

**Ministry of Foreign Affairs, Danida  
Northern Uganda Resilience Initiative - NURI  
2018-2022**

**NURI**

**Danida**

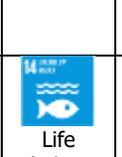
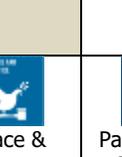
# **NORTHERN UGANDA RESILIENCE INITIATIVE Programme completion Report Incorporating ANNUAL REPORT 2022**



**Prepared by NURI Coordination Function**

**Kampala, Uganda  
March 2023**

Summary of Northern Uganda Resilience Initiative (NURI)

<p><b>Key results:</b></p> <ul style="list-style-type: none"> <li>20% increase on average annual agricultural cash income of participating households</li> <li>Reduction in no. of participating households reporting periods of food insecurity</li> <li>Increase in the number of people benefitting from supported WRM interventions</li> </ul> <p><b>Justification for support:</b></p> <ul style="list-style-type: none"> <li>High levels of poverty in Northern Uganda, exacerbated by the influx of refugees from South Sudan</li> <li>Adverse effects of climate change on small-scale farmers who are dependent on rain-fed agriculture.</li> <li>Support to both refugees and host communities thus promoting Uganda's progressive refugee policies, protect the asylum space and safeguard Uganda as a safe haven for refugees.</li> <li>Building on years of experience in Uganda, NURI is uniquely placed to promote enhanced resilience and equitable development, both through its own interventions and by sharing best practices and lessons learnt with other actors working in the same space.</li> </ul> <p><b>Major risks and challenges:</b></p> <ul style="list-style-type: none"> <li>Land conflict and land access for land intensive activities. Mitigation: Prior engagement with communities, signing of land donation forms, access by refugees through mixed groups, soil and water conservation, livelihoods diversification.</li> </ul>	<b>File No.</b>	2018-46856									
	<b>Country</b>	Uganda									
	<b>Responsible Unit</b>	2730 – Kampala									
	<b>Sector</b>	31120, Agricultural development									
	<b>Partner</b>	NURI Coordination Function (NURI CF)									
		<i>DKK mill.</i>	'18	'19	'20	'21	'22	Tot.			
	<b>Commitment</b>		3.0	46.5	85.5	87.0	88.0	<b>325</b>			
	<b>Projected ann. disb.</b>		3.0	46.5	85.5	87.0	88.0	<b>325</b>			
	<b>Duration</b>	2018 – 2022									
	<b>Previous grants</b>	DKK 150 million									
	<b>Finance Act code</b>	06.32.01.12 Uganda									
	<b>Head of unit</b>	Signe Winding Alberg									
	<b>Desk officer</b>	Victor Azza Vuzzi									
	<b>Financial officer</b>	Asger Graae									
	<b>Relevant SDGs</b>										
											
No Poverty		No Hunger		Good Health and Well-being		Quality Education		Gender Equality		Clean Water, Sanitation	
											
Affordable Clean Energy		Decent Jobs, Econ. Growth		Industry, Innovation, Infra		Reduced Inequalities		Sustainable Cities, Communities		Responsible Consumption & Production	
											
Climate Action		Life below Water		Life on Land		Peace & Justice, strong Inst.		Partnerships for Goals			

**Strategic objectives:**

Enhanced resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and host communities

**Justification for choice of partner:**

NURI CF has many years of experience from Northern Uganda. It is uniquely qualified to build on her achievements and share best practices and lessons. Implementing through NURI CF will reduce fiduciary risks and improve efficiency in project delivery like it did during the previous programme i.e. Recovery and Development in Northern Uganda Component of the U-Growth II Programme (RDNUC)

**Summary:**

NURI aimed to promote climate smart agriculture, agriculture-related rural infrastructure, and water resources management. It promoted VSLA and SRHR and targeted refugees and host communities, women and youths to ensure equitable development and peaceful coexistence. The project sought synergy with the other engagements under UPSIDE and coordinated with other interventions in Northern Uganda.

**Budget:**

Output 1: Increased agricultural output of small-scale farmers	120.4
Output 2: Agric. related rural infrastructure renovated / constructed	116.6
Output 3: Agric. related physical & natural water infrastructure constructed or made more resilient	50
Coordination incl. TA and M&E	24
Contingency	14
<b>Unit is Danish Kroner</b>	<b>Total 325</b>



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## List of Acronyms

<b>Abb.</b>	<b>Full text</b>
aBi	Agricultural Business Initiative
AEO	Agriculture Extension Officers
AES	Agriculture Extension Supervisors
AFARD	Agency for Accelerated Regional Development
AO	Agricultural Officers
ASSP	Agriculture sector strategic plan
CAO	Chief Administrative Officer
CF	Coordination Function
CDO	Community Development Officers
CMC	Catchment Management Committee
CMP	Catchment Management Plan
CSA	Climate Smart Agriculture
CRRF	Comprehensive Refugee Response Framework
Danida	Danish International Development Assistance
DAR	Development Assistance to Refugee Hosting Areas
DEC	District Executive Council
DFA	District Farmers Association
DINU	Development Initiative for Northern Uganda
DKK	Danish Kroner
DLG	District Local Government
DRC	Danish Refugee Council
DSA	Daily Subsistence Allowance
DDEG	Discretion Development Equalisation Grant
DTPC	District Technical Planning Committee
DWRM	Directorate for Water Resource Management
FG	Farmer Group
FPO	Focal Point Officer
GoU	Government of Uganda
IMC	Implementation Monitoring Committee
IP	Implementing Partner
MAAIF	Ministry of Agriculture Animal Industries and Fisheries
MoLG	Ministry of Local Government
MoFPED	Ministry of Finance Planning and Economic Development
MWE	Ministry of Water and Environment
NDP	National Development Plan
NUSAF	Northern Uganda Social Action Fund
OPM	Office of the Prime Minister
PDP	Parish Development Plan
PMP	Production and Marketing Plan
PRDP	Peace Recovery and Development Plan
PRELNOR	Project for the restoration of livelihoods in the Northern region
RALNUC	Restoration of Agricultural Livelihoods in Northern Uganda
RAU	Resilience Agricultural Unit

<b>Abb.</b>	<b>Full text</b>
RBR	River bank restoration
RDE	Royal Danish Embassy
RDNUC	Recovery and Development in Northern Uganda
SAS	Senior Assistant Secretary
SRHR	Sexual Reproductive Health and Rights
SWC	Soil and Water conservation
UGX	Ugandan Shillings
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNWMZ	Upper Nile Water Management Zone
VSLA	Village Savings and Loan Associations
WRM	Water Resource Management

## Executive Summary

This report is the final report of the Northern Uganda Resilience Initiative (NURI), and covers the entire period of the programme, from 2018, when activities relating to Water Resource Management officially started, covering the start-up of all outputs in 2019, to the end of the programme in December 2022.

NURI has expanded and developed during the years of implementation, expanding Climate Smart Agriculture (CSA) and Rural Infrastructure (RI) activities to include Koboko District and Imvepi refugee settlement through additional funding in December 2019, adding additional activities to the eight micro-catchments under Water Resource Management (WRM) activities in December 2020, and finally adding an extension period of one year. The extension period is not covered in this final report, but will be reported separately, as the planned NURI activities were, to a large extent, completed at the end of 2022.

The understanding of what it means to be a programme focusing on resilience has developed through the programme period. The introduction of Resilience design in RI and WRM has led to a new way of thinking about the resilience not only of infrastructure, but also of the communities using that infrastructure. The resilience design concept spilled over into CSA activities, and a concept of Resilience Design for CSA was developed, tested and rolled out, especially to refugee households, but impacting the general focus on soil and water conservation.

The gradual integration of VSLA activities with CSA activities through out implementation has also led to new insights, and the realisation that access to financial services, especially savings, and the opportunity to belong to a stable and supportive group underpins every other activity, and is essential for household and community resilience.

NURI CSA has provided extension services to 4,388 groups, 1,443 of which have included refugees. These groups have all increased their annual average agricultural income, despite weather challenges, and production and market disruptions caused by COVID-19. The women refugees have particularly benefited, being also the group with the lowest starting point. Adoption of CSA technologies had been over 90% indicating the impact of intensive extension efforts.

Under Output 2, almost all of the planned 1,504 projects were completed by the end of the programme period (99%) and for WRM 435 activities were planned and implemented, with over 17,000 households reporting a reduction in time and/or cost of transport to market as a result of improvements in community access roads.

Many of the impacts are difficult to measure – the networks established, the confidence built, the hours saved in terms of improved access to markets, services and water, the trees planted, the money saved, the knowledge and capacity built, not only amongst communities participating but at the District Local Government level, and in the NURI implementors, many of whom are young Northern Ugandans, who will go on to contribute to development in their districts, region and country.

# 1.0 Introduction

The Northern Uganda Resilience Initiative (NURI) is one of the eight development engagements under the Denmark / Uganda country-to-country programme 2019 – 2022, the overall aim of which is to contribute to *"poverty reduction through inclusive and sustainable economic growth, promoting democracy, good governance and human rights, and support Uganda's stabilising role in the region"*.

The Country Programme is divided into two thematic areas; the **Uganda Programme for Sustainable and Inclusive Development of the Economy (UPSIDE)** and the **Uganda Programme for Governance, Rights, Accountability and Democracy (UPGRADE)**. NURI is the largest of Development Engagements under UPSIDE, and has three output areas: Climate Smart Agriculture (CSA), Rural Infrastructure (RI), and Water Resources Management (WRM). NURI's outcome level objective is ***"Enhanced resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and refugee-hosting communities"***.

**NURI KEY OUTPUT AREAS:**

- **Climate Smart Agriculture (CSA):** *Increased agricultural output of small-scale farmers*
- **Rural Infrastructure (RI):** *Renovation and construction of agriculture related infrastructure*
- **Water Resources Management (WRM):** *Improved climate change resilience in Northern Uganda through WRM, including for refugees and host communities*

Activities in support of CSA focused on improving farmer's knowledge on climate-smart production methods, as well as their understanding of, and ability to engage with, markets and services. Support to rural infrastructure and water resource management were in those areas that contributed to agriculture sector outcomes, particularly access to markets and improving water resource management within the landscape. Water Resource Management activities addressed selected micro-catchments within the Ministry of Water and Environments wider plans for Northern Ugandan watersheds.

The objective of Climate Smart Agriculture was to *"increase agricultural output of small-scale farmers"* and core activities in support of CSA focused on improving farmers' knowledge on climate-smart production practices and technologies, as well as their understanding of, and ability to engage with markets and services including access to financial services, especially through adoption of the Village Savings and Loan Association (VSLA) model.

In order to support Uganda's progressive refugee policy and the nexus between development and humanitarian action, refugees and their host communities were among the beneficiaries in those NURI districts with refugee settlements. Geographically the programme covers 13 districts in West Nile and Acholi Sub Regions of Northern Uganda. The districts are Agago, Kitgum and Lamwo in Acholi sub region; Arua, Madi-Okollo, Terego, Pakwach, Nebbi, Zombo Koboko, Moyo, Obongi and Adjumani in West Nile egion. NURI was implemented in a number of refugee settlements within these districts.

Implementing partners were engaged and implementation units established for the implementation of the activities under the various NURI outputs. DRC was the implementing partner for Outputs 2 and 3, while for output one there were several implementing units. Coordination was carried out by NURI Coordination Function (CF), a decentralized unit of the Danish Embassy.

## 2.0 Implementation context

Northern Uganda was generally peaceful throughout the programme implementation period. This allowed communities to engage in social, economic and political activities as the economy and population grows, while also hosting a large refugee population, mainly from South Sudan. Weather conditions were challenging for much of the programme period. For the initial two years, 2019 and 2020, weather was characterised by heavy rainfall with considerable flooding and more general impact on pest, disease control and crop handling and drying, while in 2021 and 2022, late onset of the first rains impacted on agricultural activities.

### Economic activity

The main economic activity in the region is agricultural production and trade. This is where Northern Uganda contributes to national economic growth. The COVID 19 pandemic and related restrictions led to a generally weakening of the economy and inflation increased in 2021 (MoFPED, December 30th 2021). Many farmer households in the region reported declining household incomes, food insecurity and loss of employment opportunities linked to the pandemic. During the FY 2022, the national economic growth was at 4.6, faster than anticipated<sup>1</sup>. Results from Uganda poverty mapping showed considerable economic growth in the region<sup>2</sup>, up to the start of the COVID-19 epidemic.

### Humanitarian and Development Context

The context in which NURI was implemented is a combination of both humanitarian and development assistance due to the refugee population settled in the region, and while not all NURI districts are hosting refugees, all are impacted by the large number of refugees in the region. Development activities in the region are aligned to the government of Uganda's National Development Plan (NDP) II and implemented along-side donor-funded government led programmes including DDEG, NUSAF 3, PRELNOR, DRDIP and DINU. There was good coordination and collaboration across the different programmes, particularly at District level, where NURI work is concentrated. Agricultural livelihood activities are guided by MAAIFs Agricultural sector strategic plan (ASSP) and emphasis is on promoting priority commodities including beans, maize, rice and cassava.

Northern Uganda host approximately 56.7% of the total refugee population in Uganda according to UNHCR reports. By the end of 2022, there were 847,741 refugees, mainly from South Sudan; 778,349 in West-Nile and 69,392 in Acholi (UNHCR)<sup>3</sup>. Refugee response activities are overseen by OPM and coordinated through CRRF.

### Administrative units

Three new districts were gazetted by the government of the republic of Uganda during the programme period; Madi-Okollo and Terego from Arua and Obongi from Moyo. This initially impacted the District Local Government (DLG) capacity for engagement in development activities as new structures and staffing came into effect. In the older districts, new sub-counties were created which added to monitoring costs of NURI activities by the DLGs. Further administrative units were created after the 2021 elections which led to an increase in the number of sub-counties and parishes in all the districts

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<sup>1</sup> A country overview of Uganda by World bank, 2022 accessible here: <https://www.worldbank.org/en/country/uganda/overview>

<sup>2</sup> Uganda Poverty exercise conducted by UBOS in collaboration with UNICEF and The World Bank, October 2019

<sup>3</sup> UNHCR Data updated Dec 31, 2022 and accessible on: <https://data.unhcr.org/en/country/uga>

of operation. Arua municipality was granted city status in 2021. Additional administrative units impact on NURI budgets.

## **COVID-19**

The emergence of the COVID-19 pandemic in 2020 caused significant challenges to programme implementation. A general lockdown was imposed allowing only essential sectors to operate. All development agencies, ministries, districts and lower local governments were instructed to adhere to various restrictions and Standard Operating Procedures (SOPs) and obtain permission from the relevant authorities in order to operate.

NURI field activities were paused during the first lockdown, however, with Implementing Units working with District COVID-19 Task Forces to develop and agree operating procedures and secure permits, most operations were able to resume by May 2020. The performance of the economy generally declined including revenue sources during the first half of 2020<sup>4</sup>. NURI groups expressed concerns over high costs of production, food prices and general difficulty in marketing their produce. The same period also saw WFP introducing reductions in food ration in the refugee settlements.

While NURI operations were paused, NURI CF collaborated with Districts and UN agencies to support their activities, including lending vehicles to WFP, and encouraging NURI staff to volunteer for essential tasks that were implemented by other agencies.

## **Elections**

Uganda held its national general elections for presidential, parliamentary, district council, city council and lower local government positions in the first quarter of 2021. Election campaign activities started in the last quarter of 2020 and rolled into the first quarter of 2021. Newly elected leaders assumed office in the second quarter of 2021. Programme areas were largely peaceful throughout the election period, with only isolated incidents. In North West Nile, 60% of elected leaders were voted out of office, which created a need for re-orientation and induction of new district and sub-county leaders. In the settlements, the second quarter of 2021 marked the last term of office for Refugee Welfare Committees (Refugee leaders) across the refugee hosting districts. New leaders were elected to support Office of the Prime Minister (OPM) in management of refugee welfare.

## **2.1 Implementation Context in West-Nile Region:**

### **Weather**

During the last half of 2021 and for most of 2022 rainfall patterns were stable and favored production in nearly all the districts. Good harvests were achieved by farmers that planted groundnuts and soybeans in the second season of 2021 and 2022. In some locations, such as Koboko, rains facilitated opening of new community access roads.

Through the 4 years of implementation weather pattern varied across the region with many episodes of unusual and unpredictable weather. In 2019 and 2021, the first season rains were delayed causing late start of production activities. The second seasons of 2019 and 2020 saw above normal rainfall causing delay in flowering, rotting in the field, poor pod filling, high incidence of disease and generally poor yields, while mid-2021 saw moderate rainfall. A prolonged dry-spell in May/June 2021 registered unusually high temperatures up to 35°C impacting growth of early planted crops. For RI activities, the

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<sup>4</sup>MoFPED monthly economic performance monitoring report March-June 2020

weather, including flooding, disrupted some works on community access roads, leading to delays in completion, particularly of road projects.

### **Economic activities**

Major commodities traded in the region included maize, sesame, soybean, beans, groundnuts, potatoes, onions, rice and cassava, mainly sold within the districts. Generally, refugee demand and cross-border trade boosted demand for food commodities. In 2020, the impact of COVID-19 restrictions affected demand and supply of both food and non-food items in the markets, with sharp escalation in some food prices; while farmer households (refugees and nationals), that did not produce sufficient food crops to meet their consumption needs, faced high prices. Weekly and monthly markets, which usually attract traders from outside the region were stopped, transportation of produce to urban centres and cross-border became difficult and high prices were experienced for all strategic crops.

### **Coordination and collaboration**

NURI implementing units worked closely with OPM, UNHCR and the DLGs on refugee matters, while on general development activities they worked with DLGs and other development partners like CARE, ZOA, Save the Children, PALM Consults, Lutheran World Federation, Mercy Corps, DRC Livelihood, Welt Hunger Hilfe, CEFORD, SNV and IRC. Key coordination activities included joint field monitoring visits, attending sector specific coordination meetings and COVID 19 task force meetings. Overall, good coordination and collaboration amongst stakeholders fostered a conducive implementation environment.

### **Refugee response**

As of July 31, 2022, West Nile region was hosting 778,349 refugees from South Sudan and Congo according to UNHCR reports. Approximately 52% of Uganda's total refugee population is settled in West Nile; Development activities were run normally during the period, except during 2020 and 2021 COVID-19 lockdowns.

### **Land Access for construction of RI/WRM projects:**

Access to land for RI projects caused occasional challenges during programme implementation. This was addressed through site dialogue meetings with local communities and council officials and representatives of institutions. This increased awareness and encouraged land owners to sign the required land donation forms.

### **Politics and Security**

Implementation of programme activities went on peacefully with no significant cases of insecurity. Isolated cases of armed robbery were reported in Palorinya settlement in 2021 causing nine VSLA groups to halt activities. The situation was handled by the district and settlement authorities. The political campaigns at the end of 2020 led to rescheduling of some programme activities. Newly elected leaders were introduced to NURI through sensitization activities in the second quarter of 2021.

## **2.2 Context in Acholi sub-region**

### **Weather**

The rainfall pattern was unpredictable and unusual across the years. While above normal in 2021 and 2022, in 2020 the region experienced uneven rainfall with an extended dry spell unfavourable to crop production activities for first season. In both 2022 and 2021, early rains encouraged early land preparation and planting of vegetables in lowland areas. During the third quarters of those years, there was also stable rainfall, higher than normal and uniformly distributed across the districts which favoured second season crops. Some areas experienced flash floods, while others had dry spells but generally the weather supported agricultural activities.

Heavy downpours in 2020 damaged roads and rendered some villages inaccessible. Hailstorms were reported in the sub counties of Omiya Pacwa and Omot which destroyed over 15 acres of soybeans for NURI groups. Under RI and WRM, the second quarter of 2020 was characterized by heavy rains that favoured the excavation of bioswales and pitting holes for transplanting tree seedlings. However, there was also erosion of road works caused by flooding to the extent that some construction work was temporarily suspended. The sporadic rainfall experienced in the region also affected planting of seedlings in some areas

### **Economic activities**

Trade in agricultural commodities attracted buyers from neighbouring districts and as far away as Kampala. As in West Nile, a good start to the programme period was followed by sever disruption of markets and process caused by COVID-19 restrictions in 2020 and 2021. Farmers and community groups supplemented their income from trade in agricultural commodities by engaging in other non-agricultural activities like brick making, charcoal making, petty trade, cash for work, ox-ploughing services and sand mining.

### **Coordination and collaboration**

NURI units worked closely with UNHCR, OPM, and local governments as well as other livelihoods programs in the region, which included PRELNOR, DRDIP, DINU, and a wide range of NGOs. The coordination activities included DEC and LLG joint monitoring visits to programme sites, participating in cluster or sectoral meetings with partners implementing livelihood programme, COVID 19 task force meeting and other reporting platforms. As a result of collaboration activities, a number of NURI farmer groups were linked to programmes under LLGs and other development partners.

### **Refugee response**

As of December 31, 2022, the region was hosting 4.6% (69,392) of the total refugee population in Uganda in Palabek settlement according to UNHCR reports. OPM and UNHCR requested NURI to support new refugee households with livelihood activities, and Kitgum/Lamwo RAU responded swiftly by including the groups in NURI CSA activities. RAU Kitgm/Lamwo and DRC worked in close collaboration with UNHCR, OPM and DLG to support refugee farmer groups and community members registered for CSA training and rural infrastructure work during the NURI programme.

### **Political and Security situation**

The region was generally calm though with cases of cattle theft, in the sub-counties along the South Sudan border and those bordering Karamoja. Land conflict was reported in all the three districts

where a total of 20 farmer groups were affected. DLG and LLG authorities mediated, allowing for continuity of farming activities.

Political campaigns that started at the end of 2020 rolled into the first quarter of the year and voting took place in February and March. Some group activities were interrupted by the campaigns, causing NURI staff to reschedule activities. In the second quarter, newly elected leaders were sworn in and sensitization activities were conducted to introduce new leaders to the NURI programme. Some new administrative sub-counties and parishes were created and became operational.

## **3.0 Implementation of Activities**

This report covers the entire NURI implementation period, from 2019 to the end of 2022. It also includes all the three outputs of the programme; 1) Climate Smart Agriculture, 2) Rural Infrastructure and 3) Water Resource management. A summary of activity implementation against physical targets is included as Annex 2 of this report.

### **3.1 Output 1: Climate Smart Agriculture**

The objective of NURI CSA intervention is to improve the knowledge and skills of farmer households and refugees in climate smart agricultural practices which will enable them to increase and sustain their production. Major activities under this output in the reporting period included:

- Identification and/or formation of Farmer groups
- Training of Farmer groups in climate smart agriculture
- Training of Farmers groups in VSLA practices
- Capacity building of IP and RAU staff
- Capacity building of DLG production departments
- Farmer groups sensitized on SRHR and GBV issues

There were intense periods in the 2 or 3-year cycle of extension support. On average, NURI CSA groups were visited at least 13 times per year with more visits in the earlier years of implementation, reducing as the groups prepare for graduation. Those groups with VSLA activities were visited an additional 20 times per year by CBTs. Each group were additionally visited by a VSLA supervisor, an AES or Coordinator one to two times per year.

#### ***Farmer Groups Identified and Trained in Climate Smart Agriculture***

Under this intervention, the following activities were completed:

1. Assessment and selection of farmer groups for support
2. Enterprise selection by farmer groups
3. Preparation and review of production and marketing plans
4. CSA training and establishment of demonstration plots
5. Support of farmer groups in collective marketing
6. Radio talk shows

#### **Assessment and selection of farmer groups for support**

There were 4 different categories of farmer groups under the NURI CSA output. These were: old national farmer groups, new national farmer groups, mixed refugee/host farmer groups and women refugee farmer groups. For the different categories of national and refugee farmer groups, there were different criteria set to ensure correct targeting of both groups and individuals. The selection process started in 2019 with sensitization of the sub-county leaders (LC3, CDO, SAS and parish leaders) and community members. Criteria for national groups (old and new) included record keeping, leadership structure, group activities and the amount of support received from other programmes.

Selection of refugees in the supported settlements included a mapping exercise which preceded selection, reviewing the concentration of livelihood partners, proximity to land for production and concentration of host communities. Sensitization of settlement leadership including OPM/UNHCR, RWC 1 and 3, and LC1 was then conducted. Groups were formed based on the interest of households, refugee and national. Most national groups were existing groups, with selection based on leadership structure, level of previous support and interest in the programme.

National groups were in two categories: New National and Old National. All 755 old national groups identified from groups having participated in earlier Danida programmes, joined the programme in 2019; while New National groups joined in two phases. 825 new national groups enrolled in 2019, and 1,365 in 2020.

Refugee groups, who were supported for 2 years, were divided into Mixed groups, where refugees combined with national farmers, and focused on crop production, including access to land, and Women Refugee groups, largely made-up of women members, all refugees, and focusing on household food production around the homestead. There were a total of 1,443 refugee groups, 825 mixed and 618 women refugee groups.

On average, women constituted 65% of the membership for new and old national farmers while youth membership was 30%. The definition of youth in NURI is 18-28 years of age. In the mixed groups, the target was that 50% of group members were refugees and 50% nationals, however this was not stringently applied, depending on the interest of refugees and hosts and the makeup of the population in and around the settlement. The number of groups selected is summarised in the table below:

**Table 3.1.0 Number of farmer groups selected for support under CSA**

	Arua	Koboko	Nebbi	Zombo	Pakwach	Moyo	Adjumani	Kitgum	Lamwo	Agago	Total
	<b>Obongi</b>										
<b>Old national groups</b>	200	-	80	80	50	-	-	110	100	135	<b>755</b>
<b>New national groups</b>	330	195	150	150	105	300	300	210	210	240	<b>2,190</b>
<b>Mixed groups</b>	323	-	-	-	-	169	240	-	93	-	<b>825</b>
<b>Women refugee groups</b>	217	-	-	-	-	191	120	-	90	-	<b>618</b>
<b>Total</b>	<b>1,070</b>	<b>195</b>	<b>230</b>	<b>230</b>	<b>155</b>	<b>660</b>	<b>660</b>	<b>320</b>	<b>493</b>	<b>375</b>	<b>4,388</b>

### **Enterprise selection by farmer groups**

To promote production and marketing, NURI followed a strategic crop approach with national farmer groups and a field crop model with mixed refugee groups. Both South West Nile and Acholi sub-regions started with new national farmer groups in 2019, while North West Nile started working with new national farmer groups in 2020. All groups went through a Strategic Crop selection process. Enterprise selection started with a consultation meeting for all relevant stakeholders in each district where a list of potential crops was generated and each crop was assessed based on factors like suitability to climate conditions, marketability, crop resistance to pests and diseases, crop yield potential and labour requirements. Stakeholders were DLG production department, development

partners, research (NARO), private sector and farmer group representatives. The crops selected are as follows:

**Table 3.1.1 Strategic crops selected per district of intervention**

Districts	Selected Crops
Adjumani	Maize, Soybean, Sesame
Moyo	Cassava, G/nuts, Maize, Soybean, Sunflower
Obongi	Cassava, Maize, Sesame
Koboko	Beans, Groundnuts, Cassava, Maize
Arua, Madi-Okolo	Beans, cassava, sesame, soybeans
Nebbi	Beans, Irish potatoes, onions, soybeans
Pakwach	Cassava, rice, sesame
Zombo	Beans, Irish potatoes, onions
Kitgum	Sesame, soybeans, Cassava, Beans
Lamwo	Cassava, sesame, Cassava, sunflower, soybean
Agago	Sesame, soybeans, sunflower, Cassava

Enterprise selection for refugee groups, both in mixed and women groups, was done for each season at group and individual level. For mixed groups, they selected a main crop and an intercrop and seeds were provided for demonstration plots and for individual production. In women refugee groups, each individual was supported with one main enterprise, three vegetables and three fruit trees. The reason for supporting women refugee groups with vegetables was to support backyard gardening in the face of limited access to land, as well as to supplement household nutrition and food security.

