

**Indigenous Women and Climate
Change in South and North West
Cameroon**

Issues Paper.

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Preface

This report presents the results of a survey carried out within the context of the Global Seminar Workshop on Indigenous Women and Climate Change.

The target populations for this survey are the Mbororo (Cattle breeders) and Pygmies (Forest Dwellers) in some selected villages within the North West and South Regions of Cameroon, respectively.

The collection of data within these communities entailed the predevelopment themes and questions that guided subsequent investigations on the field. Semi Structured questions were used in an interview platform with selected groups of women among the indigenous communities in the research in an actual Socio-Anthropological fieldwork, using techniques such as participant observation, conversations with informants and visual documentation to elicit the relevant information. The homogenous character of the populations of women in these indigenous communities permitted for a representative sample of the women to be used in each of the cases to acquire information that significantly represents the general opinion of those and other similar communities that could not be visited due to the time constraints as well as the enclave nature of most of these communities especially at the peak of the rainy season.

The subsequent elaborations are based on the analysis of field findings gathered from the representative proportion of women from each of the communities.

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INTRODUCTION

Many of the world's indigenous peoples live in isolated and distant communities and their livelihood depends on nature and on the dictates of climate for their activities, and this makes them vulnerable to the increasing unstable and unfavourable climatic patterns.

It is widely accepted that poor and natural resource dependent communities in the developing world are especially vulnerable to climate change. These areas are characterised by significant ethnic populations of distinct indigenous people particularly exposed to the risks of climate change yet their interests are rarely taken into account in climate change negotiations towards mitigation or adaptation options.

The purpose of this current report is to project the importance of understanding the place of indigenous women in climate change, the impact of climate change on them and how they are adapting to and mitigating the effects of this phenomenon using traditional knowledge. Some elements of this report can also facilitate the integration of socio-cultural considerations in programmes and actions to address climate change through mitigation and adaptation measures.

Considering that half of the world's estimated 300 million indigenous peoples are women, they are found to be the key in the preservation, sustenance and survival of the human race and diversity and are major actors in human security as concerns food, health and overall wellbeing of their families and communities, and they hold and practice traditional knowledge in the sustainable use of biodiversity that are essential to maintain ecological balance that negates climate change (TEBTEBBA).

This paper gives an overview of the impacts of climate change on indigenous peoples in the tropical forest belt and the Savannah ecosystems and demonstrates in a case study from Djoum in South Cameroon how indigenous women are adapting to climate change.

The concept of climate was defined and interpreted differently by respondents on the field who, for example, defined it as the fluctuation between Rainy and Dry. This makes the concept of climate change as defined scientifically not well known to many Indigenous Peoples even though they have observed several and rapid changes in their surrounding environment.

If climate change has huge impacts on indigenous peoples as a whole, indigenous women are more disproportionately affected as the various actions taken to arrest the causes and effects of this phenomenon do not consider their potential contributions and this poses a grave threat to their lives and welfare; and to the important role of one of the most vulnerable group on whose hands partly depend the sustenance and wellbeing of indigenous communities.

Case Study: THE INDIGENOUS WOMEN IN SOUTHERN CAMEROON

Cameroon Baka communities made up entirely of Pygmies (forest-dwelling hunter-gatherers living in the Southern and Eastern parts of the country) are threatened both by intense logging activities that gravely affect the environment they depend on, and by climate change that is largely an outcome of exogenous mass exploitation styles of logging companies and these places a great toll on their social cohesion. However, like many peoples living in rural areas they have limited awareness on the question of climate change as viewed by the educated class. Yet they are not completely ignorant or imperceptible of the increasing environmental changes linked to climate variability. In spite the high rate of illiteracy among them that constrain their ability to become involved in initiatives aimed at addressing climate change at higher levels of decision making, the local strategies they apply either consciously or otherwise to ensure sustenance are adapted to the environment and significant enough to mitigate climate change and to attract consideration and encouragement at decision and policy drafting tables. Some of these strategies are aimed at protecting the forest which represents everything to them in terms of basic household needs, medicinal needs, shelter, food and source of perpetrating and handing down traditional norms and practices from generation to generation. Some of the indicators of climate change are their effects on the indigenous people as gathered from the field are presented in the subsequently.

