common denominator that the communities inhabiting the projects' zones of influence were not consulted.

In Ecuador, as a consequence of violation of the right to consultation, the communities, their leaders and the population in general are becoming victims of the criminalization of protests. These persons and organizations are classified as criminals and even accused of being terrorists and saboteurs, with the objective of destroying the reputation of their struggles in the eyes of the rest of society and of creating fear or demobilizing the defense of fundamental rights recognized by the Constitution of Ecuador and supported by international instruments.

An emblematic case is that of the community of Cochapata and the Canton of Nabón in the Province of Azuay, where a conflict broke out ever since the mining company Explorsur S.A., belonging to Juan El Juri, one of the richest businessmen of Ecuador, entered the zone to engage in mineral exploitation, without the state having consulted the population.

The population of Nabón expressed its opposition to this project due to its environmental and social impacts, but their social resistance activities and mobilization against mining and in defense of water sources and of their culture were responded to by the El Juri group mining company with a court

case brought on March 23, 2008. In this case, seven persons were accused of the crime of sabotage.

On July 22, 2008, the National Constitutional Assembly issued the Amnesty Mandate for persons involved in cases where they were criminalized "for defending territoriality, collective rights and the rights of peoples." Nonetheless, the criminal prosecution of the seven persons from Nabón continued in the courts of Azuay. On April 9, 2010, Division Two for Criminal Matters, Conspiracies and Traffic Matters of the Court of Justice of Azuay sentenced each of them to the maximum sentence of eight years of incarceration. The sentence was issued almost at the same time as the Municipality of Nabón finally issued the ordinance recognizing the zone of Shincate, Province of Azuay (in Southern Ecuador) as a "protecting forest," which would have been affected by mining. That, in fact, was one of the reasons why these persons, now sentenced, exercised their right to protest.

The Ombudsman's Office filed a Preliminary Administrative Claim before the Provincial Court of Azuay. But this Court again failed to acknowledge that the seven defenders of Nature of Nabón were covered by the amnesty, which was granted by a body of greater hierarchy, that is, the National Constitutional Assembly. Following that, the Ombudsman's Office filed an Action on the Grounds of Noncompliance before the Constitutional Court in Quito, but the Court denied its petition[14] arguing that the dates on which the acts took place in Nabón were not covered by the amnesty issued by the National Constitutional Assembly.

On December 21, 2011, finally, with 104 votes in favor and eight abstentions, the National Assembly granted amnesty to the seven leaders of Nabón. The amnesty resolution recognized the social struggle in defense of water and nature as legitimate. Nonetheless, the amnesty was granted to them at a time when, according to a report from the Ombudsman's Office, there are still some 200 people in Ecuador being persecuted and prosecuted by the state and by private companies, above all with respect to issues involving mining exploitation.

Colombia, Forced Displacements

The legal reforms instituted in Colombia starting in 2001 opened the road for the massive entry of multinational mining companies, given that the state lost primary ownership over mining territories, removed elements for environmental protection, and eliminated the recognition of artisanal mining zones. During the following years, the government of Álvaro Uribe commenced the issuance of mining titles without any type of rigor, which now cover some 45 million hectares, representing approximately 40 percent of Colombian territory. In fact, in Colombia a single company, Anglogold Ashanti, in 2006 applied for a mining concession for more than 4M ha in not less than 300 municipalities.

Lately the situation has been become even more alarming, given that the government of Juan Manuel Santos announced that its economic development program is founded on "the five drivers of development,"[15] one of which is mining/energy.

Mining projects make irreversible changes in the communities. The Cerro Matoso project, for example, destroyed a mountain and the Uré River and is leading to the destruction of the Emberá people of Alto Uré in San Jorge. In the Province of Antioquia, Bajo Cauca was irreversibly destroyed by mining.

The indigenous Emberá people have had a disastrous history with mining exploitation that has torn apart the culture of their communities (as in the case of Alto Andágueda, where 400 people were killed and there was massive displacement). Now, more than 530,000 ha that have been contracted to private parties in indigenous territories are exploration and exploitation zones for gold, silver, platinum, molybdenum and cobalt, associated with copper and zinc.

The gold concessions affecting indigenous peoples are concentrated in Antioquia, Córdoba, Chocó, Caldas, Risaralda, Huila, Tolima and Cauca, although significant portions of Nariño and Valle also have been granted. Just as in the rest of the country, Kedahda, Mining SA, Cerromatoso, Muriel Mining Corporation, Bateca Seca S.A., Mónica Uribe,

Minerales del Darién, and James Valdiri are the principal concessionaires.

Recently the case of the Emberá in the Jiguamiandó River basin, Department of Chocó, affected by the Mandé Norte mining exploration project of the multinational company Muriel Mining Corporation has come to light. The exploration phase of this project was conducted using an absolutely irregular, fraudulent, and bad faith prior consultation process (falsification of signatures, creation of parallel organizations, the giving of gifts, all with the acquiescence of the national government), thereby violating the fundamental rights to due process, to prior consultation and to the existence, autonomy, integrity, and cultural and social identity, among other rights, of the communities involved.

The project includes the open pit mining of the Careperro mountain, a sacred site for the Emberá, since according to their cosmovision the mountain locks in the evil spirits. Overcome by anguish and desperation, some indigenous persons have committed suicide. The army bombed the indigenous territory, leaving one indigenous person as a severely wounded paraplegic, and causing hearing problems for a child. The case was decided through Judgment T-769 of 2009, in which the Constitutional Court ordered that the project be halted and that a true consultation be conducted.

Bolivia, Care of Mother Earth

Bolivia is considered a traditional mining country. Since the Inca era and, after that, the colonial era, mining as always been one of its principal economic activities. Nonetheless, despite this long mining history, Bolivia is one of the poorest countries in the region, which evidences that such extractive activity has not contributed to development or to the national economy. Rather, it has generated an enormous social and environmental debt and problems that are impossible to remediate.

The eastern and western Cordillera mountain ranges cover nearly 42 percent of Bolivian territory. Currently there

are more than 2,200 silver, tin, antimony, tungsten, lead, zinc, copper, bismuth, and other prospecting projects there. The Precambrium geological formation, with an extension covering 18 percent of the territory, has a metal-bearing zone with more than 100 gold, platinum, nickel, tantalum, iron, and other prospecting projects. The plain of Beni covers 40 percent of Bolivian territory and has deposits of tin, tungsten and gold. In addition, the Government of Bolivia has openly stated its hope that in the coming years it will start to exploit lithium from the salt flats of the plateau, the world's principal reserve for this mineral.

Although private participation in the mining sector has increased in recent years, favoring the growth of mid-scale mining, small mining and cooperatives, the state is promoting a greater governmental presence through Corporación Minera de Bolivia (COMIBOL).

The coming into office of the Movimiento al Socialismo (Movement to the Socialism/MAS), led by coca farmer-leader Evo Morales as Bolivia's president, and the intellectual and ex-guerrilla fighter Álvaro García Linera as the country's vice president, created enormous expectations among broad sectors of the Bolivian population and Latin America as a whole. The demands of indigenous peoples for their rights, followed by an advanced discourse highlighting the care of the Pachamama (Mother Earth) added value to the Morales administration.

Despite the clear and energetic discourse of President Morales at the international level, expectations within the country regarding the exercise of rights and respect for native peoples and their relationship with Pachamama have declined. Environmental contamination and lack of respect for the rights of the communities and populations on the part of mining companies has been a constant in several departments of Bolivia.

Corocoro, Illegal Operations

The Municipality of Corocoro, in the Province of Pacajes, Department of La Paz, is the ancestral territory of Jacha Suyu Pakajaqi, at an altitude of 4,200 meters above sea level. Empresa Metalúrgica de Corocoro operated a mine there that closed its operations in 1985. It was later nationalized and formed a part of Corporación Minera de Bolivia (COMIBOL). As such, it resumed its activities in October 2009.

This recommencement of activities under COMIBOL and the Korean company Kores was undertaken without consulting the affected indigenous peoples and without an environmental license, as is required under Bolivian law. This impacted agricultural and livestock lands and contaminated the Mauri, Desaguadero and Pontesuelo Rivers, among others.

The Native Government of Jacha Suyu Pakajaqi denounced these occurrences, and the National Council of Ayllus and Markas of Qullasuyu (CONAMAQ)[16] joined in the denunciation, indicating that the affected community members "do not know whether the project has the environmental report in order to submit the environmental impact study."

On October 27, 2009 the national government inaugurated the Corocoro Hydrometallurgy Complex. The president of COMIBOL, Hugo Miranda, recognized that the environmental report was pending. This report is an indispensable requirement for starting any exploration or exploitation project operations involving non-renewable resources, but the radio station Educación Radiofónica de Bolivia (ERBOL) confirmed in a visit to the site that production activity was underway, and even observed more than 20 tons of copper piled on plates.

On November 5, 2009, representatives of the Ministry of Mining, COMIBOL and indigenous authorities from CONAMAQ and from Jacha Suyu Pakajaqi agreed that the Ministry of Mining and COMIBOL in five days would announce the consultation schedule, and also deliver all of the Corocoro mining project's documentation. Nonetheless, it was not until December 2 that COMIBOL renewed the dialogue with representatives of Jacha Suyu Pakajaqi to commence the consultation process for the project.

The consultation did not take place in the year 2009. On January 19, 2010, the III Encounter of Secretaries of Natural Resources of the Native Indigenous and Peasant Organizations of the country agreed to demand respect for the life of Mother Earth (Pachamama) and implement the use and sustainable enjoyment of natural resources through fulfillment of free, prior and informed consent, socio-environmental monitoring and transparency, and social control over extractive activities.

Kori Kollo, Deadly Cyanide

Another emblematic case is that of the Kori Kollo mine of the Inti Raymi company, where the authorities in charge are not effectively overseeing and sanctioning the companies responsible for harming the environment, in the terms indicated by the mining and environmental legislation.

The mine is located in the ancestral territory of the Suyu Suras, in the Province of Saucarí, Department of Oruro. Since colonial times the Kori Kollo mountain was exploited by the Spaniards. In 1992 the sulfur project began, and three years later it was producing 338,000 ounces of gold and 1.3 million ounces of silver, thus becoming the second most important project in Bolivia.

The mining operations, the deposit, and the encampment of Inti Raymi are located in two communities, Chuquiña and La Joya, in the central plateau, in the upper part of the basin of the Desaguadero River. Based on the location of these activities at the basin headwaters, the downstream communities of the basin have constantly denounced impacts to their lands and animals on account of problems of contamination, attributed to the operations of this mine.

The principal problems and environmental risks involve the disposal and treatment of the mine tailings and the massive use of cyanide. Riverside communities have noted a continual, accelerated environmental degradation, such as high salinization and erosion of zones that prior to the mining operations were characterized by a vegetative cover of native grasses for sheep.

Some communities—such as Toma Toma in the Province of Saucari and Santo Tomás in the Province of Cercado — with support from non-governmental institutions, have conducted Environmental Impact Assessment Studies, the results of which have evidenced high concentrations of cyanide in their soils. There have also been cases of massive deaths of sheep or deformations in lambs. A dramatic example is the death of more than 48 sheep in the community of Pata Pata, in the Province Saucarí, on January 3, 2005.

The contamination of four provinces —Saucari, Cercado, Dalence and Poopó— affects 26 ayllus (extended family communities), in addition to the Fishing Cooperatives of Lake Uru Uru and the Departmental Federation of Fishing Cooperatives of Oruro. Contamination of land and pastures represent a loss for the communities and ayllus of approximately 50 percent in agriculture, 45 percent in cattle and 30 percent in camels. In addition, the quantity of deformed fish increases each day in the two lakes, and human health problems are increasingly frequent: headaches and gastroenteritis due to consumption of salinized water. All this is provoking a migration of the population.

We think the time has come to ask ourselves "How compatible are the speeches in international forums about the care of Pachamama, Vivir Bien ("Living Well"), with the depredating neo-extractive approach that fails to respect native groups who merely demand respect for their rights? While the indigenous organizations continue opposing an extractive approach, it is important to ask ourselves if we are about to see practices of criminalization, which would provoke even greater disillusion with the Bolivian political project. It is only a matter of time, since the defense of civil and native rights is becoming ever more incompatible with the extractive approach in Bolivia. It is hoped that the accusations being made by Evo Morales against the native peoples, stating that they are seeking to manipulate the government by demanding compliance with ILO Convention 169, will not be a prelude to processes of legal intervention in the communities, thereby preventing them from exercising and regaining their rights in the face of imposition of the extractive approach.

Colofón

Latin America is presented as an example to the world given its sustained economic growth in recent years. But this development model was already questioned in Europe and even in the United States 20 years ago, given its social and environmental impacts. The same multinational corporations that in their countries of origin respect environmental and social standards ignore them in our countries. In practice, they are a growing power that feeds off the weakness and the subservience of our states.

The fact is that that the apparent economic bonanza reaches very few and is ephemeral. Once it is over, it will leave behind devastated, lifeless lands. In the debate around the climate crisis, while the states engage in rhetoric around sustainable development and a green economy, they are doing the exact opposite in our continent. Precisely where, despite everything, we have known how to conserve nature.

Endnotes

[1] José de Echave, 2009, *Minería y Territorio en el Perú, conflictos, resistencias y propuestas en tiempos de globalización*. Programa Democracia y Transformación Global (Global Democracy and Transformation Program – PDTG).

[2] Between 1993 and 2001 the mining sector became the principal recipient of investments from the World Bank. In Latin America alone it financed 27 large-scale mining projects.

[3] Gold is marketed by the troy ounce, which has a weight of 31.1 grams.

[4] InfoMine, Mining Intelligence & Technology: http://www.infomine.com/.

[5] M. Svampa, 2011, *Minería, Maldesarrollo y democracia*. Available at: http://www.omal.info/www/article.php3?id_article=4228.

[6] Metals Economics Group (2011): World Exploration Trends 2011.

[7] Source: Ombudsman's Office, 66. Report on Social Conflicts: http://www.defensoria.gob.pe/modules/Downloads/conflictos/2009/reporte-66-vf.pdf

[8] M. Svampa, 2011, *Minería, Maldesarrollo y democracia*. Available at: http://www.omal.info/www/article.php3?id_article=4228.

[9] A good example is the spot recently broadcast by the government of Ecuadorian President Rafael Correa, which attempts to make a mockery of social protest, arguing that the protests solely seeks violence and the destabilization of the country. The spot is available at: http://www.youtube.com/watch?v=asoqZn3Ysho

[10] Convention 169 of the International Labor Organization (ILO) protects the territorial rights of indigenous peoples and obligates the states to engage in consultations with the indigenous peoples regarding projects, policies and laws that affect their territories. In addition, the United Nations Declaration on the Rights of Indigenous Peoples protects the right to free, prior and informed consent, which mandates that projects must be approved with the prior consent of the people in order to be implemented.

[11] Peru has had four experiences with consultations called by the municipal governments in relation to mining: Tambogrande in the Piura region (2002), Ayabaca and Huancabamba in the Piura region (2007), Candarave in the Tacna region (2008) and Isla in the Arequipa region (2009). All of these consultations were based on mechanisms of civic participation under the protection of the Constitution and municipal legislation.

[12] Legislative Decree 982, July 21, 2007.

[13] Demographic and Family Health Survey - ENDES 2010.

[14] Decision of the Constitutional Court, July 18, 2011, Cases: 0015-11-AN, 0016-11-AN.

[15] http://www.dnp.gov.co/LinkClick.aspx?fileticket=6yjofaugVUQ%3d&tabid=1238.

[16] COMAMAQ is comprised by CAOI together with the Confederation of Peoples of the Kichwa Nationality of Ecuador (ECUARUNARI), the National Indigenous Organization of Colombia (ONIC) and the Confederation of Communities of Peru Affected by Mining (CONACAMI).



HEALTH, ENVIRONMENTAL AND SUSTAINABLE DEVELOPMENT: THE PENDING CHALLENGE[1]

Mirna Cunningham
with Andrea Carmen and Viola Waghiyi

Introduction

The UN report on the situation of indigenous peoples of the world argues that[2] all around the world, there are health disparities between indigenous and non-indigenous populations with incidence in virtually every health condition—from infectious diseases like HIV/AIDS, malaria and tuberculosis, to cardiovascular disease, diabetes, cancer, and respiratory diseases. The report also added that poor nutrition is one of the health issues that most affects indigenous peoples around the world. It also noted that, in addition to circumstances of extreme poverty, indigenous peoples suffer from malnutrition because of environmental degradation and contamination of the ecosystems in which they have traditionally lived; adding to this, loss of land and territory and a decline in the abundance or accessibility of traditional food sources.

This situation persists despite the coincidence between the internationally recognized definition of sustainable development,[3] with the vision of indigenous peoples, which states that the fundamental basis for the continuation of "good life" is respect for Mother Nature and access and control over territory and its resources. In 1990, the World Health Organization established the Committee on Health and Environment, which in 1992 published the report, *Our Health Our Planet*,[4] that evaluates the possible health consequences of environmental changes, and stresses the importance of health in an environmentally sound and sustainable development context. The Commission's objectives were to contribute to a sustainable basis for the health of all, with an environment that promotes health and awareness about their health and environmental responsibilities.[5]

The United Nations Conference on Environment and Development in 1992 sought to establish measures that halt and reverse the effects of environmental degradation and promote a sustainable and environmentally sound development in all countries. Agenda 21[6] contains commitments for the protection and promotion of health, supported by the first principle of the declaration, which states that all human beings have the right to a healthy and productive life in harmony with nature.

Ten years after Rio, in Johannesburg, the Implementation Plan and the measures recommended by states to reduce poverty while protecting the environment prioritized water, sanitation and health. The goals were to halve the number of people without access to basic sanitation by 2015; and, to produce and use chemicals products following methods without significant adverse effects on human health and the environment by 2020.

With regards to the Kimberly Declaration of 2002,[7] indigenous peoples called the attention of states because of diseases related to high levels of pollution and environmental degradation associated with unsustainable extraction of natural resources. Within the indigenous people's plan of implementation in Johannesburg,[8] various health aspects were prioritized:

1. Recognition and protection of indigenous traditional medicine, its application in building innovative models of public health, with extensive coverage and availability of services and medications, designed and implemented with the full and effective participation of indigenous peoples;
2. The search for answers to emerging health problems using indigenous institutions;
3. The approach to the issue of contaminants, designing monitoring systems, promoting the ratification of relevant Conventions and addressing the most vulnerable sectors such as women and children.

This chapter assesses the progress in the compliance of the plan of implementation to some specific cases.

Right to Health and Indigenous Peoples

One of the trends seen since the World Conference in Rio in 1992 has been the incorporation of the right to health of indigenous peoples in human rights instruments, as well as in the recommendations, comments and observations of the mechanisms that monitor the compliance of such instruments.

The right to a healthy life had been previously recognized in the Universal Declaration of Human Rights, which acknowledged the rights of all individuals to health, food and well-being (Article 25), and the life and security of a person (Article 3). The intersection between rights, based on the vision of integral health of indigenous peoples, was the subject to General Comment 23 of the Human Rights Committee that was posed with regard to the exercise of the cultural rights, protected under Article 27 of the International Convention of Civil and Political Rights.[9] In this context the Committee observes that culture manifests itself in many forms, including in particular way associated with the use of land resources, especially in the case of indigenous peoples.

The enjoyment of those rights may require positive legal measures of protection and additional measures to ensure the

effective participation of members of minority communities in decisions that affect them."[10] The right to health of indigenous peoples is also clearly consigned in Article 21 of the United Nations Declaration on the Rights of Indigenous Peoples. In Article 23 of the same Declaration, it also states that "indigenous peoples have the right to participate actively in developing and determining health programs, housing and other economic and social programs affecting them and, if possible, to manage such programs through their own institutions."[11]

Paragraphs 1 and 2 of Article 24 state that indigenous peoples have the right to their own traditional medicines and to maintain their own health practices, including the conservation of their plants, animals and vital minerals, from a medical point of view. Indigenous individuals also have the right to access, without discrimination, all health and social services, and to equally enjoy the highest attainable standard of physical and mental health. It also assigns states the responsibility to take the necessary steps to progressively achieve the full realization of these rights.[12] Article 29 refers to the measures that must be taken by states to avoid that indigenous territories be used to dispose hazardous materials and pollutants.

One thing to note is that in the Declaration, the protection of health is linked to the protection of territory; resources, including air, water; language; culture; traditional foods; sovereignty; self-determination; and transmission of traditional knowledge to future generations.

Responding to the ILO Convention 169 that also establishes the right to health of indigenous peoples,[13] the Committee has commented[14] on the need for statistical information disaggregated by sex, age and ethnicity, degree of participation and consultation on policies and programs of reproductive health and family planning, as well as measures taken to promote community health services for indigenous peoples, with their full participation.

As shown, the intersections between rights are consistent with the definition of health for indigenous peoples, for whom health is equivalent to the harmonious coexistence between humans, nature, each other and other beings in the pursuit

of a "good life." This concept articulates physical, mental, spiritual and emotional elements from a standpoint as individuals and as communities, and involves political, economic, social and cultural components. It also responds to historical experiences and worldviews of each peoples' health beliefs and practices that are part of community rules. To promote health and prevent disease, indigenous communities seek to restore and maintain balance between all elements of the natural, social and spiritual environment.

Another instance that the topic addressed was the UN Committee on the Elimination on Racial Discrimination[15] in its general recommendation XXIII on Indigenous Peoples adopted by the 51st session in Paragraph 4 in which it calls states-parties to: (c) Provide indigenous peoples with conditions allowing for a sustainable economic and social development compatible with their cultural characteristics; and (e) Ensure that indigenous communities can exercise their rights to practice and revitalize their cultural traditions and customs and to preserve and practice their languages.

In 1997 the United Nations Rapporteur on the Right to Food, Jean Zeigler,[16] responded to a submission by the International Indian Treaty Council on behalf of Indigenous Tribes and Peoples in Northern California addressing mercury contamination and St. Lawrence Island, Alaska regarding military toxics and the impacts of this contamination on their traditional subsistence foods.[17] Another instrument that makes specific reference to environmental pollution as a human rights concern affecting the health of children, as well as the closely interrelated issues of maternal and prenatal health, is the United Nations Convention on the Rights of the Child in Article 24. Therefore it is worth mentioning that in General Comment 11 of the Committee on the Rights of the Child [CRC/C/GC/11, 2009], it refers to impacts of environmental contaminants, specifically mentioning pesticides and herbicides.

Assessment on the Degree of Compliance of the Johannesburg Indigenous Peoples' Plan of Implementation

One of the objectives set by indigenous peoples for sustainable development in Johannesburg was the recognition and protection of traditional indigenous medicine and the construction of participatory intercultural health models that would enable to expand coverage and respond to emerging diseases. To assess the degree of fulfillment of this objective, a review of some experiences and initiatives will be made, especially in Latin America, to conclude with evaluations and lessons learned.

The current public debate in Kenya on traditional medicine in the process of decentralization to implement the Political Constitution adopted in 2010 reflects the trends observed in recent years regarding this issue.[18] A newspaper article referred to a debate between traditional healers and health authorities in Kenya where the issue raised was that traditional healers want to be allowed to operate in public hospitals. It added that the two Ministries of Health have asked the herbalists to say how they want the sector run in devolved government-views and to be included in a new Health Draft Bill being prepared for Parliament.

The Right to Cultural Expressions in the Political Constitution of Kenya

The Constitution of Kenya was adopted in 2010. It defines a marginalized community as one that, out of need or desire to preserve its unique culture and identity from assimilation, has remained outside the integrated social economic life of Kenya as a whole; or an indigenous community that has retained and maintained a traditional lifestyle and livelihood based on hunter or gatherer economy; or pastoralists and communities whether they are nomadic or a settled community that, because of its relative geographic isolation, has experienced only marginal participation in the integrated social and economic life of Kenya as a whole. The Constitution obligates the state to provide for adequate representation of "marginalized groups" in all levels of government, execute affirmative action on behalf of these groups,

and promote the use of Indigenous languages and the free expression of traditional cultures.

Article 11 recognizes culture as the foundation of the nation and obliges the state to promote all forms of cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries, and other cultural heritage. Article 56 specifically provides for the affirmative action of minorities and marginalized groups through programs designed to ensure that they participate and are represented in governance and other spheres of life, and are provided special educational and economic opportunities, access to employment, programs to develop their cultural values, languages and practices, and also ensure that they have reasonable access to water, health services and infrastructure.

Currently Kenya is in the process of "giving back" and in this context is promoting a legislative measure with regards to the relationship between the practices of traditional medicine and the public health system to align it with the Political Constitution. Traditional healers argue that they serve up to 80 percent of the population and therefore demand equal participation in decentralized administrative bodies and the possibility of offering their services in hospitals and have access to the State budget.

Sources: The New Constitution of Kenya. The Kenyan Section of the International Comission of Jurists; Samburu Women for Education & Environment Development Organization (SWEEDO). Mentioned by Survival International. http://www.culturalsurvival.org/news/kenya/kenyas-new-constitution-benefits-indigenous-peoples; Daily Nation. Gaonye Gathura and Ouma Wanzala. "Herbalists up in arms over new rules," April 5, 2012.

This also coincides with the fact that since 1997 the World Health Organization (WHO) established a program of traditional medicine with the following objectives: a) attract member governments and other health institutions; b) support traditional healers; c) promote the definition of National Policies; d) advocate for the use of medicinal plants based on international standards and develop technical and methodological standards for the research of plants and traditional therapies.

The WHO also adopted the 2002-2005 strategy on traditional medicine, which promotes safety in the use of traditional therapies, and recommends the establishment of policies that integrate traditional and alternative medicine in national health systems. The WHO has classified national

health systems by the degree of integration of traditional, complementary or alternative medicine within integrated, and inclusive and tolerant systems. The WHO calls Integrated systems—when traditional medicine has been officially recognized and incorporated into all areas of sanitary provision, including health insurance (China, Korea (2), Vietnam); Inclusive system—when traditional medicine is recognized but not fully integrated; and Tolerant System—when only allopathic medicine is used, but by law, some traditional cultural practices are tolerated.[19] We conclude that there has been progress in the recognition of traditional medicine; however, the debate in Kenya reflects a central aspect of the debate, which is precisely what should be the kind of relationship that must prevail among western health care systems and traditional systems for the organization of intercultural health services.[20] [21]

In Kenya, the "herbalists and traditional healers," as they are called in the *Daily Nation* newspaper,[22] "will take nothing less than equal representation in the administration as well as treating patients in government hospitals." This reaction is due to the fact that the Ministry of Health proposes that the Bill require qualified alternative healers to be registered under stringent regulations. According to the spokesman of the Ministry of Health, the proposed law would make it mandatory for herbalists to be officially registered, accredited and regulated to ensure they deliver safe and effective treatment to Kenyans. The traditional healers argue that patients should have the freedom to choose, "either herbal or conventional and both should be financed from the same sources and at similar levels."[23]

As shown, it is not only about the use of medicinal plants, but it includes other components of the indigenous health system that covers preventive, curative, rehabilitative, knowledge carriers, among others aspects. What has been observed is that the recognition of traditional medicine is a component of a broader process of recognition of rights. In Kenya, for example, it responds to the process of implementing a new Political Constitution, which is similar to several cases in Latin America.

The strategies used to address both the recognition of traditional medicine, as well as the construction of intercultural health models, have been diverse. In Ecuador, Bolivia, Venezuela and Guatemala, Vice Ministries or National Offices of Traditional Indigenous or Intercultural Health have been created, promoting indigenous health as either a transverse axis or a specific program.

In Nicaragua, the Autonomous Government provides for the transfer of the organization and administration of health services to the Autonomous Regional Councils, who have created an autonomous and intercultural regional health model.

Autonomous and Intercultural Health Model

In 1987 the National Assembly of Nicaragua passed the Autonomy Law, recognizing historical rights to indigenous peoples and ethnic communities living in approximately 50 percent of the country.[24] One of the competencies of the autonomous system is the transfer of the organization and administration of health services to regional authorities ensuring coordination with indigenous traditional medicine. In 1997 the Autonomous Regional Councils adopted the autonomous and intercultural regional health model. Some of the intercultural elements of the health model are:

- Promote a visible system of reference and counter-reference between the institutional and traditional health systems, pre-mapping and establishment of agreements between traditional healers in the various levels of the health network;
- Institutionalization of traditional childbirth;[25]
- Support self-organization and exchange between traditional healers;
- Promote the incorporation of medicinal plants in the basic list of medications;
- Incorporate indigenous diseases (socio-cultural) to the intercultural epidemiological surveillance system;
- Train western health personnel on the elements of indigenous, Afro-descendant and communitarian traditional medicine, with a comprehensive approach;
- Adapt standards and protocols of the different health programs: CPN, IMCI, STI, HIV-AIDS, chronic diseases (hypertension, diabetes, epilepsy, ischemic heart diseases), TB, Domestic Violence, CC, ETV;
- Develop protocols on indigenous diseases (Sirang, Krisisigni, Puisin, Isigni, Prahaku, Yumu, Liwa, Dus Lawan, Empacho);

- Include ceremonies of spirituality and healing within the activities of the Health Units Network;
- Regularly analyze the health situation with traditional healers at the community level and in urban areas.

Other cases have adopted more limited approaches, as is the case of Chile,[26] where the Origines program[27]—aiming to improve the cultural relevance of health services—financed proposals to indigenous communities. This includes the purchase of stretchers for the Machis[28] to care for their patients, supplies for their rituals, equipment, infrastructure to better adapt the site where consultation is provided, according to cultural practices. In Brazil and Colombia, agreements have been signed between the Ministries of Health and decentralized entities—in the latter case, there are experiences in which indigenous peoples' organizations have assumed responsibility for health, as we see in the case of the Cauca Indigenous Regional Council.

> *Two problems have been distinguished on health issues for the organization: discrimination against indigenous commoners in the provision of health services from the state, and the persecution of traditional medical knowledge, whereby the Health Program has sought, through different forms of relationships with institutions, the recognition of general citizen rights and indigenous individual rights applied to health in existing legislation at different times of the country's history. When this has been achieved, it has been necessary to have constant monitoring in order to respect the rules and enforce them. The other demand is the recognition and guarantee of the exercise of indigenous own health resources, the walas, midwife, healers, herbalists, and many others.*
>
> *Therefore, the work with communities has sought to reinforce the training area, and in the process, train indigenous personnel with both skills: indigenous medicine and facultative medicine. Today we have 60 community health workers, 142 promoters and 66 indigenous nursing assistants trained in*

coordination with the Cauca Health Department. This process of staff training has been made to create and strengthen zonal and community health programs in order to achieve the lines of action of the health program directly with communities.

These two axes have enabled them to build other lines of action that currently the health program has and are part of our CAUCA INDIGENOUS HEALTH PROJECT. These are: Indigenous Traditional Medicine, Territory and Health, Community Health Organization, Food and Health, Ethnic Health Research, Training, Relations with the State and Western Medicine.

Since the establishment of Law 100 that created the Social Security System in Colombia, indigenous peoples went back to being discriminated against because Congress did not uphold the constitutional principle of diversity, nor took into account ILO Convention 169. This situation forced indigenous social mobility to couple our requirements to this new regulation, which is why the program was in the need to implement its own Resource Administrator of the Subsidized Health Regime, today the Cauca Indigenous Association, AIC. With this experience, the CRIC has shown that councils, despite all obstacles and constraints posed by the Law and its staff, is able to carry forward a socio-cultural health management proposal with positive results both in the administrative field, as well as in the impact on quality of care; and to protect the health conditions in communities and ensure the implementation of their rights.[29]

Intercultural health approaches have adopted two basic strategies:

a. Provide Western and indigenous health services in the same Health Unit. There are several examples in Mexico,[30] Ecuador, Bolivia, and Chile. Under this method, the patient has the option of using any of both health systems. The reference between systems is made within the same health unit according to the diagnosis. One of the most promoted services under this concept has been the institutionalization of traditional childbirth;

b. Establish mechanisms for coordination between indigenous and western health systems without sharing the same facilities. An interesting case is the Manquehue Hospital[31] in Temuco, Chile, where the options of Western and Mapuche health systems are articulated. It differs from the previous example because traditional healers are not physically in the health unit, but provide services in their own traditional spaces.

The lessons learned from these experiences are that the valuation of indigenous medicine increases self esteem of its holders and strengthens indigenous identity; responds to indigenous cultural diseases and therefore allows to supplement treatments; increases the confidence of community members in the public health system to the extent that they perceive their beliefs are being respected; and facilitates the respectful relationship with public health staff as they learn the know-how and try to understand the indigenous health system.

The issue of statistical information, the construction of cultural indicators and the registration of indigenous disease has had varying levels of progress. In the case of Nicaragua, the Grisi Siknis[32] has been included in the list of obligatory notifiable diseases, and resources have been assigned in the health budget so that traditional doctors can cure disease outbreaks in communities in which cases are presented.

For centuries, Grisi Siknis (also called "pauka alkan") has been a syndrome that occurs occasionally in Miskitu communities of the Caribbean Coast region of Nicaragua. The first case registered by Europeans was in 1881 in which most of the victims were young women, with some rare cases in men. The symptoms observed included loss of senses, people running from their houses, and believing they had sexual relations with spirits. The syndrome has an epidemic pattern and can affect simultaneously a big amount of members of a specific community. It is highly contagious. From the indigenous Miskitu and Mayangna cosmovision, the lack of happiness and socio-environmental well-being is relative to be "sick." Based on this life philosophy, the Grisi Siknis is considered like a state of sickness. In the Miskitu culture, there are spirits in the forms of elves, mermaids, spirits of the dead and the owners of the mountains, rivers and hills. They are part of the way of life of the communities with whom they coexist. The reasons that cause the balance

and brake the relations are several. In those cases the spirits cause sickness. Only traditional healers can cure Grisi Siknis.[33]

Source: State of the World's Indigenous Peoples, http://social.un.org/index/IndigenousPeoples/Library/StateoftheWorldsIndigenousPeoples.aspx.

In the future it will be important to further on indigenous cultural diseases, since there are contexts in which they become worse. Experience has shown that they should be included in the list of obligatory notifiable diseases. It is necessary to develop specific protocols that enable the public health personnel to address or refer cases to the indigenous health system, as applicable. For example, in the case of Guatemala,[34] it was found that the "shock," an indigenous cultural disease, affected women of the economically active population in a greater extent, indicating that occupational health is an issue to address.

Nodding Syndrome: Another Case of Indigenous Cultural Disease?

Nodding disease or nodding syndrome is a recent, little-known disease, which emerged in Sudan in the 1960s. It is a fatal, mentally and physically disabling disease that only affects children, typically between the ages of 5 and 15. It is currently restricted to small regions in South Sudan, Tanzania, and northern Uganda. The symptoms of nodding disease are very peculiar. When children are affected by it, their growth is stunted completely and permanently. The growth of the brain is also stunted, leading to mental retardation of the affected individual. The disease is named nodding syndrome due to the characteristic, pathological nodding seizure. The seizure often begins when the children begin to eat, or sometimes when they feel cold. These seizures are brief and halt after the children stop eating or when they feel warm again. These seizures can manifest themselves with a wide degree of severity. The child next door will suddenly go into a Tonic–clonic seizure; others will freeze. Severe seizures can cause the child to collapse, leading to further injury.

Source: http://en.wikipedia.org/wiki/Nodding_disease.

Promoting the use of medicinal plants is widespread in most countries and has responded to the WHO guidelines as to prioritize the use of medicinal plants, ensuring scientific validation. Generally, it has served as a first step in the transition towards the search for an intercultural health model, gradually combining with other strategies, such as the organization of traditional healers or a joint offer of both health systems in the same facilities. There is a growing tendency to legalize the use of medicinal plants through specific laws, although these laws tend to ignore the collective rights of indigenous peoples—and while being carriers of ancestral knowledge, reduces them to a marginal player in the implementation of norms.[35] One limitation is the separation between tangible and intangible knowledge of indigenous peoples: the reduction of the indigenous health system to a specific and particular aspect that pulls it out from the integral context; the utilitarian view assigned to carriers of collective ancestral knowledge; and the creation of bases for the registration of patents, ignoring the collective intellectual property.[36] The uncontrolled use of medicinal plants contributes equally to the exploitation of natural resources, if not part of a comprehensive program.

Environmental Pollution and Indigenous Peoples

Another objective of the Johannesburg Plan referred to the issue of contaminants and their impact on women and children. For its assessment in this document, we have used the case of pollutants in the Arctic. This is part of a study presented by Andrea Carmen, International Indian Treaty Council and Indigenous Women's Environmental and Reproductive Health Initiative, and Viola Waghiyi, Native Village of Savoonga, St. Lawrence Island, Alaska and Alaska Community Action on Toxics. This was submitted to the United Nations Permanent Forum on Indigenous Issues Expert Group Meeting, "Combating Violence Against Indigenous Women and Girls," January 18-20, 2012, address-

ing impacts of Environmental Contamination on Indigenous Women, Girls and Future Generations.

The Stockholm Declaration addressed the issue of the environment and development, but left it up to the states to deal with the growing problem of environmental, degradation as a result of development throughout the world. The Stockholm Declaration did recognize the connection between human right and the environment; but in its formulation of a right to the environment, it framed this right as an individual right even though the right to the environment, like the rights of self-determination, development and peace, are all so-called "third generation" collective rights of peoples.

The World Conference on the Environment and Development (Rio) was held 20 years later, in 1992, in Rio de Janeiro, Brazil, leading to an explosion of international activity, including development of international conventions addressing the environment.

Principle 22 of the Rio Declaration recognizes that:

> *Indigenous Peoples and their communities…have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of their sustainable development.*

Indigenous peoples are addressed in Agenda 21, Chapter 26, which calls for a "full partnership" with indigenous peoples in the accomplishment of the goals of Agenda 21. Chapter 26.3 calls upon the states to "strengthen and facilitate" indigenous peoples' participation in their own development and in external development activities that may affect them.

Another important advance, which was also included in the Stockholm Convention, was the key concept of the "Precautionary Principle," placing the burden of proof on the corporation or state that chemicals are safe for human and environmental health BEFORE they are produced, used or released. This formula stands as a rights-based alternative

to current practices supported by governmental regulatory models such as "risk assessment," "safe management," and "acceptable risk," which allow the continued use and proliferation of chemicals known to be dangerous if their impacts can be "controlled" or limited to low or "acceptable" rates of illness and death.

Agenda 21, Section I, Chapter 6: "Protecting & Promoting Human Health, E. Reducing health risks from environmental pollution and hazards" recognizes that pesticides pose a serious threat to human health. Although Agenda 21 also endorses partnership with indigenous peoples, the precautionary principle and free, prior and informed consent (FPIC), in Chapter 19 and 20, it endorses another model altogether regarding the Management of Chemicals and Hazardous Wastes.

In Chapter 19 it states that "the principle of the right of the community and of workers to know those risks [of chemicals] should be recognized. However, the right to know the identity of hazardous ingredients should be balanced with industry's right to protect confidential business information."[37] In other words, it proposes that the fundamental right of exposed communities to FPIC be "balanced" with corporate business interests. Chapter 19, paragraph 52 f) also allows for the "export of chemicals that are banned, severely restricted, withdrawn or not approved for health or environmental reasons, except when such export has received prior written consent from the importing country."[38] This provides the basis for similar provisions in the Rotterdam Convention.

Indigenous peoples have challenged these provisions of Agenda 21, and the health and human rights threats they pose, in their statements in preparation for the upcoming World Conference on Indigenous Peoples (Rio +20) in June 2012, based on the minimum standard in the UN Declaration on the Rights of Indigenous Peoples, in particular, Article 29, in this regard.

St. Lawrence Island, Alaska and the Arctic: Military Contamination and Global Transport of Persistent Chemicals

The Yupik indigenous peoples of St. Lawrence Island, Alaska (USA) have been harmed and displaced by contamination from formerly used U.S. military bases, with particular effects on women whose breast milk and adipose tissues concentrate chemical contaminants. The U.S. military and Department of Defense disposed of toxic waste on the Island, located in the Arctic Circle between Alaska and Russia, including massive amounts of fuels, solvents, PCBs, PAHs and mirex (flame retardant), unexploded ordnance, and other persistent pollutants.

Annie Alowa, a respected elder an community health aide from the village of Savoonga, began to raise concerns in the late 1970s about the adverse health effects she attributed to contamination from the abandoned military site at Northeast Cape, including particular effects on women and children. These included miscarriages, cancer, low-birth weight, and other reproductive health problems. Cancer deaths among the people of St. Lawrence Island are nearly 10 times higher than in the general population in Alaska. Contamination from the military sites, which were closed in 1972 but which the US government never removed or adequately cleaned up, continues to adversely affect the health and well-being of the Islands' indigenous peoples to this day.

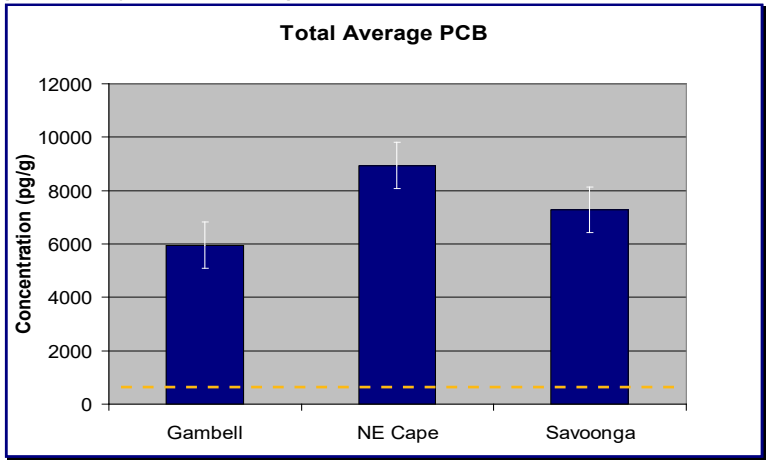
As a result of its strategic importance to the U.S. military during World War II and into present times, Alaska now has 700 formerly used defense sites (FUDS). Two of the most contaminated are located on St. Lawrence Island. The village of Gambell was used as a base for the military beginning in 1948. Hazardous wastes, military debris, unexploded ordnance, and spills remain in the soil and groundwater beneath the village. The vulnerability of the drinking water source in Gambell is heightening due to increasing storm surges that accompany rapid climate warming. Northeast Cape is a former U.S. Air Force Base and was also used as a "White Alice" site—part of a military communications network established during the Cold

War. Northeast Cape is a traditional food gathering and hunting camp for the residents of Savoonga. A village at Northeast Cape was displaced.

The military installed and later abandoned major facilities at Northeast Cape and Gambell with little or no consideration for the impact on the Island's residents. The Yupik people of St. Lawrence are doubly impacted because the Arctic has become a hemispheric sink for persistent chemicals that travel hundreds of miles into the region and accumulate in the bodies of wildlife and humans.

Hazardous chemicals from military waste sites combined with global transport of POPs (persistent organic pollutants) to the north contaminate traditional subsistence foods, water supplies, medicinal and food plants (berries, herbs, greens, roots, etc.) that women use, gather and prepare, further exposing them in particular. This double source of toxic contamination undermines the health, cultural practices and development of the Yupik people of St. Lawrence Island, the reproductive health of Yupik women, and the right to survival of their future generations. This pattern is repeated in many other Arctic indigenous communities.

Levels of PCBs in the blood of St. Lawrence Island Yupik people are 6-9 times higher than the average in the continental United States populations (indicated by the dashed line).



Tribal members from the villages of Savoonga and Gambell on St. Lawrence Island have levels of PCBs in their blood serum that are 6-9 times higher the average levels in people living in the continental United States due to global transport—with discernibly higher PCB levels among the people who lived or worked at the military base at Northeast Cape. Community health researchers on the Island have documented health outcomes of concern including cancers, thyroid disease, learning and developmental problems, diabetes, heart disease, and reproductive health problems. As stated by Dr. David Carpenter, Director of the Institute for Health and the Environment at the University at Albany: "The evidence that there are health hazards from exposures to PCBs in the range of 6-9 ppb is very strong, with disease outcomes ranging from cancer to neurobehavioral effects to endocrine disruption and immune suppression."

Temperatures in the Arctic are warming 5-10 times faster than elsewhere in the world. These outcomes of climate change also cause more rapid dispersal of contaminants into freshwater and marine environments, affecting the health of fish and marine mammals that serve as the main traditional foods for Arctic and northern indigenous peoples. Atmospheric loading of contaminants to the ocean surface is increased as sea ice retreats.

Global Transport of Persistent Organic Pollutants (POPs) and Impacts on Arctic Indigenous Peoples

Persistent organic pollutants are long-lasting pesticides and industrial chemicals that bioaccumulate through the food web, are capable of long-range transport, and are toxic to humans and wildlife.[40] The highly toxic organochlorine (OC) pesticides DDT, toxaphene, chlordane, endosulfan, and lindane, and other POPs such as PCBs, have been found in human and animal tissue as well as human breast milk in the Arctic at levels several times higher than in the rest of the world. The levels keep rising long after certain of these substances have been banned. For instance, even though DDT

agricultural uses have been banned for 30 years in the U.S, it is still accumulating in the Arctic in peregrine falcons, orcas, and human beings

Through a well-known process known as "global distillation," POPs travel northward and bioaccumulate in high quantities in the bodies of fish, marine mammals and other components of the traditional diets of the indigenous peoples in the Arctic. Prevailing ocean and wind currents bring contaminants to the Arctic where they are subsequently trapped by the cold climate. This process is often referred to as the "grasshopper effect," as chemicals repeatedly evaporate and condense while in their journey toward the Arctic. The Arctic is known as the ultimate sink because these contaminants concentrate in the cold environment and fat-based food web.

Levels of OC pesticides, such as DDT, chlordane and endosulfan, have been increasing in the Arctic. DDT in people is higher in the Arctic than in the rest of the world. PCB levels are 8 to 12 times higher than in the "lower 48 states" of the U.S. and chlordane levels are 8 to 10 times higher in the people of St. Lawrence Island. Yupik women of the Yukon-Kuskokwim Delta region of Alaska have the highest levels of the POPs chemicals known as PBDEs (polybrominateddiphenyl ethers) used as flame retardants in furniture, mattresses and electronics.[41]

POPs chemicals are causing changes in the very DNA of the people living in these areas, which has implications related to intergenerational health effects. The health impacts of POPs on indigenous peoples are well-documented on St. Lawrence Island. Much of the contamination by PCBs and other POPs is attributed to past and present U.S. military base operations.[42] [43] However, POPs pesticides also continue to build up in indigenous peoples' and animals' bodies as these chemicals move northward.

In 1991, the United States joined several other Arctic states in adopting the Arctic Environmental Protection Strategy (AEPS). The AEPS addresses the monitoring, assessment, protection, and conservation of the Arctic zone. The U.S. and the other signing countries made a commitment to, among other things, "monitor the levels of, and assess the effects of,

anthropogenic pollutants in all components of the Arctic environment" and "take preventive and other measures directly or through competent international organizations regarding marine pollution in the Arctic irrespective of origin."

In a statement made to U.S. officials of the Environmental Protection Agency, St. Lawrence Island tribal leaders asserted: "The indigenous Arctic peoples are suffering the most from these chemicals because the chemicals—DDT, endosulfan, lindane, perfluorinated compounds and toxic flame retardants, to name a few—are long lasting, and drift North on wind and water currents from where they are applied in the southern latitudes. That means these chemicals are also in our traditional foods and affecting our health and the health of our children."

The Arctic is home to approximately half a million indigenous peoples who face significant cultural, food security/subsistence and human health threats from global contaminants combined with climate change, which also threatens their food security and traditional subsistence food sources. Indigenous communities of the North are reliant on a traditional diet of foods from the land and ocean for their physical, cultural and spiritual sustenance. In a 2010 study, researchers found levels of PCBs in the traditional foods of the Yupik people of St. Lawrence Island at 200-400 times the levels considered safe for consumption, particularly in the rendered oils that are so vital for survival in the cold Arctic environment.

The cost of store-bought food is almost six times higher for the same products in rural Alaska compared to other U.S. states. Loss of subsistence foods causes an unbearable economic and nutritional hardship for Arctic indigenous peoples and undermines cultural practices handed down through generations.

Specific impacts on women, children and maternal health are well documented. Disparities of health problems in the Alaskan Arctic include high levels of birth defects and neonatal deaths among Alaska Native infants that cannot be explained by the usual risk factors of maternal use of tobacco or alcohol. Data from the Alaska Birth Defects registry shows

that the prevalence of birth defects in Alaska is twice as high as in the United States as a whole and that Alaska Native infants have twice the risk of birth defects as white infants born in Alaska. Mothers residing in villages with high hazard ranking are 43 percent more likely to have a low birth weight baby, 45 percent more likely to give birth prematurely, and more likely to have babies afflicted with intrauterine growth retardation.[44]

Scientific Evidence: Impacts of these Environmental Contaminants on Women, Children, and Maternal Health

> *We must never forget that it is at this most critical window of development in the mother's womb, the child's first environment and first relationship, where the embodied wealth of indigenous nations is determined.*[45]
>
> - TekatsitsiakwaKatsi Cook, Akwesasne Mohawk
> "Protecting the Child in the First Environment: Preconception Health to Save Native Future"
> *Journal of the National Museum of the American Indian*
> Winter 2011

A growing body of scientific evidence demonstrates that harm to women's health, particularly reproductive health, is closely associated with exposure to endocrine-disrupting chemicals, which include many POPs and pesticides, often at extremely low levels. In 2009, the Endocrine Society, a medical association of 14,000 endocrine researchers and specialists from more than 100 countries, warned that "even infinitesimally low levels of exposure [to endocrine-disrupting chemicals]—indeed, any level of exposure at all—may cause endocrine or reproductive abnormalities, particularly if exposure occurs during a critical developmental window. Surprisingly, low doses may even exert more potent effects than higher doses."[46] Studies from various fields are converging to implicate endocrine disrupting chemicals as a significant concern

to public health. These are substances in our environment, food, and consumer products that interfere with "hormone biosynthesis, metabolism, or action resulting in a deviation from normal homeostatic control of reproduction. Effects of endocrine-disrupting chemicals may be transmitted to further generations through germline epigenetic modifications or from continued exposure of offspring to the environmental insult."[47]

> *On top of our basic genetic inheritance lies epigenetics, or those environmental influences that drive changes in the gene function of the developing fetus. Many external agents during critical windows of a child's development, including maternal stress during pregnancy, maternal behaviors, exposures to toxic chemicals, radioactivity, cigarette smoke, diesel exhaust, heavy metals, and persistent organic pollutants like PCBs, have lifelong effects on the child's physical, mental and emotional health and well-being. These epigenetic effects and their 'reprogramming' of our mammalian physical functions during fetal development and through the end of adolescence can persist across generations.*[48]

A 2005 peer-reviewed study by the Environmental Working Group found an average of 200 industrial chemicals and pollutants in the umbilical cord blood of 10 babies born in U.S. hospitals.[49] In a study of infants born in 2007 and 2008, the Environmental Working Group commissioned five laboratories in the U.S., Canada and Europe to analyze umbilical cord blood collected from 10 "minority" infants born in 2007 and 2008. "Collectively, the laboratories identified up to 232 industrial compounds and pollutants in these babies, finding complex mixtures of compounds in each infant. This research demonstrates that industrial chemicals cross the placenta in large numbers to contaminate a baby before the moment of birth." The developing child is particularly vulnerable. Exposures in the womb can result in immediate harm to the child's development; however "some adverse effects may not manifest themselves for years or decades." Scientists refer to this phenomenon as the "fetal basis of adult disease."[50]

Exposure to chemicals can damage women's reproductive health by causing structural malformations and disease, adversely affect tissues or cells of the reproductive organs, and interfere with the endocrine system. Exposure to chemicals is linked with impaired fertility and ability to carry a baby to term. Chemical exposures also confer a higher risk of cancers and disorders of women's reproductive system. Some examples include:

- *Uterine fibroids* - these noncancerous tumors of muscle lining of the uterus occur in 50 percent or more of women and are the major cause of hysterectomy in women of reproductive age. They can cause pain, abnormal bleeding, infertility, and complications in pregnancy. Although all of the causes are not well understood, exposure to endocrine-disrupting chemicals (xenoestrogens) may cause fibroids. For example, researchers have found that exposure to the chemical bisphenol-A (BPA), found in certain hard plastics and the material lining canned foods and beverages, is associated with fibroid development in laboratory studies;
- *Endometriosis* - is a painful disease occurring when the endometrium, tissue lining the inside of the uterus, grows outside of the uterus into the abdomen, pelvis, or ovaries. Endometriosis affects 10-20 percent of women of reproductive age and is a leading cause of infertility and hysterectomy. Dioxins and PCBs are among the chemicals associated with endometriosis in animal and human studies. Higher levels of phthalates (an endocrine-disrupting chemical found in personal care products and soft plastics) were found in women with endometriosis;
- *Reproductive tract development and disease* - exposure to certain xenoestrogenic chemicals such as BPA and the pesticide methoxychlor can interfere with the implantation of fertilized eggs in the uterus or harm the developing bones and uterus of developing babies;
- *Effects on ovarian follicles* - exposure to endocrine-disrupting chemicals during fetal development can adversely affect the quality and quantity of ovarian

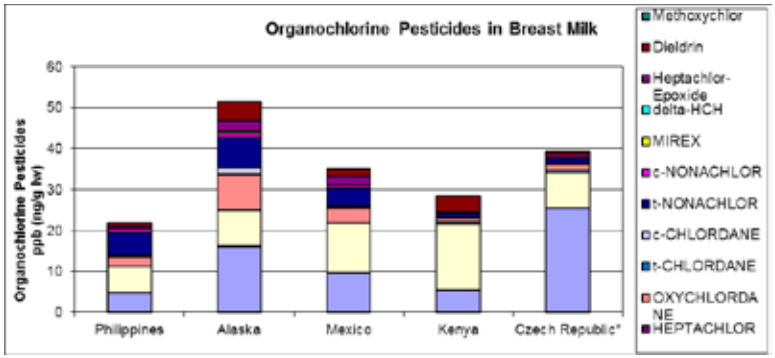
follicles. A recent study found that when laboratory animals are exposed to bisphenol-A at levels commonly measured in people, that high percentages (nearly 50%) of their eggs have chromosomal abnormalities. This genetic defect is then also found in the embryos that develop from these eggs. Chromosome abnormalities are the leading cause of miscarriages, birth defects, and mental retardation in people. Bisphenol-A is also associated with recurrent miscarriages in humans.

