



**INDIGENOUS
INFORMATION NETWORK**
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Indigenous Women and Girls Voices from Kenya and Tanzania

Our Climate Change Stories

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Women and Girls
Voices from
Kenya and Tanzania**

Our Climate Change Stories

“Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity”

Paris agreement 2015

Paragraph 62: *Urges parties to swiftly begin implementing the glasgow work programme on Action for climate Empowerment, respecting, promoting and considering their respective obligations on human rights as well as gender equality and empowerment of women.*

Glasgow Climate Pact 2021

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Acknowledgement

It is always with great joy and appreciation to work with indigenous peoples and local women and girls in the communities. It makes many of us who have this opportunity to count our blessings. It gives us hope and happiness to see that we have partners whom we call friends supporting our work at all levels. My sincere gratitude goes to all the communities who agreed to engage and provide us with the data on climate change. I thank the women group leaders from the knowledge and resource centres- Olorukoti, Paran, Naramam, Kiltamany, Nyekweri-Kimentet, Ololoipangi, and Longido community Intergrated Programme (LOOCIP) and the many groups from Longido, Enkare Naibor, Engikaret, Oltepesi and Kimokowua, Pastoralist Information and Development organization (PIDO) from Arusha Region of Tanzania. We thank the 350 individuals who participated in the different interviews and focus group discussions for your time and for the knowledge you shared with us. We also thank the girls and climate mentors and mentees who collected the data for your work and dedication. Thank you, the IIN and PIDO teams, who helped to compile and analyze the data; Creative Action Institute for the training on data collection; MADRE for financial support, your motivation all through the process was very encouraging. We were happy that we were able to have an initial preliminary report which we presented during the 26th Conference of Parties to the United Nations Convention on Climate Change (UNFCCC) 2021. In this report we welcome you to read our stories as shared by different women and community members who were interviewed.

Lucy Mulenkei

Executive Director, Indigenous Information Network

@IIN2021

Background

Indigenous Information Network (IIN) has been doing work on capacity building, training and creating awareness on climate change and the relation to conservation of Biodiversity while at the same time connecting it with traditional knowledge. Indigenous peoples have an intrinsic relationship with the environment and are dependent on natural resources for their economic, social and cultural activities. In Africa, indigenous peoples mostly inhabit arid and semi-arid lands, and a few of them live in forest areas which are threatened by increased climate change impacts such as prolonged drought, desertification, floods and increased temperatures which has impacted on the loss of Biodiversity and further impacting on indigenous peoples' livelihoods.

It is clear that climate change is already causing widespread socio-economic and environmental loss and human suffering. Studies have shown that global warming and extreme weather conditions may have calamitous human rights consequences for millions of people. Global warming is one of the leading causes and greatest contributors to world hunger, malnutrition, exposure to disease and declining access to water. Climate change affects the economic and social rights of countless individuals. This includes their rights to food, health and shelter. However, its impact is not felt equally. People experience the impact of climate change in different ways. For instance, an indigenous pastoralist woman has a very different experience of climate change to an indigenous man. Indigenous women have different adaptation needs, depending on where they live, how they sustain their livelihoods and the roles they play in their families and communities. Indigenous women's productive role of ensuring provision of food, water and energy for their families, their role in their traditional food systems and the traditional knowledge they hold, practice and transmit to future generations, are all impacted by the effects of climate change.

Over the years, Indigenous Information Network has with the support of MADRE and partners focused on working with indigenous women on climate change issues. In the past, there have been ten different meetings of the Conference of Parties to the convention on Climate Change. During the meetings MADRE and Rosa Luxemburg Stiftung RLS- New York Office supported three indigenous women from our networks to attend the meetings held in different parts of the world, the last being the 26th session held in

Glasgow in 2021. However, it was important to understand in depth the impact of the work. There has been a series of training and exchange visits among the women, and the information received through these experiences is what we share at the national, regional and international forums when learning and exchanging stories with others. Through the networks we built, and during this process, there was a need to go a step further.

In 2019, we started thinking about collecting data from communities we work with. This would enable us to know, hear and see what the community felt about the impact of climate change. There is a lack of disaggregated data when it comes to indigenous women and climate change at the local grassroots level. Together with MADRE, we started this journey and at first the process was faced with challenges because of the onset of the global pandemic (COVID-19) at the beginning of 2020 but this did not stop us because we were determined. We embarked on following and observing all protocols given by the government and health institutions.



Mentors and Mentees together in a group in the training of Data Collection in Namanga River Lodge, Kenya.

In our data collection, we decided to focus on two countries: Kenya and Tanzania. The process was to identify and select ladies from the communities who were to receive training as mentors for the girl and climate project in selected areas of the two countries and then conduct orientation meetings in each country. The orientation was first and foremost to determine the level of understanding about climate change among the ladies. Second was to understand and make sure that those selected have that close relationship with the community and how to communicate with them what technological knowledge they have and together share the platforms they would use. At that time, the challenge on Covid 19 was real especially in Kenya where there was restricted movement due to the pandemic. Because of this, we had to develop alternative and innovative ways to start working. In Tanzania, they had far less Covid 19 restrictions as it was considered a non-issue.



We wanted to reach as many communities as possible that we work with like these women from Kiltamany areas of Samburu County sharing their usual hard times and strategies to take next.

The orientation on how to use online meetings such as Zoom was done. This is where equipment (Phones) to be used were given to each mentor. The virtual training facilitated by the Creative Action Institute was conducted to further enhance the capacity. This training was the first phase done through Zoom. IIN and LOOCIP conducted a feedback workshop with mentors in order to understand the success and challenges of the virtual training. The feedback received was used to improve the second phase of the training. A face-to-face training workshop for mentors, mentees and facilitators was held in Namanga so as to be taken through all the process of data collection, analysis and compilation. The mentors and mentees met again with Indigenous Information Network (IIN) and Longido Community Integrated Programme (LOOCIP) to go through a questionnaire developed by the mentors and agreed on it to be used for data collection. Data collection was then undertaken in both Kenya and Tanzania which was an opportunity for learning and information gathering for the community and the data collection team.

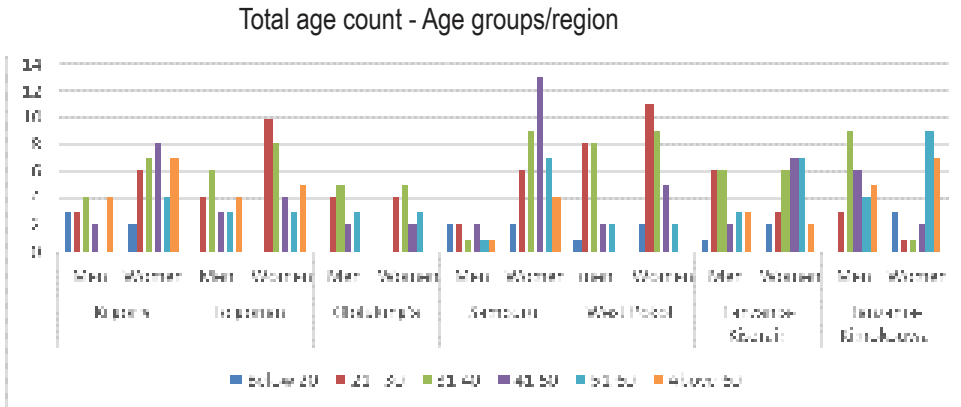
This research was carried out to assess the impact of climate change on women and girls in Kenya; In Narok (Transmara and Ololulunga), West Pokot (Chepareria and Naramam) and Samburu (Kiltamany and Lpus Leluai). In Tanzania, it was done in Longido, Engare Naibor, Engikaret, Kimokouwua, and Oltepesi. The purpose of this study was to facilitate the collection of data at field level to understand gender gaps at the national and local level while providing the actual situation of women, girls and men in these communities, their participation and behaviour, activities in economic, social and legal structures. The research is based on primary data collection using climate change and gender sensitive questionnaires in a two-phase process through individual interviews and focused group discussions to collect both qualitative and quantitative data. The three hundred and fifty (350) interviews were conducted from the selected regions and the data was collected successfully for analysis.

