

Northern Uganda Resilience Initiative (NURI)

GREENING OUR ENVIRONMENT THROUGH HOUSEHOLD TREE GROWING IN NORTHERN UGANDA:

Lessons in Operation and Implementation



Farmers distributing seedlings to cofunders

Northern Uganda Resilience Initiative (NURI) was a four-year programme (2019-2022) financed by Denmark's Ministry of Foreign Affairs as part of the Uganda Country Programme. A one-year extension in 2023 enabled piloted additional activities, focusing primarily on greening and sustainability.

NURI aimed to enhance the resilience and equitable economic development of refugees and refugee-hosting communities in Northern Uganda.

NURI was implemented in 13 districts in Northern Uganda and focused on three areas: Climate Smart Agriculture (CSA), Rural Infrastructure (RI), and Water Resources Management (WRM). Approximately 30% of activities were in refugee settlements.

NURI's achievements, challenges, and lessons -- gathered from implementing partners' reports, external assessments and learning and reflection workshops -- contributed to knowledge and learning on enhancing resilience in Northern Uganda, including the refugee settlements. This note aims to highlight lessons of interest on household tree growing to others implementing or planning to implement programmes in Uganda, including refugee settlements. Detailed reports are available on www.nuri.ag.

We want to express our gratitude to the Office of the Prime Minister, the UN Refugee Agency (UNHCR), District Local Government (DLG) representatives, farmer representatives, Mr. Acema Dan of National Agriculture and Food Research Organization (NARO) and Mr. CD Langoya of JC Holdings Ltd, private nursery operators, and Forestry Officers for their enormous input to the learning and experience sharing by NURI on household tree growing in Northern Uganda.

Implementation context

NURI's operation areas, and primary beneficiaries i.e. smallholder farmers, are among the groups most vulnerable to high intra and inter-seasonal climate variability, recurrent droughts, and floods, especially coupled with persistent poverty.

Climate change adaptation was underpinned in NURI's programme design from the onset. The 2023 NURI extension was informed by a rapid desk assessment of context, climate risks, vulnerabilities and impact related to climate variability and climate change in the NURI operational areas. It aimed to emphatically incorporate corresponding climate adaptation and sustainability interventions in the NURI results framework. According to the rules of the Climate Change Envelope that are geared towards climate change adaptation interventions, household-level tree growing is among the greening activities deemed viable for the restoration of degraded farming landscapes, while contributing to household incomes and resilience. Consequently, household-level tree growing was piloted in 12 of 13 districts targeting NURI CSA beneficiaries.

NURI implementation strategy

a) Cost-sharing approach



During the extension period, NURI introduced household-level tree growing to interested members of CSA farmer groups. Its main objective was to restore and conserve the productivity and resilience of farming landscapes in supported areas of Northern Uganda, while contributing to household incomes and resilience. The extension was implemented through a cost-sharing model where individual farmers/households paid 30% and the program paid 70% of the costs of tree seedlings. This was intentionally done to test the effectiveness of cost-sharing in inspiring ownership of tree-planting – this could be in terms of timely and appropriate maintenance towards attaining the desired product quality and/ or preservation of pre-existing trees. Farmers paid for seedlings of their choice, in quantities they were able to absorb. Response to this approach was good in areas with a minimal presence of actors offering free seedlings, and rather poor in areas where free seedlings were being distributed. Fewer refugees than host communities participated, arguably due to competing survival needs most especially food and access to land. The few refugees who participated either accessed land by virtue of inter-marriage with locals or aimed at reaping benefits in the short and medium term where protracted displacement is envisaged.

b) Beneficiary and tree nursery mapping



Local tree nurseries were mapped to ascertain availability of viable tree species. Quantities and average prices were planned to inform farmers' choice of the tree species they desired to grow. All NURI groups enrolled from 2019 to 2023 were offered the opportunity to participate, hence a wider scale of sensitization in this pilot. However, only those that were willing and able to cost share within the first half of the year, were eligible to participate. Farmers registered by submitting expression-of-interest forms and paying a 30% contribution based on prevailing market prices of their desired tree seedlings. While overwhelming interest was registered from about 288,209 households for over 1,200,000 tree seedlings of assorted species, only about 3% (9,175 households) were able to respond with their contributions in time, due to competing short-term goals. While many smallholder farmers are willing to cost share, there is need for flexibility in inception time. This will allow them to cultivate a positive mindset on tree growing as an economically viable venture and mobilize their contributions in a timelier manner if transplanting and gap filling are to be contextually well synchronized with first season rains.



Pupils participating in tree growing at institutional level

c) **Species selection and matching**



Key stakeholders including District Forestry Officers and farmers were engaged in the selection of tree species that were suitable in the agroecology. This was specific to each location/district. Lists of viable tree species were obtained from respective districts to inform farmers' choice of tree species as a way to enhance survival rates and returns on investment.

d) **Extension services**



NURI's extension priorities and approaches worked through recognised farmer groups; extension staff resided close to the farmers for accessibility and timely response to farmers' needs. Mid-way into implementation, extension staff's ability to reach every farmer proved difficult, and as a result, the farmer-to-farmer extension approach was adopted for increased outreach of extension services, uptake and sustained survival, as well as ownership of the trees planted. Under this approach, a few members of each farmer group receive hands-on mentorship in tree management practices from within tree growing sites, and tasked to cascade the skills to fellow farmers, with the extension staff only providing support in case of gaps. The farmer-to-farmer extension approach worked very well in some groups while in others, a combination of both farmer-to-farmer extension and group training were applied. In Koboko district for example, approximately 267 farmers within the respective groups were mentored on tree growing and they moved out to train other farmers.



