



<https://watetezi.org/>

**Preliminary Report: Agriculture, Livelihoods, and Conservation
Project Baseline Survey in
Luli Kayonga Central Forest Reserve and
Nearby fishing villages
Dei Sub-county, Pakwach District**



Photo credit: Pamela Lakidi

March 03, 2022

Submitted by:
PAMELLA LAKIDI ACHAN
MELR CONSULTANT
lakidipamella@gmail.com

To:
AYIORWOTH GLORIA
ENVIRONMENTAL DEFENDERS
team@watetezi.org

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

1.0 INTRODUCTION

1.1. District Background

Pakwach District is one of the districts in the West Nile region of Uganda. It is bordered by Nebbi district in the West, Nwoya and Amuru districts in the East, Democratic Republic of Congo (DRC) in the South West, Arua in the North West and Buliisa to the South. Pakwach lies between altitudes 2289ft to 5224ft above sea level. The coordinates of Pakwach district are 2°27'43.0"N, 31°29'54.0"E (Latitude 2.461944; Longitude 31.49833). The district has a total area of about 1,008.6 Sq. Kilometres of which 83.19% is arable land while 2.91% is occupied by game reserve, 6.4% wetlands and open water, and 7.5% is occupied by forest reserves. Pakwach District headquarters are situated in Pakwach Town Council which is approximately 370km from Kampala, the Capital City of Uganda (Pakwach DLG, 2022)¹.

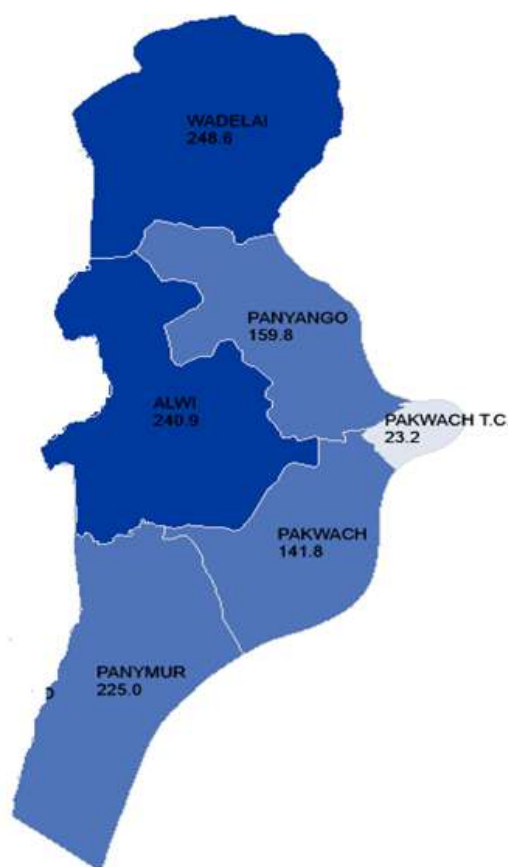


Figure 1: Pakwach district map, source: <https://pakwach.go.ug/lg/location-size>. Accessed Feb 17, 2022

1.2 Study Location Background

¹ Pakwach District Local Government. Location and size. Accessed at <https://pakwach.go.ug/lg/location-size>. On February 17, 2022.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

Panyimur Sub County is bordered by Akworo and Parombo sub counties in Nebbi district to the west, Alwi and Pakwach sub Counties to the North. To the south is the Democratic Republic of Congo (DRC), and Lake Albert lies to the East which is shared by Bullisa District. The sub county has 5 parishes, namely, Boro, Dei, Kivuje, Ganda and Nyakagei with a total of 58 villages (Panyimur, 2015)².

The landscape is hilly especially at the escarpment of the Great Western Rift Valley and gently sloping plains to the Lake shores. The major natural resource is the Lake Albert that is rich in fish of different species, some smaller seasonal rivers, and wetlands namely Oguta on the shores of the Lake. Land use in Panyimur include, Fishing activities on Lake Albert; Cultivation of crops such as cassava, sim sim, maize, groundnuts, cotton both for food and cash; livestock rearing (cattle, sheep, poultry and goats) is also practiced (ibid).