Despite the success in collecting the data, there were very unforgettable scenarios; The girls were collecting data in their own communities which required them to use their own Maasai language. This was important and all the parties realized that there were gaps in clearly speaking traditional language. Those collecting data realized that sometimes they faced challenges in understanding some aspects. This was experienced in Kenya

more than in Tanzania. There was need then to take action immediately: During the process of conducting the interviews, there was a language learning component where the girls started to revitalize their language during data collection, and this became a source of pride for the parents and the community. It was motivating for many members of the community seeing the young girls come back to the community to strengthen the bond with the elders and revive their cultural interests. Through this project, we are once again reminded that there is a need to fully understand our indigenous communities, their traditions, cultures and values.

During the interview:

- Individual interview questionnaires were used to collect personal information such as age, education background and marital status. The team distributed the questionnaires among the interviewees and helped with interpreting the questions for easy understanding and therefore accurate data collected.
- Group discussion questionnaires were used to collect qualitative participation data. The team used questions to obtain data on women’s and men’s ways of life in relation to climate change, women’s role in biodiversity and their opinion on climate change.



The representation above shows the distribution of the respondents by age in the three selected areas in Kenya.

Climate Change Impact on Indigenous Women and Girls

Discrimination has kept indigenous women from development and access to resources such as land, credit and education for a long time. Cultural beliefs make women targets of trafficking and gender-based violence, particularly in times of conflict and crisis. Traditional gender roles put women on the front lines of growing food, collecting water, and gathering fuel for their families. These are just some of the many reasons why the effects of climate change like drought, desertification, erosion and flooding will continue to hit women and girls harder than anyone else.

That is why the historic Paris climate agreement signed by nearly 200 countries was good news for everyone. The deal builds on the understanding that women can do a tremendous amount of work to confront climate change. For example, the preamble calls for gender equality and women's empowerment, and the sections of the agreement detailing adaptation and capacity-building efforts specifically call on countries to adopt gender-responsive approaches.



Neema Ngulupa, one of the mentors from Namanga - Tanzania training the women on climate change.

The international community knows it has a gender problem and the United Nations is encouraging and ensuring the full and effective participation and involvement of women in different forums and negotiations. For indigenous women, we as a network have promised ourselves to do more to empower women and girls in climate change efforts. We join the rest of the partners to acknowledge that, while the Paris agreement is a critical step forward, it is by no means the end of international efforts to address climate change. As the agreement is implemented, and as national contributions are strengthened, future efforts will benefit from gender-responsive approaches to mitigation and more attention to ensuring financial resources are generally accessible to all elements of the population especially indigenous peoples, women and girls.

Climate change is one of the major global challenges that countries have encountered in their efforts to achieve sustainable development. Indigenous peoples are among the marginalized and thus the most threatened segment of the world's population in terms of social, economic and environmental vulnerability. Their economic, social and cultural activities depend on renewable natural resources that are most at risk to climate variability and extreme weather changes. They live in geographical regions and ecosystems that are the most vulnerable to climate change. The impact of climate change in such regions has strong implications for the ecosystem-based livelihoods on which many indigenous peoples depend.

Indigenous peoples who are mainly nomadic pastoralists in Kenya and Tanzania have a strong social and environmental awareness and traditional knowledge that has sustained their communities over the years. Their livelihoods have continued to play a key role in sustainable management of natural resources and conservation of biodiversity which is critical for building a climate resilient future. Indigenous women are actively engaged at local, national and international levels in raising awareness, educating communities, shaping adaptation and mitigation priorities, evolving energy efficiency at household level, conserving environments, preserving genetic diversity, rehabilitating forests and transmitting traditional knowledge. However, they experience inequalities in access to decision making spaces and public resources and discrimination within their communities and outside, as well as being vulnerable to social and economic exclusion, exploitation, marginalization, gender-based violence, and other vulnerabilities that are multiplied by climate change.

In both Kenya and Tanzania, climate is changing. These countries have experienced increased temperatures, unpredictable rainfall patterns, increased incidences of drought, floods and rising sea levels impacting on the people. Extreme weather events have led to loss of lives, diminished livelihoods, reduced crop and livestock production and damaged infrastructure. Vulnerable groups in society including women, children, youth, the elderly, marginalized and minority groups, are particularly impacted by climate change. Both have experienced severe and recurrent droughts affecting water, energy, and the agriculture sectors. Livelihood activities and economic activities such as crop production, and livestock production are highly dependent on climate. Recent studies project that the frequency and intensity of extreme weather events will increase causing severe socio-economic consequences particularly to marginalized groups in the society.



Shortage of basic commodities like water has continued to be experienced due to climate change.

Women in pastoral communities carry the heaviest workload in the community. They have to struggle with livestock care, collect water, firewood, feed their families, and build the houses among many other duties both in their households and the community. They have to do so much, and with climate change, they are put in danger as they have to go longer

distances for firewood, water and livestock feed (grass). Climate change has made men and boys go out of their homes to look for ways to provide for the families leaving their duties on livestock production to women.

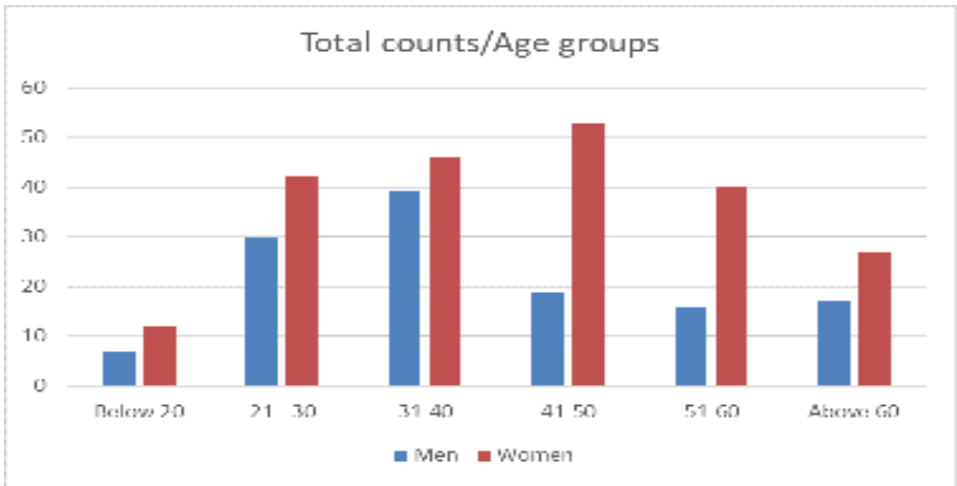


Planning and discussing collectively together helps these Pokot women from Naramam make plans for their own development in the community.

Most of the pastoralist communities' traditions allow polygamy, so a man can be married to many women who do not have any resource ownership. With the changing conditions, women and girls suffer. Women strive to provide for their families and that leaves girls covering the duties of their mothers. Men and boys do not face the same impact due to the fact that their socially assigned roles are not affected as much as those assigned to women and girls.

Indigenous women's livelihoods and cultures also face threats from climate adaptation and mitigation measures that exclude them. For instance, large-scale renewable energy projects on indigenous people's traditional lands have been associated with land alienation and forced displacement, leading

to loss of livelihoods and identity. Lack of recognition of indigenous peoples and women’s rights to land, results in many cases to restrictions and access to natural resources on lands that they have traditionally occupied. This is mainly because of pressures for natural resource extraction, environmental degradation, and policies regarding environmental conservation that do not take into consideration indigenous peoples’ needs. Further, there are socially determined differences in opportunities, responsibilities, decision-making and power that influence how vulnerable people are affected by climate change. Indigenous women play a critical leadership role and have knowledge on sustainable natural resource management and practices at community level. However, the contribution of indigenous women to climate change adaptation and mitigation is not acknowledged. Without understanding these dynamics, which are often influenced by gender, and taking them into consideration in climate policy and action, there is a risk that indigenous women with the greatest need for adaptation may be left out.



With respect to age, most of the female respondents were between the ages of 41-50 followed by those between 31- 41 while most of the male correspondents were between the ages of 31-40 followed by 21-30. In general, there were more female than male respondents in every age bracket who gave their views on different topics on women’s and men’s ways of life in relation to climate change and its effects on different groups in the society, women’s role in environmental conservation and their opinion on climate change and its effects on others in the community.

Water and Health

The girls and women are at risk because they have to fetch water far away from home. They sometimes have to go out very early in the morning, where they face dangers such as physical assault, rape and attack by wild animals.