- *Early puberty* - research demonstrates that exposure to chemicals such as PCs, PBDEs (polybrominateddiphenyl ethers), dioxins, and phthalates is associated with earlier onset of puberty in girls;
- *Breast cancer* - more than 200 chemicals, including a number of endocrine-disrupting chemicals, are associated with increased incidence of breast tumors. Breast cancer incidence rates increased in the U.S. more than 40 percent between 1973 and 1998, a period that coincides with increasing production and use of pesticides and other industrial chemicals. A woman's lifetime risk of breast cancer is one in eight, as of January 1, 2006 (the most recent point in time for which data are available);
- *Miscarriages* - exposures to BPA and pesticides such as DDT are associated with miscarriages. Miscarriages affect 21 percent of known pregnancies and although there are a variety of factors, there is strong evidence that toxic chemicals are significant risk factors;
- *Shortened lactation* - PCBs and pesticides such as atrazine are associated with a reduction in the length of time that women can breastfeed her baby. Shortened lactation is a critical problem because it has long-term consequences for the development of a healthy child, including increased risk for infection and impaired immunity, obesity and learning disorders.[51]

Contamination of Breast Milk Threatens Current and Future Generations

Levels of contaminants found in breast milk demonstrate disproportionate effects in indigenous communities. Human breast milk is a bioresource at the foundation of subsistence economies and traditional food ways of indigenous communities. Biomonitoring of human breast milk has shown the ubiquity of persistent organic pollutants in the environment.[52] One study noted that in the Akwesasne Mohawk population with lifetime exposures to consuming fish near contaminated sites, women produced breast milk with higher concentrations of PCBs; yet, when later generations of Akwesasne Mohawk mothers heeded fish advisories and did not have such lifetime exposures, the breast milk concentrations of PCBs went down.[53] Unfortunately, in many tribal jurisdictions where subsistence foods provide an economic and healthy means to eat, and where other sources of food are less available and less desirable, tribal women may not have such a choice.

In a more recent study looking at body burdens of persistent organic pollutants in the Akwesasne Mohawk youth ages 17 to 21 years old, significantly higher levels of PCBs were found among individuals who were breastfed as infants, were first born, or had consumed local fish within the past year.[54] Comparing levels of various POPs reported by the U.S. Centers for Disease Control (CDC) for youth between the ages of 12 and 19 years old, the geometric mean of several congeners was significantly higher than the reported CDC 90th percentile. This suggests continued higher than acceptable exposures and body burdens in indigenous communities either through diet or other sources. Of five women tested from Czechoslovakia, Kenya, Mexico, Philippines, and Alaska, levels of pesticides and the industrial chemicals PBDEs (polybrominateddiphenyl ethers—used as flame retardants in furniture, mattresses and electronics) were highest in the breast milk of a Yupik woman from Arctic Alaska (see chart).[55]



Contamination of human milk in Arctic mothers by POPs has been documented at levels considered unsafe. Impacted indigenous peoples have stated that they consider the contamination of breast milk as a clear human rights violation, making the most nutritious food for infants poisonous and contaminated in the pursuit of profit. Indigenous women continue to strongly encourage breastfeeding for a number of nutritional, spiritual, social, cultural, health, and economic reasons. However, they demand an immediate halt to all activities which cause it to be contaminated.

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[25] Promote delivery rooms to have space and cultural adaptation measures for traditional childbirth; also, encourage the Integrated Intercultural Health Group - Sikakakairadaknikanani - what will be in each sector, the integration of a midwife. Include in the norms of prenatal and delivery care, the assessment of household labor by the Integrated Intercultural Health Group.

[26] IDB funded program, implemented by the CONADI governmental institution.

[27] Program between the IDB and the Government of Chile. http://www.origenes.cl/quienes-somos.html.

[28] The name by which the person providing Mapuche traditional therapy services is known.

[29] CRIC. Healthprogram. http://www.cric-colombia.org/index.php?option=com_content&view=article&id=16&Itemid=69.

[30] In Cuetzalan, Puebla; San Cristobal de las Casas, Chiapas; JesusMaria, Nayarit; CapulalpanMendez, Oaxaca. Similarly there are clinics and nursing homes in Chichicaxtepec, Oaxaca; Hopelchen, Campeche, Patzcuaro, Michoacan.

[31] The argument, in order to call it additional, is that multiculturalism is broader political process that requires conditions that don't even exist in the political/legal field. Therefore, what can be done at the health level is to recognize the validity Western and Mapuche health systems, which respond both in origin and in diagnosis and therapy to different

logics. By meeting the needs of local people to the extent that they have the opportunity to apply for both health systems, they are more likely to improve their living conditions.

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[36] In the case of Mexico, several monographs used to create databases have been used by private companies to patent some medicines.

[37] Agenda 21, Chapter 19 paragraph 8.

[38] Agenda 21 Chapter 19, "Environmentally Sound Management Of Toxic Chemicals, Including Prevention Of Illegal International Traffic In Toxic And Dangerous Products," paragraph 52) f.

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2 Stories & Experiences of Indigenous Peoples in Implementing Sustainable, Self-Determined Development



FOREST TENURE &TRADITIONAL FOREST MANAGEMENT OF THE BAKA PEOPLES IN CAMEROON, CONGO BASIN

Ibrahim Njobdi and Jeannette Aboah

Historically, the Baka are among the pioneer settlers of the Congo Basin and through their horizontal expansion, they currently live in parts of the southeast forest zone of Cameroon, although with no recognized tenure rights. Among the Pygmies, forest is considered as a "quasi open-access" domain characterized by free-for-all exploitation of nature-given forest resources with no effective tenure guardrails. According to field informants, these indigenous peoples consider forest as a common property of the community, owned through historical attachment and benefitting its members. This perception is different from that of the state, logging companies, and conservation organizations. While logging companies perceive the forest as an entirely timber exploitation domain for export, the state and conservation NGOs perceive it as a viable source of foreign earnings through eco-centered conservation approaches that under-

mine the socio-cultural attachment of indigenous peoples to it. The perception of these pioneer settlers of the Congo Basin progressively became distorted, beginning with the eviction of these Pygmies from their ancestral lands from 1953.

At the eve of independence, the decolonization forces of Cameroon in the southeast forest zone felt that Pygmies, who are the pioneer settlers of the country, should abandon their nomadic lifestyle and settle along road access in order to share in the benefits of the expected independent Cameroon. That initial humanitarian and socially-oriented sedentary process was very salutary and European missionaries in the country became committed to seeing it come to fruition. After independence, and particularly from the 1970s, logging companies started gaining forest exploitation concessions in the area, and conservation and sport hunting activities took central stage in the southeast forest zone of Cameroon. During this period the Baka were no longer sensitized but coerced to leave their ancestral lands in order to make way for national parks, reserves, sanctuaries, synergetic hunting zones, and forest management units (UFAs).

Informants reported that all forms of resistance that were mounted against resettlement by the Pygmies were brutally suppressed, thus the expression, pkweke-mbungue or "force of the white," which is very common among the Bakas. "White" in this context has a dual significance for them as it is synonymous to the administration, and at the same time, refers to the white missionaries who aided the administration to evict the Baka from the forest.



A resettlement camp.

The 1994 Cameroon Forestry and Wildlife Law and its Decree of application finally sealed the deal to divest indigenous peoples of their tenure and resource access rights. This law opted for a classification of forests into permanent and non-permanent, allows for the creation of protected areas under the aegis of the state and conservation bodies, as well as the granting of forest concessions to logging companies and sport hunters in the vicinity of indigenous communities without the consent of indigenous peoples.

Various stakeholders contest the southeast forest of Cameroon, with the recently emerged stakeholders having tenure rights over the forest more than the pioneer settlers. Field informants expounded that ownership of forest among Baka indigenous peoples is not associated with land titles and that none of them, even in their current resettlement sites, had a land certificate at the time of study, as the 1974 land reforms required. Considering the modern land and forest management strategies employed by the state and conservation NGOs, it was noticed that Baka indigenous peoples have been denied access to the forest that plays host to all their life-sustaining and spiritual activities. Worse still, in their current resettlement sites, they are devoid of land tenure rights, even over construction space for the growing population. They are under the despotic rule of Bantu communities and chiefs who still chastise them by flogging, and together with logging companies, destroy their sacred forests. In the opinion of these informants, Baka are usually not called upon to participate in conservation activities and within the present master/servant dispensation, Baka cannot make any conservation initiative as they no longer have access to the forest. These include their njengi, yeyi and elimbo sacred forests, which constitute traditional conservation sites. This is a clear indication that Baka participation in conservation within the framework of REDD Plus policies and programs will seldom be brought to fruition without securing the land and resource rights in the national law of these indigenous peoples, local communities and women.

The Baka indigenous peoples differ from the other peoples in the country in terms of their lifestyle and the way



they perceive their ancestral lands. Though almost the entire landscape of Cameroon is dominated by a sedentary lifestyle, indigenous Baka communities in the forest zone are still identified with a semi-sedentary lifestyle. Their eviction from the forest and resettlement along road access, notwithstanding, the Baka acknowledged that they still maintain a close link with the forest for they still depend on it for their entire livelihood.

The use of the forest to Baka can easily be perceived in the social, cultural, economic, and political domains. Etymologically, bélé, in Baka language, is from the focal point of life. This simply means that the life of a Baka revolves around the forest as all aspects of their units of social life are inextricably linked with the forest (Ekele Daniel, personal communication). Field informants acknowledged that Baka use the forest in various ways, such as for agriculture, hunting, gathering of what to feed their families, selling, treating diseases, constructing their huts, and for spiritual purposes.

Baka indigenous peoples depend on the forest for all the products that they sell in order to raise household income. Among the forest resources in which they trade, as interviewees revealed, were bush meat (soh), fish (si), honey (poki), rattan (pkwo'o), moabi oil (adjap), caterpillars (kôbôs), mushrooms (tolo), wild mango (peke or ndo'o), and curative herbs. Concerning bush meat from hunting, all the respondents were unanimous that from the moment the Baka were introduced in bush meat trade, they have been raising a lot of income from it despite seizure of game by forest guards and apprehension. During an interview with the Baka Chief of Minko'o Pkwekembungue (Minko'o II), the informant alleged that when they were still in the forest, they use to provide bush meat to the Bantu in exchange for cassava and other food items. Between 1930 and 1950, they knew only trade by barter. But when they were evicted from the forest from 1950, they started giving their bush meat and other forest products to those Bantu with whom they were collaborating while still in the forest, to sell. In the course of time, the Bantu betrayed the confidence as the Baka realized that the Bantu were cheating them and had begun commercializing their forest products from the 1970s

when logging companies started gaining timber exploitation concessions in the southeast forest zone of Cameroon. This trading evolution was influenced by the influx of non-natives in the area who were working with the logging companies. With this change in lifestyle, coupled with rising cost of living, the pressure on fauna increased, particularly as Baka men could get sophisticated firearms and wires from the Bantu and foreign sport hunters.

The Baka acknowledged depending on the forest for food, which is made among others of wild tubers, fruits, vegetables, termites, snails, and kôbôs (caterpillars). All the five men and four women who were interviewed affirmed gender roles among the Baka. As they pointed out, hunting, harvesting of honey and fishing in big rivers were mainly practiced by Baka men and young boys, while gathering of non-timber forest products such as sabas (wild yams), kôbôs, snails, termites, mushrooms, bush mangoes of all species (péké, ndo'o), forest vegetables, wrapping leaves pkwangongo, moabi fruits for vegetable oil production, and fishing in streams and brooks are done by women and at times aided by children.

Forest Food

Field informants, however, pointed out that while still in the forest, some Baka men were working in Bantu cocoa farms in exchange for cassava during seasons of yam scarcity in the forest, such as during the rainy season. They also alleged that the owning and cultivation of farms had not been part of their culture until they were imposed a sedentary lifestyle. Attempts to convince them to settle in the 1930s and 1940s failed. That notwithstanding, from the 1950s, the decolonization forces of the-to-be Cameroon state coerced them to settle along the road access. In most cases, they settled to avoid torture in the forest from the forces of law and order and the forest guards. This is the reason of the phenomenon of disappearing and emerging Baka settlements, which is still common, as some attempt returning to the forest or are intercepted in the forest

and are forced to return to the road side, the informants noted. The sedentary lifestyle and activities they adopted from their Bantu neighbors increased the pressure on forest and forest-based resources, especially as the quest for income and their populations kept increasing. For instance, they have started hunting for ivory using firearms from Bantu and sport hunters.

The carving out of the forest for conservation as national parks, logging concessions (UFAs), synergetic hunting zones, council forests, and community forests within the zone reserved for local Bantu communities and the Baka indigenous peoples[1] has deprived the Baka of an essential source of food supply. For example, the sources of protein and wild yams have become very scarce, as field informants noted. Baka women, with whom the research team had focused group discussions, pointed out that the destruction by logging companies of wild yam sites and trees hosting wild honey and caterpillars have made women trek over longer distances than before in order to procure these sources of food in areas that are inaccessible yet to logging equipment. Logging concessions, together with synergetic hunting zones and national parks, occupy more than three quarters of the entire forest in the southeast of Cameroon. This has limited section reserved for local Bantu communities and the Baka, following contemporary forest zoning that was implemented immediately after the 1994 Forestry and Wildlife Law was promulgated. The informants also alleged that their livelihood activities in the forest are prohibited by sport hunters who claimed that their presence scares away animals in their hunting zones.

Handicraft is an important socio-economic activity practiced by the Baka. It is considered as their third source of income. It was observed in the field that they also practice basket weaving, sculpture of mortars and pestles, boards used for crushing, making drums and other materials used for traditional dances, braids of raffia plaited for the roofing of slots, the construction of huts, the texture of the lobster baskets for fishing, the forging of (knives, spears, arrows, axes), beds, and the manufacturing of objects from skins of beasts. Concerning sculpture, it is important to note that it is an art that requires

very rare species of wood. This brings about a slow destruction of forest resources.



Mortar pestle.

Spiritual Use of Forest

The Baka perceive the forest as a place for spirituality. The cultural and religious life of indigenous peoples in Cameroon is dominated by various masquerades, deities and spiritual communication with their ancestors. The masquerades appear during cultural dances in camps and villages where they perform with a lot of dexterity. Some of the masquerades are reserved only for men, particularly those who have been initiated. These are those that constitute the regulatory societies. This is the case with Njengi, Joboko and Kosse that govern the divination dance of the Baka. Then, another spirit known as Yéli prepares young girls for womanhood and induces them with singing ability when initiated using nbwahka fish. Their cultural and spiritual life requires the sacrifice of an elephant every year during Njengi ritual. These cultural and religious

activities serves as a binding force between the peoples, animals and forest, as well as the construction of a living world where all can communicate, give and take. Moreover, field informants held that there are protected forest areas that host their various spirits of the forest.

According to those interviewed, the forest is used for spiritual activities and serves as a place where the spirits and other livings of the forest commune. Similarly, the forest setting is at the center of funeral ceremonies and it is in it that they communicate with the ancestors, calling for them to intercede on behalf of the living for protection during hunting expeditions or fight against evil spirits.

Traditional Pharmacy

In Cameroon, indigenous forest peoples (the Pygmies) are reputed for their invaluable knowledge of traditional medicine. They acknowledged using forest products of all sorts to treat various ailments. But when it comes to the functioning of their traditional medicine, the Baka are not open about this. That notwithstanding, during two guided tours in the forest, they were able to identify more than 133 forest products, such as flowers, pollen grains, spurs, barks, insects, animals, birds, roots, pkwandako (fruits), seeds, lianas, tolo (mushrooms), leaves, fish, plants, and other creatures; and some of the diseases that could be treated with these, either in using specific species or in combination of two or more.

They also said that the effectiveness of traditional medicine depends on the individual, the time and manner the medicine is harvested, and the incantation chanted when harvesting or administering the medicine. They concluded that all what Komba (God) has created constitute one form of medicine or another. Through their knowledge of traditional medicine, Baka generate periodic and/or permanent household incomes, depending on whether he or she is an established traditional practitioner or not. Their customers are mainly their neighboring Bantus and some city dwellers.



Medicinal forest products.

The range of their treatment goes, at times, far beyond those intended to relieve physical pain to include metaphysics and the provision of spells. For example, the manufacturing of love philters or potions, decoctions for the protection of their users, is also a source of income generation to these indigenous forest peoples.

Indigenous Peoples' Forest Governance

Traditional forest governance of the Baka is fully embedded in their socio-political organization within the two distinct phases in the process of forest management. These are the phases during which they were still in the forest, and during which they were resettled along the road axes under the Bantu administration. Informants expounded that before their eviction from the forest, they had a loose socio-political organization characterized by a nomadic lifestyle that enabled them to live in harmony with nature. In the forest, they were living in bands of less than 50 individuals and their daily chores were hunting and gathering. The time spent in each band depended on the rate at which animals hunted or forest products for gathering get exhausted. As was the case, whenever they started experiencing less success in hunting and gathering, they moved to another site. This nomadic lifestyle was one way of checking pressure on forests and forest-based resources; and it was quite adapted to their limited populations at the time and the vast area that they were exploiting in the entire northwestern part of the Congo Basin Forest in the 1930s up to 1950.

Strategies used by the Baka to conserve, manage and use forests and forest-based resources are centered on their spiritual interaction with the forest. The research team listened to these indigenous peoples describe their socio-cultural theories and models of conservation, with salient aspects on toponom.[2] This include those related to the inventory of forest-based resources and forest zoning and identification of abodes of the gods, which often coincided with watersheds, catchment



Baka dwellings.

areas and fragile ecosystems that are subsequently designated as sacred forests for protection using the instrumentality of taboos.

These informants acknowledged the fact that the long stay of the Baka in the forest has enabled them to discover so many abodes of forest spirits. They designated sacred forests for Njengi, Kossé, Elimbo, Yeyi, Joboko, Dohdi, Ngaje, and Emboamboa, which are the most reverend. As they said, those who discovered such abodes elaborated a myth system that instilled an aura of sacredness to them and were then considered priests of such abodes. They also said that the most reverent of all the Baka forest spirits was Njengi and it became a cult with rites performed in Njengi forest during an annual Njengi dance organized in hour of this spirit. The informants further elucidated that access to Njengi forest was regulated by a taboo system that was binding among the Baka. The Baka women were and are not initiated into Njengi—and together with non-initiated men—they had no access into this abode of Njengi.

In terms of surface area, an informant said that Njengi needs a large forest area in order not to be disturbed. Such a forest could be 100 to 200 hectares (1 to 2 sq km), the informants noted. He corroborated this view by alluding to the fact that the Njengi in Minko'o Pkweke-mbungue has escaped into far-off forest because the Bantu have destroyed beyond the

abode of Njengi. This culture has been transferred to younger people through initiation and practical observation of its manifestation in the forest, informants noted.

In a purely conservation dimension, the informants alleged that pressure was minimal in Njengi forest, as Njengi was an annual event and only the temple where initiated men could dance was cleared with sticks. Also, only one elephant was sacrificed for the god. A Kôbô in Minko'o corroborated this view by saying that during Njengi, a group of Baka women who are initiated in Yeyi and referred to as queen mothers, teleguide a lone elephant to be sacrificed. This was usually killed by a man who was induced with metaphysical powers by these women. When the man left for the forest, the women would be carrying out incantation until he came back after killing the elephant. Such a teleguided elephant was killed with a knife, spear or stick. No hunting or gathering takes place in Njengi forest, as there was a portion of the forest reserved for gathering and hunting with specific norms regulating hunting activities in it. Considering the size of the forest that was kept intact for a whole year, the fact that only an elephant was sacrificed a year, and only a small portion of the forest was cleared with sticks, we could conclude that Njengi was effective in conserving the forest and its resources.

Besides the Njengi forest that served as the core conservation area (ndandai-eciti), there were other smaller forests reserved for the other spirits of the forest. These include Kossé, Elimbo, Yeyi, Joboko, Dohdi, ad Ngaje, that also became cults with their specific rites. This category of sacred forests were in the traditional buffer zone called parki-atiaciti by the Baka, and the outermost area was called tinajoko and was the common zone used by every Baka for hunting and gathering. This is an indication that Baka had a traditional forest zoning and management approach, which is an effective forest conservation management system; and may be analogous with the zoning of modern biosphere reserves, as defined by UNESCO under Man and Biosphere.

Endnotes

[1] This zone is where the Baka resettlement camps are subsumed under the local Bantu villages, which are recognized as local administrative entities.

[2] Scientific study of place names.



THE MBORORO PASTORALISTS OF CAMEROON

Ibrahim Njobdi and Riabatu Yasmine

Background

The Mbororo pastoralists are a semi-nomadic indigenous peoples of Cameroon whose lifestyle is associated with cattle rearing. Historically, many believe that they emigrated from the Middle East or northern Africa years ago in search of new grazing land for their cattle. Other researchers say that those in Cameroon migrated in the late 18th century from Northern Senegal (Futajalon mountains) through Nigeria into Cameroon.

As nomads, the indigenous Mbororo-Fulani pastoralists depend on soil and climate that generate good fodders for their stocks. Where the weather is favorable—with abundant rainfall and good soil—there is then enough fodder for their cattle. Good fodder means healthy cattle, adequate supply of fresh milk and butter, making the Mbororo contented in life.

As of present, the Mbororo-Fulani pastoralists are widespread from West Africa in Sene-Gambia region to Somalia in the horn of Africa. They are found in this entire region because of good fodder available for cattle. Even though highly populated in Africa, but being migratory, they are at present minorities in all the countries they live in. They have lived in Cameroon for over 200 years where they number about two million people, representing 13 percent of the population of Cameroon.

Socio-Cultural Context

Mbororos are livestock herders by occupation, speaking *Fulfulde* and practicing the same religion Islam, since they were one of the first people groups in Africa to be converted to Islam. They practice transhumance where they move to the valleys in the dry season for greener pastures and return to the hills during the rainy season. This explains why they construct and live in temporal traditional house called the *bukkaru,* which is a grass-thatched tent constructed with sticks having a single door without a window hardly above one meter high.

Mbororos are highly attached to the traditions of their ancestors. Mbororos own the long-horned red cattle known as the *mbororoji*. The well-being of man or a family can be evaluated based on the number of cattle he owns. This implies that cattle is not just considered as a source of wealth in terms of cash as someone without cattle has no voice and respect within the community.

The Mbororo people, even though subdivided into so many subgroups who present some minor differences especially in their vocabulary, still display the same code of conduct. This code of conduct is known as *pulaaku,* which entails, among others, respect, endurance, morality, honesty, being reserved, patience, dignity, and modesty.

The women dress in loins known as *guddeh* while the men dress in gowns called *saaroji*. Their festivities include the fol-

lowing: naming ceremonies, marriages, Koranic graduations, and the two Islamic feasts (feast of the ram and Ramadan).

Girls are usually given out for marriage at the age 14 in view of preventing promiscuity and birth of children out of marriage, which is considered a taboo. Boys, on the other hand, get married at the age of 18.

Their diet is constituted of fresh milk, cheese and butter. These are also the only source of income for women who usually trek long distances to sell their products in neighboring urban centers.

Main Activities and Traditions

Each member of the family has specific duties. The men's responsibilities include herding the cattle, tending to political affairs, treating illnesses, and making plans for traveling. The women's duties include milking the cows, preparing butter and cheese, making the clothes and blankets, and preparing the daily meals and all other household chores. They are also required to obey their husband's orders. Although the wife must follow the husband everywhere, she must never be seen in close proximity to him. The men are masters of their households, and women gain their dignity and self-satisfaction from serving and obeying their husbands. The younger boys help their older brothers with herding. The older girls help their mothers and take care of the younger children. Children learn values and Fulani pride from the tribal elders, who are eager to pass down the Fulani traditions.

Challenges

Even though highly populated in Africa but being migratory, the Mbororos are presently minorities in all the countries where they live in. Being always on the move, they have no concentrated settlements and they manage to settle into sedentary lives, where they are seen as foreigners who can be chased away by their farming neighbors at any point in time. Today, the Mbororo-Fulani feel insecure wherever they live.

The situation of Mbororo women is even worse as they are marginalized within an already highly marginalized society. Gender bias has been a major setback to the development of Mbororo women—especially in the area of economic participation, education, marriage, and decision making processes in the family. These processes include sale of cattle, family expenditures, and wider family interests that constitute the basis for family welfare especially that of the children. Mbororo girls are still disfavored by their parents with regards to enrolling into educational establishments.

The Mbororo people have minimal participation in the social and political life in Cameroon, resulting to exclusion and marginalization from the key decision making processes that impact on their lives. This situation is worsened by lack of formal education (98% illiteracy rate), effectively denying the Mbororo access to key socializing processes in society. In Cameroon, a system of patronage exists that requires a community to be geographically concentrated in order to exert political influence on power holders. This too has contributed to exclude the Mbororo from fully participating and benefiting from the democratic process, as they are dispersedly settled at the fringes of the various villages of the region due to their occupation as cattle rearers.

Demographic pressure on land as a result of population growth has in recent years forced the Mbororo to sedentarize. The overall impact is the progressive reduction of cattle wealth for families, reduction in milk production (a key source of income for Mbororo women), and vulnerability for Mbororo youth, since their parents have fewer cows to hand down to

their children as the tradition requires. This explains the high rate of juvenile delinquency within Mbororo youths, which makes them vulnerable to banditry and promiscuity leading to HIV/AIDS.

The Mbororos also do not have the right over their grazing lands and pastoral resources since grazing land is considered as national land under the Cameroon land tenure law. This accounts for the numerous forceful and spontaneous evictions from their grazing land, without any compensation, by more powerful people.

They face constant series of farmer-grazer conflicts, which have led to unaccountable loss of lives and destruction of property. They constantly face discrimination, illegal arrests and detention, extortion and exclusion by some corrupt government officials and individuals. Mbororo people are timid and afraid to confront their problems; this makes them vulnerable to many circumstances. Mbororos have desire for quick solutions, which are in reality temporary and relapsing.



ABORIGINAL TOURISM AS A FACTOR OF SUSTAINABLE DEVELOPMENT

Poline Shulbaeva
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Over the past 40 years, there has been a powerful drive to develop mass tourism, often to the detriment of the nature and the areas in which this tourism takes place. Living in large, environmentally unhealthy cities, many tourists have started to reach out to nature and are turning to "wild" tourism. This is why, over the past 10 years, ecotourism and ethnic tourism have become increasingly popular—environmentally-responsible tourism that leaves natural areas undisturbed and is aimed at learning more about the natural, cultural and ethnographic characteristics of a particular region. There are many examples demonstrating that this kind of tourism is able to meet a range of humankind's spiritual needs.

Many Russian regions beyond the Urals have realized that they will be unable to rely on mass tourism because of their remoteness and lack of infrastructure, but that they can carve out an exclusive niche by developing ecological and

ethnic tourism, especially if they involve indigenous peoples' representatives in this.

The great demand for such tourism has led to the increased popularity of Russia's remote regions for environmental and aboriginal tourism, and also of the areas traditionally inhabited by the indigenous peoples of the North, Siberia and the Far East. The endless tundra of Yamal and Chukotka, Kamchatka's volcanoes and hills, the vast expanses of the taiga and the Fish River in Siberia—have all seen an increasing number of people wishing to visit these places. Tourists, professionals and those who enjoy active or environmental holidays now come from all over the world to find out what it would be like to live in the North.

Some want to listen to the forest and the birds living in it, some want to ride a reindeer or go dog sledding, others want to go fishing on the River Ob, and yet more want to live in traditional dwellings (*Karamo*) and learn about the culture of indigenous peoples. The indigenous peoples of Russia have become involved in tourism development on their territories, albeit with great caution and ensuring full preservation of the natural landscape and biodiversity. Everyone understands the need, not only to provide guests with the rest they need, but to do so in a way that does not harm the nature and places of traditional habitat that are home to the indigenous peoples themselves and to their future generations—their children, grandchildren and descendants.

Tourism in the Individual Territories

Five nations of indigenous peoples of the North live in the Tomsk Region territory—the Selkup, Khanty, Evenki, Chulyms, and Keto. Together, they have designed 15 different tourist options for ecological, ethnographic, extreme and sports tourism. With the support of the Center for the Support of Indigenous Peoples of the North, the indigenous communities have published a *Travel Guide to Aboriginal Tourism in Tomsk Region*. The first steps in developing environmental and

ethnographic tourism in Tomsk were taken in the early 2000s, in Parabel and Kolpashevo areas. Here, two indigenous communities of the North created the territory for which ecotourism now forms a part of its sustainable development—both for the nature and for people.

Aboriginal Tourism and Indigenous Territories in the Parabel

In the mid-1990s, during the regional festivals and celebrations in the settlements of Parabel, a small indigenous folklore group named *Koldel kup* began to perform. This was a first step in drawing attention to their ancient and very beautiful culture. A group of Selkup activists, consisting of youth and elders, created an ensemble and a Cultural Center for Indigenous Peoples, and gradually began to revive and popularize their culture, traditions and holidays.

In the early 2000s, the Head of Administration of Parabel District supported the indigenous peoples by participating in this development and the district administration also promoted the indigenous peoples, their traditions and ancient culture as one of the main attractions of the region. Tourists from Russia and abroad began to arrive in Parabel from 2003 onwards, and indigenous peoples, the administration, other local residents, and businesses got together to develop events tourism and ethnographic tourism. Tourists come especially for the indigenous peoples' festivals.

At the same time, indigenous peoples began to restore the indigenous village "Yurts Mumyshevo" (originally a Selkup Kechiblet settlement), which now accommodates tourists. There is no electricity, and the usual elements of urban life are absent.

Fans of adventure tourism spend several weeks there totally immersed in the life and experiences of indigenous peoples, studying their traditions, customs and living in accordance with their customary law. Guests learn to make traps

for catching fish, and to find their own food; they study animal signs and learn to live in harmony with nature and to change their perception of the world around them, for example, not to litter and damage the house in which they live.

Such tourism can help to strengthen indigenous peoples' culture and to attract their young people, immersing them in the natural environment and culture of their peoples. This particular project also allowed us to develop the territory of Mumyshevo Yurt, including protecting the biodiversity and rivers.

This kind of tourism provides employment for many people—guides, support staff, ensembles, craftsmen producing souvenir products—they are all indigenous peoples' representatives who are also involved in the conservation of this area.

Sustainable Territorial Management and Tourism Development in Ivankin

With the assistance of the District Head, in 2001, the Selkup village of Ivankin, in Kolpashevsky area, established a Territory of Locally-significant Traditional Nature. The Ivankin settlement only has around 300 inhabitants, most of them Kolpashev Selkup leading a traditional lifestyle (and not in employment).

The territory, which was officially established by the local authorities, was already a traditional Selkup territory but it was in very poor condition due to a lack of forest guards, constant poaching and illegal activity on the part of forest harvesters.

Since the indigenous peoples established the territory, there have been no forest fires, which is very unusual in the Russian taiga when in close proximity to villages. This means that the quality and quantity of wildlife, wild plants and fish in the rivers has increased substantially. The management of the territory follows the traditional knowledge available for specific areas, which varies according to the season.

These factors have attracted many tourists looking for environmental, sports and adventure tourism. Many people are attracted to the area's remoteness from populated areas, its traditional fishing, pure nature, solitude, and the opportunity to test one's strength and ability to survive in the wilderness of the taiga.

It has become fashionable and appealing to celebrate New Year, birthdays and special dates from the warmth of a *Yurt*, amid the extraordinary setting (for most people) of the taiga, tasting traditional dishes and watching (and sometimes participating in) the rites and dances of the indigenous peoples of the North.

This means that tourism can be developed in the small Selkup settlement, while monitoring compliance with the traditional rules for living on their territory: do not pollute, do not take more than necessary, respect closed seasons and areas that are out-of-bounds at certain times of the year, and much more.

How This has Become Possible

After creating their territory of traditional nature in 2001, the residents of Ivankina village chose a Selkup leader, Sychin Sergei, to be responsible for its management. At a gathering of the settlements' citizens, several groups were set up according to the community's different livelihood activities and the necessary territorial protection. Each group consists of 5-10 villagers of all ages. This latter point was especially important because it is through the inclusion of youth that traditional knowledge on resource use and customary law is passed on.

The Rivers group engages in cleaning up and protecting rivers and lakes within the boundaries of the territory. The same group tracks illegal closed season fishing and ensures the protection of bodies of water during the spawning period.

The Forests group engages in removing dry wood and dead trees, and tracks illegal logging, monitoring the most

promising forest areas in which to gather wild plants during the different seasons and at different yearly intervals.

The group set up to protect the territorial borders is involved in protecting the area from poachers but also monitors traditional seasonal customs and rules for harvesting wild plants and animal hunting in the area. It protects the elk calving grounds and monitors migration routes.

In addition to their core tasks, all villagers also monitor the quantity and quality of animals and birds in the area, and of the aquatic biological resources and vegetation.

This work has been done entirely voluntarily, without any financial support, but has borne fruit. Over the last 10 years, the indigenous people have restored their original place of residence (not only the territory but also the biodiversity) and this area has now become highly attractive to eco- and sports tourism.Unfortunately, this territory no longer exists officially or legally because of loopholes in regional and national legislation on the rights of indigenous peoples, and also an implementation gap between legislative theory and practice.

As far as the village of Ivankin is concerned, they have legally established two indigenous peoples' organizations (family community), both run by the Sychinyh family—Sergei and his son, Yuri. These communities continue to undertake the work begun in 2001, work that is done within the spirit and the rules of indigenous peoples' customary law, giving rise to hope for the future of sustainable development in the traditional territories of indigenous peoples of the North. The territory continues to exist and operate unofficially.

Prospects for the Development of Aboriginal Tourism

An increasing number of tourists come every year to the territory of the North, Siberia and Far East of Russia to experience environmental and ethnic tourism among the

indigenous peoples. They come for total immersion in nature, for a special experience, to relax or to try something new.

With the support of the Center for the Support of Indigenous Peoples of the North (Moscow), a number of travel guides have been developed on aboriginal tourism in Tomsk Oblast, Yakutia, Khabarovsky Krai, Primorye, and Kamchatka.

Many regions are now creating travel websites offering ethnographic, ecological and sport tourism, and these involve indigenous peoples' representatives. In turn, the development of tourism stimulates a growth in souvenirs and traditional types of activities, provides jobs, and helps develop the whole area.

All of this, along with the increasing experience and desires of indigenous people, offers great opportunities and incentives for the development of aboriginal tourism.

THE COAL INDUSTRY & THE TRADITIONAL LIVELIHOODS OF THE INDIGENOUS PEOPLES OF KEMEROVO OBLAST

Dmitry Berezhkov
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Kemerovo Oblast

Kemerovo Oblast is situated in the southern part of West Siberia. The Oblast is one of the most industrially developed regions of Russia and has a population of over 2.5 million people. Its economy is based on the coal and smelting industries. The total geological coal resources of Kuznetsky Basin (Kuzbas) are estimated at over 700 billion tons, which amounts to approximately 70 percent of all the coal resources of Russia. The region produces approximately 100 million tons of coal annually (prior to the economic crisis of 2008, this was around 180 million per year)—approximately 60 percent of all the coal in Russia. Over a hundred coal-producing companies are operating in the region.



European countries are the main consumers of Kuzbas coal: the UK, the Netherlands, Germany, Poland, Denmark, as well as China, South Korea, Turkey, etc. In all, coal accounts for over 70 percent of the Oblast's foreign trade. In 2011, around 70 million tons of coal was exported, creating total revenue of approx. US$7 billion. Russia's largest smelting and power-producing companies are also active in the Oblast: the OJSC Gurievsky Smelting Plant, the OJSC Koks, the OJSC Kuznetskie Ferrosplavy, the OJSC Mechel, the OJSC SUEK, EvrazHolding, and others.

The Indigenous Peoples of the Region

The small-numbered indigenous peoples that historically populate Kemerovo Oblast are the Shors and the Teleut. Around 13,000 Shors live in Russia in all, of which 11,000 live in Kemerovo Oblast. There are approx. 2,500 Teleut living in the Oblast. These Turkic peoples mostly live in the south and southeast of the Oblast, generally in the mountain taiga area known since the early 1900s as Shoria Mountain. The Shors' main occupation today is agriculture, including crop farming, cattle farming and bee farming. However, they also continue to live from their traditional livelihoods, which are hunting,

fishing and cedar nut harvesting. The small-numbered indigenous peoples account for only 0.5 percent of Kemerovo Oblast's population. There are no purely Shors or Teleut settlements in the Oblast—settlements usually have a mixed population. However, there are several dozen settlements with a dominant Shors or Teleut population; in most cases, these are very small villages. The Shors, an ancient nation from South Siberia, were among the first to learn smith craft and are famous for their blacksmiths. Today, they are a classic example of people suffering from the "resource curse" of modern civilization.



The Coal Industry

The history of the coal industry in Kemerovo Oblast dates back several hundred years; a dowser named Mikhailo Volkov discovered the first coal deposit close to the town of Kemerovo as early as 1721. The manufacturer Demidov, from the Urals, was the first to show an interest in producing Kuznetsky coal. By the late 1700s, he had already founded several smelting plants there. Coal and smelting enterprises began to emerge in the early 1900s. The establishment of the coal and smelting industrial cluster was dramatically expedited prior to World War II within the framework of the Siberian Industrial Base Reserve, deep in the country far from the western border. Kemerovo Oblast was established in 1943 to develop the Kuzbas Industrial Cluster. Since then, the industrial basis of Kuzbas has been constantly developing. A certain decline occurred immediately following the break up of the USSR (Union of Soviet Socialist Republics) due to the production crisis and the closure of the coal mines but, since 2000, the industries have recovered, especially the coal industry.



Photo credit: Kathrin Wessendorf

The Environmental Situation

The environmental situation in Kemerovo Oblast is bleak, according to all experts (including the government's supervisory authorities). The region is explicitly aimed at raw material production. Heavy industry is at the core of the regional economy and is the main factor that has a negative impact on the environment. The Novokuznetsk city is among the most polluted in the country, according to an evaluation of the Russian Federation Ministry of Natural Resources.

The report entitled "The Status of the Environment in Kemerovo Oblast in 2011," drafted by the Regional Administration, says that the average atmospheric concentration of specific pollutants in Kemerovo Oblast is 2-3 times the maximum allowable concentrations stipulated by Russian law and, in some cases, up to 18 times. The same report describes river water in areas of industrial activity as "polluted" or "heavily polluted." In some cases, the experts speak of "extremely heavy pollution" of the water.[1]

Kemerovo Oblast features all the main components of extractive industry that are likely to have a negative impact: large-scale industrial production, a high concentration of industrial facilities in the southwest and south of the region, and an industrial structure that incorporates highly hazardous industries (natural resource extraction, smelting and chemical production, and electricity production). The development of resource-intensive industries is traditionally associated with high environmental costs. This includes a deterioration in the land due to coal mining, the production of enormous amounts of industrial waste, environmental pollution with emissions and discharges from smelting, chemical, coal mining and other industrial enterprises, a reduction in the biodiversity of industrially-developed areas, and other negative environmental consequences. The situation is exacerbated by the high concentration of environmentally hazardous enterprises in the relatively small area of the Oblast, as well as the considerable dilapidation of process and treatment equipment.



Photo credit: Nabat

Impacts on Indigenous Peoples

Industry in Kemerovo Oblast, especially coal mining, has affected and continues to affect the way of life of the local indigenous peoples—the Shors and the Teleut. A description of the scale of the coal mining industry's impact on the indigenous communities can be found in a letter from the Shors Veniamin Boriskin sent to the Russian Association of Indigenous Peoples of the North (RAIPON) in February 2012, seeking help. He wrote about the problems of a small village called Kazas, situated in Myskovsky town district of Kemerovo Oblast:

> *For decades, the Sibirginsky, Mezhdurechensky and Krasnogorsky strip mines around the village have been extracting coal. Over this time, our forests have been destroyed, the Kazass River has been killed. Area 8 of Mezhdurechensky*

coal mine and Area 3 of Krasnogorsky coal mine conduct their activities right in the village territory, discharging waste into the Kazass River. On the other, left, bank of the river, there used to be a 'green zone' which the managers promised not to touch. The people also asked them not to touch the Lysaya Mountain (Karagay Nash in the Shor language), which is sacred to the villagers, and the mountain Tachigey. These mountains used to shelter us from the coal mines. But several years ago, Area 8 added a new strip mine, Beregovoy. This mine disregarded all the promises and began activities beyond the Kazass River. A huge territory has already been excavated and they are digging into the back of Tachigey Mountain. In addition, this summer the villagers saw an excavator on our sacred mountain. The mines ignore the people of Kazas and continue to tear our land to pieces. The blasting operations are performed so close that we can see the stones flying. They have not reached the village. Yet. Once abundant, the river has grown shallow and silted like a stream. At its deepest, it is only 60 cm, at its shallowest 5-10 cm. When they pump the water from the mines it flows on top of the ice and freezes. And this happens every day. Through the winter, the ice grows so thick that water has to be taken like from a well, with a bucket on a rope.

Only a few people have stayed in the village. Once a large settlement of 50 houses with large families, it has now died out. The mines have killed a Shors' village that was over 100 years old. The villagers never received anything in exchange for their treasures and have gone silently to their graves. At the edge of the village another has emerged—the cemetery. Today, there are six retired women, one retired man and four families with children in the village.

The village has become unsuitable to live in, the people dream only of modern apartments in town. Can the coal mines, extracting millions of tons of coal from our land, not provide apartments for the remaining people of Kazas village? Or is it the Shors' fate to die poor and miserable on their land?

The village of Kazas is part of Chuvashinsky national village council (Selsovet). In all, 520 Shors live in six villages in the territory of this Selsoviet and make up 65 percent of its total population. Three coal strip mines operate in the territory: Sibirginsky, Mezhdurechensky, and Krasnogorsky. The mines' activities have resulted in the destruction of the Shors' lands of traditional natural resource use, the rivers are polluted, and the forest and wildlife destroyed. The indigenous population has received no compensation either for the destroyed lands or for the impacts on their traditional way of life. One village, Kurya, was totally destroyed in the 1950s and all its population (primarily Shors) displaced to the town of Novokuznetsk, without compensation.

As the local people reported when construction of Sibirginsky mine began, neither Chuvashka village nor Kazas village was mentioned in the government expert evaluation documents. The town of Myski was specified as the nearest settlement to the mine—at a distance of 20 km. It means that these settlements are not mentioned in the design documentation, and, consequently, their residents seem not to exist at all. Today, Kazas village is surrounded by coal strip mines and coal production infrastructure, with a railway on one side and, on the other, a contaminated river from which the villagers have to drink. They are asphyxiated all year round because of the coal dust, which literally covers everything. It penetrates into the houses and the people's lungs, it lies in a thick layer on every surface. During large-scale blasting operations, the windows sometimes break in Kazas houses, structures are damaged and demolished, and houses fall into decay.

Since 1994, the Chairman of Chuvashinsky Selsovet, Egor Bekrenev (the former President of Kemerovo Oblast Indigenous Peoples' Association), has been trying to make the coal companies operating in the territory of Chuvashinsky Selsovet pay compensation for their exploitation of the mineral resources to Chuvashinsky Selsovet, to be used for the social and economic development of Selsovet. However, a permanent and planned agreement for the social and economic support of the Shors' development in this municipality was, unfortunately, never reached with the coal companies.

In addition, taxes from mineral resource extraction in Russia are paid either to the federal (40 to 100%) or to the regional budget. Consequently, the municipality only receives the land tax and indirect payments from the industrial enterprises for operations in the municipal territory (rent of municipal property, part of employees' income tax, etc.) and this accounts for an utterly insignificant share of the overall tax payments, in particular, those from coal mining companies.

The Government's Role

Despite all this, the government's environmental authorities consider that the river water complies with health standards. The villagers emphasize, however, that the water in the river is sometimes cleaner than at other times, and they think samples should be taken when the water is dirty and not the other way around, as the government authorities do. The village has neither a school nor a health center, not a post office or a shop. All this is only available in the neighboring village. The people of Kazas have written many complaints to numerous regional departments but the situation does not improve, and the authorities merely reply that sacrifices have to be made for the sake of regional economic development. At one time, the coal companies even established a checkpoint on the village access road so that their security personnel could stop and inspect private cars, including those belonging to the villagers.

In this context, the interview given by the Governor of Kemerovo Oblast, Aman Tuleyev, to the *Chelovek i Trud Magazine*[2] is revealing, as are his other speeches. He says a great deal about the challenges of the region's industrial, social and even cultural development, but virtually nothing about the region's environmental problems. It should also be noted that Kemerovo Oblast Administration signs annual cooperation agreements with the coal companies, which include specific clauses relating to measures for maintaining and developing the territories of traditional natural resource use for

the small-numbered indigenous peoples of Kemerovo Oblast. However, according to many of the Oblast's indigenous residents, nobody knows where this money goes.

Conclusion

The extremely complicated environmental situation around the village of Kazas, which has a negative impact on the traditional livelihood of indigenous people's communities in the region, is generally quite typical of Kemerovo Oblast. The list of "hot spots" where the situation is most difficult, compiled by activists from Kemerovo Oblast Indigenous Peoples' Association jointly with experts, thus includes 12 more settlements of this kind.

The environmental situation in Kemerovo Oblast is generally one of the most depressing. Any person new to the region arriving in Novokuznetsk will immediately notice the enormous black haze of polluted atmosphere hanging over the city; the only comparable Russian place that comes to mind is Norilsk, where the largest Russian smelter Nornikel is located. The Shors live in the epicenter of this hell—gradually dying from disease. And, in the meantime, the "coal barons" continue to make billions of dollars selling "black gold."

This is how the coal mining industry is destroying the traditional culture and natural resource management of the Shors—an ancient people rightfully proud of their rich history and culture who are now being dragged into the whirlpool of the "resource curse."

Endnotes

[1] http://www.ako.ru/PRE///SS/MESS/TEXT/doklad_ecolog_2010.pdf

[2] Человек и труд, №7, 2007 - http://www.chelt.ru/2007/7-07/tuleev707.html.



HISTORY OF RELATIONS BETWEEN THE INDIGENOUS PEOPLES OF THE TAIMYR PENINSULA & OJSC NORILSKY NIKEL

Vederta Lymin

OJSC Norilsky Nikel, formerly the Norilsk Combine Plant, began operating in 1935. The Combine Plant has been exploiting the mineral resources of Taimyr for 77 years. Specialists commonly recognize the mineral deposits of Norilsk as a unique global resource.

Today, OJSC Norilsky Nikel is the leading company in the extraction and processing of nonferrous metals, not only in Russia but worldwide. The Norilsk Combine Plant produces 35 percent of the world's palladium, 25 percent of its platinum, 20 percent of its nickel, and 10 percent of its cobalt. It produces 96 percent of Russia's nickel, 95 percent of its cobalt and 55 percent of its copper.

The name of Nikolay Urvantsev is associated with the official discovery of deposits as it was he who demonstrated the presence of large deposits of black coal and complex ores between 1919 and 1926.

However, to be historically accurate, it must be acknowledged that the first explorers of the mineral resources were the ancestors of today's indigenous peoples of Taimyr. This has been confirmed by archaeologists who have discovered the dwelling sites of Bronze Age people near Lake Pyasino, along with primitive smelting and casting equipment.

Norilsk ore can be found at the site of the medieval town of Mangezey on the Taz River, in the territory of today's Yamalo-Nenets Autonomous Okrug. Obviously, the indigenous Ents, Nenets, Nganasans, and Dolgans living in this area extracted the ore and traded it for the goods they needed. The Taimyr indigenous peoples' traditional knowledge of these rich metal deposits was later used by Russian merchants on arrival in the North. For example, the merchant Kipriyan Sotnikov tried to organize industrial smelting in the late 1800s. The indigenous peoples of Taimyr assisted not only by sharing their knowledge of the local areas but also their knowledge of the local climate, household, foods, clothing, and footwear. They acted as guides and provided transportation on reindeer sledges, along with other assistance.

In Soviet times, this assistance became compulsory. Hundreds of indigenous peoples' representatives were relocated for purposes of forced labor, during which most of them died. There is still little known with regard to where they are buried.

The Norilsk Combine Plant's success would not have been possible without the Sovietization of Taimyr, which included the extermination of the strongest sector of the indigenous communities: the local leaders—princes and shamans. The Remembrance Book of Taimyr Repression includes over a hundred executed Dolgans, Nenets, Evenks, Nganasans, and Ents. This was a huge loss for the northern indigenous groups, who are extremely small-numbered. According to the Russian Census of 2010, for example, there are just 862 Nganasans and 227 Ents left.

Environmental Pollution

The Norilsk Combine Plant continued to grow as the indigenous peoples of Taimyr sustained further losses. In 1942, the Plant's Nickel Smelting Shop began production. It was then that the environmental tragedy of the Taimyr tundra and its indigenous peoples began. Then, in 1949, the Plant's Copper Shop also began polluting the local tundra.

The Nadezhinsky Smelting Plant—the pride of the Norilsk Combine Plant—was commissioned in 1981. Its polluting emissions containing heavy metals have been found as far away as Canada, Finland, Sweden, and even Alaska in the US. The town of Norilsk is surrounded by a lunar landscape for tens of kilometers; the dead tundra stretches for hundreds more. The smell of the plant's production activities is well-known to the indigenous peoples of the Ust-Avam, Volochanka, Khantaiskoye Ozero and Potapovo settlements, some of them hundreds of kilometers from Norilsk.

Information given on Wikipedia may sound appalling to specialists, but means very little to ordinary people who are not aware of the extent of the disaster:

> *Concentrations of pollutants in the atmosphere of Norilsk often reach 25.8 of the Maximum Permissible Concentration (MPC) for nitrogen dioxide, 35.6 MPC (sulphur dioxide, 1992) and even 120 MPC (methylene oxide, 1995). Around Norilsk ca. 100,000 hectares of forest tundra has been burnt or damaged. Some ecologists recognize Norilsk as an ecological disaster area.*[1]

The following gives some official data on environmental pollution:

Pollutants emissions into the atmosphere in 1986-1996 fluctuated between 1,937 million tons and 2,394 million tons. The list of standardized pollutants in 1986-1996 grew from 18 to 31; sulphur dioxide makes up the largest proportion (up to

98%). Solid sludge alone in all of the industrial emissions into the atmosphere in 1996 amounted to 26,678,000 tons. These figures are easily said but behind them lie the ruined lives of many people and a decimated wildlife.

In Rosstat's brochure "Russia in Figures – 2011,"[2] Norilsk figures as the most polluted Russian industrial town in 2010, with atmospheric emissions of nearly two million tons. While various rehabilitation and health programs are being implemented for the people of Norilsk, including the program for northerners' relocation to the south funded by OJSC Norilsky Nikel, there is, however, nothing similar for the indigenous peoples!

Impact on Indigenous Fishermen

Ever since the Combine Plant was first constructed, the main transportation route to the plant has been via the Northern Sea Route, including the lower course of the Yenisei River. In 1978, disaster struck the indigenous peoples engaged in winter fishing on the Yenisei. It was then that year-round navigation started. Powerful icebreaking vessels made their way through one-and-a-half meter thick ice, often right through fishing nets. Dozens of people have died since then in the icy pass. Communication has broken down between the people living on the different banks of the river. The reindeer herders, who have traditionally brought their reindeer to the left bank of the Yenisei, now go less often to visit their children in the settlements' boarding schools on the right bank.

In December 2011, a powerful icebreaking vessel, the Talnah (belonging to OJSC Norilsky Nikel), passed along the water passage and right through the several tons of frozen fish that was being stocked on the ice nearby for shipment to Dudinka. The damage amounted to three million roubles (US$100,000), and yet no compensation has been paid!