The crop types considered as main enterprises were cassava, maize, sorghum, sweet potatoes and groundnuts while the intercrops were cowpeas, beans and pigeon peas. The vegetable types provided were tomatoes, okra, onion, sukumawiki, eggplant, cabbage, garden eggs (entula), amaranthus and green pepper. The refugee women selected fruit trees from passion fruit, mango, pawpaw and citrus.

### **Preparation of Production and Marketing Plans**

National and Mixed farmer groups prepared Production and Marketing Plans (PMPs) as part of the NURI extension model. These PMPs involved a 3-year cycle for the new national groups and 2-year cycle for old national groups. PMPs were reviewed each year to measure progress and plan for the coming season. Actual yields from the previous seasons impacted target setting for the coming year. The PMP data were captured in the NURI CSA database, as part of the NURI M&E system. Data reports indicated progress, and guided plans for marketing support. The PMP model helped farmers to make realistic plans for their production, and the model is being integrated with individual household planning under VSLA, better integrating short to medium term production goals with longer term financial goals.

PMP data collection included collection of baseline data such as land acreage, yield and price for the strategic crop in the year before joining. Against this baseline data, groups then set production goals and targets considering multiple factors identified during SWOT analysis. Achievement of production targets depended on land access, yield and price of the produce at marketing.

### Land Access for production of strategic crops

There was significant increase in land under cultivation of strategic crops during NURI implementation, although not all groups achieved their goals, as set in the PMPs. Reasons given for under achieving included price of seeds, unfavourable weather, and lack of access to land. In 2020/2021, COVID-19 restrictions affected farmer’s access to seeds, with reports of farmers mixing improved seeds with home saved seeds or local grains due to shortage of improved seeds. Seed production from NURI group demo fields covered some of the groups’ demands, but was in many cases insufficient to meet the groups’ seed requirements.

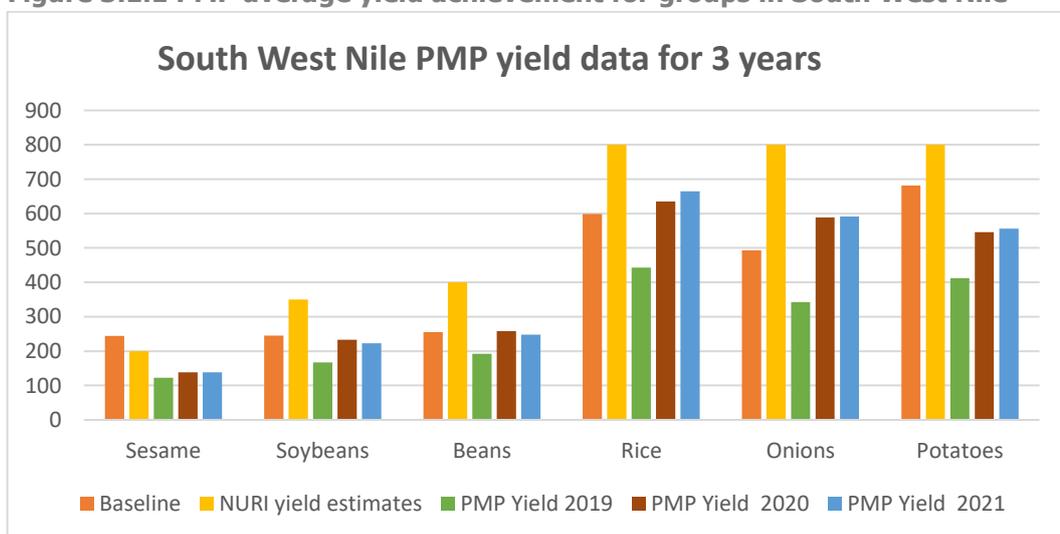
Access to land is key in achievement of production goals and differences in access between the NURI districts impacted on achievement of targets. There is higher access/ownership in Acholi sub-region compared to South and North West Nile. In West Nile, farmer groups accessed an average of between 12-15 acres (0.5 acres per individual), while it was between 38-42 acres (1.5 acres per individual) in Acholi. Farmer groups in Acholi over achieved against their target acreage, while in North West Nile, on average, farmers did not achieve the targets they set themselves in terms of acreage of strategic crops cultivated.

### Yield for strategic crops

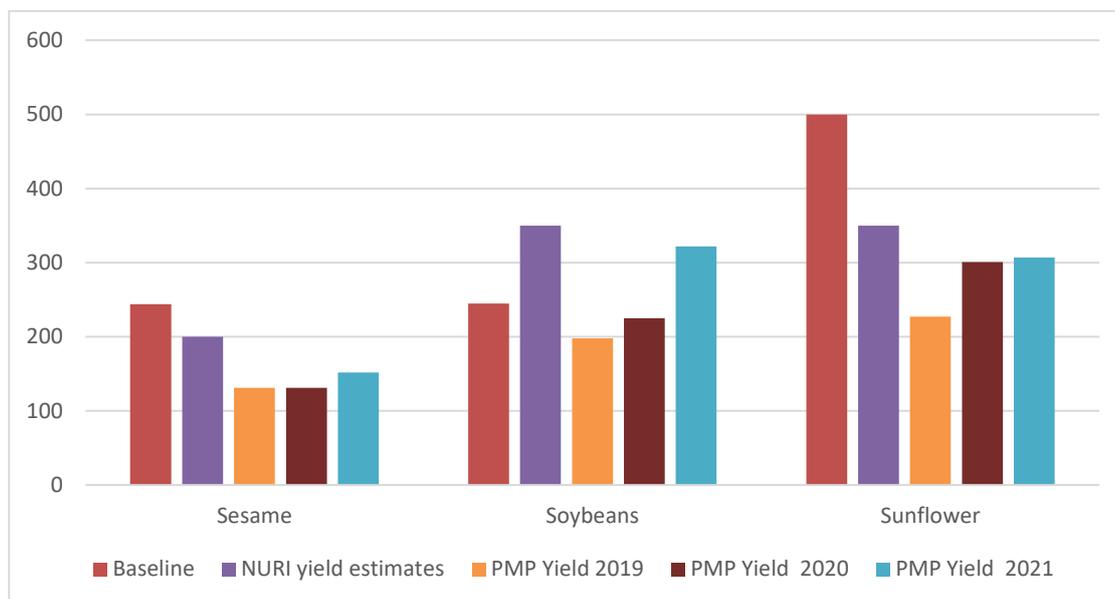
Although many NURI farmer groups did not meet their production targets, NURI extension staff noted that, the PMP model has helped the groups to set production targets. The model was integrated with individual household planning under VSLA with the objective that farmers can be able to finance their production activities better and achieve their goals.

The figures below show the yield per acre for the strategic crops by subregion for farmer groups that started in 2019 and 2020. All national farmer groups have completed three cycles of PMP. The yield is compared to baseline and CSA estimates based on results from demonstration plots. There is a clear trend of increase, though few reached the level of production achieved on the Demonstration plots. This is the result of the extra attention given to demonstration plots and the fact that not all farmers access the quality seeds used in demonstrations. While the baseline is included, it is not considered to be a reliable figure, as it is based on recall data, and further 2018, the year of recall, was an exceptionally good agricultural year.

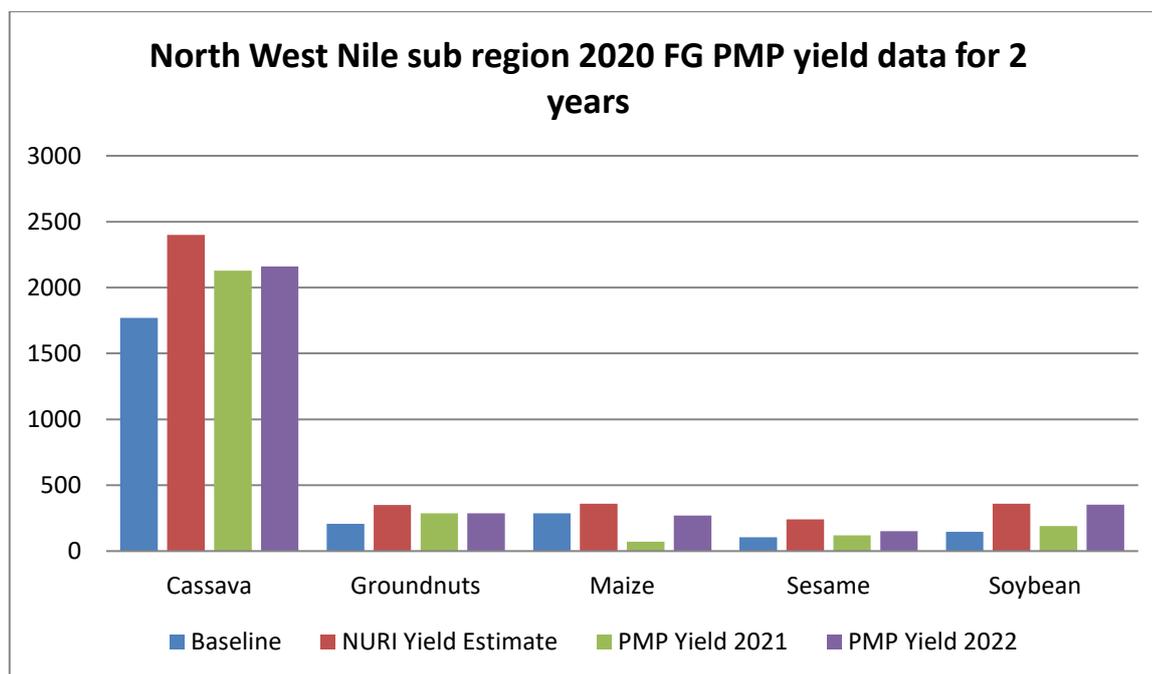
**Figure 3.1.1 PMP average yield achievement for groups in South West Nile**



**Figure 3.1.2 PMP Yield achievement for groups in Acholi sub region**



**Figure 3.1.3 PMP average yield achievement for 2020 groups in North West Nile**



**Strategic Crop Price levels compared to PMPs**

In general, target prices for sesame, rice and cassava were not achieved and prices in 2020 were generally lower than 2019. In 2021, prices rose for most of the year, and for soybeans, beans, cassava and onions went higher than the baseline figures. Fluctuating commodity prices discouraged farmers from group marketing. Price fluctuation tilted towards a fall over the period and farmers reported that there was little difference between individual price and collective marketing and were therefore less willing to engage in group marketing.

### **Training in CSA practices**

A total of 3,348 farmer groups were trained and supported in CSA technologies and practices following the ten training sessions in the CSA training manual. Training was conducted by AEOs with support from AES. The training is synchronized with the season and situation on the ground to facilitate learning and encourage adoption. The 10 sessions are:

1. Setting the ground/farmer institutional development
2. Climate, climate change and its impact on Agriculture and food security
3. Climate smart agriculture technologies/practices available
4. Introduction to specific crop enterprises for the group
5. Seeds, seed bed preparation, planting, intercropping and weeding
6. Major field pests and diseases of the given crops and their control
7. Soil fertility and water management
8. Post-harvest Handling
9. Business skills
10. Marketing

CSA training was delivered to all categories of groups, with the exception of Old National Groups, as these groups were trained in a similar curricular during the previous programme. The training programme and content varied across the group types. In the third year of engagement New National groups were trained on case-by-case basis, depending on need and demand, while the focus was mainly on their individual farms and project sites. Training manuals for the various farmer group types are available on [www.nuri.ag](http://www.nuri.ag)

CSA training was delivered using grain sack charts and demo plots. The numbers attending trainings reduced when COVID-19 lockdown was imposed at the beginning of 2020 through part of 2021. During this period training was done in mini groups of 5-6 people with cascading of training to other group members. AEOs verified delivery of information and did back-stopping during individual household visits.

From 2021 the concept of resilience design was introduced into CSA trainings, focusing especially on household gardens in refugee women groups. The concept was tested and expanded using trainers and knowledge within the programme, and strengthened consciousness and understanding of concepts relating to resilience in the face of climate change. Details of the concept, and roll-out in NURI are included as Annex 4 of this report.

Female participants make up 68% of farmer groups, attributed to the involvement of women at all stages of production. For third year national groups, where there are no demonstration activities, the level of participation was relatively low at 42% compared to 66% for groups that started in 2020 and 2021.

### **Individual farmer household and farm visits**

From the second year of support, extension teams made individual household visits to reinforce learning and encourage adoption. Individual group members were supported to review their PMPs, yield data was verified, on-farm crop management practices monitored, extension advisory services in diversification into other enterprises provided, SRHR integration, input acquisition and market linkages were discussed. This activity was planned based on time available, season and issues arising. The achievement of target compared to plans was 85% partially because of COVID 19 restrictions.

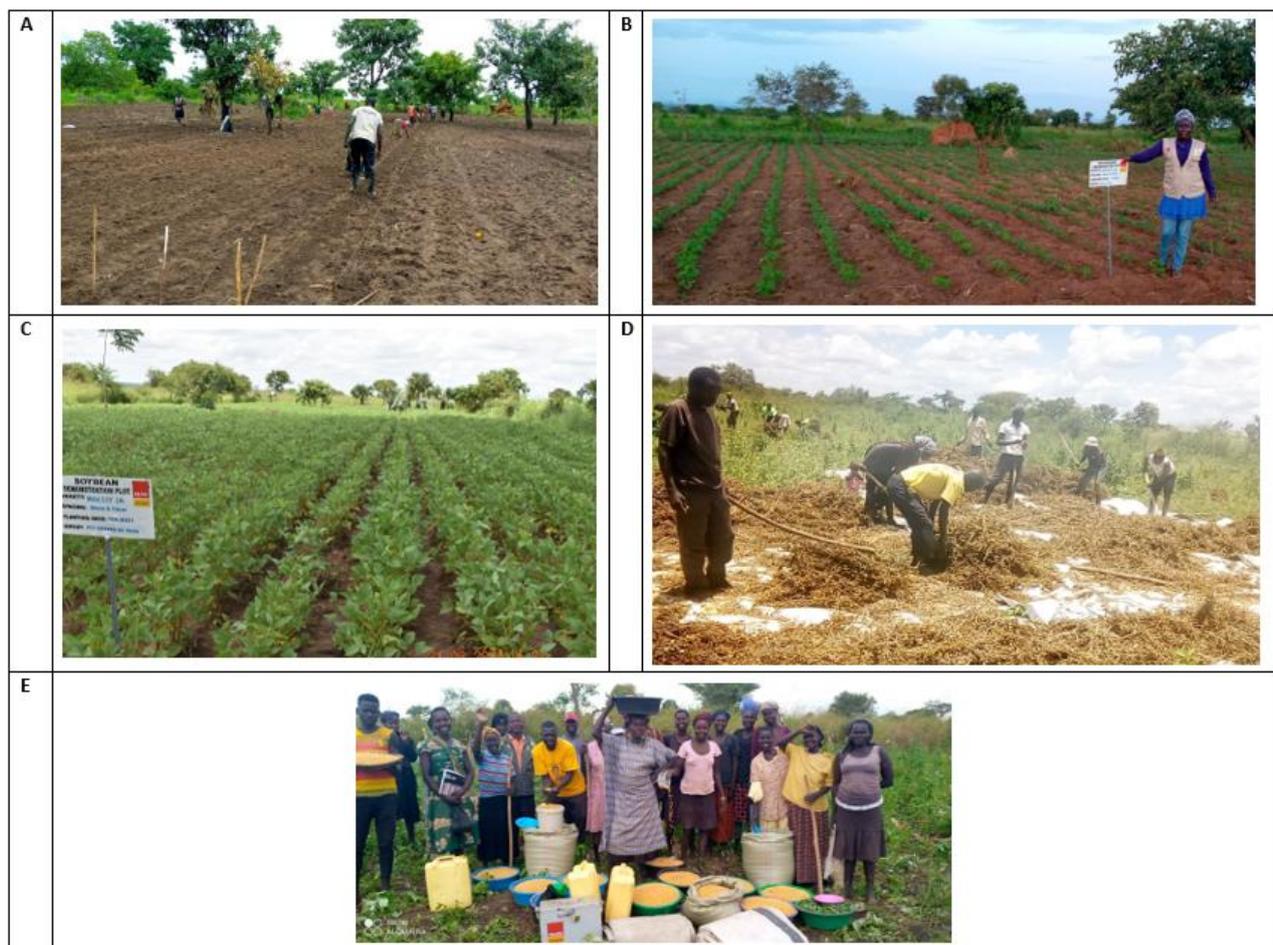
Overall, CSA practices were adopted by most farmer groups. Line planting, use of improved seeds, intercropping and pest and disease management were particularly widespread.

### Establishment of Demonstration plots

CSA training in NURI includes the use of a demo-plot approach. Farmer groups, with support from extension staff, identify suitable sites based on accessibility for ease of observation both by group and non-group members, fertility of the soil and risk of damage by stray animals.

For new national groups, demonstration fields were set up in year 1 and 2 of engagement. In a few cases, where there were significant failures, demos were supported in the third year. The CSA units procured assorted inputs for demo establishment. For new nationals, it was seed and planting equipment for 1-acre demo fields, while for the refugees and mixed groups, it was two crop seed types and planting tools both for the demo and individual fields. Inspection of the input sources was done by NURI extension supervisors with support from the district production technical staff. Seed sources inspected included National Crops Resources Research Institute Namulonge, East African Seeds, FICA Seeds and Pearl Seeds. Areas of assessment included seed quality, storage conditions and packaging. Samples were picked and subjected to germination test where test results showed over 85% germination. Cassava fields were also inspected for disease prior to procurement.

### Pictorial of soybean demo from start to finish



### **Old Farmer Groups' projects**

Activities with Old Farmer Groups targeted 755 farmer groups that had participated in the previous DANIDA RDNUC programme. The selected groups identified projects which were supported using a co-funding modality with 50% contribution by the farmer groups. Groups were assessed and placed in three tiers depending on their capacity to manage joint projects and raise cost-sharing. Implementation of the projects varied in the three tiers, with Tier III focused on tree seedlings and improved seeds, Tier II on construction of stores, and Tier I included significant projects such as larger stores and grinding mills. After completion of projects exit meetings were conducted with the groups and sub-county leaders including Chairperson LCIII, SAS, CDOs and Agric officers.

Projects classified in Tier I, were groups engaged in substantial marketing activities, and some activities spilled over into 2021. These projects included produce stores, apiary, grinding mills and cassava chipping machinery. The construction works for all project types were completed, commissioning and handover done by end of Q3 of 2021.

In AFARD, a single crop enterprise cooperative model is being promoted with the old national groups with the objective of strengthening marketing activities with the groups. A total of 9 cooperatives are in the process of registration, 2 from Pakwach, 5 from Nebbi and 2 from Zombo. These are groups from the old national farmer group category that have joined together to form cooperative unions. All the preliminary processes were carried out including member sensitization, leadership elections, start-up funds mobilization as well as filing the necessary documentation with the District Commercial Office. These documents have been submitted to complete the formation of the cooperatives.

### **Support of farmer groups in collective marketing**

This activity aims to enable farmer groups supported under the programme to market their strategic crops at better prices. The major sub activities accomplished were;

1. selection and training of marketing committees
2. market information collection and dissemination to farmer groups
3. linking farmer groups to buyers and inputs supply
4. encouraging bulking and collective marketing of produce

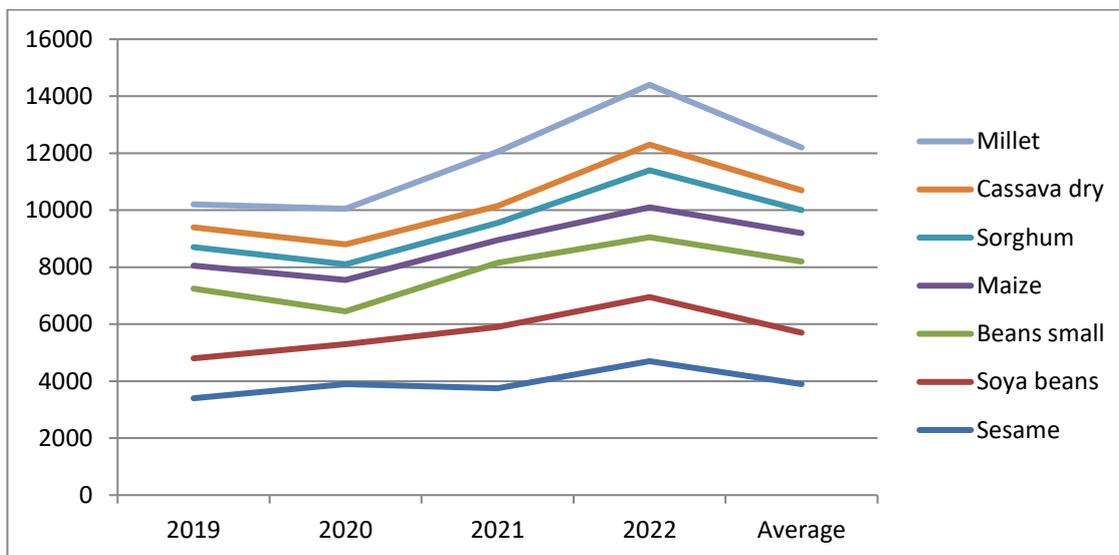
At the start of the programme, Marketing Coordinators were recruited in South West Nile and Acholi sub region to lead implementation of marketing activities. A review of the roles and responsibilities of the marketing staff and extension officers was carried out towards the end of 2020 leading to changes in the methodology with all extension staff directly responsible for supporting marketing activities.

### **Market information collection and dissemination to farmer groups**

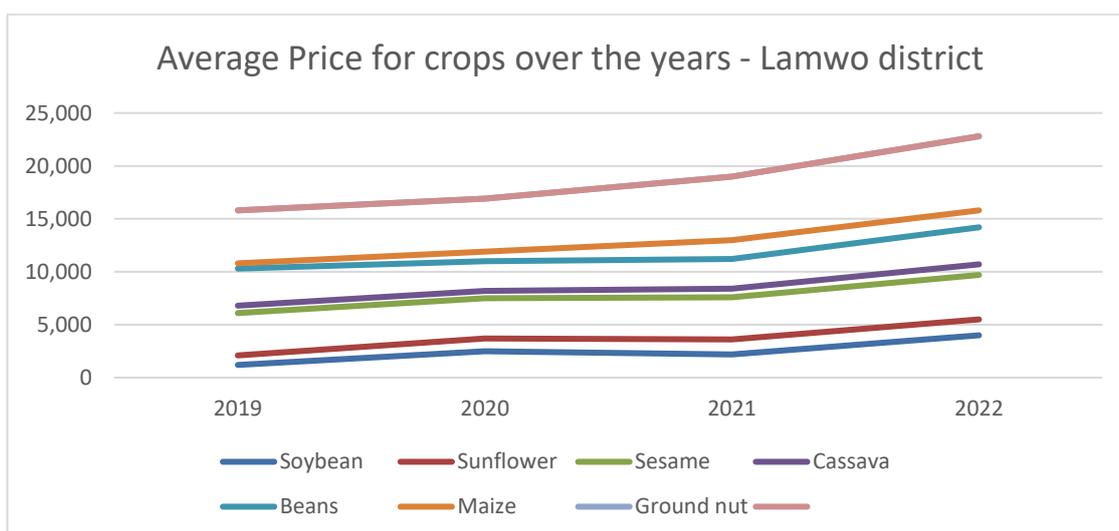
Market information was collected by extension officers with support from the marketing committees in each farmer group. The modality varied across the programme depending on local marketing patterns. Price trends of strategic crops were monitored and disseminated to farmer groups through radio talk shows, group meetings, and display in community places and sometimes sent through SMS to the farmer group leaders. The aim was to help farmers set realistic prices for bulked produce. It has, however, been challenging due to constant price fluctuations. An example of price fluctuation of prices of key commodities during the reporting period is provided in the figures below:

**Figure 3.1.4 : Price trend for key commodities in Acholi sub region**

**Average Price for crops over the years - Kitgum district**



**Average Price for crops over the years - Lamwo district**



**Linkage of farmer groups to buyers and inputs suppliers**

Implementing units regularly profiled and validated list of potential buyers within their regions in order to link farmer groups to buyers for collective marketing. For example, in 2022, AFARD conducted a new survey in their region, adding to the existing list of potential buyers. After identifying buyers, CSA units held discussions with the identified buyers on marketing of both strategic and non-strategic crops. PICOT visited potential produce buyers from Arua, Nebbi and Zombo to better understand the opportunities for farmers.

**Bulking/collective marketing of produce**

NURI famer group members were encouraged to bulk and store their produce in order to strengthen their negotiation position with buyers and take advantage of price fluctuations. Crops most commonly bulked in West Nile were sesame, beans, potatoes and onions while in the Acholi sub-region it was sunflower, followed by sesame and soybeans. The extension staff work in close collaboration with marketing committees to encourage group marketing.

During the reporting period, farmer groups from South West-Nile from the districts of Nebbi, Pakwach, Zombo and Arua were able to collectively market beans, potatoes, onions, sesame and soybeans. In Acholi marketing was dominated by sesame, sunflower and soybeans. Collective marketing is generally challenging as farmer households face pressing cash needs leading to frequent early, individual sale. There were cases where local governments played a useful role in mobilising farmers for collective marketing. While it is difficult for farmers to develop the capacity and trust to market collectively, the benefit in terms of price for produce is noticeable as shown in the examples below.

**Table 3.1.3 Quantity of produce bulked and sold collectively in Kitgum, 2022**

S/N	Crop	Price per kilo in local market	Price per kilo when bulked	Quantity bulked and sold in kgs	Amount earned
<b>2022 sales</b>					
1	Sesame	3,400	3,700	235,044	869,662,800
2	Sunflower	1,100	1,400	4,400	6,160,000
3	Soybeans	1,750	1,990	75,614	150,471,860
	Total			315,058	1,026,294,660

**Table 3.1.4 Quantity of produce bulked and sold collectively in Nebbi by 2022**

S/N	Crop	Price per kilo in local market	Price per kilo when bulked	Quantity bulked and sold in kgs	Amount earned
<b>2020 sales</b>					
1	Soybean	1,500	2,000	9,510	19,767,000
2	Onions	2,000	2,500	23,10	57,875,000
3	Beans	2,700	3,500	5,956	20,910,00
4	Potato	1,400	1,800	10,265	19,087,000
5	Cassava chips	300	500	8,040	4,190,000
6	Rice	1,200	1,500	10,000	15,000,000
<b>2021 sales</b>					
1	Soybean	1,500	1,900	15,595	29,630,500
2	Onions	800	1,500	48,532	72,798,000
3	Beans	1,000	1,200	9,600	11,520,000
4	Potato	700	1,000	18,485	48,985,250
5	Cassava	450	650	18,630	8,383,500
<b>2022 sales</b>					
1	Soybean	2,500	3,000	27,500	82,500,000
2	Onions	1,000	1,200	47,700	57,240,000
3	Beans	3,000	4,000	3,700	18,800,000
4	Potato	1,000	1,200	42,000	51,120,000
5	Cassava chips	1,500	2,000	7,000	14,000,000

## **Support to Post Harvest Handling and Marketing**

As well as trainings on PHH and marketing (Training manual available on [www.nuri.ag](http://www.nuri.ag)) NURI national and mixed farmer groups received tarpaulins for post-harvest handling (drying, sorting and cleaning) of crops and, where relevant, PICS bags for seed storage. This encouraged production of quality products and ensured quality of home-saved seed. Over the programme period a total of 33,000 tarpaulins were distributed as well as 6,000 PICS bags.

## **Farmer open days**

Open days are generally held once per year, however, due to COVID restrictions they happened only twice during the NURI programme period. Open days are an opportunity for NURI farmer groups to come together to showcase and exhibit products, share experiences and knowledge in technologies adoption and interact with other value chain actors within the agricultural sector. During the Open Day groups exhibited products and performed drama, songs, and poems reflecting their achievements and progress. District and Sub-County officials attended as did NURI staff, development partners, agro-inputs/produce dealers and the community members. As part of the open day, participating groups would be assessed on different CSA factors and the best three groups per Sub-County received prize awards worth 200,000 UGX for first place and 150,000 UGX and 100,000 UGX for second and third place respectively.