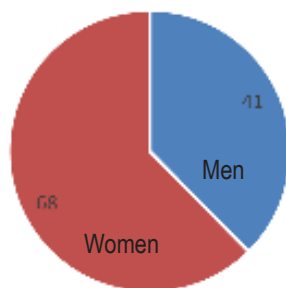


Quest for water women in Kiltamany collect the only available water for domestic use in Euwaso River

Girls are even more vulnerable because of these activities, and when parents migrate in search of pasture, they are left alone putting them in possibilities that may lead to early school dropout, early pregnancies and early marriages. Men and boys face dangers of wild animals when they take cattle to the watering points. Many times, men experience conflict caused by scarce resources that bring along competition from other neighbouring communities. Lack of water, food and poor health is experienced by the entire population, but the young children and old people are affected mostly because of their poor immunity and when they get sick, there is no help that comes easy to them.

The respondents indicated that the effects of climate change are gender differentiated. Given that women do all household chores such as cleaning, cooking and providing drinking water to the family members, their access to water is very important and crucial for the survival of their families and communities.

Decrease in Water supply



Indigenous Women Voices experiences caused by climate change

“Some years back, we did not fetch water from the river as water springs were common and we would drink from them. We did not lack water. Now we go to the river to fetch water as trees have been cut hence the scarcity of water during drought. The water level is very low. This has also resulted from cultivating land for food and settling”.

Margaret Leboo, *Ogiek Ololoipangi Ololulunga - Narok*

“These days there is water shortage, you walk long distances in search of it. It has affected a large part of human life because even if we look at access to water it has been very poor because in the past we had many water sources but now it has become very difficult and also animals have become extinct due to water and vegetation shortage.

Mama Pendo, *Ewuro ee ndege - Namanga Tanzania*

“The rivers were huge, for example Engare-Olkituak River used to have a lot of water those days since there was a lot of rain. During heavy rainfalls, it flooded and one could not cross it. If they tried, it swept them downstream.”

Naoroi Masitoi, *Kilgoris – Transmara Narok*

“Women and girls are mostly affected by climate change. Women and girls use a lot of water in their daily activities as compared to men and boys. These activities include cleaning and bathing. Domestic animals and wild animals are mainly affected during the dry season since they would have to travel a long distance to get water.”

Everlyn Narasha, *Ngeeti - Kilgoris*

“Sometimes we encounter wild animals when going to the rivers and we are forced to turn back home without water. Boreholes were dug, but wild animals also drink water from them and we lack water since they drink it all and sometimes, they would make the water dirty by swimming in it”.

Naisenya Pilale, *Nyekweri Kimintet - Lolgorian Transmara*

“There is increase in drought, lack of water and grass is also not available. We have no food or water. We would go for a long distance in search of water about four (4) kilometers. Cattle also lack water to drink and grass to eat because of climate change. Wild and domestic animals are affected during the drought seasons because they lack water to drink.”

Naila, Masai - Saparingo

“In the area, rivers used to have a lot of water before. But it has since reduced as people cut trees leaving them exposed to the sun and they end up drying. This is because people have cut trees to make room for crop plantation. Around the rivers, there are no trees, instead farms have taken over.”

Noonguta, *Enooretet*

“Climate change has resulted in a decrease in water supply. This is as the rainy seasons are unpredictable. Lack of rain is brought about when people cut down trees. There used to be plenty of water as it used to rain regularly, but nowadays there is drought. It hardly rains. Also nowadays, the temperature is very cold even when there is no rain. Climate change has resulted in a decrease in water supply. Rivers nowadays carry less water than before. It has become difficult to predict rainy and dry days.”

Rosemary Mesopir, *Namunyak Lepolosi*

“Due to climate change, there is no rain and drought has increased. Forests have been destroyed and this results in drought because forests attract rain. Animals lack water and also have to walk for long distances and some die on the way. There is a decrease in water supply since it does not rain as it used to.”

Mama Leboo, *Sisiyat women*

Naisula is an Indigenous pastoralist woman who has to leave her home and walk for hours to the nearest water source. This water source is not tapped water. It is a river, a stream or a hole in the riverbed. This activity takes hours for her to complete and get back to her home and tend to her other duties as the woman of the house. Fetching water can take anything from 2-6 hours in a day for a woman like Naisula and of late, this activity could cause indigenous women and girls to sleep out as they go further and further to find water. The weather patterns have changed, it does not rain like it used to. The quantity has reduced, and the rainy season is shifting. For these indigenous women, climate change is something they have never heard of, but they know that the resources they rely on for their livelihoods are becoming scarce by the day. Food and water are the most basic of the long list of needs they have. Many other things are affected by the lack of access to water such as their sexual reproductive health rights, sanitation, gender-based violence, security and the list goes on.*

Livelihoods

“On livelihood we know that our lives have changed. Earlier, there were no farming activities done by people but in the current day forests have been destroyed for farming, also the use of chemicals for forest destruction might have led to climate change”.

Everlyn Narasha, Ngeeti - Kilgoris

“Women and girls are more vulnerable to climate change because they are the ones who do household chores like fetching water and firewood. Domestic animals are affected because during drought they lack grass and water, and this may result in death. Wild animals will also be affected because they will lack grass and water and destruction of forests and cutting down of trees destroys their habitats.”

Eva Atilia, Naramam Chersa - West Pokot

“Women are much affected by climate change as they are home keepers. Women provide food and clothing to their children and make sure they have good shelter. Domestic animals, for example, goats depend on leaves for feeding. During the dry season, the leaves dry up and they lack what to eat.”

Yassi Mary, Lepolosi - Kilgoris

In the earlier days, there was scarce food production because people did not do any farming activity but only fed on milk and meat. Human health was also affected and as a result people died due to the absence of medical services and hospitals. In case of any sickness, they would only use traditional herbs for treatment such as “parmunyo” and “nkoriambiti”

Parmwala Morgo, Longido - Tanzania

Climate change issue is very important to me as I depend on farming for both food and for financial purposes. There are days that we expect it to be raining but it does not rain. After planting crops, we expect the rain to come but it fails and as a result the crops die in farms. Sometimes, we get very little returns from the farms and usually we depend on these to cloth our children and pay their school fees.

Steve Masitoi, Kilgoris - Transmara

“Animals are affected. As for now where we lack rain, cows will lack pastures, they will become thin and will produce little milk. These cows are helpful because we depend on milk produced to pay school fees, and to provide food. When cows suffer, I am also affected as I depend on them for a living.

Nayian Kiplagat, Paran Ololulunga

There will be no rains in future and rivers will dry. This will affect us. As population increases, then forest destruction will also increase because people would want to build houses and the option is to destroy forests and also for plantations.

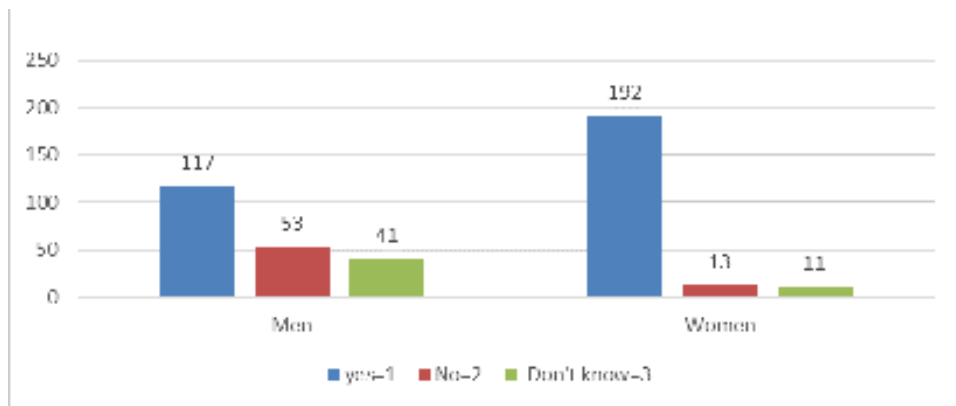
Chepukel Tato, Melelo Women Group, Ololulunga

Due to economic factors, people have no money and the only option is to sell trees for charcoal and this affects the climate. Before, there were no schools, people were also not greedy for money; this helped in conserving our forests. These days, when a person sees a tree, he only thinks of money. Many things changed due to increased poverty because people do not love each other anymore compared to the past, for example, in the past, people used to give two or more goats to those who did not have. Today, people do not share.