The year-round navigation has also brought with it another problem. To ensure safe navigation, it was decided to



use radioisotope thermoelectric generator (RITEGs) for vessel piloting. Old men say the generators are installed along the pass on the river bottom. Whether this is true or not, we do not know. This information is still confidential. Ever since, however, fishermen have started catching half-boiled fish with their meat falling off the bones; also since then there have been more cases of deaths from cancer. In the settlements along the Yenisei estuary, drinking water is taken from the river and consumed without any treatment whatsoever.

The official sources state that RITEGs serve as sources of electricity by using heat energy from radioactive decay; Strontium-90 is used as RITEG fuel or, for high-capacity generators, Plutonium-238. Their lifespan is 10 to 30 years and, after that, they are supposed to undergo treatment. Nothing is as yet known in Taimyr about this treatment, however.

Power Generation – For Whom?

Khantai Evenkis living in the south of Taimyr have also suffered from the Combine Plant's activities. Construction of the Ust-Khantai Hydro-Power Plant began in 1963—the production facilities of the Norilsk Combine Plant needed cheap electricity. However, the bottom of the reservoir was not cleaned properly and, according to ecologists, the flooded larch forests are still emitting phenols. Evenkis in Khantaiskoye Ozero settlement have no place to go. They drink contaminated water and eat contaminated fish. Moreover, phenols attack the fish immune system and so most of them are contaminated with parasites (helminths and intestinal worms).

Electricity from the Ust-Khantaiskaya HPP is made available to the Norilsky Combine Plant itself, the people of the cities of Norilsk, Dudinka and Igarka, but not the indigenous peoples. Even the relatively close settlements of Potapovo and Khantaiskoye Ozero, populated by Ents, Evenkis and Dolgans, are not connected to the HPP's main transmission line.

The Impact of Gas Development on Indigenous Reindeer Herders

In the 1960s, gas was required to operate the Norilsky Combine Plant and, in 1966, the Messoyakhinskoye gas condensate field came into operation, 250 kilometers from Norilsk. This is the native land of the Taimyr Nenets. In the 1970s, two nuclear explosions were performed to provide underground gas storage facilities on their territory. We do not know how hazardous this has made the area; the Nenets were never warned of the consequences, and no radiation survey has been carried out to this day.

In 1972, the Yuzhno-Soleninskoye gas condensate field was commissioned at the same location—yet another concern for the Nenets of Taimyr.



In October 2003, the Pelyatkinskoye gas condensate field came into operation. It comprises eight wells and a powerful gas production infrastructure on the territory of the Nenets of Taimyr.

A new gas pipeline is currently being laid from this field; its length will be nearly 300 km. Officially, the total area of seized and destroyed pastures will amount to 940.73 hectares; in reality, this area is going to be three times greater. The gas pipeline will run through the most productive pastureland.

Investment in the gas condensate pipeline construction is thought to amount to some 16,409,243,000 roubles and yet the project does not envisage any compensation for the Nenets reindeer herders.

Business, Politics and Compensation?

Today, OJSC Norilsky Nikel is a universally-recognized leader in the production of nonferrous metals, both in Russia and worldwide. The company's owners are official dollar millionaires—individuals highly respected at home and abroad. They take part every year in the Davos Forum in Switzerland and consider themselves to be civilized businessmen.

According to International Financial Reporting Standards, the company's turnover in 2010 amounted to $12,775 billion, and its net profit in the same year came to $3.09 billion.

In March 2012, the President of OJSC Norilsky Nikel, Andrey Klishas, became a member of the Council of Federation (the upper house of parliament), representing Krasnoyarsky Kray. The company's protégés occupy the highest positions in the Krasnoyarsky Kray government (Taimyr Dolgano-Nenetsky Municipal Region has been part of the Kray since 2007).

The owners, managers and protégés of OJSC Norilsky Nikel consider themselves to be civilized people but they forget that social corporate responsibility implies respecting the rights of indigenous peoples and local communities, adhering to the principle of free, prior and informed consent, and paying reparations to the parties that suffer from their activities.

Both in Russia and the whole world, on the territories of indigenous peoples, large responsible industrial companies are implementing programs to support the indigenous population, establishing targeted funds, and helping the local communities to develop their livelihoods. Jointly with the indigenous peoples, they are implementing environmental programs and, generally, doing their best to minimize the harm to the natural environment.

And as for OJSC Norilsky Nikel?

As of early 2012, there has not been a single agreement with any of the communities of Taimyr's indigenous peoples,

there is not a single agreement in effect with Taimyr's indigenous peoples' organizations. There is not a single program of targeted support for these peoples.

The managers of OJSC Norilsky Nikel may argue that support is being provided. And, indeed, it is—but for whom?

The company is currently building an Ice Palace in Dudinka, it helped repair Dudinka's swimming pool and, in 2005, it undertook an overall refurbishment of the town's fitness center. However, there are practically no indigenous peoples' representatives in Dudinka

The indigenous peoples also receive something in the context of so-called "patronage." For example, every year, the company hands out presents to the reindeer herders on Reindeer Herders' Day. Last year, the most expensive present was a portable diesel generator worth seven or eight thousand roubles ($250). Most often the presents are thermos flasks worth 100-150 roubles ($4), spoon bait sets and other trifles. Two years ago, the company gave 3-5 year-old children metal brandy flasks, possibly in the hope that they will become alcoholics all the sooner.

In 2010, the magazine *Indigenous Peoples' World—Living Arctic*[3] published a report by the Association of Indigenous Small-Numbered Peoples of Taimyr in which the support from OJSC Norilsky Nikel was estimated at two million roubles a year or around $60,000. The company's net profit, as already mentioned, amounted to $3.09 billion in 2010. The company evaluates the long term damage to the indigenous peoples of Taimyr as 0.0054 percent of its yearly profit.

Just How Much is That?

Over the years of the Norilsk Combine Plant's activities, the Nganasan and Dolgan living in the central part of Taimyr (Ust-Avam, Volochanka) have lost their traditional way of life, their unique reindeer herding culture, due to the environmental impacts. Reindeer herding is the basis of the

northern nomadic peoples' culture, which is reflected in their language. Today, their settlements are full of unemployment, alcohol abuse, suicides, crime, and social orphans. Two years ago, Khantai Evenkis also lost their reindeer herding. For the indigenous peoples, losing reindeer is the same as losing face for the Japanese. It is a devastating tragedy.

The Nenets and Ents—reindeer herders and fishermen living on the banks of rivers and brooks in the areas where gas is extracted at the Messoyakha, Pelyatka, Yuzhno-Soleninskoye and Vankor fields—can no longer go fishing because there are practically no fish left in those waters!

This is the price of the Norilsk Combine Plant's success since 1935 to this day.

OJSC Norilsky Nikel' success is a tragedy for the indigenous peoples of Taimyr!

Endnotes

[1] http://ru.wikipedia.org/wiki/%D0%9D%D0%BE%D1%80%D0%B8%D0%BB%D1%8C%D1%81%D0%BA.

[2] http://www.gks.ru/bgd/regl/b11_12/Main.htm.

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THE ITELMEN OF KAMCHATKA: TOO FAR TO RIO

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About the Itelmen

The Itelmen are one of the smallest indigenous peoples in the world. There are 3,193 Itelmen living in Russia today and Kovran is the only one community where they form a majority of the population. Three hundred and thirty people live in the village of Kovran and it is known as the "Capital of the Itelmen World."

The Itelmen are the most ancient people of Kamchatka, the large peninsula in the Russian Far East. The oldest Itelmen settlements discovered by archaeologists show that there were already Itelmen living in Kamchatka some 15,000 years ago. The Itelmen word *itenmen* means "living here." The Itelmen language is rapidly disappearing. There are only a few people still alive who can speak it. The main language of communication is now Russian.

The main occupation of the Itelmen since ancient times has been fishing, mostly salmon and smelt fishing. Fish used to represent year-round nutrition for the Itelmen, and the Kamchatka peninsula is one of the richest fisheries on the planet. Huge salmon and smelt populations come to the rivers of Kamchatka in the summer. The sea shelf is rich in crab, halibut, cod, pollock, etc.

During the summer, the Itelmen used to catch and dry the fish, and sour it in special pits for the long winter ahead. For smelt fishing, they would use the dodgy devices that trap the fish without human intervention. Sometimes the Itelmen would go hungry in the springtime, when the summer fish stores had been consumed over the long winter. The soured fish was used mainly for the dogs because they were the only form for transport. The Itelmen also hunted seals along the seashore and bears in the forests. Another of the main features of Itelmen culture was the gathering of local plants. They were great experts in the use of local plants for food and traditional medicine. They developed pottery and built large earth houses in which several families would live at a time. The summer would be spent in fishing camps where they built their high *balagans*—summer lodgings. Their main holidays were the spring celebration of the first fish when the salmon first appear in the rivers and then the great fall holiday, Alhalalalay, dedicated to giving thanks to the Earth for its gifts to the people.

Their History

Historically, the Itelmen lived across the whole territory of Kamchatka. Russians began to arrive in the peninsula at around the end of the 17th century. Because of conflicts, new diseases and assimilation, the Itelmen population declined dramatically throughout the 20th century, as did their indigenous territories. Today, they live mostly in the small territory of North West Kamchatka. In the 1960s, a new disaster befell the Itelmen population. The Soviet authorities forcibly closed

hundreds of indigenous settlements in the Russian North and Siberia, including many Itelmen communities. Thousands of people left their Motherland.

Kovran village is located in North West Kamchaka, four kilometres from the Okhotsk Sea. Itelmen from many villages around were forcibly resettled here. Six hundred and fifty people lived here at the end of the Soviet era, mainly Itelmen. The local Kovran River is not so rich in salmon but has the greatest population of smelt in West Kamchatka.

The state fishing farm "Krasny Oktyabr" was situated here in Soviet times and supported the social services, culture and agriculture of the village. During the hot summer fishing season, all of Kovran's population would work on the state farm as fishermen and workers. In the 1970s, however, the main state farm facilities were relocated to the neighboring city of Ust-Khayrusovo, some 20 kilometers to the south, on the coast, where there is a sea port for the big fishing boats. More than 3,000 people lived in Ust-Khayrusovo and the population would increase substantially during the summer. This was a typical industrial fishing city with a large Russian population. Fish production subsequently closed down in Kovran but, every summer until the fall of the Soviet Union in 1991, fishing teams from "Krasny Oktyabr," consisting of the local Itelmen people, would go to work on the Kovran River.

At the beginning of the 1990s, the state farm was privatized by its management but continued fishing and supporting the social life of Kovran village. This was a condition set by the local authorities in return for which the company received its fishing quotas. After a few years, however, the company collapsed and the moneymakers of the new business generation began to appear. The first thing they did was to terminate Kovran village's social program. The Kovran agricultural farm immediately went bankrupt and, after a while, the local hospital and boarding school for indigenous children closed as well. The Itelmen began to learn how to survive without any state support.

Sustainable Development

At the beginning of the 1990s, the local people decided to organize their own local fish enterprise known as "Kavral." This involved fishermen who had worked on the state farm during Soviet times. They started to fish for themselves on their native river and delivered 50 percent of their catch to the factories in Ust-Khayrusovo in order to freeze it. They would receive 50 percent of the frozen fish back, which they then sold to the ships that buy fish all along the Kamchatka coast.

The Kavral enterprise began to support the local culture. Itelmen cultural supporters revived the ceremony of the ancient Alhalalalay holiday of giving thanks to Mother Earth. Gradually, the celebration became famous in Kamchatka. Many outsiders now wanted to visit the community and participate in the celebrations. Groups of tourists from other regions of Russia and from abroad would visit Kovran to experience the native traditional food, see the nature and study the ancient Itelmen culture.

In 1998, the new Regional Governor signed an Act establishing the first special Territory of Traditional Nature Use in Russia, "Thsanom," which included the traditional Itelmen land around Kovran. This Act was highly innovative for Russian legislation, with the territory being governed by the Itelmen themselves.

The main aim of creating the "Thsanom" territory was to protect the environment, as well as to develop the traditional Itelmen economy—fishing, hunting, sea hunting, forest harvesting, etc. The Russian branch of WWF and regional environmental organizations supported this initiative. Several members of the Itelmen community gained the status of public environmental inspectors from the regional government (Department of Ecology). The community began to develop a network of environmental posts, including field radios and transportation, where public inspectors could stay for longer or shorter periods of time in order to monitor the territory but where they could also engage in traditional livelihood

activities. An ethno-information center was established and this commenced educational activities on the environmental program for the local population.

At the same time, and maybe as a consequence of increased beer consumption in Russia, dry salted smelt became one of the most popular snacks in the country. The prices paid for the community's fish started to rise. At the end of the 1990s, the community decided to build its own fish factory to process the fish in Kovran village. The governor supported the idea and the community received state support to buy the equipment. This was a time of discussions about sustainable development for the Itelmen people. They began to build the fish factory but did not have time to finish it.

Challenges for Sustainable Development

The Kovran River has no rich salmon resources, so for a long time the river was of no interest to the bigger commercial fishing companies. Following the rise in the price of smelt fish, however, big business began to turn its attention to the river. In 2003, the authorities suddenly decided to open up the most lucrative part of the river, near Kovran, to commercial fishing. This is also the traditional fishing place of the Itelmen, as it is the only place in the river where fishing is profitable. And it was opened up not to Kavral, as the traditional user of the river, but to the big fishing company "Ivning Star" from the biggest regional city of Petropavlovsk-Kamchatsky. The local people were forced to find work with the new owners of the river. In 2008, the Kamchatka authorities organized commercial tenders to rent out rivers for up to 25 years and the tender for the Kovran River was won by another large company. The local Kavral enterprise also participated in the tender but lost, as it had no fish factory. Once the commercial exploitation of the Kovran River had begun, the stocks of smelt fish decreased dramatically.

Ill comes often on the back of worse. The new governor, appointed in 2001, who was a geologist and the head of the

largest regional gold mining company, Koryakgeoldobycha, exploited a loophole in the Federal Law on Territories of Traditional Nature Use from 2001 to rescind the Regional Act on the "Thsanom" Territory of Traditional Nature Use, thereby undermining the self-governance of Itelmen on their native territory. In addition, since 2008, oil companies have begun drilling on the sea shelf near the village and have begun to search for oil and gas along the shores all around the small Itelmen community.

The village has begun to die. The population has once again dwindled. Some have passed away, while other highly-skilled individuals—doctors, teachers, who are mainly not indigenous,—have escaped Kovran in search of a better life elsewhere. Most of the male population has no job. Alcoholism has increased dramatically. The suicide rate is 12 times higher than the Russian average, which is already one of the worst in the world.

The Hopes for Sustainable Development

The leaders of the Itelmen people are continuing their struggle for their native river, their lands and the right to a traditional way of life. They have lost all their court cases aimed at overturning the governor's decision to rescind the Act on the "Thsanom" Territory, along with all the court cases against commercial fishing companies over the one single fishing place on the Kovran River. Big business intimidates the indigenous activists; the authorities sometimes put them in prison.

Nevertheless, throughout all these years, the indigenous leaders of the Itelmen have continued to write letters, organize village gatherings, pursue their work in court, make complaints, etc., and, in all these years, the indigenous folklore group Elvel has continued to celebrate the fall holiday of Alhalalalay, giving thanks to Mother Earth for her gifts.

In 2012, official experts from the Fish Science Institute banned commercial smelt fishing on the river because of the catastrophic decline in the smelt population on the Kovran River. This is a small victory for the indigenous community, as they have been writing letters to the authorities for many years about the depletion of the river. Nevertheless, this prohibition is temporary—for one year only. The next step has to be taken by the new governor who was appointed in 2011. He has no background in geology or in commercial fishing and he could ban large-scale fishing on the river. The Itelmen people's hopes now lie with him.

SUSTAINABLE AGRICULTURE & TRADE: SOUTH TO NORTH GROWER TO CONSUMER

American Indian Treaty Council

Fair Trade and Environmental Protection

We support value-added opportunities by helping farmers process their products to gain a greater share of the market. Many coffee growers, for example, get 25 cents a pound for coffee, which consumers typically buy for US$8-12 dollars. Value-added processing increases grower income and, given the usual community cooperation, improves infrastructure and living standards. Our facilitation of direct trade with wholesale food buyers gives farmers more of the consumer price by surpassing expensive middle-men. The premium paid by buyers committed to Fair Trade is a critical factor for farmers struggling to sustain their farms.

IITC (International Indian Treaty Council) has partnered with coops and associations who typify the 100 million Indian members of farm families in Mexico, Central and South

America. For the sake of our children and theirs, we help traditional people protect farm cultures that are environmentally sustainable and as old as agriculture. These Indian cultures are exquisitely beautiful and contain infinite wisdom that can increasingly contribute to the survival of humanity. The community networks that received our technical assistance include producers of coffee, cocoa, rice, fruit, vegetables, herbs, and medicinal plants. Indians using traditional cooperative farming methods provide much of the food for the U.S. and Canada.

Dr. Peter Rosset of Food First said, "Despite more than a century of anti-small farmer policies in both industrialized and third world countries, small farmers continue to be more productive and more efficient than large, agri-business farming operations. Small farmers offer the best way to feed the world, and the only way to effectively conserve the soil resources for future generations." Ismail Serageldin of the World Bank adds, "We have to do the hard work of dealing with problems of small land holders in remote areas. They are the real defenders against food insecurity."

The emerging strength of NGOs and more democratic government institutions brightens the future of indigenous farmers if they receive appropriate technical assistance. Their most critical need is direct access to markets paying fair prices for their products. The primary job of our office is (1) to provide farmers with essential technical assistance required for participation in direct markets, and (2) to help establish and maintain direct trade with those markets in the U.S., Canada and Europe. We place special emphasis on the organic and natural food market—the most dynamic food sector with growth at 20 percent per year in the U.S.

American Indian Treaty Council

Mission Statement

The mission of the American Indian Treaty Council (AITC) is to support, develop and facilitate trade between Indians in the Americas and socially conscious buyers and consumers in Minnesota, the USA and beyond. The foundation of this trade is mutual benefit for producer and consumer based on fair price, environmental protection and cultural integrity. We depend on Indian and other indigenous peoples in their homelands to maintain the health of the forests and waters so critical to the survival of our species. Trade with them is economically as well as ecologically beneficial for all of us.

The AITC is affiliated with the International Indian Treaty Council, a leader of the indigenous non-governmental organization (NGO) movement at the United Nations since 1977. The International Indian Treaty Council (IITC) is an organization of indigenous peoples from North, Central, South America and the Pacific working for the sovereignty and self-determination of indigenous peoples. Through the United Nations work of the International Indian Treaty Council, various international indigenous producers of agricultural and other products requested that IITC establish an intermediary position on their behalf in the markets of North America, Europe and Asia. The Minneapolis office of the IITC was formed in 1996 to carry out this development responsibility.

The Minneapolis office now functions as the independent American Indian Treaty Council with it's own tax exempt 501c3 status. Indian and other indigenous producers need more cash flow from their products to maintain and sustain themselves. Sustainable economic development is critical to their efforts to survive and save an ecologically sustainable way of life that has endured for countless thousands of years. We depend on Indian and other indigenous peoples in their homelands to maintain the health of the forests and waters so critical to the survival of our species.

The foundation for our work is a long-standing commitment made to indigenous communities who have patiently, persistently and adamantly requested sustainable support for developing direct, fair and sustainable commercial partnerships with outside buyers interested in their community products. This, according to producer cooperatives and associations, is the number one way to protect and continue life in the communities and surrounding environments.

Action in Mexico and Guatemala

In the past nine years, we coordinated 81 agricultural technical assistance assignments in Mexico and Guatemala. Primary focus is a vast territory of over eight million Mayans that extends from the Mexican gulf coast state of Tabasco, through the mountains and jungles of Chiapas, and into the highlands of Guatemala. Fair trade helps farmers stay home and avoid *maquiladoras*, big cities or the U.S.

All technical services are provided at the request of farm communities after extensive consultation. They ask for and get assignments that advance a 3-part stream of activity leading toward fair trade:

1. Organizational & Business Development;
2. Value-Added Processing; and
3. Establishing Direct Grower to Buyer Marketing and Trade relationships.

Cooperation with Land O'Lakes

We developed our technical assistance programs from 1996 to 2002 in collaboration with the International Division of Land O'Lakes, a Minnesota-based cooperative owned by 300,000 farmers in 17 states**.** At that time the majority of funding was provided by the US Agency for International Development (USAID). NGO partner organizations received finances for paid support staff**.** During those years, we have received support from Ford Foundation and other major donors to develop other projects to assist coops and associations.

Our success has depended on local NGOs who maintain constant communication with farm communities. We have worked with many NGO partners, including Asesoria Tecnica en Cultivos Organicos (ATCO) in the state of Tabasco, Mexico and Dana, A.C. in Chiapas. Work in Guatemala is directed by the International Indian Treaty Council Central America

Office in Guatemala City. In-country staff guide technical assistance consultants and maintain community ties. In-country advocacy and coordination ensures Indigenous participation at all levels.

Through nine years of recruitment and delivering technical assistance, we developed an expanding team of excellent agricultural consultants who helped develop relationships with communities. We facilitated exchanges in which indigenous farmers from various areas consulted for each other—ultimately this is the most efficient form of technical assistance. IITC has access to Indian people in Mexico, Central and South America. This cultural reality inspired Land O'Lakes to work with us.

Impacts

The impacts described below define early success and the potential for developing Sustainable Agriculture and Trade:

Dealing with Mayan Cocoa Growers and the International Chocolate Crisis

The world supply of chocolate is in danger of drastic shortages. Many large cocoa plantations are failing because the cocoa tree, without shade from taller trees, is vulnerable to disease and pests. Cocoa evolved over millions of years in tropical rainforests and thrives on small shaded plots. Major chocolate companies are realizing that sustainability of chocolate depends on smaller farms that help preserve rainforests. Plant and animal species flourish in the natural habitat of a cocoa orchard.

We worked with cocoa coops and communities in the state of Tabasco where 90 percent of Mexico's cocoa is harvested annually and in Chiapas where the remaining 10 percent is grown. Growers have traditional cocoa orchards with several varieties of crops. For 30,000 Chontal Mayan families that

grow all of the cocoa in Tabasco, it is their primary source of survival. In Chiapas, cocoa is the ancient Maya cash crop with increasing potential. Mexican cocoa farmers have sufficient land for increasing production by three times.

Farmers used our technical assistance to build processing plants, expand organic and sustainable methods, and prepare for direct marketing to customers in the U.S. and Europe. Through Mariano Gutierrez and Alma Garces, coordinators of ATCO, we worked with three associations of cocoa producers representing 2,000 cocoa families farming without chemicals. They have the capacity to process 3,650 tons of cocoa or nine percent of Mexico's production. Their success in organic markets could transform the cocoa region.

Economic benefits emerged. Four hundred Cardenas area families increased their cocoa income by 30 percent with a dry processor constructed as a result of our Farmer-to-Farmer Program. That success inspired a larger dry processor that benefits 1,000 additional families.

Building Regional and Cross Border Cooperation: Tabasco-Chiapas-Bolivia exchange

In Chiapas we worked with a network of communities near the jungle areas of eastern Chiapas. Malnutrition is common. Farmers need crops to support the communities and eliminate the need to cut down the rainforest for short-term cash. Cocoa is a real option considering a growing market for high quality cocoa.

Fernando Ochoa and Ronald Nigh of Dana, our NGO in Chiapas, worked with ATCO in Tabasco on a series of exchanges between Tabasco and Chiapas farmers for the purpose of improving Chiapas growing methods and expanding production. A regional Cocoa Marketing Coop is the goal of this exchange. Cocoa production and farmer organization is improving.

At the request of the coops, we provided a consultant from one of the world's most successful cocoa coops, El Ceibo in

Bolivia. El Ceibo sells organic cocoa directly to chocolate companies in Europe and the USA for a 35 percent premium over world market prices. Their expert, Joaquin Milz, conducted a 10-day workshop for Tabasco and Chiapas growers on creating extremely healthy and productive orchards for cacao, plus five other cash crops. Several growers have adopted this system.

Creating Links: Local Growers and International Chocolate Companies

To improve the growers market position, we established relationships with conventional chocolate companies such as M & M Mars and organic chocolate companies such as Organic Commodity Products and Rapunzel. M & M Mars buyers and production experts have completed extended assignments with our coop associates and Organic Commodity Products sent their technical expert on extended farmer-to-farmer assignments.

Improving Living Standards for Chiapas Coffee Communities

In Chiapas we played an essential role in helping coffee cooperative Mut Vitz reach international markets for the first time. Thirty Mayan communities in this new cooperative are located in a zone of low-intensity war in the highlands of Chiapas. Conditions present an extreme challenge for all farmers. Nearly 1,000 families in Cooperativa Mut Vitz produce 1.5 million pounds of high-altitude coffee per year.

Farmers continue to live in acute poverty in 349 of 411 Mexican coffee municipalities. Since the 1980s, indigenous growers have formed coffee coops in order to gain value-added advantages and self-determination. Mut Vitz requested technical assistance from our Farmer-Farmer Program to help accomplish this goal. Monika Firl and Karen Ferroggiaro, who are experts in coffee coop development with years of experi-

ence in Mexico and Central America, agreed to coordinate our assistance.

Karen and Monika established a Mut Vitz business relationship with San Fernando Coffee Coop, which is located outside the war zone. San Fernando Coop is processing Mut Vitz Coffee and making it possible for them to export for the first time. Mut Vitz is now exporting 600,000 pounds of specialty coffee a year at guaranteed fair trade prices of $1.27 to $1.41 a pound. This results in total additional income of $600,000 a year. This represents an income gain of 50 percent for member families. In tightly knit communities in southern Mexico, we have witnessed significant improvements in community infrastructure achieved with 50 percent increases in commodity income.

Cooperative Development in the Highlands of Guatemala

Our progress in Mexico led to a similar approach in Guatemala. IITC worked with Land O'Lakes to implement a Cooperative Development Program (CDP) with Mayans in the Highlands of Guatemala. In the recent war, 200,000 Mayans were killed and more than 400 of their communities incinerated by the Guatemala army. We brought IITC Board Member and Mayan Nobel Peace Prize winner Rigoberta Menchu to Land O'Lakes to encourage the initiation of this program.

CDP was implemented by Juan Leon, Coordinator of the IITC Central America Office in Guatemala City, and Francisco Cali, President of the IITC Board of Directors. They are Mayans with years of community organizing experience in the highlands. During the war, coops were destroyed and members were assassinated. A critical priority for farm families is rebuilding and creating new organizations. Coops and associations from six highland districts were involved in launching the CDP. To build a base of success, the initial CDP focus was on organic coffee as a sub-sector with a short term export future. For Guatemala, the job of our IITC Trade

Office is to continue to interface with IITC Central America while establishing export relationships as the cooperatives become market ready.

Creating Policy For Sustainable Development

A major development obstacle in rural Mexico and Guatemala is the severe shortage of financing for production and commercial activities. Coops and NGOs we work with are urging government and financial institutions to create financing mechanisms that give farmers greater independence and experience in financial management. This allows growers to partner with the private sector on more equal footing. Credit unions, for example, create coop capital formation to decrease dependence on costly bank loans. Thanks to grassroots pressure, Mexico's new banking and cooperative laws permit some innovative mechanisms.

Our office has pressed for more democratic and community-oriented policy in several meetings with high level Mexican officials. Chiapas farmers are in the midst of dramatic dialogue and reforms mandated by the Zapatista uprising. Tabasco farmers are in the forefront of a movement for economic democracy and environmental protection. In Guatemala, the IITC Central America office is devoted to campaigns that encourage participation of the indigenous majority at all levels of the political process. However, no matter what the existing policy, farmers persevere in their quest for markets.

Priorities for the IITC Trade Office

- First: To maintain and expand our existing agricultural technical assistance programs in Mexico and Guatemala. This technical assistance is focused on helping producer coops get directly to market.
- Second: To maintain and expand development of direct business relationships between producers south of the U.S. border and buyers in the U.S. and Europe. We need to know all of the key organic, natural and conventional buyers of international agricultural products.

We are one of the few Indian organizations in North America with expertise in delivering agricultural technical assistance to Mexico and Central America. Our progress may inspire participation of many Indian communities from the North.

Fair Trade & Cooperative Development Programs:
MEXICO – GUATEMALA

implemented by the American Indian Treaty Council

TECHNICAL ASSISTANCE ASSIGNMENTS
81 Completed in 8 Years from July 1996 through May 2005

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
1	W Means/W Gilbert/ Kearney	Mexico City & Chiapas, Mexico	Coop & NGO Exploration	Mexican NGO Networks	25 JUL-5 AUG 96	complete
2	Milana Tolins/ J. Kearney	Chiapas-Oaxaca, Mexico	Coop & NGO Exploration	Chiapas-Oaxaca NGOs	13-25 NOV 96	complete
3	Carlos Manzo/ M. Tolins/J. Kearney	Mexico City-Oaxaca-Chiapas, Mexico	Coop & NGO Exploration	Chiapas-Oaxaca-Tabasco NGOs	5-20 FEB 97	complete
4	A. Cervantes/B. Means	Oaxaca, Mexico	Coop Coffee Coop Development	CEPCO/UCIRI Coffee Coops	12-17 FEB 97	complete
5	A. Cervantes/ J. Kearney	Oaxaca-Chiapas-Tabasco, Mexico	Coop & NGO Exploration	Chiapas-Oaxaca-Tabasco NGOs	1-20 MAY 97	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
6	Michael Evnin	Tabasco, Mexico	Cacao Production	ATCO & Tabasco Cacao Associations	15-29 MAY 97	complete
7	James McCool	Oaxaca, Mexico	Coffee Marketing	CEPCO/UCIRI Coffee Coops	24-30 JUL 97	complete
8	Alex Woehrlin/ J. Kearney	Oaxaca-Chiapas, Mexico	Coffee Processing	Coops CEPCO/UCIRI/ Majomut	24 JUL-7 AUG 97	complete
9	Mike McDougal	Chiapas, Mexico	Rice Production	Dana/Ejido E. Zapata & Benito Juarez	31 JUL-7 AUG 97	complete
10	Alex Woehrlin/ J. Kearney	Oaxaca-Chiapas, Mexico Guatemala City	Coffee Processing	CEPCO/UCIRI/ Majomut/R. Menchu	11-26 NOV 97	complete
11	Michael Evnin	Tabasco, Mexico	Cacao Organization	ATCO & Tabasco Cacao Associations	11-26 NOV 97	complete
12	Mike McDougal	Chiapas, Mexico	Rice Processing	Dana/Ejido E.Zapata & Benito Juarez	13 NOV-06 DEC 97	complete
13	Monika Firl	Chiapas, Mexico	Coffee Marketing	Coop Majomut & Coop Cafe Network	18-25 NOV 97	complete
14	Monika Firl	Chiapas, Mexico	Coffee Marketing	Coop Majomut & Coop Cafe Network	5-18 DEC 97	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
15	Ronald Nigh	Guatemala Highlands Chiapas, Mexico	Coop Development Rice Processing	IITC Guatemala Tabasco Cacao Asoc	18-22 NOV 97	complete
16	Monika Firl	Guatemala Highlands	Coffee Marketing Evaluation	FEDECOAG/ ASPECagua/CADISagua	10-27 JAN 98	complete
17	Monika Firl	Chiapas, Mexico	Coffee Organization	Coop Mutvits in Alto E. Zapata in Selva	16 FEB-19 MAR 98	com,plete
18	Karen Ferroggiaro	Chiapas, Mexico	Coffee Organization	Coop Mutvits in Alto E. Zapata in Selva	1-19 MAR 98	complete
19	Mike McDougal	Chiapas, Mexico	Rice Processing	Dana/Ejido E. Zapata & Benito Juarez	26 MAR-10 APR 98	complete
20	Ronald Nigh	Guatemala Highlands Chiapas, Mexico	Coop Development Rice Processing	IITC Guatemala Tabasco Cacao Asoc	31 MAR –13APR98	complete
21	Milana Tolins/ J. Kearney	Chiapas-Oaxaca, Mexico Guatemala Highlands	Coop Development Program	CEPCO/UCIRI CITI Guatemala	18-31 MAY 98	complete
22	Alex Woehrlin	Oaxaca-Chiapas, Mexico	Coffee Processing	Coops CEPCO/ UCIRI/Majomut	26-31 MAY 98	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
23	John Kearney	Chiapas, Mexico	NGO & Rice Assoc Planning	Dana/Ejido E. Zapata & Benito Juarez	8-14 JUN 98	complete
24	Monika Firl	Chiapas, Mexico	Coffee Organization	Coffee Cooperativa Mut Vits	30 JUN-22 JUL 98	complete
25	Karen Ferroggiaro	Chiapas, Mexico	Coffee Organization	Coffee Cooperativa Mut Vits	30 JUN-22 JUL 98	complete
26	Alma Garces/Mariano Gutierrez	Chiapas, Mexico	Chocolate & Cacao Production	Dana/Ejido E. Zapata & Benito Juarez	7-15 JUL 98	complete
27	Walter Welz	Tabasco, Mexico	Cacao Organization	ATCO/Tabasco Cacao Associations	2-15 AUG 98	complete
28	Joaquin Milz	Tabasco, Mexico	Cacao Marketing	Tabasco Cacao Asoc Kay Kab-Chiapas	15-25 SEP 98	complete
29	Monika Firl	Chiapas, Mexico	Coop Development	UNEM/Ejidos San Pathuitz/La Pimienta	15 SEP-15 OCT 98	complete
30	Karen Ferroggiaro	Chiapas, Mexico	Coop Development	UNEM/Ejidos San Pathuitz/La Pimienta	15 SEP-15 OCT 98	complete
31	Mark Rehder	Sonora, Mexico	Coop Development	Yaqui Ag Feasibility on 1,000,000 acres	8-18 OCT 98	complete
32	Cheryl Bann	Guatemala Highlands	Coop Development	IITC C.A./Mayan Highland Coops	17-25 OCT 98	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
33	Mike McDougal	Chiapas, Mexico	Rice Processing	Dana/Ejido E. Zapata & Benito Juarez	6 NOV-6 DEC 98	complete
34	Nigh/Ochoa/Kearney	Chiapas, Mexico/ Belize/Guatemala	Rice Processing/ CITI Development	Dana/EjidoS E. Zapata & Juarez/CITI	8 NOV-25 NOV 98	complete
35	Alex Woehrlin	Oaxaca-Chiapas, Mexico	Coffee Processing	Coops CEPCO/ UCIRI/Majomut	18-25 NOV 98	complete
36	Monika Firl	Chiapas, Mexico	Coop Development	Coffee Cooperativa Mut Vits	8 DEC-24 DEC 98	complete
37	Karen Ferroggiaro	Chiapas, Mexico	Coop Development	UNEM/Ejidos San Pathuitz/La Pimienta	16-22 DEC 98	complete
38	Karen Ferroggiaro	Chiapas, Mexico	Coop Development	UNEM/Ejidos San Pathuitz/La Pimienta	3-10 JAN 99	complete
39	Karen Ferroggiaro	Tabasco, Mexico	Coop Development	ATCO/Tabasco Cacao Associations	15 JAN-5 FEB 99	complete
40	Ronald Nigh	Tabasco, Mexico	Cacao Production	ATCO/Tabasco Cacao Associations	17-25 JAN 99	complete
41	Alex Woehrlin	Oaxaca-Chiapas, Mexico	Coffee Marketing	CEPCO/UCIRI/ San Fernando Coop	28 JAN-17 FEB 99	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
42	Cheryl Bann	Guatemala Highlands	Coop Development	IITC C.A./Mayan Highland Coops	14-21 MAR 99	complete
43	Ronald Nigh	Tabasco, Mexico	Cacao Production	ATCO/Tabasco Cacao Associations	19-25 APR 99	complete
44	Alej Cervantes/Milana Tolins	Oaxaca, Mexico	Coffee Coop Contracts	CEPCO/UCIRI	7-14 FEB 99	complete
45	John Kearney	Nor Yungas/ Cochabamba, Bolivia	Coffee Coop Development	UAC Carmen Pampa Aymara Assoc	13-20 MAY 99	complete
46	Karen Ferroggiaro	Tabasco, Mexico	Coop Development	ATCO/Tabasco Cacao Associations	24 MAY-13JUN 99	complete
47	John Burstein	Tabasco, Mexico	Cacao Farmer Promoter Training	ATCO/Tabasco Cacao Associations	6-12 JUN 99	complete
48	Karen Ferroggiaro	Guatemala Highlands	Coop Development	IITC C.A./Mayan Highland Coops	9 AUG-29 AUG 99	complete
49	Monika Firl	Chiapas, Mexico	Coffee Marketing	Coffee Cooperativa Mut Vits	2 OCT-22 OCT 99	complete
50	John Burstein	Tabasco, Mexico	Cacao Farmer Promoter Training	ATCO/Tabasco Cacao Associations	2-8 DEC 99	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
51	M&M: Matlick/ Lewis/Full/(Mack)	Tabasco, Mexico	Increasing Cacao Yield & Processing	ATCO/Dana/Tabasco Cacao Asoc	12 DEC-19 DEC 99	complete
52	John Burstein	Tabasco, Mexico	Cacao Farmer Promoter Training	ATCO/Tabasco Cacao Associations	17-23 JAN 00	complete
53	Karen Ferroggiaro	Chiapas, Mexico	Coop Development	UNEM/Ejidos San Pathuitz/La Pimienta	27 JAN-9 FEB 00	complete
54	Mike McDougal	Chiapas, Mexico	Rice Planting & Processing	UNEM/Ejidos San Pathuitz/La Pimienta	4 MAR-14 MAR 00	complete
55	Monika Firl	Chiapas, Mexico	Coffee Sales & Organic Certifying	Coffee Cooperativa Mut Vits	24 MAR-10 APR 00	complete
56	Kristin Juliar	Tabasco, Mexico	Proposal Writing: Cacao Processing	ATCO/Tabasco Cacao Associations	26 MAR-04 APR 00	complete
57	M&M: Matlick/ Lewis/Full/(Mack)	Tabasco, Mexico	Increasing Cacao Yield & Processing	ATCO/Dana/Tabasco Cacao Asoc	28-30 MAR 00	complete
58	M&M: Matlick/ Lim/DeVille/Mack	Tabasco, Mexico	Increasing Cacao Yield & Processing	ATCO/Dana/Tabasco Cacao Asoc	7 MAY-11 MAY 00	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
59	CITI / AITC/IITC Means/Cali/ Simon	Quetzaltenango, Guatemala	IITC International Conference	CITI & Highland Mayan Communities	3-11 JUL 00	complete
60	Ellis Ruby	Chiapas, Mexico	Hog Marketing, Mgmt & Health	Dana/Ejidos Zapata & Benito Juarez	03 SEP-20 SEP 00	complete
61	Alex Woehrlin/Kevin Larson	Chiapas, Mexico	Second Grade Coffee Marketing	La Selva/Cafe Tenam/ Dana	15-19 NOV 00	complete
62	Mike McDougal	Chiapas, Mexico	Rice Planting & Processing for USA	UNEM/La Pimienta/San Pathuitz/Zapata	22 NOV-13 DEC 00	complete
63	Harriet Behar/Gerardo Gonzalez	Chiapas, Mexico	Organic Certifying & Incorporation	UNEM/La Pimienta/San Pathuitz/Zapata	20 FEB-1 MAR 01	complete
64	Harriet Behar/Gerardo Gonzalez	Tabasco, Mexico	Organic Certifying & Incorporation	Tabasco Cacao Association	20 FEB-06 MAR 01	complete
65	Ellis Ruby	Chiapas, Mexico	Yucca Development for Nutrition	Dana/Ejidos Zapata & Benito Juarez	14-25 MAR 01	complete
66	Bill Means/ John Kearney	Tabasco & Chiapas, Mexico/ Guatemala	TA Project & Roundtable Plans	ATCO & Dana/CITI	21-29 MAR 01	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
67	Peter Reese	Tabasco, Mexico & Guatemala	Chocolate Markets & Roundtable TA	ATCO &Tabasco Cacao Assoc & CITI	21-29 MAR 01	complete
68	AITC/Land O'Lakes/ USAID	Panajachel, Lake Atitlan, Guatemala	Fair Trade-Organic Coop Roundtable	CITI & 50 Coops from 6 countries	11 JUN-18 JUN 01	complete
69	Tom Seibel	Chiapas, Mexico	Revival of Chiapas Wheat Farming	UNEM/Rio Florido	13 JUN-28 JUN 01	complete
70	Rick Bronson	Chiapas, Mexico	Planning Cacao Orchard Diversity	Miramar Region Cacao Farmers	03 SEP-12 SEP 01	complete
71	Rick Bronson	Tabasco, Mexico	Planning Cacao Orchard Diversity	Tabasco Cacao Association	13 SEP-21 SEP 01	complete
72	John Kearney	Tabasco & Chiapas, Mexico/Guatemala	Cocoa & Coffee Value Added TA	ATCO & Dana	18-25 SEP 01	complete
73	David Hull/ Ruben Pacay	Guatemala Highlands	Coop Development	IITC C.A./Mayan Highland Coops	3 FEB-3 MAR 02	complete
74	Fernando Ochoa/ J Kearney	Ciudad Oaxaca, Oaxaca, Mexico	Indigenous Tourism Forum / textiles	RTP & INSO & CICE	17-24 MAR 02	complete

	Development Consultants	Location	Assignment	Host Organizations	Dates	Status
75	David Rothschild/ J Kearney	Guatemala Highlands	Indigenous Tourism/Fair Trade Textiles	CITI/Coop Aj Quen/Assoc Patzun	09-16 MAR 03	complete
76	F. Cali/A. Simon/ McLaren/Kearney	Cancun & Yucatan, Mexico	Fair Trade Conf/ organic cotton mtgs	Comercio Justo & IATP	09 -16 SEP 03	complete
77	M. Woodard/M. Woods/ Kearney	Guatemala Highlands	Develop Organic Textile Contracts	CITI/Coop Aj Quen/Assoc Patzun	04-09 DEC 03	complete
78	Felipe Perez/John Kearney	Guatemala Highlands/ Alta Verapaz	Organic Textile Dev/Organic Cotton Dv	CITI /Assoc Aj Quen/ Patzun/Raxquix	02-06 MAR04	complete
79	F. Cali/A. Simon/J. Kearney	Guatemala Highlands	Develop Organic Textile Contracts	CITI/Coop Aj Quen/Assoc Patzun	29 MAR-2 APR 04	complete
80	F. Cali / A. Simon/J. Kearney	Guatemala Highlands	Develop Organic Textile Contracts	CITI/Coop Aj Quen/Assoc Patzun	23-29 MAY 04	complete
81	Raul Machin R Pacay/Kearney	Alta Verapaz & Retahuleu Guatemala	Planning-Planting Organic Cotton	CITI & Raxquix & Coronado Assoc	7-14 NOV 04	complete



THE NATIVE AMERICAN OLYMPIC TEAM FOUNDATION (NAOTF)

The mission of the Native American Olympic Team Foundation (NAOTF), a partnership between Olympians and Native American leaders and Elders, is to "create joyful unity through sports and education, to help heal Mother Earth for all our children, including through the Olympics."

NAOTF was co-founded by Olympic skier Suzy Chaffee, who introduced fun fitness to America while serving on four Presidents Councils of Physical Fitness, and led the Title 1X March that enforced Equal Opportunities for Women in School Sports and Education, which helped save the U.S. a trillion in healthcare and welfare.

A snow miracle in Telluride, Colorado, 16 years ago—after Suzy taught a Lokata Indian named Rollingbears to ski with a ticket donated by the ski area—inspired the ski area to partner with Suzy to pioneer Telluride's Ute ski and snowboard

program. Chaffee then enlightened and inspired ski areas/communities across North America to give thousands of their nearby underserved Native youth a chance to ski and snowboard on over a million acres of their beloved ancestral mountains. Thanks to lifting the health, behavior, academics, joy, job and Olympic opportunities of their children, the Elders have been inspired to lead Gratitude Snow ceremonies that have helped save countless ski areas from droughts, including the Salt Lake Olympics.

Over the years, NAOTF created a working partnership between the U.S. ski industry leaders, scientists, such as the late Nobel Peace Prize winner Stanford's Dr. Stephen Scheider, and a group of Native American Elders and Earth healers. For example, Seneca Elder Robert John Knapp who inspired Pope Benedict to declare, "It is a sin to poison the water," and gifted Cherokee Earth healer, Olivia Ellis, Phd., master gardener at President Jefferson's Montacello Gardens.

They agreed that these ceremonies that give appreciation to Mother Earth raise the electromagnetic vibration of the mountains where no toxins can exist. And in purifying the mountains of the blankets of poisonous smog from the cities, it restores Nature's cycles and the natural weather and precipitation of regions. Elders-led gratitude ceremonies next to oceans have a similar purifying affect on water, also proven by Dr. Emoto, who often partners with tribal Elders worldwide to restore contaminated bodies of water.

Further empowered by the work that the United Nations is carrying in the area of Harmony with Nature and its holistic approach, NAOTF orchestrated high visibility model mountain and ocean ceremonies in Vail, Colorado and Puerto Vallarata, Mexico, respectively, leading up to the UN's 2011 International Mother Earth Day. We deeply honor the indigenous Bolivians for initiating this day, after losing their only glacier/ski area and water supply for two million people in La Paz.

Learning from the Elders and proven by scientists that these ceremonies can also smooth out the earth changes related to 2012, NAOTF called upon the US ski industry leader,

David Ingimie, to assist us in reaching out to ski leaders on other continents to share this ceremonial solution to inspire communities to live in more harmony with Nature, to help ensure that future generations can enjoy snowsports. Through our world press stories (some articles getting 10 pages on Google, including Forbes.com, USA Today, the Vatican and two UN websites) and contact with foreign ski leaders, added to partnerships with Michelle Cousteau, George Baumaster, and Mountaineers, our stories have helped inspire many communities to invite the indigenous Elders to lead cross-cultural ceremonies in Australia, South America and Europe, which reconnect us with our Earth-honoring indigenous roots.

Scientists have also proven the power of prayers. To help diminish and purify the oceans from radiation from Fukushima's nuclear catastrophe, NAOTF circulated in the press worldwide Dr. Emoto's Hawaiian Elders' powerful healing prayer.

To help prevent Los Alamos' nuclear catastrophe on our soil, which would have dwarfed Fukushima's, NAOTF gave world press spotlight to the prayers led by the Apache Elders, and united with prayers by hundreds of cross-cultural people of different faiths done on Mt. Baldy, one of "19 Holy Mountains." The rains miraculously came and winds shifted across the street from the Lab. These Holy Mountains on four continents are energized so that each prayer on any part of them, even in the parking lot if you are disabled, is like 3,000 people praying with you (stories are available on www.snowriders.org).

Stanford's scientists and others corroborate the pioneering efforts of Sir George King, astrophysicist-mystic, to store prayers by hundreds of pilgrims on Holy Mountains in the U.K. and U.S., to be able to send them to prevent or diminish catastrophes and more quickly recover from them.

Practical and spiritual solutions need to go hand in hand to restore the Earth. Mother Earth has warned the Elders that man cannot keep polluting the lands and mountains. Doing ceremonies is a band aid solution to compassionately assist in emergency droughts and catastrophe, but our countries and individuals need to make bold green changes to prevent

reruns. Yet these miracles, more than anything, woke up Suzy and communities to realize that Mother Earth really listens to heartfelt prayers and appreciation.

Since the toxins from all countries end up in the oceans, we are headed toward mass extinctions. The trade winds bring clouds of toxins to the Arctic regions and melt our glaciers. Every time we use a product with toxic chemicals we are contaminating our very drinking water, which is the key to life. The U.S. has banned only five toxins; E.U., 35; and Japan, 48—and we must do more to survive and thrive. Therefore, we must quickly shift to using all natural products and foods.

NAOTF Recommendations

Since most people have a hard time believing that the UN has made this phenomenal mind and heart shift in the last few years, which NAOTF heartily applauds, we recommend that the UN uses its immense resources and networks to better get the word out that they believe that Mother Earth is a living, and infinitely loving, compassionate, intelligent being. Our Earth Family needs to hear that UN leaders and ambassadors from each country support these Elders-led ceremonies that are backed by Nobel laureate scientists.

Therefore, NAOTF recommends:

1. That Rio +20 actively encourages world participation in Elders-led ceremonies and prayers, and to share joyful sports, dance and music activities, especially with the youth, which will also help prevent 2,000 tribes from going extinct each year, according to the UN.
2. That the UN raise awareness and encourages our Earth Family to make pilgrimages to the Holy Mountains (see Annex). The Aetherius Society, founded by Dr. King, can assist pilgrims to access them safely via Aetherius.org. Some can be climbed in an hour and others in a day. And there are regular groups that one can join.

3. To restore our dying oceans, get agreements by all countries to ban 100 of the most dangerous toxins within three years using the EU model, combined with the proposed U.S. model, and approved by Elders, which test chemicals by using human cells in petri dishes, rather than genociding millions of animals.
4. Follow the Mexican government model of assisting farmers in becoming organic certified. Mexico has many organic farms.
5. Encourage all schools to have organic gardens to prevent obesity, diabetes and teach children organic farming, to help restore world soil and water purity. And ideally have local Elders bless them at a ceremonial dance.
6. That all 192 UN member states strongly enforce laws protecting the headwaters of vast regions, since healthy normal nature cycles are critical to ensure gentle abundant rain, snow and snowmelt for drinking water, nature and agriculture. Aspen (next Castle Peak, a Holy Mountain), and the Arizona Snow Bowl (on the San Francisco Peaks, sacred to 13 tribes), are the water sources of Colorado and the Southwest. They both found that through tribal-led ceremonies and detoxing their ski areas and towns with a variety of wind, solar, biodiesel mass transportation and snowcats, they restored their abundant snow cycles. While the Snow Bowl wanted to use wastewater in the snowmaking that could not filter hospital drugs, the tribal ceremonies and prayers we circulated worldwide made it so that the snowmaking was never needed for the last four years.
7. Acknowledge Student Green power through praising Middlebury (Vermont) College Students who created the first Zero Carbon Ski Area in partnership with Native (Wind) Energy, which won a world clean energy Oscar in Switzerland. And also the U.S. colleges who switched to green cleaning, including North Arizona University, which helped end Arizona Snow Bowl's snow drought.

8. Urge everyone with standard toilets to put a rock or two into its reservoirs, which could perhaps save quadrillions of gallons of precious water from going down the drain.
9. NAOTF recommends that Elders are allowed to present some of their contributions to live in harmony with nature and honour Mother Earth:
    - Johann Grander should present his Grander Method at Rio +20;
    - Jamie Scheckman, founder of MountainRiders Alliance, who is ushering in a new era of Green Ski Areas that honors harmony with Nature above profit, should be cited as a model; (http://live.tetongravity.com/_News-MRA-Skilogik-And-Suzy-Chapstick-To-Help-Native-Skiers/blog/5400887/75233.html);
    - Robert John Knapp speaks on behalf of Mother Earth about preserving Her waters, given his Seneca Nation's Water Prophesy. Humanity may be as touched as Pope Benedict was to declare it a sin to poison the water.

Diet and Exercise—Key to Healthy Green Countries

The Elders say what we eat affect the way we think and the same can be said about what countries eat. In order to create a healthy Earth Family with the energy and vision to live in harmony with nature and restore our planet, we need to create psychologically healthy populations through diet and exercise. Karl Jung (Swiss), "The Father of Modern Psychology," realized while living with a Pueblo Indian family the five keys to being psychologically healthy. These are 1) sports, ideally in nature; 2) daily PE (physical exercise) so kids can get naturally high and develop intuition; 3) Fine Arts classes in schools to express who we are; 4) giving back our unique gift for the greater good (now curing bullies); and 5) giving gratitude, including to Mother Earth.

Therefore, NAOTF urges all countries:

1. To support daily sports plus the arts to create a psychologically healthier Earth Family, which is critical to creating good earth guardians. And also spread awareness of the other keys;
2. To help spread this research about Stevia as a cost-effective alternative to the world diabetes-obesity epidemics;
3. To urge star athletes to cheer on their country's children to reduce diabetes by also giving clinics in schools.

Restoring Earth Through a Nuclear-Free World

1. Above all else, Rio +20 leaders must urge humanity to ensure the Prophesy of Peace and Prosperity for 1,000 years by boldly enlightening and insisting that our leaders and representatives learn from Fukushima and the Gulf catastrophes; and stop serving the nuclear and oil corporations, given their connection to wars and annihilation. The people have spoken through both the Nuclear and Wall Street protests around the world, that we want a nuclear-free world, since nuclear is motivated by what turns out to be sociopathic greed by the Military Industrial Complex. President Eisenhower warned us about them in his farewell speech. The year 2012 is the winding down of the greed machine and the rise of the heart-centered, and those serving the people through safe clean wind, solar, geothermal and tidal turbine energy are flourishing (see Annex to learn the lessons of how three worlds have already been destroyed).

