

2024 SOPHEA Community Outreach Activity, Baringo, Kenya

Introduction:

This case study showcases a community outreach activity conducted in the Lake Bogoria region, Baringo County, Kenya. The activity focused on the Endorois community, an indigenous group traditionally reliant on fishing and pastoralism, and the Koimugul Indigenous Women Network (KIWN), a local organization supporting them. The report examines current cooking options, the impact of climate change on vulnerable communities, adaptation measures and potential solutions.



Fig 1: SOPHEA team & Indigenous community introduction session

Background Information

A. Endorois Community:

The Endorois community are an indigenous people traditionally inhabiting the shores of Lake Bogoria in Baringo County. They have a deep connection to the land and have practiced a nomadic pastoralist lifestyle for generations. However, their traditional way of life has been significantly impacted by forced evictions from their ancestral lands in the 1970s, environmental degradation, and marginalization.

The community faces challenges related to:

- Land dispossession and insecurity
- Loss of traditional knowledge and practices
- Limited access to healthcare, education, and basic services
- High levels of poverty and unemployment

B. Koimugul Indigenous Women Network (KIWN):

KIWN is a grassroots organization established by Endorois women to address the unique challenges faced by their community. Established in 2020, Koimugul Indigenous Women Network is a dynamic organization committed to fostering climate change awareness and sustainability practices. Our mission encompasses a range of initiatives, including tree plantation, the integration and adaptation of climate-smart agriculture, and the promotion of agro-ecology principles.

In addition to their focus on agriculture and environmental conservation, they recognize the urgent need to address the devastating impact of cattle rustling in our community. Cattle rustling has not only left families destitute but has also resulted in an alarming number of women becoming widows and children orphaned and traumatized. This cycle of violence and insecurity has contributed to widespread depression and despair among community members.

Their mission is to empower Endorois women through:

- Advocacy for land rights and cultural preservation
- Capacity building through training and workshops
- Income generation initiatives
- Promotion of women's leadership and participation in decision-making

II. Community Outreach Activity:

A. Objectives:

This community outreach activity aimed to:

- Engage with the Endorois community, particularly women, to understand their current needs and challenges in relation to climate change impacts and current cooking options.
- Raise awareness about KIWN's work and resources available to the community.
- Strengthen collaboration between SOPHEA and KIWN to support the Endorois Community.



Fig 2: SOPHEA Project Coordinator, Melvine leading a focus group discussion during the community workshop

III. Findings

A. Perception Of Climate Change

The community's understanding of climate change is rooted in the experience of altered weather patterns, affecting their agricultural practices and daily lives . There is a consensus that climate change is a critical issue that needs immediate attention



Fig 3: Student, Mary Mwai leading a focus group discussion on perception on climate change

B. Effects Of Drought

The community has suffered considerably from drought leading to:

- Displacement: seeking new residence due to the water scarcity
- Livestock mortality: a devastating loss of a vital livestock source
- Educational disruption: Frequently relocation hinder children access to education
- Health risk : an increase in starvation related diseases due to food shortages



Fig 4: Student & PHCA, Joseph Akite leading a focus group discussion on effects of drought

C. Effects Of Flooding

The community has suffered equally detrimental effect including:

- Displacement and property loss : home and possessions are destroyed displacing families
- Educational barrier: flooded infrastructure prevent children from attending schools
- Agricultural setbacks: transport issues delay agricultural productivity since roads become mud to allow vehicles to go trough.



Fig 5: Research assistant, Diana Bii leading a focus group discussion on effects of flooding

D. Food Security And Coping Mechanisms Against Climate Change Impacts

The community has suffered considerably from climate change which causes food insecurity. Therefore the community has come up with coping mechanism to deal with food shortages this includes:

- Short cycle crop cultivation: Planting crops that mature in 2 months to ensure food supply.
- Reliance on kinship: turning to relatives in less affected areas for support.
- Community solidarity: Requesting assistance through local leaders from organizations like the Red Cross.
- Charcoal burning: Resorting to charcoal burning as an alternative source of income when agricultural efforts fail.



Fig 6: Student & PHCA, Justus Kipkosgei leading a focus group discussion on food security

E. Steps to Adopt Climate Change Impacts

The community has come up with measures to address climate change and this includes:

- Transition to renewable energy: Investing solar, wind, hydroelectric and other renewable energy sources.
- Improve transport system : Develop and expand public transportation networks and invest in infrastructure and walking that are durable to flooding.
- Conserve forest and natural habitat: Promote sustainable land use practices that do not destroy habitats.
- Education and raise awareness: Promote education on climate change mitigation and adaptation strategies.

F. Concern About Future Impacts on Climate Change

The community are concerned about the future impacts of climate change therefore they highlighted the following:

- Agriculture and food security: Climate change causes change in temperature and precipitation patterns along with increased occurrence of pests and diseases which reduce crop yields.
- Health impacts: It can increase the spread of vector borne disease such as malaria

- Water scarcity: water scarcity has come and effect since some rivers dried up which were used for domestic and irrigation purposes.
- Social and political conflict: Competition over diminishing natural resources has led to social tension and conflicts.
- Ecosystem and biodiversity loss : climate change has disrupted ecosystems leading to loss of biodiversity. Species that can not adapt or migrate to cooler areas face extinction.

G. Most beneficial support community need to cope with climate change

The community has said incase they find any support they will prioritize for the following beneficial support to cope with climate change:

a) Financial support

Under the financial support they mentioned the following:

i) climate finance: Investment from public, private and alternative sources to support mitigation and adaptation activities.

ii) insurance: innovate insurance products to help communities recover quickly after extreme weather events.

b) Education and research support

i) climate change education: They requested programs that raise awareness about climate change impacts and actions that can be taken to mitigate.

ii) research funding: Investment in scientific research to understand climate change better developing new techniques and improving climate models and forecasting.

Cooking Options Available

Introduction

The Endorois community, indigenous to the Lake Bogoria region of Kenya, primarily relies on firewood for cooking, which has raised concerns about household pollution and its health and environmental implications. This report examines the cooking options available to the Endorois community and the impact of household pollution on their well-being.

Cooking Options

Firewood: The vast majority of Endorois households use firewood as their primary cooking fuel. Firewood is readily available in the surrounding forests and is considered a traditional cooking method.

Impact Of Household Pollution

Health Risks: Household air pollution from firewood and charcoal cooking emits harmful pollutants such as particulate matter (PM), carbon monoxide, These pollutants can cause a range of health problems, including:

- Respiratory infections (e.g., pneumonia, bronchitis)
- Cardiovascular disease
- Stroke
- Lung cancer

Environmental Impacts: Household air pollution also contributes to environmental degradation by releasing greenhouse gasses (e.g., carbon dioxide) and black carbon, which can affect local and global climate patterns.

Women and Children: Women and children are particularly vulnerable to the effects of household air pollution as they spend more time indoors cooking and caring for young children.



Fig 7: SOPHEA team & Endorois indigenous community, Baringo, Kenya

Conclusion

The Endorois community faces significant health and environmental challenges due to their reliance on firewood for cooking. While traditional cooking methods are deeply rooted in their culture, alternative cooking options offer important opportunities to improve household air quality and reduce the negative impacts on health and the environment. To improve the well-being of the Endorois community, there is a need for sustained efforts to promote and support the adoption of cleaner and more sustainable cooking practices. Therefore through the SOPHEA project initiative, a window of opportunity in knowledge translation, awareness creation and implementation of research is foreseen as well as continuing the collaboration with the community in tackling climate change and planetary health issues.

References