INDICATORS AND EFFECTS OF CLIMATE CHANGE ON INDIGENOUS WOMEN

Rainfall has become very irregular, unpredictable and reduced in the period it lasts from about three to four months during the short rainy season period to about two months in Mebang community area. This leads to prolonged dryness and drying up of streams, accompanied by exceedingly hot climatic conditions all of which provoke poor agricultural performance and low output, disappearance of some species of fish like "NWAHKA" usually used in performing traditional rites aimed at initiating young girls upon their maturity for marriage into womanhood as well as very long distances covered by women to fetch water for their household chores, which result in time and energy wasting. The disappearance of elements vital to tradition and customs such

as this special fish will accentuate the new generation's ignorance of their culture and traditional knowledge and values, and deprives the girl child the pride and honour that used to be associated initiating them using this species. Why is the nwahka so significant for this ritual...what is the belief about the fish? when was the disappearance of the nwahka first observed? Can the women recall under what environmental/climatic conditions when the fish has seemingly disappeared? Is the disappearance attributed to climate change? What other factors can the respondents think of as the cause of its disappearance? It was collected from the field that this species of fish is of great importance as far as initiation of women into womanhood is concerned because it permits the spirits to be evoked. It has been handed down from generation to generation. The disappearance of this fish from the usual water sources was first observed in 2007 during libanji festival in Nkonete village in Djoum. Since then this ritual has not taken place till date. Women are attributing its disappearance to reduction in water levels which is as a result of climate change. Since these people are now living sedentary lives and are increasing in population, the demand for this particular fish has equally increased also accounting for its rapid disappearance. The fish has not totally disappeared per say but can be found in those rivers found deep in the forest and most often out of reach of the villagers.

Initially the traditional rite was performed once every year by traditional chiefs and elderly women on girls of age 15-23 years. This is usually performed deep in the forest where they spend 1 week evoking forest spirits to fortify young girls to be able to face womanhood with vigour and stand the accompanying challenges. For three years this rite has not been performed and the communities are still reflecting on the most appropriate alternatives.

Any girl who has refuses or has not been initiated above the age of 23 is excluded from certain decision making arenas concerning the women, from performing certain traditional rites especially those during some dances and from entering certain traditional shrines.

Most often the girls who refuse being initiated are regarded upon as witches who are afraid of being exposed by the forest spirit and as such they are rejected by the community especially in social gatherings.

Has the nwahka fist totally disappeared? If totally disappeared, what happened to the traditional rite for girls' initiation – is the performance of this rite stopped also? If not, what are women doing so they will have the nwahka for the ritual? Traditionally, how often is the traditional rite performed in a year? How many of this ritual was performed last year?

Can you, possibly, describe how the traditional ritual is performed (i.e at what ages are women undergoing this? What other qualifications are needed for women to undergo the ritual? Who performs the ritual? Is this performed in public with the whole community watching it or is it done in private? Is it done in groups or individually??)Are all Baka women expected to undergo the ritual? What happens to

girls who do not want to undergo the ritual? What is the significance of these ritual to Baka women? what cultural values does this traditional rite of passage reinforce among women and in the community? What roles and expectations do the community expect this women to hold after the ritual?

If there are women who have not undergone this ritual, how do they feel about themselves – do they feel more inferior or less confident compared to those who went through the ritual?. Does the community regard them differently compared to those who went through the ritual? How – are they less respected?

Reduction in rainfall has equally made hunting, which is one of the activities of the male folk that provide food for the households, difficult as footprints of animals that are usually evident in wet conditions are disguised on dry leaves. This reduces the household food supply capacity of men shifting the greater burden onto the women who have to ensure the feeding of the household thereby placing a significant weight of the effects of climate change on the indigenous women.

Women who normally catch fish by way of dams built across streams during the dry season are increasingly becoming unable to achieve traditional fish catches due to reduction in the volume of water in rivers due to prolonged dry conditions that permit only for little quantities of water to collect behind the dams for longer waiting periods and little fish available in it than in the past.