Forests

1. Urge humanity to further protect our forests following 2011's Year of the Forests, by encouraging all schools, parks, forest departments, and ski areas to give an honorarium to indigenous Elders or teachers to lead hikes in nature to help students and hikers see through the eyes of their ancient Earth-honoring ancestors. Fourth grade students in Telluride were totally fascinated by a Cherokee teacher who substituted a forest ranger who got sick. Aspen SkiCo then contacted NAOTF.org to implement such a program for their 4,000 per year Nature Adventurers on skis, snowshoes and shoes in summer.

Annex

Background Information on the Stevia Plant

Diet is also key to creating healthy Earth Guardians. Recent studies found that consuming high levels of sugar damages our brains, causes ADD and ADHT, the sugar blues, depression, and violence—a pipeline to prison. The U.S. and Mexicans are the biggest consumers of Coke and Pepsi, which have 40 grams of sugar, when 15 grams of sugar is the recommended healthy limit per day. When a Mexican-American teacher got the sugary soda machines banned in the LA School district, violence in schools was also reduced by 65 percent (NPR Radio). Yet, there is a solution to the Wall Street Journal findings that "the number of adults with diabetes has doubled worldwide over the last three decades to nearly 350 million, and nearly threefold in the U.S. and diabetes' long-lasting and disabling condition is going to be the largest cost for many health systems."

One thousand five hundred years ago, the South American tribes discovered a flowering herb called *Stevia rebaudiana*, which the Spanish then helped spread worldwide since it is the only known natural sweetener with zero calories, zero carbohydrates and a zero glycemic index, which gives you zero fluctuations in blood glucose and energy roller coasters, and zero contributions to any disease. Yet, surprisingly not everyone knows about this extraordinary sweetener.

Asia is the largest grower and user of Stevia, and have nearly stamped out diabetes. Stevia keeps blood sugar levels healthy to avoid hypoglycemia, which makes one vulnerable to the overuse of the fermented sugars in alcohol, which is only a step away from alcoholism and drug abuse. Another study found that "82.6 percent of those who attempted suicide were under the influence of alcohol and drugs."

The tribes also used organic Stevia leaves for their anti- fungal, viral, bacterial, cavity and gum disease qualities to heal wounds. There are many companies now making Stevias available in powder packets, liquid bottles, shakers, tabs, syrups, and canisters (fiber baking version) that are sold at healthfood stores, online, many grocery stores, supermarkets and super discount stores worldwide. While all Stevias are healthier than the toxic processed sugars, GMOed high fructose corn syrups in most sodas and chemical sweeteners, the pure organic Stevias without additives, such as NOW Foods, Pyure Sweet, and KAL, plus Zevia and Rainforest Colas, have the healthiest qualities. Because Stevia is also an antioxidant, which dilates blood vessels, it increases mental activity and reduces the craving for tobacco, sugar and alcohol. And no side effects have ever been found.

Pure organic Stevias without fillers are the best solution for managing or possibly reducing diabetes, as well as for those who want to enjoy vibrant health and never want to get it.

The U.S. manufacturers have some of the healthiest best tasting organic Stevia sweeteners and Stevia sodas, which are available in other countries and are now becoming available also to Latin America. Because Mexico has the highest diabetes in the world, including children, in a role reversal, NAOTF united some of the Pan Am heroes who are gladly cheering on the Mexican children, as well as their countrymen, to be Lean, Clean and Diabetes-free through Stevia awareness!

Background Information on Purifying our Waters Solution

As part of encouraging other continents to invite their indigenous Elders or Shamen to lead ceremonies, I learned from the leaders of the Kitzbuhl Ski Club about their revered local astrophysicist-shaman, Johann Grander, who has help purify their waters so they

can drink from their streams. His Grander Method is now used by ski areas across Austria and other countries.

"As a result, Kitzbuhl's fields are also flourishing, and we have an abundance of natural spring drinking water, which we use for the little snowmaking we need, despite our low altitude. Austria also uses clean hydropower, and no nuclear plants ever, and all 28 E.U. countries having strict laws protecting our waters, thanks to banning 35 toxins, including chlorine; and our mountain communities are monitored regularly by the government and universities," said the KSC Vice President Peter Obernauer.

"Because of different damages and stressors today, our water lacks its original cleanliness and potency," says Johann. In the YouTube video, "Water: the Great Mystery," researchers in 11 countries and Nobel prize winner, Kurt Wuthrich, studied the only other known original water, which is protected by a tribe in Venezuela, and found it had 40,000 times the potency on all our organs than tapwater.

"The Grander water revitalization system gives water the information back it needs to build up its self-purification process and its power," says Johann, who was honored by the Russians after verifying his science. Its applications for swimming pools, home water systems, speedy recovery for injured Olympians, and spas, is used by enlightened communities around the world, including a green hotel in Boston and a Country Club and swimming pool in Taos, New Mexico (http://usa.grander.biz/en/johann-grander).

A Restored Mother Earth Humming with Solar and Wind Energy

Creating a nuclear-free world is the highest priority, given how renowned scientists now agree with the Hopi Elders that, "Three of our worlds have already been destroyed. The first one by volcano-triggered fires, the second by ice, and the third by floods, all as a result of the Earth shifting on Her axis. Creator destroyed these worlds after the Oneness given us turned into human quarrels, corruption, world wars over materialism, and then technology making

humanity forget to 'sing joy from our hearts to Creator.' (sound familiar?) But those who kept their hearts open were saved" ("Book of Hopi" by Frank Waters).

We are now in the 4th world, and Hopi Elders say that "the United States will be destroyed—land and people—by atomic bombs and radioactivity. But those with peace in their hearts will be sheltered." The Elders also say that prophesies can shift as the minds and hearts and actions of humanity shift (http://www.iamamerica.com/media/following_the_star.pdf).

Australia's Nobel Prize winner, Dr. Helen Caldecott, also called nuclear a destroyer of worlds and the late Sir George King, astrophysicist and mystic, corroborates much of the Hopi Prophesy. In his book *The Holy Mountains of the World* (published by Aetherius Society), he said "Planet Earth is an ancient Goddess of immense compassion, wisdom and cosmic experience, who gives us refuge upon Her surface."

The difference is that, he says, the axial turns all triggered massive floods that cleansed the earth and prevented nuclear chain reactions. Dr. King explained that Man had nuclear technology then that could have killed life forms on most of the planet's surface for hundreds of thousands of years, and possibly Mother Earth Herself. And the Great Ones consider the protection of Mother Earth as first priority.

Our human family has flunked "Survival 101" three times from forgetting, ignoring, allowing ourselves to be distracted, or hiding these lessons. The Elders agree with Dr. King's book *You Are Responsible*, which would say to recommend:

That Rio +20 leaders must INSIST that our leaders shut down and stop the licensing and building of all nuclear reactors, and in unity, phase out anything nuclear related NOW (weaponry, uranium mines and mills), which are fronts for producing yellow cake to build immensely profitable nuclear bombs per reactor. Yet, Fukushima was 1,000 times more destructive than any nuclear bomb explosion, say scientists. Then, we need to SHIFT budgets from defense and nuclear projects to safe wind, solar, tidal turbine, and geothermal energy. Let our Earth Mother safely boil our water. Let Her hum with happiness with abundance for all!

Electrical and nuclear engineer Dr. Arjun Makhijani, president of the Institute for Energy and Environmental Research, has done studies that show, "We have the technology today to completely power America with wind and solar energy."

Since the UN woke people up that Mother Earth is a living being, and nuclear is the most dangerous toxin to Her existence and therefore ours, Rio +20 should call on our Earth Family to set our hearts on choosing to manifest the prophesy of 1,000 years of Peace and Prosperity for all life forms on our New Earth.

NAOTF BOARD:

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RoberJohn Knapp (Seneca) - inspired Pope Benedict to declare, "It is a sin poison the water."

Jamie Schecter - founder, Mountainriders Alliance

NAOTF sites: NAOTF.org, SNOW-RIDERS.ORG

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NAK'AZDLI: FIGHTING FOR OUR LAND & FUTURE GENERATIONS[1]

Chief Fred Sam

Shus Nadloh is the name of the mountain; Milligan was the name of a Surveyor that my grandfather guided throughout our territory.

Nak'azdli, located at Stuart Lake, has a population of 1,800 members. A few kilometers north of Nak'azdli is the continental divide where the water starts running to the north. In the headwaters of the Peace River Basin you will find Shus Nadloh.

For generations my family has been connected to the Shus Nadloh area. Our connection to the land can be found through the names of places, medicinal plant collection areas, birthing areas; and all throughout the Rainbow Creek watershed we have trails, hunting, fishing and trapping areas. On Rainbow Creek my father built a cabin, which is only 13 km from the mine site. On the Nation River we have small villages that are only 24 km from the mine site. Our ancestors have told us

time and time again: It is the Land that gives us our Identity and makes us who we are.

The watersheds that begin in the mountains are sacred areas. It is the mountains that hold the cleanest waters and the powerful plants to make medicines. Shus Nadloh is not only an ideal place for my family and my ancestors, but also it has always been a home for beavers, caribou, moose, bears, and grizzlies. The wetlands around Shus Nadloh are also a resting area for migratory birds in the fall as they make their way south and in the spring when they return to their homelands in the north.

We have a responsibility to keep the land healthy.

My grandfather, my father and uncles knew about gold in the Shus Nadloh area. In 1871 gold was discovered at Manson Creek, just north of Nation River and Shus Nadloh. There were prospectors from everywhere traveling through our territory, and even though my grandfather knew the gold was there, he believed it was more important not to tell anyone about it. One reason to keep the secret was that money made people crazy and would cause fighting. A second reason was that the land was what we lived off, and it was more important that his children and grandchildren be able to continue their connection to the land by hunting, trapping, fishing, and gathering.

Then in the 1980s gold prices went up again and claims were staked. Our territory was invaded by people who wanted to get rich quickly. Shus Nadloh was claimed, but we were not aware of the plans that were being made for our territory. By 1993 the Mt. Milligan project had gone through a government assessment process and a mine was being planned, and we were basically left on the sidelines to watch as strangers entered our territory.

When gold prices dropped drastically and since the Milligan project was a low grade type of gold and copper, the project was shelved as uneconomical. At the time we did not realize what a blessing that was. We were spared from water contamination, acid rock drainage and metal leaching, and the dislocation and destruction of our territory. Like my an-

cestors, my family was able to continue our occupancy and use of our Keyoh around Shus Nadloh and the Nation River.

Let me be clear, Nak'azdli is not against development in our territory. We understand the importance of economic development for the betterment of our members. Nak'azdli has been very successful at building an economic development corporation. In the 1980s we started investing in a logging company. In the 1990s we built a gas bar and a value added mill. In 2009 Nak'azdli opened up a grocery store. Profits from the Economic Development Corporation go back into the Nak'al Bun school and into recreation programs. What we have come to realize through all our economic development is that it is not just about making money. There has to be a balance between economic development and the impact we have on the environment.

So it should not have been a surprise to anyone when Nak'azdli took a stand to protect our territory in 2006 when we found out that a new company had interests in reviving the Mt. Milligan project at Shus Nadloh. Terrane Metals was the company the British Columbia (BC) government gave an exploration permit to, without any consultation with Nak'azdli. So after the fact, the company came to Nak'azdli to start discussions.

Nak'azdli was very clear to this company: If you want to develop a mine in our territory that will impact our members, then there is a cost of doing business in Nak'azdli territory. No longer will a government or company do as they wish in our territory. Nak'azdli is going to be involved in the planning and decisions that are made about the Mt. Milligan project.

To be fair to Terrane Metals, they did attempt to do things in a respectful manner at the beginning. We negotiated a process with the company that saw Nak'azdli in charge of producing a document called the Aboriginal Interest and Use Study. This document focused on asking how the proposed Mt. Milligan mine development would impact Nak'azdli. We looked at five main areas where impacts would occur: economic impacts, environment impacts, legal impacts, social impacts, and cultural impacts.

This document was to help the company prepare its application for the BC environmental assessment (EA) process. Nak'azdli was committed to working with the company as they made their way through the EA process.

Nak'azdli also wanted to ensure that our members were making an informed decision about this project. The decision to accept the project was not just up to the Chief and Council. The whole community was going to be impacted, so the entire community needed to be informed. We were not just going to hear the company's side of the story of what a great project Milligan was, or how many jobs it would bring and what a small impact it would have on us. We wanted to hear about the true impacts mining has on Aboriginal communities.

As we set out on the path of making an informed decision, we started to see signs that the company was worried that Nak'azdli was asking too many questions. There were concerns about the types of studies that community members wanted done, for example, the environmental contaminants study. At public meetings company representatives were telling people that Nak'azdli was against the project. Nak'azdli was told "to leave it to the expert" and we heard over and over again that "we need the jobs that this project will bring to the region." I was accused of holding out as the Chief because my family just wanted more money. False allegations were made that this was not about the environment and Nak'azdli was being greedy and selfish.

Nak'azdli took a stand against the cookie cutter approach of the BC EA process. We understood the importance of conducting an Environmental Assessment, but had heard the courts say that these types of assessments need to be developed with First Nations, not dictated by governments. We realized that the EA process does not address our Aboriginal Rights and Title to the lands impacted, or address our cultural loss. Nor does it address the social impacts that accompany mining developments.

And so we proposed a way that would be fair and innovative. We asked BC to respect our request to conduct an assessment that was more inclusive of Nak'azdli. BC refused to

address Nak'azdli's concerns, and when the EA certificate was approved in March of 2009, Nak'azdli was left with no option but to challenge the process and approval by going to the BC courts.

Nak'azdli asked the Federal Government of Canada to address the concerns we had about the impacts to the environment, to our culture and to our way of life; but, it decided to approve the Mt. Milligan project in November 2010. We have filed a case in federal court against Canada's decision.

Nak'azdli is also challenging the sale of the Mt. Milligan project from Terrane Metals to Thompson Creek in October of 2010 due to the lack of consultation. The Haida case clearly stated that the selling of companies should not be seen as a mere business transaction when aboriginal title and rights are going to be impacted.

So where are we today? It needs to be understood that even though Nak'a zdli learned about all the impacts this project will have—we will never be able to be hunt and gather around Milligan Creek, Canada and BC has allowed the company to destroy this area; our land will never be the same—we are still at the table to talk about possible development. If there is going to be a project in our territory we want it to be the best, with the least impacts to the environment and to our Keyoh stewards.

There has been a lot of focus on the matter of whose territory is home to the mine site. Is it Nak'azdli's or is it McLeod Lakes? But I think the discussion should not be: is it Da'kelh (carrier) or Sekani territory?, because it is not so clear. Instead let me share with you this, my Grandfather Lh'ta'ten Sam mother was Deneza', my grandmother Louise Cho is the great granddaughter of Chief K'wah from Nak'azdli, so I am Carrier and Sekani/Deneza' decent. What we know for sure is that members from Nak'azdli and McLeod Lake will be impacted by this development.

What I have learned from this experience? Well, if I had it to do over again, I would spend more time with our neighbors from McLeod Lake, so that we would have a better relationship established before discussion with the company

and government began. Clearly, what First Nations need to realize is that it is not up to the Government of BC or Canada to decide whose territory a development is in. It is up to the First Nations to come together to decide together and to find solutions together without any interference from government and industry. Nak'azdli is committed to working with our neighboring First Nations on partnership agreements.

Today, Nak'azdli has a project in our territory to which we have NOT given our consent and the construction of this project is already impacting us. Members are being told they have to ask a third party for access to our traditional territory. We are told that we can only visit the site once a year. There has been a sewage spill and a diesel spill at the mine site, and a road that was built last summer was slumping towards Rainbow Creek this spring.

We have no plans developed with the company to set out how the construction site is monitored. Members from our nations have been served an injunction by Thompson Creek that prevents them access to their Keyoh. Our health center is starting to see increased demands on services. We are starting to see the emergence of a drug war within the community.

What we are not seeing are the jobs that the company and government promised would come. Actually, a month ago, a professor from SFU, Peter Hall, stated: "Mining is not an activity that delivers a lot of jobs." Two years ago, Dr. Marvin Shaffer's study found high paying jobs tend to go to outsiders, brought in because of their skills and experience and that communities are left with low paying jobs and high social costs.

The Government of BC has put in front of us an Economic Community Development Agreement, which is a step in the right direction; but such an agreement should not limit a First Nation's ability to protect its land in exchange for a small revenue sharing opportunity. The company has presented to us a draft impact benefits agreement, without any negotiations. It says its offer is the industry standard, but by no stretch of the imagination is it industry standard compared to what is happening in other provinces.

I came here today to tell our story. From Nak'azdli's perspective, the Mt. Milligan project is an example of what NOT to do. Divide and conquer is not the way to get a mine approved. First Nations have the solutions.

- First Nations should be given the opportunity to develop Land Use Plans, so they can decide where and when development can occur on their lands;
- The BC Mines Act needs to be updated, BC needs to get rid of the free entry system;
- There needs to be a reform of the BCEAO (British Columbia Environmental Assessment Office)—not to make it even easier than it is now easier for companies to get approval, but to establish a process that is inclusive of assessing what the social and cultural impacts will be and that monitors a project after approval is granted.

The environment will always be a priority for Nak'azdli. It is not good enough for industry and government to have knowledge about Aboriginal Rights and Title. They need to recognize and acknowledge Aboriginal peoples' connection to the land, and we need to find a way forward that honors First Nations' responsibility to the land and to future generations.

Endnote

[1] Presentation at CAMA 2011, November 7, 2011.



GLOBAL WARMING, RIGHT TO FOOD & U.S. ENERGY POLICY IMPACTS ON ALASKA NATIVE PEOPLES

Faith Gemmill
Neets'aii Gwich'in/Pit River/Wintu, Arctic Village, Alaska

My elders have stated that the land is no longer the same. As time goes by, our environment is changing due to global warming. Climate change is upsetting the delicate balance in many ecosystems. This affects our peoples' ability to sustain our subsistence livelihoods. The changes are happening at an alarming rate, and are easily noticed.

The lakes are dry. These lakes are very important subsistence fishing lakes. They have always provided our people with our springtime fishing; and the fish were delicacies for our peoples in the spring. The plentiful fish of the past are gone. When I fly north to my village, I look down on our lands and many of the lakes that dot the landscape are completely dry.

There is a huge lake that is to the southeast of our village, which is a very important hunting and fishing place for us. Long ago an old man lived there and he had a vision. He told

the people that in the future, that entire lake would be dry. It seems that this vision is becoming our reality now.

In our village we are surrounded by mountains. There are big glaciers on the sides of the mountains, but now the glaciers are all melting, and some exist no more. These glaciers are very important places that the caribou go when they are within our territories—the caribou take refuge from heat and mosquitoes on the glaciers. There are certain times of the year that we know that is where the caribou are…but now, where do the caribou go to rest and find relief?

Half of our land base, the Venetie Reserve of 1.8 million acres, burned in forest fires in 2004. The land is drying out so the fires are coming more and more, and are burning closer to northern communities.

The plants are growing faster—the spruce trees and the willows; and as for our berries, we have noticed that our berries come to ripeness, and then in mid or late July when it comes time to pick the berries, they have already dropped. The reason is due to strange weather; just when berries ripen, we get a cold spell—just like winter (in July)—and then they drop. The other factor is that the dryness in the summers causes the berries to dry out before it is time to harvest, which means we have to go farther from the villages towards colder and more wet areas for the berries. Last year, in Venetie, we had to drive 20 miles out for blueberries. Each year it is the same nowadays, we are lucky to get berries in the summers now.

The burning of fossil fuels is the major human cause of emissions that are resulting in global warming. Global warming is leading to shifts in the world environment that are resulting in a significant increase in devastating and alarming weather patterns. Effects of global warming in Alaska alone include altered weather patterns, more severe storms, erosion of coastal areas, greater precipitation, thawing permafrost, melting sea ice, receding glaciers, increased instance of spruce bark beetle infestation, increased and severe forest fires, declining fish populations, migratory and habitat disruptions of key subsistence resources, and disruption of all natural cycles

of life. These impacts lead to loss of subsistence resources and rights, relocation of communities, and to negative social statistics related to human health. One of the major impacts is Alaska Native communities are struggling with forced relocation as coastlines no longer protected by sea ice erode. They, in essence, are now becoming environmental refugees or climate refugees.

The current impacts of climate change on Alaska's indigenous peoples are perpetuated by the incessant demand for energy to feed the high consumption appetite of America. Current energy policy disproportionately targets our homelands and continually puts our subsistence way of life at risk. The sovereign authority of Alaska Natives is undermined as our ancestral ways of life and homelands are imperiled by devastating proposals for further resource extraction of fossil fuels and minerals. The devastation is compounded by climate change and vice versa.

One of the most disturbing events that we can attribute to global warming happened in the year 2000. The caribou were on their spring migration to their calving grounds, which are located in the coastal plain of the Arctic National Wildlife Refuge, from their wintering grounds in Canada. This is the Porcupine Caribou Herd I am talking about. The snows in the winter are heavy nowadays, and so the females were trying to go forward in their migration in time for their young to be born safely in the Refuge, and the heavy snows slowed their migration. The herd met the Porcupine River, which they had to cross to get to their calving grounds. The ice on the river had broken early, and the females could not cross, and so they tried to wait till the ice flow was done; but this was too slow and the females dropped their calves right there on the Southside of the river. Even if the caribou are forced to drop their young in a place other than their calving grounds, their natural instincts compel them to move onward to the calving grounds for safety of their young. And so once the ice flow was done, the mothers started swimming across the river and the young tried to follow the mothers—but they were too young and they drowned. We lost 15,000 calves right there! That represents 40 percent of the herd. This is a herd of 123,000 caribou.

This was devastating for the Gwich'in people. The people in the village of Old Crow watched as the dead calves came floating down the river past the village, and they cried. Our peoples mourned this great loss, because in our way, we are a part of the caribou and the caribou are a part of us. This was the worst of the effects of global warming we have seen so far. But our elders tell us that we are just beginning to see the long-term effects on our peoples' lives and our traditional subsistence foods, which have always sustained us, our cultures, and allowed us be who we are.

Masi' Choh Shalak Naii

Thank You all My Relations.



ENHANCING INDIGENOUS PEOPLES' CAPACITIES TO ASSERT & CLAIM THEIR RIGHTS & TO CONTRIBUTE TO THE SUSTAINABILITY AGENDA: THE TEBTEBBA STORY[1]

Victoria Tauli-Corpuz
Executive Director, Tebtebba

Human Rights Violations and Development Aggression

In the 90s, when Tebtebba was born, gross incidents of human rights violations against indigenous peoples were happening almost on a daily basis. Countries like the Philippines, Guatemala, Peru, Indonesia, among others, were still or just coming out of decades of military dictatorships with terrible and continuing stories of massacres, displacements, and tortures of indigenous peoples. And yet the capacities of indigenous peoples to document, expose and campaign on these issues and obtain justice are very limited. Knowledge about International Human Rights Law, including on the complaints mechanisms of various UN Human Rights Treaties, was very low. Indigenous peoples, particularly those from the South, hardly brought complaints on the human rights violations against them to the UN.

It was also in the 90s when aggressive globalization of the capitalist-industrial system was at its height. Many indigenous territories, whether in the South and the North, were regarded as resource bases from where minerals, metals, oil, gas, coal and logs will be extracted and exported. This paradigm characterized by incessant growth and accumulation, environmental unsustainability, cut-throat competition, unsustainable production and consumption, domination of nature and a highly-individualistic culture was systematically perpetuated through state laws, policies and programs.

Indigenous peoples' traditional livelihoods and economies, sustainable ways of managing diverse ecosystems, traditional knowledge, and customary governance systems were denigrated as backward, unscientific and non-productive. These were considered as obstacles to progress, modernity and development. Even the United Nations, adopted and promoted this dominant development and economic model.

Clearly, indigenous peoples were not the beneficiaries, but the prime victims of this dominant paradigm. The violations of individual and collective human rights of indigenous peoples came along with the implementation of this development model because their lands, territories and resources had to be expropriated and exploited, their customary institutions destroyed and any form of resistance to these was met with impunity. We called this development aggression, the violation of human rights in the pursuit of the dominant model of development.

Birth of Tebtebba

We were very concerned about what we and our indigenous counterparts were witnessing and experiencing. We wanted to change the turn of events by raising the awareness of the world on the human rights violations we were suffering from. We were concerned that indigenous peoples were not usually representing and speaking for themselves in various spaces where decisions are made directly affecting them.

In the rare occasions where we were present, we lacked the necessary preparations and capacities to be able to effectively influence decisions in our favor. We were also equally concerned that while there are peoples' movements working for the liberation of the oppressed in various parts of the world, these were not adequately addressing indigenous peoples' oppression and discrimination and supporting their right of self-determination.

We wanted the world to be aware and support our knowledge and ways of sustaining nature while using its bountiful gifts for our subsistence and well-being. We wanted to use, occupy or create spaces where we can air our complaints and seek remedies and redress for these injustices. We wanted to be in arenas where our rights are being negotiated and where decisions on development and investment policies and programs affecting our territories and lives are being made. We wanted to engage peoples' movements and other social movements to make them more sensitive to the realities, worldviews and rights of indigenous peoples.

For all these to happen, however, we needed to have institutions and the necessary resources in terms of funds, technical assistance, empirical data and research to back up our complaints, claims and assertions. We needed to train and support indigenous leaders, activists and spokespersons who are willing to go to such meetings and are able to communicate and project well their issues and concerns. There has to be a core of activists who will be supported financially and technically to do this kind of work on a full-time basis. Getting right policies in place or reforming bad policies cannot be done in an arbitrary manner. There has to be a comprehensive strategy to carry this out.

A few of us, indigenous and non-indigenous activists, who were members of the anti-dictatorship peoples' and national liberation movement in the Philippines, made the decision to set up Tebtebba. When we gave birth to Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education) in 1996, we were clear that our reasons for being are: first, to help enhance the capacities of indigenous peoples to assert and claim their human rights and to get

states to respect, protect and fulfill these. Secondly, to raise the awareness of the dominant society on indigenous peoples' realities, rights, worldviews and perspectives on sustainability, development and well-being. Thirdly, to help put in place right policies and reform the bad ones, both at the global and national levels. And lastly, to help create spaces and networks or engage in existing spaces, where indigenous peoples' rights and development issues will be discussed and addressed.

Active Engagement with the UN

We made a conscious decision to directly engage with the United Nations, which is the body that adopted human rights and humanitarian conventions and instruments and multilateral environmental agreements relevant to indigenous peoples. So we participated actively in the bodies where the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) was being drafted, negotiated and adopted. We fully engaged in the UNDRIP processes until it was adopted by the UN General Assembly in 13 September 2007.

To facilitate our participation in the UN, we applied for a Special Consultative Status with the UN Economic and Social Council (ECOSOC). Our application was approved by the UN NGO Committee in 2001. Having this status allows us to attend any UN meeting (except for the General Assembly and Security Council) and submit reports or statements to the various meetings and bodies of the UN. We were among the five indigenous peoples' organizations who have this status and the first one from a developing country.

Together with other indigenous peoples, we dreamt and strategized on how we will get the UN to establish the UN Permanent Forum on Indigenous Issues (UNPFII). This was achieved through a General Assembly resolution 2000/22 and its first meeting was held in 2002. The UNPFII is the highest body within the UN which addresses the issues of indigenous peoples in the areas of education, economic development, environment, culture, health, and human rights.

In 2004, when our colleagues from Asia offered to nominate me to the Permanent Forum as one of the Asian indigenous experts, I readily accepted the challenge. I became a member in 2005 and was elected every year from 2005 to 2009 as the Chairperson of the Forum. With this position I was able to bring in more easily within the UN, the synthesized and consolidated views of indigenous peoples' on human rights, development and sustainability. Various themes such as Millennium Development Goals (MDGs), climate change, development with culture and identity, data disaggregation, and indicators of indigenous peoples' well-being and sustainability, among others, were discussed during my term. It was also during this period that the UN Report *State of the World's Indigenous Peoples* came out.

As Chair of the Forum, I was able to play an active role in lobbying Ambassadors of the various Permanent Missions of UN member-states in New York to vote for the adoption of the UNDRIP. Together with other indigenous leaders, I met twice with the President of the General Assembly to appeal to her to table the adoption of the UNDRIP in its 66th and 67th sessions and to facilitate dialogues between governments and indigenous peoples. When the UNDRIP was adopted, I was able to address the General Assembly on behalf of the Forum and indigenous peoples.

The Forum, during my term, was able to undertake its first official country mission visits to Bolivia and Paraguay to look at the situation of forced labor of indigenous peoples. It was also during this time that the first General Comment on Article 42 of the UNDRIP was prepared by the Forum, which was written by our colleague, Karsten Smith, the former Chief Justice of the Supreme Court of Norway. This Article calls on the UN, including the Permanent Forum on Indigenous Issues, to promote respect for and application of the UNDRIP and follow up its effectiveness.

Engaging with the Negotiations and Implementation of Multilateral Environmental Agreements and Rio +20

Part of our work has been to take part in the negotiations in the UN Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD) and to enhance capacities of indigenous peoples to get some of the agreements implemented nationally. We also have been and continue to be active in the processes within the Commission on Sustainable Development (CSD), which is the body in charge of the Rio +20 processes. The CSD was mandated in the 1992 UN Conference on Environment and Development, held in Rio de Janiero, Brazil, to oversee the implementation of the Program of Action (Agenda 21), which was adopted by the conference. Tebtebba, since its establishment in 1996, took on the task of coordinating the indigenous peoples' caucus within the CSD and it continues to play this role up to the present.

Indigenous Peoples as Custodians and Stewards of Biodiversity

Our survival as indigenous peoples is linked directly with our capacities to protect their ancestral territories and the resources found therein and also the continued use of our customary laws and traditional knowledge systems. Biodiversity within these territories is one of these resources.

There is no question that conserving biodiversity and ensuring its sustainable use is a central concern of indigenous peoples. Thus, Article 8(j) and Related Provisions of the Convention of Biological Diversity (CBD), which deals with traditional knowledge, innovations and practices of indigenous peoples and local communities, became the focus of the work of the IIFB (International Indigenous Forum on Biodiversity)

and Tebtebba. Traditional knowledge, as a cross-cutting issue, has also been included in thematic programs of work such as forests, agriculture, mountains, and islands, as well as other cross-cutting program areas such as Protected Areas.

Article 10 (c), which is on the customary sustainable use of genetic resources, is equally relevant to indigenous peoples. Tebtebba, jointly with other NGOs like the Forest Peoples' Programme, worked to ensure the implementation of the program of work of this Article. We helped document customary practices of indigenous peoples on the use of biodiversity and related traditional knowledge. We organized seminars-workshop to elaborate further on this issue and make plans for its better implementation. Our work on indicators included the need to monitor how traditional occupations of indigenous peoples are sustained. Traditional occupations are directly related to customary sustainable use of biodiversity.

Within the CBD, Tebtebba headed the indigenous caucus called the IIFB Working Group on Indicators and also led the Communications, Education and Public Awareness Working Group. The Indicators Working Group, together with other NGOs, worked for the inclusion of strategic goals, targets and indicators, which are important for indigenous peoples. Indicators are used to measure the progress in the implementation of the Strategic Plan for Biodiversity (2010-2020). We also influenced the previous 10 year Strategic Plan.

Monitoring with the use of these indicators means that when governments will make reports on how they are implementing the 10 Year Strategic Plan, they will have to measure progress in these linguistic diversity, changes in land use and tenure, and practice of traditional occupations. The assumption underpinning these indicators is that linguistic diversity, respect of rights to indigenous peoples to their traditional territories and ensuring the continuation of traditional occupations, lead to further protection and conservation of biological diversity.

Aside from all these, Tebtebba actively took part in all the negotiations leading to the adoption the "Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable

Sharing of Benefits Arising from their Utilization" in the 2010 Conference of Parties. In the preambular section of this protocol, the UNDRIP was noted and "the right of indigenous and local communities to identify the rightful holders of their traditional knowledge associated with genetic resources, within their communities" acknowledged. The Protocol also affirmed that prior informed consent of indigenous peoples be obtained for access to their genetic resources. However, this is watered down by the phrase "in accordance with domestic or national law." Most states do not have laws which recognize the rights of indigenous peoples. There are several parts of the Protocol which have watered down the rights of indigenous peoples, which means much more work needs to be done in the implementation of this Protocol at national levels.

Need to Respect Human Rights and Enhance Capacities of Indigenous Peoples to Contribute to Climate Change Adaptation and Mitigation

For the climate change convention (UN Framework Convention on Climate Change/UNFCCC), Tebtebba also took part in this arena since 2000. It was only in 2007, however, when we got more fully engaged—meaning that more persons from Tebtebba participated—and we covered not only the Conference of Parties (COPs) but also the intersessional negotiations taking place before this. Most importantly, we forged partnerships with 13 indigenous networks and organizations and one non-indigenous NGO from 11 countries in Asia, Africa and Latin America. With this, we had greater possibilities to influence the decisions of the UNFCCC and the implementation of agreements on the ground level.

We saw an opportunity to push for the recognition of the importance of respecting human rights and indigenous peoples' traditional knowledge systems in both climate change mitigation and adaptation decisions and processes.

It is bad enough when we suffer from the adverse impacts of climate change. What is even worse is when we suffer from climate change solutions. For example, the Convention agreed that developing renewable energy sources is one of the solutions for climate change—the mix of renewable energy sources included hydroelectric dams and biofuels. It is a well-known fact that violations of indigenous peoples' rights, such as forced displacements, killings and torture, etc., happened in the construction of mega hydroelectric dams in indigenous territories in many countries. Likewise, the expansion of biofuel plantations like oil palm and jatropha in Indonesia, Cambodia, India, etc., has led to the displacement of indigenous peoples from their lands and conflicts are rife in these communities.

The report done by the UN Human Rights Council on "Climate Change and Human Rights" also identified how indigenous peoples are among the most vulnerable and the suffering most from climate change impacts. The Shared Vision section of the Cancun Agreement did recognize the human rights implications of climate change. It also recognized that among the most vulnerable to the impacts of climate change are indigenous peoples. It acknowledged the UN Human Rights Council Report.

In 2009, just before the COPs in Denmark, I was requested by the Philippine government to be one of the members of the Philippine delegation and I was assigned to cover the negotiations on REDD Plus.[2] Since forests are issues close to the hearts of indigenous peoples and since most of the tropical forests, the subject of this item, are in indigenous territories, I welcomed this assignment.

Forests became central to the negotiations on climate change mitigation because scientists who are members of the Intergovernmental Panel on Climate Change (IPCC) concluded that almost 20 percent of the carbon dioxide emissions come from forest, particularly tropical rainforests. They also established that the amount of carbon still contained in tropical forests, including peatland forests, are equal to what is found in the atmosphere. Forests play a major role in carbon sequestration.

Inasmuch as the UN Declaration on the Rights of Indigenous Peoples has already been adopted in 2007, we saw that this is the right time to push for the recognition of this instrument in the climate change decisions. While we want the recognition of the UNDRIP to be contained in the section on Shared Vision of the Cancun Agreements, we faced great resistance from states. So we focused on the REDD Plus Agreements, where we saw that it would be politically costly if states continue to resist acknowledgement of the UNDRIP.

Many of the violations of indigenous peoples' rights took place and continue to happen among indigenous peoples who either dwell in the forests or are dependent on the forests. Most states, especially in the Global South, have declared forests, including those customarily owned and managed by indigenous peoples, as public lands or national parks, which vests on them control and ownership. Indigenous peoples' in several parts of the world resisted these moves of states to claim ownership over their ancestral forests. This is one reason why there are still ongoing conflicts, armed and unarmed, between forest-dwelling and dependent indigenous peoples and the states.

We did not like to see REDD Plus as another mechanism whereby the states will further entrench their control and ownership over our traditional forests and justify the further displacement of indigenous peoples. We did not like REDD Plus to inflame further the conflicts between forest-dwelling and dependent peoples and states. It is with this backdrop that we got fully engaged in influencing the decisions on REDD Plus and other climate change agreements.

In Cancun (2010), we succeeded in getting a REDD Plus Agreement, which integrated social, environmental and governance safeguard mechanisms that should be addressed when REDD Plus is implemented. It acknowledged that the rights and knowledge of indigenous peoples and members of local communities should be respected and addressed and their full and effective participation should be ensured. This also recognized that the UNDRIP was adopted by the UN General Assembly. Furthermore, the Agreement recognized the importance of conserving biological diversity and the

non-conversion of natural forests into other uses, as well as the need for good forest governance. The need to deal with the drivers of deforestation, land tenure and gender considerations and the need to monitor and report how safeguards are being addressed and respected were also included in the Agreement.

The IIPFCC (International Indigenous Peoples' Forum on Climate Change) members, particularly the Tebtebba partners in the Indigenous Peoples' Partnership on Climate Change and Forests, focused a lot of their work in ensuring that the parties are going to adopt the safeguards, include the recognition of the UNDRIP, and acknowledge that gender and the drivers of deforestation and land tenure issues need to dealt with as well. As a member of the Philippine delegation, I was inside all the negotiations including the closed door negotiations. I had to work hard to convince other delegations to support the demands of indigenous peoples. Based on our experience with the adoption of the UNDRIP, we know very well that it is important to constantly dialogue with negotiators and enlighten them on the importance of your issues. Therefore, it is equally important to have indigenous persons as parts of the delegation because we can witness and influence what takes place in these closed spaces.

After the Cancun Conference of Parties, I was invited by the Chair of the Subsidiary Body on Scientific and Technological Advice (SBSTA) of the UNFCCC to co-chair the Working Group on REDD Plus. The Working Group is mandated to negotiate the methodological guidance on how to measure, monitor, report and verify the implementation of the REDD Plus Agreement. This includes methodologies on the monitoring and reporting processes on how the safeguards in REDD Plus are going to be addressed and respected by REDD Plus countries.[3]

Linking Global Gains to the Local

While we are undertaking the global negotiations with our partners, we are also working with them to strengthen their capacities at the national and local level. We brought our partners to the global negotiations; organized training-workshops with them and their constituencies on climate change, forests and indigenous peoples' rights; jointly did researches on national forest policies, their forest-related traditional knowledge, indigenous women's knowledge systems and their roles in forest conservation and use; and supported traditional and alternative livelihoods, which will not put much pressure on the forests.

This partnership was forged in 2009. Since then, it has become a very vibrant formation in terms of developing and exposing indigenous activists and leaders to be effective in global policy advocacy work and communications, education and public awareness work. The key representatives of our partner organizations became members of the national multi-stakeholder formations on climate change and on REDD Plus in their countries. Aside from me, some of our partners were invited to sit as members of the official delegation of their countries.

Each of our partners are working directly with indigenous peoples in tropical forest communities in their countries. NEFIN,[4] for instance, is a member of the Nepal REDD Plus Cell, which was set up by the government, and it is in this arena where our partner watches closely how the government is implementing and putting in place mechanisms to respect the REDD Plus safeguards. There is still a long way to go to get governments to genuinely implement the safeguards. It is a very new thing, especially for governments who have long ignored and discriminated against indigenous peoples. But the fact that our partners are there and they are doing their best in terms of strengthening traditional forest management systems and getting indigenous peoples to assert and claim their rights and knowledge is a major step.

Indigenous Peoples' Attempts to Influence Rio +20 and their Efforts to Implement Sustainable, Self-Determined Development in their Communities

As mentioned earlier, Tebtebba has a long history with the Commission on Sustainable Development. As part of our role as the convenor of the Indigenous Peoples' Caucus of the CSD since l997, we also co-organized the Rio +5 UN General Assembly Special Session that year. This was the first time we got indigenous persons to address the UN General Assembly. For the Rio +10 process in 2002, we were also centrally involved. We organized the Indigenous Peoples' Preparatory Meeting in Bali, Indonesia, when the official preparatory meeting was held.

Then during the official summit, which was held in Johannesburg, we organized the Kimberley Indigenous Peoples' Global Summit on Sustainable Development were more than 200 indigenous representatives and almost all the regions were represented. This was held before the official summit. We developed our Kimberley Declaration and the Indigenous Peoples' Plan of Implementation for Sustainable Development.

It was during this Summit where we got the heads of states to approve a sentence in the Preamble of the Johannesburg Declaration, which "reaffirmed the vital role of indigenous peoples in sustainable development." The use of the letter "s" in the phrase "indigenous peoples" was a major victory for us. The use of "s" has been a sticking point since the drafting of the UNDRIP. States were resistant to this because the use of the word "s" in peoples acknowledges that indigenous peoples have the right to self-determination.

For Rio +20, we wanted indigenous peoples to assess how the "Indigenous Peoples' Plan of Implementation for Sustainable Development" (Johannesburg, 2002) has been implemented. We also are keen to influence the Outcome

Documents for Rio +20. What we have done so far is to help organize the Global Indigenous Peoples' Steering Committee for Rio +20. This group, which consists of focal points from the seven indigenous regions, met in Manaus in August 2011 to discuss the preparations for Rio +20.

To influence the Rio +20 Outcome Documents, we already submitted the key messages of indigenous peoples. These key messages are the following:

- Recognition of the need to respect and fulfill the rights of indigenous peoples rights to their lands, territories and resources as a key component of sustainable development;
- Acknowledgement that the UNDRIP is a key human rights instrument which should underpin sustainable development;
- Importance of indigenous peoples' traditional knowledge systems in promoting sustainable development and the need to adopt the knowledge-based approach as a key approach for sustainable development;
- Inclusion of culture as the fourth pillar or component of sustainable development; and
- Recognition and support of indigenous peoples' sustainable local economic systems as the real examples of sustainability and green economies.

We submitted our key messages to the ECOSOC and some of our messages are integrated into the Zero Draft. The ones included were those on traditional knowledge, the UNDRIP, and some references to culture as an important component of sustainable development.

In terms of how forests should be addressed in the Rio +20 process, we think that the situation does not yet present the need for a Forest Convention. We remembered well the debates in Rio 92 on the need for a Forest Convention and many of the issues then remain up to now. The main contention that time was from forest countries in the South who looked at their forests as a resource for their economic development. Those countries from the North wanted a Forest Convention, which will contain minimum standards needed to control deforestation and forest degradation.

The UN Forum on Forests has not advanced much in addressing the contentious issues surrounding the need for a Forest Convention. So, maybe the non-legally binding Forest Treaty made by the Forum should still remain for now.

Tebtebba is of the view, that all UN agencies. conventions and bodies dealing with forest issues should sit down together to discuss more comprehensively how to address forests and the roles these play in relation to economic development and ecological sustainability. There is still too much fragmentation on how forests are addressed. In all these, indigenous peoples who are forest-dwellers and forest-dependent should be centrally involved in these discussions and negotiations.

Conclusion

Tebtebba's method of work in linking indigenous peoples' local realities and demands to the global arena and bringing down the global gains to the community level, we believe, is what makes us a unique and useful institution. Our work to influence global decisions has also shown us that this can be done as long as we are focused and we are able to sustain the work which takes a long time. The proofs that this can be done is the adoption of the UNDRIP, the establishment of the UN Permanent Forum on Indigenous Issues, the Special Rapporteur on Indigenous Peoples' Rights, among others. We also managed to influence the UNFCCC and the CBD to recognize the UNDRIP.

Having achieved all these, our focus now is to work for implementation of the UN Declaration on the Rights of Indigenous Peoples on the ground. This is why the partnerships we established are very important. We have developed the integrated and holistic framework to indigenous peoples' sustainable, self-determined development. This framework combines the human rights approach, ecosystem approach, knowledge-based approach, and the intercultural approach. We are developing the training modules for these and holding training sessions for our partners to internalize this framework and use this in their community work.

If governments are slow in implementing the human rights and the environmental agreements they ratified, then we have to strengthen the capacities of indigenous peoples and local communities to implement these themselves. They are the ones most concerned in ensuring that their territories are sustained ecologically. They are the ones who have to make a living from their natural resources, and it is in their interest to ensure that these are not rapaciously exploited that nothing will be left for their future generations.

We have communities who are piloting the implementation of the ecosystem and human rights approach and we now have local governments who are willing to support our and our partners' programs. This is happening in the Philippines, Nicaragua, Brazil, Nepal, and in Mexico.

This is where our hopes lie. If we are able to multiply the number of communities operationalizing this framework, slowly, we will be able to see the realization of sustainability and development with equity and justice.

Endnotes

[1] Excerpt from an article written by the author and published by Evangelischer Entwicklüngsdienst (EED).

[2] REDD Plus is the popular name, which stands for this official agenda item under the Bali Action Plan that was adopted at the Cancun Conference of Parties in 2010. This is entitled, "Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries."

[3] REDD Plus countries are the developing countries with tropical forests who volunteered to implement REDD Plus. These are countries who are receiving funds from the Forest Carbon Partnership Facility of the World Bank, bilateral funds from donor countries like Norway, Australia, US, the UK, Germany, etc.; and countries under the UN-REDD Collaborative Programme, which is a joint program of the UNDP, FAO and the UNEP.

[4] NEFIN is the Nepal Federation of Indigenous Nationalities.



INDIGENOUS PEOPLES' PARTNERS COLLABORATE TO CONFRONT CLIMATE CHANGE[1]

Maurice Malanes

TIME was when grandmothers would know when to clear the fields and prepare these for sowing and planting. For example, Prudilla Thomas, an almost 70-year old Miskitu grandmother, has learned since childhood how to chart cropping schedules by the appearance of various animal and plant species in her village of Kisalaya by the banks of the Wangki River in Northern Nicaragua.

"When we see the small turtle begin to walk, we know that we are in January and that it is time to clear (weeds) in the growing fields," she said.

According to Thomas, the appearance of the small turtle signifies the start of a new month, which, in the Gregorian calendar, is January. January is equivalent to what the Miskitu people call Siakwa Kati, or the Month of the Small Turtle.

During this time, Thomas and her villagemates sell wood and coal as they do not have crops yet.

But Miskitu village women noted how times have changed and the change has made life more difficult not only to humans but even to hapless creatures such as the turtle. "It is sometimes a difficult month, even for the little turtle nowadays, because when she (referring to the small turtle) leaves to sunbathe, the river overflows, something that did not happen before," she said.

During Kuswa Kati or the Month of the Large Turtle (which is equivalent to February), large turtles would be seen in rivers and creeks. "She (referring to the female turtle) goes to the rivers and creeks to reproduce. (But) we have seen now how she loses her eggs when the river overflows," said Thomas.

Thomas spoke to Rose Cunningham Kain of the Center for Indigenous Peoples' Autonomy and Development (known for its Spanish acronym CADPI), a research and educational center for indigenous peoples and Afro-descent communities on the North Atlantic coast of Nicaragua.

Cunningham-Kain, a Miskita herself, had a lengthy conversation with women elders from Wangki and noted their comprehensive grasp about climate change.

Cunningham-Kain's conversation with the women elders formed part of a research paper, entitled "The Grandmothers of the Wangki," which was published as part of the book, *Indigenous Women, Climate Change and Forests*.

Published in 2011 by Tebtebba, a Philippine-based global organization dealing with indigenous peoples' concerns, the book contains 11 research papers from some countries where indigenous women highlighted the role of their traditional knowledge and customary laws in forest management.

The research papers contained in the 312-page book on indigenous women, climate change and forest management are just among the activities of Tebtebba and its partners under what is called "Indigenous Peoples' Partnership on Climate Change and Forests."

CADPI is one of Tebtebba's 11 partners in implementing a program called "Ensuring Rights Protection, Enhancing Effective Participation for Indigenous Peoples in REDD Plus Policies and Programs," which began in June 2010 and would end in June 2013.

Being implemented in 10 countries, the program actually is the second phase of an earlier partnership program, "Ensuring the Effective Participation of Indigenous Peoples in Global and National REDD Processes," which was implemented from June 2009 to June 2010. Both phases were supported by the Norwegian Agency for Development Cooperation or Norad.

In her conversation with Cunningham-Kain, Thomas detailed, among other things, what makes up the Miskitu calendar based on the life cycles of animals like the turtle, iguana, birds and fish, besides plants and flowers. But besides these, the Miskitu people have long noted a change in season based on the direction of strong winds. So in the Miskitu calendar there is Waupasa Kati, the month when strong winds begin to blow from the South, and is equivalent to October. There is also Yaba Kati Yaslam, the month strong winds come from the North, which is November.

Each of the months in the Gregorian calendar has its equivalent in this traditional Miskitu calendar. Since the old days the Miskitu had long patterned their farming, religious rites and festivities after this traditional calendar. And in those days, the Miskitu had lived in harmony with their surroundings, anticipating and preparing what should be done according to what was then a normally predictable weather pattern.

But the Miskitu people lament that their traditional calendar has changed. "The months always have the same name, but the signs gradually have changed since those days," said Thomas.

The change in recent years has been extreme. Thomas cites the last hurricanes that hit Nicaragua in recent decades such as Fifi, Mitch and Felix, all of which devastated lives, homes and other property. According to an official report, the destruction caused by the September 2007 Hurricane Felix, in

addition to the lives lost, represents more than 14.4 percent of GDP in 2006, reaching a total of 13.395 million cordobas or US$608,863.63.

Thomas attributes these devastating extreme climatic conditions to the loss of respect to each of the spirits or beings, which, according to the Miskitu, protect every creation.

"Since I was young, I was taught about these beings, and we feared them," she said. "We did not touch what we should not touch. We did not damage the water spouts, and we enjoyed the river. We did not throw garbage into the river or poison the water to kill fish. But now this is done. Although the *liwa mairin* (a being believed to be the real owner of fresh and saltwater) carries people away, they do not listen and are not afraid, not of the *unta dukia* (a being that protects the mountains and large trees) or the *unta dawan* (another forest guardian). They destroy the entire forest."

Thomas was articulating part of a belief system, which Cunningham-Kain noted, has helped maintain peace and a balanced coexistence with Mother Earth. Cunningham-Kain talked with other grandmothers of Wangki who all vividly remembered how the early Miskitu communities were well provided for by Mother Nature. And what nature provided for the Miskitu was supplemented by the labor of their hands.

The Miskitu peoples' idea of peace and balanced coexistence with Mother Nature is also reinforced by their notion *yamni iwanka* or good living. "Good living gives high value to solidarity and reciprocity between men and women, and the harmony with spiritual beings such as *Dawan Aisa* (creator or magnificent father) and the *Isingni*, the spirits of ancestors and nature," said Julie Ann Smith Velasquez also of CADPI. Velasquez wrote another paper, "Indigenous Women and Territoriality Challenges to Equality in the Governance of Indigenous Communities of Tasba Raya," which formed part of the 2011 book Tebtebba published.

"Good living is where there is balance between men and women, as well as between humans and nature and environment," also said Velasquez, citing interviews with women. "It is living in unity with the community, living in organized

manner, having space in which one can sow seeds in order to have food to eat, and it is which recognizes equality in the social, political and economic spheres."

Small wonder that in those days no one was found wanting. This was because, according to the authors, the Miskitu hunted and gathered only what they needed and every catch was shared with neighbors. Even when they learned about farming, such as growing rice, they did it collectively. No one starved then because the community grew crops even for widows and single elderly women.

This "peace and balanced coexistence with Mother Earth" unfortunately began to erode when the Miskitu belief and value system was disregarded. As a result, Mother Earth, according to the grandmothers, is now "tired and worn out," and they "feel her fatigue."

"They recognize that humans are to blame for all the negative things that have been happening," noted Cunningham-Kain, reiterating her conversations with the grandmothers of Wangki. "They know that all these can be connected to the indiscriminate cutting of trees and forest fires caused by humans. The beings that used to protect Mother Earth have left and humans are being punished."

The accounts of the grandmothers suggest "there is much to be learned by taking indigenous knowledge into account of the various efforts, which have been initiated to mitigate the adverse effects of climate change," said Cunningham-Kain. "Such knowledge can give us ideas on how best to adapt, reinvent practices and implement projects."

Deforestation and Forest Degradation

In the whole RAAN (*Regiones Autonoma Atlantico Norte* or North Atlantic Autonomous Regions), the term *mestizo culture* has been synonymous with deforestation, according to another team of CADPI researchers.

"Indigenous peoples and Afro-descendants have the strong perception that mestizos are the main predators of the forest," the CADPI research team said in a paper, "Implementing REDD Plus in Nicaragua: An Indigenous Peoples' Analysis."

The paper is part of a 505-page book, *State of Forests, Policy Environment & Ways Forward*, another Tebebba publication in 2010. The book contains the indigenous perspectives and analyses of Tebtebba's partners in nine countries.

"Mestizo peasants are still seen as individuals involved in less than environmentally harmonious activities and who have a heightened belief in a capitalist standard of enrichment," said the CADPI paper. "This way of life and sense of valuing assets began to permeate the belief systems of indigenous and Afro-descendant peoples to the point that it is possible to find mestizo, indigenous and Afro-descendant individuals alike who contribute to deforestation."

Despite the influence of mestizo culture, indigenous and Afro-descendant peoples' subsistence practices are "less intensive," according to the CADPI paper. The paper cites Engineer Jorge Canales, deputy director of the National Forestry Institute, who said: "They (indigenous peoples) burn one-fourth of a block per family (for slash-and-burn upland farming), and this is permissible because they do not have a commercial purpose compared to the extensive practices of the mestizos."

The CADPI paper, however, stressed that it does not intend to find faults based on ethnicity. "But circumstances have shown that although both Mestizos and indigenous and Afro-descendant peoples practice slash-and-burn agriculture, the Mestizos do it in such a way that the change in land use is permanent and the land is used in the following order: agriculture, pasture and livestock," it said.