## **Exchange learning visits**

Exchange visits were originally not planned for in CSA implementation, however, they were gradually introduced with some success. The aim was to encourage adoption of technologies by exposing farmers to early adopters within their vicinity. Visits were organised to add on to the knowledge received through trainings and individual visits by the AEOs to reinforce learning and adoption of the practices. The extension staff selected individual farmers from different groups for the activity. Some visits were done between Sub-counties in a district while in some cases the participants visited nearby districts. For example, farmers in Kitgum were taken to Agago and Lamwo districts in two separate exchange visits to the resilience design sites that were established by selected NURI groups. From these sites there were practices on soil and water conservation with vegetable and fruit trees establishment.

## **Exit meetings with farmer groups and Lower Local governments**

Under the NURI program, national farmer groups were supported for 3 years and refugee groups for 2 years. All the farmer groups under that category had their final year of support concluded in 2021 for groups that joined in 2019 and 2022 for national groups that joined in 2020. Exit meetings were held with farmer groups as they graduated from NURI support, during which groups were informed of future opportunities, both from the DLGs, other programmes and NURI extension activities. The farmer group lists were handed over to the local authority and refugee leadership structures (OPM, UNHCR and RWCs) at Sub-county exit meetings.

## **Additional Activities by NURI CSA Partners with NURI farmer groups**

### **PICOT promotion of horticultural crops for NURI farmers in Koboko**

NURI CSA activities cover all the sub-counties in Koboko district and farmers are in their third year of support. In those sub-counties with small and fragmented land-holdings farmers are engaged in substantial vegetable production. PICOT consequently started promoting horticulture amongst 55 farmer groups enrolled in the NURI programme to supplement the strategic crops. PICOT included a

budget-line for assorted vegetable seeds for selected groups.

Thirty farmer groups were trained in season A, by the extension staff in vegetable production and other agronomic practices for onions and tomatoes. The groups established demo gardens of 0.25 acres as learning sites, and NURI extension staff provided guidance and monitoring of the sites, providing advice on agronomic practices including timely weeding, soil fertility and water management and pest and diseases control measures. In season B a further 25 groups were added.

### **AFARD support to NURI farmers' groups forming Cooperatives in Nebbi**

In AFARD, a cooperative model is being promoted with the old national groups with the objective of strengthening marketing activities with the groups. To date, 10 farmer groups have successfully joined, formed and registered as a cooperative with support from AFARD and DLG commercial office. Currently AFARD is closely monitoring their activities as a cooperative before enrolling more farmers.

#### ***3.1.2 NURI CSA farmer groups trained in VSLA***

The objective of this activity is to improve access to finance and financial literacy of farmer households. This is achieved through integrating financial literacy training into more traditional savings trainings for farmer groups. The major activities during the period were:

- Assessment and selection of farmer groups for VSLA support
- Recruitment and training of CBTs
- CBT training of farmer groups in VSLA methodology
- Training of VSLA staff in SAVIX (VSLA global database)
- Monitoring farmer group savings activities

#### **Assessment and selection of farmer groups for VSLA support**

To enhance access to financial inclusion among the rural farmers, the programme incorporated VSLA activities into the CSA groups. With the learnings generated in terms of the implementation in the first year, financial literacy was incorporated to enable the farmers plan and manage their finances. This resulted into 3,086 groups being selected for implementation of both VSLA and financial literacy. With the effects of COVID19, 66 groups dropped out along the way leaving 3,020 with a membership of 83,955 with women constituting 72%, 26% youth. Of these groups, 48 were only supported in financial literacy since they were already being supported by other partners in VSLA.

Selection and assessment of groups was done by VSLA officers with support from the extension staff. Assessment considered the level of group interest and whether the group had received or was receiving VSLA support from other organisations. As much as possible all CSA groups were offered VSLA unless already supported.

**Table 3.1.5 Number of VSLA groups supported per District**

Target group	Arua	Koboko	Nebbi	Zombo	Pakwach	Adjumani	Moyo/ Obongi	Kitgum	Lamwo	Agago	Total
<b>New national groups</b>	262	100	224	186	127	232	235	230	260	268	2124
<b>Refugee groups</b>	274	0	0	0	0	245	287	0	90	0	896
<b>Total</b>	536	100	224	186	128	477	522	230	350	270	3,020

### Recruitment and training of CBTs

VSLA activities were implemented by Community Based Trainers (CBTs) who supported groups with training, monitoring and mentoring. A total of 366 CBT's were contracted, with an effort made to recruit refugee CBTs in refugee hosting areas based on learning in the early stages of implementation. CBTs were hired on one-year contracts, and as well as training activities were required collect financial data from the farmer groups.

CBTs were backstopped by NURI VSLA staff, who were responsible for building the capacity of CBTs on the integrated VSLA methodology promoted by NURI. Issues which emerged during the trainings included; handling emergency funds, fund borrowing and its repayment period, multiple memberships in groups, members poor culture of saving, loan default and interest rate on loans. These were concretely addressed by the VSLA team hence, equipping the CBTs with the necessary skills.

### Procurement and distribution of VSLA kits

This activity was done for all the groups selected for support in the implementation period. The package includes assorted items to facilitate documentation, monitoring and safe keeping of funds before banking and /or borrowing by group members. They include a metallic savings box, stationary, calculators and plastic bowls for handling money before storage in the box. All the groups selected for supported received the VSLA kits during the reporting period and have begun using them for their savings activities.

### CBT training of farmer groups in VSLA methodology and household visioning

During the implementation phase of the programme, 3,020 groups were trained in the VSLA methodology implemented. The modules trained include: group formation, general assembly, VSLA concepts, leadership, constitution development, records and conflict management. Under the VSLA concepts, the integration of household visioning was tailored in the second year of implementation to ensure farmers plan for both their savings and production. By design, each CBT trains 6-10 farmer groups per savings cycle. Reports indicate that 92% attendance was recorded across the districts despite COVID 19 restrictions. In terms of gender, more women (99%) attended training compared to men (85%).

It was observed that households adopting the joint household approach achieved more in terms of production and savings. This therefore led to the programme taking a deliberate move to ensure that more households implement the methodology. This resulted into households addressing the issues of gender-based violence (GBV) since resources were transparently allocated and utilized, increase in production hence increased household incomes.

### Monitoring farmer group savings activities

During the implementation period, monitoring of farmer group savings activities and utilization of funds borrowed for both production and business activities was done. VSLA savings provided financial safety nets for farmers, reducing the likelihood of selling off productive assets during emergencies. Besides the main savings, group members save for emergencies in a 'Welfare fund'. This fund acts as an insurance for the farmers and is more easily accessible than the main savings fund.

### Saving monitoring for groups supported in VSLA

In the entire 4 years of implementation, the VSLA team monitored portfolios of groups for 13 months before they get ready to share out groups cumulatively saved UGX 13,662,583,900 with an average annual growth rate of 71%. Findings indicate that across the districts, Moyo had the highest average savings per member at UGX 275,220 and the least was from Agago at UGX 82,737. In general, women saved more than men, with their savings constituting 78% of total savings. This is attributed to women's engaging in IGA activities and their commitment to VSLA as seen in higher attendance. Youth engagement improved during programme implementation and by 2022 youth were fully engaging in VSLA activities and progressed to a level where, in some groups their savings were higher than for the wider group. Return on investment increased from 7.1% in 2019 to 22.5% in 2022.

Table 3.1.6 Accumulation of savings across the years.

Savings	2019	2020	2021	2022
Cumulative savings	154,146,200	1,942,771,200	7,272,808,200	13,662,583,900
Savings women	110,520,500	713,678,200	3,488,346,400	7,017,792,600
Savings Youth	31,627,000	382,207,900	1,385,262,700	2,683,360,500
Savings Refugees	11,249,700	240,428,900	501,605,700	1,937,294,300
Returns on savings	7.10%	17.60%	19.30%	22.50%

### Loans monitoring for groups supported in VSLA

In the programme implementation period, it was noted that VSLA loans were borrowed by the members at an interest of 10% per months for a period of 3 months. Cumulatively groups borrowed UGX 13,981,154,500 with the women, youth and refugees borrowing averagely 66%,23% and 9% of the loans. These loans were mainly used to fund business and agricultural production that constituted 38% of the loans borrowed on average. The agricultural activities funded by the VSLA loans included land preparation, weeding, harvesting, input procurement and procurement of post-harvest equipment.

Table 3.1.7 Loans borrowed across the years

Loans	2019	2020	2021	2022
Cumulative loans	124,990,200	1,974,192,000	7,519,051,500	13,981,154,500
Loan borrowed by women	86,138,900	1,156,803,500	5,218,884,200	9,626,980,600
Loan borrowed by Youth	25,804,100	403,557,900	2,068,582,500	3,375,611,500
Loans borrowed by refugees	4,288,000	177,119,800	500,684,300	2,296,736,300
Cumulative Agricultural loans	24,469,500	1,029,140,000	3,567,463,800	4,708,930,000

From the reports provided, districts without refugees utilized more of the loans to fund agricultural activities with the highest which is Koboko 61%, Zombo 56% and Agago 54% compared to those hosting refugees Arua 21% and Obongi 25%. This can be attributed to the fact refugees have lower access to agricultural land.

### Social fund

To enable farmers to absorb shocks and avoid side-selling, the programme followed the VSLA practice of including a social fund to allow member to cater for emergencies. Throughout the implementation period, NURI farmers groups contributed to the social funds of their VSLAs, eventually saving fund of 1.2 billion UGX to cater for emergencies such as medical bills, scholastic materials, funeral etc.

### Graduation of Farmer groups

Each VSLA cycle takes 8-12 month after which action audit, or share out takes place. Of the VSLA groups started under the programme a total of 2,941, or 97% had graduated, and performed share out at least once. The groups shared out almost 17 billion with average take home per member of UGX 206,419. After graduation, most groups are expected to regroup and start a new cycle. By the end of 2022, 82% of NURI groups had reformed and commenced on a new cycle of saving.

**Table 3.1.7 Share-out information**

District	Savings	Interest earned	Amount shared	Average take home per member
Kitgum	945,116,300	166,340,469	1,111,456,769	166,212
Lamwo	1,363,380,000	252,225,300	1,615,605,300	164,522
Adjumani	1,450,568,900	381,499,621	1,832,068,521	135,769
Zombo	517,143,000	145,317,183	662,460,183	135,806
Arua/Terego/Madi Okollo	3,252,695,000	914,007,295	4,166,702,295	287,537
Nebbi	1,054,581,400	355,393,932	1,409,975,332	262,712
Obongi	2,005,869,300	345,009,520	2,350,878,820	229,892
Koboko	467,415,000	57,959,460	525,374,460	184,666
Pakwach	732,505,000	169,941,160	902,446,160	264,725
Agago	701,691,500	136,829,843	838,521,343	98,871
Moyo	1,171,618,500	275,330,348	1,446,948,848	399,899
<b>Total</b>	<b>13,662,583,900</b>	<b>3,199,854,129</b>	<b>16,862,438,029</b>	

### Linking farmer groups to Financial Institutions

NURI VSLA team worked throughout the programme to link VSLA groups to financial institutions. The efforts were concentrated in the second and third year of the programme when groups had gone through at least one savings cycle, and were stable in their membership and savings routine. A total of 193 groups opened accounts with different commercial financial institution and SACCOs. By the end of the programme, these groups had saved UGX 176,077,000. There were considerable challenges in access and cost of operation, that discourage groups from opening accounts, however

the security of funds, and the possibility of loans and other services from financial institutions make linkage an important aspect in ensuring groups access to financial services, and the aim of increasing financial inclusion.

### **TALANTA Finance Limited Animal traction loan services to farmer groups in Agago**

In 2021 NURI partnered with Talanta Microfinance to pilot animal traction loan services to farmer groups in Agago district. This is done through provision of animals to the farmer groups, with repayment over 2 years at 1.5% interest per month. Farmers were required to deposit 30% of the loan amount as commitment and interest to take the loans. Together with Talanta Microfinance, NURI staff were able to sensitize 56 farmer groups from the four sub counties of Patongo, Lokole, Lira Palwo and Wol.

After joint sensitization, 42 farmers from four groups took up loans and paid 30% of the loan requirement to Talanta. A total of 66 animals and 6 ox ploughs were distributed to 42 farmers from Patongo sub county. However, 6 of the animals died due to unknown reasons and while Talanta had claimed to have insurance in place they did not compensate the farmers who lost the animals.

In general, Talanta have not been successful in follow-up and trust building with farmers and repayment systems have not worked well, with the bank taking in repayments, closing their branch in Agago. While the collaboration has shown that farmers are willing to take out loans for animal traction, the system for repayment and supporting services have undermined the success of the initiative.

### ***3.1.3 Capacity Building of CSA Staff***

NURI staff capacity building activities aimed to ensure staff had the technical expertise needed to deliver on the objectives of the programme. As well as regular on-the-job training and mentoring within each of the Implementing Units, NURI CF organised a number of specialised trainings for staff, including representatives from DLGs where relevant. Major trainings carried out during the period are highlighted below:

1. Orientation and induction of newly recruited extension staff: this was conducted during the first quarters of 2019 and 2020. The objective was to introduce the newly recruited staff to NURI programme policy guidelines including financial management, procurement, HR and technical related issues.
2. Training on VSLA methodology: VSLA staff were trained on the methodology used in NURI. Additionally, the VSLA staff conducted seminars for the rest of the extension teams to create awareness about the methodology throughout the team. CSA staff have in some cases synchronised their CSA training sessions with VSLA meeting days, boosting attendance.
3. Training on SAVIX: The training was conducted by the NURI VSLA Coordinator for all the VSLA staff and RAU Unit/CSA Coordinators. The aim of the training was to equip the staff with the skills and knowledge on the usability of the system.
4. Training on Climate Smart Agriculture: NURI CF organised and conducted CSA training for extension staff. The training was organised in close collaboration with NARO-ZARDI focusing on knowledge and skills on CSA technologies. Concepts on climate change and its impact on production and good agricultural practices were key topics handled during these trainings.

5. Training on vegetable and fruit tree production was organised for extension staff working with refugee groups in the selected settlements of operation. All the CSA Coordinators, RAU Coordinators, AES and AEOs participated in the trainings.
6. Training on Production and Marketing Plans (PMP): All Unit Coordinators, CSA Coordinators, AES and AEOs recruited were trained on preparation of PMP. The training was both theoretical and practical and teams conducted pre-tests before rolling out the exercise.
7. Training on Post-harvest handling: PHH is one of the sessions in the CSA training program. All extension staff received four days practical training by a team of consultants from NARO. The core objective was to equip the staff with knowledge on PHH practices that would in turn be imparted on to the farmer groups.
8. Resilience Design training by DRC included a selected team of CSA officers. The participants went on to develop a training curriculum and, with support from NURI CF, to roll-out their learning to the wider CSA groups.
9. Resilience design training for all extension staff in all implementation units was conducted in March and April, 2021. The training was conducted by staffs who were the first participants of the training organised by DRC. The training is to enable the programme build synergies across the three output areas of implementation as well as strengthen climate smart aspects of Output 1.
10. Plant Clinic training: NURI CF in collaboration with MAAIF organized one-week training in Kitgum district on setting up plant clinics. AEOs from the units and implementing partners attended the training. The DLG production departments also attended the trainings. They learnt to identify and diagnose pests and diseases occurrence as well as offer recommendations. They are working closely with the production department to support farmers in disease and pest management.
11. Training on Sexual Right and Health Right (SRHR): CARE International under the UNFPAs WAY programme conducted various trainings of the CSA staff. The aim of the training was to enable staff make relevant referrals where SRHR cases have been reported to the extensionists in the field.
12. Training on NURI M&E Framework: The training was conducted for all the extension staff with the objective of building the capacities of the newly recruited staff on M&E reporting while emphasizing their core M&E roles in NURI CSA. There were several refresher trainings during the 4 years of the programme.

### ***3.1.4 Sensitize farmer groups on SRHR & GBV issues (UNFPA WAY programme)***

The Sexual Reproductive Health and Rights and Gender Based Violence (SRHR & GBV) component of NURI was implemented by Care International, financed through a DANIDA grant to UNFPA. CARE conducted training of CSA staff and CBTs in SRHR & GBV to equip them with knowledge and skills to conduct sensitization of NURI beneficiaries and where possible make referrals. The aim was to build the capacity of staff to raise awareness, and make referrals of SRHR related matters to institutions that could support such cases. All the CSA staff in Agago, Kitgum, Lamwo, Arua, Moyo/Obongi and Adjumani were trained. Other NURI districts are not included under the WAY programme.

## 3.2 Output 2: Rural Infrastructure

The objective of this output was to improve agricultural related infrastructure using labour-intensive approaches. This was to contribute to increased agricultural production and marketing through improved access to local retail and bulk markets. It further created temporary off-farm employment through cash-for-work modality. Activities were implemented under the following outputs:

- Prepare infrastructure investment plans for approval
- Implement approved infrastructure projects

The full report by the implementing partner, DRC, as well as the RI manual, which has details on the types of activities implemented under this output are available on [www.nuri.ag](http://www.nuri.ag)

From the second year of implementation the concept of resilience design was introduced into RI activities. An introduction to the concept is included as Annex 3 of this report.

### 3.2.1 Prioritized Infrastructure Investment Plans Approved

Activities under this output included sensitization activities, revalidation of parish development plans, selection and prioritization of projects at the sub-county level, technical screening and costing of prioritized projects. Formation of parish development committees and revalidation of the development plans.

#### Project Types and Resilience Design Interventions

The types of projects are described in detail in the RI manual, with the differences between those projects including resilience design, and those, implemented in the first 2 years of the NURI programme, following traditional implementation, are described in Annex 3. The basic definitions are described below, though each site was unique:

1. **Food Forest** – Food forest under RI were of at least 1 acre, and implemented at an institution – schools, mosques, churches or sub-county office. Resilience design interventions including multi-species tree planting, including fuel, fibre, food, fodder, medicinal and nitrogen-fixing species. Food forests include soil and water harvesting and management with structures such as bioswales, infiltration pits / silt traps, smile berms and farmer-managed natural regeneration (FMNR) of trees on the site.
2. **Protected Spring** – Protected springs were at sites of natural springs, with sufficient water flow to justify investment in spring protection. Resilience design around springs included establishment of water recharge systems, including bioswales and road water harvesting systems and infiltration pits / silt traps. Depending on the site, further interventions included Food Forest establishment, stone-works such as check dams and one rock dams as well as extensive planting of trees and ground cover to protect earthworks and stone-works.
3. **Community Access Roads (CARs)** - Each community access road was divided into 1 km projects for convenience of management of cash-for-work activities. Resilience design includes road-water harvesting and management through bioswales, infiltration pits or silt traps, mitre drains, scour checks and tree and grass planting as appropriate. Also borrow pit management, and where possible conversion to water storage. Bioswales constructed to reduce flooding of roads provides fertile soils and moisture for permaculture. In some soil types bioswales also limit erosion on roadsides. There are examples of community replication of bioswales in their farm lands.

4. **Water Ponds** – Water ponds were established for water management including water for livestock and crop production. Resilience design features included bioswales, smile berms to encourage vegetation growth, infiltration pits and check dams. There was bioengineering of sites including the planting and protection of tree and grass, including Vertiver grass, and other deep-rooted and resilient grasses

### **District Inception Meetings**

District inception meetings were held in all implementing districts in 2019 and 2020 at the start of Output 2 implementation. In total, 1,095 (778 male and 317 female) participants attended, including representatives from district technical teams and politicians. The main objective of this activity was to familiarize the key stakeholders at district level with the program, create synergies and collaboration with organizations implementing similar projects.

### **Sub-county and settlement sensitisation meetings**

The main objective of this activity was to ensure the local leaders, including newly elected leaders had full understanding of NURI activities, as well as their roles and responsibilities during implementation. The meetings were conducted in collaboration with CSA implementing units and district and sub county authorities. The participants from the DLG were Chief Administrative Officers (CAO), LCV Chairpersons, Secretaries of Production, Secretaries of Works and Technical Services, Secretaries of Health and Education, Secretaries of Finance, District Engineers and water officers and the NURI District Focal Point Officer. At the sub counties the participants were Sub-County Chiefs, Community Development Officers, Agricultural Officers, Parish Chiefs, District Councillors, LC II and Sub-County Councillors. A total of 8,334 (4,978 male and 3,356 female) attended the district and sub-county sensitization meetings over the course of the programme, in 97 venues, including District and sub-county headquarters.

### **Formation of Parish Development Committees (PDCs) and Revalidation of Parish Development Plans (PDPs)**

To ensure effective and consistent planning DRC supported the establishment or reconstitution of Parish Development Committees (PDCs) in all districts at the start of implementation, through a bottom-up approach.

The formed or reconstituted PDCs consisted of 20 to 25 members, with 9 executive members including the Local Council (LCII) as the chairperson and the Parish chief as the secretary. PDCs representatives included elders, youth (both male and female), veterans, retired civil servants, and women representatives, persons with disability, councillors and Local Council (LC I) Chairpersons. PDC formation was conducted in coordination with the District Planning units. The PDCs were responsible for revalidation of the Parish development plans. They also participated in prioritization and selection of projects at sub county level.

After reconstitution PDCs were inducted on local government planning process, selection, and prioritization of projects in line with NURI guidance for Rural Infrastructure (RI) intervention, which focused on labour-based approaches. The District Planners conducted the induction of PDCs.

**Table 3.2.1 Distribution of formed or reconstituted PDCs across NURI Districts**

S/No	District	No of Parishes	PDC Members registered		
			Male	Female	Total
1	Adjumani	48	270	230	500
2	Arua	88	1100	1,100	2,200
35	Lamwo	30	354	123	477
4	Kitgum	45	563	562	1,125
5	Agago	78	1,155	219	1,374
6	Moyo	23	401	147	548
7	Pakwach	25	373	252	625
8	Koboko	41	721	304	1,025
9	Obongi	15	213	53	266
10	Nebbi	44	924	176	1,100
<b>Total</b>		<b>437</b>	<b>6,074</b>	<b>3,166</b>	<b>9,240</b>

### Revalidation of Parish Development Plans

The purpose of revalidating PDPs was to identify and/or include activities that appropriate for inclusion under NURI. Revalidation of PDPs was carried out in the sub-counties in 2019 and 2020. In some districts revalidation of PDPs happened during the time of partial lockdown in 2020 and restrictions had to be observed. The ideal practice was for all the 25 members of the PDC to be engaged however during COVID-19 5 to 9 members of the PDCs were allowed to attend revalidation meetings at the parishes. The Parish Chiefs, CDOs and DRC staff facilitated the process. Projects, suitable for implementation under NURI Output 2 were generated from village priorities following Government planning process under the National Planning Authority (NPA) with focus on community engagement and accountability.

### Selection and prioritization of projects at the sub-county level

Following development of the PDPs, DRC facilitated Sub County Technical Planning Committees to prioritize projects from the Parish priorities using pairwise scoring sheets. The focus was on agricultural related infrastructure projects, which could be done by labour-based approach, and these included community access roads (CARs), functional markets (Grade C), water ponds, spring protection and establishment of food forests in institutions. The prioritization and selection of projects was done at Sub county Level. The Parish Chiefs and the Sub county Community Development Officers guided the selection and prioritization of projects contributing to NURI objectives.

### Technical Screening of Projects

Prioritized projects were subsequently screened for technical viability. Screening and costing of prioritized projects were done by DRC with support from the district and sub county technical staff. The staff from the districts included District engineers, Production officers, Forestry officers, Water Officers, Environment Officers and Commercial Officers. BoQs were prepared and projects were costed. It should be noted that the technical staff from the DLGs were dissatisfied with the official LDPG rate of 20,000 UGX as Safari Day Allowance and this to some extent discouraged their fulltime participation during screening of projects as other development partners paid higher rates.

## **Preparation and approval of Investment Plans by the DTPC and sign off by DEC**

Project funds for RI activities were allocated to the 13 districts according to the population and land size, and districts were informed accordingly. After technical screening of projects and preparation of the BoQs, Investment plans capturing all prioritised and costed projects for each sub-county were presented to the DTPCs for review and approval. DEC signed off investment plans after recommendation by the DTPC.

Under RI, projects were defined as follows: 1 km of a community access road is considered a project, 2 acres of food forest is a project, a water pond, spring protection and a market are considered as projects.

### ***3.2.2 Implementation of Approved Infrastructure Projects***

After the completion of all planning and preparation activities, implementation of RI projects began, through a series of activities.

#### **Community Site Dialogue Meetings and Signing of Project Implementation Agreements**

Site dialogue meetings were carried out for all projects, by DRC and local authorities, once Investment Plans were approved. Communities were proactively engaged to mitigate conflict on issues related to land access for project sites. The purpose of the meetings was to ensure that all stakeholders had full information on the details of infrastructure works and that safe accesses to the project sites were guaranteed. This process increased awareness on projects in the local communities and encourages participation.

DRC involved local leaders including Parish chiefs, Local Council I, II and III chairpersons, opinion leaders and refugee welfare councils (RWCs) and the settlement commandants during site dialogue meetings. The meetings addressed issues such as land disputes, demarcation of boundaries for project land, seeking community approval of projects and discussing other potential threats before start of implementation. Other issues addressed included cash payment rate, workdays, type and nature of the public works and cash payment modalities. Site dialogue meeting minutes were prepared and signed by the local authorities and shared with stakeholders. For all projects, voluntary land donation agreements were signed between the property owners and the sub county authorities.

A total of 1,133 Site dialogue meetings were conducted across all districts. Meeting minutes have been prepared and signed by local authorities.

#### **Community Groups Formation**

DRC worked with local authorities in all the 13 districts to identify participants and form local community groups that were willing and able to participate in the construction of NURI projects. The process of selection of group members was headed by Parish Chiefs and the LC I of the respective areas, and supported by DRC field staff. Local leaders played a key role in verifying members' residence status within the respective communities. During group selection, DRC ensured that all group members were within walking distance to the project site, and that at least 50% were female and 60% were youth aged of 18 to 28 years. Over the course of NURI programme implementation, a total of 1,504 groups comprised of 42,924 members, across all 13 districts and five refugee

settlements, were formed. Members included 22,632 (53%) men, 20,292 (47%) women and 24,686 (58%) youth.

### **Project Management Committees (PMCs) Formed and Members Trained**

For all RI projects, PMCs comprised of a Chairperson, Secretary, Treasurer and one committee member, were formed. PMCs were elected by the group, and trained to oversee group activities, including management of the group register, control of tools, preparation of detailed work plans, organization and supervision of work, maintenance of attendance registers, support in issuing payments to members, and handing over tools to PUCs after completion of works. A total of 6,016 (3,005 female and 3,011 male) individual group members were elected and trained as PMC members, across the 1,504 projects implemented.

### **Procurement and Distribution of Tools**

Tools and materials were procured and distributed to the 1,504 community groups for implementation of infrastructure projects. The tools were distributed after successful completion of site dialogue meetings and PMC trainings. The tools comprised of hoes, spades, wheel barrows, bonding rods, measuring tapes, strings, buckets, crow bars, hammers, first aid kits etc. Also distributed were seedlings for food forest establishment, which included different varieties including: Teak, Afzelia, Mvule, and Neem (canopy), Tamarind, Tangerine, Pawpaw, Bananas, and Guava (Fruit seedlings) and Sesbania, Aloe vera, Hibiscus, and Ginger (Shrubs).

### **Implementation of approved projects**

Out of 1,504 projects approved in the investment plans since the commencement of the NURI programme, 1,486 (99%) had been fully completed by the end of 2022, while 18 were ongoing. The completion of the ongoing projects was agreed to be implemented and completed during the first quarter of 2023, during the NURI extension. The main reasons for delays in completion of projects were the breakdown of equipment, both that were borrowed from Districts, and that of private contractors. Private contracts facing financial difficulties during implementation was another common challenge leading to delays.

Testing of construction materials as a means of assuring quality greatly reduced on losses resulting from premature failure of structures in previous instances. This has improved on the image of NURI Program as well as working relationship between DRC and the local governments.