Tumaini Engare, Naibor - Tanzania

Women and girls are mostly affected by climate change because generally the woman is the home-keeper. Girls are affected because they have to walk for long distances to fetch water, this makes them late for school. When a girl lacks water during her monthly periods (menstruation), she will be unclean. Men and boys are only affected during drought, because they have to travel long distances with cattle looking for water. Men depend on women for cleaning their clothes. Women and girls are the ones who are mostly affected more than any other person in the community. Livestock is affected because rivers are shared with wild animals and when they meet, they are attacked. On the other hand, in places like Transmara, women are greatly affected by climate change as they most of the time lack food to give to their children due to land leasing for people to plant sugarcane. Men lease the land to people for plantation in exchange for money without thinking that women will need land to plant food crops.

Do you think that climate change is something that is affecting or is likely going to affect you in future?



Most of the respondents, 192 women and 117 men, thought that climate change is something that is going to affect them in future in one way or the other, resulting in problems like,

- Low water levels.
- Poor production of food hence starvation.
- Death of animals.
- School drop-outs.
- Poverty.

Gender Based Violence

Climate Change and gender-based violence are interrelated. It has brought about, changing in weather patterns, livestock loss, high temperatures, prolonged drought and therefore scarcity of food and water. Yet, people's everyday needs increase with the increasing population. During prolonged drought, women and girls go for long distances to fetch water which makes them vulnerable to rape and physical assault. We women are affected by climate change as we go for long distances in search of water. Girls who are forced to spend long hours of times fetching water miss out on school days which has led to school dropout therefore early marriage and early pregnancies due to unforeseen assault on their way.

Our girls are affected too as they help to fetch water. We also send them to look for firewood since boys do not do such chores.

Naisenya Ntetia, Lolgorian

We women and girls are more vulnerable to climate change as we do most of the house chores and provide food for our families. The girls would help their mothers in fetching water before and after school late in the evening that poses danger for them as they do not know what they will encounter on the way.

Kingasunye Ntiyogoi, Olochnai

Girls these days get married off early at class seven due to challenges caused by effects of climate challenge Many parents have also had to force their girl children into early marriages as a coping mechanism to food scarcity and generate an income to raise their younger siblings. When going out to look for food and water, women spend more time and energy there and may not have enough time for doing household chores that lead to domestic violence. There will be no rains in future and rivers will dry this will affect us. As population increases, then forest destruction will also increase because people would want to build houses and the option is to destroy forests and also for plantation.

Chepukel Tato, Melelo women group Ololulunga

Due to economic factors, people have no money and the only option is to sell trees for charcoal and this affects the climate. Back before, there were no schools, people were also not greedy for money; this helped in conserving our forests. Unlike this days where when a person see a tree they only think of money. Many things changed due to increased poverty because people do not love each other anymore compared to the past, for example in the past people used to give two or more goats to those who do not have. Today people do not share.

Koko Engare, Naibor - Tanzania

Lack of food, loss of animals and crops put pressure on the men's role to provide for the family according to traditions. To cope with this, men have turned to alcohol drinking leading to family arguments and increased violence to children and women. And so, addressing the economic livelihoods of women who depend on themselves, starting conversations on gender-based violence will improve women's response to climate change. Girls are also affected because once they lack essentials, they may turn to men for help who will take advantage and get pregnant or contract diseases. Girls help their parents a lot so parents should educate their girls.

Kalasinga, Enooretet kilgoris

Women are most affected as we do all house chores, going to the rivers and farms. Girls are also affected as we send them to fetch water and firewood. They would fetch water before going to school or after coming from school. They are unable to fetch water alone from long distances and would need someone to go with them. Girls sometimes get pregnant and the mother would be blamed for her wrong doings. Mothers are expected to prevent such from happening. Women have a hard time advising their daughters as they no longer listen. The girls would ignore the advice as they consider them to be old and outdated. They lack respect towards their elders.

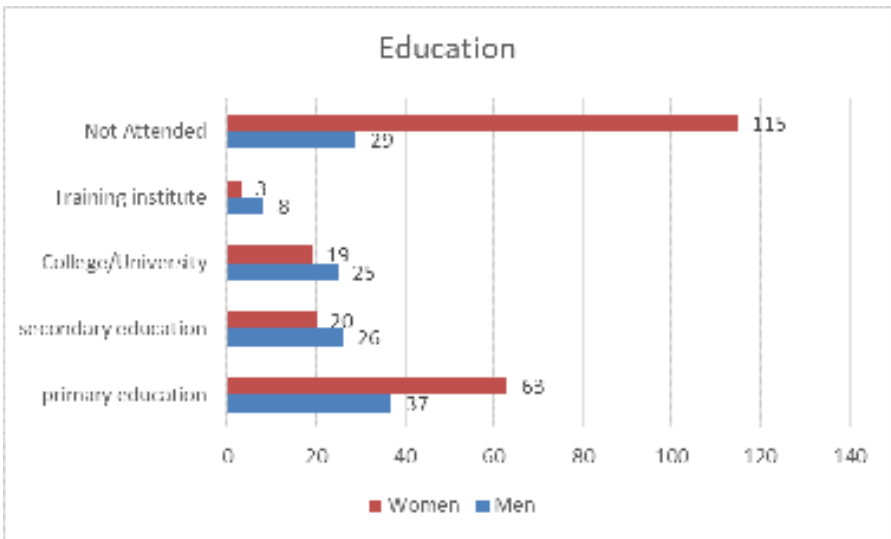
Margaret Leboo, sisiyat Women

Given land ownership, I will not destroy forests instead I will protect it by fencing it and planting more trees. Also, I would be able to manage it and plant crop varieties.

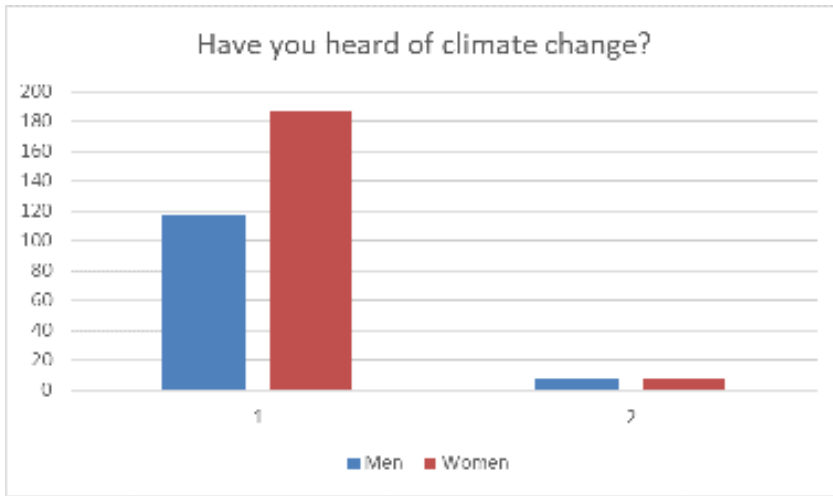
Nashuru ene Lelmpere, Ololulunga

Education

Despite the fact that most of the rural women are illiterate, they are more informed than men. They socialize more with the children and among each other and therefore learn, hear and get information on different happenings more than men. Indigenous women are good listeners and always curious to know what their children know and what others tell them in order to broaden their knowledge and also to know what advice they can give when requested. The women know that they are vulnerable since they will always be discriminated by many out there because of lack of education. There are many factors that cause this dilemma such as negative cultural practice, poverty and the right to education that have denied them the opportunities.



On the other hand and despite many women not attending school, most of them have heard the information on climate change more than men.



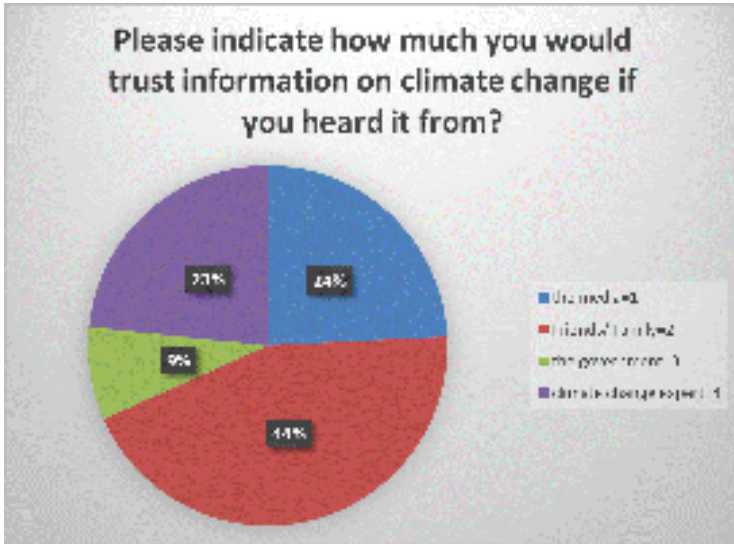
In addition, it was found out that due to their socialization aspect among each other, they share opportunities in their different gatherings at the community level that allow them to attend learning sessions such as a series of training workshops organized by Indigenous. Information Network that have allowed them learn, link and share further at the village and household level.