In contrast, indigenous and Afro-descendant peoples' land use is temporary, cyclical and rotational. "This gives the ecosystem time for renewal," noted the paper.

The Same Fate

The fate of indigenous peoples in RAAN is also shared by their counterparts in Africa, Asia and other parts of Latin America.

In Southern Cameroon, the Baka people, who are part of the Pygmy community, have been endowed with biodiversity-rich forests where they have hunted and gathered food for their survival. But the Baka peoples' traditional livelihoods have been threatened by three national parks, one world heritage reserve and many "forest management units," all of which have become off-limits to the Baka people. These forest management units are zones for safari hunting and logging activities.

The Baka peoples have been blessed also with springs, streams, rivers and wetlands, which have given them various species of fish and other marine life.

Particularly important to the community is a big fish called *Nbwakha*, an important element in the initiation rites of Baka girls. This fish is needed in the *Yeyi*, a rite of passage to Baka womanhood for girls aged 15 to 23, which is done in the forest as part of the annual *Libanji* Festival. But the Nbwakha fish had disappeared since 1997, according to Lelewal, citing informants. As a result, no such initiation rite has been done in Djoum since that time.

Lelewal is an organization based in Cameroon's capital city of Yaounde, which is one of Tebtebba's partners. Its research paper, "Indigenous Women and Climate Change in South Cameroon," was also part of the book, *Indigenous Women, Climate Change & Forests*.

The Baka peoples had interpreted the disappearance of the Nbwakha fish as a sign of the wrath of *Komba* (the Creator) and they blamed themselves for this. They became aware, however, that the special fish vanished possibly because of climate change, which could be attributed largely to commercial logging and ironically, "conservation" projects.

In Indonesia, indigenous peoples have continued to stand up against what they consider as the strongest "drivers of deforestation"—a multimillion timber industry, massive oil palm plantations, mining, forest and land fires, and transmigration.

Indonesia is the third largest greenhouse gas contributor in the world. According to AMAN (Aliansi Masyarakat Adat Nusantara or Indigenous Peoples Alliance of the Archipelago), one of the largest sources of greenhouse gas emissions in Indonesia is the forestry sector with emission levels reaching 2,563 MtCO2. AMAN, which works on indigenous peoples' rights and is promoting traditional knowledge and customary law, is also one of Tebtebba's partners.

These emissions are the result of deforestation and forest degradation. Approximately two million hectares are deforested and degraded each year.

Deforestation and forest degradation are also facts of life in other countries such as Kenya, Peru, Mexico, Nepal, Vietnam, China, and the Philippines. What is common in these countries is that indigenous peoples, who live mostly forested lands, have protected and conserved their biodiversity-rich forested abodes. Unfortunately, indigenous peoples' knowledge, values and norms that have long governed how they managed their forests have been eroded by a mix of factors.

For example, state laws, private concepts of ownership, profit-oriented economic development, exclusive forest conservation schemes (which fence off indigenous peoples from having access to the forests), and influences of religion and "modernization" have pushed indigenous peoples to the margins.

But as deforestation and forest degradation and their adverse impacts on climate change have become national and global concerns, indigenous peoples have asserted that their valuable traditional knowledge and customary governance systems must be put to good use. Such assertion demands full and effective participation of indigenous peoples in engaging with policy makers in the national and global arena.

And to prepare them for such engagement, indigenous peoples must become familiar with the whole processes of policy making. At the community and tribal level, indigenous peoples have evolved and developed their own traditional decision making processes and institutions.

Still, indigenous peoples' traditional decision making processes and institutions need to help influence also those in the national, regional and global mainstream arenas, where policies—which affect and impact even remote villages—are wielded.

This is precisely the rationale behind Tebtebba's partnership with its 11 partners in 10 countries. The partnership aims to increase support for indigenous peoples, including indigenous women, to enhance their capacity and build on their knowledge, skills and initiatives.

The goal, said Tebtebba executive director and Asian Indigenous Women's Network convenor Victoria Tauli-Corpuz, is "to increase and strengthen their visibility as well as their access to and control over forest resources."

Enhancing Capacities

Influencing policies, however, needs a lot of preparation. This requires enhancing capacities if indigenous peoples' leaders can fully and effectively participate in helping influence and craft policies on how to mitigate and adapt to climate change.

So during the first phase of the project from June 2009 to June 2010, Tebtebba and its partners had to prepare themselves for the tasks ahead through awareness raising, education and training. The publication of an updated second edition of the 195-page *Guide on Climate Change and Indigenous Peoples,* was most helpful as the book became one of the best-selling reference materials for partners. Supplementing the book were newly produced popular information materials and booklets.

Based on these materials, the partners were able to develop a training course manual with five modules about climate change, REDD Plus and indigenous peoples. To ensure that these modules would be disseminated and understood by indigenous communities of country partners, these modules were translated in Bahasa/Indonesian, Spanish, Nepali and French.

With the modules, the partners embarked on training of trainers on climate change.

The trainings during the first phase were further enhanced by a series of trainings during the second-phase (June 2010 to June 2013).

For instance, in September 2010, the partners participated in a training-workshop on the international human rights and environmental laws and the UN Declaration of the Rights of Indigenous Peoples. This activity was crucial in enabling indigenous peoples how to help address the climate change crisis from a rights-based and what is called ecosystems approach, which are closest to indigenous worldviews and systems.

Other trainings followed, all of which were aimed at enhancing the capacities and knowledge of indigenous peoples about policy advocacy, climate change and indigenous women, and mechanisms such as REDD Plus. Trainings at the local level were also held, which included trainings for editors and journalists about indigenous peoples, climate change and REDD Plus-related curricula, diploma and graduate courses, measuring carbon stock, and other related activities.

The trainings and workshops on REDD Plus, for example, were so detailed that two global workshops in 2011 were designed to develop "indigenous-sensitive and gender-sensitive" monitoring, review and information systems, and instruments and tools on REDD Plus safeguards.

Among themselves, Tebtebba and its partners also thought it wise to learn from each other's traditional forest management systems. In September 2010, for example, partners visited the Loita Development Foundation in Kenya. Hosted by the Mainyoito Pastoralist Integrated Development Organization or MPIDO, the partners visited the Loita Naimina Enkiyo

Forest and the Mau Forest, both in Maasai territory.

The two forests in Kenya was a good study of contrasts. Managed by the Loita Maasai communities under the guidance of the indigenous spiritual leader, the *Oloiboni*, and a council of elders, the Naimina Enkiyo Forest had lush covers and rich biodiversity. In contrast, the government forestry unit-managed Mau Forest were quite deforested.

In a visit to Khasur, Lamjung in Nepal, partners discovered how traditional knowledge, including forest management, has been transmitted from one generation to the next through a system called *Rodhi/Rodi*. The Rodhi is a socially organized institution where indigenous Gurung young people gather every evening. Through this evening gathering, elders, most often women, teach young people about norms and cultural values. But young people get to enjoy the evenings as mothers also teach young boys and girls about traditional dances and music.

Partners also visited the Imugan community of Nueva Vizcaya province in northern Philippines and the community of Tasba Pri, Bilwi in Nicaragua. From the communities, partners learned how forests were managed according to traditional management practices and how they developed alternative sustainable livelihoods. Partners also learned from the two communities how the communities measured carbon.

Engagement

On policy advocacy, the trainings and workshops Tebtebba's partners underwent bore fruit. As early as during the first phase of the partnership project, many partners were visible in the global climate change negotiations. Partners trained by the project were able to come out with an indigenous peoples' position, which was integrated in the negotiating text on REDD Plus.

During the second phase of the project, more indigenous partners were supported to participate in various global

UNFCCC (UN Framework Convention on Climate Change) processes. Now more confident to articulate their issues, many indigenous representatives from partners have become part of their governments' delegations to the UNFCCC.

Besides Victoria Tauli-Corpuz of Tebtebba in the Philippine delegation, there was Ibrahim Njobdi of Lelewal as part of the Cameroon delegation. During the UNFCCC meeting in Tianjin, the Kenyan government delegation suggested that indigenous peoples' representatives would be considered in their government delegation to Cancun. So nominated were Joseph Ole Simel and Julian Naisula of MPIDO and Umuro Godana of the Pastoralists Integrated Support Program, an MPIDO partner.

The partnership no doubt has enabled partners to maximize spaces for indigenous peoples' representatives engaged in the climate change debates and negotiations. These spaces may be found within the UNFCCC processes within the plenary halls of UN or at side events and press briefings where indigenous representatives could articulate and assert their positions or where they could sustainable traditional forest management practices.

These spaces for policy advocacy may also be found on the regional and national fronts. For example, in the Philippines, Tebtebba and other civil society organizations helped critique the Philippine National REDD Plus Strategy Program, which was prepared by CoDeREDD, an alliance of civil society organizations.

For its part, CADPI, as a member of the National Alliance on Climate Change in Nicaragua, established a platform, which discusses and analyzes national and international information on climate change and REDD Plus. With this capacity, CADPI has continued to closely collaborate with the regional and local autonomous governments in the North and South Atlantic indigenous territories.

Other partners have been doing equally the same collaboration efforts. MPIDO in Kenya, CERDA in Vietnam, CHIRAPAQ (Center for Indigenous Cultures of Peru) in Peru, Lelewal in Cameroon, and AMAN in Indonesia have

reached a certain stature so much so that their governments either have been consulting or directly have collaborated with them in formulating REDD Plus policies, for example.

Two other crucial areas where indigenous peoples' partners have been sharpening their skills were in research and documentation. Both phases of the project have stressed research and documentation for a vital reason: well-researched and well-documented findings about sustainable traditional forest management practices and livelihoods, for example, are crucial in pushing policies that affect indigenous peoples. The various partners have done just that, selecting subjects and cases for studies, which are relevant for policy advocacy work.

Bees and Pine Needles

Similarly, both phases of the project have demonstration project sites. Three sites were selected during the first phase. One was in Indonesia, another in Nicraragua and one in Kenya. During the second phase, four new sites were targeted in Nepal, Mexico, Peru, and Vietnam.

These demonstration sites could show that ensuring the rights of indigenous peoples to their forests and resources and enhancing their forest conservation and natural resource management could make REDD projects succeed.

A bee keeping project in the Loita community in Kenya is a good example. The project has proved as a forest-friendly alternative livelihood. Ever since they engaged in the bee project, the villagers, who have been organized into a cooperative, have learned to appreciate that they must maintain and protect their forests whose diverse flowers are the source of high-grade honey.

As part of a CADPI demonstration project, another good alternative livelihood in the communities of Sukatpin and Kligna in Nicaragua is weaving handicrafts out of pine needles and cotton yarn. The craft was taught by a Miskitu woman handicraft expert and artist through a series of workshops.

The products the women learned to make include functional handicrafts such as fruit baskets, table placemats, and multi-purpose covered baskets. These products do not only give additional income. The handicraft is one way to prevent the practice of some people who burn the pine needles, which emit carbon dioxide into the atmosphere. And the handicraft stores the carbon for a long time.

The Power of Information

Information, communication and creation of monitoring bodies are the other important components of the partners' project. Tebtebba manages the Indigenous Climate Portal (www.indigenousclimate.org), which informs and updates project partners about relevant activities, documents and books on indigenous peoples, climate change and REDD Plus.

On monitoring bodies, the partners since the project's first phase have collaborated with other civil society groups and the academe to support the continuing advocacy work for indigenous peoples' rights and participation in processes. The project partners had also desired to establish "independent multistakeholder" monitoring bodies to monitor how REDD is implemented. This was aimed to correct weaknesses and problems that may arise.

The partners have learned that many non-government organizations have been interested in putting up a monitoring body on the global and national levels. On the national level, partners have set up various structures and mechanisms with civil society organizations. There is the National Steering Committee on Climate Change for Kenya. Another is the National and Sub-national Committees on Indigenous Peoples, Climate Change and REDD Plus established by AMAN in Indonesia. In Vietnam, there is the National REDD network headed by the Ministry of Agriculture Development and assisted by CERDA. In Nepal, NEFIN is part of the National REDD Cell, but NEFIN set up a body to pressure government. For Nicaragua, CADPI and other organizations

work more closely with the regional council of RAAN. Partners in Peru and other countries in the region have set up a Latin Indigenous Peoples' Forum on Climate Change to unify diverse and varying indigenous peoples' positions in relation to indigenous peoples' rights, climate change and REDD.

In addition, project partners have yet to fully maximize existing grievance bodies and mechanisms at the UN and World Bank. So at one point Tebtebba convened a side event on the grievance mechanisms of multilateral bodies such as the WB, Asian Development Bank, International Finance Corporation, and others. During this side event, project partners realized the need to be trained on how to use and access these grievance bodies.

As they continue to collaborate to address climate change, project partners—backed by a highly motivated Tebtebba Climate Change Project Team—have remained upbeat about their ultimate goal—to help reduce greenhouse gas emissions caused by deforestation and land-changing factors.

As AMAN had said in its June 2009 to June 2010 report, "Climate change and the REDD issue have proved to be quite a powerful entry point to reiterate the demands of recognition of indigenous peoples' rights. There is a window of opportunity at least in the next two years to pave the way to reform policies on indigenous issues in Indonesia through climate change and REDD."

Endnote

[1] This article does not attempt to chronicle all the activities done by Tebtebba and all its 11 "climate change" partners. The article simply highlights some cases and activities to represent what may be called the climate change partnership story.

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KIPAT LAND MANAGEMENT SYSTEM IN ILAM, NEPAL

Santosh Nemban

Piple forest, located in Jamuna and Mabu VDCs[1] of Ilam District in East Nepal, is traditionally protected by the local community up to the present. Despite the efforts of the District Forest Office of Ilam to integrate Piple forest into community forest, the local Thebe indigenous community was rigid in their claim to protect their ancestral *kipat* land (customary system of land tenure with specific rights and regulations). Piple forest, as a result, remained under the stewardship and protection of the local Thebe indigenous community.

According to several Community Forest User Groups, Piple forest is comparatively more protected and conserved than other forests in Ilam District. Ninety-six-year old Tulsihangma Thebe asserts that their ancestors spent centuries protecting and taking care of Piple forest, a traditional practice which will be sustained by the next generation as well. Nine local Thebe families currently depend on Piple forest.

According to Rudrahang Thebe, a local youth, seasonal crops like potato, corn, wheat, and buckwheat is cultivated and livestock reared in some parts of the forest. Even though half their harvest is destroyed by wild animals and birds, the community never complains and is always content.

Based on the need assessment of the nine families and with the permission of the eldest member of the nine households, who is currently Tulsihangma Thebe, except for the use of common grass and required trees to make household use items and construct homes, the families do not fell other trees and sell wood. Since Thebe community revere nature, they worship the forest god in each harvest and pray for blessings and protection of the forest, flora, fauna, and wildlife. When the indigenous peoples were kipat holders, all the community forests were under their control. The Land Reform Act of 1964 and the implementation of the Forest Act of 1964, however, converted all kipat forests into community forests and devolved them over to user groups.

Endnote

[1] A village development committee (Gāun Bikās Samiti) in Nepal is the lower administrative part of its local development ministry.



CUSTOMARY LAWS & PRACTICES ON FOREST & PASTORAL LAND MANAGEMENT SYSTEMS AMONG THE INDIGENOUS PEOPLES IN THE MOUNTAIN REGION OF NEPAL

Pasang Sherpa and Pasang Dolma Sherpa

Nawa System of the Sherpa People

The Nawa system is a traditional practice for conservation and management of agricultural and pastoral land, as well as other natural resources in Sherpa communities, particularly in Khumbu,[1] and Rolwaling[2] regions. The main function of Nawa is to hold a balance between the needs of the Sherpas' traditional economy and prevent carelessness or egotism of individuals damaging the interests of other members of the community (Haimendorf, 1964). Nawa is also the title given to the representatives elected by the village council to carry out the given responsibilities. Generally, there will be two Nawas depending upon the area and population of the community. They are unanimously elected by the villagers as Lawa[3] during the Yul-thim Tshokpa[4] (village council) or during special function such as Yarchhyang (a summer festival) by the villagers for fixed terms. Soon after their selection, the new Nawas call

all villagers to a meeting. In the meeting, all the villagers are informed about the rules and regulations on agricultural and pasture land and other natural resource management. These rules and regulations include the schedule for shifting cattle to higher pastures and getting down to lower elevation; making fencing to block the cattle from entering lower areas and crop fields; and the provision of fines for the offenders.

The village council represented by each household in the community is the main decision making body and makes socio-economic, cultural, and resource related rules and regulations in the community. The village council is led by Murmin.[5] The Nawa System is part of the village council with particular authorities and responsibilities. The Nawas are responsible for implementing the rules and regulations related to agricultural and pastoral land management, as well as other resources agreed by the village council. Generally, there are two types of Nawas according to the sector and scope of responsibilities and authorities given to them: Osho Nawa and Shingi Nawa. However, in most of the communities the Nawas, without such distinction, implement the rules and regulations, monitor, and manage agriculture and pasture land, cattle grazing, and other forest resources.

The Osho Nawa is responsible for implementing rules and regulations and managing the agriculture and pasture land, and control cattle grazing. For instance, the Osho Nawas order all cattle to be moved from the village to higher elevation pasture lands in early July. Similarly, at the end of August, the herdsmen gradually start shifting down from the summer grazing land to lower elevations. The offender is liable to a fine in the form of Chhyang (a type of locally produced alcohol), crops, or cash. For instance, if cattle of any family damage the crop of any other family in the community, then the Nawa will charge a fine to the offender and compensation is given to the aggrieved party. The form or nature of fine depends upon the magnitude and seriousness of the damage done. The Nawas hold meetings to settle the dispute between the aggrieved party and the offender, which is known as Na-chhyang.[6]

The Shingi Nawa deals with the husbanding of the firewood, timber, and other natural resources in the community.

They are responsible for implementing, monitoring, and levying fines as per the schedule to collect forest resources. They play a vital role in the protection of the reserved forest close to the village. About three to four men are appointed for this purpose as regular and vigilant guards to prevent illegal logging in their forest. It is within the Shingi Nawa's power and authority to permit limited cutting of trees in the protected forest for special purposes, such as cremation wood, funeral pyres, timber for community building, domestic furniture, and house building. They are also entitled to spend a small portion of the cash collected from the offenders and food or drinks offered by the offenders during the dispute settling meeting. The meeting, on the basis of the offender's mistake, either imposes the fine in cash or gives one an excuse. The remaining fine balance is either given to the funds of the village monastery or used in public works, such as the building of trails or bridge.

Ghapu or Dhebu System Among the Dolpo People

The indigenous Dolpo, residing in Dolpa district of Nepal, had their own ages-long traditional systems such as Chikyap, Gowa, Ghapu, and Dhebu to manage land, forest and pasture-land. Soon after the introduction of the One-party Panchayat System in 1960 by then King Mahendra, the Chikyap and Gowa traditions went out of practice. While the rest of the two traditions: Ghapu and Dhebu are still in practice in Dolpo communities. In Dolpo language, both the Ghapu and Dhebu mean "the key or senior person of the village." Some Dolpo villages practice the Ghapu while others exercise the Dhebu tradition.

Under the Ghapu or Dhebu system, a 5-member Hyulpon Chhokpa (a committee) led by the Ghapu is formed. The member of the committee is called Rolbu (supporters). The Ghapu and Dhebu are selected in rotation among the households each year while the Rolbu are selected through the village assembly. Generally, the committee is formed in April-

May just before the villagers begin their annual farming. The committee is responsible for the management and protection of land, forest and pasture land in the village.

There are five types of traditional laws exiting among the Dolpo communities. First, is the Rilungchasid that works to manage the forest and land. Second, is the Rigya lugya that protects wild animals from hunting and poaching. Third is the Cha-thim that looks after the management of pastureland. Fourth, is the Ngo-thim that works for the management of crops. And fifth is the Dhikkim that works to implement fine and penalty to the law-breakers.

The Dolpo people make the laws through a village assembly in the presence of their senior citizens and monks. The members of Hyulpon Chhokpa bring the laws in practice. The Hyulpon Chhokpa secretly appoints two secret agents called Sowa in order to report the names of the people who violate the law.

In order to utilize the resources efficiently, the Dolpo people manage their land and pastureland based on seasons. On seasonal basis, Yarsa (monsoon pasturing) exists for two months—Asar and Shrawan; Ghunsa (winter pasturing) lasts for three months starting from Poush till Phalgun; Soisa (spring pasturing) exists for the months of Chaitra, Baisakh and Jestha; and Toen or Sarad (autumn pasturing) runs for the months of Asoj, Kartik, and Mangsir. The households who break the pasturing rules are brought into justice and charged Nepri[7] (fine). For instance, if the cattle damage the crops of any family, the owner of the cattle are fined based on the quantity of damage. If a bigger animal like a yak merely steps into the farmland without damaging the crops, the owner is obliged to pay one kilogram wheat or barley to the aggrieved party; but if such animal is sheep or ram, the master has to pay one-fourth of the grains paid for the bigger animals. The penalty made for damaging the near-to-harvesting plant is called Thokkyon. Such penalty is charged by the members of Hyulpon Chhokpa. Likewise, the Dolpo people have traditional laws of penalizing people who kill wild animals, fell trees, damage plants, or set fire in the forest. The amount collected from the law breakers and offenders is amassed in the community fund. The fund is spent for religious works such as constructing Stupa and

Chaitya or other social works such as constructing irrigation canals and roads.

Endnotes

[1] Khumbu is the upper region of Solukhumbu district; there are two VDCs: Namche and Khumjung in Khumbu region.

[2] Rolwaling is the upper northern region of Dolakha district. This area is also known as the Beyul or sacred valley of Gururinpochhye "Padmasambhawa."

[3] Lawa is the turn taking by each household for the community functions and other responsibilities. Nawa will be the main organizer of activities or responsible person to carry the rules and regulations set by the community.

[4] Yul-thim Tshokpa or village council is the plenary meeting of the community held regularly on particular dates or occasion to make rules and regulations related to farmland, grazing land, cattle, and other socio-cultural activities.

[5] Murmin or village chief is the head person in the community. During the Autocratic Rana Regime and Panchyat System, the responsibilities of Jimmawal was given to Murmin in Sherpa communities.

[6] Na-chhyang refers to "dispute settling talk"; the offender has to offer Chhyang, a type of locally produced alcohol, to Nawas and the sufferer during the dispute settlement talk.

[7] Nepri refers to the fine charged to the offender in the community; normally such fine is levied in the form of locally produced crops such as wheat or barley.



INDIGENOUS KNOWLEDGE & ADAPTATION TO CLIMATE CHANGE: STORIES OF ETHNIC MINORITIES IN VIETNAM

Center for Sustainable Development in Mountainous Areas (CSDM)

Indigenous Knowledge: The Basis of Initiatives to Respond to Climate Change

Indigenous knowledge, local knowledge or traditional knowledge is a system of knowledge that was accumulated and developed by the people in a community based on experience, tested through practice, and often changes to accommodate adjustments and adaptability to changes in the natural environment, culture and society. It has been maintained and developed for a long time with the interaction among people, living and interacting closely with nature and the environment. Indigenous knowledge has always been enriched through the integration of new experience or new ideas gained from these practical and theoretical knowledges. Indigenous knowledge is primarily transmitted orally from generation to generation, seldom stored and kept in written records.

Indigenous knowledge includes language systems and its identification and classification, methods in utilizing the resources, rituals and ceremonies, spiritual beliefs and values, outlooks, knowledge, and worldviews. Knowledge is fundamental in making informed decisions on many aspects of the people's lives and their relationship to the natural environment. Using indigenous knowledge on local and natural resources creates less dependency on external supplies.

Indigenous knowledge is the foundation in sustaining the life of indigenous societies. Moreover, in the context of a relatively closed society that rely heavily on economic self-reliance and sufficiency, indigenous knowledge becomes the basis of their existence for the majority of ethnic minorities in Vietnam. The introduction of the "official knowledge" and the emergence and influence of western culture has created a cultural shock in the history of Vietnamese people, especially among ethnic minorities in rural communities. For a long time, indigenous knowledge has not been properly evaluated with the underpinning values; worst, it been considered a manifestation of a stagnant, backward and unscientific knowledge.

In the 80s, there were many attempts to neglect indigenous knowledge throughout the country. In many areas, indigenous knowledge has played an important role and contributed in resolving environmental problems and social conflicts within communities. As with all other ethnic groups, ethnic minorities in the north have their own indigenous knowledge in different areas: in the natural environment, socio-economic and political life of communities and people. In the context of global climate change, the phenomenon of extremely unpredictable weather changes and natural disasters increasingly take place and are becoming more complex. Prior to these external interventions/assistance, people had to seek counter-measures to protect themselves, their families and communities. Initiatives have been developed based on indigenous knowledge that they have acquired from their day-to-day experiences and practices and in their interaction with their surroundings.

Initiatives to Adapt and Mitigate the Impacts of Climate Change

Self-Protection and Healthcare

For many local residents of Lao Cai and Yen Bai provinces in Vietnam, landslides and flash floods are common occurrences in the areas. Disastrous landslides that happened in Phin Ngan Commune (Bat Xat district, Lao Cai) in 2004, the massive flooding in Cat Thinh (Van Chan district, Yen Bai) in 2005, and an avalanche in Che Cu Nha (Mu Cang Chai district, Yen Bai) in 2010 caused many farmers to become more alert.

As observed in Tram Tau and Van Chan districts, many households in the area most likely have their own assessment on the occurrence of floods and landslides, especially among vulnerable communities living near rivers and mountain slopes. They take the initiative and voluntarily relocate themselves, rather than wait for local authorities warnings, calls and assistance during times of disasters. Resources and funds are shouldered primarily by families and households themselves. For poor families, support mechanisms within the community, such as neighbors and relatives are crucial and most important.

> Farmers can freely relocate themselves when they realize imminent danger and risk.“ Farmers know the signs of danger just by observing their lands and rivers. Because of this, many families and households are very cautious and do not feel too confident when the signs are observed. In response, they actively relocate and move to safe places. Support from government are very limited and they just rely in themselves and the support of relatives and neighbors.”
>
> Interview of commune chief, Tram Tau district, Yen Bai Province on 6/11/2010.

Studies were conducted among the Tay and Nung in north Vietnam; the Thais in the northwest; the Dao, Hmong in Ha Giang, Lao Cai and Lai Chau provinces; and of San Diu people in Vinh Phuc, Bac Giang and in the Tuyen Quang highlands. These studies show that the peoples' health condition is quite good; their knowledge of medicinal plants and herbal and traditional healthcare system are rich and still intact. Their ways and methods in storing medicines are valuable resources and are promoted and preserved. Herbal and medicinal plants are easy to find almost everywhere in the villages and forests. It is easy to prepare and use without any danger of side effects to patients and people. These are often prepared by boiling the herbs and plants in water, which are used for bathing and/or mixed with food as part of every meal.

One example is the Dia Nhan of the Dao people in Sa Pa, Lao Cai province. This is a special food rich with herbal spices and is a medicinal food supplement. This, however, takes a lot of time to prepare. Similar to this, the Dao bath at Ta Phin (Sa Pa, Lao Cai) or Cao Bo (Vi Xuyen, Ha Giang) also have many features. These herbal medicines will treat osteoarthritis, a special drug treatment for maternal healthcare after birthing, for skin diseases, and as aphrodisiac for men and women.

The herbs are carefully selected before they are put in the pot for boiling and a certain type of wood is mixed to increase its effectiveness. Dao knowledge of medicinal plants and treatment meets the basic health needs of the community. This medicinal knowledge has earned a reputation for the community and is known by other different nationalities. This is one great advantage in self-care, which also augments family income.

Vietnam is abundant and is a great source of medicinal plants, trees and herbs. Indigenous knowledge on traditional herbal medicines and healthcare is rich, especially among ethnic minorities.According to latest figures from the Institute of Pharmaceuticals (2000), in Vietnam medicinal plants are approximately 3,830. Most medicinal plants, trees and herbals grows wild everywhere in the mountains and forests. In Vietnam, it is very fortunate to have both these elements.

Source: Tran Cong Khanh, 2002, Medicinal Plants and national conservation issues local knowledge on how to use medicinal plants, Journal of Pharmaceutical Sciences 4.

In the context of climate change and extreme weather, one objective is to ensure the protection of children. Parents in communities have different approaches and solutions to ensure the health of their family and children though regular health care, diet, and teaching the basic ways of personal hygiene and healthcare. Through consultation, interview and survey, it was found out that the knowledge of the majority of Thai, Tay, Hmong, and Dao families in Yen Bai and Ha Giang are rich.

Results of consultations in some provinces of Yen Bai, Ha Giang also show that in recent years, the incidents of children drowning in flash floods are alarming, and increases especially during the rainy season. One reason as to why this is happening is that many children do not know how to swim, especially among those living near river banks and those areas vulnerable to flash floods. Teaching children how to swim is essential to protect children from drowning.

Landslides and Erosions

Ethnic minorities in the north are very good and skillful at using indigenous knowledge to prevent the risk of landslides and erosion. Research by scholars in the country have proven that bamboo is beneficial, not only in bringing immediate benefits, but also has long-term value through its ability to prevent erosion, conserve soil and regulate water.

Muong people in Hoa Binh, Thai people of Son La, Dien Bien, Lai Chau and Yen Bai provinces know significantly the various bamboo species that can prevent land erosions and landslides. This is the reason why there are a lot of bamboos planted around their farm fields, especially along slopes and riverbanks. North Vietnam provinces have planted more bamboos for the same purpose.

Bamboos are the best species that can resist and prevent land erosions and landslides. Bamboo plants are for very good in the prevention of soil erosion and landslides in slopes, riverbanks and farming areas of mountainous peoples. Bamboo serves as additional family and household income as well.

Research in Dong Cao, Tien Xuan Luong Son district, Hoa Binh province shows that 47% agreed that bamboos have the most potential for soil and water conservation in agroforestry systems and could be able to augment households income in communities.

Source: Organizations World Agroforestry (ICRAF), 2003, "An example of how market-based IK system."

Aside from bamboo trees, many other plants and trees are also used to prevent soil erosion. Farmers in the Tay Boc Bo commune, Pac Nam district (Bac Kan) plant bananas, cassavas, pineapples, and other useful plants around their houses. These plants also help in preventing soil erosion. Hmong, the Pu Peo, Lo Lo Co Lao farmers in highland areas of Quan Ba, Yen Minh, Dong Van and Meo Vac (Ha Giang) are often associated with gem tree planting around their houses. This approach has been maintained for hundreds of years and has created a very specific cultural significance of the area, commonly called "Highland Stone."

In Reducing the Impacts of Floods

Upon the government's recommendations and programs undertaken to increase productive agricultural land, many old growth forests near the ethnic minority areas in the north became terraces or upland ricefields. However, in the late 80s, the state and the local people soon realized their mistakes. With the support of Program 327 and 661 recently, majority of the forest land has been revived. But the choice and recognition of varieties and species is quite a long process. The local people want to grow evergreen trees in the forests that will serve as sheds instead. Previously, they planted teak trees, but these trees shed their leaves only in winter and the leaves taste

bitter, affecting potable drinking water sources. Later, they planted eucalyptus trees, but no plants would grow around it. The people learned a lot from these experiences. They now focus on planting acacia trees. Farmers in the districts of Pac Nam (Bac Kan), Vi Xuyen (Ha Giang province), Bao Thang (Lao Cai province), east of Dien Bien (Dien Bien) and Van Chan (Yen Bai) share similar opinions, observations and stories.

In the Exploitation and Protection of Water Resources

In 1996-1998, the Center for Research and Capacity Development, the women and ethnic minorities (abbreviated as TEW, attached to the Union of Vietnam Science and Technology) conducted a project to support water supply for people living in communal Hmong Quan Than San, Si Ma Cai district (Lao Cai province).

Inspite of these efforts, the project failed as water supply for Quan Than San was still not sufficient. Recognizing the problem, TEW called for peoples' participation in the project's implementation by using indigenous knowledge in the management approach, developing a successful communal water supply in the process. Later, TEW summarized the achievement: "The core of the program is no other than the local people who use their indigenous knowledge, their efforts for construction, and maintenance work for their own use and application. As a result in 2000, the project was successful."

The indigenous knowledge and understanding of water resource management and the sustainable utilization are one of the very valuable knowledge of ethnic minorities living in the northern mountainous areas. They can share this knowledge to all ethnic groups living in the valleys, plains, hills and mountains in other provinces in the south and central part of the country.

To sustainably protect water resources, most ethnic minorities maintain sacred forest-type protection and management within their villages. The Hmong and the Ha Nhi people have what they call "forbidden forest," the Lung Shan (Mandarin

Fire means "dragon mountain"); and the sacred forest of Thais in Son La, the Pa Ham. These forests are where they worship their ancestral spirits and deities. Customary laws and traditions among ethnic minorities and indigenous peoples in the world have strict provisions in protecting these sacred forests. According to them, "the forest is water and deforestation is dehydration."

The sacred forest-type protection and management is not only for conservation of genetic resources but is also effective in reducing greenhouse gas emissions. Sacred forest is protected to ensure that it remains intact; and sacred trees are protected for its growth and development. In effect, balance is maintained and complemented, using good seed dispersal and growth for nearby forest and places. These will contribute to preventing and resisting natural disasters due to climate change, such as strong winds and drought; increase water retention and reduce wind speed, which will support disaster mitigation and other impacts of climate change.

Source: Vu Van Need and colleagues 2011.

In Agriculture Farming and Livestock Raising

Ethnic minorities have valuable knowledge and experience in arable lands and slope farming. Contour farming is a good example. With this method, the terraced fields or rely fragments are mined around the hillsides, forming the contour. On top of the hill, they keep the forests intact. These forests serve as natural habitat and makes cultivation in the lower portion more conducive. According to them, the uphill forests retain moisture for new cropland, helps slow down the water flow due to rains, and reduces and prevent soil erosion. They have gained so much experience through centuries of terrace farming: starting from selecting suitable terrain and convenient water source; calculating accurately the field and ensuring each irrigation systems is available in the field level (which spills down the lower portion to prevent field and hillside erosion); to selecting varieties; appropriate farming techniques; sowing time; and selecting revenue pickers in order to achieve high productivity. These experiences were

transmitted from generation to generation and maintained up to this day. This knowledge is very much relevant and effective in ensuring food security for the whole community.

Researchers on farming systems of the northern mountainous ethnic minorities agreed on the effectiveness of the application of indigenous knowledge.[1]

Many researchers believe that farming is still the most effective tool and method for the humid tropics.[2] The researchers on this issue[3] believe that measures can be taken to increase productivity in farming without removing traditional farming methods. For upland agricultural development, traditional farming systems can be used as starting point to be supported by modern agricultural science to increase crop yields. Maintaining traditional farming plays an important role, because it covers a large area, contains a variety of traditions and culture, and involves the local people. Furthermore, the authors also confirmed that the agricultural system is very effective in adapting to climatic changes.

In relation to livestock, more than 50,000 buffaloes died due to prolonged cold spell in 2008, impacting heavily on ethnic minority households. This is a century old-problem of the people, especially during winter seasons. In 2010 recorded livestock losses were very low. Many Hmong families in Bac Ha, Si Ma Cai (Lao Cai province) took advantage of the natural cave to warm their cattle. In the provinces of Bac Kan, Ha Giang, Lao Cai, and Yen Bai mountainous district such as Tram Tau and Mu Cang Chai, people also use wood or corncobs as fuel for heating their livestocks.

Another study of the Vietnam Agricultural Institute demonstrated the superiority of indigenous breeds of cattle and domestic animals—such as among the Hmong in Cao Bang and black pigs of the ethnic Muong Khuong (Lao Cai province)—compared with the high breed imported ones. All of the traditional breeds are able to adapt to the natural environment. The local livestock breeds naturally, and they are weather resistant and able to reproduce fairly well.

Vietnam has significant numbers of indigenous species of plants and animals that are able to adapt well to the weather conditions. Vietnam has recorded about 60 species of extinct animals, particularly in northern mountainous provinces of Quang Ninh to Lai Chau, accounting for 30% of total extinct animals of the country. These species include Hmong beef, pork hung (Ha Giang), pig baits Na (Cao Bang), chicken (Yen Bai), white horses, chickens, and six-toed duck spots (Lang Son). These distinct animals are not only valuable as meat but also have medicinal value.

Source: Nguyen Dang Vang, Director of Veterinary Medicine, Ministry of Agriculture and Rural Development, Vietnamnet interview on 06.20.2003.

Endnotes

[1] Researcher Le Trong Cuc (2003) agreed with Dao The Tuan (Agricultural Ecosystems Vietnam-1984) on this conclusion.

[2] A unit of energy spent can be obtained from 5 to 15 units of energy products. One man working a day obtains this at two times on the Mekong River Delta and three times in the Red River Delta.

[3] Dao The Tuan and Le Trong Cuc Nguyen Tat.



SASI SYSTEM IN HARUKU INDIGENOUS COMMUNITY (MOLUCCAS)*

Asia Indigenous Peoples Pact (AIPP)

Natural resource management in Haruku, Moluccas, Indonesia is based on customary rules known as Sasi law. The implementation and application of Sasi are carried out by traditional institutions called Kewang (customary police). Sasi law enforcement is categorized into two, namely, Sasi for a particular area, and Sasi for certain types of natural resources.

Sasi for a particular area is applicable to a specific territory as well as all natural resources within it, like for instance, Sasi for the sea and rivers. Sasi on watersheds prohibits any activity that would disturb or alter the condition of the watersheds. There is also Sasi on protected marine area for coral reefs and marine life in the sea, as well as protected Lompa (a kind of small sardine) fish areas. On the other hand, Sasi for certain

*Excerpt from the Regional Report of the Asia Indigenous Peoples Pact (AIPP).

types of natural resources is applicable to certain types of natural resources, which are in the territory of Haruku village. This customary law has rules for the protection of several types of natural resources such as pineapple, walnuts, Cempedak (fruiting tree native to Asia), durian, areca nut, nutmeg, and sago leaves.

Both the Sasi for particular areas and Sasi for natural resources are conducted in order to maintain the capacity of the environment and natural resources. The application of both types of Sasi on the natural resource management systems as enforced and guarded by the Kewang, aims to keep potential and protected areas intact. The impact is monitored from year to year, so that Haruku and the community in general can increase their economic income.

From the social point of view, the Sasi affects the relationship between individuals and clans as it strengthens their relationship as brothers. Any violations of Sasi laws face enforcement of sanction by the Kewang Indigenous Police. The Haruku community believes that solving problems among them is more effective when settled by customary law because the conflict would be resolved without a grudge. Bringing the problem to the Public Police can resolve the issue, but there is still dissatisfaction on either side, which can create new conflicts between them. In Haruku cultural system, there are rituals to open and close Sasi which directly give good lessons to Haruku generations about the importance of maintaining the rules of customary law.

IMPROVING INDIGENOUS PEOPLES' WELL-BEING THROUGH COMMUNITY ORGANIZING, TRAINING & WATERWORKS

Cordillera Disaster Response and Development Services (CorDisRDS)

Community Profile of Daulan, Barangay Tonglayan, Natonin, Mountain Province

Sitio Daulan is situated in the southern part of Barangay[1] Tonglayan, Natonin, Mountain Province in northern Philippines. It is located about 62.5 km from Bontoc, the capital town of Mt. Province, and can be reached after 3-4 hours jeep ride and 30-minute hike through a footpath from the drop point.

Sitio Daulan is mountainous with a moderate slope where the rice terraces are found and a few portions of flat lands where the residential houses are built. The existing land uses in the community are agricultural, residential and forest lands. There are two seasons. Dry season starts in March and ends in May while the rest of the months are the wet season. The hottest months are from March to July while the coldest months are from November to February.

Firewood is still the most commonly used fuel for cooking in the community. The community's electric power is provided by the Mountain Province Electric Cooperative (MOPRECO). However, only 50 percent of the households have availed of electricity due to the membership requirements, wiring and monthly billing. Electrical power is used mainly for lighting.

Forest products of Daulan include soft wood, orchids, herbal plants, reeds, weeds, and some wild animals like deer, boar, and wild birds. Edible plants found in the place are rattan shoots, pappait, amti and other native plants. Hardwoods that were found before are now gone due to illegal logging. There are also many water sources in the community. These include the Pap-arong river, the Chauran river and Chapah creek. These are sources of fresh water fish aside from being utilized for irrigation and domestic use.

Sitio Daulan has a total population of 272 individuals with 62 households and 63 families. The people are a mixture of different ethnolinguistic groups, but the majority belong to the indigenous Ha'ki tribe. They speak the Tinongrayan and Ginihon languages. But many also speak and understand Pilipino, Ilocano, and English especially the younger generations.

Rice farming is the main economic activity and primary source of livelihood in the community. There are two cropping seasons both for wet and dry rice farming. The first cropping is called Tinyerga. It is planted during the months of January until June. During this first planting season indigenous and introduced varieties are planted. The second cropping is called Tapiac. The rice varieties planted are Tapac and Pinnawid and some other rice varieties planted in the first cropping are tried in this planting season. Both organic and inorganic farming are practiced in the community. Organic farming is done with the use of animal manure. Some rice fields are planted with camote or sweet potatoes, aba or gabi (taro), and corn during the dry season due to insufficient irrigation water.

Rice production is primarily for household consumption. Rice shortage is common especially from the months of January until May. To cope with the situation, the people

engage in swidden farming, and paid labor for additional income.

Aside from wet rice farming, upland swidden farming is practiced through the uma system. Harvest from upland farming are usually a mixture of traditional and introduced rice varieties and vegetables.

Traditional crops are beans, peanuts, chayote, corn, squash, and sweet potatoes. Temperate vegetables grown are wombok (chinese cabbage), cabbage and pechay (a cabbage variety).

In addition, some community members engage in tilapia fish production. Raising of chickens and ducks for household consumption is also common to all households. Seasonal or occasional labor is another source of livelihood for the residents. Males usually go out of the community for seasonal labor in construction or gardens while some women go out to work as house help. Overseas work is also a cause of temporary outmigration. Government employment and store-keeping are other sources of income for a few residents. Making brooms from tiger grass and rattan weaving of baskets and backpacks are also done, usually by the males.

Indigenous practices are still followed in the community. Elders decide on community issues and also help in its implementation. Governance and decision making is done both by the barangay officials and the elders.

Elementary school children study in Tonglayan and in schools outside the barangay. Elementary and high school students need to walk 15-20 minutes to reach the school in Sitio Pora, while college students travel to Bontoc, Baguio, Isabela, or Manila for their education.

There is one Barangay Health Station with only one barangay health worker and a barangay midwife assigned in the community. Common diseases are headache, diarrhea, cough, flu, rheumatism, measles, amoebiasis, ulcer, urinary tract infection, goiter, and worms. The malnutrition rate in the community is high. Most of these cases are preventable, yet these remain the major illnesses in the community.

The Balugang-Daulan Farmers Organization (BADAFO) first came to know about Cordillera Disaster Response and Development Service (CorDisRDS) in May 2008, through the provincial peasant alliance APIT-Montañosa and the Cordillera Peoples Alliance (CPA) Mountain Province chapter. The activities implemented by CorDisRDS in Balugang-Daulan include a Water Works Project, Human Rights orientation, leadership training seminar, herbal medicine training and support for organizing the general assembly of the people's organization.

Waterworks System

The people of the community felt the need for a waterworks system because of the lack of clean water in the community. They had an existing water system at that time with limited pipes and faucets that did not reach all the different clusters of houses. But because the water source was from a brook (waig), it was not safe to drink. Soil and decayed leaves and plants usually contaminated the water and they had to boil their water for drinking all the time. The water volume from the old source was insufficent for the needs of all the households. It served mainly the houses near the source while little was left for the lower sitios such as Balugang and Daulan, causing competition and disputes over water among the people. They were not able to construct water sealed flush toilets because of the lack of water.

For the women, the problems they encountered with the old water system was that the water was not safe for their children to drink, requiring them to boil it. The children usually get diarrhea after drinking water straight from the old source. They had to walk far to fetch water from the source or from the river when the supply of water is cut, especially during rainy season when sticks or stones block the pipes from the old source. Time usually spent by the women in fetching water and washing clothes and dishes in the source was around one to two hours each day.

Thus, when CorDisRDS responded to the request of the community and the plan for the water works project was made, the whole community participated actively since they felt that the water works was a priority project. All the 67 households in Balugang and Daulan helped in the work by sending their representatives to work each day, including the men, women and youth. Men and women helped in hauling sand and gravel. The youth carried the cement and pipes from the road. During the construction of the water tank and the installation of the pipes, the men went out early to do the work, while the women prepared the food for the workers. Plumbing and cementing work were done by the community members who had learned the skills from the construction of the old water system. CorDisRDS was responsible for the design and technical assistance and they also provided all the materials for the project. They suggested that three distribution pipes be installed directly from main tank because of the location of the different clusters of houses that are far from each other; and to maximize the water volume to serve all the households. The work on the project started on August 27, 2008 and was completed on September 26, 2008 with no major problems encountered.

After the completion of the project, the community people said that they feel that there has been a big improvement in their lives. They are very satisfied that they now have abundant supply of water. Water is now enough to supply the needs of the community the whole year round, 24 hours each day. Since the project was completed, they have not experienced scarcity of water. All 67 households have access to the water, which is safe to drink even without boiling, because the water source was tapped from a spring. The water reaches their houses and this makes it easier for them to wash, cook, bathe, clean, and raise pigs. The women now have more free time to work in the fields and gardens, to pound rice, to do housework, and to care for the children. Their dirty dishes and clothes are no longer accumulated, but are washed regularly right beside their homes. The incidence of diseases like diarrhea and scabies has also decreased. They are able to bathe even at night after coming home from the fields, because they no longer have to walk a long distance to the water source. The children

have more free time and are no longer often late for school as the water for bathing is just nearby.

In the maintenance of the water system, the people's organization BADAFO is the one responsible for making sure that the water system is in good conditions. The 67 member households are divided into four groups for the maintenance of the waterworks. Every month, one group is responsible to check the system, do necessary repairs, and clean the area from the water tank down to the pipes and faucets. The four groups take turn in doing the maintenance work.

Aside from this, the BADAFO has collected a small amount from the members: a membership fee of P10.00 per household and a yearly fee of P5.00 per household. This amount is being collected by the treasurer of the organization and they have now collected P4,000.00 (approx. US$100). The amount reached P7,000.00 earlier so they decided to use P3,000.00 to buy a pipe threader and pipe wrench for the maintenance of the project. The money is also being used for any expenses for the repair of the water system.

Another policy is to collect fines from those who damage the water system. Only those 15 years old and above may be fined. The organization is very strict in imposing the fine. So far, two people have been fined, adding to the money of the organization.

The money they have collected may also be lent out without interest to members who have an emergency need such as sickness, death, hospitalization, and emergency trips to visit a sick relative. A maximum of P1,500.00 may be borrowed for up to three months only, after which it must be paid. They identify a collateral that will be taken in case the person is unable to pay back on time. Or else, an officer of BADAFO can sign as a guarantor of the loan. They have, however, not yet experienced a case when the person who borrowed did not pay back his loan.

On the whole, the project implementation and maintenance was deemed successful. The community praised CorDisRDS for listening to the community and for helping out in the work of implementing the project. In exchange,

CorDisRDS encouraged the community to always maintain and take care of the water system because it belongs to the community. The community also says that they are able to implement and maintain the project without continued outside support.

Training on Herbal Medicine, Leadership and Human Rights

The training on herbal medicine was considered very useful for the community, especially by the women. They were able to learn how to make herbal medicines such as garlic; ginger and chili mixed with gin to be used as an ointment for arthritis, wounds and cough; ginger tea for cough and sore throat; dangla leaves as an antiseptic and for bathing when you have fever; and other herbal preparations, which they did not know of before. They are now applying what they learned and using the herbal medicines when these are needed. This has had the effect of lessening their expenses for buying medicines.

The Human Rights Orientation was conducted jointly with APIT-Montañosa. During the orientation, they discussed what are human rights, learned how to identify the different forms of human rights violations, and learned skills in documentation of human rights violations. Women also learned about women's rights. Now, the women feel empowered because they feel they can be equal with men and also do the work that men do, while their husbands also help them in the housework and child care.

The Leadership Training Seminar taught them collective management of the organization, how to facilitate meetings, how to take minutes of meetings, and make resolutions and other documents. They found this training very useful, especially for the chairman of the organization, since he now knows better how to run the organization. Before, it was mainly the elders who were depended upon to lead the community. Now

new leaders have emerged. The barangay secretary also found the training useful because it helped her do her work well in the barangay, like recording minutes of meetings and preparing barangay resolutions.

After the training, the leaders of BADAFO improved their leadership style and methods. Everybody does his/her duties and cannot refuse to do a task, because they were oriented on their tasks before they accepted to become officers of the organization. They have also improved their system of cooperation even when working in the rice fields. For instance, they do the traditional cooperative exchange labor by groups instead of all together at one time, which is more efficient. They also bring their own rice to eat when working in the fields of another farmer, so that the landowner will not have problems in feeding the workers. Because of the good cooperation within the organization, other communities have become impressed with BADAFO and want to follow their system of cooperation.

Endnote

[1] A barangay is the smallest administrative division in the Philippines and is the Filipino term for a village, district or ward.



ENERGY FOREVER FOR PEOPLES' WELL-BEING

Montañosa Research and Development Center (MRDC)

In the glow of the fire from the pithwood of the pine came a strong passionate voice, "And when we will be victorious in our collective endeavor, it will be a living proof that we are not anti-development; that we sincerely aspire for progress to better the welfare of our children and our children's children… Our relentless and successful protest against the proposed mega dams along the Chico River,[1] even sacrificing the lives of our brothers and sister, will be vindicated."

This was an excerpt of a closing remark made by an elder when we, as representatives of the Montañosa Research and Development Center (MRDC), met with the Umilin di Ngibat (residents of Ngibat who are members of the Butbut tribe of Kalinga, northern Philippines) to finalize the project concept of the multi-purpose micro-hydro project (MHP) of Ngibat in 1991.

Born from an indigenous peoples' struggle against development aggression, the proposed concept of the Ngibat MHP was concretized in 1992, and is now on its 20th year of existence and sustained operation, which is the longest community-managed renewable energy project in the Philippines.

The partnership of MRDC and the Ngibat community dates back in 1981. We devoted our early years in studying, experimentation and adoption of innovations on traditional knowledge in agriculture and blacksmithing. An alternative to the mega-dams was one of our favorite topics when we gather for community discussions at night.

In 1986, Umilin di Buscalan (residents of Buscalan, which is also part of the Butbut tribe) and MRDC ventured and completed a water-powered rice pounder project in Buscalan, Tinglayan, which is a neighboring village of Ngibat. It showed concretely how water can be harnessed for renewable energy. From this project, Ngibat came out with the concept of a multi-purpose micro-hydro project, which remained dormant and shelved for more than five years due to intense militarization of the area by a local paramilitary unit who called themselves the Cordillera People's Liberation Army (CPLA). When the situation in the area normalized, the now legally-registered Ngibat Farmers' Association or NFA[2] forwarded its request to MRDC to assist in the realization of the micro-hydro project.

Project Implementation

In accordance with MRDC's guidelines on project development, an all-rounded feasibility study was conducted and a community unification process was undertaken on what the project is, the options, the design, the needed resources and who will provide for such resources, the management of the project, among other concerns.

The project implementation was launched with Ngibat hosting the gathering of three tribes (the Butbut, Dananao, and Tulgao) who share the same communal watershed/forests.

It was a successful event. Ngibat presented their plan to maximize the water flowing in their territory to be a power source of their micro-hydro unit and the different tribes affirmed their commitment for the protection of the shared communal watershed.

One non-negotiable mandate and principle that we had to religiously ensure in the development process is peoples' participation. We believe that the full participation of the whole community is a precondition for the success of the project, if we are to contribute to people's empowerment and if we are to measure our success in terms of people being able to carry on any development initiatives on their own. Nancy Ayangao, a community organizer of MRDC, would repeatedly verbalize her observations that even small children helped in the hauling of materials based on their capacity. In critical stages of the work, Engineer Frank Taguba, the project-in-charge from MRDC, would bring out the technical design and some books, and translate these into the local language, for lengthy, but necessary instructions from these. The people then, would discuss how to apply the theory and with their traditional knowledge in engineering, blacksmithing and construction, the work proceeded smoothly.

It was not only the technical aspects that we had to discuss. Of the many points we debated on, there was only one significant concern which we were not able to unite on: that the community did not agree on the idea from the management committee of MRDC that domestic lightning will be the least priority and should be installed a year after assessing phase 1 of the project. Phase 1 included energizing a rice mill equipment and a blacksmith shop. They immediately installed domestic lighting and they were proven right during the first project evaluation in 1997.

The Ngibat people said, "The project have had a significant impact on our lives. With the supply of domestic lighting or electricity, school children have become more diligent and conscientious in their studies. Similarly, the women can work with ease at night compared to the earlier times when they have to work in the dark or in the light of the saleng"[3] (Chi-ug Gannac, 29 years old, woman farmer, 1997).