1.3 Goals and Objectives of Panyimur Sub County

Vision: *A transformed community of Panyimur sub county from a peasant to a modern and a prosperous society.*

Mission: *To improve the quality of life of the people of Panyimur through a coordinated service delivery system and equitable distribution of resources in line with the National and local priorities.*

Goal: *Improved livelihood of the people of Panyimur Sub County.*

Strategic Objectives

Amongst the many objectives that were pursued under the district development plan of the period 2015-2020, was the following relevant to the work of the Environmental Defenders:

#3: To upscale extension service delivery and advisory services for crop and livestock production, fisheries, vermin control and provide market linkages and information to farmers in the Sub County.

#8: To improve the environmental use through undertaking simple initiatives for the protection and management of the environment like, establishing own woodlots, use of fuel saving stoves, modern agricultural practices among etc.

1.4 About Environmental Defenders

The Environmental Defenders (ED) is an ecofeminism and collaborative environmental justice organization that protect biodiversity and defend Indigenous People's rights. We are dedicated to building resilience for human and environmental security, helping marginalized Indigenous Peoples and communities in the Albertine rift and Congo Basin make a sustainable living and protect their water sources, land, and the local environment.

² Panyimur Development Plan, 2015-2020: accessed at: <file:///E:/PAKWACH/Panyimur%20DP%202015-2020.pdf>.
On February 17, 2022.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

ED's mission is to protect and defend the natural environment, the people, and wildlife that depend upon it. The organization envisions a secure, healthy, and ecologically sound environment for people and biodiversity.

To achieve its mission, ED uses approaches such as; trees planting, restoration of degraded land and watersheds, livelihood support and community capacity building, seed banking and propagation, protection and accompaniment of conservation activists and human rights defenders, tree nursery production as well as environmental awareness and education at local level.

The organization works with local government agencies, farmers groups, private land owners, community based groups, smallholders, fisher communities and local farmers to implement its various conservation and livelihoods programs on trees planting, village loan and saving, environmental awareness, women empowerment and defense of environmental activists.

1.5 Data Collection Background

The study kicked off with an inception meeting held at ED offices located in Luli village, Dei Sub County. This meeting achieved the planning for, and implementation of, the community mobilization for participation in the Baseline Study. On the same day, the Baseline study team was introduced to the leadership of Dei Sub County and information was shared on roles and responsibilities for the fulfillment of the Baseline study objectives. The sub county was very receptive and cooperative.

Enumerator training was conducted with 2 females and 2 male enumerators. The training focused on the following: research ethics, survey administration dos and don'ts, and familiarization hence understanding the meaning of each question in the 3 questionnaires. Three questions- one of Forestry, another on Agriculture and the last one on Fisheries were trained on. Training also covered the use of a mobile-based data collection tool in data collection. Enumerators were provided with mobile smart phones for data collection. The training day also included planning on how the actual data collection would be undertaken. Mr. Ronald Mukisa Mpala conducted the training with small input from the Lead consultant, Ms. Pamela Lakidi.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey



Figure 1: Trainer and Field Supervisor, Mr. Mpala training the Enumerators on the use of the mobile-based tool.

1.6 Data collection

1.6.1 Household survey

The field work commenced on February 25, 2022. It consisted of household survey which was done through face to face interviews with household heads selected from three categories: Forestry group, Fisheries and Agriculture. The survey was accomplished through data collection software uploaded on SMART phones. The data collection started in Luli village, then on to Deli village and ended in Hoima village. Data collected was synchronized with the data server on a daily basis by the survey field supervisor.



Figure 2: Selection and allocation of households to Enumerators by local leader and ED staff (Sarah, writing)

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

100 households were targeted. 93 households were surveyed. This is a response rate of 93% which is good. The data has been forwarded to the Statistician hired for this purpose. Results are expected within the next 7-10 days.