Inability to predict rainfall as in the past tricks the farmers into planting at the onset of early rains especially during the short rainy season period, which unfortunately may last only for days succeeded by otherwise longer periods of dryness resulting in the dying of the already germinating seeds. This results in failure in crop yield and in food shortages thereby placing the indigenous woman in a more complicated situation of having to feed the family barely with anything. This exposes them sometimes to some form of emotional torture and a sense of rejection, all as a result of climate generated effects on farm productivity. Can you cite a specific case of crop failure due to adverse climatic conditions – i.e identify one woman's experience : identify the woman, how many members of her household? When was this? What specifically did she plant? Compare crop yield before and after the crop failure –i.e before, how much did she plant? How much did she harvest and how long did it last? after – how much did she harvest after the adverse climate condition? How long did it last? what did she do to supplement food needs of the family if the harvest was not enough for the expected period? No specific information as to this has been given by the communities but there is general crop reduction due poor yield that never used to be at the early years when they started crop cultivation.

This is compounded by the inability of women (who as main gatherers used to provide easily from the forest), to currently still depend on it and provide enough food for their families from the gathering as some delicacy species of food such as Mushroom and tree Larvae that used to abound have disappeared under the effect ensuing harsh climatic conditions. This has increased hunger, malnutrition and some

type of misery amongst them and this has greater effects on women and children than the male folk in spite the fact that the effects generally concern everybody.

The constant increase in temperatures also contributes to crop failures and the weakening of their immune systems making it difficult to work for long hours. The excess heat also causes skin rashes and enhances mosquitoes breeding which gives them malaria. It is also affirmed that the hot sun and excess heat causes fruits to fall off before maturity thus causing wastage, shortage and hunger.

The disappearance of some of these species with strong medicinal values has left the indigenous Baka communities void of any health security that used to be easily ensured by the regular consumption of these species such as the bush yam (BAHH), which is traditionally used to fortify their immune systems for better prevention against numerous diseases. This has seen the evolution of new diseases that attack humans, plants and animals. Increase in the poor health state of these indigenous populations in general has placed a heavy toll on women who in addition to the stress to provision household spend most of their precious time to care for the sick in a sedentary non productive type of life. Is there data available (maybe from the local health department) on increase of malaria, skin rash and other diseases including malnutrition level that corresponds with the observed increase in temperature? Is there data also on plant and animal diseases? If these data are available, it may be good to cite them to give an idea of what this are and what extent these have caused in affecting food security in the community. No data available as of now since these people are very traditional and hardly go to hospitals for treatment.-

There is equally a gradual disappearance of some tree species like the MOABI tree whose bark is used for medicinal purposes and the seeds transformed into vegetable oil used for cooking. (again, why is the Moabi disappearing? Is this one of the species being regenerated locally so that it will not totally disappear; what diseases increased in incidence because the tree is disappearing? The disappearance of the Moabi tree is linked to industrial logging since they are very huge trees with very good wood for woodworks and highly demanded especially in the market.

All of these have subjected the Baka indigenous peoples and especially the women to very harsh living conditions today than in the past leaving them no choice than to indigenously work a way through the difficult conditions by consciously or otherwise seeking adaptations methods and techniques that go a long way to mitigate the climate change phenomenon.

ADAPTATION STRATEGIES

Adaptations to environmental changes in a bid to ensure livelihood are not new but have taken place through out history. Natural resource dependent communities have been continuously adapting their livelihood strategies to a wide variety of external

disturbances and stresses in order to survive. However, climate change creates additional risks to which these communities are exposed, and the intensity of future climate change impacts are certainly outside the range of risks that they have experienced and adapted to in the past. This overstrains indigenous people's capacity to adapt and eventually lead to a loss of their traditional habitats and along with their cultural heritage. All these notwithstanding women put in a lot of efforts to ensure food security and adapt to the impacts of climate change

In the forest areas the Baka women evolve several strategies to adapt to climate change in order to ensure food security. These include the following.