Most of the interviewees reported that they have schooled their children to gain information and would therefore take pride in learning from and supporting them. Despite the gap in speaking the local dialect for which they indicated that their children spend much more time in school than at home, they showed an interest in intergenerational learning and improving



Mentors during the training strategizing on ways of informing and collecting data at the same time.

the understanding of the local language for their children to make it possible to learn from the youth and the young ones on climate change and other issues. This would help them understand these issues fully since most of them have not attended school.



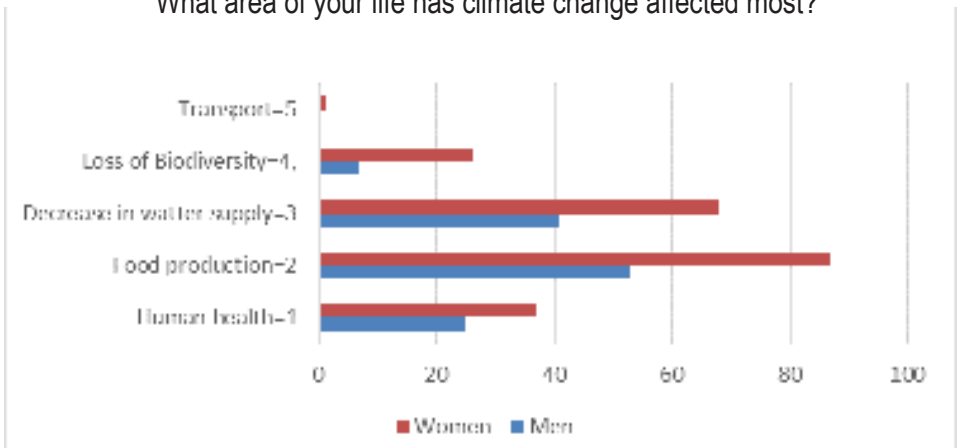
Food Sovereignty

Indigenous women feed their communities; they are the ones who know where the food will come from despite the challenging environment. Due to climate change that has caused prolonged droughts and impacting on their lands, they have been hit hard and have been finding themselves depending on help from elsewhere to get food for their community. They have lost livestock which is their main economy and men and young men moved to urban areas to look for an alternative leaving women with more workloads. They find themselves walking for long distances in search of food and water. Girls help their mothers with the house chores, making them unable to go to school as they are left at home to feed the children.



Extreme droughts can cause communities to experience food shortages and many times need partners to support them.

What area of your life has climate change affected most?



Most women respondents indicated food production followed by a decrease in water supply as the most affected areas of their lives by climate change. Generally, in all areas women were more affected than men.

Traditionally and in years back, many said that when it came to food, they knew how to manage themselves as a family and community. The main food was blood, meat and milk. As drought approached, each man would ensure that his family is ready for what is to come, a bull was slaughtered, the meat was well cooked and dried, mixed with fat and preserved and stored for the family to use in times of drought ensuring family's food security ahead of time. This was also because livestock had be moved around to other locations where there was pasture and water.

The women interviewed expressed their observation that the weather pattern has changed. Earlier, dry seasons would last for a month or two. But currently it may last up to four or five months. This is due to climate change. Climate change has greatly affected food production. Water supply has also reduced as drought has hit the land harder due to climate change.



These indigenous women from Longido and Ngare-naibor from Arusha Region of Tanzania, collectively met to discuss and come up with strategies to buy dry cereals, store them and distribute and sell during drought not only to make an income but also to ensure there is some food available for their families and the community.

It was very interesting that many women interviewed remembered what they used to have before as foodstuffs and how they have lost them due to climate change and because of land use change.

“In the earlier days, people could predict when the dry season was approaching and there were vegetables that could not dry, an example is ‘nteremek’. Therefore, people should at least plant vegetables as this helps during the dry season.”

Noorbarakuo, Lepolosi - Kilgoris

Climate change has mostly affected food production. Food production is greatly affected due to inadequate rainfalls making it take longer for them to mature. An example is maize plantation which is much affected resulting in lower yields during harvesting. This is all due to climate change. Also in the past days, all farm practices like ploughing using cows and carrying of food products by use of donkeys, was common. But these days, all farm operations are done using tractors. This causes people to incur a lot of expenses.

Lynne Kaarie, Oloibor Soito

Climate change has affected food production. Before we used to get food from our animal products, but nowadays we depend on sugar plantations. It has also affected many water sources, rivers have dried up and the water level has gone down. An example of rivers is Engare oo nkituak.

Noonkipa Ole Pesi, Endonyo oo Ngopit

Climate change has great effects. There will be poverty due to lack of food and water. Animals will lack pastures because sugarcane plantations happen at people’s doorsteps. Cows are important assets to the Maasai. Women are greatly affected as they lack food to give to their children due to land leasing for people to plant sugarcane. Men lease out land to people for plantations in exchange for money therefore there will be no land to plant food crops.

Nariku Ngera, Transmara

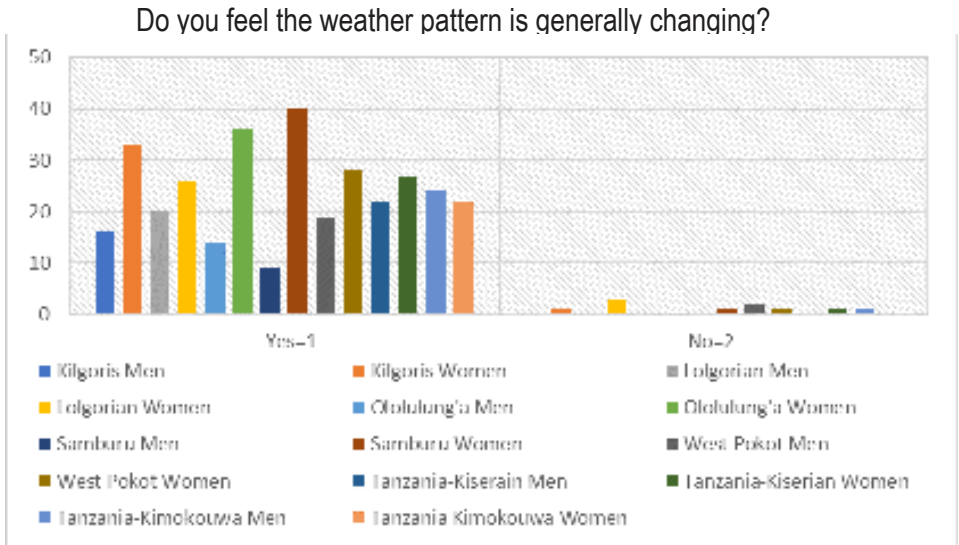
Rain is disappearing and we rely on rain to plant our farms. Animals are affected, for instance cows when they lack food and water, they will not produce milk. I will plant napier grass for cows so that they get something to eat This results in low food production as crops die in farms. Also the food produced will be insufficient as there is an increase in population.

Shadrack Lekakeny, Enoosaen

Climate change greatly affects food production. I fear for the future, everyone is affected by climate change. We all lack food and water. Animals will lack water to drink and grass to eat. **Isaac Morgo, Transmara**

Climate change has greatly affected food production. There is less food for both humans and animals. **Steve Masitoi, Kilgoris**

Climate change has led to drought which has caused food shortage, death of cattle which we depend on leading to poverty. We cut down trees because of poverty. This is not also good for our future. **Michael Yaro, Tanzania.**



In most areas of our study, respondents felt that the weather pattern was generally changing, it was made clear that the effects were gender differentiated.

“Climate change has led to extinction of living things since they do not have enough food, pasture and water to feed on. Animals like cattle, goats, and wild animals are suffering as a result of climate change because they have no green pasture and water. Homes for wild animals have been destroyed by cutting down trees. That is why in our village, Engikaret, animals like

giraffes, zebras, antelopes, and digi digi have disappeared because of drought. We do not see them like before. Livestock migrate in search of water and pasture.