The following table provides a comprehensive overview of project status:

**Table 3.2.3: Status of Approved Rural Infrastructure Projects at December 2022**

District	CAR		Market		Food Forest		Springs		Water Ponds		Total		
	Plan	Complete	Plan	Complete	Plan	Complete	Plan	Complete	Plan	Complete	Total Plan	Total Complete	
Adjumani	86	77	0	0	50	50	4	4	3	3	<b>143</b>	<b>134</b>	<b>94%</b>
Agago	82	82	1	1	24	24	8	8	7	7	<b>122</b>	<b>122</b>	<b>100%</b>
Arua	65	65	4	4	45	45	37	37	0	0	<b>151</b>	<b>151</b>	<b>100%</b>
Imvepi	46	46	1	1	29	29	2	2	3	3	<b>81</b>	<b>81</b>	<b>100%</b>
Kitgum	47	38	1	1	31	31	0	0	3	3	<b>82</b>	<b>73</b>	<b>89%</b>
Koboko	43	43	2	2	26	26	15	15	7	7	<b>93</b>	<b>93</b>	<b>100%</b>
Lamwo	56	56	2	2	25	25	1	1	4	4	<b>88</b>	<b>88</b>	<b>100%</b>
Madi Okollo	35	35	0	0	46	46	5	5	0	0	<b>86</b>	<b>86</b>	<b>100%</b>
Moyo	37	37	0	0	13	13	6	6	3	3	<b>59</b>	<b>59</b>	<b>100%</b>
Nebbi	31	31	1	1	37	37	12	12	3	3	<b>84</b>	<b>84</b>	<b>100%</b>
Obongi	102	102	0	0	60	60	1	1	1	1	<b>164</b>	<b>164</b>	<b>100%</b>
Pakwach	30	30	0	0	14	14	0	0	4	4	<b>48</b>	<b>48</b>	<b>100%</b>
Palabek	18	18	0	0	23	23	0	0	0	0	<b>41</b>	<b>41</b>	<b>100%</b>
Rhino Camp	61	61	0	0	64	64	10	10	1	1	<b>136</b>	<b>136</b>	<b>100%</b>
Terego	15	15	0	0	12	12	6	6	0	0	<b>33</b>	<b>33</b>	<b>100%</b>
Zombo	24	24	0	0	17	17	52	52	0	0	<b>93</b>	<b>93</b>	<b>100%</b>
<b>Total</b>	<b>778</b>	<b>760</b>	<b>12</b>	<b>12</b>	<b>516</b>	<b>516</b>	<b>159</b>	<b>159</b>	<b>39</b>	<b>39</b>	<b>1504</b>	<b>1486</b>	<b>99%</b>

## Formation of Project User Committees (PUCs)

As part of NURI sustainability plans, PUCs were formed for each completed project. The PUC members were all comprised of nominated members of the user's groups and assumed responsibility for:

- Leading the process of formulating and submitting by-laws for approval by local councils.
- Preparing maintenance work plans
- Mobilising resources for the maintenance of created assets.
- Mobilising community members to carry out periodic maintenance.
- Reporting any problems in regard to the infrastructure to local authorities.

During the reporting period, a total of 7,883 individuals (4,528 men and 3,355 women) formed 864 PUCs. Each PUC averaged 9 members, including a chairperson, vice chairperson, secretary, treasurer and five other members, all of whom were provided with training by DRC and District Technical staff on their roles and were supported to develop maintenance plans and by-laws. DRC ensured that PUCs are followed up and supported for 6 months after commissioning of projects.

PUCs were not formed for food forest or market projects as these are handed over to institutions and sub-counties for ongoing management and maintenance. In the case of markets, sub-counties subsequently outsource management and maintenance through market tenderers.

**Table 3.2.5 Project User Committee Members Trained Per District**

District	PUCs	Male	Female	Total
Adjumani	85	442	325	767
Agago	59	298	233	531
Arua	69	425	457	882
Imvepi Settlement	43	235	152	387
Kitgum	64	315	262	577
Koboko	65	291	294	585
Lamwo / Palabek Settlement	81	473	257	730
Madi-Okollo	41	246	123	369
Moyo	29	149	110	259
Nebbi	28	134	109	243
Obongi	98	419	272	691
Pakwach	34	182	124	306
Rhino Camp Settlement	72	322	326	648
Terego	21	115	74	189
Zombo	75	482	237	719
<b>Total</b>	<b>864</b>	<b>4528</b>	<b>3,355</b>	<b>7,883</b>

### **Field Coordination Meetings**

Over the course of Programme implementation, a total of 173 field coordination meetings were conducted across all districts. These meetings enhanced effective collaboration with other stakeholders. DRC also participated in monthly coordination meetings organized by the DTTCs. Other coordination meetings included the monthly coordination meetings organized and chaired by the Regional Coordinator for the NURI Coordination Function, RAU partner and the NURI Focal Point Officers. The meetings were conducted to share issues of coordination and harmonization of activities, to build synergies between DRC and RAU, and share lessons and challenges.

### **Community Sensitization Meetings**

Community sensitisation meetings were conducted on project activities across the districts to create awareness on safety of the water ponds, the importance of resilience design structures constructed along the newly opened and rehabilitated CARs, and the importance of maintenance of established structures. Attendances included community members and local leaders. The sensitizations were conducted in such a way that beneficiary communities were mobilized at a central point.

### **Commissioning of Completed Projects**

Over the course of the programme, commissioning of completed projects was carried out in 13 districts and five refugee settlements. In total, 1,302 (87%) projects were commissioned by the end of 2022, with the remainder to be handed over in the first quarter of 2023. Prior to commissioning DRC submits the list of completed projects to the district technical teams for final inspection of the projects. The DTTCs carry out final inspection of the completed projects. In case some defects are identified during final inspections, DRC makes corrections on the defects and the district technical team make another final inspection. In some districts the politicians, including Resident District Commissioners and LC V Chairpersons, also carry out quality checks of the projects to be commissioned. The DTTCs thereafter provide the final inspection reports and completion certificates for projects that have been approved for commissioning.

DRC provides documentation on maintenance plans and bye laws, a list of projects to be commissioned, completion certificates and details on Project User Committees prior to commissioning.

On the date set for commissioning one project is selected for cutting of the ribbon. The participants invited for commissioning ceremony include communities, sub county officials, district officials, DRC and NURI-CF staff. DRC provides refreshments for all the members present and SDA and fuel for government officials.

### 3.3 Output 3: Water Resource Management

This intervention aimed to improve the enabling environment for smallholder farming by increasing water availability, reducing the impact of climate change and extreme weather events, and countering environmental degradation, leading to improved yields and decreased incidents of crop failure. The planning and monitoring are done by Upper Nile Water Management Zone under Ministry of Water and environment with Danish Refugee Council carrying out implementation of planned infrastructure. The activities were implemented under the following outputs:

- WRM micro catchment plans developed (MWE - UNWMZ)
- Approved WRM infrastructure projects constructed (DRC)

The full report by the implementing partner, DRC, as well as the WRM manual, which has details on the types of activities implemented under this output are available on [www.NURI.ag](http://www.NURI.ag). Implementation included the concept of resilience design, an introduction to the concept is included as Annex 3 of this report.

The WRM component of the program were implemented in:

- Awic micro-catchment located in Lamwo district,
- Ogowapoke micro-catchment located in Kitgum district
- Ayila Abongo micro-catchment shared between Nebbi and Pakwach districts
- Nyarwodho micro-catchment located in Nebbi district
- Iboa micro-catchment shared between Moyo and Obongi districts
- Nyivura micro-catchment located in Adjumani district
- Ora micro-catchment located in Zombo district
- Yelulu micro-catchment shared between Terego and Madi-Okollo districts.

The projects within these micro-catchments benefited both refugees and host communities in the refugee settlements of Adjumani, Palabek, Palorinya and Rhino Camp.

The WRM manual, which guided implementation, is available at [www.nuri.ag](http://www.nuri.ag)

#### ***Development of the micro-catchment plans by UNWMZ***

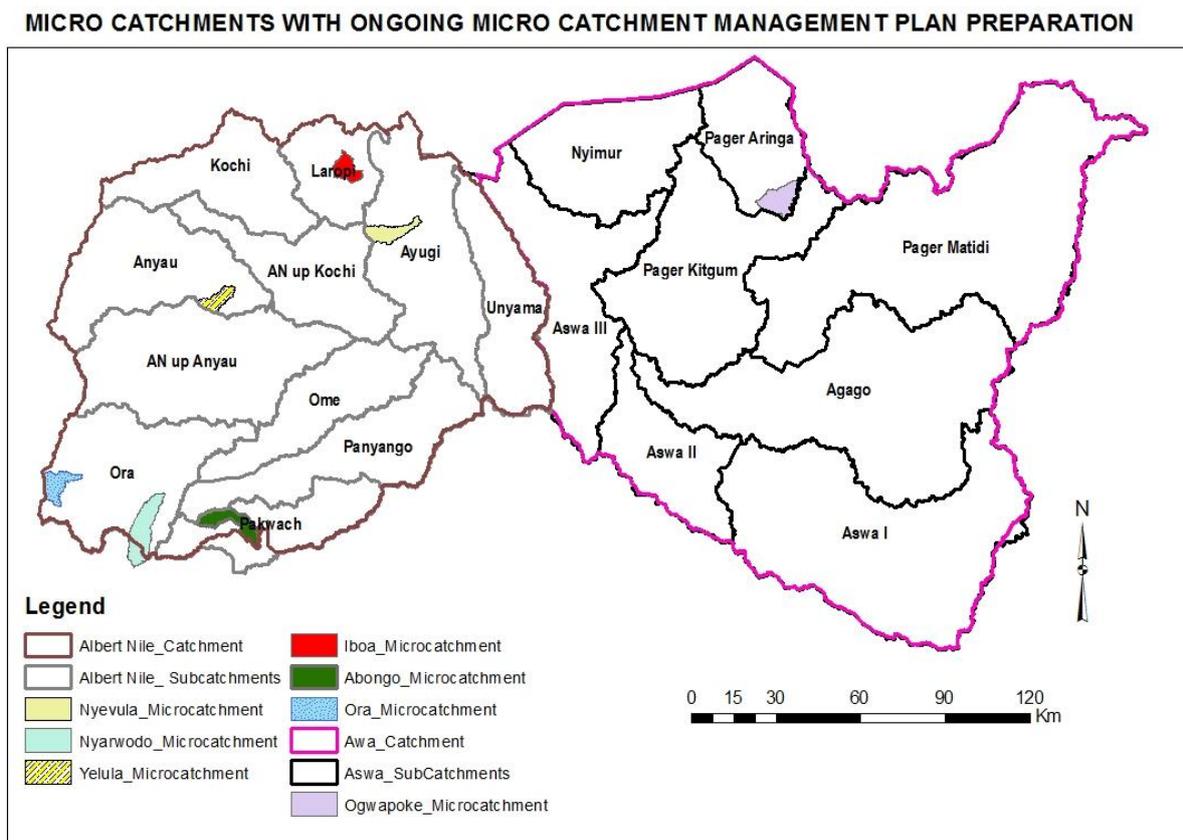
MWE / UNWMZ was responsible for the selection of the eight micro-catchments based on detailed assessments and using selection criteria spelt out in the project DED. After selection, UNWMZ lead development of micro-catchment plans for the selected catchments. Once plans were developed with support from consultants supervised by UNWMZ, plans were presented to stakeholders for approval with involvement of the relevant Catchment Management Committees as well as the UNWMZ representatives, DECs of the relevant Districts, Micro-Catchment Management Committees (mCMC) and other stakeholders. COVID-19 led to some delays in preparation and presentation of the micro-catchment plans, and the majority were prepared, presented in 2020 and 2021.

Throughout programme implementation, the UNWMZ team worked closely with NURI CF and DRC to ensure the plans guided selection and implementation of projects and to address any issues as they arose.

#### **Development of effective community agreements/bylaws on natural resource management**

UNWMZ completed the development of bylaws for all the micro-catchments during the reporting period and remains engaged in the dissemination of the by-laws to the relevant stakeholders.

**Figure 3.3.1 MAP SHOWING THE LOCATION OF THE 8 MICROCATCHMENTS IMPLEMENTED**



### ***WRM Infrastructure Implementation***

Once Micro-catchment assessments were complete and approved, they were handed to DRC for implementation of activities. The full report from DRC as well as the WRM manual are available at [www.nuri.ag](http://www.nuri.ag). The main activities implemented under this output include:

1. District and Subcounty Sensitization Meetings, Screening of Identified implementable Projects from micro-Catchment Management Plans (mCMPs) developed by Ministry of Water and Environment (MWE) through Upper Nile Water Management Zone (UNWMZ)
2. Presentation and approval of the Investment Plans
3. Site Dialogue Meetings (SDM) and signing of voluntary Land Donation (VLD) forms
4. Formation of Cash for Work (CfW) groups
5. Selection and training of Project Management Committees (PMC)
6. Distribution of project tools
7. Establishment (Planting) of Food Forests and River Bank Systems
8. Public work activities on Green Roads for Water (GR4W) formation of Project User Committees (PUCs) and Water User Committees (WUCs)
9. Radio talk shows
10. Project Implementation and Monitoring by District Executive Committee (DEC) District Technical Planning Committee (DTPC), micro-Catchment Management Committee (mCMC) and Sub-County staff.

## Project Types

The types of projects, in many cases combined within one site, were defined and described in the WRM manual. The basic definitions were as described below, though each site was unique:

1. **Food Forest** – Each food forest system under WRM was of at least 2 acres, and were implemented on individually owned land, based on micro-catchment management plans. Resilience design interventions including multi-species tree planting, including fuel, fibre, food, fodder, medicinal and nitrogen-fixing species. Food forest include soil and water harvesting and management with structures such as bioswales, infiltration pits / silt traps, smile berms and farmer managed natural regeneration (FMNR) of trees on the site.
2. **Protected Spring** – Protected springs were at sites of natural springs, with sufficient water flow to justify investment in spring protection. Resilience design around springs included establishment of water recharge systems, including bioswales and road water harvesting systems and infiltration pits / silt traps. Depending on the site, further interventions included Food Forest establishment, stone-works such as check dams and one rock dams as well as extensive planting of trees and ground cover to protect earthworks and stone-works.
3. **Green Roads for Water GR4W** - Each GR4W project was defined based on the objective of connecting a community with targeted services as guided by the micro-catchment plans. GR4W design elements were contextualized to each setting and informed by the World Bank guidance as per the document *Road Infrastructure in Support of Water Management and Climate Resilience*. Resilience design includes road-water harvesting and management through bioswales, infiltration pits or silt traps and tree and grass planting as appropriate. Also borrow pit management, and where possible conversion to water storage. Bioswales constructed to reduce flooding of roads provides fertile soils and moisture for permaculture. In some soil types bioswales also limit erosion on roadsides. There are examples of community replication of bioswales in their farm lands.
4. **Soil and Water Conservation Structures** – These were in most cases implemented as part of other WRM projects. All soil and water conservation structures, which include bioswales, infiltration pits, bench terracing, gully plugging, one rock dams, cutting down general slopes to manageable segments, stabilizing with stone slates, and planting slopes with fast-growing trees, each with a water harvesting structure (smiling berm). Soil and water structures also included riverbank restoration or protection, with resilience design including training the river course, excavation of catch drains and bioswale, planting of trees, grass (Vertiver and Napier), and other deep-rooted and resilient grasses to stabilize river embankments and reduce erosion into the river.
5. **Water Infrastructure (Water Ponds)** - Resilience design includes excavation of ponds on contour, extending the catchment areas using bioswales, smile berms to encourage vegetation growth, and shallow infiltration pits and check dams. There is bioengineering of sites including the planting and protection of embankments, trees, and grass, including Vertiver, and other deep-rooted and resilient grasses. Water infrastructure was integrated with soil and water conservation activities.

## Project Screening Activities

DRC received micro catchment management plans (mCMPs) from UNWMZ after stakeholder review and validation workshops. Based on mCMPs relevant projects were selected for implementation with maximum use of labour-based approaches, in accordance to NURI objectives. Selected projects underwent social, environmental and technical screening. Screening of Water resources projects were carried out with the district technical planning team (DTPC), including the District

Engineering, Forestry and Water departments, to ascertain the viability of the identified projects for implementation within NURI-WRM project scope. DRC engineering staff spearheaded the screening and costing of the selected projects and developed investment plans for presentation to the DTPC, UNWMZ and the Chairpersons of Albert Nile and Aswa Catchment Management Committees (CMC) for approval.

### Preparation and presentation of Plans for Approval

Investment plans for Ayila Abongo, Iboa, Nyarwodho, Nyivura, Ogowapoke and Yelulu mCs were prepared, presented and approved between 2020 and 2021. In 2022, only Awic and Ora mC investment plans were approved. In total, 435 projects across all the 8 micro-catchments were selected and implemented as detailed below.

**Table 3.3.1: Summary of Projects as per Approved Investment Plans**

Micro Catchments	Green Roads for Water	Valley Tank	Food Forests	Springs	Water Ponds	Soil and Water Conservation	Gravity Flow Scheme	Total
Ayila Abongo	2	0	68	11	12	4	0	97
Awic	5	0	38	0	5	0	0	48
Iboa	5	0	36	1	6	2	0	50
Nyarwodho	4	0	27	16	2	5	0	54
Nyivura	5	0	30	6	5	2	0	48
Ogowapoke	5	0	36	1	6	1	0	49
Ora	3	0	25	29	2	0	1	60
Yelulu	3	1	19	2	1	3	0	29
<b>Total</b>	<b>32</b>	<b>1</b>	<b>279</b>	<b>66</b>	<b>39</b>	<b>17</b>	<b>1</b>	<b>435</b>

Two notable projects which were not initially planned for implementation under WRM but were implemented on requests from District authorities are:

- 1. Riba Gravity Flow Scheme (GFS):** Under Ora mC funds for the re-construction of the GFS in Zombo District, which was intended to supply potable water to communities in Ayaka and Amuda Parishes in Akaa sub-county. DRC eventually proceeded with the project following a design review workshop attended by engineers from Northern Umbrella of Water and Sanitation (NuWS), UNWMZ, Zombo DLG and DRC. The major components implemented were abstraction structure at Riba Spring source, sedimentation tank (25m<sup>3</sup> Break Pressure Tank), distribution mains, laterals and 11 public stand pipes.
- 2. Waka Flood Control Works on River Kochi:** This project was undertaken to address flooding that affected Waka parish and the villages of Kochi Boma, Kochi Central and Gborokonyo in Iboa mC, Itula sub-county. Through implementation of river bank restoration works combined with resilience design approaches, including unblocking of the natural water course widespread flooding was controlled.

## Implementation of projects

Implementation of approved projects started with site dialogue meetings, and signing of Voluntary Land Donation forms, formation of Cash for Work (CfW) groups, selection and training of PMC, distribution of project tools, establishment of vegetative interventions, public work activities on GR4W, formation of PUCs and WUCs, and monitoring by DEC, DTPC, mCMC and Sub-County staff.

### Site Dialogue Meetings and Signing Voluntary Land Donation Forms

A total of 187 site dialogue meetings took place over the course of implementation with participation by a total of 11,571 individuals (6,341 male and 5,230 female). The meetings contributed to minimizing potential land dispute issues, and provided space for addressing community concerns and questions. Cash for work beneficiary modalities, groups formation criteria, payment rates and modalities, voluntary land donation forms and the nature of work were also explained during the meetings. All meetings were immediately followed by landlords signing voluntary land donation forms. Over the course of the implementation, turnout for these meetings was high, owing to high enthusiasm by communities.

**Table 3.3.4: Summary of Site Dialogue Meetings and Signing Voluntary Land Donation Forms**

Micro-Catchments	Groups	Participants		Total
		Male	Female	
Ayila Abongo	33	2251	2353	4604
Awic	50	735	803	1538
Iboa	8	414	236	650
Nyarwodho	27	285	300	585
Nyivura	13	188	155	343
Ogwapoke	23	1332	966	2298
Ora	26	660	214	874
Yelulu	7	476	203	679
<b>Total</b>	<b>187</b>	<b>6341</b>	<b>5230</b>	<b>11,571</b>

Although turnout was high, men tended to dominate meetings with the senior male members of communities referred to for decision-making. In such instances, women are invited to sit together for mutual support and explicitly invited to speak. DRC also promotes full debate and stresses that there are no 'right' opinions before decisions are taken.

### Community Groups Formation

A majority of community group formation activities were completed over the course of 2021 however, some micro-catchments for example Awic and Ora formed community groups in 2022. A total of 557 groups were formed for cash for work activities. To encourage participation DRC organised planning meetings before public works started to agree with community members on the most appropriate days of the week and times for scheduling work. Public works activities normally take 4 hours a day, starting in the morning, before the temperatures become hot and this allows ample time for community members to attend to their other activities.

Of the 17,500 participants in cash for work activities 53% were female and 46.7% male. The target Overall, 58.5% of the participants were youths against the 60% program target.

## **Formation and training Project Management Committees**

During the course of implementation, a total of 2,904 (1,451 females, 1,453 males) members of PMCs were trained in theory and practice of construction and maintenance of Green Roads for Water, food forests, protected springs, riverbank restoration and soil and water conservation techniques by district technical and sub-county staff. Each PMC group received a two-day training on the topics of:

- Safe use and application of tools
- Basic project cycle management and inter-personal supervision skills.
- Record-keeping for attendance.
- Work norms and conditions, and methods for payment as per the national policy on cash for work.
- Basic training on how to use first aid kits.
- The DRC's feedback and complaints' mechanism.
- Reporting mechanism for conflicts and risks to relevant stakeholders

Trainings were organised around practical demonstration so that trainees were able to immediately apply their newly learned skills and knowledge. Over the course of the implementation, this activity was affected by COVID-19 due to restrictions placed on the number of people allowed to congregate in one place. DRC responded by dividing trainings into smaller groups, while ensuring strict observation of governmental and organizational standard operating procedures.

## **Procurement and Distribution of Tools and materials**

Tools and materials included hand hoes, spades, slashers, Pangas, axes, measuring tapes, spirit level, wheel barrows, rakes, assorted nails, barbed wire, first aid kits, and hand washing facilities were procured and distributed to 557 community groups. Distribution and type of tools depended on the project type.

## **Implementation status of Approved Projects**

Out of 435 projects approved in the investment plans since the commencement of the WRM component of the NURI programme, 428 (98%) have been fully completed by DRC, while seven (2%) are ongoing. However, four projects (3 GR4W links in Awic and one GR4W link in Nyarwodho mC) will not be completed by end of 2022. These projects will be completed and commissioned in quarter one of 2023.

**Table 3.3.5 Status of Approved Projects**

Micro Catchment	Green Roads for Water		Valley Tank		Food Forest		Protected Springs		Water Ponds		Soil and Water Conservation		Gravity Flow Scheme		Total		
	Plan ned	Compl eted	Plan ned	Compl eted	Plan ned	Compl eted	Plan ned	Compl eted	Plan ned	Compl eted	Plan ned	Compl eted	Plan ned	Compl eted	Total Plann ed	Total Comple ted	%
<b>Awic</b>	5	2	0	0	38	38	0	0	5	5	0	0	0	0	<b>48</b>	<b>45</b>	<b>94</b>
<b>Ayila Abongo</b>	2	2	0	0	68	68	11	11	12	12	4	3	0	0	<b>97</b>	<b>96</b>	<b>99</b>
<b>Iboa</b>	5	5	0	0	36	36	1	1	6	6	2	2	0	0	<b>50</b>	<b>50</b>	<b>100</b>
<b>Nyarwodho</b>	4	3	0	0	27	27	16	16	2	2	5	5	0	0	<b>54</b>	<b>53</b>	<b>98</b>
<b>Nyivura</b>	5	3	0	0	30	30	6	6	5	5	2	2	0	0	<b>48</b>	<b>46</b>	<b>96</b>
<b>Ogwapoke</b>	5	5	0	0	36	36	1	1	6	6	1	1	0	0	<b>49</b>	<b>49</b>	<b>100</b>
<b>Ora</b>	3	3	0	0	25	25	29	29	2	2	0	0	1	1	<b>60</b>	<b>60</b>	<b>100</b>
<b>Yelulu</b>	3	3	1	1	19	19	2	2	1	1	3	3	0	0	<b>29</b>	<b>29</b>	<b>100</b>
<b>Total</b>	<b>32</b>	<b>26</b>	<b>1</b>	<b>1</b>	<b>279</b>	<b>279</b>	<b>66</b>	<b>66</b>	<b>39</b>	<b>39</b>	<b>17</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>435</b>	<b>428</b>	<b>98%</b>

Projects not completed at the time of reporting were on-going and all will be included in, and completed during the first quarter of 2023.

### Formation of Project User Committees

During the reporting period 1,929 (997 female, 932 male) PUC members were formed and trained in the eight micro catchments, with the presence of local leaders. All PUC members continued to be trained on their roles and were supported in the development of maintenance plans. Other processes meant to enhance the ownership also took place during the reporting period including, drafting community by-laws for endorsement by the sub-counties, guiding the communities in preparing maintenance plans, and community sensitization meetings.

**Table 3.3.6 Project User Committees Members Formed and Trained**

Micro Catchment	Female	Male	Total
<b>Awic</b>	44	91	135
<b>Ayila Abongo</b>	123	84	207
<b>Iboa</b>	54	72	126
<b>Ogwapoke</b>	116	169	285
<b>Ora</b>	345	204	549
<b>Nyarwodho</b>	99	128	227
<b>Nyivura</b>	188	163	351
<b>Yelulu</b>	28	21	49
<b>Total</b>	<b>997</b>	<b>932</b>	<b>1929</b>

### Field Coordination Meetings

During this reporting period, DRC participated in 01 Settlement Co-ordination meeting, 04 Sector Working Group meetings and 02 District stakeholder's coordination meetings in Yelulu and Nyivura micro catchments. DRC also attended 8 field-level coordination meetings organized by DLGs, OPM, World Food Programme (WFP), Subcounty and NURI CF. Most partners use this platform for monitoring other partner's activities, share workplans and reports/updates. Furthermore, DRC also attended district inter-Agency coordination meetings on COVID-19 where DRC disseminated information on COVID-19 and recommended SOPs, DRC further provided hand washing soap and facilities to the districts and cash for work groups.

### Commissioning of Completed Projects

Commissioning for the already established projects continued to be conducted across the 8 mCs, formation and training of project/water user committees, and preparation of maintenance plans and bylaws are a prerequisite before commissioning is conducted.

### **3.4 Programme Coordination**

NURI Programme Coordination is the responsibility of NURI Coordination Function (NURI CF). NURI CF is responsible for coordination of programme activities including synergy between the various outputs, and provides technical support to the programme. NURI CF has a team of 10 technical staff and six drivers. Of the technical staff, six are based in Kampala and four in regional offices in Arua, Moyo and Kitgum. CF works in close collaboration with RDE and coordinators/managers of the implementing units and partners and DLG technical staff.

NURI CF carries out a number of supporting roles as well as coordination. The major activities are:

- Coordination and Synergy
- District Capacity Building activities
- Financial Management Activities
- Procurement Activities
- Human Resource Management
- M&E Activities
- Programme exit activities

#### ***Coordination and synergy***

NURI CF is responsible for coordination and synergy across the NURI programme, however, in terms of technical supervision and monitoring, relatively more focus is on CSA where there are a number of different types of implementing units, all implementing similar activities. Implementation of Outputs 2 and 3 by DRC is governed by a contract, which details implementation modalities, and the planning process of Output 3, implemented by the Ministry of Water and Environment, is governed by a separate Development Engagement Document.

Throughout the implementation of the programme a number of activities have been planned and implemented jointly amongst stakeholders and implementing partners across the programme. These include a range of activities and meetings including annual IMC meetings, field monitoring visits, DEC and LLG monitoring, sensitization and community mobilization including national and refugee population.