HH tree growing registering success

e) Coordination and collaborations



The program collaborated with key stakeholders such as District Local Governments (DLGs), Lower Local Governments (LLGs), Operation Wealth Creation (OWC), NARO, ZARDI's, UNHCR, OPM, other development partners e.g., Kijani among other partners in the districts of operations. The close relationship and involvement of DLGs and LLGs in the implementation of NURI activities contributed to the recruitment of competent staff, effective staff training, successful mapping of tree nurseries, quality assurance of inputs and technical backstopping. On the other hand, UNHCR, NFA and Kijani in Adjumani, Moyo, Obongi and Lamwo districts complemented NURI support with additional seedlings that were used for gap-filling and or expansion of tree coverage.



Farmer to farmer extension services ongoing

LESSONS LEARNED

Premised on the experience gained from the tree growing pilot in 2022 in Pakwach district using a cost-sharing model, (detailed report is available on www.nuri.ag), this concept of tree growing was expanded to 12 of the 13 districts in the NURI programme coverage. It targeted NURI CSA groups under the following categories: national farmer groups, refugee women and mixed refugee/host community groups. Its main objective was to restore and conserve productivity and resilience of the farming landscapes in supported areas of Northern Uganda while contributing to household incomes and resilience. Specifically, it addressed the following issues:

- Knowledge and skills gaps in tree growing and environment protection.
- Depletion of vegetation cover and resultant environmental degradation
- Limited access of smallholder households to biomass energy

General lessons



Involvement of beneficiaries and key stakeholders in species selection is key:

Participation of farmers and district officials in the selection of their preferred tree species and/or matching contributed positively to acceptance and timely remittance of their contributions. This was widely appreciated by the different beneficiaries/households.



Gender plays a role in management and care for the trees:

There was more success in trees planted and managed by women and/or children; their trees were well-established with good survival rates. This was attributed to the attention and care rendered to the growing trees.



Cost-sharing model does not guarantee continued care:

Farmers' willingness and investing their resources in tree growing does not guarantee proper and timely maintenance of the trees. Most beneficiaries did not attend to the trees as required despite cost-sharing. This is attributed to the traditional belief that trees grow on their own. Additionally, mobilisation for cost-sharing is time consuming and requires good record-keeping to keep track of farmers' choices and co-funding money considering the large number of farmers involved.



Farmer-to-farmer extension services adds value:

The provision of extension services is key in tree growing as farmers lack basic knowledge and skills. It also motivates them to manage and nurture the trees to achieve desired products ecosystem improvement.



Consider an integrated approach to implementation:

Tree growing for individual farmers targeting various benefits should be integrated into other program interventions e.g. CSA training and not offered as a stand-alone intervention. Ample time should be considered for preparatory activities as well as follow up.



Gender plays a role in preferences of tree species:

Women preferred fruit and short-term species while men opted for timber and pole species. Whilst species-matching is a requisite for good survival, the influence of preference on ownership of investment by beneficiaries is a factor worth noting.



Keep household power dynamics in mind:

Both women and men seemed to access land for tree growing without too many restrictions relating to household power decisions. For instance, there were no reported cases of women being stopped from planting the tree seedlings they procured but rather, many cases of spouses co-financing were registered.



Implementation of tree growing needs detailed planning:

Tree growing is easily adoptable but requires several extension services through home-to-home visits. Additionally, deciding on the optimal time to start the activity, mobilizing farmers' contributions, training farmers, mapping tree nurseries, procuring and distributing seedlings; and following up on farmers all require meticulous planning to achieve good results. The inclusion of soil and water conservation measures is crucial to higher survival rates. Otherwise, tree growing can be implemented at household level and does not necessarily require cash for work to compel adoption and ownership.



Consider species that adapt to adverse weather variability:

Indigenous tree species were less affected by weather extremes when compared to exotic ones. The current shifts in weather patterns affected survival rates even with transplanting at the onset of first season rains. It is important to consider a combination of approaches including resilience design concepts such as soil and water conservation, farmer-managed natural regeneration, site-species matching, proper pitting and seedling selection, primary protection, and timely maintenance of trees to attain high survival and product quality.

Conclusion:

Despite the restricted duration of this pilot, the key achievements registered of this pilot present sufficient prove that household level tree growing using cost sharing approach is possible, moreover with due consideration of recommendations enlisted. The need for ample duration of implementation with due attention to preparatory activities coupled with adequate technical workforce and attention to record keeping should not be underestimated. Despite time constraint to determine the outcome if this pilot, its core purpose of greening NURI has been achieved among targeted households, to a greater extent.