Sophia Amani, Tanzania

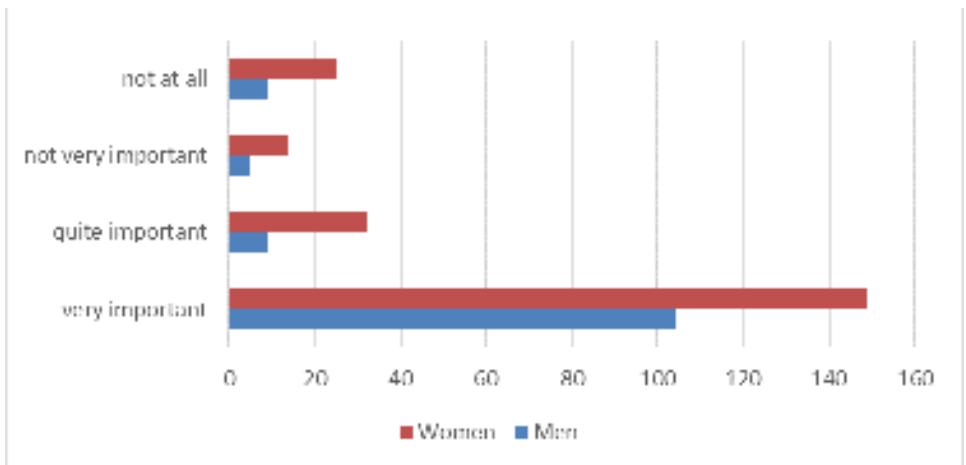
There is extinction of plants and vegetation that has caused important biodiversity to disappear. For example birds like white-collar crows and Tamagusi. We had birds called morani but after climate change, they have disappeared. This is just one among many that we no longer see and we do not think our children will ever see them again.

Esupat Ngulupa, Namanga Tanzania

It has changed because, for example, in the past we had a large forest. When the wind blew, it did not destroy things because the trees were tall and dense but now the forest is no longer there because people have cut down trees for charcoal burning and building houses. There is a lack of rain because there are no trees to help attract the rain. Deforestation has caused soil erosion.

Sophia Pendo, Tanzania

How important is the issue of climate change to you?



Many of the respondents indicated that the issues of climate change are important to them. They said they had experienced the effects of climate

change and had heard or seen these effects in other areas. They recognize that these effects could go on for an even longer time and learning about climate change, how to mitigate and adapt to these changes will help them plan for their future. They reported that learning and understanding the climate will help them predict when it will rain, how much rain and for how long in order to effectively plan when there are no rains in terms of food and water for themselves and their livestock.

Environmental degradation, biodiversity, traditions and cultures

Environmental conservation, biodiversity protection, traditions and cultures were very important among indigenous peoples and their local communities. They conserved and protected their own lands and ensured that the natural resources found in those lands were well safeguarded at all times. The different communities had their own customary laws to use when anyone broke or destroyed what was for the community. They believed that all that has life has been given to them to use, protect and keep for future generations.

According to many who were interviewed in the community, climate change has been caused by people's bad behaviour of not caring for their environment. Climate change has been caused by charcoal burning, environmental degradation, deforestation and they felt that people should plant trees, stop destruction of forests and conserve the environment. Most of them felt that plans to conserve the environment such as tree planting could help and forests should be protected against logging, and human encroachment. Also we should maintain 15 meters distance from the rivers. The government should protect the forest by enforcing strict laws that we know exist but are not implemented. Cutting down of trees is the main cause of climate change, especially the Mau Forest. This used to serve as a catchment area as it attracted rain. Since its destruction, it hardly rains these days.

“We go for long distances in order to find rivers. Before, rivers used to be near but they have dried up completely. We fetch water for domestic use, for calves at home and for sick cows which cannot go to the river. Also, there were boreholes around here but they have dried up due to direct exposure to the sun. There are no trees to prevent the sun from hitting them directly. This is all as a result of cutting down trees.” **Noorarami, Ololulunga**

“Destruction of forests has caused climate change. There is little rain nowadays, there is no food, people go for long distances searching for water. This place used to be a forest and there was a river where we are standing but it is no longer there. When people started destroying forests, we no longer get rain water. Instead we go to the river. We also used to have water coming from underground that we used to drink. This whole place where we live used to be a forest.”

Koko leboo, Ogiek Sisiyat Women - Ololoipangi



Impact on climate changed that has increased land degradation in Naramam Chesra area of West Pokot

“Drought is as a result of people cutting down trees. Some sell trees for charcoal while some use them as firewood. Climate change is going to affect people and the future. People now have the knowledge on the importance of tree planting. This is done especially during rainy seasons where people would engage in tree planting activities, and this will help bring rain. And the idea of cutting one tree and planting two trees is of great help. Protecting forests from destruction like the Mau Forest, will be of more value to lives as it will reduce the rate of low food production. People contribute to climate change by cutting down trees. Also, by not planting trees that bring rain. These are indigenous trees. These days, people have no respect for the earth unlike earlier days and this has caused climate change. People have also cut trees for sugarcane plantation, and this brings about the dry season and low food production as sugarcane takes 24 months to be harvested causing people to starve.”

Margaret Nguratian, *Chebareria West Pokot*

“People have contributed to climate change by cutting down trees at the rivers. This makes the rivers dry up. People should not cultivate at the river banks. Trees like “olkimitare” and “oloperoni” should be planted along rivers, because they have water. People should stop cutting trees and destruction of forests as this will help restore rains. Also, trees at the rivers should not be cut. This will help the rivers not to dry. Planting of indigenous trees along the riverbanks will also help and it will prevent rivers from drying.”

Parmwala Murgo

“During earlier days, it used to rain all night and at daytime we would be herding cows. But currently, we are experiencing rain anytime of the day and this makes it difficult to look after cows. Climate change is likely going to affect the future. This happens due to unpredictable weather patterns these days compared to earlier days. Also, poor timing in terms of when to plant and when to harvest. This is all because of climate change. Forests are beneficial to humans because they act as windbreakers. When forests are destroyed, the environment will not be conserved. Therefore, people should protect forests as this will bring more rains in the area.”

Eunice Senei Sisiyat, *Ololulunga*



Indigenous women from lolulunga hosting other groups from their county on Biodiversity and traditional knowledge learning from each other.

“Before there were forests, the wild animals used to have habitats and we would not see them during the day. But nowadays they do not have places to stay and are just out in the open. We have a lot of wild animals roaming around our homes. Now we are competing with them for the little resources available; the grass for our cattle and water. Destruction of forests has contributed to climate change. When forests were there, it used to rain and there was enough grass for our cattle.”

Naisenya Ntetia, Saparingo - Lolgorian

“There were a lot of wild animals around, unlike nowadays we cannot see them.”

Susan Liman, Naramam - West Pokot

“Some traditional trees were not cut as they were known to attract rain. There were also trees that were not cut down as they were seen to be ‘holy’ Ilkeek Osinya in the local language. They include Ositeti, Enkopito and Osokoni. When the rivers dry up, they dig the sands in the rivers to get water. Because of scarcity, sometimes wild animals would disturb them

by drinking the water and blocking them from fetching water. Shedding leaves of the sycamore trees that are referred to as Olng'aboli and Olaponi, showed that the drought is about to occur and so people stored food and put measures for survival during drought.”

Nashuru ene Lempere, *Paran Ololulunga*

“Traditionally, rainy seasons could be determined by the presence of many black ants. Lots of heat at night, and the appearance of birds was an indication that the rainy season was approaching.”

Lynne kaarie, *Transmara*

“We, as Oltorobo, we did not destroy forests instead we protected them. Bees would be found in these forests for nectar in order to make honey for us that we would eat with meat. We did not eat maize, this came with the whites. We did not buy cooking oil either. We only used to eat honey with meat. When times became hard, when someone felt sick, they were given herbs such as Parmunyo, Oltiini. Olerubat were herbs used to treat the sick. We only heard about Malaria but nobody had suffered from it. We would go into the forest to hunt wild animals and also hunt for honey.”

Koko Leboo, *Sisiyat Women Ololoipangi - Ololulunga*

“In the past, when it was too late to rain, the Maasai community went to the mountain to sing to their God and their God listened to them by giving them rain.”

Pendo Kesoi Engare, *Naibor- Arusha Region Tanzania*

“According to the Maasai culture, women and girls are the ones who do all the household chores such as fetching water and firewood, looking after the children and cooking which make them vulnerable. During drought, women and girls are forced to walk long distances in search of water putting girls at a high risk of being raped.”