#### **Radio Talk Shows**

Regular radio shows and messages, including live broadcasts were conducted on local radio stations, in local language, throughout NURI implementation and across the NURI districts. Radio activities were coordinated between CSA implementing units and DRC offices, as well as other stakeholders including DLGs. This provided not only information and an opportunity for feedback on ongoing activities, but acted as a supplement to training and a way to increase outreach beyond NURI participants. The radio shows covered ongoing activities including marketing of agricultural produce. Cross-cutting elements were also covered including SRHR issues.

## **DLG/LLG Monitoring and Supervision by DTPC, DEC, LLGs, OPM/RWCs**

Monitoring and supervisory visits by district and local government leaders including DTPC, DEC, LLGs, OPM and RWCs were conducted on a monthly basis, with DEC monitoring on a quarterly basis. Monitoring visits were organised by District Focal Officers working with CSA Units and DRC regional and district offices. For the first two years of programme implementation these were paid for by CSA budgets, and for the second two years by RI budgets. The technical supervisory visits included inspection and technical backstopping, and were led by the district Engineering Department for Roads and Water Infrastructure, and District Production Officer for CSA activities. The monitoring and supervising teams ensured that plans, agreements and technical designs were followed. In total over 3,000 such monitoring and supervision visits were conducted across the 13 districts. Monitoring visits also covered the 8 micro-catchments and the resilience design activities under CSA and RI, giving DLGs the opportunity to observe and understand issues related to resilience and climate change, as well as environmental, soil and water conservation using simple resilience design principles.

## **Programme Coordination Meetings**

NURI CF has been responsible for organising joint meetings with stakeholders to review implementation of activities, address implementation challenges and discuss strategies for synergy and improvement. Regular meetings started in the second year of implementation, with monthly meetings of NURI CF, quarterly meetings of all CSA Implementing Units, and bi-annual meetings of all implementing partners organised by NURI CF. When relevant other stakeholders were invited to attend some sessions of these meetings, and on occasion visits to field activities were included.

## ***District Capacity Building (DCB)***

NURI CF managed DLG Capacity Building activities, targeting the Production and Engineering Departments of all the NURI Districts. DCB activities aim to strengthening the two government departments most closely linked with NURI activities in their roles in the implementation and sustainability of NURI activities, as well as generally improving the capacity of the two departments.

Each NURI district was supported to developed plans for skills/career development and re-tooling, based on allocated budget and guidelines. Districts which had received support under the previous programme were given minimal support for re-tooling, with focus on trainings, while DLGs not previously supported were provided with a budget for re-tooling as well as the skilling budget. Follow-up meetings were held as necessary, including a workshop to standardize specification of items to be procured. NURI CF was responsible for all procurement, but worked closely with the districts to ensure specifications were met.

Training activities were significantly disrupted by COVID restrictions on training institutions, and a number of long-term trainings, that were not yet started at the time of the first lock-down, were not implemented while others have been approved for extension into the NURI extension 2023.

In 2022 a replanning exercise was carried out, where savings from procurements and trainings not implemented due to delays, were re-budgeted, Focus was on frequently requested items such as office furniture and IT equipment. A consultant was hired to ensure efficient implementation of the out-standing short-term courses, many of which had been delayed due to COVID restrictions.

### **Skills/career development**

A total of 56 short course trainings were conducted and 44 students from various DLGs were sponsored by the programme for long-term courses (as detailed in annex 6 of this report). In summary:

- Five of 19 Masters students completed their courses in 2022
- 20 Post Graduate Diploma students had completed their courses by end of 2022.
- Five Higher Diploma students were still studying by end of 2022.
- A total of 29 short courses trainings were conducted and completed in 2022.

Short courses implemented included: Mindset change, Horticulture management, Engineering software, Plant clinic operations, Animal & laboratory diagnostics/field basic surgery, Bee keeping, Poultry and piggery management, Fish breeding & value addition, Fish feed formulation, Roads equipment operation and maintenance, Materials & soil testing, Artificial insemination, Post-harvest handling and management, Dry season cattle feeding, Factory automation & electrical wiring, Design of piped and solar water pumped irrigation system, Global positioning system, Safety and occupational safety, Agriculture and rural innovation, low cost sealing of roads & design construction/maintenance, water quality testing and analysis Advanced excel.

### **Re-tooling**

Through DCB a wide range of items were procured as per the needs of the DLGs. Items were procured by NURI CF and delivered to the DLGs. Procured items include: 11 vehicles for DLGs and 106 motorcycles, various engineering and production equipment. Additional second-hand vehicles and motorcycles will be donated to the DLGs as the NURI extension comes to an end.

Re-tooling in 2022 included purchase and delivery of the following items, many a result of the re-planning process;

- Two vehicles were procured and donated to Koboko DLG
- Various IT and office equipment including; 49 laptops, 09 desktop computers, 46 tablets, 07 printers, 01 projector, 01 binding machine and 06 hand-held mega-phones
- Engineering equipment included GPS machines, a borehole camera, a digital dumpy level, water test kit, a hand pump mechanics tools kit, a dip meter for well depth testing, 12 full sets of motorcycle riding gears, a diagnostic computer for vehicle faults and a compressor for tyres.

- Production department equipment procured included vaccine refrigerator, 50 tsetse survey traps, 28 rain gauges, 05 surgical kits, 01 vaccine carrier, 01 soil testing kit, 06 hip boots, and 12 full sets of motorcycle riding gears.
- Office furniture including; filing cabinets, book shelves, visitors’ chairs, conference tables and chairs, conference tables, office desks were delivered.
- Solar power installations were done and a generator procured for some DLGs.

### **Human Resource Management**

The implementation of NURI 2019-2022 involved engagement of a large number of extension officers under the programme. CSA staff under RAUS were directly managed under NURI CF, and NURI CF was engaged in HR issues with the CSA staff employed by CSA implementing partners, to encourage uniform employment conditions for extension staff across the output. DRC being an INGO, followed their own HR policies, with RDE and NURI CF involved only in approval of CVs for key positions. MWE, UNWMZ staff were not under the management of the programme, being employees of the Government of Uganda.

Human resources under NURI CF were guided by the HR Coordinator, working with NURI CF colleagues, and the management of the CSA Implementing units.

### **Workforce recruitment process and procedures**

Crucial to successful NURI implementation has been recruitment of the CSA workforce which has been continuously adjusted according to the level of activity. This included:

- recruitment planning and forecasting hiring needs,
- ideal candidate profiling with clear application and selection process
- training and empowering hiring managers at Units and Partner levels
- involvement of stakeholders at DLGs in the recruitment process,
- strategically placing adverts in regional media targeting qualified local applicants,
- offering opportunity to fresh graduates and qualified refugees where applicable.

NURI was able to maintain the required workforce with recruitment, selection and onboarding done ahead of programme activity implementation and organized on the basis of streamlined procedures that emphasize competence, efficiency and integrity.

**Table 3.4.1 CSA Staffing**

<b>Period</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Total Head Count (FTEs) as of 31<sup>st</sup> December</b>	304	319	325	221

*\*Head count excludes seasonal, temporary, and paid consultants (Enumerators and CBTS) often recruited for short time engagements.*

Since the start of NURI in 2018 approximately 400 young persons have been directly employed and gone through training and capacities building to provide extension within Northern Uganda and refugee hosting communities.

In recruitment NURI CF encouraged gender equality and opportunities for women. NURI CSA field activities require extension staff to be confident in riding motorbikes, and to be based in sub-counties, many of which are remote. Special efforts were made to support female candidates in bike riding.

The statistics contained in this section show improvement in terms of percentage of women in the CSA workforce over the years

Period ending 31 <sup>st</sup> December			2019		2020		2021		2022	
<b>Total</b>	<b>Head</b>	<b>count-CSA</b>	<b>304</b>		<b>219</b>		<b>325</b>		<b>221</b>	
<b>workforce</b>										
<b>Gender</b>			M	<b>F</b>	M	<b>F</b>	M	<b>F</b>	M	<b>F</b>
<b>Head count by gender</b>			214	<b>90</b>	149	<b>70</b>	215	<b>110</b>	141	<b>80</b>
<b>Percentage</b>			70%	<b>30%</b>	68%	<b>32%</b>	66%	<b>34%</b>	63%	<b>36%</b>

### Staff performance management

Performance Management has been a priority in NURI. Assessments have been regular, and tools adjusted and improved over time, with managers trained and supported to implement the tools developed. Performance management included the below activities:

- annual performance reviews (APRs),
- participatory ToR reviews, including agreement on key performance indicators
- formal and informal performance dialogue and feedback conversations
- learnings from reviews incorporated into training programs to for continuous improvement

### Training and Development

Capacity building is an integral part of NURI. Learning initiatives beyond the technical (listed in 3.1.3. Staff Training), to develop leaders and employees at all levels during the period. Notable additional trainings included:

**Leadership Training:** An important innovation was the SLT mentorship programme held in October 2020- Mar 2021 facilitated by Infinity Leadership-Australia targeting NURI CF and CSA Unit managers. The training not only provided useful leadership skills, but strengthened cohesion and joint culture in NURI management.

**Danida Fellowship Courses (DFC)** Collaboration with DFC continued to strengthen capacity of NURI and implementing partners staff, although there was a long pause in trainings during the COVID-19 period, and challenges in the period following the introduction of new bio-metric passports. Courses attended by NURI staff and partners included:

- Entrepreneurship, Innovation and Value Chains
- Conflict Transformation
- Youth involvement in political and economic life
- Green Growth, Climate Change and Environmental Sustainability
- Strategic Leadership and Change Management

### ***Monitoring and Evaluation Activities***

Monitoring and evaluation in NURI is guided by the M&E manual and the programme log-frame, with results defined in the programme document and DED. Monitoring aims to measure progress towards achievement of component objectives and outcomes, while enhancing learning and accountability. NURI CF M&E function was supported by consultants, relevant stakeholders and implementing partners and unit's staff and management.

### **IMC**

The implementation monitoring committee (IMC) is an annual event that is organised by NURI CF and brings together all the stakeholders of the programme to monitor progress on implementation. The meeting is attended by the Danish Embassy, Line ministry representatives, DLG officials from all NURI districts, RAUs, implementing partners and NURI CF. In 2019 the programme launch in Lamwo District was brought together the NURI IMC for the first time. In the following years the event was divided into two, with meetings held in Arua and Kitgum, early in the last quarter of the year. Representatives of the implementors of each Output presented status reports during the first day of the meeting. Districts reported on their observations during their regular monitoring visits. IMC members engaged in discussion and feedback on the status of activities and provided recommendations. Recommendations are recorded and NURI CF regularly reports against these. Major recommendations and status on these are reported in Chapter 9.0 Implementation of Recommendations, of this report.

On the second day of IMC meetings, participants were split into smaller groups and made field visits to a range of activities covering all Outputs, with opportunities to interact with field staff and programme beneficiaries. Minutes of the meetings are prepared each year and are available on the NURI website.

### **DEC and Lower Local government (LLG) field monitoring**

DLGs through the DEC is mandated to carry out quarterly monitoring of activities, while, at lower levels, LLG carry out monitoring. In the settlements, OPM takes lead and works in close collaboration with the partners to ensure activities in the settlements are monitored on a quarterly basis. Monitoring visits target selected sub-counties, while the LLG visits cover all sub counties. DLG/DEC monitoring team comprises of LC V chairman, DPO, DAO, DE. Other sector committee members also join the monitoring team as considered relevant. At LLG level, the team comprised of LC III chairpersons, SAS, AO, and CDO.

In terms of technical supervision, District Technical Team (Engineering, Forestry, Water, Environment, and Production) have continued to provide quality assurance and backstopping of infrastructure projects.

### **NURI Monitoring and Adoption surveys and NURI CSA data base**

NURI CF is responsible for adoption and monitoring surveys during the implementation of the NURI programme, as well as a database on CSA activities. These are laid out in the Programme Documents and further expanded in the NURI M&E manual. The monitoring and survey reports, along with additional, surveys of specific activities carried out by external consultants, including NURI extension methodology, and progress on RI and WRM are available on the NURI website. Database information is gathered by NURI CSA staff as part of their normal work routine. Results of studies and database are presented in Chapter 4 Progress against Objectives and Outputs, of this report as well in Chapter 3.0 Implementation of Activities.

### **Data entry into the CSA database**

PMP data, collected by the extension officers, is verified by Data Officers with the support of supervisors and captured in the CSA database. Data entry for 2021B should have been completed by the end of the reporting period however this did not happen due to hacking of the database leading to loss of data, which had to be re-entered. Operation of the system was restored and data re-entry is ongoing at the time of reporting.

### **Programme reporting (quarterly, semi-annual and annual)**

NURI CF has prepared semi-annual and annual reports, while implementing partners have prepared quarterly reports. Each unit has prepared reports to share with the relevant DLGs as well as NURI CF. NURI CF has then consolidated these reports for external stakeholders.

### ***Financial Management***

NURI CF is responsible for financial monitoring of implementing partners. The finance team reviews financial reporting from the implementing partners and checks that agreed procedures are followed. The finance team worked in close collaboration with the coordinators and accountants of each implementing partner and unit. Activities accomplished are described below:

### **Budget Utilization Monitoring**

NURI CF carries out budget monitoring including guidance and mentoring of the CSA units. Details on budget and utilization are included in section 6 of this report, including details of budget review.

### **Audit**

The annual audit of NURI CF and all implementing partners is managed by NURI CF and is started in March of each year. The Audit for 2022 will start in March 2023, and the Audit of the extension will be in the first quarter of 2024.

## **Procurement activities**

Procurement activities within the programme are divided between those handled centrally at CF and those decentralized to implementing partners and units. NURI CF procurements are managed by the Finance department. Decentralizing procurement speeds up processes, which is particularly important in the case of agricultural inputs that are bound by agricultural seasons.

Agricultural inputs and items for office running were procured directly by the various implementing units, with some support from CF on services, including motorcycle repairs through a pre-qualified service provider, printing of training manuals, repair of office equipment including laptops, leasing copiers and purchasing riding gears for staff.

## ***Programme Exit Activities***

NURI CF is responsible for the orderly closing of the NURI programme. In 2021 activities in Agago District were finalized, as per the NURI programme document, to the extent that the remaining CSA and RI activities were managed from Kitgum/Lamwo RAU and DRC office in Kitgum. This gave NURI CF the opportunity to develop a closing plan, which will guide the closing of activities in other districts.

The closing plan included handling and archiving of records and documentation, some of which were from previous Danida programmes. Documents still needed for accountability and audits were moved to Kitgum for safe-keeping while older documents were destroyed. Service provider contracts were ended and the main and satellite offices renovated and handed back to the landlords, as per agreement. Assets inventory was up-dated and decisions made on transfer to other units, handover to DLG and disposal. Staff were informed in good time and as all contracts ended at the end of 2021 Contracts for the coordinator and accountant, as well as 2 VSLA staff were extended. This allowed for support to the audit, and completion of VSLA activities delayed by the COVID 19 lockdown.

Plans for the closing of all NURI activities by the end 2023 with only a small team to support audits in 2024 were prepared by NURI CF in close collaboration with RDE in the last quarter of 2022. Details of the NURI extension are included as Annex 1 of this report.

## 4.0 Progress Against Objectives and Outputs

Output and Outcome Performance results are from Adoption and Monitoring surveys, where possible triangulated against database results, while activity results are from the NURI CSA database and progress reports from implementing partners. Final results were prepared in time for the final IMC meeting in November 2022 to ensure that Ministries, Districts and partners had opportunity to comment on the results.

Surveys and reports are available on [www.nuri.ag](http://www.nuri.ag)

### 4.1 Progress against Objectives and Outputs

Indicator		Baseline 2018	End Target	Achieved 2022	Comments
Immediate Objective: To enhance resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and host communities.					
Increase in average annual agricultural cash income of participating HHs (segregated by age, gender of HH head and refugee status) Income figures in UGX	Nationals	1,685,419	20% (2,022,503/=)	1,868,509	11% increase from baseline. Under target by 7%, impacted by COVID 19 restrictions.
	Refugees in mixed FGs	872,410	20% (1,046,892/=)	1,000,930	15% increase from baseline. Under target by 4%, impacted by COVID 19 restrictions.
	Women refugees	294,241	20% (353,089/=)	594,853	102% increase from baseline and target exceeded by 68%
Number of participating Households reporting periods of food insecurity (segregated by age, gender of HH head and refugee status)	Nationals	45%	23%	35%	10% improvement from baseline. Under target by 12% attributed to weather and market challenges, including impact of COVID on markets.
	Refugees in mixed FGs	43%	23%	18%	Achievement 5% above target attributed to WFP food ration and inputs provided by NURI.
	Women refugees	55%	23%	19%	Achievement 4% above target attributed to WFP food ration and inputs provided by NURI.
Total number of people benefiting from supported WRM interventions	N/A		122,350	115,009	6% of projects were ongoing at the end of 2022. All were completed in the first quarter of 2023, and target was achieved.

Indicator	Baseline 2018		End Target	Achieved 2022		Comments
Objective for output 1: To increase the agricultural output of small-scale farmers						
Cumulative % of participating HHs adopting additional CSA practices	All FGs	N/A	65%	93%		Result exceeds target, attributed to the training methodology and FGs high level of engagement.
	New nationals	N/A	65%	91.2%		Adoption is not uniform for all practices; result represent at adoption of at least three new practices since joining NURI
	Refugees in mixed groups	N/A	65%	95%		Adoption is not uniform for all practices; result represent adoption of at least three new practices since joining NURI
Cumulative % increase in average yields in kgs per acre for strategic crops for participating HHs	All crop types		15%	22.4%		Achievement 7.4% above target, attributed to CSA practice adoption and weather.
	Sesame	156kgs		225kgs	44%	Target achievement attributed to adoption of CSA practices and favourable weather in 2021. Cassava was substantially sold as cuttings due to NURI introduction of improved varieties, so tuber yield measurement was not comparable with baseline.
	Beans	264kgs		320kgs	21%	
	Maize	380kgs		450kgs	18%	
	Soybeans	231kgs		290kgs	26%	
	Sunflower	449kgs		580kgs	29%	
	Rice	504kgs		680kgs	35%	
	Potatoes	747kgs		850kgs	14%	
	Cassava	2,901kgs		1,950kgs	NA	
	Onions	1,052kgs		1,331kgs	27%	
Groundnuts	409kgs		440kgs	8%		
Cumulative % of the quantity of strategic crops harvest that is sold	61%		70%	75%		Results exceeded target, with some crops (sunflower, soybean, rice) fully sold, while others (sesame, beans, onions, potatoes, groundnuts, cassava) partially consumed in the HHs.

Indicator	Baseline 2018	End Target	Achieved 2022	Comments
Objective for output 2: To renovate and/ or construct agriculturally-related rural infrastructure using labour intensive approach				
Average cumulative percentage of projects in district investment plans completed	N/A	100% (1504)	98%	Construction work ongoing at time of survey, target fully achieved within first quarter of 2023.
Cumulative number of beneficiaries that report a reduction in time and/or cost in transporting goods to a market place	N/A	20,000	17,380 (86.9%)	Target slightly under achieved due to ongoing works at the time of survey.
Objective for output 3: To construct or make more resilient agriculturally related physical and natural water infrastructure				
Cumulative number of micro-catchment plans implemented	N/A	8	8	All micro-catchment plans have been implemented with some works still ongoing
Number of agriculturally-related physical & natural water infrastructure constructed or rehabilitated (adjusted CCE supporting indicated)	N/A	435	427	By 31th December, completion was at 98% and all projects were completed and handed over within the first quarter of 2023.
Community/user management agreements developed and implemented	N/A	8	8	Development of the bylaws is at 100%

## 4.2 Activity level Performance Results

Output 1: Agricultural output of small-scale farmers including for refugees increased				
No. of FGs trained in collective marketing/year	N/A	3,800	1,580	Training is still on going, the no. achieved represents graduated FGs.
No. of farmer groups trained in CSA practices	N/A	4,388	2,807	CSA training is still on going for new national groups in their third year and refugee groups that started in 2021. By the end of 2022, target will be achieved
% of new FG members and refugees reporting having learnt at least 3 new CSA practices	N/A	60%	91% nationals 94% refugees	Performance target was exceeded for three practices (line planting, use of improved seeds and soil & water conservation)
% of refugee HHs participating in mixed groups reporting having access to production land	N/A	30%	75%	Refugees in mixed groups reported that most of their land has been accessed through mutual relationship with host communities
% of strategic crops produced by participating farmers collectively marketed	N/A	30%	33%	Collective marketing is still a challenge however target was achieved for key communities like sesame, soybeans, sunflower and rice
No. of farmer/refugee groups trained in VSLA	N/A	3,086	2,115	Achievement represents FGs that have graduated and completed a full cycle of training. Target will be achieved by year end.
% of VSLA loans used for agricultural purpose by FGs & refugee HHs	N/A	63%	69%	Performance target achieved
No. of districts with approved capacity building plans	N/A	13	13	All districts prepared capacity building plans and implementation is on-going
No. of DLG capacity building plans implemented	N/A	13	13	Implementation of plans is on going with procurement activities at 71%, while training programmes were affected by COVID 19.
Output 2: Agriculturally related rural infrastructure rehabilitated using labour based intensive approach				
No. of parishes with updated development plans	N/A	560	560	Target achieved

No. of districts with approved infrastructure investment plans	N/A	13	13	All districts including settlements developed investment plans which clearly defined the projects completed and those still on going in the districts of operation
No. of work days paid for in implementation of infrastructure projects (based on district plan)	N/A	1,048,000	965,520	About 7% of projects are still undergoing completion at the same time payment is on-going. Target will be achieved by end of 2022.
% of completed infrastructure projects constructed in accordance with agreed standards	N/A	95%	80%	Some remedial works still ongoing, target will be achieved by end of 2022
% of participants for infrastructure works who are youth (18-28 years)	N/A	60%	60%	Target achieved.
% of HH reporting satisfaction with quality of completed projects	N/A	90%	80.4%	Target slightly under achieved. Maintenance and repairs ongoing for some projects
% of community members living close to the completed projects who are using it regularly	N/A	90%	85%	Target slightly under achieved because of maintenance and repairs ongoing for some projects

## 5.0 Status on Risks and Assumptions

The year 2022, was to have been the last year of NURI implementation, and even with plans for an extension taking shape in late 2021, the focus of much activity has been on completion of activities, graduation of groups and finalization of projects. The extension will focus on strengthening sustainability and piloting new activities in preparation for the follow-on programme. The COVID pandemic, has largely faded into the background in 2022, with schools reopened in September 2021, staff and beneficiaries have seen life return to normal. The main impact of COVID has remained in impact on prices and delays caused to activity implementation, particularly VSLAs.

Details on risks and assumption identified in the DED, as well as those emerging, are updated in the below tables:

### 5.1 Status on Risk factors

Risk factor	Risk assessment and response	Update at December 2022
Programmatic Risk		
Creation of aid dependency by supporting small-scale farmers to access subsidized low-cost inputs.	NURI's strategy is to provide inputs only to those farmer groups that fulfil certain conditions, like co-financing and preparation of a business plan. Also, subsidized inputs constitute a small proportion of the total intervention.	This risk has not materialized. The importance of levelling expectations is a lesson from earlier programs. Production and Marketing plans, supported by VSLA Saving with a Purpose concept encourages farmers to plan production and expenditure.
Land conflicts due to unclear land ownership and increasing pressure on land and/or land-grabbing by powerful entities or individuals.	Land conflicts may be exacerbated by the NURI success. Mitigation through ensuring land ownership is clearly defined and recorded and through inclusive planning processes, locally driven implementation and strengthening of local communities.	Land conflicts are managed on a case-by-case basis, for example by relocating demo plots or compromising on the width of CARs. All cases are addressed through engagement of LLG authorities. DRC introduction of site dialogue meetings and land donation documentation has assisted.
Poor sustainability of constructed or renovated infrastructure due to insufficient maintenance.	NURI will strengthen learning from cases where mobilization of local communities for maintenance has been successful, and continuously explore and share information on best practice.	DRC has built in mitigation based on earlier experience. Implementation of Resilience Design potentially reduces the need for road maintenance and creates incentives for farmers to maintain drainage structures for agricultural purposes. Despite all efforts the issue continues to be a challenge. In 2022 meetings were held with all DLGs to discuss sustainability after commissioning of projects. The commissioning process is designed to encourage local ownership.

Risk factor	Risk assessment and response	Update at December 2022
Adverse climatic events, such as floods or droughts	While mitigation of this risk is somewhat outside the scope of NURI, adaptation to climate risk is a key rationale for NURI's interventions concerning climate smart agriculture and water resources management, and climate considerations are also integrated in infrastructure renovation and construction.	CSA practices and resilience design are mitigating measures that somewhat lessen this risk. For example flooding where drainage trenches have been introduced with advice from NURI extensionists. Resilience design in CSA is a mitigation encouraging soil and water conservation against floods and drought.
Women will not actually get empowered due to deep-rooted cultural practices and norms.	NURI's strengthened focus on female empowerment is in itself a recognition of such deep-rooted cultural practices and norms. While changing norms in a few years might not be possible, a significant contribution has been made. Training in financial literacy and family planning are seen as key opportunities.	In collaboration with the WAY programme a guide for strengthening SRHR and gender in CSA training has been developed for use of extension staff. In 2022 the collaboration has developed significantly. In CSA and VSLA high levels of participation ensures women's participation in leadership.
Local communities become disgruntled due to disagreement on selection of beneficiaries and projects.	NURI will emphasize transparency and inclusion in decision-making processes. Stakeholders are sensitized before project selection and distribution of resources is done in a transparent way.	This has not materialized, addressed by strong efforts on clarifying selection procedures and involvement of local governments and communities, including self-selection and minimal free inputs.
Interventions by other DPs offer more lucrative support for beneficiaries and better salaries for staff	NURI will coordinate with other DPs to avoid geographical overlap and "competition" for beneficiaries, and to coordinate general remuneration levels for both community participation and project staff.	Few groups have dropping out and staff left for other posts, but not to a level impacting outcomes. NURIs focus on training vs inputs is widely understood and respected. Less than 1% of VSLA groups have moved to other programmes due to incentives.
<b>Institutional Risk</b>		
Corruption or misuse of funds among NURI implementing partners (also programmatic risk)	Mitigation through implementation modalities based on experience. Lessons learned on safeguards under RDNUC are incorporated in the Management and Accounts Manuals.	Financial and procurement guidelines and monitoring are implemented. Whistle blower reports are thoroughly investigated. Quarterly financial reports are submitted to, combined with regular monitoring visits.
Self-implementation by NURI CF leads to lack of sustainability and excessive management burdens.	This risk will be mitigated by building on previous positive effects of self-implementation: Many local staff have been trained and equipped with skills they can apply in different contexts, and efficiency has been high due to decreased fiduciary risks and no politicisation of activities.	In NURI CSA sustainability is achieved through building human capacity within the IPs, DLGs and the community. NURI CSA staff are recognised for their capacity and, from past experience, go on to jobs in public, NGO and private sector, taking with them the skills imparted by NURI.

Risk factor	Risk assessment and response	Update at December 2022
		Excessive management burdens have been addressed with additional and flexible staffing.
Limited engagement of local governments, as they do not implement.	As NURI will rely on the active engagement of DLGs, it is designed to ensure full alignment to their structures and procedures. Furthermore, capacity building is integrated in all NURI interventions.	DLGs and LLG are enthusiastically engaged in NURI through quarterly monitoring and IMC. Also involved in selection of beneficiaries, strategic crops selection, infrastructure projects approval and in attending and occasionally facilitating trainings. During 2022 information meetings were held with all DLGs relating to the monitoring and sustainability of RI and WRM activities.
Emerging Risks 2020		
Conflict between Districts where new districts have been split off from NURI districts	Managed by a transparent splitting of resources between the sub-divided districts and by engaging with the new districts. NURI follows GoU lead and does not engage in any political debate.	The initial conflict between Obongi and Moyo districts has receded, and no other conflicts identified that have impacted on NURI implementation.
COVID-19 lock-downs and restrictions hinder work and raise fear of outsiders in the communities	Emergence of the COVID-19 pandemic has already had major impact on Uganda and on all economic and development activities. NURI works with District COVID taskforces.	NURI has successfully managed implementation during the pandemic, working closely with DLGs. In 2022 some VSLA groups that dropped out during lockdowns have re-joined NURI.
Emerging Risks 2021		
Access to quality inputs in remote sub-counties and settlements	Access to quality inputs remains a problem despite some improvement for farmers closer to urban settlements.	Although access to inputs is increasing as the market responds to demand, there are considerable gaps, including access to improved varieties. Recent price rises are likely to worsen the situation. Kitgum reports increased number of agro-input businesses, but with limited outreach. Strengthening farmers knowledge on propagation of seeds is continuing and a pilot on Local Seed Business is planned in NURI extension.