Before the project, among the daily chores of small children is to hold or tend the pithwood light for mothers to be able to see her work during the night, such as rice pounding, dishwashing, selecting seeds, and others. Oftentimes, children are whipped if they refuse to do this task. Thus, the presence of electric lighting was a great relief for mothers and children. "We do the work with our children and we have time to sit down with them to study their lessons, and our bonding was much improved," as narrated by Catherine Atumpa, one of the mothers.

That was a rare disagreement, we agreed on almost all matters and were able to put into practice our agreements. We were able to complete the project through the use of an existing irrigation canal. Intake dam and forebay were constructed and a galvanized iron penstock measuring six inches in diameter was used to direct the water to the crossflow turbine that generate both mechanical and electrical power. This is to energize the processing equipments such as the rice mill, sugar cane presser and flour mill; also the power tools for the blacksmithing activity in the daytime; and to provide domestic lightning during the night. It took us more than a year to complete the project.

From 1993 to 1997, both MRDC and the community jointly maintained the project. But it was mainly the community's collective effort, which made it possible for them to have discerned the problems, planned and implemented repairs and modification. From 1997 up to present, the community is maintaining and managing the project on their own.

One of agreed things that did not materialize was the formation of a committee that will supervise movie viewing and to regulate movie shows. We were able to predict that with electricity, the entry of televisions will be inevitable. With the entry of televisions, the indiscriminate advertisement of consumer goods, the culture of violence and the patriarchal society, among other unregulated shows, may lead to the creation of unnecessary wants and cultural erosion. To prevent this, an educational program that makes use of televisions and audio-visual materials shall be planned with a committee who will review and regulate viewings. It was also anticipated that

freezers for food preservation will then be acquired for the common use.

For nearly 20 years, the project was able to service the community realizing the following objectives:

1. Increased appreciation and strengthened traditional forest management and collective customary laws of forest protection among the tribes involved;
2. Decreased the labor-intensive production processes specifically the burden of manual rice pounding among women and children;
3. Increased labor productivity through the inventions, fabrication and production of appropriate labor saving devices, tools and implements;
4. With the reduction of labor input in the production processes, production of other food crops such as rootcrops, sugarcane and cash crops shall be encouraged to address the food shortage;
5. Provided domestic lighting that raised the quality of life in the village, like the bonding of children and mothers, more sharing of responsibilities, wherein men now became the rice millers.

In conclusion, we can say that the key factors that continue to sustain the project, among others, include people being the main actors in the whole cycle of the development process; the strengthening of their positive cultural values of resource utilization and conservation; cooperation; the sincere capacity facilitation for capacity building, technology development and transfer by the MRDC; the democratic decision making and collective management of the community leaders; and most especially, the continuing meaningful and relevant services derived from the project by the community.

Endnotes

[1] Ngibat, one of the five villages composing the Butbut Tribe in Tinglayan, Kalinga, Philippines was one of the many communities that successfully stopped the construction of the proposed World bank funded Chico River Dam Project. In the course of their struggle to

defend their land, they came face to face with political oppression, military brutality and were accused as anti-development.

[2] To assert their legality, the residents of Ngibat formalized their organization and registered this in the Securities and Exchange Commission (SEC) as Ngibat Farmers' Association (NFA), but even this did not save them from military harassment.

[3] Pine pithwood used for lighting that emits much smoke.



MICRO-HYDRO POWER PLANT MEANS RICE SURPLUS & INCOME FOR INDIGENOUS PEOPLES OF REMOTE MABACA

Montañosa Research and Development Center (MRDC)

The initiative, "Integrated Rice Intensification Program for Mabaca," started in 2004 and was crafted by the indigenous peoples' organization, the Mabaca Farmers Alluyon (MFA) in Kalinga province, northern Philippines. It evolved from the research conducted in the area by the Montañosa Research and Development Center (MRDC).

The research in 2004 showed that the 797 population of Mabaca, divided into 135 households, experience rice shortage at an average of four months per year. Each household consumes an average of 1.5 cavans/sack (50kgs/cavan) of rice per month. To supplement this shortage, the villagers have to hike eight hours over a mountainous terrain and get a 5-hour vehicular ride in a rugged road, paying PhP120.00 (US$2.70) one way to the town center, Tabuk, and buy chemically-grown rice at PhP1,200.00/cavan ($27.27). This rice shortage for the 135 households totals 810 cavans in four months and they

spend for the 1.5 cavans rice and fare PhP2,040.00. For the whole village, they spend PhP1,852,400.00 ($42,100) per year. Thus, the main purpose of the initiative is to attain a level of self-sufficiency in rice.

The activities undertaken: 1) blacksmith trainings for the villagers to fabricate their own farm tools and equipment; 2) seminars and trainings on organizational management; 3) construction of an irrigation canal for rice field expansion and to operate a micro-hydropower project to mechanically run a rice mill to lessen the burden of manually pounding rice, power a blacksmith shop, and provide electric light; 4) seminars and trainings on sustainable agriculture practices and natural resource utilization and management.

In 2009, after five years of the initiative, a level of rice self-sufficiency has been achieved. This is manifested in the availability of locally-produced organic rice that can be bought within the community the whole year round, which means they do not have to go to Tabuk to buy chemically-grown rice.

For the 135 households of indigenous peoples of Mabaca, Balbalan Kalinga, the installation of a micro-hydropower plant (MHP) meant surplus rice production and increased income for their household needs. The micro-hydropower plant also led to the construction of a hydro-powered rice mill and a blacksmith shop in the community.

The 25-kilowatt MHP was constructed by MRDC in partnership with the technical expertise of Sibol Agham at Teknolohiya (SIBAT). Montañosa Relief and Rehabilitation Services (MRRS) assisted in the survey and implementation of the project.

Rice Mill

The rice mill installed in 2004 meant money saved for those who used to have their palay (unmilled rice) milled in the town center of Salegseg, via a 7-hour downhill trek and another 8-hour uphill trek to bring the milled rice home.

Before the installation of the rice mill, hauling fees for one half cavan of rice commands PhP150 for bringing the palay to the milling center in Salegseg and bringing the milled rice back to Mabaca. Others who are hired for their hauling services prefer to be paid in kind with at least one ganta (1 medium can) of rice per can of milled rice.

The rice mill was constructed in 2004 and is open three days a week. The people pay only PhP10 for milling a can of rice. For those who wish to pay in kind, they pay two cups (chupas) of milled rice per can. The payments go to the MFA, the indigenous people's organization managing the rice mill.

The presence of a local rice mill has also greatly reduced the time and effort spent by the women in pounding rice. One household usually consumes a can of rice, which is pounded for three hours, within a period of at least five days. With the presence of the rice mill closer to home, they now have more time to spend for other activities including other work in the field, taking care of children, and domestic chores.



Mabaca Rice Mill

Rice Field Expansion

The installation of the powerhouse along with the blacksmith shop resulted in the expansion of the area of cultivated rice land. Expansion of the current rice field area is largely due to the installation of the blacksmith shop (pandayan), which enabled the farmers to make metal tools for digging and cutting, including bolos, sickles, sanggap, shovels, and wheelbarrows. With the use of these farm tools, the people expanded their rice lands through the system of ubbo or mutual help groups. Ubbo are work groups numbering around 6- 15 persons per ubbo, who cooperate to accomplish a collective task in the community such as rice field expansion, planting, and harvesting.

With the increase of the cultivated rice land area, the people are now able to increase their rice supply and eliminate the shortage of rice production. Before, rice supply usually falls short by four months before the next harvest season. Prior to the installation of the micro-hydropower plant in 2004, the 135 households in Mabaca needed to buy rice from Tabuk during the lean months to augment their rice supply. This rice shortage for the 135 households totals 810 cavans in four months. At PhP2,040.00 per cavan of rice including hauling fees, the shortage of 810 cavans per year is equivalent to a total PhP1,852,400.00 ($42,100) per year or nearly PhP2 M spent by the households of Mabaca to buy rice from the Tabuk town center.

Since 2006 with the full operation of the MHP and the rice mill, Mabaca enjoys sufficiency of rice supply from its own production. Mabaca has also since then been able to sell rice to other neighboring communities in Gawaan, Tanap, and in the town center at Salegseg.

The year 2006 also saw the mounting of the dynamo and installation of the panel board and transmission lines to the blacksmith building with the supervision of the MRDC staff and Triclops.

Irrigation Canals in Place

Increase of rice supply is also due to increased supply of water after irrigation canals were put in place. The construction of a limestone-lined 1,000-meter long irrigation canal located 150 meters above the powerhouse resulted in regular water supply for the rice fields. Near the tank is a diversion canal that directs the water to the community and into an irrigation canal leading to the rice fields of Bayowong.

The rice produce had earlier been insufficient due to to lack of irrigation facilities that meant that only one crop of rice could be planted each year. Now, the irrigation canal leading from the Bayowong Creek to the ricefields has contributed to increased rice production. The hydropower system is fed with water from the Bayowong creek that comes from several artesian springs that flow all year round. Bayowong creek is a tributary of the Mabaca River.



Bayowong Creek

Sugar Cane Presser

With the blacksmithing shop in place, the people of Mabaca were able to make a dapilan (sugar cane presser) to extract sugar cane juice and make brown sugar (muscovado) from the sugar juice. The community folks also make basi, a favorite sugar cane wine that is drank on special occasions including weddings, baptisms and graduations.

Domestic Lighting

In the same year of 2006, transmission lines for electrical wiring for household lighting was completed. Mabaca is not covered by the national electric grid. Thus, with the installation of the MHP, the households are now able to use electric current for house lighting, following the conduct of a ritual celebrated by the community elders. Trainings were conducted by MRDC on the operation of the MHP, including practical wiring and leadership skills and values. Practical house wiring is also given and actual practice is conducted.

In December 2006, the Mabaca Farmers Alluyon and the Mabaca Barangay Council created the Barangay Mabaca Electric Cooperative (BMEC) through a barangay (basic government unit) assembly. The cooperative's daily affairs are taken care of by a management committee with 7-10 members. Cooperative members are grouped according to the village or purok they belong to. The members assigned group leaders per village. Policies and guidelines were formulated with the understanding that the BMEC is collectively owned by the MFA, an organization of farmers and the people of Barangay Mabaca.

Conclusion

The "Integrated Rice Intensification Program for Mabaca" has contributed in several ways to the community well-being and sustainable development of the indigenous peoples of Mabaca. Firstly, the initiative saved hard-earned cash that was used to buy rice in the town center, which is now used for other basic necessities such as for education, health, clothing, and other food needs. Secondly, the burden of carrying rice for eight hours has been eliminated. Thirdly, the MHP-operated rice mill has eliminated the burden of women and children in manually pounding rice.

The MHP-operated blacksmith shop also provides the villagers with homemade sturdy farm tools and they now know how to repair broken farm tools, which in the past is just discarded. Also, the electric current provided by the MHP gave the children time to read their lessons and increased their knowledge, which the teachers have noted. With the provision of lighting, the people do not need to buy kerosene anymore for their lighting needs, thereby eliminating carbon emission and the additional expense. Aside from kerosene, they used to gather pine pithwood from the pine forest for lighting, which is an additional work as the forest where they gather these are far from the village settlement.

And lastly, the practice of sustainable agriculture practices has been inculcated to them and is being practiced, thus ensuring the sustainable production of crops. They now grow healthful organic rice instead of buying the chemically-grown rice being sold in the town center.



THE CALAMIAN TAGBANUA OF CORON: DEFENDING THEIR IDENTITY & CULTURAL HERITAGE

Jo Ann Guillao
Tebtebba

The Calamian Tagbanua, Their Heritage and Struggles

Nurtured by their ancestors, the land and waters of the indigenous Calamian Tagbanua[1] persists the test of time, and most recently, of climate change. It was not easy for the Calamian Tagbanua of Mindoro, Philippines to defend their identity and cultural heritage; but their efforts had given them leverage to possess and utilize their rich marine and coastal ecosystems. The kind of life that I saw in the land and territories of the Calamian Tagbanua is simple, yet life sustaining. It is a kind of life that permeates solidarity and sense of self-determination that strengthens a community's life and wellbeing. A life that has kept the serene beauty of the sea and limestone formations abounding the island.

The Tebtebba research on how traditional knowledge is being practiced in the majestic land of the Calamian Tagbanua, in the face of climate change, made my heart leap with joy. It has always been part of my consciousness to see this picturesque beauty that I often see in postcards and pictures, not to mention the heart-warming stories of friends who had been to the place.

It is not always easy to be a stranger in a place, especially if you are alone. However, this feeling of discomfort was dissolved when I reached my destination. The moment I disembarked in Busuanga,[2] I knew that my trip to Coron Island, which is composed of two villages, namely, Cabugao and Banwang-Daan, would be very interesting and enriching.

Indeed, the visit to Coron Island transcends the appreciation of the physical beauty of the place. The experience plunged me in a deeper understanding of the Calamian Tagbanua, who have surpassed a history of neglect and non-recognition of their rights to indigenous or traditional systems, a system that puts premium to sustainable development. Noteworthy is the fact that the Calamian Tagbanua have developed mechanisms and actions to confront the impacts of rapidly changing climate. This is on top of the realities they are confronted with, specifically that of the dominant society. This mainly comes in the form of addressing the influence of some dayuhan (migrants) in relation to fishing method and pressures from tourism activities being promoted by the local government.

My week-long stay in the community was filled with rich exchange of knowledge and demonstration of traditional practices. Integral to the visit was a brief tour to the ancestral domain of the Calamian Tagbanua. They consider their ancestral domain not only as territory but also part of their history and cultural identity. The chance to visit brought my consciousness in silent wonder as I recall the discussion I had with the elders of Coron Island. Their wisdom and persistence against intimidation and abuses from powerful forces whose intention was to exploit and gain from their resources is far from commendable. It is actually an act of heroism because they have defended the integrity of the Calamian Tagbanua.

They have protected their cultural heritage. For them the essence of identity and wellbeing lies very much in their rich ecosystems. As expounded by Apo Ben Aguilar (an elder in the community), "We cannot live without our ancestral land and waters. They are part of our lives."

The struggles of the Tagbanua to defend their territory are reflected in the epic tales of two heroes, Ti Makarere and Ti Natambak. These are important accounts about Tagbanua warriors who had defended their territory from foreign Muslim and Spanish invaders.[3] Since then, the people have stood in unity against any invasion from outsiders in order to protect their territory and their traditional way of life.

Discerning the need to further protect their ancestral domain from abuses or exploitation in the future, the Calamian Tagbanuas fought to obtain their legal claim over their land and waters. Through the help of the Philippine Association for Intercultural Development (PAFID), the Tagbanua Foundation of Coron Island (TFCI) was formed by the Calamian Tagbanua in 1985.[4] This organization played an important role in their claim for their ancestral territory. The process of reclaiming their ancestral domain started in 1996. After two years of intense haggling with the government, the Calamian Tagbanua successfully gained their legal claim, the Certificate of Ancestral Domain Claim (CADC) over their land and waters.[5] The arduous process endured by the Calamian Tagbanua community as highlighted below show a glimpse of their struggles and gains in the course of defending their territory.

Table 1: Highlights of the Tagbanua Struggle for their Ancestral Domain[6]

Date	Events
1967	To protect its valuable resources, Coron Island was declared a Natural Reserve by virtue of Proclamation 219.
1978	Proclamation 1806 declared the island a Tourist Zone and Marine Reserve. This led to the transfer of management of the island to the Philippine Tourism Authority, which later implemented a tax policy that caused the Tagbanua to lose their ownership of the clan caves where they gather swiftlet's nest. Proclamation 2152 declared the entire province a Mangrove Swamp Forest Reserve
1985	Through their organization, the Tagbanua Foundation of Coron Island (TFCI), the people filed an application for a Community Forest Stewardship Agreement (CFSA) to the Department of Environment and Natural Resources (DENR) covering the islands of Coron and Delian. This was in response to the public bidding (auction) of the clan caves initiated by the municipal government in the 1970s.
1990	A CFSA was issued by the DENR to the TFCI, covering about 7,748 ha. The granting of CFSA to TFCI inspired neighboring Calamian Tagbanua clans living in other villages.
1992	Passage of NIPAS Act, which made Coron Island a priority protected area. The passage of the Act strengthened the plan of the Tagbanua to include vital areas that are part of their ancestral domain, which were not initially included in the CFSA.
1993	On February 19, 1993, seven Coron barangays applied for a Certificate of Ancestral Domain Claim (CADC) with the DENR, and asked support from the Palawan Council for Sustainable Development, the mayor and other municipalities. This year marks the beginning of a unified action of the Tagbanua in securing their right for ancestral domain through the forming a federation called SARAGAPUNTA (which is derived from the word "saragun," meaning "let us gather").
1997	Passage of the Indigenous Peoples Rights Act.
1998	On June 5, Coron Island was recognized as an ancestral domain with the issuance of CADC No. 134 to the Tagbanua consisting of 22,400 ha of land and waters. The awarding of CADC to TFCI etched a historical milestone in the life of the Tagbanua. For them, this is the start of a more meaningful stewardship over their resources.

2001	On February 15, the Tagbanua of Coron Island finally obtained their Certificate of Ancestral Domain Title (CADT), a victory not only for the Tagbanua but to all the indigenous peoples in the country.
2002	Implementation of the provisions in the CADT was delayed because of criticisms from some sectors. Eventually, the National Commission on Indigenous Peoples issued AO No. 1 series of 2002, which upheld the validity of the CADT.

What is Sustainable Life Among the Calamian Tagbanuas?

The persistence of a sustainable life among the Calamian Tagbanua was a result of years of practice of indigenous knowledge that had been handed down to them by their ancestors. For instance, certain areas are delineated as fish sanctuaries and sacred areas such as the panyaan.[7] The people have also interesting means of understanding the weather by looking into the signs around their environment. As shared by the Barangay[8] Captain, also an elder in the community, the Calamian Tagbanua have their traditional way of weather forecasting and this knowledge guides their day-to-day activities, though some of these have been compromised because of climate change. Nonetheless, "Kap" (as he is fondly called by his constituent) related that if they wanted to see if they could go fishing the following day, they look at the moon. When the moon is not shining brightly, then it means that the sea is not calm and the weather would not be good for fishing activity the following day; and so they would rather perform other tasks at home.

The system of fishing (pangangawil), which is an important livelihood for the Calamian Tagbanua, is guided by the principle of subsistence fishing: getting only what they need for the day. To catch fish, fishermen use simple tools like kawil (hook and line), pana (spear) and lambat (small nets). This fishing strategy effectively limits the harvest and therefore allows the people in the community to conserve their marine resources.

Apart from fishing, gathering of balinsasayaw or Pygmy swiftlet's nests[9] is equally an important traditional livelihood among the indigenous peoples of Coron Island. This traditional livelihood has been practiced from generation to generation. Swiftlet's nest-gathering is strictly practiced by clan members and ownership of these nests is passed down through generations, together with the knowledge of nest-gathering. While nest-gathering (pagbabalinsasayaw) is an important source of cash for the people, they are mindful to harvest what is enough for the day.

Critical to the sustainable management of their resources (marine and even forest), is the observance of their traditional litigation system called panglaw. The system provides space to address violation or abuse of resource use and customary law. Anyone who is reported to have committed any violations are tried under this system. The Calamian Tagbanua observe and practice a number of norms and rules as outlined below.

Customary Laws/Norms Governing the Ancestral Domain of the Calamian Tagbanua[10]

On fishing methods:

- The use of any part of the ancestral domain by non-Tagbanua without permission.
- Catching yields by non-Tagbanua that exceed sustenance or for commercial purposes.
- Selling and leasing of portions of land within the ancestral domain to non-Tagbanua without consultation and approval from the Tagbanua Foundation of Coron Island (TFCI).
- Fishing in sacred areas, lagoons and lakes.

In preserving their homeland/sacred places:

- The burial grounds are prohibited for use for other purposes and are not open to the public.
- Fishing in sacred places is prohibited.
- It is prohibited to gather nest of balinsasayaw if its inakay (brood) are still very young.
- Ownership of caves where the balinsasayaw lives is through inheritance only unless these are discovered caves.

On the use of lakes and beaches:

- Only small canoe is used for touring around the island.
- Beaches are regarded as sacred, hence must not be exploited.
- Quarrying or destruction of limestone rocks is prohibited.

In preserving the forests and its resources:

- It is prohibited to gather all the root crops like kurut and kapari.
- Gathering of tubers must be from the root; the root system must be left intact and viable in order that the plant can continue to produce.
- Cutting of mangroves along the coast is prohibited.
- It is prohibited to uproot, damage and burn herbs and other medicinal plants.
- The use of pandan leaves must be regulated and this plant must not be over used.
- It is prohibited to hunt beyek, kalasyaw gesye (wild animals).

Now that the legal system is dominantly influencing community's indigenous knowledge system, an elder in the community insists on reviving the panglaw system as he believes that this is more effective in punishing violators, especially those dayuhans that use illegal fishing.

The sparkling coasts of Coron Island mirror the sustainable lifeways and systems of the Calamian Tagbanua in the midst of constant pressure from outsiders and threats from climate change. As expressed by an elderly woman, the weather has become unpredictable and difficult to understand ("Magulo ang panahon ngayon; minsan madalas ang ulan, minsan wala namang ulan"). The unpredictability of the weather was first observed in the early 80s but they say that weather changes have become more frequent in the 90s up to the present. With the advent of climate change, the Calamian Tagbanuas experience unpredictable weather patterns, warmer weather and drought, sea level rise, warmer sea and they are now more susceptible to environmental hazards.

The elders in Coron Island view climate change as linked with other environmental and social problems. They see the impacts of climate change as some sort of punishment for people's greed, selfishness, lack of spirituality, disrespect for

sacred places, or violation of taboos such as fishing near the awuyuk,[11] panyaan and the sanktuario (nesting ground for fish). For them, climate change is a warning to the people who are causing so much destruction to nature. They also believe that these changes in the climate happen because the world is "getting old." Hence, an option for them is to adapt to climate change and improve their adaptive capacity in the process.

To cope with the impact of climate change, the Calamian Tagbanua have adjusted the cycle of their day-to-day activities, such as preparing their kuma (swidden farm) in earlier month rather than the usual time. They also discover new places to gather fish, given the decline in fish catch from the regular areas where they fish. To reverse the declining trend in fish catch, most of the elders in the community urge the people to go back to traditional ways of fishing. They even argued that if traditional methods had been used continually, then there could have been less damage to marine life. As more environmental disasters are perceived to come in the future, the Calamian Tagbanua likewise pledge to avoid acts that would cause further damage to their rich ecosystems. Since the weather has become unpredictable and is posing greater risks to community life, the elders strongly advocate the re-vitalization and application of their traditional knowledge in order to protect, manage and sustain life within their ancestral domain. As aptly put by an elder, what is needed now is a paradigm shift which would reinforce a more sustainable life, without putting harm to the rich biodiversity of the ecosystem.

Greed for the bounty of the sea is not a virtue of a Calamian Tagbanua. Yet, the kind of life that is being demonstrated by the dominant society is just the opposite and is thus posing a great threat to the lifeways and systems of the Calamian Tagbanua. Through time, Coron Island enjoyed a serene life under the care of its people. Will they surpass these challenges? The voices are clear—there is the collective determination to win another battle for survival.

Endnotes

[1] Traditionally seafaring people who obtain most of their resources from the sea.

[2] Busuanga is a municipality in the Province of Palawan which is part of the Calamianes Group of Islands lying between Mindoro and mainland Palawan.

[3] The story of these two warriors, which is retold by elders and adults in the island, gives inspiration to Tagbanua in having the strong determination to defend their territory. Two caves found in Banuang Daan were named after Makarere and Matambak.

[4] TFCI is led by the founding members, the council of elders, and the barangay officials of Cabugao and Banuang Daan.

[5] The Calamian Tagbanua had to submit affidavits, maps, historical accounts, genealogical data, anthropological data, list of validated names and places in the native dialect, and other proofs to prove their presence in the area since time immemorial (Zingapan and De Vera, 1999; PCSD, 2003a). This process allowed a recording of the Calamian Tagbanua's customary law that is traditionally transmitted orally. With the technical help of PAFID, the Calamian Tagbanua defined their CADC's inclusions and boundaries, and translated this into a map acceptable to the DENR.

[6] Leah Abayao, Jo Ann Guillao, Mikara Kaye Jubay and Helen Magata, Revitalizing traditional knowledge systems and practices, climate change, and Indigenous Peoples, The Case of the Calamian Tagbanua and Ikalahan Peoples in the Philippines, forthcoming publication of Tebtebba Foundation

[7] These are sacred marine areas found in various locations around the island. The Calamian Tagbanuas also believe that a giant, human-like octopus or pugita dwell in this place.

[8] A barangay is the smallest administrative division in the Philippines and is the native Filipino term for a village, district or ward.

[9] Coron Island has the best swift bird nests in the world.

[10] Leah Abayao, Jo Ann Guillao, Mikara Kaye Jubay and Helen Magata, Revitalizing traditional knowledge systems and practices, climate change, and Indigenous Peoples, The Case of the Calamian Tagbanua and Ikalahan Peoples in the Philippines, forthcoming publication of Tebtebba Foundation

[11] These are lakes created by sinkholes atop the cliffs deep enough to connect to the sea.



ROLE OF TRADITIONAL KNOWLEDGE IN STRENGTHENING SOCIO-ECOLOGICAL PRODUCTION LANDSCAPES

Montañosa Research and Development Center and Tebtebba

Recognizing the importance of traditional knowledge including customary sustainable use and equitable sharing of resources, the United Nations Convention on Biological Diversity (CBD),[1] has not only adopted their promotion, in its Article 8j and Article 10c respectively, but also adopted the ecosystem approach as the main framework in its program of work. It was along this line that Tebtebba forged a partnership with the Montañosa Research and Development Center (MRDC) in June 2008. This partnership engaged the Kalanguyas of Tinoc, Ifugao in northern Philippines to implement the project "Support for Community Development within the Framework of Indigenous Peoples' Rights and Ecosystem Approach."

The area is the watershed of Magat Dam that generates 360 megawatts of electricity and a river system that irrigates about 5,000 hectares of lowland. Inspite of this resources, the

town is the 23rd poorest in 2000 and the only town in the whole country, which was not accessible to vehicular transport up to 1996.

The work brings together five communities of Tinoc; MRDC an organization that works directly with indigenous peoples' organizations on sustainable production food systems for 30 years; and Tebtebba, which works and has gained recognition in promoting indigenous peoples' rights in the international arena. It is a collaborative work with the following objectives:

- To enable communities to identify and characterize the land use and management of their territories; i.e., composition, structure and function and assess the present trends;
- To facilitate information exchange and learning sessions among and between community holders of traditional knowledge, authorities of customary law and service providers/duty bearers towards formulating and adopting development plans within the principles of ecosystem approach consistent with the rights and customary resource management and sustainable use practices of indigenous peoples;
- To promote the adoption of the ecosystem-based approach at different levels of development planning and implementation and to draw lessons at appropriate times from the piloting experience and transmit these to policy makers and strengthen implementation of the ecosystem-based approach; and,
- To support initiatives on socio-economic work pertinent to revival, innovations of traditional livelihoods linked to biodiversity and ecosystems.

Summary of Research Findings

As defined by CBD, the ecosystem approach is a strategy to manage land, water and living resources that promotes conservation and sustainable use of the different parts of the environment, thereby ensuring continued ecosystem services/ functioning for people's well-being. Our work brought us to the conclusion that ecosystem approach is a traditional holistic viewpoint of the Igorot[2] indigenous peoples in the management of their territories. They adopted a land use pattern creating different nested ecosystems of watersheds, woodlots, rotational agricultural areas, rice lands, the river systems, and homesites, which are perfect picture of agroforestry within the mountain ecosystem. These different parts of the ili (village/ community) are kept in balance through knowledge system, custom laws, belief systems and spirituality, community solidarity, and social values transmitted from one generation to the other. Their respect for nature (as manifested by many rituals that they have to perform for the use of resources it provides); their strong belief that land is life to be nurtured for future generations; and their activities determined by the coming of certain birds, flowering of certain plants, the direction of the wind, the formation of the clouds—all these illustrate the land-man-nature relationship.



From the different parts of the land emerged a biodiversity of flora and fauna in the different nested ecosystems, e.g., the fish, frogs, edible snails, weeds, insects; different varieties of rice in the ricefields; more than 20 cultivated food crops; several naturally occurring plants in the rotational agricultural areas; and various kinds of grasses and trees in the pastureland. From the land and biodiversity, people developed their livelihood systems. Twenty-five traditional occupations were recorded, including among others, hunting, food gathering, food processing, farming, fishing, pottery, bamboo weaving, barter, salt making, sugar cane processing, stonewall construction, and broom making. Except for blacksmithing and weaving, raw materials required for these occupations were found in the community.

Up to the 80s, people generally lived off the land and produce most of their needs. Due to various socio-economic, cultural and political pressures, however, the above-mentioned knowledge system weakened through time. Its disintegration was hastened by the promotion of chemical-based monocrop farming. Virgin forests were bulldozed to pave the way for the production of commercial temperate clime vegetables.

Project Implementation

Establishing Rapport, Knowing What is There

To implement the project, four development strategies were drawn up. At different stages of the work, the partnership had to find the correct balance or combination of two or three of these; at other times, to focus on just one. These include (1) research and documentation, (2) organizing and capacity building, (3) advocacy and networking, and (4) socio economic project implementation.

Research has to be the first step after acquiring free, prior and informed consent, following the process of the communi-

ties. By the time the partnership entered the area, however, the peoples' confidence on their knowledge and lifeways was so much eroded that they would not like to talk about it. We had to shift our research to doing more awareness-raising: telling people that in the international communities, many have come to realize that our traditional ways are profound wisdom. We then engaged community members in the discussion on the logic of traditional practices. Eventually, through the participatory research, we documented the traditional knowledge and resource management which are still very much alive in two of the five pilot sites. We did a case study in one village that is now dominantly entrenched into the market economy. The latter showed drying up of some rivers and indebtedness among vegetable growers; and other manifestations of increasing food insecurity were surfaced out.

Enabling Communities to Advocate and Influence Policies

Such findings were presented to heads of line agencies, the legislative body and the Mayors' Office. The session culminated with the local government unit (LGU) allocating resources for the project to be able to upscale from our five pilots sites to include all the 12 barangays[3] of the municipality. These includes plans to do the 3-dimensional mapping a of the whole town and to formulate a land use plan that upholds the principles of traditional territory management of sustainable use and equitable sharing or resources.

The sharing led people to question the general view that chemical based commercial vegetable production has brought in quality of life in the community. The discussion also surfaced the realization that the shift from diversified, sustainable traditional farming system to the "modern" farming was a negative change. These we consider as our first and second breakthrough.

Our third breakthrough occurred during the first land summit where participants were able to unite their views on the superiority of their traditional knowledge and their cus-



tomary laws. Participants signed a covenant and committed themselves to "arrest environmental degradation and promote peoples' well-being" by continuing the research work, regularizing community education, strengthening positive traditional lifeways, and reaching a broader unity starting from their communities to those sharing the services of their territories' ecosystems.

Promoting Development/Innovations of Traditional Occupations for Increased Food Security and Poverty Alleviation

To date, the partnership has implemented three projects. The first was the construction of the Wangwang Footbridge in July-December 2009 to facilitate access to farmlands. This project is the first of its kind in the community on four counts: best in quality and durability in the municipality, designed through collective discussion, implemented through an ubbo (communal labor) group, and done through a collaborative effort of the people's organization and the barangay council.



The second project set up a blacksmith training center through the newly-formed Tinoc Panday Group, in collaboration with the LGU. Blacksmithing is one of the traditional occupations in the area, but in the entire central Tinoc only one living blacksmith continues to practice it. As 53-year-old Daniel Binay-an declared:

> *It gives me great pleasure to be a trainor in blacksmithing. I thought I would not be able to transmit the skills I have. The project now gives me the opportunity to lead a more meaningful life, I can transfer my skills to others. As such, I will die a happy man.*

The Inum-an Development Project was launched on November 23. The inum-an is the rotational agricultural area or where shifting cultivation is practiced. Since time immemorial, the inum-an has contributed much of the people's sustenance. Before rice terraces were built, these areas supplied rice, camote (sweet potato), legumes and vegetables.

Up to this time, these continue to supplement rice farming, contributing more than 50 percent of the food needs of the village. However, inum-an management has to contend with 1) shorter fallow periods, thus decreased soil fertility and reduced productivity, 2) need for better soil erosion control as the environment becomes more fragile, 3) growing population and limited land, 4) decreasing labor force, and 5) the need for cash. With the Inum-an Development Project, innovations for sustainable food systems can be showcased and food security enhanced. Specifically, the project aims to:

1. Support interested ubbo groups, with members of organized groups as a priority, willing to integrate innovations in their inum-an;
2. Provide learning venues for other members of communities for innovative technologies;
3. Increase productivity of the inum-an;
4. Contribute to increasing food security of project beneficiaries; and
5. Contribute to organizational funds to promote and develop sustainable food systems.

Forming or Strengthening Appropriate Groups in the Community

Strengthening the farmers' organizations was initially not considered a priority by barangay councils, but this problem was overcome as the need for strong peoples' organizations was reaffirmed. Community leaders and elders at the Man-ili Convention discussed and agreed on a more systematic and comprehensive plan for community organizing as they gained a better appreciation of the role of indigenous peoples' organizations in ensuring self-determined development. To date four farmers' organizations have been revived and organizing of elders is ongoing.

Maximizing Project Outcomes for National and International Policy Advocacy

Linking the project to national and global policy advocacy has just started. The project experience has been presented in several fora organized by Tebtebba in the Philippines with the aim to promote revitalization of indigenous peoples' natural resource management systems, using as an example the profound knowledge of the Kalanguya. It has also been shared with community mappers in different countries supported by the Forest Peoples Programme (a UK-based NGO) working on customary sustainable use through community mapping. A broader perspective was provided to these groups including traditional occupations and traditional knowledge on the development of nested ecosystems.

Continuing Work

The MRDC-Tebtebba Partnership continues to work towards the objective of unifying different stakeholders in Tinoc to formulate a roadmap for the adoption of the ecosystem approach on a higher and wider level, taking into account current realities. In May to August 2011, nine of the 12 barangays drafted their comprehensive land use plan (CLUP), facilitated by a steering committee composed of representatives from CSO's, government line agencies, and community leaders.

To ensure support, adoption and implementation of the Land Summit Covenant on the municipal level through the municipal comprehensive land use plan has to be undertaken. To attain this, the following work shall be done:

- Capacity building among different peoples' organizations as part of the project's sustaining mechanism; and
- Convening an inter-agency roundtable discussion to define roles of each in the implementation of land use and development plans.

Endnotes

[1] The United Nations Convention on Biological Diversity was put into force in 1993 with three main objectives, namely: 1) conservation of biological diversity; 2) sustainable use of its components; and 3) equitable sharing of the benefits arising out of the utilization of genetic resources.

[2] Igorot is the collective identity of the seven major ethno-linguistic groups (Kankanaey, Ibaloi, Kalinga, Isnegs, Tinggians, Bontoks, and Ifugaos) of the Cordillera Administrative Region of northern Philippines. Kalanguya is one of three entholiguistic groups of Ifugaos.

[3] Smallest administrative division in the Philippines and is the native Filipino term for a village, district or ward.

IKALAHANS: OWNERS & PROTECTORS OF THE LAND

Helen Magata
Tebtebba

We, the Kalanguya-Ikalahan[1] tribe, invariably equate land and the resources within it with life itself. We nurtured our indigenous systems for our land and resources management that have endured the test of time. For this reason, the recognition of our indigenous ability to sustainably manage our ancestral domain was made a matter of policy (ADSSDPP 2005).

I am an Ikalahan, I am a Forest Guard

The strong cool breeze of the Malico forest caused Nonoy, the forest guard, to tighten his jacket around his chest. But even the approaching rain does not stop him from trekking down the pathway to the forest—his forest.

Nonoy is one of the forest guards of the Kalahan Forest Reserve in Nueva Vizcaya province, northern Philippines. He makes sure that the forest is used according to community land use plans. He also reports to the local forestry office if there are indiscriminate harvesting of timber products and forest fires. It is a part of his job to identify sick trees that might need assistance or cutting and checks portions of the forest that need clearing or replanting. He loves his job.

He has learned how to measure how the trees grow just by looking at them and by making use of his tape measure. Centimeter, circumference, breast height—these are only some of the terms he learned to use when he sees how the trees are growing. He used to think that when trees are left alone in the forest, then they would grow faster. Why not? No people and animals would disturb the growth. But experience taught him otherwise.

It was not bad at all when people assist the growing of trees. He has been instrumental in assisting the growth of trees and other species in the forest by the Forest Improvement Technology (FIT) that he and the other foresters of Ikalahan have innovated. He is happy to see that their innovation is yielding much trees than they ever thought. Oh, how he loves his job.

The Forest Improvement Technology

FIT follows the natural rejuvenation process of the forest. Trees die or are felled by storms, while new seedlings will sprout and develop. Mature trees that have stopped growing are removed to create favorable conditions for forest rejuvenation. If this is done every year, the forest will continue to develop and improve. The removal of individual trees does not hurt the forest or its environment and provides first class lumber.

Each year the forest farmer makes a selection of trees to be cut. The farmer checks for crooked, damaged or crowded trees that need to be removed to improve the forest. Simple equipment is used, and the sawdust, tops and branches are left to rot because they restore fertility to the forest soil and help maintain biodiversity. The farmer does not separate the potential crop trees from the other trees because he knows that all trees have a role to play in the forest.

If there are large open spaces, a forest pioneer species will be planted first. Agricultural crops are not planted between the trees because they would bother the other plants that need to grow to make a good forest. Enrichment planting can increase the population of one or two species of large or small plants. This can be highly favorable as long as the forest is not turned into a plantation. The forest farmer will cut only a small amount of growth, allowing the forest to improve each year.

When the forest finally has its proper amount of wood, which is approximately 270 m^3 per ha, the farmer can begin to remove an amount equal to the total growth rate of 15 to 20 m^3 per ha per year. The farmer will have to do that to allow the seedlings to grow. The growth rate presently expected in Philippine forests is about 4.5 m^3 per ha per year. Under proper management, using FIT, the forest can produce as much as 15 to 20 m^3 per ha per year. Such a forest still retains the characteristics of a natural forest.

It still has high biodiversity and is an effective watershed with a high percolation rate. It will also provide a sanctuary for many kinds of wild orchids, animals, birds and insects. If each forest farmer cares for five ha of good forest, he may harvest up to 80 m^3 of first class lumber every year without damaging the forest. That would provide him with higher cash income than many professionals and he would still have plenty of time to produce his own food on the farm. Once the forest has developed, it can be sustained indefinitely.

***Source**: Rice, D. 2000. "The Ikalahan: towards sustainable forest use." In Villamor, Grace B. and Rodel D. Lasco, n.d. The Ikalahan Ancestral Domain, the Philippines. ILEIA Newsletter, September 21p. http://www.worldagroforestry.org/sea/Publications/files/bookchapter/BC0231-06.PDF.*

The forest guard doesn't make much money from his job. But according to him, he does what he does for the future generation. He says he is not a university graduate but has learned forest protection from his parents and grandparents. The community has become his teacher, and the forest his school grounds. He has been doing this for years and he wants to continue doing it for his children. He loves his job.

The Fight for Land is the Fight for Life

Nonoy stops to appraise the pine forest down the mountainside. He sighs from pure bliss. Some of the smaller pine trees are now catching up with older ones. These pine trees were planted during the earthquake, he recalls. Ah, yes the earthquake.

It was in 1990 when a major earthquake hit the community. Right after the quake, there was a torrential rain for 40 days. Some feared it was the end of the world. A huge part of the forest eroded with large trees uprooted. This devastated the forest—but not the people. The community started collecting indigenous seedlings and put up more nurseries for the rehabilitation of the forest. No family sat down until the destroyed parts of the forest were replanted. Nonoy sniffs. Now, he sees the fruit of their toil. He recalls that the planting was done after community consultations and agreements.

It has been wont in the community to call for a tongtong or a community meeting when there are community matters to be discussed. The lallakay (elders) would preside the meeting and the youth and children are welcome to listen. It was through these community gatherings that Nonoy learned how the Ikalahans have fought valiantly for their right to access, control and manage their ancestral forests.

The reserve is a part of the 48,000 hectares of the whole ancestral domain of the Ikalahans. The ancestral domain has been recognized and handed to the Ikalahans in 1974 through a Memorandum of Agreement (MOA No. 1) with the government. The agreement gave the Ikalahans the right to access, manage and utilize the forest for 25 years, renewable for another 25 years, according to their traditional forest management.

The community story of the Ikalahans was not an easy road to success. Being the first group of indigenous peoples to challenge the government to relinquish forest management to the community, the Ikalahans had to play the rule of the game. They had to have a legal name.

The Kalahan Educational Foundation (KEF) became the answer. With the help of Pastor Delbert Rice, an American missionary who was residing in the community at that time, the community registered the KEF in the early 1970s to serve as their legal entity in their battle. A year after, the community realized that they needed a community school for their youth who were then leaving to neighboring towns for secondary education. The Kalahan Academy was set up through meager local funds and much community contributions.

Forest fires, rampant illegal logging and threats of land grabbing from outsiders prompted the community to set up community rules and actions that would later be recognized and serve as a model to other forest-based communities, not only nationwide but in many other countries in the world.

MOA No. 1 spurred inspiration from and determination of the Ikalahan to save their then-endangered forest. The table below chronicles the community activities that the Ikalahan had to undergo to be able to fulfill the agreements in the MOA.

The Road to Successful Forest Management

Year	Community Situation	Community Initiatives
1974	Scarcity of funds and experts to help in reforestation activities	They started reforestation with donated labor and used their meager funds in acquiring needed seedlings and manpower for their reforestation project. The KEF hired local people and worked on the development of their skills rather than hire technical experts from the outside. They also wrote project proposals and received meager support from various funding agencies (Rice 2003).
1975 -1977	Degraded forest brought by illegal logging and forest fires	Delineation of primary, secondary and production forests through an agroforestry development and land use plans, community protocols on forest use and management. The KEF facilitated the implementation of 10-meter fire lines (gaik) around the reserve, but when they realized that this strategy was very costly, they employed forest guards to act as a firefighting team. They created 19 kilometers of 10-meter fire lines in strategic areas and annually planted flora that are known as green breaks (plants that are effective in controlling fires like *maguey* and giant ipil-ipil).[2]

	Government development plans for the reserve	Road construction and other development plans were presented but rejected by the Ikalahan. They started doing forest inventory through community mapping, listing the flora and fauna, and creating a baseline data for their forest biomass.
	Settlement of individual land claims	Locally-trained foresters made a survey on each claims and properly delineated them with the help of the claiming parties. A family was entitled to at most 15 ha (dappat). As steward, land claimants signed Land Claim Certificate or Registration (LCC) where the exact location, boundaries and maps of their land holdings were included. In addition with their right to utilize, the land claimants were also expected to follow the agroforestry rules and regulations.[3] The claims were made based on the peoples' fallow fields and current uma (swidden farm) and the lands they have acquired either through cash purchase or inheritance.
1980s		The Ikalahan ventured into cash production activities such as raising cattle and pigs, milk processing, vegetable and fruit processing. Their fruit processing has been very successful and its products are reaching the market, including major stores nationwide, up to now.
1993		Officially established and delineated a wildlife sanctuary within the forest reserve (Rice 1994).
1992-2011		Carbon documentation activities.

The documentation of forest resources, which started in the 70s has proven to be very helpful not just in forest resource inventory but also in protecting the reserve.

In the 1990s the government proposed a road construction that would save hours of navigating through difficult roads to neighboring provinces. The community was ecstatic! This would mean less hours of travel time to the city! But the proposal says that the road would have to pass through the wildlife sanctuary of the Kalahan Forest Reserve. Everyone disagreed. The Ikalahans through the KEF organized bird watching activities with other civil and environmental organizations. They invited government officials, agencies and civil organizations to join the activity. At the end of the day, the

Ikalahans were able to make a very long list of indigenous birds, migratory birds, endangered birds and animals, and even threatened species of trees that would have to be cut were the road proposal takes place. The government did not dare try to irk the people. They backed off from the project.

Community Resilience and Forest Management

Nonoy could not stop smiling while thinking how proud he felt to be in charge of his own ancestral forest. He realized that the MOA No. 1 has been very instrumental in making the Ikalahan manage their forest, but it was really the comm-"unity" (oneness) that made everything possible. The rain droplets are starting to fall. He walks faster.

He recalls how, as a child, he would trot down their uma (swidden farm) while his mother is busy harvesting obi (sweet potatoes). He would then help carry the obi back home where they will cook it in boiling water for dinner. How long ago it seems now!

Now, they are observing the two-month-no hunting policy. He knows this has to be done to give way to the hatching of the birds. It has also been years since there were recorded violators of night bird hunting. The community forestry law prohibits hunting of night birds in order to prevent catching of migratory birds. Since childhood, they were taught that the Kalahan Forest Reserve is a migratory path for birds from other countries. He heard that some birds even come from China.

He passed by the uma of his friend Tom and saw that Tom's fire grass are almost ready for harvest. He prays the rainy season do not come before it is harvest time for fire grass. His friend Tom and other farmers sell the fire grass and other crops from their production forest.

He sees that his friend is still practicing the traditional composting he used to know as a child. This is common in the

community as they strongly oppose the entrance of commercial pesticides and herbicide. His mother would gather all the vines and weeds from the uma, put them under the soil in a plot and let the weeds rot in time for the next planting season. Other weeds and branches from trees his mother would pile in the steeper parts of the uma to prevent erosion. They call this procedure the gen-gen. He also uses this method to maintain fertility of the soil in his dappat (individual land holding). His father acquired the dappat in the early 70s where all community members were given 5-10 ha of the production forest to till. Then his father divided the land to his children. The remaining part of the forest were set aside for the wildlife sanctuary and watersheds that are still observed up to the present.

How time has changed! Before, they would only talk about how to sustain the forest for their needs such as food, water, and shelter. Now, they are talking about climate change and how it might affect their children in the future. Since the 90s the community have observed slight changes in the weather, specifically the weather patterns. Before, the elders and even the younger people in the community were able to predict and prepare when the strongest typhoons came and when to weed the uma in time for summer season. Now, time has changed. Nonoy's father is an old man who loves to work in his uma from sunrise to high noon. He would then go home at lunchtime and get some rest before going back to the fields. But some years back, he consistently complains of the sun becoming hotter which makes him unable to finish his tasks at noon time. He claims the sun must have gotten older, too; that is why it is much hotter and "burns the skin."

Nonoy believes his father. Recently, he heard his friend from Malico, which is way up high the forest, who was able to plant rice in his paddy. People in Malico have not been planting rice in their paddies since he could remember because of the cold weather. They only get rice from the farmers from the lower part of the domain, where it is hotter.

There have been visitors in the community who have been talking about possibilities of selling carbon. "Carbon?" Nonoy thought. He does not have any idea about selling carbon.

From what he heard, carbon is something stored in the forest when you take care of the trees. When there are more trees, there are more carbon and there is less climate change. As a forest guard, he has been involved in measuring the biomass and carbon content of the forest. They have started doing this in 1994 and then had to change the formula twice in order to get a more accurate result. He could not remember how much exactly the forest carbon content is, but it ranges from 8,000-9,000 tons/year and it continues to improve every year.

He shrugs. If someone would buy carbon or air, then he does not see anything bad about it, as long as he and the community continue what they do in the forest. Who knows, if they were able to sell carbon while still managing their forest, they might be able to have their own hospital. He sighs. Sometimes, this talk on climate change and forest being a solution to it gets very complex. Why don't people just stop making things that result to climate change?

Now, he is nearing home. He can smell the sweet scent of Manang Persia's jam. He should try to tell his wife to cook dagwey (wildberry) jam when he gets home.

The community livelihood on selling jams and jellies has been a huge success. Accounts from older men and women have it that the quest for an alternative livelihood started in the early 80s. Many tried venturing in milk processing, commercial vegetable production, and composting; but so far, the production of jams from wild fruits has been the most successful and sustainable one. He heard from their marketing division that they are now selling their products to as far as Manila, the country's capital.

The community livelihood started out as an experiment. One day, they realized that much of the wild fruits were being left alone in the wild for the birds to eat. But not everything is being consumed by the animals. So they started picking some wild and edible fruits and the community women learned how to cook and preserve them. Now, they gather wild fruits from their production forests but makes sure they leave more than enough for the wild animals to eat.

Now, it is really raining. Nonoy didn't have any umbrella so he was partly jogging. He was a few meters from their door and Nonoy's heart swelled with pride. His home, a simple hut made from sturdy pine tree from his own forest, stands before him. His wife, cooking some rice from their own ricefield from their dappat must have also been preparing some of the fish he caught from the river the previous day. And his child, his precious kid, is waiting at the doorway for him. These are his treasures, nurtured and fostered here in this forest—a forest that has been fought for and taken cared for so long by his forefathers. A forest he had sworn to protect and live for the rest of his life.

Endnotes

[1] The Ikalahans are the indigenous peoples of the province of Nueva Vizcaya, northern part of the Philippines. According to oral accounts of elders, the Ikalahans came from the neigboring provinces of Benguet and neighboring towns of Nueva Vizcaya. In search for land to till in the middle of the 19th century, the Ikalahans moved downwards then southwards to what they call now the barangays of Imugan and Malico.

[2] Community regulations on forest fires were likewise strictly implemented. At least five years after the MOA signing, the people attest that though there are no data to show the decrease in the incidence of forest fires, the residents attest that forest fires indeed decreased by 80 percent (if not totally eliminated).

[3] There are foresters employed by the KEF who are tasked to check on areas being proposed by farmers to farm, trees to cut and areas of the forest to burn. They check whether these lands are not critical to the watershed or the wildlife sanctuaries. Accordingly, they process the permit and issue them in within days. When asked if they do not find it difficult to secure permits for their farms, the farmers believe that the actions of their agroforestry office are rightful and just.



EXTRACTIVISM: MINING & INDIGENOUS PEOPLES— THE CASE OF ECUADOR

Mónica Chuji Gualinga

Extractivism is a development model that violates the rights of peoples and the rights of nature through activities such as mining, oil, biofuels, multimodal axes, transgenics, environmental services, among others. This model involves the design of a judicial security system for foreign direct investment and, what's even more severe for indigenous peoples, is that it also implies a transfer of sovereignty from territories to investors, resulting in depopulation of ancestral lands and, in the case there is resistance from indigenous organizations and communities, criminalization and social persecution takes place. In this model, commodities are traded even before they are produced, as in the case of Ecuador, which has sold oil in advance to foreign companies. All these compromise the survival of indigenous peoples that live in these areas.

Indeed, after almost 20 years since the Earth Summit in Brazil (1992), and 10 years after the Sustainable Development

Summit Rio +10 (Johannesburg 2002), the requests of indigenous peoples to fully exercise their right to self-determination is a pending matter, even though this right is recognized in the United Nations Declaration on the Rights of Indigenous Peoples and in the ILO Convention 169. One way indigenous peoples exercise their right to self-determination is by exercising their right to free, prior and informed consent, whose results are effectively binding with state programs. This means that the commitments made by states in terms of legal frameworks for indigenous rights recognized internationally are not being respected in their entirety. Instead, the extractive-based economy, which in the past 20 years has expanded with new methods, practices and discourses, has caused many social and environmental conflicts. We will look at a brief review of the facts that have occurred in Ecuador in these two decades.

Unlike Peru and Bolivia whose colonial foundation was largely characterized by the exploitation of gold and silver, Ecuador, from the early 19th century, based its economy on agricultural exports, except for some small-scale artisanal mining carried out in certain areas of the Coast, Highlands and Amazon basin. However, oil exploration in the coast began in the 1920s and its large-scale boom took place in the 1970s in Ecuador's northern Amazon. This is what initiated the current extractive model that is being reinforced with a new policy that encourages large-scale mining.

This oil "boom" abruptly changed the lives of indigenous peoples in different ways, depending on their geographic location. In the provinces of Orellana and Sucumbios, in the northern Amazon where oil development is concentrated, indigenous territories were invaded through the construction of roads and facilities, followed by colonization and logging, to make way for livestock and agro-industrial monocultures; and then over time, massive pollution of their lands, especially of their natural water systems. There is no aspect in the life of indigenous peoples that has escaped negative impacts; there was either the loss of their homelands and traditional economy, devaluation of their cultural identity, breakdown of traditional society, or diseases caused by pollution, among others.

After 40 years of oil exploitation, the quality of life of communities in these Amazonian provinces has worsened. Official

data show that this area has among the highest poverty rates in the country; as a historical fact it is worth mentioning that oil exploitation has caused the disappearance of the Sansaguari and Tetete indigenous peoples.

Parallel to this, what stands out from the 90s is the strengthening of indigenous organizations that make up the Confederation of Indigenous Nationalities of Ecuador (CONAIE), by developing innovative alternative proposals to the political and economic model of the country, founded on the principles of plurinationality and respect to mother earth, the defense of their territories, lifestyles, self-government and self-development traditions.