1.6.2 Focus Group discussions with women and men

Focus group discussions were held separately for women and for men. 3 men groups and 3 women groups were engaged. The group member selection was managed by the ED staff. Initially, non-group members of the current beneficiaries of ED programs were targeted. However, after the men group at Luli raised the issue of ‘facilitation’ it was agreed that as much as possible the men group participants of FGD be drawn from the groups that ED works with. Further, the ED staff responsible-Sarah- was to inform the group participants prior to the discussions that this was not a training therefore there would be no ‘facilitation’. With this change in approach, the rest of the group meetings were held in peace.

Focus group meetings were held in Luli, Dei and Hoima as parallel activities to the household survey hat was being conducted there too.



Figure 3: Luli village men group FGD participants. Photo credit: Pamella Lakidi.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey



Figure 4: Luli village women group FGD participants. Photo credit: Pamella Lakidi.

1.6.3 Village maps and Transects drawing

Additionally, the men were engaged in drawing of the village maps and transects. This activity helped to explore the communities understanding of: their community resources, the changes in their community; and, the relationships between the environmental changes and human practices. The intention was to have women and men draw these maps from their perspectives. However, due to limitations in women's literacy levels and time the exercise was only accomplished with the men of the community. Village maps were drawn for Luli and Hoima. Dei men were slow in responding to the invitation to participate in the FGD meeting. Therefore it was not possible to do the exercise with them.

On the whole, the exercise proved to be very exciting and quite engaging for the village men.



PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

Figure 5: Luli Men pose with their village map and village transect from their perspective.

Photo credit: Pamela



Figure 6: the men of Hoima discuss as they draw the map of Hoima Parish.

Photo credit: Pamela Lakidi

1.6.4 Key Informant Interviews (KIIs)

A limited number of KIIs were conducted with the following: Ajamugisa Gerald, Michael Dolo Osi, Richard Aramazan, and Mohammed Ocakon Hamza. The rest were either engaged with other commitments or had a language barrier (could not speak English). However, efforts to reach out to every contact are still ongoing.

1.6.4 Group interview

A group interview was held with the sub county leaders at Dei. Initially, they were targeted for Key Informant Interviews. However, since they happened to be at the sub county at the same time it was prudent to engage them together to avoid the loss of any of them. The participants included the following: Muswa Maurice, the Sub county Chief; Baguma Jamal, the CDO; Odaga Daniel, the Parish Chief of Oguta Parish; and, Ozinda Sam Babylon, Deputy Speaker.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

1.7 Data collection Debrief

The debrief was planned as an early morning activity on the day after the household level data collection was completed. However, this did not materialize due to two problems: the consultant team's vehicle broke down on that morning. Also, by the time the consultant team arrived in the sub county, the Sub county leaders at Dei were waiting to be engaged. Priority was given to meeting the leaders while the ED team engaged the Enumerators to get the feedback from the household exercise from the Enumerators. Details of this interaction were recorded and are available for any future reference at the ED offices.

After the data collection from the Dei sub county authorities, the Lead consultant debriefed the ED representative, Deputy Executive Director, Sarah Lonyo and program officer, Oyergiu Joshua. The debrief covered a general overview of the exercise and preliminary outcomes of the study. This report is an expanded version of this debrief, and in a formal /written format.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

2.0 PRELIMINARY RESULTS

2.1 Introduction

The main objective of the proposed Agriculture, Livelihoods, and Conservation baseline survey is to understand and document the prevailing conditions of communities living adjacent to Luli Kayonga Forest reserve and those living at the shore of the Dei Landing site in Pakwach district.

The findings of the study will support ED to develop and design activities or programs aimed at protecting the forests and Lake Albert Biodiversity; and, to enhance livelihoods in the study areas where forest and biodiversity loss are associated with smallholder agriculture. ED's approach to resolving this development challenge is to support groups, households; and, individuals demonstrating that conservation and development goals can be most effectively achieved through interventions that are pro-smallholder and encourage sustainable development at the local level while maintaining critical ecosystems and ecosystems.

