LIVELIHOOD OPTIONS:

BEE KEEPING AND COMMERCIAL TREE NURSERY AS A LIVELIHOOD ENHANCING OPTIONS FOR COMMUNITIES IN LAMWO DISTRICT
Back Ground.

Towards Pro-Poor phase II Project has supported two community groups in Lamwo district to establish livelihood enterprises. The groups were identified and selected through a participatory process, which involved the District local Government, after an orientation about the Human rights based and Pro-poor approach of the project. These livelihood enhancing options include bee keeping and a commercial tree nursery among the Katum CFM group (Katum parish, Padibe East Sub County) and Mar Yen CFM group in (Pawach parish, Agoro Sub County) respectively-Figures 1 & 2. Both of these groups live adjacent to Lalak and Agoro-Agu central forest reserves respectively from which they partially derive their livelihoods. Katum CFM group is composed of 107 members, of whom 44% (47) are females, and 56% (60) are males, whereas Mar Yen CFM group is composed of 462 members, of whom 37% (172) are females, and 63% (290) are males.

Lamwo district which is one of the two project sites for the Towards Pro-poor phase II project, the other one being Mbale and Kapchorwa districts in the Mt. Elgon landscape. A socio-economic baseline that was carried out in Lamwo at the onset of project interventions in the district in 2015 revealed the following in terms of the socio-economic status of communities;

i) Communities were still recovering from almost two decades of displacement due to armed conflict (1987-2005).

ii) Approximately 70% of the community are poor, with an annual income of approximately $64 translating into $0.17, way below the poverty line

iii) Main sources of livelihood are agriculture, and forestry resources. 69% of the population in Lamwo depend on forests as non-cash livelihood sources, highlighting the importance of such resources.

iv) The district was created in 2009 (less than ten years old) and still has limited financial and human resource capacity to ably steer the development initiatives in the district.

Hence the support towards development of livelihoods options was a response to critical community and district needs in terms of providing alternative income sources.

Brief Description of the Livelihood Enhancing Options and How They Evolved

a) Bee keeping

Bee keeping is one of the enterprises that is fast gaining popularity in Lamwo. Given the relatively low degradation in the district, and the abundance of natural vegetation, the honey produced is considered of much better quality than honey from neighboring districts. The common practice is for farmers to make bee hives from local materials such as bamboo and cow dung, and hung these out on trees on their farms. The production capacity of these hives is 6-10kg annually depending on the length of the local bee hive.

In order to improve on the production and profitability of bee keeping for the Katum group, the Towards Pro-Poor project;
Figure 1: Location of Katum Parish and Lalak CFR in Lamwo district

Figure 2: Location of Pawach Parish and Agoro-Agu CFR in Agoro sub county in Lamwo district
i) Facilitated a collaborative Forest management process for the Lalak Central Forest reserve (CFR) between NFA, the District Local Government and the Katum group to co-manage the CFR.

ii) Through this process, the group was assigned a portion of the CFR forest reserve to carry out tree planting, as well as other forest based enterprises such as bee keeping, and this is where the apiary is located.

iii) Provided the group with 50 improved bee hives, the Kenya Top Bar (KTB) hives. Each of these hives has the capacity to produce 30-40kg of honey annually. In addition, the group was equipped with two sets of honey harvesting equipment, as well as baiting material.

iv) Ensured capacity building of the Katum group on bee keeping. Under the MoU signed between Lamwo District Local Government, the district entomologist carried out capacity building sessions for the group members in various aspects of managing a bee keeping enterprise. The group was equipped with knowledge and skills on the benefits of beekeeping, Apiary siting, hives deployment and baiting, apiary management, pests and disease control, among others. Through such hand-on training, the fifty beehives were put up in early August and to-date, eleven bee hives have been colonized. Training in record keeping is on-going throughout the phased approach and subsequent trainings in Honey harvesting and harvesting techniques; Simple honey processing and storage; and Roles of bees and beeking in nature conservation will follow at the most appropriate stages. As colonies stabilize, it is expected that the group will be able to harvest between 1000 - 2000kg, annually which at the current price of 10,000 Ugx ($2.7) translates into $2700 - $5400 annually.

v) Supported the group to put in place separate management arrangements for the bee keeping enterprise, which included establishing a management committee as well as benefit sharing modalities. The Katum CFM group constituted a beekeeping subcommittee to oversee the establishment and management of the apiary.

b) Commercial tree nursery

Given the increasing rates of natural resources degradation as well as awareness about climate change, there is demand for tree growing among communities in Lamwo, especially for commercial timber species such as Teak and *Khaya senegalensis*. The seedlings from the tree nursery are intended for use in two ways; a) for sale to non-group members, b) for members to plant and establish commercial woodlots and/or plantations. The Mar yen (which means we love trees) group was primarily formed to promote tree growing but their major constraint was the source of planting materials.