## 5.2 Status on Assumptions

No.	Assumption / Risk	Status
KA CSA	Farmer groups will be open to learning climate smart agricultural methods and will adopt and apply the techniques on their farms	Farmer groups have been selected based on interest and commitment. Drop outs have been negligible. CSA adoption studies have shown that there has been widespread adoption of low-cost CSA technologies
KA CSA	Farmer groups will be willing to participate and cost-share some types of support such as produce stores	Old National Groups contributed significantly through cost-sharing for projects focused on marketing, although their ability to do so reduced due to COVID-19. Tree growing pilot, including cost-sharing on seedlings is ongoing.
KA CSA	Refugees will have access to sufficient land for production activities	Access to land for refugees varies considerably across the settlements. In general access to land has not hindered group activities and has improved for refugees in mixed groups.
KA RI	Participating communities will be willing and able to contribute to physical investments through labour and maintenance of infrastructure	Groups are actively participating in activity implementation. Participation in maintenance activities for RI still has challenges. Further efforts will be made to engage parishes during the NURI extension.
KA RI	Climatic conditions are favourable for construction works	Heavy and persistent rains are problematic in terms of flooding and erosion of road works. Resilience design is implemented in mitigation.
KA RI	Local contractors are available and able to meet quality standards	Availability of qualified local contracts have caused delays in some RI activities, and procurement process have had to be adapted to address this. Some contractors have had to be replaced after start of implementation.
KA WRM	UNWMZ is able to establish collaboration and agreements	Lower-level collaboration still needs to be strengthened but is successful at district level.
KA WRM	Stakeholders are able to identify suitable micro-catchments	All eight micro-catchments under the programme were identified.
KA WRM	Participating communities are willing and able to contribute to physical investments	In RI and WRM there are challenges in willingness to contribute land for NURI investments and intense community dialogue and the signing of land-donation agreements prior to starting is essential, as is DLG involvement.

KA CSA= Key Assumption for Climate Smart Agriculture, KA RI = Key Assumption for Rural Infrastructure, KA WRM= Key Assumption Water Resource Management

## 6.0 Reporting on Expenditure

This report on expenditure is as at the end of March 2023, with audits of 2022 still not completed. A final and complete overview of the expenditure of the NURI programme will be available after the completion of the 2022 audits.

The NURI grant for all Outputs totals DKK 325 million over a period of five years (2018-2022). For the coordination, Climate Smart Agriculture (CSA) and Rural Infrastructure (RI), the grant is derived from the Denmark-Uganda Country Programme 2018-2022. For the output Water Resources Management (WRM), the grant of DKK 50 million is derived from the Climate Change Envelope.

Following approval, contingencies of 14 million DKK was reallocated to the output Climate Smart Agriculture.

**Table 6.0.1: Overall budget for NURI for the period 2018-2022 (DKK millions)**

Output	2018	2019	2020	2021	2022	Total	Rev.	Rev. Total	%
Climate Smart Agriculture (CSA)	-	16	35	36	29.5	120.4	14	134.4	41%
Rural Infrastructure (RI)	-	16	36	37	31.5	116.6		116.6	36%
Water Resources Management (WRM)	3	8.5	8.5	15.5	14.5	50		50	15%
Coordination incl. TA and M&E	-	6	6	6	6	24		24	7%
Contingency	-	-	-	-	14	14	-14	0	0%
<b>Total</b>	<b>3</b>	<b>46.5</b>	<b>85.5</b>	<b>94.5</b>	<b>95.5</b>	<b>325</b>		<b>325</b>	<b>100%</b>

Under each output, NURI implementing unit(s) and/or partner(s) prepares annual work plans and budgets based on a budget frame provided by NURI CF. The annual budgets are prepared through a consultative process between the implementing units/partners and NURI CF. Details on the budgeting process are included in the Management Manual, under section 8, Financial Management and Procurement, 8.1 Budget and budget approval.

Please note - the major part of the Danida grant for the NURI programme is managed by the NURI Coordination Fund (NURI CF) as a decentralized unit under RDE.

- The budgets and actual expenditure under management by NURI CF is presented in the following section 6.1.
- The budget and actual expenditure for the total NURI programme is presented in section 6.2.

## 6.1 NURI CF Budget 2022

The NURI CF budget does not include expenditure incurred through direct payments by RDE. These direct payments comprise of expenditure including remuneration of international advisors, DRC management fees, audit fees as well as international procurement of vehicles, motorcycles etc.

The NURI CF Budget 2022 was approved at 85.7 million DKK (UGX 45.4 billion). During the third quarter of 2022, the NURI CF Revised Budget 2022 was approved at 80.9 million DKK (UGX 45.7 billion). The revised Budget 2022 incorporated an additional implementation budget for RI activities to the amount of UGX 1,708,603,870, made up of the following activities:

- Gravelling of community access roads, UGX 1,385,589,750
- Gap filling in food forests, UGX 323,014,120

The Revised Budget for 2022 was also revised with respect to the DKK/UGX exchange rate, so the NURI CF Revised Budget 2022 was reduced from 85.7 million DKK to 80.9 million DKK.

**Table 6.0.2: NURI CF Revised Budget 2022**

Output / Implementing Unit		Ushs.				DKK	
Output Code	Name	Budget	Budget	Budget	Budget	Total Budget	
		Q1	Q2	Q3	Q4	2022	
<b>0</b>	<b>Coordination, TA and M&amp;E</b>	<b>822,162,855</b>	<b>742,444,460</b>	<b>336,954,213</b>	<b>404,564,213</b>	<b>2,306,125,740</b>	<b>4,083,735</b>
	Coordination Function	822,162,855	742,444,460	336,954,213	404,564,213	2,306,125,740	4,083,735
<b>1</b>	<b>Climate Smart Agriculture</b>	<b>5,514,055,363</b>	<b>4,211,814,025</b>	<b>3,469,627,475</b>	<b>2,400,432,457</b>	<b>15,595,929,320</b>	<b>27,617,590</b>
	Coordination Function	837,367,000	1,241,100,000	(302,644,381)	113,215,619	1,889,038,238	3,345,147
	ARUA DFA	1,039,529,475	421,678,975	1,120,875,975	546,257,975	3,128,342,398	5,539,733
	AFARD	330,814,447	582,286,947	415,639,947	317,503,947	1,646,245,286	2,915,205
	PICOT	245,278,535	288,606,935	198,709,535	220,678,535	953,273,538	1,688,076
	RAU Moyo	955,398,215	430,019,715	973,498,200	467,069,210	2,825,985,340	5,004,313
	RAU Adjumani	1,432,236,349	895,887,849	465,085,484	421,195,061	3,214,404,742	5,692,134
	RAU Kitgum / Lamwo	611,911,948	329,488,344	598,462,716	314,512,112	1,854,375,121	3,283,765
	RAU Agago (will be under CF)	61,519,396	22,745,261	-	-	84,264,657	149,218
<b>TOTAL for Output 0 and 1</b>		<b>6,336,218,218</b>	<b>4,954,258,485</b>	<b>3,806,581,687</b>	<b>2,804,996,669</b>	<b>17,902,055,060</b>	<b>31,701,325</b>
<b>2</b>	<b>Rural Infrastructure</b>						
	Coordination Function	400,000,000	400,000,000	(139,000,000)	(280,000,000)	381,000,000	674,683
	Danish Refugee Council	4,112,672,291	3,136,150,331	1,413,781,556	1,191,923,916	9,854,528,094	17,450,600
<b>TOTAL for Output 2</b>		<b>4,512,672,291</b>	<b>3,536,150,331</b>	<b>1,274,781,556</b>	<b>911,923,916</b>	<b>10,235,528,094</b>	<b>18,125,282</b>
<b>3</b>	<b>Water Resource Management</b>						
	Coordination Function	-	50,000,000	115,000,000	-	165,000,000	292,185
	Danish Refugee Council	5,446,014,140	5,932,704,039	1,988,658,937	4,018,897,208	17,386,274,324	30,787,970
<b>TOTAL for Output 3</b>		<b>5,446,014,140</b>	<b>5,982,704,039</b>	<b>2,103,658,937</b>	<b>4,018,897,208</b>	<b>17,551,274,324</b>	<b>31,080,155</b>
<b>GRAND TOTAL - NURI EXPENDITURE</b>		<b>16,294,904,650</b>	<b>14,473,112,856</b>	<b>7,185,022,180</b>	<b>7,735,817,793</b>	<b>45,688,857,479</b>	<b>80,906,762</b>

## NURI CF Budget Utilization as at 31<sup>st</sup> December 2022

Table 6.0.3: NURI CF Budget Utilization 31st December 2022 in UGX

	Total			
	Actual	Budget	Remaining	% of Budget
<b>0. Coordination ,TA and M&amp;E</b>				
<b>Total 0. Coordination ,TA and M&amp;E</b>	<b>-2,598,574,220</b>	<b>-2,306,125,740</b>	<b>292,448,480</b>	<b>112.68%</b>
<b>1. Climate Smart Agriculture</b>				
Total 1.0.1. NURI coordination ,management ,M&E	-718,253,759	-706,764,657	11,489,102	101.63%
Total 1.1.2. Prepare plans with the selected farmer groups depending on their situation and needs	-25,949,000	-40,265,500	-14,316,500	64.44%
Total 1.1.3. Train in Climate smart agricultural practices, including soil and water management.	-4,981,097,667	-5,548,912,000	-567,814,333	89.77%
Total 1.1.4. Train in and support collective marketing.	-166,883,300	-179,538,500	-12,655,200	92.95%
Total 1.2. Train target farmer groups in financial literacy, especially through formation and support of	-751,795,972	-861,761,000	-109,965,028	87.24%
Total 1.3. Provide capacity building and operational support to the implementing partner	-8,001,276,947	-8,088,687,663	-87,410,716	98.92%
Total 1.4. Provide capacity building and operational support to the Production Departments in the partici	-715,012,924	-170,000,000	545,012,924	420.60%
<b>Total 1. Climate Smart Agriculture</b>	<b>-15,360,269,569</b>	<b>-15,595,929,320</b>	<b>-235,659,751</b>	<b>98.49%</b>
<b>2. Rural Infrastructure</b>				
Total 2.3. DLG capacity building (CF)	-878,969,933	-381,000,000	497,969,933	230.70%
Total 2.1. Prepare Infrastructure Investment Plans for approval	0	0	0	
Total 2.2. Implement approved infrastructure projects	-9,201,843,771	-8,789,623,997	412,219,774	104.69%
Total 2.3 Capacity Building and Operations - DRC	-1,319,079,116	-1,064,904,097	254,175,019	123.87%
<b>Total 2. Rural Infrastructure</b>	<b>-11,399,892,820</b>	<b>-10,235,528,094</b>	<b>1,164,364,726</b>	<b>111.38%</b>
<b>3. Water Resources Management</b>				
Total 3.2 Construct approved water resource management infrastructure projects	-15,860,505,310	-17,386,274,324	-1,525,769,015	91.22%
Total 3.3. Consultancies ,short term TA	0	-165,000,000	-165,000,000	0.00%
<b>Total 3. Water Resources Management</b>	<b>-15,860,505,310</b>	<b>-17,551,274,324</b>	<b>-1,690,769,015</b>	<b>90.37%</b>
<b>TOTAL</b>	<b>-45,219,241,919</b>	<b>-45,688,857,479</b>	<b>-469,615,560</b>	<b>98.97%</b>

In total, NURI CF has spent UGX 45.2 billion equal to 99% of the approved NURI CF Budget 2022.

Under Output 0, Coordination, Management & M&E, NURI CF has spent UGX 2.5 billion being 12% more than Budget 2022 due to additional M&E surveys conducted during the period.

Under Output 1, CSA, NURI CF has spent UGX 15.4 billion being 98% of Budget 2022. The planned CSA training of farmer groups were conducted at 90% of Budget 2022. District capacity building (DCB) activities was executed at significantly higher expenditure than included in the Revised Budget 2022. DCB implementation progress improved significantly in 2<sup>nd</sup> half 2022, resulting in over expenditure compared to the Revised Budget 2022.

Under Output 2, Rural Infrastructure, expenditure was 11% over budget 2022. Again, the DCB scheme under Output 2 was budgeted too low during the budget revision in the second half 2022. The implementation of RI projects by DRC exceeded the 2022 budget by approx. UGX 1 billion, approximately 10% over budget.

Under Output 3, Water Resource Management, NURI CF has spent only 90% of the planned budget for 2022, as a result of delays in implementation, with some activities and payments being carried forward into 2023.

Apart from the DLG capacity building, hereunder especially the long-term education component, overall NURI progress in 2022 is deemed satisfactory technically as well as financially. The delay in long-term courses under DCB was caused by the suspension of university courses by up to two years during the COVID pandemic. It has not been possible to catch up for these long gaps in training activities, and RDE has agreed that, where justified, trainings are finalized in 2023.

The NURI programme is comprised of two key intervention areas: CSA training counting for 35% of Budget 2022 and construction of RI/WRM structures counting for 60% of Budget 2022.

In respect of the CSA intervention, implementation progress has been highly satisfactory technically as well as financially. NURI CF has conducted the required M&E surveys whereas implementation by the NURI CSA units and partners is ranging between 87-101% of the NURI CSA Budget 2022. The average cost per farmer group is approx. 14,000 DKK. Approx. 48% of the CSA expenditure goes towards CSA training including procurement of agricultural inputs; another 52% goes towards capacity building and operational support of the units and partners.

In terms of the RI intervention, implementation is nearly finalized with few DRC RI projects being finalized in 1<sup>st</sup> quarter 2023. In terms of the RI finances, DRC has overspent on the RI project implementation activities with approx. UGX 666 million. Furthermore, DRC is reporting outstanding commitments as at 31<sup>st</sup> December 2022 at approx. UGX 1.062 billion under the RI project implementation. If project expenditure as well as outstanding commitments will be approved under the NURI Audit 2022, DRC will have overspent UGX 1.728 billion under RI project implementation.

In terms of the WRM intervention, implementation is also nearly finalized with few WRM projects being finalized in 1<sup>st</sup> quarter 2023. In terms of WRM finances, DRC has underspend on the WRM project implementation activities by approx. UGX 1.525 billion. DRC is reporting outstanding commitments as at 31<sup>st</sup> December 2022 at approx. UGX 1.835 billion, thus DRC will have overspent the DRC WRM Budget 2022 by approx. UGX 310 million.

## **6.2 NURI Programme Budget and Actual Expenditure 2018-2022**

The status of the NURI Total Programme Budget 2022, which also includes direct payments/expenditure by RDE on behalf of NURI, is as follows:

<b>DKK</b>	<b>NURI Programme Budget</b>	<b>RDE Direct Payments</b>	<b>NURI CF Expenditure</b>	<b>Remaining Grant Balance</b>
0. Coordination, TA & M&E	<b>24,000,000</b>	<b>10,171,388</b>	<b>16,077,258</b>	<b>-2,248,646</b>
1. Climate Smart Agriculture	<b>134,370,000</b>	<b>10,363,459</b>	<b>121,139,233</b>	<b>2,867,307</b>
2. Rural Infrastructure	<b>116,630,000</b>	<b>26,254,642</b>	<b>89,212,696</b>	<b>1,162,662</b>
3. Water Resources Management	<b>50,000,000</b>	<b>5,108,257</b>	<b>38,410,049</b>	<b>6,481,694</b>
<b>TOTAL</b>	<b>325,000,000</b>	<b>51,897,746</b>	<b>264,839,236</b>	<b>8,263,017</b>

In the "NURI CF Expenditure", the DRC outstanding commitments as at 31<sup>st</sup> December 2022 have not been included. This could be an additional UGX 2 billion equal to 3.5 million DKK.

DRC is yet to invoice its management fee invoice covering 4<sup>th</sup> quarter 2022 estimated at 1.6 million DKK.

In addition, DRC is entitled to a 2% payment on audited expenditure incurred in 2022, which would amount to approx. 1.1 million DKK.

Finally, the NURI auditors, PKF, are entitled to audit fees covering the 2022 NURI audit at approx. 331,000 DKK.

In total, these outstanding payments would amount to approx. 6.5 million DKK, which leaves approx. 1.8 million DKK of the two NURI grants.

## **7.0 Lessons and Pilot Activities**

The NURI programme (2019 to 2022) is finalized with this report. Although there is a one-year extension, this focuses on a new set of activities, building on the success of the previous 4-years while focusing on greening and sustaining these activities, as well as extracting lessons from the main programme and from the pilot activities.

This section of the final report presents some of the lessons learnt including ideas generated from the annual reports of implementing partners and units across the programme, as well as from NURI CF. Further lessons extracted from Learning and Reflection Workshops and analysis of NURI outcomes during 2023 will be added as annexes to this report to ensure the lessons are easily available. They are also shared through other relevant fora, for example, those lessons relating to refugees, and work at the humanitarian-development-peace nexus are shared on the U-learn website, targeting organisations working with refugees and host communities.

Lessons targeting specific audiences or events are included under Annex 7

This chapter also covers various pilot activities implemented during the programme including some that are on-going in the NURI extension, 2023.

## 7.1 Lessons Learnt

Lessons learnt under the NURI programme are generated from reports from implementing partners, reports from programme workshops, analysis of studies and management observations. In this report lessons are divided into: CSA technical and programmatic, RI/WRM technical and programmatic, NURI programme – programmatic and cross-cutting.

### *A) Climate Smart Agriculture – Lessons relating to technical issues*



#### **Integrating VLSA and CSA activities**

VSLA is an important part of CSA activities in NURI. Access to small loans and savings assist farmers, including refugees, in dealing with shocks, agricultural and household needs and other challenges that affect their productive lives. Integration of VSLA with CSA has developed during the 4-years of implementation. Initially production planning through annual production and marketing plans for groups and individual members were addressed separately to the VSLA concept of household planning and visioning. Early in implementation, it was observed that the most successful groups were those that committed to VSLA activities and PMPs were increasingly linked to household visioning and planning. In any future programme, VSLA and CSA should be implemented together from the start of the programme, with production and marketing plans following on from visioning and household planning.

Farmer groups that are guided to save with a purpose, including for procurement of agricultural inputs that support their production plans, are more likely to spend savings on productive activities.



#### **Flexibility in CSA extension support**

Farmer groups regularly requested to change the strategic crop initially chosen due to changes in their preference and interest, or in the market. This has been a challenge due to the progression of NURI CSA activities, which follow a progressive training and up-scaling plan. This has been addressed by encouraging extension staff to offer advice on a range of crops, not only the selected strategic crop, particularly in the second and third year of extension support to groups, when training on the strategic crop is less intensive. The introduction of intercrops in mixed groups has been popular and successful, and could be explored with national groups in future. The cost of this flexibility in terms of implementation is that extension officers, and their supervisors, need a wider range of knowledge and expertise, and costs of training and capacity building are higher. It is thus a balance between what is possible in terms of time and investment in training, against the importance of ensuring farmer groups are motivated, and feel ownership of the learning process.



### **Agricultural Inputs availability is a continuing challenge**

Access to and affordability of agro-inputs continues to pose a challenge to agricultural production for farmer groups in Northern Uganda and is frequently mentioned as a factor undermining farmers ability to meet their targets. With the NURI demo approach, farmers' seed needs are, to some extent, met by production from the demo, however with some crops this is not achieved. Where prices for improved seeds are high, for example for sunflower seeds, farmers are reluctant to buy the seeds, and even access to seeds can be challenging. Local seed production, taken up by an increasing number of the most successful NURI groups, and supported under the NURI extension, may be part of the solution. In refugee hosting areas the problem of free inputs inhibiting development of private sector supply is even more marked.

## ***B) Climate Smart Agriculture – Lessons relating to Programmatic Issues***



### **Length and intensity of extension services to Farmer Groups**

An assessment of the NURI extension model undertaken as an input to the Mid-term review found the NURI extension approach to be efficient, relevant and cost effective. The full report goes into detail on various aspect, but important conclusions give insight into NURI success factors.

The length and intensity of extension activities, along with the integration of VSLA and financial literacy training, lies at the heart of the success of the NURI CSA component. The relationship between extension staff and the supported farmer groups which develops over 2-to-3 years of implementation, not only provides technical learning, but also builds the confidence of groups, strengths trust within groups and strengthens their ability to network. While much of the monitoring of activities focuses on production and marketing figures, the resilience of the households, as a result of belonging to a well-functioning group, is a less tangible, but no-less important, impact.

Extension officers visit each group at least 13 times per year, with more visits in the earlier years, reducing towards graduation. CBTs, supporting VSLA activities, visit each group around 20 times per year. Additionally, each group is visited by a VSLA supervisor, an AES and/or Unit Coordinator once or twice per year.

The implementation of extension activities under the CSA output is done by competitively recruited extension officers. Successful groups are most often those covered by the most committed extension officers. This can be seen in the frequency of visits to the households and fields, the method of training delivery and application of other participatory community engagement approaches.

NURI's focus on motivating and building the capacity of field level extension staff has contributed to programme success. Farmer groups and local leaders, including LLGs, regularly comment on the quality and commitment of NURI staff.



### **Giving farmers / communities choices**

Beyond the participatory processes of selecting strategic crops in each district, and reviving Parish Development Plans when prioritising infrastructure projects, giving individual groups and households choices increases the interest and ownership. Examples of how this is implemented in NURI include:

- NURI has not applied strict selection criteria, favouring self-selecting groups
- While a single family member from a household is the official group member, other members of the household may step in for trainings or VSLA activities based on their interest
- Three to five strategic crops are selected at district level, but each farmer group makes their own choice from this menu of strategic crops
- AEOs/CBT have considerable freedom to agree with groups on timing and prioritising training topics within the CSA or VSLA curriculum
- Refugee households have a choice of vegetables to grow, as well as a choice of fruit trees
- In the tree growing pilot in the NURI extension farmers pay 30% of the cost of the seedling, and have a choice of the tree species as well as receiving training



### **Sequencing CSA activities**

There are lessons learnt over the years, which, because of the nature of the programme, NURI has not been able to test. One of these is on the sequencing of activities.

At the start of NURI CSA activities implementation, the focus was on agricultural extension activities, and getting crops in the ground, to make full use of the agricultural seasons. VSLA was started later, and the concept of household visioning came in after that. Having experienced the power of household visioning in motivating production and saving, it is now clear that, even at the cost of delaying the start of field implementation, household visioning should be done first, while field activities and savings should start concurrently after the visioning process.

In the programme planning process, it is important to be realistic regarding the time required to recruit staff, establish offices, train staff, develop workplans and establish groups, all of which needs to be done before agricultural field activities can start.

## ***C) Rural Infrastructure/Water Resource Management – Lessons relating to technical issues***



### **Introduction of Resilience Design under RI and WRM components**

With support of NURI CF, DRC Regional office was engaged in designing and implementing training on Resilience design for Rural Infrastructure and Water Resource Management towards the end of 2020. The training introduced the concept of Resilience Design to DRC/NURI project staff and district local governments. Ninety participants from the RI and WRM teams participated in the trainings. The training was carried out by Warren Brush an international consultant on Resilience design approach and DRC Resilience and Livelihoods Coordinator, Natalie Topa. The training covered; theoretical knowledge on resilience design, application of the concept to rural infrastructure projects and Water Resource Management, to protect the roads and develop roadside agroecosystems utilizing the surface water and nutrient resources flowing to and from the roads. While the Resilience Design concept is still evolving, NURI Outputs 2 and 3 have contributed to extensive understanding and learning on Resilience Design. These lessons are still being analyzed, and will be shared separately.



### **Combining manual labour and machines in infrastructure projects**

NURI RI activities build on earlier Danida funded programmes, where the aspect of Cash-for-Work from labor-based infrastructure construction were an important aspect. Over the years the need to improve the sustainability and quality of infrastructure has led to an increasing use of construction equipment to supplement the cash-for-work activities. Particularly in the construction of water ponds and dam projects large equipment, while expensive, has proved to be efficient in terms of efficiency. DRC was able to construct mega structures at lower cost than commonly experienced with Government and other implementing partners, making use of both contractors and DLG equipment.



### **Community and institutions acceptance of Food Forest concept**

At the time of the introduction of Resilience Design in Outputs 2 and 3, a change was made in the popular activity of woodlots. Traditional woodlots, provided to institutions under RI and to private individuals as part of landscape water resource management under WRM, were replaced by the concept of Food Forests. Food Forests include a range of tree and other plant species and mimic natural forests, giving a wider range of services than woodlots. Success has been mixed, with strong resistance in some traditional tree-growing areas, leading to a compromise design. A large number of Food Forests are implemented in collaboration with schools, and the long period where schools were closed due to COVID negatively affected ownership as well as maintenance of the established Food Forests. While the concept of Food Forests shows considerable merit,

lack of buy-in by communities is likely to undermine success in some areas/ cases. It will be important to maintain monitoring of the Food Forest concept to ensure the right lessons are learnt. During the NURI extension NURI CSA implementing units are following up on Food Forests and other trees planted under RI/WRM.

Interestingly there was high level of theft of seedlings, particularly fruit tree seedlings, indicating that communities are eager to get access to tree seedlings.



### **Agreement with DLGs on Design / Scope of works**

Many RI/WRM projects have faced delays during finalization, or when it came to commissioning and handover to DLGs. This is because District leaders have demanded additional works beyond those initially agreed in the investment plans. Changes in design of structures being recommended by the district technical staff usually lead to higher costs of structures, and while DRC have tried to meet these demands, this has not always been possible, leading to disappointment and delays. The problem is to some extent caused by the use of standardized designs and BoQs, which do not take into consideration variations in site specific challenges and requirements.

## ***D) Rural Infrastructure/Water Resource Management – Lessons relating to programmatic issues***



### **Community engagement throughout the programme**

The high level of community participation in NURI activities, including site dialogue meetings prior to start of implementation have led to a high success rate of project implementation. It is ideal to engage communities right from the start whereby they are sensitized on project requirements and their roles and responsibilities as community stakeholders. The signing of voluntary land agreement forms by land donors during site dialogue meetings has been very instrumental in reducing land related conflicts.

The labour-based approach including cash-for-work on installation of structures has been a successful low-cost approach and ensured community involvement. Implementation costs have been significantly reduced compared to issuing contracts to vendors. DRC trained masons and hired labour for the installation of structures.

One best-practice adopted later in the programme was the inclusion of social safe guards in the process of screening of projects for implementation. This has enabled communities to feel ownership of projects. DRC held frequent community meetings to create awareness on safety issues on projects like water ponds and also, carried out fencing of water ponds with barbed wires and Kei apples and installed warning signs in local languages.



### **Balance between the cost and number of projects under Rural Infrastructure**

The requirement to implement a set number of projects, combined with the focus on parish level priorities, and labour-intensive approaches has resulted in many, relatively small, projects implemented under Output 2 of NURI. The most common projects have been community access roads, spring protection and woodlots / food forests. District level priorities are not directly considered, due to the bottom-up planning approach. This has been one of the main success factors of NURI RI, because the projects selected have reflected the needs of the communities.

There is, however, an increasing demand for addressing district level priorities in terms of bottle-necks, as well as improving the quality of Community Access Roads by gravelling entire road lengths especially in areas with black cotton or sandy soils, improving the design of markets to include shades, selling platforms and stores, and to go beyond spring protection and dam construction to improving water quality and access for domestic use. This would make individual projects more expensive, and result in fewer, but potentially more sustainable projects. On the other hand, a move to larger projects requiring more equipment would exacerbate the lack of quality heavy-equipment, both private and public in Northern Uganda which has contributed to delays in NURI implementation.