Specifically, the study sought to accomplish the following:

1. To establish the socioeconomic status on the following areas; knowledge and practices of climate change adaptation and sustainable land management; community livelihood options and annual incomes from the existing livelihood options; existence or lack thereof of any conflict over fisheries and forests resource use, and the factors driving such conflicts; community access to, and use of, Lake Albert and Luli Kayonga Forest reserve resources, and, gender equality in the communities living adjacent to Luli Kayonga Forest reserve and Dei Landing site.
2. To identify different land uses and their contribution to natural ecosystems, environmental degradation, deforestation, and biodiversity loss in the study areas.
3. To identify restoration opportunities, strategies, and map potential for forest landscape restoration around Luli Kayonga Central Forest reserve and surrounding fishing villages (Dei landing site)
4. To provide recommendations on livelihood options, value chains, and restoration areas the Environmental Defenders should focus on per villages or parishes/landing sites.

In addition, the study was to provide answers to certain critical questions as follows:

- *What are the baseline values for project components indicators?*
- *What are the realistic performance targets to be set for the project components indicators given initial baseline values?*
- *What recommendations, based on specific project component indicators, will help improve the implementation of the Agriculture, Livelihoods, and Conservation project for the community, groups, and individuals around Luli Kayonga Central Forest reserve and nearby fishing villages in Dei sub-county, Pakwach district?*

Finally, the study was expected to identify the following key issues:

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

- *The climate change and sustainable land use management knowledge and practices,*
- *The different types of land use and their contributions to natural ecosystems, environmental degradation, deforestation, and biodiversity loss.*
- *The livelihood options,*
- *The fisheries, and forest resources access and use conflicts*
- *The indicators of the project in a gendered manner in line with the main objective*
- *The gender relationships;*
- *The different restoration opportunities and strategies and*
- *Map out the potentials for forest landscape restoration around Luli Kayonga Central Forest reserve and surrounding fishing villages*
- *Strategies for the improvement of livelihood options, value chains, and restoration areas*

2.2 Topline Preliminary Results

2.2.1 Protection of Forests, water and land resources

From the qualitative evidence gathered so far, it has emerged that the community is already aware of what human activities have resulted into loss of forest cover on mountain Jonam. Community knowledge and practices on Luli forest should be reflected in the results from the survey, hopefully. The community members in the FGDs did not discuss much on Luli Forest. In addition, there is knowledge of the important indigenous tree species that are disappearing, hence need to be preserved; and how these can be preserved. In Luli Parish, there is a previous tree planting project that was implemented by NUSAF in 2018 which provides learning on what works and does not in tree planting projects.

On Lake Albert water resources, the community is not against government regulation towards the preservation of the fisheries resources but have concerns on how this government regulation is being implemented. The main concern is over the great loss of income for majority of the population that depended on fishing both directly and indirectly and yet government has not provided a safety net for them to have an alternative to turn to. In the past, when the climate was still favorable, farming would have provided that safety net for those who own land or, at least can access land through renting. However, the droughts of the last and previous years have constrained this option as an alternative to fishing and the associated incomes from it. Consequently, the community has continued to engage in illegal fishing, this being aided by the corruption in the enforcement agencies that are manning the implementation of the government regulation on fishing with the right boat size and net size.

In relation to land resources, in Luli village more of the community members are land owners while in Dei and Hoima Parishes, there are more land tenants. Land uses therefore vary accordingly, with Dei and Hoima Parish engaging in more short term crops productions as the majority grow small acreages of food for home consumption using their incomes from the Lake /water businesses they run. It was observed that brick making is high in Dei and Hoima Parishes as seen from the several brick making kilns on the land. Owners of large chunks of land

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

that can be used for perennial agriculture also exist in Dei and Hoima, but the location of these are more towards the foot of the slopes of the mountain Jonam. In Luli Parish, both short term agricultural crops and perennial crops are grown, and trees are more common sight as compared to the other two parishes. On the mountain Jonam, small animals such as goats are seen grazing on the slopes while bigger animals like cattle are more on the foot of the hills and plains. However, it appears that the animal keeping is more prevalent in the Oguta parish area.

2.2.2 Livelihoods

In Hoima and Dei parishes fishing and related activities is the primary income source with Agriculture/crop farming being secondary. Oguta and Luli Parish community are also involved in fishing but with the advantage of having land are equally engaged in agriculture as a livelihood source.