Naserian Naishiye, *Longido - Tanzania*

“The Pokot, like the other pastoralist people, believed in God. In the past, they did not cut down trees because they believed it was not good to destroy the environment since it is God’s creation.”

Everline Chemisto, *Naramam - Chesra West Pokot*

“Earlier, there were forests that were not supposed to be cut. They were preserved for events such as “**Orpul**” that was protected by everyone. This is mainly done in forests, whereby morans will have large pieces of meat. This would last for several days. Women were not allowed to see these meetings. When they slaughter a cow, a mother will only be given a small quantity of meat. I was not allowed to see the meat, once I see it, the morans will not eat it again. This meant that the meat will be given to women.

At orpul, the morans would only feed on milk until the last day. Both girls and morans would go for orpul but only morans were the ones allowed to go with cows. The main thing that we used to do at orpul was preparing **motori** meat soup, this was mixed with different types of traditional herbs and we used to drink it using cow horns and not cups as expected. This was shared with everyone, and a small amount of meat. This was served saltless. Once done, we would go to **Olosingo** field and fight in corporal war, thereafter we would go back and drink motori. This was the daily routine at Orpul till the last day. On the last day at Orpul, there was no more meat, the houses that we used to stay were only covered with cow skin that we had slaughtered. We would go back to our places as a group and we usually found lots of sour milk that had been set aside for us. Morans would then look for a big cow and shoot it using an arrow, the blood is then collected, after which we drink the blood raw using the cow horns. When we see the blood, then we would not drink it again. After all this, we would enter the house in the order of a girl-moran, girl-moran while singing. Milk would then be brought and morans would shake them. We drank the milk using the traditional calabash, which was shared by five people. We would make sure that we finished all the milk set aside in that household. We would then rotate in all the households from which the morans came from. In the case where milk will be insufficient, then a cow would be slaughtered as a compensation. We would then sing and part ways on the last day. In case there were clashes when we were still at Orpul, then the morans would be called to go and fight.”

Sarah Oloibor Soito, Kilgoris - Transmara

All areas in Kenya and Tanzania have experienced change in weather pattern which has led to prolonged drought causing poor production of food and death of livestock making the community starve. The month of July used to be very cold, April and August were the rainy seasons. But in recent years, the rainfall pattern is totally different, unpredictable and therefore

unreliable. Climate change has led to poverty among the community members. For example, in Samburu, the community depend mostly on livestock for their livelihood. When the livestock die due to drought, they are left poor because they do not have any other source to depend on. Girls drop out of school to look after their young siblings and also help in doing the household work. Women are also affected because when they give birth, there is no one to help them do their household chores. Pregnant women and girls are affected most because they are expected to do all the household work which is a challenge to them when pregnant. This further affects their physical and reproductive health. Women, girls and children can sometimes lack food leading to starvation.

Conflicts are a challenge due to drought. Fight for natural resources especially pasture and water sources are common causes. Men and boys migrate to look for the resources and sometimes move from rural to urban areas. Women are left to look after their children, struggling to cater for them. Boys and men wait for food and water without knowing the source thus the girls and women are affected more since they do all the household work. Girls and women look after the siblings, cattle, do cultivation while boys and men wait for them to cook food. Women and girls are discriminated against more than men and boys in the community. They are affected equally because they all need water and food to survive.

Further discussions during data collection also showed that there are a number of ways that the communities use to adapt to climate change as per their indigenous knowledge. People used to come together as a community, move around the area praying and singing asking for rainfall. It used to work but now nobody does that anymore. There are different authorities such as traditional leaders and healers who were the ones to speak to people. Land uses were traditionally outlined, there were grazing lands for different seasons. For example, there were grazing areas for the dry season which are called 'Olopololi' for calves and other younger livestock and 'Enkaroni' for the older stock like cows. The elders used to go to the mountains/sacred places and offer honey and milk in prayer asking for rainfall so that they could get grass and water for their livestock. The community was using traditional ways of prayers. They looked at the stars and knew what to expect. Traditional seers like 'Iloibonok' were also consulted. Communities performed traditional rituals in which they could slaughter a sheep, leaving it and praying overnight. They believed God took the sheep and gave rain in return.

There were people/experts who performed rituals to stop or bring rain. They also predicted drought and rainy seasons. Years back, the community used traditional ways of prayers and looked at the stars and knew what to expect in terms of rains or drought; traditional seers were also consulted. Men



held meetings where they discussed water shortage issues and women worshiped to bring the rains back; they wore cow skin and went to hill tops/ mountains to pray, and it would rain. Women were taught how to carry out Oloirosi ceremonies where women wore their special beaded clothes and went to the hills to pray for rain to come. The men slaughtered a black ram ‘without blemish’. This was used for ceremonies because it was seen to be holy (esinya); the other colour used was brown with no spots. Sheep was slaughtered because it was humble (eborr). No goats were slaughtered for ceremonial purposes except for eating. They believed that after this sacrifice, it would rain.

During drought both men and women, two each, would go to the river edges dressed in black and ask God for rains. A black sheep would be slaughtered and they all turned to the east where the sun rises and ask God for rains. This was repeated four times. They would come home and once they reached, then it would rain heavily. It was a Maasai tradition that two men and two women would intercede, because a man is not complete without a woman, this was also considered holy.

“There before, there would be men barazas to discuss important issues affecting the society. If those men existed in the present days, they would tell people not to abandon planting maize. Also, they would abolish sugarcane planting as it takes long before they mature. Earlier, during dry seasons they used to walk for long distance singing and praying and as a result, rain

would come. They used to predict rainy seasons by the appearance of birds and bees. This meant it was going to rain. The birds and bees used to appear in the morning around 8:00 a.m. and they would return to their hideouts in the evening around 4:00 p.m. In the past when there was no rain, they used to wake up and cry out to God pouring milk over and performing rituals. In the past, the old men would sit under a certain tree called Orngoswa, and pass in the middle. They had hemp tied on their hands so they could avoid diseases. When it did not rain, they slaughtered a white sheep in the middle of the kraal and sang for it. They finished by putting the sheep's skin on their toes.”

Susan Philipo, Longido, Tanzania.

In the old days when the rains did not fall, they performed rituals of males of sheep and they used to go to a place called Oretete and pray to god and when the woman is in her menstruation periods, she was given medicine called (Oripanderi) so that it could help her, and they also took (Ala mai) which is also given to a woman who has not given birth so that she could give birth. She was exposed and given a dirty bowel, the gut was smeared with ashes and released belly belts [Engitati) and whipped with it. You would be given a dirty bowel and you would not be able to cut it because you were given by the ladies. And also when it did not rain, they took a pregnant woman and showed her naked and laid her down and then people surrounded her and started singing and praying. People continue to pray and god will answer them and the pregnant woman would not rise up from the floor until people had finished praying. People in the past could move from one place to another where they had prepared for grazing during the dry season.

Case Studies

The community used traditional ways of prayers and looked at the stars and knew what to expect in terms of rains or drought. Traditional seers were also consulted.

The people in Transmara migrated from one place to another in search of pasture and water to adapt to climate change. There were oral narratives that gave people knowledge on the importance of the environment. During the drought period, they moved from their homes to other places in search of food and water. When it rained, they moved back to their homes.

The sighting of black ants was used to indicate the incoming rainy season. High temperatures at night were also an indicator of rain. There were also birds known as Motorok which indicated that it was about to rain, or the drought period was approaching. There was a community



protocol that indicated they were not to build houses in other places or clear bushes because they prayed and did ceremonies in the forest. There was a rule that you should not settle on Endukuya-oonkishu, and there were trees which were not supposed to be cut. The traditional ceremonies were called ‘Ilpuli’. The morans (warriors) and elders used to care for the forests with utmost respect. Culture did not allow people to eat other foods, that is, they only took blood and meat.



In Narok, the community members shared that traditionally there was no tilling the land because they never wanted to destroy the environment. Instead, they only slashed some shrubs in an identified space, burnt it and directly planted. Weeding was done once using only their hands. Traditional varieties of maize were planted that is,

Cipinji, Taprongoei and Irpaekmarai that easily matured and produced high quality and quantity harvest. Afterwards, harvesting was also done by hand and the harvest was kept in a skin and stored in a dry place in the upper part

of the kitchen called, oltaput, in Maasai. This is where they removed bit by bit and ground using a wooden hollow wood to make it ready for grinding in a fine way using a flat and round stone one to make flour for cooking. There were also a lot of fruits in the forest and traditional vegetables that people ate that kept them healthy and they were not experiencing a lot of diseases like today. The forest was a meeting area where people talked. Most of the ceremonies and rituals were done there in an identified place and people respected it. You were not allowed to visit there anyhow.