Within settlements, where there are different priorities, and a wider range of actors, a different approach may also be needed.



### **Labour and Allowance rates**

Development partners generally agree to following government guidance on allowances and labour rates, and NURI has done this throughout programme implementation. However, in practice, there is a wide range of payments for Cash-for-Work as well payment of allowances to government staff for participation in activities. This creates challenges for programmes which strictly follow the agreed guidelines. These issues are particularly marked in refugee areas, where some partners treat all refugees as POCs (Persons of Concern) thus justifying higher payments in cash-for-work, contributions to group savings and other practices, not considered best-practices in the development community.



### **Immediate handover/commissioning of completed infrastructure projects**

During the reporting period, a number of RI projects were commissioned while others were assessed for commissioning, however, some projects required repairs before hand over to the communities. This is aggravated when commissioning is much delayed, leading to an increase in costs of implementation. Handover and commissioning should be done as soon as projects are completed so that ownership and the responsibility of maintenance is taken up by communities with support of local governments.

## ***E) Whole NURI Programme – Lesson relating to Programmatic Issues***



### **Collaboration and joint monitoring with local government and partners**

The role of DLGs and LLGs in NURI includes monitoring of projects including providing technical expertise in checking and approving designs for structures under outputs 2 and 3. Regular engagement with district technical staff and leadership ensured commitment from the local governments, despite their frequent time constraints. Formal and informal meetings to discuss work progress, challenges and agreeing on way forward ensured the development of strong and supportive relations between local governments and NURI implementors.

- Continuous engagement with local government and partners at project design and throughout the implementation was crucial in ensuring local governments played their role with commitment, and also reduced on duplication of activities and projects in the areas of implementation.
- Involvement of Sub-County officials during group formation and planning processes ensured support for community mobilization.
- With good cooperation, districts have been lending heavy earth moving equipment to DRC for the construction of rural infrastructure projects in all the districts of operation, ensuring efficient roll-out of activities.
- Technical Support from the district technical staff like District Engineer, District Water Officer, District Natural Resource Officer, District Forest Officer, DTPC and the Planning Unit enhances ownership, sustainability and harmonization of sector norms during project implementation.



### **DLG and parish plans**

While DLGs/LLGs should theoretically carry out regular planning activities at parish, Sub county and District level, this is not always the case. In 2019/2020 NURI supported the DLG/LLGs in updating their Parish Development Plans, as the GoU planning process coincided with the roll-out of Output 2 activities by DRC. Especially LLGs expressed gratitude and satisfaction that the NURI intervention coincided with the expiration of Parish five-year development plans. NURI support to the DLGs/LLGs ensured the planning process was transparent, inclusive and participatory.



### **Community Involvement in Planning processes**

Involvement of communities and stakeholders in needs identification including strategic crops under CSA, and selecting project under RI ensured project acceptance and ownership among the stakeholders. Continuous collaboration and use of local government structures created a very strong bonding between the community and implementers.



### **Procurement Issues**

Procurement issues have caused delays across the NURI outputs. Sufficient specialised staff are needed from the start of the programme to avoid delays in implementation. Confusion on procurement rules and reluctance to decentralize procurement delayed activities in the first years of the programme. Additional manpower, including consultants where relevant, and clear guidance as well as framework agreements and decentralization of procurement where possible, were tools used to address the challenges in NURI.



### **Co-opting local or community leaders in radio talk shows**

Radio talk shows have been used to broaden community understanding about the NURI programme and as an additional source of training information, reaching beyond the programme beneficiaries and reinforcing learning. Implementing partners and units have most often held the shows themselves while in some instances inviting guest speakers. It has been noted that co-opting local community leaders increases community response and understanding of their roles and responsibilities towards the programme. There has been strong engagement by communities, with listeners calling in to comment and ask questions.



### **Access to land**

Community reluctance to offer land for project implementation, created some challenges to NURI implementation, and was most evident in semi-urban areas. This halted or delayed commencement of public works for some projects. This was overcome by continuous mobilization and sensitization of communities regarding land donation, the signing of voluntary land donation forms prior to starting project implementation and the engagement of political leaders in community mobilization and sensitization.

Refugees access to land for productive activities through membership in mixed groups was successful in NURI, as in other programmes, with hosts and refugees coming to various arrangements of land loan or hire through their own initiative, and based on the relationships developed in mixed groups.



### **Technical support from Government departments including research**

Various NURI activities received important technical support from Government institutions, in useful and flexible ways. While the differences in implementation modalities can make collaboration difficult, NURI received important technical support from Upper Nile Water Management Zone (UNWMZ), and from various government research institutions. Examples include:

UNWMZ team engaged actively in NURI management and collaboration activities throughout the programme, contributing to imaginative solutions on how to implement WRM activities. In this way, although the higher-level coordination was not always timely, the collaboration was still an important aspect in NURI overall success.

NARO and Zonal Agricultural Research Institutes (ZARDIs) allowed individual experts, researchers and trainers to support NURI in capacity building of CSA staff through a flexible arrangement allowing direct contracting of the trainers. This allowed researchers to interface with enthusiastic extension officers, in a manner which would have been difficult in a more formal arrangement.



### **Programme management**

The flexibility in programme management resulting from the close relationship between the Co-ordination function and the Danish Embassy, as well as the implementing units and partners has provided opportunities for learning lessons, adjusting and piloting new ideas.

Focus on maximizing staff motivation through transparent recruitment, meaningful annual assessments, decent employment conditions and opportunities to learn and build skills ensure the investment in human resources gives value-for-money in programme implementation. A dedicated HR unit has proved invaluable.

The NURI CF and CSA units were dominated by technical staff with agricultural back-grounds. The VSLA Coordinator and Supervising Engineer being the exception, and contributing a useful balance to the team. Inclusion of team members with a social sciences background could have added breadth to the management team.

When NURI activities were up and running, a leadership training was implemented for NURI CF staff as well as management teams of Output one. This had a profound impact on motivation and cohesion within the management team.

Balancing the need for uniformity in implementation across a large and complex programme, with the need for local adaptation is achieved through a meaningful level of decentralization of decision making, guided by the regional presence of NURI CF, with Regional Coordinators in each region, and a sub-office of NURI HQ located in Arua. Monthly CF meetings, quarterly meetings with all CSA Coordinators, and semi-annual meetings with management of the 3 components has given good coordination and opportunities for synergy.

The value of decentralized decision-making became very clear during the COVID pandemic lockdowns, where NURI was able to restart some activities quickly as implementing units worked closely with district level COVID committees.



## Technical staffing

Looking at the various lessons learnt in both CSA, RI and WRM there are many lessons relating to the importance of community engagement. NURI has focused strongly on technical issues, perhaps due not only to the programme design, but also the technical backgrounds of the staff at all levels. A larger number of staff with backgrounds in community mobilization, gender, youth and other community development focused areas could have been advantageous.

### *F) Lessons relating to Cross-cutting issues*



## Tree-planting and differentiated community needs

Observations from a household tree-growing pilot- (with cost-sharing) implemented in Pakwach District in 2022, as well as provision of fruit tree seedlings to refugee women groups, offer some lessons. Both activities will be further rolled out as part of the NURI extension and these lessons will be further tested.

The tree growing activities so far have made clear that when promoting agroforestry and tree growing there are big differences in the needs / demands of refugees versus nationals, and men versus women, even within the same households. The interests of national women are rather similar to that of refugees, with demand being for relatively few seedlings, mainly fruit trees, and with refugees in particular focused on quick growing fruit trees such as pawpaw and passion fruit vines. National / host community men are more interested in larger numbers of seedlings, for poles and timber, i.e., for commercial production. National men and women are interested in tree seedlings for households and garden boundary planting, as well as for fodder. While this is perhaps no surprise, it indicates the importance of differentiating the supply of seedlings to meet the needs of different groups.

The trial with cost-sharing shows willingness to pay when farmers have a choice of seedlings, and when supply is backed-up with technical support / extension. The existence of programmes providing free seedlings undermines willingness to cost-share

The willingness of refugees to pay for tree seedlings has not been tested.



## Youth

Based on a pilot prior to the start of NURI, the definition of youth in the programme was set as 18 to 28-year olds. After piloting youth groups in the pre-NURI pilot, it was also decided not to create separate youth groups in the main NURI programme, but rather to encourage the inclusion

of youth in the existing or self-selecting farmer groups, some of which call themselves youth groups – though the membership is often very mixed. The decision not to create new youth groups was based on observation and discussion with communities, who saw the value of diverse groups. Newly created Youth groups in the pilot were found to be unstable, and while there was a small core of youth interested in agriculture, others would join the group and then leave. It was also found that the category 'youth' was not especially useful as those within the age bracket who had established a family had very different interests and needs to those who were unencumbered.

NURI has focused on those youth interested and/or engaged in agriculture, and resisted the pressure to include non-agricultural skills training in the programme, rather keeping the focus on agriculture related activities. Almost a third of participants in CSA activities and 60% in cash-for-work have been youth. Youth have also been active in saving and borrowing through VSLAs.

NURI have included opportunities for fresh graduates in staff recruitment, giving young people a chance at their first job, in a crowded labour market. These fresh graduates have proved to be highly motivated, and have been well received by the communities.



There is strong demand for SRHR services, in farmer groups, refugee and host communities and at household level. Collaboration between NURI and the WAY SRHR programme created opportunities for both programmes.

NURI and WAY, having different geographic coverage, was a disadvantage, as it undermined the full integration of SRHR activities in NURI workplans. Clarity on roles and responsibilities in terms of outreach, training and linkage took time to emerge, especially concerning the role of NURI CSA extension staff. As a result, the many examples of positive impact were strongly influenced by the interest of the individual extension officers, and the quality of collaboration between WAY and NURI at the district level.



Gender in NURI was mainstreamed, rather than focusing in specific gender activities and budgets. While this can lead to a watering down of gender focus and impact, it has not done so in NURI. The integration of VSLA into CSA activities ensured high participation by women, and gave a platform for women to develop their leadership skills. Women were well represented in cash-for-work activities as well as in group leadership.

In CSA activities, focus was on households, but in the settlements, following a pre-NURI pilot, women refugee groups were the focus of extension on household vegetable and fruit production.

This was based on the low level of commitment and attendance by male members in the pilot, as well as the high number of de-facto female-headed households.

In the staffing of NURI women were well represented at all levels, particularly in top management, i.e., the NURI CF team. In the CSA field teams, the female extension officers, in NURI riding gear, and on off-road motorcycles, were a common and popular sight, and these women are often mentioned as an inspiration and eye-opener in the communities.

## 7.2 Pilot Activities

### Animal traction loan services to farmer groups in Agago

In 2021, NURI partnered with Talanta Microfinance to pilot animal traction loan services to farmer groups in Agago district. Support has been delivered to 42 farmers that showed interested and were to pay 30% of loan requirement to Talanta after sensitization. During the reporting period, monitoring was conducted to assess progress in terms of loans payments. The three groups involved were visited and findings show that farmers face challenges in access to the payment channel provided by Talanta. This has delayed remittance of payments coupled with lack of ground staff to support the activity. It was also noted that one of the groups (Can opwonya) had not paid any money since they took loans from Talanta because of varying payment amounts communicated by the loans officer. To date only 17% of the overall amount to be remitted to Talanta Microfinance has been paid. NURI CF will continue to engage with Talanta in the subsequent quarters to ensure the farmer group needs are met.

### Tree growing pilot project in Pakwach

NURI CF, in partnership with AFARD, is piloting tree growing activities, on a cost-share basis in Pakwach district. The objective of the model is to encourage tree growing while fostering ownership, with beneficiaries contributing 30% of seedling costs. The project targets 105 farmer groups, with tree species indentified by DLG aand stakeholders. Eleven climate adaptive species are promoted: mango, avocado, orange, *Eucalyptus grandis*, jack fruit, teak, ashogany, giant lira, neem, kikobe, and *Grevillae robusta* (Mbeni) with a target of 1,260 households growing at least 50 trees.

AFARD NURI staff mobilised groups for payment of co-funding. To ensure that the tree seedlings were planted, deliveries were done to all the groups that co-funded including the seven community members. A total of 14,044 tree seedlings were delivered and planted with cost share of UGX 4.2 million paid by farmers and groups. Field staff conducted routine monitoring and provide advice on management. Dry spell and pest attach affected survival rates. Farmers were advised to water tree seedlings and spray against pests and diseases. The prolonged dry spells experienced during the quarter delayed tree seedlings distribution and transplanting.

### Farmer Market School approach

Inspired by the work of NGO, ADRA, NURI CF made the decision to pilot the Farmer Marketing School concept, as developed by ADRA. Five NURI extension staff from implementing units were trained by ADRA (Adventist Development and Relief Agency) in Mubende district. With support of NURI CF and Unit managers, the trained staff rolled-out the training to extension teams in each CSA implementing unit. Criteria for selection of NURI farmer groups to participate were developed, considering: group membership, constitution and procedures, group leadership, production and marketing trend, record-keeping and willingness to participate. The concept is to empower farmer groups to better understand market functions and be manage marketing

activities. A total of 89 farmer groups were for piloting FMS, with some organised in clusters, depending on geographic distribution and focus crops.

Early indication is that the concept allows for ownership and sustainability of market by empowering farmers to do their own market research with NURI as the facilitator of the process. This will lessen dependency of NURI staff to identify market opportunities and also strengthen production and marketing committees to perform their roles sustainably.

### **PMP/VSLA integration pilot**

PMP-VSLA integration is a concept that enables groups and households to plan their developments through production, savings and loans. This concept supports the group institutional development through giving them opportunities to develop their vision and pathways to achieve. At the household level, a vision and goals are developed with participation of all family members. Once this is done, they embark on development of the plans that include; budget, production and marketing plan, savings plans and debt management plans.

While the concept has gradually developed across the NURI programme, with the PMP activities and the VSLA planning, gradually being integrated, and CSA staff trained to facilitate this integration the pilot is a conscious effort to find the best way to integrate planning of production and marketing with the group or family cash-flow and income.

The pilot is currently being implemented in the districts of Koboko and Adjumani through PICOT and RAU Adjumani, targeting 380 groups that implement both VSLA and CSA and have regrouped after the first VSLA cycle share-out. A manual has been developed building on experience gained. At the time of reporting 736 farmers (534 female, 202 male) from 41 groups have been trained started training, mainly on sessions one and two, which involve a review of household goals in production, education, building and purchase of household assets.

## **8.0 Implementation of recommendations**

NURI CF gathers recommendations from stakeholders, including District Local Governments, the IMC meeting and RDE monitoring visits, and addresses them to the extent feasible, within the programme limitations and mandate. Recommendations from studies and appraisals are addressed in the same way.

Since the start of the programme there have been three Implementation Monitoring Committee meetings, the meeting in 2019 having been a programme launch rather than a monitoring meeting. There was a re-appraisal of the programme design in October 2019, and a Mid-term review in the first quarter of 2021.

All major recommendations and the actions taken to address them are reported on in early Annual and semi-annual reports. These, as well as minutes of the IMC meetings, from both regions and each year, are available under reports on [www.nuri.aq](http://www.nuri.aq)

The up-dated overview of recommendations and progress against these are presented in the matrix below:

## Actions/Implementations of the "Back to office" Recommendations

Propose actions / plans in addressing NURI recommendations from annual IMC meetings and RDE monitoring reports.

Sn	Observations / Findings	Recommendations	Planned Actions	Status
<b>Climate Smart Agriculture (CSA)</b>				
1	<b>Need to ensure synergy among the three outputs of NURI.</b> Partners focus exclusively on their outputs and yet the community should benefit from all the interventions.	Need to improve on the partnership between RI/WRM and CSA IUs. Mobilization and guiding farmers near projects to use of water for production.	<ul style="list-style-type: none"> <li>CSA and DRC staff to intensify collaborations when mapping farmer/infrastructure groups and projects such that the community near can utilize and benefit from the structures.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Joint coordination meetings</li> <li>✓ Cash for work under RI/WRM used to facilitate savings in VSLA.</li> <li>✓ Involvement of CSA staff in site dialogue meetings.</li> <li>✓ Joint district sensitization meetings.</li> </ul>
2	<b>Practical on-farm training on soil and water (moisture) conservation needed.</b>	NURI CF and DRC should consider organizing such trainings.	<ul style="list-style-type: none"> <li>Resilience design training organized by DRC benefiting the CSA staff</li> <li>CSA staff cascaded learning to CSA units.</li> <li>Conduct refresher trainings</li> </ul>	<ul style="list-style-type: none"> <li>✓ Refresher trainings done.</li> <li>✓ Training upscaled to individual farmer level</li> <li>✓ Some FGs established own RD demo sites e.g. Eggplant in Kitgum Matidi FG</li> </ul>
3	<b>Some farmer groups have lost interest in their strategic crops and need to change</b>	Allow flexibility and include focus on nutrition and food security while promoting CSA through strategic crops	<ul style="list-style-type: none"> <li>Additional commodities may be considered for farmer groups in their 3rd year.</li> <li>Addendum to the 3rd year AEO guideline</li> </ul>	<ul style="list-style-type: none"> <li>✓ Farmers encouraged to diversify and AEOs gave general extension advise (3<sup>rd</sup> year farmer groups).</li> <li>✓ Training targeted farmers at HH level</li> </ul>
4	<b>Support interested farmer groups to become seed producers</b>	Support farmer groups with good potential to become seed producers	<ul style="list-style-type: none"> <li>Train the AEOs on Local Seed production/Business</li> <li>NURI liaise with DLG/MAAIF</li> <li>Train the potential farmer groups</li> </ul>	<ul style="list-style-type: none"> <li>✓ Suitable groups to benefit from LSB in NURI extension</li> <li>✓ Concept for LSB included in NURI extension.</li> </ul>
5	<b>Expand CSA Resilience activities beyond</b>	NURI CF guides AEOs to widen advisory services	<ul style="list-style-type: none"> <li>CSA staff to intensify demand driven provision of diverse extension</li> </ul>	<ul style="list-style-type: none"> <li>✓ ToRs revised for staff especially in 3<sup>rd</sup> year</li> </ul>

Sn	Observations /Findings	Recommendations	Planned Actions	Status
	<b>strategic crops.</b> AEOs focus mainly on selected farmers and strategic crops. Farmers need general extension to ensure impact.	to include other enterprises and farmers whenever possible and practical.	services and knowledge through homestead / household visits. This shall include supporting and encouraging even the non-group members to attend CSA trainings.	<ul style="list-style-type: none"> <li>✓ Some farmer groups hosted &amp; participated in the RD refresher trainings.</li> <li>✓ Diversification of enterprises</li> <li>✓ BDS training included in NURI Extension</li> </ul>
6	<b>Areas of CSA training need strengthening:</b> soil, water conservation structures, contour cultivation, use of plant residues in mulching and manuring, timely planting, pest control and production planning	CSA training should address the issues observed and promote the appropriate application of the general principles of CSA.	<ul style="list-style-type: none"> <li>• Refresher CSA training for extension staff</li> <li>• AEOs making individual follow up of group members</li> </ul>	<ul style="list-style-type: none"> <li>✓ Refresher training in Resilience design.</li> <li>✓ Technical trainings with expert trainers.</li> <li>✓ Technical backstopping.</li> <li>✓ Selected staff attend other trainings e.g., FMS, Mind set change, DFC</li> </ul>
7	<b>Quality assurance of inputs.</b> Some inputs either of poor quality e.g., cassava cuttings or not well adapted to the local environment. In some cases, varietal mixtures noted.	Supply of poor-quality inputs should be addressed by NURI CF and implementing partners for CSA	<ul style="list-style-type: none"> <li>• More engagement of the vendors on quality parameters. Pre-bid meetings with bidders to clarify specifications. Partners/IUs to emphasize procurement of cultivars from certified local source to allow close inspection of quality in the delivery process.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Germination tests done</li> <li>✓ Verification by DLGs conducted at the seed source</li> <li>✓ Suppliers invited for pre-bidding meetings.</li> <li>✓ SOPs for procurement implemented</li> </ul>
8	<b>Delayed delivery of inputs:</b> Delay in demo establishment.	Timely establishment of the demonstrations	<ul style="list-style-type: none"> <li>• Units should procure demo inputs timely, observe quality and advise farmers to follow GAPs</li> </ul>	<ul style="list-style-type: none"> <li>✓ Refresher training on demo setting done across units</li> <li>✓ Most procurements relinquished to the units/IPs.</li> <li>✓ Systems for effective procurement Implemented</li> </ul>

Sn	Observations /Findings	Recommendations	Planned Actions	Status
9	<b>Synergy with other programmes.</b> NURI FGs can benefit from complementary programs. CSA IUs to work closely with the DLGs and other development partners within/out the region(s) to enhance the achievements and sustainability.	Responsibility for follow up lies with CF, units and DLGs.	<ul style="list-style-type: none"> <li>• IPs/Units to share the profile of progressive groups with the DAOs/DPOs as well as focal persons/Area Coordinators of the complimentary programmes including DINU, DRDIP etc</li> <li>• Joint radio talk shows and combined programs for joint sensitizations</li> </ul>	<ul style="list-style-type: none"> <li>✓ Exit meetings for all groups and group details shared with LLGs/DLGs for linkage.</li> <li>✓ NURI CF and IUs link groups as relevant e.g., AFARD linking groups for "Basket weaving"</li> <li>✓ Financial linkages being under taken by Ensibuuko and Talanta</li> </ul>
10	<b>The poor mindset</b> of group members	Continuous sensitization of the farmer groups right from selection.	<ul style="list-style-type: none"> <li>• NURI and DLGs should take this up as they engage with farmers</li> </ul>	<ul style="list-style-type: none"> <li>✓ Selected unit and DLG staff attended a mind-set change training.</li> <li>✓ The ToT staff cascaded mind set change across units and farmer groups.</li> </ul>
<b>Rural Infrastructure (RI) and Water Resources Management (WRM)</b>				
11	<b>Land disputes affecting project implementation.</b> Mentioned as a challenge by both the implementing units and the local government reports.	NURI CF, implementing units & participating Local Governments take extra measures moving forward.	<ul style="list-style-type: none"> <li>• Site dialogue meetings conducted before group formation</li> <li>• Signing of voluntary land donation forms by landlords and Sub County local authority</li> </ul>	<ul style="list-style-type: none"> <li>✓ Dialogue meetings and voluntary donation forms implemented across all project sites and districts.</li> <li>✓ Continuous community sensitization conducted</li> </ul>
12	<b>Compliance with sector norms, guidelines and standards.</b> DLGs were more involved during project approval, but less during implementation.	NURI CF and DRC always involve the DLG in all stages of the project cycle, i.e., from identification, design/specification, approval, implementation,	<ul style="list-style-type: none"> <li>• Involvement of the DTPCs and LLG in monitoring and supervision of projects.</li> <li>• DLGs/LLGs submit work plans for monitoring and supervision in advance for facilitation.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Increased involvement of local leaders was implemented across all DLGs/LLGs.</li> </ul>

Sn	Observations /Findings	Recommendations	Planned Actions	Status
		monitoring and supervision		
13	<b>Support for WRM.</b> NURI has a target to support integrated WRM in 8 micro-catchments spread across the programme area	MWE/UNWMZ prepares and shares quarterly progress reports for the integrated water resources management	<ul style="list-style-type: none"> <li>• DRC shares quarterly report with UNWMZ for consolidation and submission to CF</li> </ul>	✓ Implemented as planned
14	<b>Quality assurance.</b> According to some LGs report, some inputs supplied were either of poor quality or not well adapted to the local environment (tree seedlings, construction materials)	This should be addressed by DRC and NURI CF	<ul style="list-style-type: none"> <li>• Tree seedlings procured locally from within the districts/regions.</li> <li>• Water quality test conducted before and after construction.</li> <li>• Testing of samples of materials e.g sand, murram, aggregates and culverts</li> <li>• Involvement of water dept</li> </ul>	<ul style="list-style-type: none"> <li>✓ Implemented as planned.</li> <li>✓ All structures constructed and installed certified by the DE</li> </ul>
15	<b>Low participation of women.</b> Fewer women participated in the PDPs revalidation exercises especially during farming season due to engagement in farming	DRC/DLGs/LLGs to take deliberate efforts in mobilizing women to participate in project implementation.	<ul style="list-style-type: none"> <li>• Community meetings emphasise gender and youth participation.</li> <li>• Continuous sensitization on the importance of equal participation</li> <li>• Emphasis on women taking up leadership.</li> </ul>	✓ This was successfully implemented and improvement noted. In Acholi there were finally more female participants - 17,031 (Female 8,856 & Male 8,175).
16	<b>Status and maintenance of the CARs:</b> Inaccessible Roads and Sustainability / maintenance of roads opened	Need to spot gravel slippery surfaces Handover of tools after public works to sub counties for maintenance	<ul style="list-style-type: none"> <li>• Close consultation with the DLGs in harmonization of specifications and what remedies to take.</li> <li>• Regular joint monitoring and supervision of projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Swamp raising e.g., in Akwang, Arinyapi etc were done.</li> <li>• Emphasis on RD to direct water for production</li> <li>• Spot gravelling done on some CARs.</li> </ul>

## **Annex 1: NURI Extension**

The NURI programme, as part of the Danida Country Programme has been extended by one year. As almost all activities are completed and the budget exhausted by the end of 2022, a costed extension is planned. During the extension period, NURI CF will gather lessons learnt from the programme to pass on to future programmes, and to contribute to the dialogue around climate change, and the humanitarian/development nexus.

NURI coordination function will continue to manage the programme, but roles, structure and staffing have been reviewed and adapted in the last quarter of 2022, to meet the needs of the extension. Where needed consultants will be brought in to support activities.

For infrastructure and water projects under outputs 2 and 3, an extension of DRC contract will focus on additional works adding value to completed activities as well as DLG and community capacity in maintenance of infrastructure.

Collaboration with the Danida funded, UNFPA implemented WAY programme will be continued during the extension period. This will not have any direct cost implication for NURI, but will involve linking NURI groups, including graduated groups, to the WAY programme, and engaging in coordination activities with the implementors, UNFPA and CARE.

Assets such as laptops, vehicles and motorcycles belonging to the NURI programme, will be made use of as necessary, and disposed of where no longer needed.

Activities will focus on three results areas:

### **Assessing and documenting NURI activities**

The extension will allow for systematic assessment of existing interventions against international climate adaptation criteria (NbS criteria), and the documentation and sharing of lessons with partners and DLGs for wider application and possible incorporation in guidelines, policies and practices.

Gathering and sharing relevant lessons from successful interventions, including pilot activities will be an activity focusing on gathering lessons, challenges and emerging opportunities from completed, on-going and pilot activities. Information will be analysed and shared to relevant stakeholders, including local governments, communities, implementing partners, development actors and Government of Uganda. NURI CF will work with professional communications consultants and/or partners and identify and implement best practices in sharing lessons, including for policy briefings. There are expected to be lessons in the areas of CSA technologies and extension methodologies as well as on specific areas such as the concept of resilience design in rural infrastructure and water resource management. New technical concepts such as resilience design in CSA, Green Roads for Water and Food Forests for institutions and individuals will be assessed and lessons, positive and negative, fed into the emerging knowledge in these areas.

## **Greening NURI**

Pilot activities will be expanded to enhance the greening of NURI including tree growing at individual household level on cost sharing basis and permaculture food systems at household level with fruit trees, including for refugees.

Building the capacity of DLGs through training and information on climate related issues will be considered if suitable training opportunities can be identified.

Community ownership of tree growing in food forests and resilience design projects implemented during NURI implementation will be followed by NURI CSA extension staff. Experience shows that community ownership and technical support, follow-up and mentoring of these activities is crucial for tree planting to become tree-growing. The NURI extension gives an opportunity to address a gap which was aggravated by the COVID pandemic restrictions, which limited community involvement and therefore ownership of trees planted during the NURI programme, particularly, the many food forests handed over to schools. During the extension CSA extension officers will be given refresher training in tree growing, agro-forestry and other related issues, after which they will provide back-stopping and mentoring to farmers and institutions involved in tree growing through all outputs of the NURI programme.