Drought in the past year has been a major constraint to crop agriculture and this coupled with the stringent measures on fishing activity has left all the four parishes in a dire situation. The community is aware of the negative impacts of tree cutting but is forced to continue with the same practice as tree cutting for charcoal burning, firewood sale and brick/kiln use remain their alternative livelihood source.

Cotton growing was mentioned as a cash income source. However, the farmers were discouraged by the low prices that the cotton is purchased at hence have largely abandoned cotton growing for the purpose of income earning.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey



Figure 7: A youth (standing) displays the required GOU net size

3.0 PRELIMINARY RECOMMENDATIONS

From the foregoing, a holistic approach to addressing environmental degradation must be adopted. That is, as we seek to reverse the negative impacts of deforestation, we must also avail or strengthen people's livelihoods so that they are able to access fuel wood and/or alternative energy sources; we must be able to meet the need for affordable methods of fish processing that do not use fuel wood; and crop agriculture must be supported through feasible modern day agriculture technologies.

This may be achieved through the following strategies:

(a) Fisheries

Undertake advocacy with the lower local government, the district local government, area parliament representatives, the Ministry of agriculture, the Ministry of Trade and Industry and all other relevant stakeholders to consider alternative approaches to the implementation of the Government of Uganda GOU regulation. There is a petition by the Dei sub county, Panyimur

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

Town Council and Panyimur Sub County that clearly states what actions Government of Uganda GOU should adopt towards this end. ED can support the Lower Local Governments on to take forward. Support them to continue engaging at all fronts with this petition until GOU responds.

Furthermore, Dei Sub County is posting increasing high rates of crime, specifically murder cases. The murder cases are high in incidence amongst the youth on issues around relationships between men and women. Although there is no study to confirm this, it can be considered that these high levels of frustrations that lead to murders may also be related to the loss in employment for many youth that depended on the Lake for their livelihood.

The women are bearing the brunt of the GOU regulations on the fishing community and all those that depended on the lake resources for their livelihoods. Women have continued to deal with the demands for school fees for their children, feeding their households and meeting medical expenses yet most of them who were selling fish are now left without a trade. GOU has a Gender Strategy, and women's economic empowerment is a key pillar. GOU has to fulfill its obligations to these women.

ED may undertake a separate study to quantify the economic, social and other impacts of the current government regulations on the communities and the environment and use this report as a tool for advocacy at national and global levels.

(b) Forestry

Tree planting, is one of the strategies of ED in its efforts to reverse environmental degradation. The evidence from the study is that the tree planting projects have been implemented before so ED will not be starting from zero. However, the community had ideas on how not to do the tree planting. There are issues of land ownership to be considered when undertaking the tree planting projects. For instance in Dei and Hoima, tree planting can be accomplished with the land owners of the land located on the mountain Jonam and the foot of its slopes. In Luli and Oguta, where people may have a little more land, trees may be planted at household level.

Group projects for tree planting: the men of Luli, during the FGD expressed willingness to participate in a group tree planting project. Details of such an engagement need to be established through community engagement meetings at the start of the tree planting project implementation. Additionally, during the community engagement, the community must be involved in the selection of the tree species (kalafuru, sufre, yauu, mangoes, tooo, oranges) that need to be preserved as they also know the methods for their conservation.

(c) Agriculture

The key inputs constraining agriculture are water (rain) and good quality seeds. The community is aware of irrigation as a solution to drought conditions. Fortunately, the Ministry of Agriculture is implementing irrigation projects in Wadelai. ED should consider visiting these projects together with the leaders of Dei Sub County to see the possibility of technology transfer, if appropriate to Dei Sub County.

PRELIMINARY REPORT: Agriculture, Livelihoods, and Conservation Project Baseline Survey

On the issue of quality seed the community is requesting for a better cassava variety. The complaint is that the current variety which matures in 6 months is not good as rots sooner too. Cassava is both a staple food and a key income earner for majority of families.

Fish caging: Community members from Luli mentioned the technique of fish cages as a desirable activity they would undertake. ED may consider engaging the Ministry of agriculture on this too.



Dei women FGD participants and Pamella (the survey consultant) in front of NARO's fish processing machine in Hoima Parish.

Photo credit: Pamella