“Traditional ceremonies such as ‘Ilpuli’ were carried out in the forest by the Maasai. The men, both young and old, would meet and share meals, talk about the community, and mentor the young men. The ceremonies helped the community protect the forest. The elders oversaw the communities and the Maasai Morans were called upon to protect the forest. There were identified trees in the forest which were not cut by anybody but specific people. Not all parts were cut but only some parts of the tree, mainly the branches which were used for medicinal or ceremonial purposes.”

Benjanin Muntet, Melelo

“The Ogiek used to live in the Mau Forest. They used to feed on wild animals and honey which was harvested from hives on trees where the bees lived. When bees migrated to another part of the forest, the people would follow. They were able to predict when the honey was ready from its scent carried by steady winds and the men making a follow up. Men were the ones harvesting the honey and hunting for meat while the women would care for the homes and feed the children. This is not the same anymore.”

Eunicde Senei, Sisiyat Group

The Ogiek do not live in the forest anymore. The forest has been destroyed and trees cut down. There was a bird called Ngongony/Mundut which flew in different directions. This was a sign that the rain was coming. The first thing they did was bring together all cattle, sheep and goats in one place and build a shed/kraal. The top of the shed was covered with skins and a fire was lit inside overnight. This would keep the animals safe from the heavy rains. This was also a sign to prepare the fields for planting. Water direct from the river, was very clean and had a taste of leaves because everywhere was covered by forests. The rains were consistent and came during the

months known for rain. They were not experiencing many disasters like today of either drought or floods. During heavy rain there were many wild animals coming out of the forest. This was a detection of a lot of rain and even bees could move from place to place.



“In West Pokot, the old people used the stars to predict rain. If they saw a female star separate from a male star, they assembled all breastfeeding women to pray in a certain place until the old men saw both female and male stars come close. They believed that when they separated, the child of the star had gone to his father. So, they must pray till they meet so that it rains. When they don’t meet, it would not rain. They also observed the moon to predict the rain. If the moon was bright, they knew there would be no rain and when the clouds covered the moon, they knew it would rain. They also observed the shading of some trees to predict the rain. They used the sun to predict rain, that if it was very hot, they knew it would rain.”

Monica Choria Naramama, Chesra - West Pokot

“They observed the movement of wind, bees and birds. When they moved in a certain direction, they knew it would rain or not. The members of the community also went to mountains to pray because they believed it was sacred. Old people sacrificed black sheep when drought prolonged, they believed after the rituals (Chepotaleyo) it will rain. There were actions that they were not allowed to do. For instance, you were not allowed to insult

each other near the river because they believed it was sacred place. A mother who bore twins and who conceived while breastfeeding another baby was not allowed to go to the river because they believed it would dry up. Women in their monthly periods were not allowed to cross the river because they believed it would dry.” **Everlyn Chemisto, West Pokot**

The community also planted millet and sorghum which they used as food during drought and famine. In the past, people were also not allowed and did not cut trees without the permission of the village elder. But this has changed over the years.



Among the Samburu community, they used birds to predict the rain. For instance, when the birds moved in a certain direction, they knew if it would rain or not.(From East to West no rain, West to East it rained).They used a bird called Kerinkiteng to predict rain ,for instance when it chirped, they knew there would be no rain and they believed if you killed it drought would occur. They also used the Ltepes tree to predict rain, for instance when it shed flowers, they knew it would rain.Women used to pray, bless the rivers using milk, oil from the sheep’s tail and honey (these items were perceived to be holy). They believed it would rain after these offerings

were made. The old people had the knowledge to predict rain by looking at the clouds (Ngidisin), when the cloud covered the moon, they knew it would rain, when the moon was bright there would be no rain. There were families who were believed to bring rain, for example Leopir and Lekalaile families, so other people in the community gave them beads (green and white that signified purity and nature) and they prayed for the rain. They protected the water points and preserved a portion of land where they would let grass grow for some months. This is where the livestock grazed during the dry season. In the olden days the community obeyed rules, for instance, when they agreed to preserve an area or portion where the livestock would graze during the dry season, no one would go against it and they had unity at that time compared to now. Community members also did not sell their land which enabled them to manage their livestock during the dry season. They also lived in an area for a long period and only migrated in case of drought. They used to eat traditional food like cooked blood and milk (Lordo) which they mixed with porridge; this made them strong. Nchasi was given to children; it had water and it was sweet. They used traditional medicine like Sukuroi (Aloe Vera) to treat livestock, and it was also herbs for people to use.

In time of drought, a pregnant woman who was almost due was taken to a dry dam where she was rolled over several times naked while singing songs of prayer asking God to rejuvenate the land and give it life as He had given life to the baby in the womb of the woman. Around November, if there was still no rainfall the community looked for a black sheep which was slaughtered and offered as a sacrifice to God.

In Tanzania, during times of prolonged drought and excessive rainfall, where the effects to people were life threatening, women resorted to praying. This is done by going around a homestead every night for several nights. This was believed to have stopped the calamity.

In preventing or treating



sicknesses, water, milk and green grass was put in a buffalo horn traditionally known as Engidong' then everyone in the community took a sip from it. The other way was boiling the milk in the calabash by burning medicinal wood and dipping it in the milk until it boiled. The milk was then given to sick people. In the case of food security, there were several ways to ensure that hunger was minimized as possible. Drinking of animal fat (either from a cow, goat, or sheep) left someone full and would not need food for a long time. The fresh blood obtained from a live cow was also drunk raw or was preserved by boiling. There were traditional fruits that children ate, and it kept them from hunger and thirst while they were away grazing livestock.

Strategies and Solutions

- The Communities recommended strongly that People need to plant trees in order to attract rain especially indigenous trees. The vegetables that we plant in our gardens would be fresh if they have trees around them as they will not be hit directly by the sun rays.
- We can prevent the impact of climate change if we enhance activities on ecosystem restoration.
- Educating people on how to conserve the environment and the importance of managing it. We need the land to become green, to bring rain so that we will get water. Animals will get grass and leaves to eat and water to drink. We will also get food to eat all these should be collective action.
- The government should restrict people from cultivating near rivers. With this, the water levels will go back as it was before. People also need to plant indigenous trees.
- We should also dig boreholes to store water. This will help during drought.
- We should also buy tanks for harvesting water during the rainy season. This will help when drought occurs.
- The government should implement the laws they already have especially those rules regarding cutting down of trees and by this people would develop caution and this will reduce the rates of cutting trees.

- Training should be conducted to raise awareness on the concept of climate change. Although there are visible changes, only those that have had a chance to attend the training have that clear understanding of it. The importance of having more training apart from creating awareness helps people to understand their own contribution to climate change.
- It is important to recognize and respect indigenous rights and realize that indigenous people, women, girls, and youth can play a vital role in the development of any given country as other citizens and therefore should be fully included in all decisions that impact on their land and livelihood.
- It is critical that a gender approach is taken in policy making to meet specific needs and priorities of indigenous women and girls because the impact of climate change is gender differentiated. Failure to do so will only exacerbate the existing inequalities especially to indigenous women who face multiple discrimination.
- Funding is an important response to adaptation and mitigation. There is need for strategies for indigenous women. We need more funding and investment going directly to fund indigenous led adaptation and mitigation strategies. And to have a 50/50 funding policy for climate change adaptation and mitigation activities and projects.
- Traditional knowledge for resilience is crucial for indigenous women and is often neglected in policy and research, and their mutual recognition and integration with scientific knowledge will increase the effectiveness of adaptation and mitigation in addressing food security, and developing early warning systems.



Glasgow climate pact 2021 Paragraph 66: Emphasizes the important role of indigenous peoples and local communities' culture and knowledge in effective action on climate change, and urges parties to actively involve indigenous peoples and local communities in designing and implementing climate action and to engage with second three-year work plan for implementing the functions of the local communities and indigenous peoples platform, for 2022-2024.



Our Indigenous women working with their sisters globally while attending different side events at the Conference of Parties to Climate Change (UNFCCC)

Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection without discrimination.

UNDRIP, Article 29(1)