1. They are increasingly getting involved in crop cultivation that has never been part of their food security strategy and culture. This is the negative effects of climate change resulting in the reduction and disappearance of the forest products they very much depended on for their feeding. About all the of the family's daily consumption used to be derived from the forest some twenty to thirty years ago but today not up to 50% of this can still be provided by the forest. (is there an estimate figure here (in percentage, maybe) to show how much of a family's daily consumption is derived from the forest and how has it decreased with the observed progressive disappearance of some species? They now cultivate crops such as cassava and plantains (plate 1) which they feed on now just as their adjacent Bantu sisters. Most Baka people accept the cultivation of these new crops just as a last resort lest they die of hunger as they still very much desire and prefer their forest sources that to them required little digging and tilling of the ground which is gradually becoming part of them. These practices the women complain are compelling them to lead sedentary lifestyles that never used to be the case. This limits their contact with nature and exposes them, especially the girl child, to social practices and cohabitations with the Bantu people that compromises womanhood dignity as some of them are easily made to become mothers at tender ages out of wedlock, which hardly used to be the case with their mobile lifestyle. Cassava and plantain cultivation are the new products being planted by the women? What have women observed as the impacts of this in the community? Are these considered bad or good? Does this have impact also on land like : access to land, land use and/or rights over land? What about soil quality ? Access to land has hardly been a problem to them by virtue of the wide expanses of forest land that needs only to be cleared and tilled with little or no completioncompetition for it yet but it is gradually rendering them more of contributors to forest degradation than conservators that they have always been. This is because forest has to be cleared in order for the farms to be opened. The soils still have very high fertility potentials if the necessary moisture is available at appropriate moments as in the past twenty or more years.

2. They set up regeneration plantations for some tree species under threat of disappearing that are being planted to safeguard the species especially of medicinal and fruit plants (plate 2). About 12 to 15 different major medicinal forest species were numbered on the plantation owned and operated by a family. This gives an indication of the number of species that are increasingly becoming hard to find. Such initiatives are still taken up and fostered by individual farmers and little is yet done as far as community based reflection towards this direction is concerned. This is mainly explained by the people to be due to inadequate funds. How many major medicinal forest species are disappearing? Who is involved in the plantations – is this a family or community level initiative?
3. In order to circumvent the stress from the disappearance of fruit trees, they are increasingly diversifying into consuming more of green vegetables to replace some of the lost species of foods (mushroom) they used to get from the forest. These vegetables are ~~are that are new~~ largely new in the Baka diet and are harvested from the forest and from farms from where they grow as exogenous plants brought in from neighbouring villages either intentionally or otherwise. Some of these vegetables harvested from the forest used to exist but were never considered of any importance to their diet. EG. Cassava leaves, African spinach (where do they get the green vegetables? Are these new in the Baka diet?
4. They farm along river banks to overcome the effects of prolonged dryness and in order to prevent crop failure, ensure crop productivity and availability of food for the family especially during the dry season and periods of climate failure. What are Baka women doing to ensure that the river/streams do not also dry up? Unfortunately they are doing nothing in particular yet as they don't have the capacity and technical knowhow of preserving rivers. Although the regeneration of trees is indirectly contributing to the preservation of underground water.
5. Some women carry water from rivers and streams from distant locations to irrigate their farms with in spite the drudgery involved in the process. (can you cite one woman who carries water from the rivers/stream i.e name; farm crop; how far does she carry the water or estimated distance from river to farm; how many times does she go back to the river to ensure that all plants are watered/irrigated? How many time in a week does she do this? How long or how many hours does it take her to irrigate? how heavy is the water that she carries;
6. To water a farm of about 500 square meters she has to go as many as 25 times over a round distance of about 8km. she does this 3 times a week. Considering the distances she prefers to carry water in a 30liter gallon. She takes about $\frac{3}{4}$ of the day to complete the task.