As a result of the organizational strengthening, the 1998 constitutional reforms recognized indigenous individual and collective rights, based on the ILO Convention 169, which at that time was ratified by Ecuador.

An evaluation of the 10-year period from the 1998 Constitution until 2008, with regards to the implementation and effective exercise of collective rights, especially land rights, made us realize that the risks have increased; as there has been no respect for the rights recognized by the Constitution or by international standards. On the contrary, institutional frameworks have been manipulated and used by successive governments as an instrument of division rather than for participation.[1] This reality, compared with the various statements made since 1992 through the 2002 Summit present several contradictions.

Mining in the Ecuadorian Constitution

From 1992 to the 2002 Johannesburg Summit, indigenous peoples have called for a moratorium on mining until states recognize their right to self-determination in each of their countries. However, this request has not been integrated into governmental agendas.

There has been some progress made with regards to human and indigenous rights both at the international and

national levels. Various national constitutions have incorporated certain principles and rights that have been proposed by indigenous peoples, but new speeches and other mechanisms have been created to counteract the rights already recognized.

In Ecuador, the National Constituent Assembly of 2008 raised great expectations within the indigenous movement, as it was considered that the 1998 Constitution, then in effect, was limited in some key areas, especially with regards the recognition of the plurinational reality of the country and with regards to the extension, deepening and more systematic treatment of collective rights. Consequently, base organizations joined other sectors and social movements to propose radically different principles from those established in the previous Constitution, including the rights of nature, the principle of good living, access to water as a human right, among others. However, although the Assembly approved these rights and principles in defense of the Pacha Mama (Mother Earth), the economic model matrix has not changed.

The government has begun to create a new vision and progressive policy of change through a social welfare state and national economic development, which will be sustained primarily on income from oil export and exploitation, and by the large-scale metal mining industry. This will create a substantial macroeconomic change, considering that so far, Ecuador has not been considered as a mining country. However, until 2008 no less than 12 percent of the entire national territory had already been granted in concession to several domestic and foreign mining companies, a large amount of them are located in indigenous territories and protected areas, most of whose inhabitants were never consulted and therefore did not have the opportunity to accept or reject them.[2]

The Constituent Assembly adopted a "mining mandate" that sought to limit artisanal mining to establish a legal framework and strengthen the government's institutionality to provide guarantees for large-scale mining, which are necessary to attract investment by international mining corporations. This is why, the mining mandate was used to legitimize and strengthen the government's green credentials, while preparing the ground to facilitate the approval of the mining law in January 2009, without respect for the due process of consultation.

Beyond the ecological issue, a set of problems brought by the extractive development model are questioned. "Recent evidence and many historical experiences allow us to say that countries that have specialized in the extraction and export of natural resources, have failed to develop... The abundance of natural resources tends to have, among many other endogenous processes of the pathological nature that accompany them, the distortion of the structure and allocation of economic resources of the country, regressively redistributing national income and concentrating wealth in a few hands, while widespread poverty leads to recurrent economic crises, consolidating 'reinter' mentalities, deepening the weak and poor institutionality, encouraging corruption and undermining the environment."[3]

Included in the Constitution are a set of principles on nature protection, good living, consultation, etc., that had much resistance but were finally included. Nevertheless, the critical knot occurred when talking about access, control, administration and management of those natural resources, considered strategic for the national economy, specifically oil, minerals and water, as well as related topics such as land rights, consultation and consent. This debate was critical for indigenous peoples because their territories are, and remain, the most affected by extractive industries. In fact, this issue has led to the breakdown of relations between the government and indigenous peoples.

The approval of the mining law by the transitional legislature, omitted the constitutional mandate that states have "when any type of legislative measure is about to be approved and affects the collective rights, they must be consulted,"[4] it also ignored the rights of nature, adopted as an innovative principle. These omissions reflect the existing gap between the legal frameworks and the actual exercise of rights: "it is obeyed but not fulfilled." The approval of this law generated anti-mining protests, and in response, there was severe repression from the state, mainly in the Andean province of Azuay and in the southern Amazon, leaving a toll of one dead indigenous leader, the teacher Bosco Wisum in 2009.

The main areas where minerals are found are in indigenous Amazonian territories and parts of the northern and

central highlands. In the territories of the Shuar nation we can find, according to the state, gold and copper. These areas are now in concession to foreign companies, especially to Canadian companies.

Another consequence of the implementation of metal mining in Ecuador is the criminalization of social protest and political persecution; people who have participated in protests against mining activities have been prosecuted, most of whom are indigenous leaders. In fact, we now have 186 indigenous people accused of terrorism and sabotage, some face penalties of up to eight years in prison.

On the other hand, the environmental protection competence of local governments is being removed when they have shown to be allies of social sectors. For example, relying on the Mining Law and Organic Code of Territorial Organization (both written by the same government), the Ministry of Environment removed the environmental management competence of the provincial government of Azuay when they questioned the implementation of a mining project in a fresh water zone that supplies the City of Cuenca, the third most populated city of country.[5]

Another case occurs on the Ecuadorian coast, where the territories of the Chachi nationality are under concession to oil companies, as well as the territories of the Awa nationality, which are under concession to mining companies. This situation has weakened various organizations because of the division caused by extractive industries and the state itself. Leaders are coopted and confrontations are fostered between indigenous communities, as in the case of the Shuar Federation of Zamora, where their organization was divided between the ones who were allies of the government and others that were not, resulting in physical confrontations between the Shuar.

Despite this, there are examples of resistance, such as the indigenous communities of Kimsa Kocha, Azuay province, who are pushing for a process of consultation between communities on a proposed large-scale mining activity that threatens fresh water in the area. This sets an example for future action within indigenous communities.

Tendencies, Consequences and Implications

History tells that once a deposit is discovered the area's future will change forever, for better or for worse, and from previous experiences, we have seen that the changes are for worse. In the case of indigenous peoples the change occurs because their territories are handed over to mining companies, they lose their territory and are reduced to groups without identity, to become part of the poorest among the poor.

The arrival of mining companies also weakens local institutions. Their presence tends to generate new inequalities among recipients of social responsibility programs and those excluded, among part of the population that is employed in the new industry and the other part that is not. This leads to division and disagreement within the community, some in favor of extraction and others against. In a context of competing leaders and conflicting organizations, the possibility of reaching collective consensus becomes more complicated.[6]

One consequence is the emergence of new conflicts because of uncertainty, a sense of infringed rights, dispossession of resources and cultural assets. The conflict can deepen by the interaction of other internal and external actors that seek to promote their own political and territorial projects through the conflict over the extractive industry.

Another consequence is that public institutions tend to lose legitimacy in communities and enter into continuous confrontation. Such conflicts lead to entrenched positions, hampering the transmission and exchange of information necessary to carry out dialogues and informed debates between parties, communities, social organizations, public institutions, businesses, etc.—in search of solutions.

The famous ITT-Yasuni proposal to leave oil under ground was a historic demand from the indigenous peoples of the Amazon, but it is now presented as a government proposal, completely excluding indigenous peoples from the discussions. The ITT has even become a blackmail proposal because the government is threatening that, if the necessary funds are not met, this indigenous territory will be exploited, which shows that there is no conviction or political will to

change the current development model, but rather use this historic ecological proposal to camouflage extractive mining.

Extractivism is underway in Ecuador. On September 2001 the government granted the first mining license to the Chinese/Canadian Company Ecuacorriente (ECSA), which will develop its activities in the Amazonian province of Zamora Chinchipe in an "open air" form, to exploit gold with an investment of US$1.63 million. It is anticipated that in 2014 the investments of foreign companies in the country will exceed US$5.5 million.[7] Meanwhile, in the indigenous territories of the three regions, the problems not only continue but are worsening, especially now that the defenders of nature—indigenous peoples, peasants, traditional users of mangroves, etc.—are on the defensive as a result of cooptation policies, division, delegitimization and criminalization of various organizations, and of those who exercise their right to protest.

At the same time, the government is promoting conservation programs in areas with strategic natural resources, such as the Amazon rainforest and the Andean highlands, which entangle and transform communities into dependent clients of the new conservatism. For example, in the case of San Pablo, the Secoya peoples, which joined the "Socio Bosque" initiative, are being fined by the Ministry of Environment with an average of $17,000 per family for cultivating palm oil against terms of agreement, while next to the same community there is a large plantation of the same palm oil belonging to a private company, and somehow they have obtained all the rights to continue their business without any sanctions.[8]

Also, new legal concepts are being created such as the Public Security Act whose scope includes the protection of biodiversity and natural resources. Article 43 of the Act provides that "in circumstances of critical insecurity that threaten or seriously risk the management of public and private companies who are responsible for the management of strategic sectors, the Defense Ministry will instruct the armed forces to take preventive measures for the protection of facilities and infrastructure necessary to ensure its normal functioning."[9] This can be interpreted as opening way to the possible militarization of indigenous territories when communities take action to defend their water before any mining activity.

This is how Ecuador is heading for an "extractive neo-development" of the 21st Century, like many other Latin American countries, without, apparently, a real consideration for the impacts and environmental and social consequences they may have in the long term.

Final Considerations

The events that have occurred in the last 20 years, after the Earth Summit in Brazil in 1992 and 10 years after Johannesburg, particularly in Ecuador, show us that, on the one hand, there has been a process of recognizing indigenous rights at the international level, as well as some changes in the last 10 years in the national legislative field; but the central problem is that rights are not fully met as established in regulatory standards.

For example, three years after the new Constitution was adopted in 2008, the extractive economic model has not changed. On the contrary, the extractive economy matrix has deepened, but now on a constitutional and "democratic" manner, through politically manipulated referendums, accompanied by campaigns that identify those who oppose the extractive industries as being "opposed to a developing" country. And what is even worse is that it appropriates and uses indigenous peoples own proposals and speeches in order to counterattack and divide the indigenous movement and implement policies and actions in the interest of power. Joint policies have weakened the real exercise of collective rights. The "common good" is articulated and nationally positioned as detrimental to the collective rights of indigenous peoples.

The experiences of indigenous peoples mentioned earlier confirm the empirical investigations of some experts whos findings join the mounting criticism of extractivism, in this case, to large-scale metal mining that is developing in Ecuador. Everything points to the continuing threats, not only to the environment and the collective rights of indigenous peoples, but also to the same democratic local institutions and social organizations, creating more unequal and social divisions, and

encouraging new clientelism and corruption. This leads, as is being seen in Ecuador, to major social conflicts, while authorities shelter themselves in technocratic and authoritarian positions closed to any dialogue between parties. All this weakens the potential of the public sphere to the resolution of conflicts and, especially, threatens to undermine international norms, national and public institutions that indigenous peoples and civil society in general need to ensure the integrity of the environment, their lands and territories, and of their own life.[10]

Meanwhile, the demand that the world's indigenous peoples made in the Plan of Development in Johannesburg in South Africa 2002, remains a pending matter. Concerns, complaints and proposals made in 1994 and again in 2002 still continue to be delayed: such as, self-determination and consultation with consent.

Meanwhile, faced with this difficult situation, the nationalities and indigenous peoples of Ecuador are continuing their historical process of struggle for their rights and in defense of Mother Earth, protected under the international standard on indigenous rights that allows them to "implement planning strategies from traditional knowledge of territories and culture, to preserve and set biodiversity at the service of those who are living there."[11]

Finally, the largest organization of Ecuador, CONAIE, in its September 2011 meeting, reaffirmed their will to continue to defend the territories of the nations and peoples that are being given in concession to mining companies and reject new oil contracts; not to accept the division of indigenous organizations and the criminalization of social protest or human rights violations, especially regarding the defenders of life, nature and water; continue to demand the National Assembly to approve legislation that guarantees the right to water, agricultural production and the right to consultation; develop its own proposal regarding the protection and administration of biodiversity, considering that negotiations on REDD Plus do not represent the interests of peoples and nationalities; promoting the implementation of indigenous territorial constituencies as spaces for self-determination and self-government, and as a constitutional right of the Plurinational State of Ecuador.

Endnotes

[1] Ecuador-Collective Rights of Peoples and Nationalities: Evaluation of a decade 1998-2008.

[2] Data submitted to the National Constituent Assembly during the vote on the Mining Mandate, April 18, 2008.

[3] Acosta, A., and Schuldt, J., 2006, "Oil, Rentism and Underdevelopment. A curse without a solution?" Nueva Sociedad no. 204.

[4] Ecuadorian Constitution, Section on Collective Rights.

[5] El Comercio, Quito, September 15, 2011.

[6] Anthony Bebbington, 2009, The paradox of wealth: how to translate extractive revenues into territorial development?

[7] Ecuadorinmediato, Quito, September 21, 2011.

[8] El Universo, Guayaquil, June 31, 2011.

[9] As cited in RAMOS, Ivonne.

[10] Anthony Bebbington and Eduardo Gudynas, 2009, *Ten theses on the new extractivism: contexts and demands under the current South American progressivism*.

[11] Tito Merino Interview, 2009.



LEADERSHIP DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT

Waldo L. Muller
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In my early childhood and youth in the 80s, I lived as a refugee in the Honduran Miskito Territory under the protection of the United Nations High Commissioner for Refugees (UNHCR). That experience gave me many lessons on human rights and solidarity. There I lived and learned about humanitarian crises. It was in Honduras where I had my studies in primary and secondary school. While I was in Honduras at the age of 12 in the year of 1990, the armed conflict ended in Nicaragua and thousands of other Miskitu refugees decided to return to their indigenous home communities located in Nicaragua.Due to the death of my mother in Honduras, my three brothers and I decided to return to our home community on the River Wangki. However, with my desire to continue my studies, I decided to go to the town center in Sahsa because this was a place where I would have the opportunities to study.

Now, I think because of the lessons in humanitarian issues that I learned in Honduras, I decided to go to Sahsa to work as a volunteer in 1992. I was fortunate to join in a malaria eradication program. This was a national program which aimed to eradicate malaria, where I participated for two years in Sahsa. As a volunteer brigade, I worked in vaccination activities of children, delivered treatment for malaria, sprayed mosquito repellant in every house, facilitated workshops in communities, promoted and mobilized community participation during clean-up days.That experience made me gain self-confidence and credibility as a volunteer, and then they offered me a contract for two years under the National Malaria Eradication Program (SNEM, acronym in Spanish) of the Ministry of Health. During that time no one was thinking or spoke, or had a concept of indigenous territory. During that time we were living in those settlements of internal displaced peoples (IDP) such as Sahsa, Sumubila, Wasminona, and Columbus. This is mainly because these communities offered more safety, because the communities in Wangki river (my communities of origin) were full of land mines, which is a result of the counter-revolutionary war period.

During my first two years in the settlements, I realized the great importance of the big political changes that we had in Nicaragua. I noticed the significant changes in our lives, since the country ended a revolutionary process and initiated a process of changes made by neo-liberal governments. I learned about the meaning and relevance of the process of the Miskitu indigenous peoples returning to their communities of origin. Now I understand that during that time, there was still little interest to stay in these new settlements for internal displaced peoples, and the high desire of the Miskitu peoples was to to return to their home communities. The motivation they had was so great that they took the decision collectively during discussions in community assemblies. At that time, while the Miskitu peoples were planning to leave temporarily their new settlements to go back to their original home communities, some other non-indigenous peoples came to take possession of those "abandoned" lots in the settlements. During that time, no one was still fully aware on the Law 28 related to the regional autonomy process. This process was not yet adopted

by peoples; no one was discussing about indigenous peoples rights. And in turn, no one defended the territory. The priority concern was to return to their original home communities and start their life all over again. Because of such difficult experience, I had to build a close relationship with the local authorities and this allowed me to understand more about social issues and development. Between 1998 to 2002, I joined as a coach in the Christian Medical Action, an NGO that was active in community development. Thus, I started facilitating workshops on leadership, headed the construction of water wells and latrines for sanitation, facilitated courses, organized outside the region, and promoted food security with the production of vegetables. All these activities helped me to acquire more experience and to have more personal contact with the communities of the Tasba Pri territory.

During those year, the territory had 16 communities that were not structured or organized together. On one hand the Miskitu peoples continued returning to their home communities along the river Wangki; and at the same time, there was an increasing migration of people from the Pacific coast to the Tasba Pri communities. New non-indigenous settlers were coming. This was considered as a mestizo invasion and illegal occupation of lands, which they thought were abandoned. And then the original settlers remaining in these IDP settlements decided to organize the Territorial Union of Communities of Tasba Pri (UCOTAP, acronym in Spanish), as a way of coping with the arrival of mestizo peoples.

In the beginning, UCOPTAP was composed of Sumubila and Sahsa settlements, of which 80 percent of the residents from Sumubila decided to return to Wangki river communities. Sixty percent of the peoples from Sahsa, on the other hand, returned to their home communities.

Thereafter, Tasba Pri was not yet conceived as one territory, but as a group of communities of indigenous settlements. However, when it was created as the Territorial Union of Communities of Tasba Pri (UCOTAP), the board was composed of 80 percent indigenous and 20 percent mestizos. Even during that time, I believed that the indigenous settlements would then disappear, and that these communities will be con-

trolled by the mestizos. The Miskitu Indians were then looking for a new dawn of life in restoring their home communities along the river Wangki. Meanwhile, Tasba Pri had developed some level of stability, with a social and economic security. The directive board of UCOTAP was elected every two years, so early on before the second election period, I decided to participate in the process of elections. I won the presidency, which to me is an honorable position to lead the peoples of Tasba Pri. At that time, the Law 28 on the Regional Autonomy process was not widely known. There were no discussions yet on the rights of indigenous peoples. Many farmers came and started deforestation in the area, so this was one major issue of concern in UCOTAP. With the management of this issue, I gained an image as a good leader, which was the basis for a political party to ask me to participate in the regional elections as a candidate for Regional Councilor.

I decided to follow the advise of the political party to participate in the regional election because I was then highly motivated by an older political leader, whom I greatly respected. I did not know anything about politics, but I knew that as a Regional Councilor, I will have the opportunity to manage resources for projects within the Tasba Pri. I took the correct decision and I was elected as a Regional Councilor. One of the first issues that we addressed was to promote the territorial demarcation. So we started with a territorial diagnosis, disclosure of the Law 445 and Law 28 on Regional Autonomy, and we encouraged the involvement of the National Commission on Demarcation and Titling (CONADETI), as one of the parliamentary work of the Regional Council. In 2006, UCOTAP came again in the process of the election of the directive board, and I won again.

In this new period, I got the support from the NGO DIAKONIA in order to develop agricultural projects, latrines, schools with multi-grade system, medicinal plant gardens, and training in tailoring. We also rebuilt the UCOTAP office, which was destroyed by Hurricane Felix in 2007. Starting in 2010, we talked about new issues arising in a new context, such as: land tenure, territoriality, statutory laws, regulations for natural resources, governance, climate change, sustainability,

among others. By August 2010, we became the Indigenous Territorial Government of Tasba Pri. These changes did not mean large modifications on the directive board of the territory. The UCOPTAP was conceived and structured as an NGO, so we only had to modify some structures. The needs, however, remained the same, so the roles were unchanged. In this way, we strengthen the work according to the rights of indigenous peoples, land tenure, natural resource management, and women's rights. In this important process of local governance, I had to learn to manage the political discourse and relate it to social work and its relationship with the community, where I had grown.

Now, I became a consultant, manager, counselor, guide, a Ta Upla (Grand chief). But Ta Upla cannot work alone; we must work collectively, enabling the participation of the group, as the people also demand. The indigenous peoples are now more aware of the need for collective participation, as compared before when only two to three people were making the decisions. Now, there is a much broader leadership. The indigenous territory of Tasba Pri currently have 29 communities: nine indigenous communities and 20 with mixed indigenous and mestizo peoples. Now the 99 percent of the directive board are indigenous members. Tasba Pri has also became a supplier of food to the City of Bilwi. We are producing rice, corn, beans, taro, beef, and wood.

Challenges

The first challenges of leadership in Tasba Pri is the titling of the land, in a context of multiculturalism within an atmosphere of peaceful and coexistence of the peoples. We know that mestizos are also looking for their survival and peace, so we have the challenge to work for this peaceful situation. The peace and tranquility of the people should allow a stable territorial governance. So we must seek for the social legal certainty for both groups of the population of the territory. We must work to create and strengthen a process of peaceful

coexistence in which the mestizo understand the concept and history of the indigenous community, land and agreement of peaceful coexistence. Only through this way will we achieve a sustainable development for Tasba Pri territory.



THE BIODIVERSITY RESERVE OF BOSAWAS & THE MISKITU MAYANGNA ANCESTRAL HOME

Murphy Almendaris

What is now called BOSAWAS, the largest Biodiversity Biosphere Reserve in Nicaragua, has always been the ancestral homeland of my people, the Mayangna peoples. BOSAWAS is composed of the Bocay river, the mountains of Saslaya and Waspuk river. BOSAWAS is one of 11 priority areas for biodiversity conservation in Central America and the first Biosphere Reserve in Nicaragua, recognized by UNESCO (United Nations Educational, Scientific and Cultural Organization). This region is rich in biodiversity, flora and fauna, and is organized into seven territorial governments under the indigenous Miskitu and Mayangna peoples for the administration, development, and defense of the resources.

The Governments of Nicaragua and Honduras are conducting dialogues on the framework of the Proyecto Corazón to establish a joint project on biodiversity conservation, but they have not yet taken into account the indigenous peoples

who live there. We, the Mayangna peoples, were not still informed on the details of the objectives of this project and the level of participation that we, the Mayangnas, could have in this project.

In February 2012, in a meeting between the Nicaraguan government and the directive boards of seven indigenous territorial governments, the representatives of the indigenous peoples (Miskitu and Mayangna) expressed our disagreement with the suggested procedures, wherein there is no discussion on substantive issues. At the end of the workshop, we came up with a proposal for dialogue with the indigenous peoples in Honduras, who are also Miskitu and Tawahka.

Decree 44-91 on the creation of the biodiversity reserve empowers the State of Nicaragua over the land, without recognizing the existence of the indigenous lands, territories, and the Miskitu and Mayangna peoples thereat. In addition, the decree clearly violates the country's constitution and Law 28 on regional autonomy.

One of the problems that we have with BOSAWAS (or the Biosphere Reserve as government calls it) is that all governments have referred to this area by referring only to the forest and to use the area to obtain financial support, without proper consultation or dialogues with indigenous peoples and communities. There has never been a planning conducted with the communities, and while government officials are aware of the biosphere area, there is no management of biodiversity being done by them. It is the indigenous peoples who had always managed and protected the area as our Bosawas, as our indigenous territory, for generations until now.

The Miskitu and Mayangna peoples had always sustained and supported conservation of the area, which we had always done for generations. But the government institutions had not always supported us, without even defining specific roles and to support the establishment of an alliance of the indigenous peoples within the territory.

After eight years of the previous management plan of the Bosawas Biosphere Reserves (RBB) within the new national and international context, the government is reviewing and

revising, this 2012, the new guidelines, approaches, priorities and operational mechanisms in managing the Reserve.

According to a new arrangement proposal, the provisions of the article states:

> *[T]he Plan of Management of BOSAWAS must have a management plan to guide its development within the short, medium and long terms, to be approved by Ministry of Natural Resources and Environment (MARENA) in consultation with municipalities, regional governments, private landowners, local communities.*

In this regard, the participation of indigenous peoples is explicitly not included, but includes the terminology "local communities," which means farmers in the area. Most of the farmers are settlers or outsiders who migrated into the territory of indigenous peoples. This led to a breach of the commitments under the policies of the Biosphere Reserve by the Government of Nicaragua.

Another concern that needs to be addressed is that the new Management Plan of BOSAWAS should include the full and effective participation of the Indigenous Territorial Government of Mayangna and Miskitu peoples. This would ensure the conservation of biodiversity and the ecological integrity of ecosystems, which allows the sustainable use of natural resources, and the enhancement of cultural and traditional knowledge, and thus contribute to improving the quality of life of indigenous peoples and local population.

A recent report[1] by the seven territorial governments of the Mayangna and Miskitu peoples, who are the customary forest owners in the area identified 18 problems on the BOSAWAS system, and which we have shared with the Ministry of Natural Resources and Environment (MARENA). These problems are the following:

1. Existing conflicts among the inter-agency stakeholders in the management of RBB;
2. Scattered and uncoordinated institutional planning processes;

3. Systematic processes of land invasion, without appropriate institutions to prevent them;
4. Weak information flows to the communities and ineffective at the macro/national level;
5. Lack of prioritization on the management of RBB at different levels and as a result, there is little attention from the national level;
6. Unplanned and improper use of natural resources;
7. Existence of a weak institutional presence to a greater or lesser extent, including MARENA as responsible for the administration of the Reserve. In some areas, the presence of some institutions (e.g., National Institute for Agricultural Technology (INTA), Ministry of Agriculture, Livestock and Forestaría) is zero, there is no presence of representative of such institutions.
8. Weak citizen participation in matters relating to the management of the reserve, largely due to lack of appropriate information;
9. No clear incentives to participate in the management of the Reserve;
10. Low level of leadership of organizations and institutions concerning the management of the Reserve;
11. Some institutions have no clear mandate regarding the legal framework of the RAAN and the management of the reserve governed by Law 407;
12. Low ownership on the management plan of the Reserve and no response to its problems;
13. Different interests and resources of organizations without institutional control;
14. Low rate of implementation of the laws on the land and the reserve; and
15. Illegal land market that promotes the invasion of indigenous lands and other lands.

With such problems, all the more that the new management plan should involve indigenous peoples. This is also a good opportunity to raise awareness on the importance and relevance of the Bosawas Biodiversity Reserve to the Meso-American region, and its local and global functions. For example, this should include improved policies for the protection of natural ecosystems and ensure on the provision of

the goods and environmental services. These policies should be designed to provide incentives for adaptation to climate change, and to leverage opportunities for water resource management, food security and energy, and the restoration of rights of indigenous peoples to have a better quality of life.

Given this situation, we, Mayangnas and Miskitu indigenous peoples, continue to demand that the project should take into account the rights of indigenous peoples as enshrined in the United Nations Declaration on the Rights of Indigenous Peoples, especially emphasizing the right to free, prior and informed consent, the right to self-determination, and the full and effective participation of indigenous peoples in the decision making processes.

Ideally, what we would like to see is that the administration of BOSAWAS will be passed to the autonomous regional government, with the necessary financial.

Endnote

[1] Report of the Joint Management Plan of the RBB, 2011.



INJURY TO PROPERTY RIGHTS OVER TERRITORY

Odilon Candia Huaman

The events took place in the year 2005. A group of non-indigenous outsiders squatted on lands with the aim of appropriating a hundred hectares belonging to the Native Community of Pitirinkini. This community is located in the District of Pichar in the Province of La Convención, Cusco in Peru. Faced with the encroachment, the natives of Pitirinkini, supported by the Ashaninka Machiguenga Organization of the Apurimac River Valley, decided to evict the usurpers. In response, the encroachers, who named themselves the "La Victoria" Civic Association of Agricultural Producers of Pitirinkini, resolved to file a crime report against the Chief of the Native Community, Mr. Abel Casiano Cáceres, and other community members such as Mauro Casiano Cáceres, for the crime of aggravated usurpation against life, body and physical integrity.

Thus, the prosecutor brought criminal charges, following which the Mixed Jurisdiction Court of Ayna San Francisco, after an irregular process devoid of evidence, found the indigenous brothers GUILTY. On appeal, the Criminal Division of Ayacucho quashed the guilty verdict and ordered that a new verdict be issued since there was insufficient evidence for the guilty verdict. Three years have since gone by, but the new verdict has yet to be handed down.

This is a typical case in which encroachers upon the territory of communities take recourse in trials under western court procedures, which are not understood by the indigenous peoples of the Amazon. Especially since the indigenous peoples of the communities have not had access to primary school education. The criollo encroachers thus resort to trickery, obtaining "evidence" using attorneys, prosecutors, judges, and any official of the state, with the aim of attaining a guilty verdict against the natives, exercising such powers in order to benefit themselves with extensive lands. In addition to that, due to failure by many judges and prosecutors to correctly apply criminal law, major injustices are committed against the vulnerable population: the indigenous native community of the Apurimac River Valley.

ILO Convention 169, national legislation on native communities, Executive Order No. 22175, legislation over rights of possession and rights to property, protect possession and ownership by native communities. In the case referred to above, the Native Community of Pitirinkini is a community with a property title, both with respect to the area they own and other areas where they continually, in an ongoing fashion, exercise their right to possession and ownership in practice, since they engage in activities of planting, hunting, fishing, the use of the flora for medicine, rituals, and other purposes.

The area is used for communications in several different forms with members of other communities. It has also provided protection against the threats of armed insurgent groups. These material facts reliably demonstrate the possession and exercise of ownership referred to in the text of Article 13(2) of ILO Convention 169: "The use of the term 'lands' in Articles 15 and 16 shall include the concept of territories, which covers

the total environment of the areas, which the peoples concerned occupy or otherwise use."

The indigenous peoples of the community of Pitirinkini, within their territory, are enjoying their right, which has been affected and violated by the group of encroachers and once again violated by the acts of the Prosecutor's Office and of the Court of Mixed Jurisdiction.

According to Peruvian law and the concept of possession under criminal law, possession is the use, in practice, of real or personal property. In the case of lands, such possession must be peaceful, continual and does not involve violence. In this case, the usurpers do not meet this condition. On the contrary, the community exercises possession over their lands. Thus, the crime charged is baseless.

Through a ruse, an attempt has been made to demonstrate that the indigenous peoples engaged in violence against the encroachers. The indigenous peoples were accused of using weapons, based on the mere fact that they carry arrows for daily use. Slanderous accusations were also made by the denouncing parties that the indigenous people wore hoods. These allegations were not corroborated during the investigation. On the contrary, the Pitirinkini community members seized firearms from the hands of the encroachers, given that it is prohibited to carry firearms in the zone without due authorization, since it is a combat zone with groups of armed insurgents. Such a measure is in place in order to protect the families of the community from attacks by outside agents. In an irregular fashion, the judge of Mixed Jurisdiction and the prosecutor attempted to hide and distort these facts in order to find the defendants guilty and thereby clearly favor the encroachers with extensive lands.

Evidently, the members of the justice system, on the one hand, were not educated regarding respect for the rights of indigenous peoples, much less regarding the application of ILO Convention 169. Article 17 of said convention states, "Persons not belonging to these peoples shall be prevented from taking advantage of their customs or of lack of understanding of the laws on the part of their members to secure the

ownership, possession or use of land belonging to them." It is patently clear that through the crime report, it is sought to bog the community members down in a proceedings unknown to them in its substantive and procedural sense, in addition to monetary expenses.

On the other hand, the denouncing parties have sufficient resources to mobilize any person or authority that displays willingness to act in their favor. For instance, they are able to obtain inspection certificates without the presence of the natives, as well as reports favorable to the denouncing parties from officials of the Agrarian Agency and from the prosecutor, who ends up becoming counsel for the denouncing parties and vice versa.

The act of encroachment is nothing less than an unauthorized intrusion on the lands of the Pitirinkini community. This act violates Article 18 of ILO Convention 169, where the authorities, such as the Justice of the Peace and the Lieutenant Governor of Pichari, rather than take measures against the intrusion, make reports in favor of the denouncing party. It is as if the legitimate possessor and owner were "dispossessing" the denouncing parties.

In this regard, the application and interpretation of ILO Convention 169, the interpretation of the crime of usurpation in its strict criminal sense, and the absence of incriminating evidence, is gaining influence among new operators in the justice system. Indeed, the judiciary is receiving judges that are more open to learning about reality, especially that of the Apurimac River Valley. These new judges have training in international law and especially as regards indigenous peoples. With these changes, it is hoped to gain results that provide justice and return the right to the native communities that is theirs. There is no foundation for a guilty verdict against brothers Abel Casiano Cáceres and Mauro Casiano Cáceres. Indeed, from the point of view of the native community, the guilty verdict is much more than a condemnation against those persons. Rather, it is a condemnation against the community, with the consequent loss of their territory.

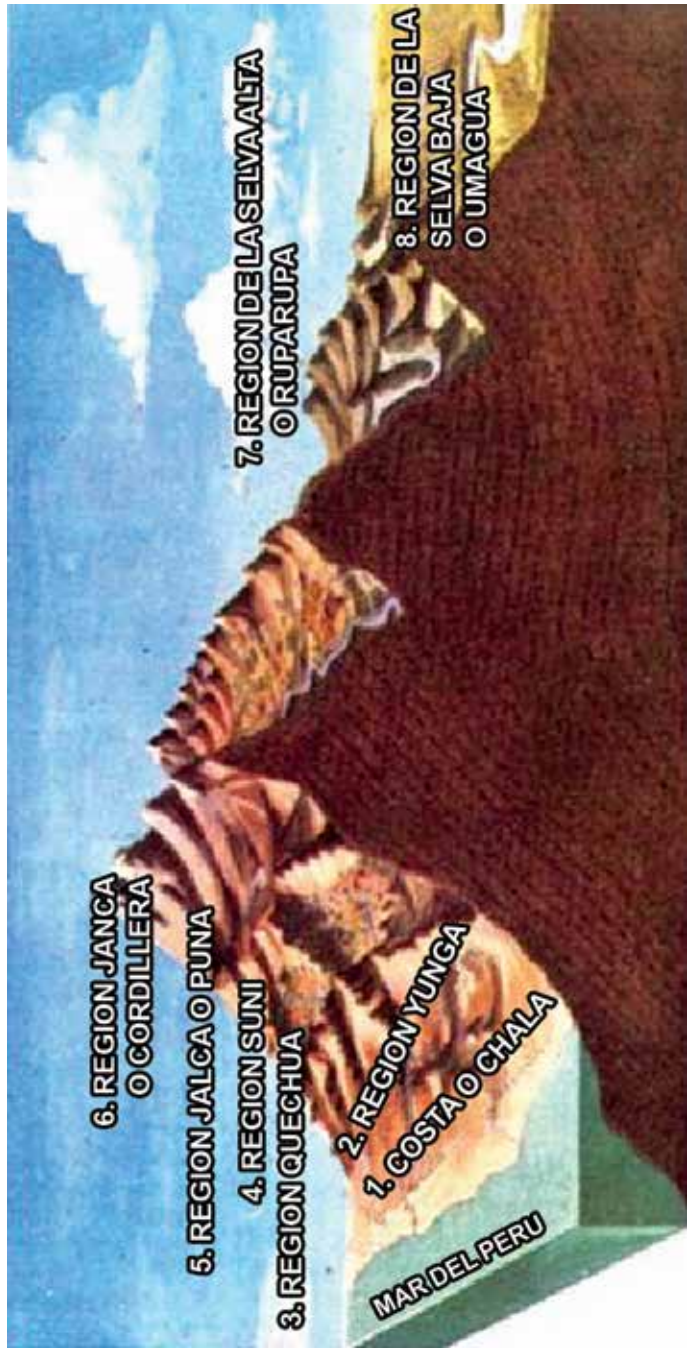


CONSERVATION OF AGRO-BIODIVERSITY IN ITS RESPECTIVE PLACE

Odilon Candia Huaman

This is the Proposed Regional Ordinance of Ayacucho. Its aim is to promote the conservation of agro-biodiversity as a food security alternative, respecting the Andean worldview that sustainable development projects must include agro-diversity and that the resulting diet must be oriented to the consumption of native products based on agro-biodiversity.

Peru is a state organized into three levels of government: the National Government, Regional Government and Local Government, which correspond to the three political divisions. Regional governments have sovereignty over their territorial jurisdiction. Accordingly, Peru has 24 regions divided into the coast, sierra and rainforest on the one hand, and the eight natural regions, classified according to Pulgar Vidal as: Chala or Coast, Yunga, Quechua, Suni or Jalca, Puna or Jalca, Janca or Cordillera, Rupa Rupa or High Rainforest, and Omagua or Low Rainforest. The Ayacucho region is located in the sierra or


6. REGION JANCA
O CORDILLERA
5. REGION JALCA O PUNA
4. REGION SUNI
3. REGION QUECHUA
2. REGION YUNGA
1. COSTA O CHALA
MAR DEL PERU
7. REGION DE LA SELVA ALTA
O RUPARUPA
8. REGION DE LA
SELVA BAJA
O UMAGUA

Quechua region. Its population is majority Quechua speaking and indigenous. It is a zone of extreme poverty, at the heart of the armed conflict. There, agro-biodiversity has been practiced since time immemorial, which ought to be consecrated as public policy. The Regional Government of Ayacucho is now doing so, with a view towards issuing a Regional Ordinance.

In said regard, the 1986 United Nations Declaration on the Right to Development establishes that the "human right to development also implies the full realization of the right of peoples to self-determination, which includes… the exercise of their inalienable right to full sovereignty over all their natural wealth and resources." In said regard, agro-biodiversity is a fundamental cultural wealth and, at the same time, is wealth in the form of a natural resource produced by being "grown" (the familiar understanding between nature and man). In application of Article 15 of ILO Convention 169, indigenous peoples have a right to participate in the use, management and conservation of natural resources. The special importance of the relationship of peoples with lands and territory must be considered and respected by governments. It therefore needs to take shape in the form of an ordinance. Also applicable is Law No. 26839, the Law on Conservation and Sustainable Use of Biological Diversity, which establishes the state's obligation to prioritize actions for conservation of ecosystems, species and genes, giving privileged status to their high ecological, economic, social, and cultural value. This obligation also corresponds to the conservation of natural ecosystems and croplands, through promoting the use of proper, sustainable management techniques. Such a regulatory framework is rooted in the material reality of the living culture of practice and customary law of agro-biodiversity in the various ecological zones of the Natural Quechua Region, exercised by the indigenous communities.

Agro-biodiversity has created multiple species, necessary to maintain food security and for a successful exchange of products. These aspects are being weakened by the presence of commercial-use products introduced through the market. In fact, the national government's policies, rather than fomenting native agro-biodiversity, favor consumption

of production from plantations on the coast. Agro-biodiversity exists when there is a diversity of species, for example, tubers (more than 200 varieties of potatoes, more than 50 varieties of ollucos, mashua, oca yams, arracacha, pitu bitter potatoes, and sweet potatoes), cereals (quinoa, achita Inca wheat, oats, more than 100 varieties of corn), legumes (beans, tarwi, peas, sinqayru, lima beans), fruits (prickly pear, arrayán, bazul, armancay, lukma, avocado, pacay, chirimoya, loquats, usun), and countless vegetables. Almost all are endogenous or native to the natural zone.

The lack of an educational system committed to Peru's agro-biodiversity resources has paved the way for a lack of appreciation on the part of the public for the immense cultural heritage of Peru's agro-biodiversity. Instead, the Peruvian state has promoted agrarian policies that undermine agro-biodiversity, resulting in a continual degradation of ancestrally cultivated biodiversity, as well as insensitivity towards Andean crops. Yet Andean crops, in nutritional terms, surpass the nutritional standards of products on the national market.

Sound regional policy, promoting respect for cultural rights and the rights of indigenous peoples to live in a healthy environment and to protect health with optimal nutrition, requires action in the face of the extinction of species from the Ayacucho region (as well as elsewhere in the world). Such action will allow for recovery of agro-biodiversity, making Ayacucho a region that is rich in species and fruitful in biodiversity. This, in turn, will make it possible to sustainably offer the population products high in nutritional quality in order to combat food insecurity and eliminate poverty and malnutrition, especially among children.

Likewise, conservation of agro-biodiversity is absent in development projects. Current projects—and those being planned—use conceptualizations counter to the Andean world view, to cultural identity, and to the preservation of food security for the generations. These projects fail to consider ancestral methods, techniques and knowledge. Accordingly, the planning of agricultural projects must include responsibility for conserving and promoting biodiversity as a sustainable alternative for the Ayacucho region, as a guarantee of food security for the various sectors of the population, especially children. Such an approach is also needed in order to provide

an alternative for joining the market with a better outlook for positioning products with respect to those that are harmful to health and that provide poor nutrition. It must also ensure that agro-biodiversity constitutes a true germoplasm bank to be protected and promoted in public projects and policies.

Andeans have exercised and continue to exercise their rights and their authority over agro-biodiversity. In the past, in the Ayacucho region, this led to increased levels of production, depending upon the features of the cultivated areas, as well as protected seeds and diversified crops. The conservation and growth of agro-biodiversity has been possible due to sound organizational, social and legal policy, which lives today in real, tangible acts among the people of Ayacucho, practiced by the communities, population centers, indigenous individuals, intellectuals, and others. This includes a group of people who exercise the day-to-day functions of traditional authorities, principally in agrarian activities, maintaining the interrelationship between man and nature. The functions fulfilled by these traditional operators have direct implications on organizational life, given that they are imbued with the wisdom of the Andean world view of respect for the life of the universal environment under the principle of complementarity and return (reciprocity).

The Andean culture persists through biodiversity. For that reason, national and regional legislation is needed to provide regulation for purposes of application, so that subjective rights will be exercised through a legal mandate. In other words, the conservation, practice and predominance of agro-biodiversity must be in the hands of the indigenous peasants. Thus, it is indispensable to reiterate that agro-biodiversity in Ayacucho constitutes a right of the indigenous peoples.

Therefore, in order to safeguard the regional interests of preservation and sustainable use of agro-biodiversity, and in keeping with the constitution, international pacts and conventions, said goal must rise to the level of public policy through an ordinance.



COMMUNICATIONS FOR DEVELOPMENT WITH IDENTITY OF THE INDIGENOUS PEOPLES OF THE REGION

Coordinating Body of the Indigenous Organizations of the Amazon Basin

The Situation of Indigenous Peoples in the Amazon Basin

The main cause of extreme poverty in Latin America, and particularly among our indigenous peoples, is the neoliberal policy within what is called globalization of the economy. Our communities are seeing their territories increasingly threatened by multinational companies that exploit natural resources, such as mines, lumber, water resources, oil and gas. Indeed, even those who claim to be defending the environment advocate removing us from our ancestral territories, because they supposedly know how to "manage" and conserve them better than we do.

Human rights violations and genocide against indigenous peoples have been systematic throughout our history since the arrival of the Europeans. Only recently has public

opinion shown awakened concern over our rights, which still fail to be guaranteed in the majority of states. The political constitutions instituted in the 1980s and 1990s as countries transitioned from dictatorships to democracy were developed within the framework of neoliberal visions, geared towards a globalized economy. These constitutions and the laws derived from them fail to ensure compliance with and implementation of formally declared conventions, pacts and offers.

Backed by pompous modern technical military language, we, the indigenous peoples, have been the target of various "dirty wars" in the continent. On a daily basis, we are victims of state violence in certain countries, either through official repressive bodies or through paramilitary organizations at the service of a number of power and interest groups—ranging from political and business organizations to armed insurgents and even drug traffickers, as well as several different types of smugglers and armed mafias.

At present, we, the indigenous inhabitants of the Amazon, number more than two million, and belong to approximately 400 different peoples. Our peoples are marginalized, discriminated against, and impoverished. This is aggravated by the destruction of ecosystems, which has further weakened the indigenous economic base. For the majority of indigenous peoples, territory and natural resources are assets that are indeed "put to use." Yet these assets are transmitted through the wisdom passed down from generation to generation; they are the "space for life" and for cultural reproduction. In no way are they "assets to be traded" as they are seen by the managerial rationality of voracious exploitation.

At present, there is a shortage of know-how and human resources for administering communications technologies. Despite that, the indigenous movement in the Amazon has developed a democratic, multiethnic, decentralized organization that is international in scope. Countries such as Ecuador and Bolivia have become key political players in social processes. Elsewhere, such as in Peru, though indigenous peoples are not visible for the official world, in the urban world we are actively engaged with initiatives and national proposals. Furthermore, though most of the organizations lack specialized knowledge

in communications, there have been significant experiences in communications in several different parts of the region, which need to be shared for national and regional learning and continual improvement.

The Development of Communications and Information Technologies

The principal issue and starting point is the need for organizational strengthening at all levels so that our peoples will be able to successfully engage in the struggle for our rights and build a future with identity. As such, it is not a matter of technologies *per se*, but of the search for solutions to this problem. Accordingly, we need to have an integral vision of communications, understanding them not so much as mediums or messages, but as social processes that involve the day-to-day tasks of indigenous peoples and communities. A communications policy must be approached based on such every day community and organizational needs, based on which, in an intercultural process, we need to incorporate information and communications technologies (ICTs) and other technologies. This must be integrating in nature, linking and articulating local practices, traditional media, radio and ICTs, with an intercultural approach.

New ICTs are not simply one more tool. They are the product of state of the art technology. The computer, cell phone, global positioning units (GPS, used in AIDESEP's territorial defense work in Peru, for example[1]), the Internet (our websites in the region, e-magazines, etc.), and several aspects of digital technology, comprise what technicians and specialists in such matters call ICTs. These devices, often considered the latest technological fad, in practice have structurally changed the way individuals, communities and nations interrelate with one another.

Much has been said about the importance of ICTs as a factor for development and social welfare. Nonetheless, ICTs in fact widen the gap between North and South, between powerful economic groups and the poor, between the countryside and the city.

It should not be forgotten that according to the most reliable calculations, only some one-third to one-half of long-term economic growth is due to mere accumulation of factors (capital and labor). The rest, between one-half and two-thirds, is due to the technical progress, that is, to technological innovation (which is the result of what, in turn, is generically referred to as research and development). Thus, the development and acquisition (appropriation) of this new technology has become the new horizon, indicating who is poor and who is not.

But this is not a question of infrastructure. It is a question of content. *We must be clear on this*. We need to engage in processes that use technologies in order to communicate with one another, efficiently manage our knowledge and, above all, be able to contribute to productive development based on our own identity as indigenous peoples. Several governmental and non-governmental ICT projects related to indigenous peoples are underway in the region. We need combined information in order to promote negotiations in each country so that these projects will respond to our interests. ICTs need to be of practical service (database system, Intranet, applications, etc.) so that we can consolidate information in relation to biodiversity, genetic resources, ancestral wisdom, collective knowledge, intellectual property, climate change, REDD, REDD+ and indigenous REDD+, among international bodies. The promotion of productivity and marketing requires the development of a group of indigenous productivity professionals who can share experiences, not only in their country of origin, but at a regional level. That way, we can efficiently exchange products and knowledge for economic development programs, bio-investment, and sustainable management of natural resources throughout the region. By strengthening mechanisms to internally take account of collective knowledge, ancestral wisdom and biodiversity resources existing in our territories, and by being involved in decisions on policy, legislation and bio-commerce projects, we can bolster our own economic development in keeping with our worldview.

The use of this technology on our part is not question of a major money investment. Rather, it calls for an "efficient in-

frastructure." The critical point is for the organization to make a policy decision and work to make its technology endeavors strong and sustainable. This means that it is vital to master the technologies so that we can take our place as active players, with a horizontal structure and management of know-how, thereby guaranteeing continuity of the work. Technology is increasingly accessible due to lower equipment costs and improvements in telecommunications infrastructures. We, the indigenous peoples, have experience in using the technologies of western society. We must use them as instruments. But we need to develop sustainable practices, train people who can lead the processes, and make sure that these processes are coordinated and respond to our authentic interests to improve the lives of our peoples and communities, with an affirmation of our identity and a sustainable management of the natural resources available in our territories.

COICA - The Regional Organization and the National Organizations.

The Coordinating Body of the Indigenous Organizations of the Amazon Basin (*Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica*/COICA) brings together national and regional indigenous organizations from the nine Amazonian countries and is the maximum level regional organization. Its members are: The Inter-ethnic Development Association of the Peruvian Rainforest (AIDESEP); the Association of Amerindian Peoples of Guyana (APA); the Confederation of Indigenous Peoples of Bolivia (CIDOB); the Coordinating Body of the Indigenous Organizations of the Brazilian Amazon (COIAB); the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (CONFENIAE); the Federation of Amerindian Organizations of French Guyana (FOAG); the Regional Organization of Indigenous Peoples of the Amazon (ORPIA); the Organization of Indigenous Peoples of Surinam (OIS); and the Organization of Indigenous Peoples of the Colombian Amazon (OPIAC). The important function it pro-

vides has only been possible due to the level of legitimacy and representativity it has achieved at the regional level and the recognition it has built in international fora where different aspects concerning the exercise of our collective rights are debated.

But now, the organization's potential must be maximized by formulating a strategic plan that contemplates priorities for our work and reflects on how to best achieve the results sought, schedule coordination activities, and make the most of available resources.

Here, the internal and external communications factor is a structural component. First, this is because we need a common dynamic, built through the COICA Coordinating body with each of the national and regional organizations in all the member countries, thus overcoming problems in communications and information flows in COICA and at all levels. Thus, we need to develop a collaborative organizational culture, not just among leaders, but above all among projects and programs: Land and Territories, Education and Intercultural Health, Application of Justice, Intergenerational Transfer of Wisdom and Knowledge, Administration of Natural Resources, Inter-Institutional Relations and Political Spaces.

The following are communication strategy proposals to bring us closer together and better coordinate our work as peoples in the region:

1. Design of an ICT strategy in coordination with the indigenous organizations of the Amazon Basin, with a strategic mid- and long-term vision that allows us to coordinate national campaigns and negotiate with states, multilateral agencies and NGOs that act or operate in these arenas, and at national and international forums;
2. Creation of an Indigenous Communications Center (CECOI) as a unit involved in actions at an international level, along with communication units in each region. This operating center must undertake the branding and internal communications work of the organization. Through audiovisual production, it must

scale up from the current website to an Amazonian Indigenous Portal with tools such as fora, bulletins, e-books, etc. It must also make efficient use of ICTs in order to strengthen internal communications with an Intranet, on-line documentation system, etc.;

3. Promote maximum transparency of information for resource management and administration. A structural problem endemic in the region is the culture of corruption. The indigenous movement must thus be capable of informing its grassroots regarding the management of a number of different resources related to territorial rights, the environment, and international entities for the protection and recognition of the rights of indigenous peoples;
4. Training and/or updating of indigenous leaders at a regional level and in each member country, specialized in ICTs, who, based on our perspective, will design proposals, lead these processes and operate tools as they become available through social and technological developments;
5. The efficient and effective use of financial resources provided through international cooperation as a driver for self-financed activities based on ICT processes;
6. Adoption, dissemination and development of methods for using free software in all areas of work with these technologies, thus ensuring autonomy, security and sustainability in indigenous organizations;
7. An intensive study of best practices, compiling and disseminating experiences at the international level, through a Virtual Documentation Center, thus enabling an effective management of knowledge.

This document outlines our vision and strategic criteria. This work should be led by the Indigenous Communications Center of COICA (CECOI) as an operating unit of the COICA Steering Committee, framed within the organization's approved Strategic Plan.

Quito, March 5, 2012

Endnote

[1] CIPTA (Information and Planning Center) is one of the National Programs of AIDESEP. CIPTA use information technology in its satellite geo-referencing work. http://www.aidesep.org.pe/cipta/.



CLIMATE CHANGE & INDIGENOUS PEOPLES IN THE AMAZON BASIN

Coordinating Body of Indigenous Organizations of the Amazon Basin

What Challenges Does Climate Change Pose for Us?

The *pishtaco*, for many peoples of Peru, is a character who takes people by surprise, hangs them by their feet, and sucks all the fat out of their bodies. The grease obtained, considered to be the finest in the land, is taken far away to be used in spaceships and state of the art industrial products. Surely, numerous indigenous peoples have such a character under other names. The pishtaco, in fact, is like the businessmen and governments that promote industrialization and extraction down to the last drop of our resources, whether from the soil or the subsoil.[1] They tend to present themselves in such a way that at first it is hard for us to distinguish their true identity. In general, it is our elders who, long before many others, recognize those who come to suck out our very lives.

Climate change is far from being a phenomenon of nature. It is rather, above all, a product of man, who, driven by industrial activity, takes our resources without any consideration whatsoever for our lives, peoples or ecosystems, destroying them in a thousand ways as they are encountered. Could that be why the responses and importance given to what has now caused a climate crisis are not the same for all?

Climate change threatens to terminate our existence as indigenous peoples in the short-term. Even though we are not the cause of climate change, we are the human group most directly and violently impacted by it. Climate change has already caused a global crisis. It not only plagues the world on a daily basis, but could also provoke the extinction of all humanity in some 100 to 150 years. The year 2010 was the hottest recorded in history. It does not take a fortune teller to understand that this will have consequences for all. It suffices to remember the events of 2010 in Haiti and the Gulf of Mexico.

Could it be that in this land there are those who speak the truth and those who lie? We are those who are listened to the least. Or is it that those who are supposedly "civilized" do not read, do not understand, or simply do not want to understand the immense number of scientific reports on what is happening, not only at the level of ecosystems, but of persons and cultures who, among other things, have ensured and continue to ensure the very existence of those ecosystems? Why is it that the major environmental institutions fail to change those who push for the unharnessed extraction and the resulting shameless destruction of our ecosystems and life in every sense? Could it be that industrialist and governments are, in large measure, financing the most powerful environmental organizations, so that we will be the ones who have to change?[2] It would hardly be an exaggeration to say that things are upside down in the world.