Through the support of the Towards Pro-Poor project, the Mar Yen group was provided with;

i) Tree seed and nursery equipment worth USD 2,767 (10,123,000/=). This included species like Teak, *Grivellea robusta*, and *Khaya senegalensis*. In addition the group collected Kei apple seeds locally.

ii) Capacity building on nursery operations. Under the MoU signed between the National Forest Authority (NFA), and in collaboration with Agoro-Agu Forest Landscape Platform, the group was equipped with knowledge and skill on;

- Nursery soil site selection, digging and soil preparation e.g. removal of debris, stones etc.
- Training on how to prepare germination bed for pricking and transplanting into transplant bed
- Soil potting and arrangement of the plots into transplant beds
- Transplanting technique.
- Training on how to construct transplant bed
- Watering regimes of the transplant bed to avoid dumping off
- Routine maintenance of nursery areas to avoid pest and diseases from attacking nursery plants

iii) Support to put in place management arrangements including commercial tree nursery subcommittee to oversee the establishment and management of the tree nursery, as well as agreement of how the proceeds from the sale of tree seedlings would be shared.

The commercial tree nursery was established adjacent the Aringa river on a one hectare piece of land, which was provided by one of the members under and MoU for an initial period of five years. Fifty Mar Yen CFM group members were interested and are actively involved in the commercial tree nursery establishment and management and of these, 58% (29) are Females and 42% (21) are males.

So far, the process of establishing the commercial tree nursery resulted in raising up to 9000 tree seedlings. Of these, the Mar Yen CFM group sold off 1500 tree seedlings at 500 Ugandan shillings each. The group therefore recouped an incidental Ugx 750,000 ($209). The group has also planted some 1,500 tree seedlings in a degraded portion of the forest under CFM arrangement. This has enabled the vulnerable groups such as the women who by tradition do not own land, to plant and own trees. Five hundred seedlings were distributed amongst members to plant, and the rest is being managed within the nursery in preparation for the next rainy season. With the knowledge and skills gained, the group plans to produce at least 40,000 seedlings annually (worthy USD 5,450), and also expand the species list to include fruits and other commercial tree species as per need. The commercial tree nursery has the potential of raising up to 200,000 seedlings

**How the livelihood enhancing options evolved**

During the fourth quarter of 2016, the Towards Pro-poor REDD- project in partnership with Environmental Alert, embarked on a process to support groups within Lamwo to get into agreement with the National Forestry Authority to co-manage the Central forest reserves that they live adjacent to. The communities had initiated the collaborative forest management process with NFA ten years before, but had failed to make headway due to lack of financial resources and capacity to engage. The aim of the project was twofold; i) to provide the necessary financial and technical capacity that the communities needed to engage in the CFM process, ii) To ensure that through the process, HRBAs and Pro-poor principles were followed.

It is during the initial phases of the CFM process i.e, participatory situation analysis and resource mapping, that these livelihood enhancing options were identified by the respective communities. During these exercise, the potential and viability of the options was established, and this informed the development of these specific livelihood enterprises at the beginning of 2017.
Based on the pro-poor principle of needs of the people being at the center stage in planning for sustainable management of natural resources, the Katum and Mar Yen forest adjacent communities benefited from the CFM process by accessing land for bee keeping and tree growing. This demonstrated the pro-activeness of the duty bearers (National Forest Authority-NFA) to respond to the requirements of HBRA and pro-poor REDD+ principles. According to Nekesa Esther, the NFA Sector manager, this was a unique case because in the conventional CFM process, agreements have to be signed before any implementation can take place. The CFM agreements for the two groups were signed in August 2017.

Figure 4: Establishment of commercial tree nursery in Pawach parish by Mar Yen CFM group

Figure 3: L- The chairperson on Katum group inspecting the apiary, R-one of the colonized hives
PROGRESS TOWARDS ADDRESSING LANDSCAPE LEVEL CHALLENGES

Through both the CFM and establishment of the livelihood enhancing options, the two groups have been empowered to become stewards of the natural resources, specifically the forests around them. Given the human resource constraint of both Lamwo district Government and NFA to monitor forests, the groups are helping to monitor illegal use of forest resources. An example is the Mar Yen group which is already effectively implementing the recently signed CFM agreements. Mid November this year, the Mar Yen CFM group intercept and caused for the arrest of a trailer and a loader with illegally harvested logs of *Alfezia Africana*, (a species categorized as vulnerable to extinction on the IUCN Red list) from the Agoro-Agu Central Forest Reserve.

*Figure 5: Above - Logs of Afezia that were impounded, Below - the loader that was used to load the logs on to the truck*
Through the established enterprises, both communities expect to earn an income, which they plan to use to start a revolving fund which will access credit to members. Given that households in Lamwo live way below the poverty line, this additional income from both the enterprises and the revolving fund will go a long way to improve members’ asset base and wellbeing.

The Mar yen group plans to re-invest the initial earnings from the sales of seedlings so as to expand the tree nursery.