7. They engage in the exploitation of other new non-timber forest products like *Njangsang* which is very nutritive, *KURTU* which is a new species of mushroom and which they eat to replace the lost specie and TUP which they sale to generate some revenue now highly needed than in the past by women (plate 3). Kurtu, for example is grown by the families around compounds. In fact growing mushroom on plate 3 has been grown by the wives of the Chief of Ando Peke village- around their compound premises. Njangsang on its part is one of the plants found in the family plantation of one of the families' visited on the field. While they are increasingly using other non-timber products, what are they doing to conserve these (Njangsang, Kurtu, tup)as well so that they will not totally disappear?
8. Some engage in the domestication of some fruit trees which falls within the frame of agricultural diversification to ensure continuous availability and consumption of some of the fruits now at the verge of disappearance from the immediate surroundings that used to be very handy in the past.
9. They also plant other fruits which they initially never used to consume such as plums and oranges.
10. To reduce destruction of plants by insect pest that is a new phenomenon amongst them that has been existing since some ten years ago, they use traditional techniques such as burying elephant skin and tortoise carapace in their farms as well as spraying palm oil on the plants to scare away the pest elements. These pests cut up plant roots and eat up tubers such that the crops dry up or produce no tubers at their maturity. Some of them eat up plant leaves such as cassava leaves that are eaten as vegetable rendering shortages in this food complement. What are these new pests? When did they start having these pests? What are their impacts on crops?
11. To ensure continuous hunting and consumption of animal protein, they tend to set traps along river banks and water sources to trap many of the animals that come around there to look for water and food. They also do hunting around marshy and river areas since it is easy to see animal foot prints. The traditional community rules for hunting are those that limit hunting mainly for men who ensure the protein intake of the households while allowing the women more time to do other activities as fishing and now farming. These rules are gradually being modified in some village communities with some women now being allowed to carry out some limited hunting by way of setting traps to assist their husbands mainly hunt with other weapons. Other restrictions are mainly on non community members who are not allowed access into the forest without authorization from community head who is most often a man. The community is not liable to any harm that happens to a foreigner who intrudes into their forest without permission. Are there traditional community rules for

hunting? Are these rules still being followed? How is it implemented? Who implements them? What are the punishment for violation? Women also hunt?

12. In a bid to conserve the forests they desist from cutting down trees and hunt only the necessary quantity to satisfy their food and other very basic needs. This very particular with honey harvesting during which they instead climb to harvest it on the trees rather than felling the trees as their Bantu counterparts would. This is a very sustainable strategy of managing the forest that goes a long way to limit the destruction of the carbon sink thereby mitigating the climate change phenomenon. Honey harvesting happens to be one of the main activities of men especially during the dry season since it is used for medicinal purposes and is now increasingly being sold to provide some income for the households. The role of the women however in honey business is in the area of selling it which is increasingly gaining grounds of late. Is honey gathering a major activity for women?
13. They construct thatch houses with small windows to reduce the effects of increasing heat experienced lately especially in the night. The modern House construction is the affair of both the men and women with specific designated rules with the men responsible for cutting the sticks, pinning them down and weaving them together with some tough forest climbers while the women and children plaster the walls with mud and fetch the grass that is used for roofing. As for the traditional huts the construction is entirely done by women especially during hunting and gathering seasons when they go to spend time in the interior of the forest. Who is usually involved in house construction? – is it the women? if not, what are women’s roles in house construction?

Plate 1: New crops cultivated by the Indigenous Baka people as they gradually embrace the crop cultivation culture



A cassava farm owned and operated by a Pygmy family to ensure food security in South



A newly planted plantains farm on a cleared portion in the forest by a Pygmy family on South Cameroon

Plate 2: Newly opened plantation for some important tree species to the communities that are at the verge of extinction.



Three different species of trees, among other, being regenerated by indigenous women in an attempt to safeguard their stock of medicinal and fruit trees in a plantation in Djoum in the South Region of Cameroon

Plate 3: A newly consumed forest product in place of the disappearing species



The research team poses with the indigenous peoples in work session and after in the village of Meban 1 in Djoum.

Other fruit trees currently planted around dwellings unlike in the past when hunting and gathering used to be the main source of feeding to the indigenous Baka Pygmy communities