As indigenous peoples, we inhabit and maintain the life of the most fragile ecosystems on the planet. Moreover, we are the only peoples who have managed to maintain the life of tropical rainforests, deserts, marshlands, mountains, mangroves, glaciers, islands, and other ecosystems that we

still see around us. And we have done so for centuries, based on our models of life, knowledge and wisdom, as indigenous peoples and cultures. These spaces, in the face of a malignant dominant industrial demand worldwide, are now facing severe processes of desertification, melting of glaciers, destruction of mangroves, contamination of waters by heavy metals, and disappearance of biological corridors that maintain the lives of our fauna, forests and the entire biodiversity of our territories.

In addition to destroying these spaces, development is associated with countless emerging and reemerging infectious diseases, whose impact is multiplied by the famines we are facing. These weaken the capacity of our bodies to combat infections and other diseases in our families. The interaction between our forests, fauna, birds, and fish normally contains the development of such diseases. But once our forests or water sources are destructively intervened upon (e.g., with explosives, engines, speedboats, etc.), the balance between each of these forms of life is broken and, as a result, the viruses, bacteria, parasites, and amoebas with which the wildlife lives end up infecting humans in several possible ways. Some examples of emerging and reemerging diseases are: dengue, leishmaniasis, yellow fever, chagas disease, rabies, the anthrax virus, ebola, hanta, and HIV, in addition to others that might yet to be identified. That is how the infections our families are now facing multiply.

Our Mother Earth is not only killed materially. Our identity, culture, knowledge, practices, interactions, dreams, bodies, specialists, health, and elders—our entire universe—are likewise jeopardized. But it appears that for the rest of humanity, this does not matter. Much less do they understand how all of that places their own health in jeopardy. Currently, three out of every four new diseases in the world are generated as described above, while their impact on global health are feared and studied in detail by powerful public health entities.

What Response are We Receiving?

We are disproportionately impacted by the climate change crisis as a direct result of industrial demand and its drive for relentless exploitation of our soil and subsoil resources. It is thus imperative for us to take affirmative measures to *repair,*[3] *mitigate,*[4] *adapt to,*[5] and *compensate*[6] the material damages and harm to human beings that we are facing in our territories. It is not acts of compassion that are sought, but acts of minimal reparations and social and ecological justice. The fact that we are excluded from policy making and from programs for mitigation of the impacts of climate change now requires us, without a moment's hesitation, to engage in action—urgently, creatively, and with solidarity.

We, the indigenous peoples of the Amazon, practice sustainable technologies based on an integral culture, a civilization where the human and the natural are profoundly united on the social, productive and spiritual plane. It is now indispensible to curb deforestation and illegal logging, through the integration of our cultural and spiritual values. The social reproduction of our peoples and communities so require in order to overcome what now truly constitutes grave threats to our hydrological and territorial equilibrium in the Amazon.

To date, solutions proposed by governments and international NGOs in response to the effects of climate change are unfortunately based solely on a market logic.[7] Some examples are the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD),[8] among other environmentalist proposals. These are built on the same modes of economic geo-policy that have always threatened the collective rights of indigenous peoples, even those rights that are guaranteed by multiple national and international instruments and our own models of good living[9] as indigenous peoples.

The situation is getting worse. Using the most recent initiatives to contain climate change as a smoke screen the states and multinational companies, with unprecedented alacrity

and intensity, are promoting what they call "green" development and the construction of dams, agrofuels, hydrocarbons exploration, forestry plantations, exploitation of natural gas, monocrops, etc. This does not represent a fundamental transformation. What is happening in practice is the promotion of an extreme expropriation and destruction of our territories. Even more shamelessly, together with that, the criminalization, prosecution and even murder are being ordered against indigenous brothers and sisters who are defending their territories.

A Close-Up Look at a National Example in Peru

The current policy of privatization and exploitation of natural resources will surely lead to tragedy. The case of the Peruvian Amazon described below is a living example. Some 15 million hectares are being granted as hydrocarbon lots to a dozen oil companies. These are superimposed upon approximately 14M ha of indigenous territory occupied by us under one or more modes of "protection." If we include forms of indigenous land tenure under other modes, the proportion would be even higher. And that figure only includes superimposed spaces. If we were to present an analysis of the impacts of such industries on the environment, our health, soils, flora, fauna, fish, and biodiversity, the situation reaches proportions that are practically infinite. For example, it is noted that Pluspetrol alone, in its Lots 8 and 1 A-B, has been responsible in the last four years for 78 oil spills.[10]

The following table lists hydrocarbon lots granted by concession or offered to oil companies by the Peruvian government.[11] It is estimated that at present 80 percent of the Amazon is already distributed to such companies. Each of the companies listed is superimposed upon indigenous territory under protection, either in the form of Communal Reserves, Territorial Reserves for Indigenous Peoples in Voluntary Isolation, Protected Forests, Reserved Zones, National Parks,

National Reserves, Regional Conservation Areas, or Buffer Zones in one of its prior land tenancy classifications. In several cases, the lots also simultaneously and directly superimposed upon native communities.

Hydrocarbon Lots in Indigenous Territories (as of March 31, 2010)

Company	Lot	Approx. size (hectares)	Indigenous Territory Impacted	Approx. size (hectares)	Indigenous Peoples
Burlington, Conoco-Phillips, Cepsa USA, Spain) Burlington, Conoco-Phillips, Repsol (USA, Spain)	104 129 39	1+ million 472,000+ 886,000+	Pucacuro Reserved Zone	637,000+	Indigenous Peoples in Voluntary Isolation
Golden Oil Corporation (Canada)	132	148,000+	Murunahua Territorial Reserve	481,000+	Murunahua, Nahua
Hocol Maurel et Prom (France)	116	853,000+	Santiago Comaina Reserved Zone (Buffer Zone)	863,000+	Awajún, Wampís
Hunt Oil, Repsol (USA, Spain)	76	1.4+ million	Manu National Park Buffer Zone Amarakaeri Communal Reserve (Buffer Zone)	257,000+ 402,000+	Yiné, Matsiguenka Harakmbut

Maple (USA)	31-B 31-D 31-E	62,000+ 141,000+	Sierra del Divisor Reserved Zone	1.4+ million	Indigenous Peoples in Voluntary Isolation, Shipibo Conibo
Occidental - OXY (USA)	103	870,000+	Cordillera Escalera Regional Conservation Area	149,000+	Quechua, Lamist, Chayahuita
Pacific Stratus Energy Ltd. (Canada)	135 137 138	1+ million 448,000+ 414,000+	Yavarí-Tapiche Territorial Reserve Ishconahua Territorial Reserve	1.1+ million 275,000+	Mayoruna, Isconahua, Matsés Ishconahua
Pan Andean, Cepsa (UK, Spain)	114	770,000+	El Sira Communal Reserve (Buffer Zone)	616,000+	Asháninka, Yánesha, Shipibo
Petrobrás (Brazil)	58 117	340,000+ 368,000+	Matsiguenka Communal Reserve Güeppí Reserved Zone (Buffer Zone), Napo Tigre Territorial Reserve	218,000+ 625,000+	Matsiguenka, Kugapakori, Nahua Secoya, Bora, Kichwa

Petrolífera Petroleum del Perú (Canada)	107 133	1.2 million 396,000+	Yanesha Communal Reserve (Buffer Zone) S. Matías-S. Carlos Protected Forests (Buffer Zone) Cordillera Azul National Park (Buffer Zone) Madre de Dios Territorial Reserve	34,000+ 145,000+ 2+million 768,000+	Yánesha Yánesha Kechwa Lamist, Yiné, Shipibo, Conibo, Cashibo, Cacataibo Masko Piro, Indigenous Peoples in Voluntary Isolation
Pluspetrol (Argentina) + Korea National Oil and DAEWOO (Korea)	1 A- B 108 8	691,000+ 1.2+ million 187,000+	Pucacuro Reserved Zone S. Matías-S. Carlos Protected Forests, Asháninka Communal Reserve (Buffer Zone) Pacaya Samiria National Reserve	637,000+ 145,000+ 1.8+ million 2+ million	Indigenous Peoples in Voluntary Isolation Yánesha Asháninka Kukama Kukamiria
Repsol, Burlington Resources (Spain, USA)	57	611,000+	Matsiguenka Communal Reserve (Buffer Zone)	218,000+	Matsiguenka, Kugapakori, Nahua

The Peruvian case is just one example of how the agents responsible for climate change work. It is not hard to understand which way governments and companies are heading, when they walk hand-in-hand. In the first months of 2010, 25 more lots have been offered, principally in Amazonian territory. In this framework, exorbitant pressure is being placed on the southern rainforest, due in part to its natural gas deposits, the value of which is skyrocketing.

The solutions to respond to the effects of climate change must necessarily be holistic, coherent and respectful of human rights of Mother Earth and of the very legislation in our defense, guaranteed at a national and international level.[12] In other words, it must not be limited to western scientific knowledge promoted by the governments and companies that are responsible, and that together, are behind the serious problems we are facing. We already know that such discourses are mainly monolithic. They are headed in a single direction—the monetary one. What we need to fortify are our indigenous principles, knowledge, innovations and practices. Based on them, we must develop new responses and proposals to face the serious challenges that lie ahead. This is what, over time, has made it possible, and in the end, has guaranteed the conservation of ecosystems and biodiversity within our ancestral territories.

Taking the Bull by the Horns?

The projects and programs related to climate change and adaptation have not, to date, shown any respect whatsoever for the collective rights we have legally and officially acquired as indigenous peoples at the national and international level. Therefore, we have called upon the United Nations Permanent Forum on Indigenous Issues to recommend that the Office of the United Nations High Commissioner have the Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people prepare a serious, complete report regarding the impacts of climate change on indigenous peoples.

Projects and programs related to climate change and adaptation must have full respect for the collective rights of indigenous peoples. It is with this objective that COICA participates in an ongoing manner in various international spaces created by indigenous and peasant organizations throughout the world, in order to carry the voice of the indigenous organizations of the Amazonian peoples and discuss all issues involving the rights and future of indigenous peoples of the Amazon Basin and South America as a whole. In its participation around climate change negotiations, COICA has voiced the following as its principal concerns and demands:

- To incorporate and apply the principles and mandates of the United Nations Declaration on Rights of Indigenous Peoples in order to guarantee the full exercise of their rights;
- To apply ILO Convention 169, especially with respect to territorial rights;
- To provide full and real guarantees for land tenancy, return of lands and title for indigenous lands and territories in the countries of the Amazon Basin;
- To demand the application of free, prior and informed consent in all processes intended for application of climate change adaptation and mitigation measures in indigenous territories, considering that this not only means consultation, but that consent includes a veto right, that is, the right to say "no";
- To value and utilize ancestral knowledge in the design of climate change adaptation and mitigation strategies;
- To ensure the effective participation of indigenous peoples in decision making processes and in the design, implementation and monitoring of climate change mitigation and adaptation strategies, both in national and in international negotiations.

These positions were shared and formally agreed upon with other indigenous peoples of the world when we met at the World Summit of Indigenous Peoples and Climate Change held in Anchorage, Alaska in April 2009. The "Anchorage Declaration" signed at that time is one of our principal instruments for climate change negotiations today.

The time has come for us to act and respond, based on our own needs, realities and priorities as indigenous peoples. Our only option at this point is to learn to recognize and support those climate change mitigation and adaptation programs and strategies that we, as indigenous peoples, can direct and enrich. For that, it is indispensible to be flexible and to expand the financial mechanisms available to us, so that as indigenous peoples, we will have the capacity needed to move ahead and act in a viable manner. This must include access to existing financial resources for mitigation and adaptation processes, capacity building, technology transfer and other instruments, without which we would be excluded, in practice, from the policies and major work that lies ahead, at which our lives are at stake. We will bring these prerequisites, together with our principal concerns and demands to all negotiation tables. The pishtaco must not surprise us any more.

Quito, Ecuador, March 6, 2012

Endnotes

[1] This is sometimes called "development," "resource management," "concessions," and even "conservation."

[2] See the annual reports and financial statements of institutions such as IUCN or Conservation International, among others, easily available on the Internet. In addition to the financing sources of each of these institutions, it is important to take a look at their policies, and the discussions and issues around them—in short, the overall trajectory of such institutions.

[3] By *repair*, we are referring to the need to correct the destruction occasioned in indigenous territories.

[4] *Mitigate* means that the industrialized countries that are causing the warming, or those with the largest ecological footprint, should reduce that footprint.

[5] By *adapt,* we mean that the greenhouse effects must be reduced.

[6] *Compensate* means granting the necessary financing to the indigenous peoples so that we can develop the governance of our territories.

[7] How in heaven could they think someone can place a price on land, water or the forest and, indirectly, on our lives, when each of these forms of life depends for its existence on its interrelation with the others?

[8] REDD is the abbreviation for Reducing Emissions from Deforestation and Forest Degradation.

[9] See, for example, Miguel Palacín Quispe, "Mundo: El Buen Vivir y la Construcción de Nuevos Paradigmas," SERVINDI, February 11, 2010.

[10] SERVINDI, June 30, 2010.

[11] Sources: AIDESEP/INRENA/Observatorio de Actividades Hidrocarburíferas ("Hydrocarbons Activities Watch")/ PERÚPETRO.

[12] Among these are the United Nations Declaration on the Rights of Indigenous Peoples, ILO Convention 169, Articles 8j and 10 of the Convention on Biological Diversity, as well as some of our own national constitutions.



SELF-DETERMINATION & TERRITORIAL RIGHTS

Coordinating Body of the Indigenous Organizations of the Amazon Basin (COICA)

Territorial Rights

Our multidimensional, integral vision of territory, as well as of our natural resources, is hard to comprehend from the current point of view of the nation-state. In the general conception of the nation-state, land and resources are productive, monetary assets, subject to private property. In this framework, nature is nothing more than an exchangeable, transferrable asset, susceptible to encumbrances and adverse possession of title, as if it were any other "thing." Such laws and the extraction-based economic dynamic treat what for us, in essence, is life itself, as a piece of merchandise. The recognition, to some extent, of our right to our territories—stated in certain political constitutions and, in particular, through ILO Convention 169—introduces an alternative approach in formal terms, which grants our indigenous territories the status of being unencumberable, inalienable and not subject

to loss by adverse possession.[1] These are precisely the rights that our nation-states seek to reverse however they can. In Peru, for example, such rights were initially recognized in the Constitution of 1979, but were later reduced to their minimal expression in the Constitution of 1993, under which the status of our territories as unencumberable, inalienable, and as not subject to loss by adverse possession was eliminated. Such status thus became precarious and conditioned.

Even though there have been significant advances in the region in gaining recognition for the rights of indigenous peoples and in strengthening the capacity of our organizations and peoples so that we will have an influence in ensuring that such rights prevail and grow, it must always be borne in mind that the Amazon and, in particular, indigenous territories, are the scene of major conflicts, some of which are even global in nature. Oil, gas, mining resources, forests, genetic resources, and traditional knowledge/ancestral wisdom are not only of great interest to the world. Access to all of them, at the same time, is viewed as being hindered or limited precisely by the indigenous rights whose recognition has been gained.

For the extractionists, our territories are simply a physical space, whose resources, like articles at a bazaar, are taken or left behind depending upon their monetary costs and benefits at a given moment. Our territories are considered simple merchandise—items, cans or barrels—of interest at a given point in time, to later be used, destroyed and forgotten.

The extractionist interest groups continually pressure, in a variety of ways, to minimize our rights to territory as indigenous peoples. They even try to buy us off or manipulate us through education and health services. They know that in NO way is it in our interest to use the world we inhabit in a way that leaves it destroyed or forgotten. Through legal and constitutional reforms, the objective of such interest groups is to turn back the clock on our recognized rights in order to free up indigenous lands for the market and facilitate the extraction of all natural resources that have a monetary interest. Through a number of different regulations, procedures, and other general mechanisms —including the use of the brute force—they continually

obstruct both the spirit and letter of processes based in law, recognized in favor of our territories and indigenous peoples. Three clear examples are the case of Bolivia, with the title-granting and legalization process for Community Lands of Origin (*Tierras Comunitarias de Origen* - TCO). The same is seen in all of the region's countries, with the application of the right to prior consultation; and in Peru, with the struggle, which is even violent, focused precisely on freeing indigenous lands for the market in order to specifically facilitate the exploitation of forest resources and hydrocarbons.

Vision of Territory

As indigenous peoples, our concept of territory is not that of a material world exclusively. Our vision is integral—holistic—though with distinct internal dimensions, involving spiritual, social, cultural, political, economic, and many more aspects. For us, territory is not a simple monetary asset or means of production for instant profit on the market (local, national or global), taking place at the cost of its destruction. Our territory contains a mystical-spiritual reality that leads us to recognize it as sacred, and to recognize the need to interact with the creator spirits who protect all life within it.

Territory is the space that, as indigenous peoples, *we share* with other living beings. Its existence guarantees our existence as peoples with our own identity and with permanence, which we reconstruct day by day based on ancestral wisdom. We have a primordial privilege to exercise influence and responsibility over what occurs within our territories, as we have been doing through the dynamic of use and enjoyment of resources, with collective participation in decisions that jointly affect our territories and all forms of life within them, including ours as indigenous peoples.

For us, nature is part of us, and we are part of her. Our territory is life itself, as water in a basin, without which we would cease to exist. We not only share our territories with other living beings; everything within our territories, whether

fauna, birds, fish or our peoples themselves, contains the heartbeat of life, the result of the territories' existence. Without territory, life would disappear, as if there were no air; life would stop breathing. As a basic, unconditional condition for our freedom, territory stimulates the expression of our cultures and, with it, the continuity of our peoples.

Western philosophy, in a diametrically opposed view, sees man as *separate* from nature, which it should confront and dominate for his own purposes. We sadly confirm this each day when we see with our owns eyes and feel in our own bodies the tremendous impacts to our soils, forests, flora, fauna, water sources, basins, non-renewable resources, natural protected areas and, with all that, the heart of our existence and spirit as indigenous peoples. The notion of supremacy over other peoples and the natural world tend to go hand-in-hand in one and a thousand ways.

Our interrelation is governed, on the other hand, precisely by those philosophical and spiritual foundations that are born and have grown within our territories, based on our territories themselves, since time immemorial. Our ancestral wisdom has always known how to face major changing challenges that come with the passage of time and other transformations around us.

Indigenous Law

Our interaction with and within our territories is a two-way process. While territory gives life to our peoples, we give life to her. Our need is reciprocal. This relationship, in addition to being direct, is one of mutual sustainability. Our territory dies when we cease to care for her.

Sustainable development is inconceivable without the subjective tie that indigenous peoples have with their territory. Territory is the wealth handed down by our ancestors, which the new generation is obligated to leave to its descendents, in conditions of stability and perpetuity.

In the formulation of the right to territory, there is a trilogy that must be always be approached in an integral manner: territory-indigenous peoples-self-determination. The free development of our peoples is based on this recognition and respect for our territorial base, which is the vital space in which all our collective rights, autonomy and authority are cultivated and grow. It is our mission to freely pursue the economic, social and cultural sustainability of our territory. This means, in other words, that we must exercise territorial and political autonomy, conceived as a plan of life, based on our own paradigms of cultural continuity.

It is vital for us to apply norms, customs and traditions in our territory that are born from ourselves. We cannot, therefore, cease to self-regulate and adjust our forms of social organization and representation in the face of the onslaughts of globalization and post-modernity. We must orient and administer our economy and the use of our wealth and natural resources, while safeguarding the lives of other natural living beings and ecological balance, and while preventing environmental degradation.[2]

When we speak of our right to territory and not just to land, we are speaking in terms of exercising power as a public entity just like a municipality does, for example, within the limits of its jurisdiction. This does not mean and should not be interpreted as an attack on the sovereignty of the nation-state. In other words, we must: (1) exercise *influence and control* over what occurs in our space, including its dynamic of use and appropriation; (2) participate *as collectivities* in all decisions that affect our territories; and (3) *productively conserve* the resources existing there.[3]

We, the indigenous peoples and our organizations, are not those who have provoked the conflict, but neither are we neutral. The defense of our rights cannot be understood without also strengthening our organizations and our coordination mechanisms, from the local level to the international and even global level. This is not always understood by international cooperation entities and NGOs, which prefer to act directly with some but not with other communities, thus dividing and undermining the strength generated by the sum of our

various organizational spaces. We are peoples whose rights must be respected by all players within their realms, without any distinction whatsoever. The dimension of this challenge requires a sustained organizational effort, in order to truly safeguard territory, knowledge and culture. The differences in how we conceive of our space and time, as compared to the conception of other power groups around us, are deep indeed.

Having said all this, we are prepared to take on this challenge, as we have done with so many others throughout our existence as preexisting indigenous peoples.

Quito, Ecuador, March 6, 2012

Endnotes

[1] Bolivia, Brazil, Colombia, Ecuador, and Venezuela presently recognize such status for the lands/territories of indigenous peoples and communities. Nonetheless, in Guyana, Surinam and French Guyana, it has not yet been possible to change the law and thus advance in the recognition of these rights.

[2] COICA 1996.

[3] We understand productive conservation as the use of our resources, including some with monetary purposes, without that entailing their destruction, as occurs, in contrast, with extractivist activities.



WHAT IS GOVERNANCE?[1]

Coordinating Body of the Indigenous Organizations of the Amazon Basin (COICA)

The act of governing involves those who govern and those who are governed. The way they relate to one another and participate in decision making is known as governance.

Governance[2] is defined "as the interactions and agreements between those who govern and those who are governed, in order to create opportunities and solve the problems of the citizens, and to build the institutions and norms necessary to make those changes."

In other words, governance implies that persons can participate in the decisions that ensure them a life with dignity. For that, the citizens need to have freedom of speech and of association, respect for and strengthening of human rights. Furthermore, they must be informed as to what those who govern decide and do.

Those who govern, for their part, must have the capacity to fulfill their functions and have sensitivity to take into account the aspirations and needs of the citizenry.

The following are key aspects of forms of governance:

- Legitimacy, which means acting with justice, allowing for participation and responding to the demands of civil society, and having decisions materialize in the form of public policies;
- Poverty reduction policies that create job opportunities, availability of and access to resources (including land, natural resources and the means of production), as well as equity in the provision of public services;
- Protection of the environment, through the sustainable use of natural resources;
- Land tenure and equity in access to land;
- The stability or capacity of the government to adapt to change.

Indigenous Governance[3]

Indigenous peoples have their own structures, institutions and forms of governance. At the same time, their institutions interact with government structures at a national, regional or municipal level. That relationship, in large measure, determines the possibilities for sustainable and effective development of the communities.

Indigenous peoples must have the opportunity to participate in decision making in their countries, as any citizen does. But they must also have the right to participate on the basis of their own worldview or cosmovision. That right is often denied to them by governments and institutions of various sectors.

Indigenous governance implies that the form of governing must recognize the diversity of worldviews, values and cultural traditions characterizing indigenous peoples, and thereby promote authentic decision making and local control. The

challenge to be met for indigenous governance is to ensure participation by indigenous peoples in government decisions and the passage of laws in accordance with their uses and customs. This is considered fundamental for the protection of their rights and to establish culturally pertinent progress indicators.

Territorial Governance

The process of territoriality[4] entails new organizational challenges for indigenous peoples and organizations in the administration and management of their territories.

Territorial governance often involves a shift from a communal form of organization (over small areas, the lands of the community) to collective forms of organization over large territories inhabited by dozens of communities that need to agree upon the norms and policies under which their territories will be governed.

In Latin America, the indigenous right to governance has been consecrated in the national constitutions of several countries. In Bolivia, the National Constitution of the State (2009) guarantees self-determination for indigenous peoples within the framework of the unity of the state, which includes their right to autonomy, to self-governance, to their culture, and to the recognition of their institutions. In Ecuador, the National Constitution (2008) establishes the rights of indigenous nationalities to political, administrative and legal autonomy, both for management of their internal affairs and for relations with public and private entities.

Quito, March 6, 2012

Endnotes

[1] Governance is said to be he sum of government plus confidence. It is the way in which a society operates. Alberto Chirif.

[2] The concept of governance should be differentiated from the concept of "governability," which refers to the capacity of the states to govern in a democracy.

[3] Indigenous peoples, traditionally, have had forms of self-governance recognized internally based on a diversity of worldviews and spiritual and cultural values that characterized these indigenous peoples.

[4] Willem Assies considers that the notion of territoriality arose in the context of indigenous peoples' defense of the Amazon region in the face of development projects implemented as of the 1960s. He furthermore considers that this has been included as a central concept in the emerging language of Pan-Indian positions in connection with the demand for recognition of the system of indigenous political authority and indigenous jurisdiction. "Territorialidad, Indianidad y Desarrollo: las cuentas pendientes." Available at: http://www.iisg.nl/labouragain/documents/assies.pdf.



SAPARA NATION OF ECUADOR WITH INSTITUTION

FURARE & NASE FOUNDATION (2006 TO 2010): ANALOGOUS REFORESTATION

Bartolo Ushigua
Director of Strengthening Organizational Policy (CONAIE)

Introduction

The Sapara Nation is one of the oldest nationalities living in a corner of the Ecuadorian Amazon. In ancient times, our territory extended as far as the current City of Iquitos, and ethnographic studies confirm a very numerous population that was more than 20,000 inhabitants.

Location of the Sapara Territory

In Ecuador, we, the Sapara communities, are located in the Province of Pastaza and the Canton of Puyo, belonging to the Río Tigre and Montalvo Parish, some 300 kilometers southeast of the capital of the republic, Quito. Our territory

is located between the Pinduyacu, Conambo and Corrientes Rivers, and covers 380,303 hectares.

The Sapara Nation includes 23 communities, with a population of 1,000 inhabitants, including children, women and men.

Objective

To reforest the traditional community orchard with fruit bearing plants so as not to lose the biological corridors.

In order to attain these objectives, we work together with the Furare Foundation in four communities: Llanchamacocha, Cuyacocha, Jandiayacu and Mazaramu.

When we started collecting wild seeds, it was very complicated work. In order to acquire some species and fruits, it was necessary to climb the trees. There was also a concern that we might be jeopardizing some fruit species that we have already planted in the orchards. Another concern was that the wild seeds might serve as food directly for animals such as the black agouti, the paca and the acouchy. These animals plant in their own way in places unknown to us, but in all events, this activity led us to research the places where the animals were planting the fruits.

When we obtained the seeds planted by the animals, it was a great success for us. With this discovery, we commenced construction of seedbeds in each of the communities. Next, we planted the seeds in the seedbeds. After that, we had to care for the seedbeds until the plants sprouted; but this process was very slow, taking almost six months. Next, we had to prepare the orchards to start planting the seedlings in them, with ritual songs from the women wisdoms holders. With that, all the plants grew without any problem.

The Result Obtained

At present, the fruit trees, without affecting other fruits, have grown very large. With that, we have succeeded in having the ecosystem continue to function normally. In addition, the wild animals come closer to the outskirts of the four communities to feed off the wild fruits in the orchards. The children also have varieties of fruits for good nutrition.

This experience is very important for the Sapara world. In our territory, we possess a reserve of 20,000 ha declared at a congress, with the idea that all animal species may procreate in this space; after which they approach the outskirts of the four communities, and there the families have their animals nearby to be able to hunt and nourish themselves.

The management policy for our territory is to maintain the primary forest without contamination. We can also say that if a government program is consistent with the policy of conservation, we can analyze it and participate. But on the condition that it not affect our collective or individual rights as a nationality.

Conclusion

The four Sapara communities have joined in the work that has been carried out on a community basis. It is extremely important to continue maintaining and caring for the forests around each of the communities.

This project makes a very important contribution for the good of humanity in combating climate change, which is affecting our planet earth.

The ecosystem is functioning correctly in our territory, where we can feel the activity of each species of plants, animals and humans.

FROM CO-MANAGEMENT TO GOVERNANCE IN LANÍN PARK

Mapuche Confederation of Neuquén (CMN), Argentina

Introduction on Recent History

The indigenous peoples of South America and of the world are in a state of alert, given the growing threats to our territories and cultures posed by privatization and foreign control of our lands. In the case of protected areas and high biodiversity zones, such approaches propose to market goods and services from protected areas through private-public partnerships.

In this document, we will refer to one such scenario involving indigenous peoples and the administration of protected areas, focusing our attention on the results of the deliberations over the policy of the International Union for Conservation of Nature (IUCN). This process included active participation leading up to the IUCN IV World Conservation Congress, held in Barcelona (October 2008). A key arena for our region in such preparatory events was the II Latin

American Congress on Parks and Protected Areas held in Bariloche (October 2007).

Our participation in this arena came at a crucial time. Presently, the Argentine state, with greater urgency and increased commitments but fewer resources, is facing a dilemma: Argentina has signed several international agreements and conventions but is allocating ever fewer resources to earnestly fulfill these commitments due to structural adjustment policies being imposed upon the country.

Argentina is not the only place where this occurs. At a continental level, two trends are taking shape in response to such obvious disfunctionality: one is decentralization of the state; the other consists of policies aimed at privatizing government-owned assets and companies. The first of these approaches seeks to strengthen the competencies and technical capacities of local governments. The second allows government-owned assets to be sold in bidding competitions, in an effort to capture fresh funds and fiscal resources for a state that is increasingly at a loss for financing.

This latter option, which is already being implemented in certain countries, increases the threat posed when indigenous territories are declared to be protected areas, given that it opens the door for indiscriminate marketing of biological resources, genetic resources and traditional knowledge, without suitable regulations to guarantee indigenous rights.

On the other hand, it was clearly voiced at the II Latin American Congress on Parks and Protected Areas of Bariloche that activities such as mining and hydrocarbons extraction undermine conservation. Yet the trend to open such assets to tenders would facilitate authorization of these activities in protected areas. Such an approach would also nullify conservation efforts and, in turn, adversely affect indigenous peoples if such activities take place within our territories. Adding to the multiple consequences of this trend is the possibility that water will be privatized, since headwaters are often located in protected areas.

Parallel to this process, on September 13, 2007 at the 61st Session of the United Nations General Assembly, the United

Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was adopted. The Declaration marks a watershed with respect to the scope of rights and policies to be implemented as of its adoption, given its recognition of our right to self-determination and self-governance and the Declaration's full recognition of the legal construct of Peoples.

The adoption of the UNDRIP had a major influence in the deliberations at the II Latin American Congress on Parks and Protected Areas in Bariloche and at the IUCN IV World Conservation Congress. Indeed, the recognition of self-determination entails recognition of indigenous government systems, recognition of sovereignty, and recognition of ownership by indigenous peoples of their own lands, territories and resources.

In this context, we look forward to the next stage, with renewed energy to fully exercise our right to self-determination and self-governance, in which sovereignty and authority over the management and administration model rises from our own jurisdictional regime and the authority of our own institutions.

This objective of advancing towards indigenous systems is reviving our own models, which we have been implementing historically, according to our Mapuche practices, worldview and knowledge.

The following pages intend to provide a basis for rich, intense debates to be engaged in by our traditional authorities: *logko, pu werken, pu kona*.

The Transition from Co-Management

The birth of the concept of co-management (or participatory management) for protected areas in the environmental agendas of Latin America during the 1990s is not coincidental. Participatory management is a link in a chain of public policies, often referred to as the three "D's," which seek to *de-concentrate* public administration, *decentralize* decision making and *delegate* responsibilities and mandates to civil society entities.

How did this come about in Lanín Park?

In September 1999, at a time when the National Parks Administration (APN) was in a deep institutional crisis, the Mapuche Confederation of Neuquén (CMN), as a representative organization of the Mapuche communities, occupied the Administrative Office of the Lanín National Park due to the failure by that office to respond to territorial demands, especially in the case of the Lake Huechulafquen basin. The Administrative Office had been dealing with this crisis for more than a year and had issued eviction orders against Mapuche authorities.

It was brought to the attention of the Park's authorities that they needed to handle conflict situations using the legal framework in effect: ILO Convention 169, the Convention on Biodiversity, and Article 75 of the National Constitution. The Mapuche organization proposed a workshop to be held with Mapuche authorities and APN officials, to discuss a conceptual construct devised by the COM named Protected Indigenous Territory (or TIP, based on its Spanish acronym).

Definitions of Co-Management

The exchange that took place at the 1st Workshop on Protected Indigenous Territory in May 2000 led to a review of the interpretation of APN regulations in the framework of the legislation in effect. In that regard, three basic principles were validated:

1. *Territory*: The concept of territory was established and applied in two dimensions: a) cultural and legal; and b) that the term "lands" must include the concept of territory, which covers the totality of the habitat of communities;
2. *Co-Management*: The Mapuche native people have developed an integrated management concept for their ecosystem, seeing themselves as forming a part of the ecosystem, based on knowledge and practices that are fully vibrant. With this understanding, it was decided that the two practices would come together directly in the form of co-management.

3. *Correlation between cultural and biological diversity*: The ever present correlation between cultural diversity and biological diversity was recognized.

These three basic principles were approved in a "Declaration of Preliminary Principles." APN Resolution 204/00 was approved, seeking a better understanding for strengthening relations between Mapuche communities and the APN/Lanín National Park.

In July 2000 the Administration and Co-Management Committee was formalized, comprised by representatives of the APN, of the CMN and of the Mapuche Communities with ties to the park.

Co-Management (also referred to as Participatory Management, Co-Administration, or Shared Management) is an institutional arrangement among the local users of a territory or set of natural resources and/or groups interested in their conservation, and the public agencies in charge of administering these resources. It implies a distribution of responsibilities and competencies, a clear definition of the exercise of public authority, and guidelines for use, access, control, and subsequent management of resources.

Why is Co-Management Insufficient?

Co-management has been a very valuable stage in this newly established relationship of respect and recognition between CMN and the APN. Nonetheless, this concept does not fulfill the aspirations of the Mapuche people for the following reasons:

1. The Mapuche communities, their lands, territories, resources, and knowledge, are not recognized as an end in and of themselves, but as steps serving a principal goal: the protected areas or conservation.
2. In the best of cases, the communities are recognized as co-administrators, depriving them of their right as owners to plan the zoning of their territory based on their own norms. Co-administration in such a form

can only be accepted as a transitional stage in the process towards territorial restitution.

This was debated in depth at a meeting of indigenous experts on protected areas held in Buenos Aires in August 2007. There, the following conclusions were reached:

WORKSHOP OF INDIGENOUS TECHNICIANS IN PROTECTED AREAS
Position on the Mechanism of CO-MANAGEMENT
Buenos Aires, Argentina, August 7 and 8, 2007

Directorate of Native Peoples and Natural Resources,
Department of the Environment and Sustainable Development
Mapuche Confederation of Neuquén (Argentina)
Community of the Kolla Tinkunaku People (Argentina)

- Co-management and co-administration, as currently implemented, reaffirms the principle of absolute sovereignty of the states over natural resources. That principle is questioned by all indigenous peoples of the world, given that we reaffirm our absolute right to ownership, control and administration of our natural, genetic and cultural resources.
- Co-management and co-administration, in practice, do not include recognition of our fundamental rights to territory and to autonomy or recognition as pre-existing peoples. Rather, it has become a mechanism for integration into a global market model that currently threatens our lives and cultures.
- Co-management and co-administration are subject to a jurisdiction (a regulatory and legal system of norms) that contradicts our normative system and our concept of the relationship between man and nature.
- Co-management or co-administration legally falls under a supra legal regime of the state, in which the state has the power and jurisdictional sovereignty, and can make determinations that in one way or another affect indigenous institutionality and/or forms of government. Thus, co-management can only be accepted as a temporary alternative, to the extent that it is conceived of as a transitional tool or bridge to a new mechanism or system within a conservation category that fully recognizes our territorial and political rights. A growing movement stresses that the best guarantee for a conservation policy in indigenous territories situated within the jurisdictions of the APN is recognition of our rights to ownership, control and administration.

- Furthermore, co-management is often solely limited to marginal experiments. Given the dynamics and leading role of the CBD, these situations could change. A call is also being made for equity. Equity requires a just approach to sharing the costs and benefits of protected areas and to ensuring access to justice when conflicts arise.

IUCN IV World Conservation Congress – Barcelona

The Results of Barcelona

The following were major achievements in our work towards full recognition of our sovereign rights to land, territory and natural resources:

a) Recognition of governance in the hands of the indigenous peoples;
b) Motion related to policies for the return of territories that had been confiscated for conservation purposes;
c) Adoption in all its terms of the UNDRIP;
d) A new category was recognized: Indigenous Conservation Territory.

Governance by indigenous peoples

One of the most concrete results that came out of this global event was recognition of a new model of self-governance for indigenous territories previously declared as Protected Areas without consent: Governance in the hands of the indigenous peoples. This motion was made in Barcelona by the Indigenous Forum on Protected Areas that arose from the Latin American Congress on Parks held in Bariloche, Argentina in October 2007.

In Barcelona the "IUCN Guidelines for Applying Protected Areas Management Categories" were approved.

What do the Guidelines say?

The main distinguishing features of indigenous peoples' protected areas have to do with the socio-political arrangements that are established between indigenous peoples and national authorities for the government of lands and resources in indigenous peoples' lands. Such features are that:

1. They are based on the collective rights of the respective peoples or nations to land, territories and resources;
2. They are established as protected areas in application of the right to self-determination, exercised through:
   - Self-declaration of the protected area by the indigenous peoples/nations with collective territorial rights over the area,
   - Free, prior, and informed consent of the people or nation with territorial rights over the area, in cases where the designation proposal is originated in government agencies or conservation organizations;
3. They are based on traditional occupation;
4. Occupation, use and management are connected to and dependent upon the broader socio-cultural and political structure of the people or nation, which include their customary law and institutions;
5. They are self-governed by indigenous institutions within their territories and protected areas, in application of arrangements stabled with the system-level protected areas authorities.

New Recognized Category: Indigenous Conservation Territory

The concept of Indigenous Conservation Territory is a concept based on recognition of the rights consecrated in the Declaration. This concept was developed at the Second Latin American Congress on Protected Areas (Bariloche, October 2007). The IUCN has since adopted an official policy

in said regard through Resolution 4,050 of the IV World Conservation Congress in October 2008.

How is an Indigenous Conservation Territory Defined?

1. It is a territory determined by ancestral occupation.
2. The territory is designated as a protected area, in whole or in part, by the corresponding people, in the exercise of their right to self-determination, or by the authorities of the national state with free, prior, and informed consent from the people or the communities involved.
3. The Indigenous Conservation Territory is based on the territorial rights of the indigenous peoples, nation or community.
4. Indigenous Conservation Territories require full recognition of indigenous rights to traditionally used lands, territories and resources, as well as of our right to manage and control such areas.

This territory, as a protected area, is administered by the same indigenous communities that inhabit it, or by such persons as they may delegate.

The World Conservation Congress, at its 4th Session in Barcelona, Spain, 5 –14 October of 2008, provides the following guidance concerning implementation of the IUCN Programme 2009-2012:

*2. CALLS UPON the Director General to promote and support recognition of **Indigenous Conservation Territories** as a legitimate governance model for protected areas established in indigenous peoples territories, following the governance guidelines contained in the IUCN publication 'Guidelines for Applying Protected Area Management Categories,' whatever the management category may be, taking into account the need to integrate culture and nature, the role of customary law, traditional institutionality, and the exercise of indigenous authority in such territories.*

Motion 4,050 "Recognition of Indigenous Conservation Territories" (Approved)

The background summarized above forms the basis for the amended proposal that we have brought to the authorities of the Lanín National Park as the foundation for a relationship of mutual recognition, which we wish to strengthen over time.

LANÍN NATIONAL PARK Agreement

"Mapuche Governance (Self-governance) in Community Territories"

THE PRINCIPLE THAT GOVERNS US

Based on the human rights of the Mapuche people, the state returns dominion, ownership, and administration of protected areas created in ancestral territories.

We consider that the recognition and the inclusion of models of Mapuche self-governance within the national protected areas system is a road on which there is no turning back. We have sustained the relationship between indigenous peoples and nature for thousands of years. Today this model of coexistence with nature has attained a degree of comprehension that must be turned into actions.

These advances have not been a gratuitous concession. They are a product of debates and negotiations where each such advance has been defended. Nonetheless, the practice and exercise of this right necessitates the application of a new category that we have named "Indigenous Biocultural Territory." This should facilitate a transition toward *Our Own Conservation System*, based on our customary law, our knowledge and practices, governed by our institutions, without external interference of any type.

Basic Content for the Exercise of Mapuche Governance

a. A declaration of Governance principles and concepts.
b. A clear demarcation of the territory to be governed and of its resources.
c. Definition of a control and oversight mechanism.
d. Composition of the Mapuche government, avenue for shared decision making with APN, and conflict resolution mechanisms.
e. Norms for governance of the protected area, the exercise of authority and the administration of sanctions.
f. Mechanisms for financing and for technical/financial support.

Development

Declaration of Governance Principles and Concepts: It is our understanding that this content must be agreed upon. The documents generated through consensus both in Bariloche and in Barcelona with authorities on Parks, Protected Areas and other environmental bodies should serve as a basis.

A clear demarcation of the territory to be governed and of its resources: The territory that would come under the governance model consists of the current territories, which will be handed over one by one, in keeping with the implementation of Law 26,160. They shall be recognized under the category "Mapuche Biocultural Territories" or "Mapuche Conservation Territories," as a different category than the seven categories established by the international system.

Definition of control and oversight mechanisms: The body responsible for control and oversight of the governance process, as well as for technical/administrative management, is the Department of Co-Management or the Department of Governance, which shall be a single entity, with a single set of technical personnel, and its budget shall be consistent with a major operation. Everything related to Mapuche territorial policy shall come under its jurisdiction and it shall be the implementation body for decisions made by the Administration and Co-Management Committee.

Composition of Mapuche government, avenue for shared decision making with APN, and conflict resolution mechanisms: The Mapuche government has three institutional decision making levels: a) the community level, led by the Logko and its Steering Committee; b) the zone level (Pewence and Wijice), which groups together the 11 communities whose territories are found in the area of the Lanín and Nahuel Huapi Parks; and c) the level of the Mapuche people, represented through the Mapuche Confederation of Neuquén.

The avenue for coordination and joint decision making is the Administration and Co-Management Committee, which will be strengthened with this new political relationship framework. The Administration and Co-Management Committee includes representation from the zone levels and Confederation levels, with six Mapuche representatives (Pewence, Wijice and Confederation). The conflict resolution mechanisms will be such institutional arrangements as the Administration and Co-Management Committee defines.

Norms for governance of the protected area, the exercise of authority and the administration of sanctions: Mapuche governance or self-governance is guided by the Nor Mogen or Mapuche normative system, based on a series of principles and laws that arise from the *Az* and Nor Mogen. This system is non-codified, but is embodied in the Mapuche knowledge of our elders. It has been organized and has acquired status as a norm in effect with the approval of the new By-laws of the Mapuche Confederation of Neuquén, which will be the basis for updating all the community bylaws in Neuquén.

The body for community administration of justice is the Nor Feleal, which is comprised by the Inan Logko, the Werken and two members of the community. Community sanctions, imposed on any member who violates a community norm of coexistence between Mapuche and the natural environment and the APN authority, are applied by the Nor Feleal and are indicated in the Unified Mapuche Regulations.

The body of Kona x Ixofijmogen, who are Guardians of Biodiversity, shall be formed and shall be the authority that will administer the sanctions.

Mechanisms for financing and technical/financial support: Priority shall be placed upon ensuring budgetary support for the various agreed upon levels of government and administration. The state is responsible for ensuring Mapuche political representation in the Administration and Co-Management Committee, as well as for ensuring the appropriate status or hierarchy that the Department of Governance must have within the structure of the Lanín National Park. For the other bodies, a financing mechanism must be developed, drawing upon local financing, external financing and international cooperation.

Neuquén, Mapuche territory. Puel Mapu, February 2012



BIO-CULTURAL HERITAGE OF THE MAPUCHE PEOPLE: THE CASE OF THE LANÍN VOLCANO, THE SACRED MAPUCHE SITE

Jorge Nahuel
Mapuche Confederation of Neuquén (CMN), Argentina

Objective

This case demonstrates the determination of a native people (the Mapuche Nation), who seek to halt the destructive acts of the tourism industry at one of the sacred places of the Mapuche people: the Lanín Volcano. It also demonstrates a determination to apply sustainable development, based on defense of the land and its resources, administered by the indigenous peoples themselves.

For the Mapuche people of Neuquén, Argentina, the latent Lanín Volcano, almost 5,000 meters above sea level, located in the extreme north of the Patagonia Andes, is their *Pijan Mawiza* (the home of all life). Their determination to protect their sacred mountain led them to develop a plan of action to attain recognition for it as "Mapuche Bio-Cultural Heritage." This strategy began five years ago, with an act of exercising

Mapuche rights, by once again conducting the Gejipun, a sacred Mapuche ceremony. In the Gejipun, for four days and four nights, hundreds of families come together and reaffirm that the Lanín Volcano is the point of reference, the hub, where their cosmovision is constituted and exercised. It is the place to put into action the relationship system between natural life (ixofijmogen) and man (Che).

Under the leadership of the Pijan Kuse and Gempiñ (philosophical/religious Mapuche authorities), the social and territorial integration was put into practice that had been violated and broken with the creation of the Lanín National Park a century ago.

Traditional Mapuche knowledge and practices effectively protected the ecosystem for centuries, but today the region (and in particular the volcano) is threatened by the tourism industry, which is contributing to climate change and leaving this sacred place without snow, owing to the annual influx of hundreds of thousands of tourists. In addition, the increase in cattle grazing, logging and mining in the fragile Andean mountain range has caused a shift in land management from that of small local parcels to large landowners comprised by foreign interests.

In the face of these challenges, the Mapuche are making a proposal to the government, represented by the National Park Administration (APN), to establish the first spiritual park, which will directly benefit the communities and their cultures. This would be a formal recognition of the mountain range as a community conservation area with natural sacred sites. The Lanín Volcano as "Mapuche Bio-Cultural Heritage" reaffirms indigenous and traditional management of conservation and the activities of agro-biodiversity with the goal of alleviating poverty based on local concepts of well-being. The park will protect the fragile biodiversity of the area.

"Due to restricted access to certain areas under voluntary protection exercised by the local population, the natural sacred sites conserve local ecosystems and their singular biodiversity effectively and efficiently, and can thus serve as repositories of critical biological resources for the rehabilitation of Andean

landscapes that are exhausted," stated Logko Elías Maripan, the maximum authority of the Mapuche people.

Definitive Terms of Reference for Control of the Lanín Volcano

Based on this principle, we have formulated Terms of Reference to be applied by the National Park Administrations of Argentina in order to conduct an Environmental Impact Assessment (EIA) regarding use for tourism purposes of the area that includes the Lanín Volcano in the current Lanín National Park, Neuquén, Patagonia Argentina.

These Terms of Reference have been elaborated based on the participation and consultation of the native authorities of the Mapuche people, following an intentional, qualitative methodology.

In producing this report, the guidelines formulated in the proposed concession for the area mentioned have been taken into account. This report is divided into the Definitive Terms of Reference, their foundation upon the results of the research work, the methodology followed, the activities carried out, and the annexes.

Summary of the General Term of Reference

One of the determinant criteria for approving any project for use of tourism resources—that includes the Lanín Volcano in the Lanín National Park—must be the probable/potential impacts on the use and projection as a native people of the Waj Mapu materially-occupied (Lelfvn) and culturally-lived (Mogen) ancestral territorial space of the Mapuche communities existing in the area of Lanín National Park. This includes the impact on any cultural, social, economic, ecological, and psychobiological value, within the framework of the constitu-

tional rights and other instruments of law with constitutional stature, that are applicable in our country (i.e., the rights of the child, of adolescents and of women, as well as provincial and municipal legislation in effect).

Specific Terms of Reference

1. Consider whether the project impacts, encroaches upon, denies or threatens the Mapuche cosmovision regarding the Lanín Volcano (Pillan Mawiza), Ko (water), Pire (snow), and the interrelations between their respective Newen (energy).
2. Consider whether the project impacts, encroaches upon, denies or threatens the Mapuche cosmovision regarding the cruce de aguas ("crossing of waters") and the displacement and relocation of their respective Newen.
3. Consider whether the project impacts, encroaches upon, denies or threatens the Mapuche cosmovision over the artificial transformation of Ko into Pire, through unnatural chemical processes.
4. Consider whether the project impacts, encroaches upon, denies or threatens the dynamics of self-ascription and identity and if that will lead to a negative redefinition of cultural difference.
5. Consider whether the project impacts, encroaches upon, denies or threatens the revival and projection of Mapuzugun as the native language.
6. Consider whether the project impacts, encroaches upon, denies or threatens the recovery and projection of the transmission of knowledge and communication modes such as gvxam, epew, tayvl, vlkantun.
7. Consider whether the project impacts, encroaches upon, denies or threatens the celebration of social and philosophical ceremonies, such as those that coincide with the snow season, and others such as: Wiñoy Xipantv, Wixa Xipan, Katan Kawiñ, Bakutun, etc.
8. Assess whether the implantation and use of the project ensures the reserve, secrecy and integrity of the sites

and collections of diverse objects with significance as heritage.

9. Consider whether the project impacts, encroaches upon, denies or threatens health processes of psychobiological and/or cultural etiology.
10. Consider whether the project encroaches upon, denies or threatens the modes of community understanding and treating of KUXAN (pain diseases).
11. Assess whether the project denies or threatens the physically or culturally-lived occupation of the ancestral territorial space of the communities.
12. Assess whether the project will bring further governmental or private appropriation of a Waj Mapu ancestral space that is materially-occupied (Lelfvn) and culturally-lived (Mogen), and thus the respective degree of confinement.
13. Assess the disturbance to social and cultural life resulting from impeding the native authorities and the communities from being able to decide over high impact projects and works in a Waj Mapu ancestral space that is materially-occupied (Lelfvn) and culturally-lived (Mogen).
14. Assess the impact upon the social and cultural life of the native Mapuche people and the communities that will be represented by the increase in tourism for skiing, adventure, ecological tours, and other forms of marketing of the landscape, leisure time and culture, and from the resulting patterns of access and use, traffic from pedestrians, vehicles, domestic animals, etc. in a Waj Mapu ancestral territorial space that is materially-occupied (Lelfvn) and culturally-lived (Mogen).
15. Assess how the unequal crossing of cultures and modes of social and cultural organization have an imposing, vertical and contaminating impact on the existence and projection of the native Mapuche people, and of the communities involved.
16. Consider whether the project impacts, encroaches upon or threatens the establishment and development of the singular subjectivity of each person, as well as

the processes of consolidation and projection of identity, both collective and individual.

17. Assess whether there will be positive aspects for the current existence and projection of the Mapuche communities involved, and in that case describe those aspects in detail, taking into account an appreciation for the Mapuche worldview.
18. Assess whether there will be improvements in the quality of life of the communities measured in terms of several socioeconomic indicators, such as distribution of income, physical and social integrity and protection of persons and communities, job promotions and opportunities, health and welfare, education, and availability and quality of housing and lodging, infrastructure, services, etc.
19. Assess the possible impacts on traditional land tenure systems, on socioeconomic and cultural relations between genders and inter-generationally, on the physical security of persons, on social cohesion, on traditional life styles, and the possible impact on the access to genetic resources.
20. Assess the influences that the water transfer works and the consequent increase in tourism, increased occupation and appropriation of the Lanín Volcano (Pillan Mawiza), Ko and Pire will produce on the ethnobotany, the conceptualization and social, cultural, economic, and psychobiological biological use of the Baweh (medicinal plants) and other plant species.
21. Assess the influences that the water transfer works and the consequent increase in tourism, increased occupation and appropriation of the Lanín Volcano (Pillan Mawiza), Ko and Pire will produce on the ethno-zoology and the economic and social, cultural and psychobiological use of animals.
22. Assess the economic and cultural changes that will come with the alteration of water sources and their seasonal use for wetlands, waterfalls and pastures.
23. Assess to what extent the project impacts, encroaches upon, denies, or threatens traditional Mapuche forms of balanced management of natural resources.

24. Assess whether the project contemplates development strategies that constitute a sound, projective option for a life with dignity in accordance with the cosmovision of the Mapuche communities, who ancestrally live from, care for, and share the natural resources of the Lanín Volcano basin water system.
25. Assess whether implementation and operation of the project contemplates, respects and complies with constitutional rights, Law 24,071, Article 8j of the Convention on Biological Diversity, the Akwe Kon Guidelines, and more advanced standards in said regard.
26. Assess whether implementation and operation of the project contemplates the rights of the child and of adolescents, the rights of the women and the elderly.
27. Evaluate how the project, based on the intensive consumption of water resources for the snow cannons, implies control and power over public uses of the water, to the detriment of the material and symbolic sovereignty of the native Mapuche people over this vital source.



Indigenous Peoples have something to offer in this equation for survival. We have the perspective of time. Living in one place for thousands of years has given us an understanding of the complexities of life forces. Our languages are libraries of knowledge that may contain keys to survival... One of our Elders said a long time ago that there will come a time when we will cease to live and begin to exist. For the sake of life and our grandchildren, we cannot let that happen in our generation.

- Chief Oren Lyons, Faithkeeper
Onondaga and Seneca Nations, Iroquois Confederacy

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