## **Sustaining NURI**

Extension activities will focus on activities that enhance sustainability of the results achieved during NURI. This will include efforts to improving maintenance of rural infrastructure. Despite setting-up and handholding of organisation structures, by-laws and contribution agreements, the sustainability of rural infrastructure, including water infrastructure is often disappointing after project handed-over. Yet, there are many examples of indigenous structures such as rotating labour groups that have functioned for many generations. During the extension period, NURI will build on successful models for maintenance of infrastructure.

Piloting commercial agriculture extension. Different modalities of commercial and cost-effective extension will be explored, whereby the role of the extension officer may include; becoming agents for input suppliers, taking the role of aggregator/bulk-reseller, offering extension and complementary services on a fee-basis. Similarly, different modes of service delivery may be tested, including the adoption of tech-based solutions. Interventions will aim to create self-sustainable models for commercial extension services, whereby farmers will benefit from the interventions long after the end of the programme. An assessment of the income streams of extension officers, after they leave employment will be carried out, and options for expanding these explored. NURI will reach out to potential and/or part-time commercial extension officers and in collaboration with these explore ways to expand and strengthen income streams.

Promoting market / business orientation of farmers. Farmers' capacity in group marketing and business skills around the value-chain will be strengthened through Farmer Marketing School training and activities, including building capacity of in-group facilitators. Access to, and business

opportunities concerning agricultural seeds, including production of quality declared seeds, will also be explored. Integrating Production and Marketing Plans with VSLA activities will be continued building on earlier experience.

Training in business skills and entrepreneurship. During the extension, new efforts in this area, including off-farm agriculturally related activities, will be piloted. This will include supporting farmers to identify and capitalise on potential business opportunities. Focus will be on income diversification, ultimately reducing farmers' vulnerability to shocks and variability in their primary income streams. Planned interventions include training in financial/business skills, subsidising small start-ups at farmer and/or group level, providing advice/business support to farmer entrepreneurs, as well as collaborating with other organisations to promote off-farm income generating activities.

Deepening the impact of VSLAs. The VSLA model has proven to be a strong driver for development with robust indications of self-sustainability and climate adaptation. All indications are that many VSLAs will continue to operate long after the training has ended. A strong level of operational sustainability can be claimed, as beneficiaries will continue to benefit from the intervention for years to come. During the extension, NURI will explore interventions to further deepen the positive impacts of VSLAs. Different avenues of complementary interventions will be explored. As a starting point, the following thematic interventions will be considered for potential implementation: a) linking VSLAs to financial institutions, b) digitisation of VSLAs, c) building on financial literacy training with the addition of basic business skills training, and, d) combining VSLA planning with agricultural production and marketing planning of the group and household. NURI will work with partners as well as with staff of CSA implementing units on these activities, and capacity building of CSA extension officers in offering training in basic business skills alongside agronomic skills is planned.

Although the foregoing adjustments will enhance the climate change adaptation and sustainability of NURI operations, they will largely be within the original scope of the programme. However, the adjustments will necessitate adjusting NURI's objective, and amend some indicators at outcome and output levels.

## Annex 2: Status on physical targets

The below table gives achievement of physical targets as at 31<sup>st</sup> December 2022

### A. NURI staffing levels as of 31 December 2022

S/n	Implementing entity	Number of districts	Number of staff	Comments
(1)	NURI CF	13	<b>16</b>	Includes 2 advisers
(2)	RAU Agago	0	0	Unit closed
(3)	RAU Kitgum/Lamwo	3	28	
(4)	Arua DFA: Arua, Madi-Okollo, Terego	3	40	1 partially funded
(5)	AFARD: Pakwach, Nebbi, Zombo	3	33	3 partially funded
(6)	RAU Moyo/Obongi	2	37	
(7)	RAU Adjumani	1	34	
(8)	PICOT: Koboko	1	19	3 partially funded
	<b>Total CSA</b>	<b>13</b>	<b>191</b>	
(9)	DRC	13	<b>60</b>	
(10)	MWE / UNWMZ	10	<b>7</b>	MWE staff working with NURI
	<b>Total NURI</b>	<b>13</b>	<b>274</b>	

### C. NURI Physical Progress for Rural Infrastructure (RI) Projects as of 31 December 2022

S/n	Type of Project	Target Number	Number Completed	Number Ongoing	% Completed
(1)	Community Access Roads (No)	778	760	18	98%
(2)	Food Forests (No)	516	516	0	99%
(3)	Markets (No)	12	12	0	100%
(4)	Protected Springs (No)	159	159	0	100%
(5)	Water Ponds (No)	39	39	0	100%
	<b>Total</b>	<b>1,504</b>	<b>1,486</b>	<b>18</b>	<b>98%</b>

#### D. NURI Physical Progress for WRM Projects as of 31 December 2022

S/n	Type of Project	Target Number	Number Completed	Number Ongoing	% Completed
(1)	Green Roads for Water (No)	32	26	7	78%
(2)	Valley Tank and Small-scale irrigation	1	1	0	100%
(3)	Food Forest	279	279	0	100%
(4)	Protected spring	66	66	0	100%
(5)	Water Ponds	39	39	0	100%
(6)	Soil and water conservation	17	16	1	94%
(7)	Riba Gravity Flow Scheme	1	1	0	100%
	<b>Total</b>	<b>435</b>	<b>428</b>	<b>7</b>	<b>98%</b>

#### E. NURI CSA Status of Farmer Groups Training as of 31 December 2022

S/n	District	Target number	Number Completed	Number Ongoing	% Completed
(1)	Agago	375	375	0	100
(2)	Kitgum	320	320	0	100
(3)	Lamwo	493	493	0	100
(4)	Arua, M-O, Terego	1,070	1,070	0	100
(5)	Pakwach	155	155	0	100
(6)	Nebbi	230	230	0	100
(7)	Zombo	230	230	0	100
(8)	Moyo/Obongi	660	660	0	100
(9)	Adjumani	660	660	0	100
(10)	Koboko	195	195	0	100
	<b>Total</b>	<b>4,388</b>	<b>4,388</b>	<b>0</b>	<b>100%</b>

Graduation of groups complete with continuing collaboration for pilot activities, e.g., FMS, LSB. Groups linked to DLGs and NGOs in graduation process.

## F. NURI CSA Status of Farmer Groups with VSLA as of 31 December 2022

S/n	District	VSLA's established	Number Graduated	Number Ongoing (drop-outs)	% Completed	Regrouped for 2 <sup>nd</sup> Cycle
(1)	Agago	270	268	0 (2)	100%	268
(2)	Kitgum	230	229	1	100%	218
(3)	Lamwo	355	349	1 (5)	100%	254
(4)	Arua,MO, Terego	555	517	19 (19)	96%	424
(5)	Pakwach	131	128	0 (3)	100%	116
(6)	Nebbi	229	224	0 (5)	100%	186
(7)	Zombo	207	186	0 (21)	100%	142
(8)	Moyo/Obongi	523	520	1 (2)	100%	399
(9)	Adjumani	486	420	57 (9)	88%	312
(10)	Koboko	100	100	0	100%	99
	<b>Total</b>	<b>3,086</b>	<b>2,941</b>	<b>79 (66)</b>	<b>97%</b>	<b>2,418</b>

To support groups in their 'saving for a purpose' efforts, some graduations will be in January rather than December.

## G. NURI CF support to District Capacity building, 31 December 2022

S/n	District	Targer Number	Number Ongoing	Number Complete	% Completed / ongoing
(1)	Masters	19	14	5	26% complete, 74% ongoing
(2)	Post Grad Diploma	20	0	20	100% complete
(3)	Higher diploma	5	5	0	0% complete, 100% ongoing
(4)	Short Courses	56	0	56	100% complete
(5)	Procurements				99% complete

- Most long-term students are now in their 3<sup>rd</sup> (out of 4) semester.

## **Annex 3: Resilience Design in Rural Infrastructure**

The aim of Resilience Design is to reduce soil erosion, build healthy soils that can retain water and regenerate local biodiversity for long-term resilience of the physical landscape so that natural resources are replenished and not degraded. By utilizing this approach, long-term surface water retention and sub-grade water storage within the landscape are more viable, which ultimately supports the long-term health of local ecosystems, thus improving an ecosystem's ability to provide food, fodder, fiber, fuel and fertility for communities. Characteristic of DRC's resilience design approach is systems-based thinking that considers good governance of resources, social cohesion, infrastructure and facilitation of local market systems, as well as a healthy and vital local ecology that is resilient to shocks and stresses. By consolidating and integrating resilience design interventions, the overall impact of each project is optimized by leveraging opportunities of infrastructure improvements to aid in healing landscapes and buffering communities and markets from climate and weather extremes.

DRC's Resilience Design Approach incorporates land restoration, permaculture, agroecology and agroforestry principles to respond to ecological degradation and extreme hydrological behavior within sub-catchment zones, micro-watersheds and the ecology of areas where rural infrastructure and water resource management projects are implemented.

In addition to the hands-on training community members receive during their participation in each project, DRC's intensive resilience design trainings include participation by government representatives as well as representatives from the Climate Smart Agriculture component of NURI.

While ongoing monitoring, evaluation and learning activities undertaken through the NURI program seek to understand the longer-term impact of resilience design principles on community attitudes and practices, observations from DRC's demonstration site in Nebbi district suggest a strong appreciation for resilience design principles by many within the community. As an example, multiple farmers, whose lands were part of the demonstration site, have reported the benefits of introducing bioswales which have resulted in greater and healthier yields from their crops. Beyond agricultural yields, community members around the Nebbi demonstration site have also reported how the integration of resilience design has helped to recharge a local borehole that was previously abandoned due to low yields. In yet another example, the introduction of a pond within the Nebbi demonstration site has created new opportunities for fish farming as well as brickmaking resulting from the new and reliable water source. Through the remainder of the NURI project, DRC will continue to promote community learning through the use of demonstration sites, by sharing the practical experiences of community members and by hosting open houses, exchange events and learning opportunities as a means to encourage ongoing community uptake and application of resilience design principles beyond projects directly implemented through the NURI program.

The below table provides concrete examples as to the difference in costs as well as difference in the key components and outcomes between the conventional and resilience design approaches.

The graphics following illustrate examples of the integration of resilience design into NURI projects. It should be noted that, while the total number of projects was reduced with the integration of resilience design, the change in cash-for-work is insignificant as additional working days were required for applying resilience design principles to projects.

### Comparison of Traditional Projects Versus Incorporating Resilience Design Principles

<b>Community Access Roads:</b>	
<b>Conventional Approach</b>	<b>Resilience Design Approach</b>
<p><b>Labor and Time:</b> 30 community members engaged for 20 days.</p> <p><b>Average Cost:</b> 19,064,742 UGX</p> <p><b>Components:</b></p> <ol style="list-style-type: none"> <li>1. 1 km of road leading to one or more social service center.</li> <li>2. Mitre drains (off-shoot drains).</li> </ol> <p><b>Outcomes:</b></p> <ol style="list-style-type: none"> <li>1. Access by communities to social service centers is improved.</li> </ol>	<p><b>Labor and Time:</b> 30 community members engaged for 25 days.</p> <p><b>Average Cost:</b> 24,311,890 UGX</p> <p><b>Components:</b></p> <ol style="list-style-type: none"> <li>1. 1 km of road leading to one or more social service center.</li> <li>2. Road-water harvesting.</li> <li>3. Bioswales.</li> <li>4. Ponds.</li> <li>5. Infiltration pits / silt traps.</li> <li>6. Check dams.</li> <li>7. Tree and grass planting.</li> </ol> <p><b>Outcomes:</b></p> <ol style="list-style-type: none"> <li>1. Access by communities to social service centers is improved.</li> <li>2. Reduced long-term road maintenance requirements resulting from improved management of water runoff.</li> <li>3. Improved soil hydration and agricultural productivity resulting from water management (bioswales, ponds, infiltration pits, check dams and tree and grass planting).</li> <li>4. Reduced impact of extreme weather events, such as droughts, as a result of improved soil hydration from water management (bioswales, ponds, infiltration pits, check dams and tree and grass planting).</li> <li>5. Reduced environmental degradation, such as soil erosion, as a result of water management (bioswales, ponds, infiltration pits, check dams and tree and grass planting).</li> </ol>

<b>Woodlot Versus Food Forest</b>	
<b>Conventional Approach</b>	<b>Resilience Design Approach</b>
<p><b>Labor and Time:</b> 30 community members engaged for 20 days plus 10 days maintenance.</p> <p><b>Average Cost:</b> 11,923,650 UGX</p> <p><b>Components:</b></p> <ol style="list-style-type: none"> <li>1. Monoculture tree planting.</li> </ol> <p><b>Outcomes:</b></p> <ol style="list-style-type: none"> <li>1. Revenue from timber.</li> <li>2. Wind break.</li> <li>3. Carbon sequestration.</li> </ol>	<p><b>Labor and Time:</b> 30 community members engaged for 22 days plus 10 days maintenance.</p> <p><b>Average Cost:</b> 12,127,690 UGX</p> <p><b>Components:</b></p> <ol style="list-style-type: none"> <li>1. Multi-species indigenous tree planting, representative of species that can provide fiber, food, fodder and which fix nitrogen and have medicinal uses. Planted in water harvesting methods and patterns for long term survival rate. Maximum 10% timber trees in any Food Forest.</li> <li>2. Bioswales on contour.</li> <li>3. Infiltration pits / silt traps.</li> <li>4. Farmer Managed Natural Regeneration</li> <li>5. Smile berms</li> </ol> <p><b>Outcomes:</b></p> <ol style="list-style-type: none"> <li>1. Enhanced management of water resources including recharge of ground water systems.</li> <li>2. Reduced impact of extreme weather events, such as droughts and floods, as a result of improved deep soil hydration from water management.</li> <li>3. Minimized soil erosion.</li> <li>4. Increased survival rates of trees.</li> <li>5. More stable crop yields through regenerative land management and design.</li> </ol>

## SPRING/BOREHOLE/GROUNDWATER RECHARGE

DESIGNING TO PUT MORE WATER IN TO THE SYSTEM THAN WE ARE TAKING OUT



## CREATING A "SPONGE VILLAGE" IN ATEGO, UGANDA

AN INTEGRATED NETWORK OF FILL-N-SPILL WATER STORAGE AND INFILTRATION SYSTEMS STABILIZED BY TREE SYSTEMS AND VEGETATION



## **Annex 4: Resilience Design for CSA / Permaculture**

NURI aims to increase resilience of the supported communities in Northern Uganda. At the same time climate change and biodiversity loss are exacerbating food and nutrition insecurity while population growth and refugee influx are increasing pressure on land and food systems. NURI has integrated the concept of resilience design, initially introduced in RI and WRM outputs, into CSA activities and based on lessons learnt, developed a Permaculture pilot for the NURI extension.

Resilience designs is an integrated approach optimizing sustainable land resource productivity and household food security while conserving the ecosystem. Resilience design includes landscape designs to inform sustainable farming practices. In early 2021, NURI program sent a team of 5 CSA staff to attend the “resilience design in water, landscape and ecosystem integration” training organized by DRC in Nebbi district. The team leader customized the training to CSA, and developed “Resilience design for Climate Smart Agriculture” (RD4CSA), which was then cascaded to NURI CSA staff.

RD4CSA can increase productivity within rain-fed farming systems, improving farmers’ knowledge on soil conservation and water storage in the soil, extending the production period. NURI extension teams passed on this knowledge to the farming communities who adopt and adapt as per their needs and capacity. Trainers in RD4CSA established six demonstration sites where NURI extension staff were trained, and which served as learning platforms and income source for the host farmer groups.

Key practices included resource planning and land-use design with application of soil and water conservations practice including double-dug beds, bioswales, boomerangs (smile-berms) and trellising, and integrating and conservation of biodiversity. To enhance learning and adoption, training was mainly hands-on. Trainings involved farmers and extension staff in the learning process.

The intervention was considered successful as the resilience design sites flourished and farmers near the sites, and others visiting on learning tours adopted many of the practices.

### ***Observations/Lessons learnt***

- a) Knowledge from the RD4CSA is increasingly being adopted by farmers because of the visible results of soil and water conservation especially in landscapes prone to run off.
- b) Adoption of the resilience design structures by farmers has been context specific i.e., in areas of gentle slopes farmers have mainly adopting double-dug beds.
- c) Farmers adopt only one or two of the resilience design structures due to labour demands and also based on the context of the landscape.
- d) Farmers have been replicating the structures though with minimum standards of the design structures.

- e) The success of the sites and level of adoption by farmers can be attributed to the level of effort and engagement by the implementing Units and/or participants.
- f) The highest uptake and application of the technologies is in backyard gardening. Typically, farmers from the refugee settlements have highly adopted some design structures, including double dug beds, smile berms and bioswales.
- g) Increase in soil productivity with higher yields recorded per unit resources invested by farmers.

On the basis of the observations and lessons, the main practices adopted by farmer groups included; use of double dug beds for sustainable vegetable production, bioswales for controlling run-off and moisture retention, and smile berms (boomerangs) for household fruit tree growing. These lessons were integrated into the permaculture pilot under the NURI extension.

The resilience design structures have proved to be effective in run-off controls, moisture retention, increased soil productivity and higher yields of vegetables at household level economically benefiting the farming households.

As the focus is shifting towards sustainability and greening of NURI outputs with special attentions to refugees, Permaculture becomes relevant as farmers in the refugee settlements are faced by limited access to land due to small plots allocated which are now exhausted. It is worth noting that due to continuous cropping with poor rotation, many soils have lost fertility undermining productivity. Adopting practices and technologies that replenish soil fertility and health can mitigate this challenge in the NURI farmer groups as well as enhancing soil biodiversity through growing fruit trees for enhanced household incomes.

Prepared by Team leader RD4CSA, Joel Bayo, CSA Coordinator, North West Nile.

**Gallery of photos for permagardens at household level**



## **Annex 5: Case study on mixed refugee/host groups**

### Working with mixed groups under NURI- a case of Palabek Settlement

A deliberate effort was made to observations and record the work with mixed groups in the NURI programme. The team in Acholi sub-region documented observations that could guide continuity with the approach especially during the extension period in 2023.

#### **General observations with emphasis on peaceful co-existence and relationship building**

- Level of co-existence has reduced with increased conflicts. This is attributed to hosts becoming less willing to give land for free. On the other hand, refugees are desperate to increase production following reduction in the food rations by WFP.
- Many refugees are now taking farming seriously, giving a good environment for the adoption of CSA practices.
- Some partners e.g. Don Bosco and Caritas are hiring land for demonstration plots. In addition, Don Bosco is in the process of procuring tractors for hire by refugees to open land. Some partners such as LWF and Food for Hungry even hire tractors for individuals. Partners, along with OPM support these initiatives in livelihood sector meeting.
- OPM is proposing that MoU should be signed for land for demonstrations by land owners and groups. Partners are in support of this but NURI opposed it because of its practicality.
- Many partners do not have funding e.g. World Vision, CESVI and even LWF is struggling.
- NURI is well recognised in the settlement as supporting many refugees in the zones its operating. NURI has never paid for access to land.
- Refugee capacity for Palabek has been increased to 75,000 and currently there are 65,000 people. Land acquisition for short season crop is sometime free whereas for annual crops like cassava, it involves some hiring.
- The land available to refugees is often unproductive and sometime prone to floods
- Refugee also hire their labour to the host community, sometime in exchange for food stuffs

#### **a) Successes**

- All 33 demos sites for 2022 were acquired free. However, 3 were taken back or sites changed after groups had prepared.
- New Zones 8 – 9, locals are willing to give land for free to the refugees including individuals.
- Mixed groups with VSLA remain firm and continue to work together
- Co-existence is established in some mixed groups and they begin to the share things. Hosts may offer refugees land for farming, land for laying bricks, charcoal burning, labour. Refugees will exchange items because of friendship e.g., solar lights, host also work for some progressive refugees. Both can also help in times of need.

- Refugees are investing from the income they earned which is traced to NURI intervention. With this they are diversifying into other enterprises. Possibly traced to VSLA training on Visioning, some say they want to go back to South Sudan with something.
- Individual visits by extension officers are good for mindset change. Many refugees tend to listen when individually approached. This is making impact for the refugees to understand.
- Due to increase in land access, the refugees have increased production of field crops thus making them relatively food secure.
- Mindset change and willingness to engage in productivity
- Learning new ideas and thus inspiring each other

## **b) Challenges**

- Host community sometimes changes on the land donated for a demo. These 3 sites were taken back by landlords after the groups had prepared them and 2 gave alternative sites. This affected timely planting. Also host restrict the type of crops to plant preferring short term compared to cassava and pigeon peas. Similarly land for individuals is hard to get while that for hire is plenty at 20,000 – 50,000 per acre.
- Some refugees are lazy (lack interest in growing of crops) especially those from pastoral tribes. This brings conflicts in the groups if they cannot do group work. Some groups of 2089 have remained operational till now.
- Free demo sites are sometimes not suitable for the intended crops as it limits choice.
- Some host community members when they donate land for group do not want to work in the group activities and this bring conflicts. Example in one group a member missed inputs because did not work
- Where the number of refugees and hosts do not balance, there is often rift in terms of decision making with majority overriding in decisions. This has been witnessed in input distribution, VSLA who keeps box etc
- Mixed groups tend to bring many tribes and training becomes difficult because of long translations. This has led to some instructions not properly followed e.g. one member of a group distributed all cassava cuttings in 2022 including for the demo site to members. There is also some level of disunity exhibited in groups with many tribes.

## **c) Recommendations**

- Strengthen coordination at higher level down to settlement. OPM and UNHCR sometimes dictate. Example of land hire and entering into agreement with landlords / farmers
- Consider animal traction for mixed groups on pilot basis
- Explores ways to motivate landlords e.g., fruit and timber seedlings so that they can give land to the refugees. Possible to integrate this with Food forests under WRM?
- Hold sensitization meetings with landlord to improve on coexistence and relationship building

*Prepared by NURI team, Acholi*

## Annex 6: NURI Pilot on Farmer Market School methodology

Following a decision to extend the NURI program by 1 year and need to support and strengthen marketing in the graduated NURI farmer groups, NURI CF implemented a pilot on Farmer Market School (FMS) starting late 2021. The pilot built on a model developed, and introduced in Uganda by Adventist Development and Relief Agency (ADRA).

The FMS methodology aims at empowering smallholder farmers to explore markets and better understand market functions and opportunities through facilitated discovery learning. Once a value chain is known with all its links and actors, specifications and peculiarities, farmers will be better able to make decisions about which value chains to specialize in and what is expected of them as producers, and better able to analyze other relevant value chains. They will better understand the importance of quantity, timeliness and quality. The FMS covers 14 topics before farmers begin to explore markets within their locality and beyond, depending on their needs and using own resources (see FMS manual at <https://nuri.ag/>).

The NURI FMS pilot started in November 2021 with the training of 4 master trainers, from among NURI staff. These trainers then rolled out what they had learned to extension staff across the implementation units in April/ May 2022. The model was then rolled out to selected farmer groups. NURI adapted ADRA training manuals to guide the implementation of the pilot activity. Farmer groups were selected to participate based on group membership, group functioning, leadership, production and marketing trend and willingness to finance learning. A total of 89 farmer groups were selected across the different implementing units as per Table 1 below.

**Table 1: Number of groups selected and models used for training**

s/n	District	# groups trained under cluster	# groups trained under complementarity	Total groups selected
1	Kitgum	15	0	15
2	Lamwo	17	1	18
3	Agago	0	0	0
4	Adjumani	5	7	12
5	Moyo	0	4	4
6	Obongi	0	6	6
7	Koboko	3	7	10
8	Terego	0	3	3
9	Arua	2	2	4
10	M/Okollo	0	3	3
11	Nebbi	0	5	5
12	Zombo	5	0	5
13	Pakwach	2	2	4
	<b>Total</b>	<b>49</b>	<b>40</b>	<b>89</b>

Final selection of groups considered the workload of AEOs and whether the group would train alone or with other nearby groups. Where the group is trained alone, this is referred as complimentarity model, where two or more groups are trained together, it is called cluster model. The program expects to select another 92 groups in 2023, after which successes and lessons will be reviewed and shared.

In the complimentarity model, all group members are trained directly by NURI AEOs. The complementarity model has the advantage that farmers are trained directly by NURI extension staff, while the cluster model is more cost effective and encourages groups to work together and build trust – potentially giving opportunities for groups to market larger quantities, and develop into cooperatives.

In the cluster model, the AEO first trains 3 farmers called Group Marketing Facilitators (GMFs) selected from each group. The GMFs then train their fellow group members with or without AEO being present. The clustered groups carry out the market trip together and learn from each other. Some are moving towards becoming cooperative e.g. 3 groups under cluster in Koboko district. Where groups are geographically scattered clustering is not viable.

By the end of the year, some groups had completed all the prescribed 14 sessions and had even undertaken market trips in search of market while others were still in session 5. Reports from the implementing units indicated that attendance of the training was above 50% of the membership. This showed that farmers were interested in attending training sessions under FMS.

Generally, farmers showed a high willingness to learn these new marketing concepts including its training methodology (training through GMFs). Preliminary feedback from FMS training in a few of the groups indicated good progress.

Successful case includes in Mucwini subcounty in Kitgum district where 4 groups (two FMS groups plus two others) were able to carry out collective marketing due to FMS training. In Adjumani district, cluster selling was not registered with groups, however, the complementarity group members sold collectively. A group in Ofua subcounty attributed that collective marketing of soybeans to Agri Exim to FMS training. Another group in Abuku subcounty, Koboko district, decided to market beans to a nearby school after comparing transport cost to market. Some groups in Nebbi have gone for value addition and collective marketing. This shows both models have a potential for positive impacts and enhanced collective marketing.

Amidst the positive feedback, there is more work to be done to overcome challenges:

- Simplify and translate training guides into local languages
- Access to stores for groups
- Need for ongoing mentoring and technical backstopping

### Lessons learnt from the pilot:

- The inclusion of market research involving FMS group members opened the eyes of groups to market dynamics that affect their production
- FMS training and exposure encouraged innovation
- Under cluster model, some sessions are difficult for the GMFs to deliver necessitating regular technical backstopping by AEOs
- The different training methods in FMS such as role plays and stories strengthen learning
- Under the complementarity model, GMFs can aid in refresher trainings to group members
- Training periods to be between January to May when farmers are less occupied.
- GMFs require motivation e.g. quarterly review meetings including refresher trainings

Generally, FMS training is offering hope to farmers to unlock their ability to engage with the market but requires a lot to help them develop this capacity.

### Photos



Two NURI staff & group members in Ofua sub county Adjumani district in soybeans bulked,



Members of Mungu Leni Group, Adumi sub county, Arua City in a meeting with NURI staff

## Annex 6: DCB Students supported by NURI

	District	Department	Course	Beneficiary / Student Name	Training institution
<b>MASTERS STUDENTS</b>					
1	Adjumani	Engineering	Masters of Science in water and sanitation engineering	Izakare Kareode Richard	Kyambogo University
2	Agago	Production	Master of Science in food security and community nutrition	Odich Emmanuel Okullo	Gulu University
3	Agago	Production	Master of management science	Otema Geoffrey	Gulu University
4	Arua	Production	MSc. in Irrigation and Drainage Engineering	Onziga Elia	Busitema University
5	Arua	Production	Msc. Veterinary Preventive Medicine (Field Epidemiology)	Caku Benjamin	Makerere University
6	Kitgum	Production	Masters of Science in Agriculture and Rural Development	IKEBA Damalie	Uganda Christian University-Mukono
7	Kitgum	Production	Master of Agribusiness Management	O CAN Bosco	Makerere University
8	Kitgum	Production	Msc in Applied Science & Entomology	Nyeko Francis Omona	Gulu University
9	Koboko	Engineering	Undertaking an MSc Course in Construction technology and Management	Buga Mohammad	Kyambogo University
10	Koboko	Production	Undertaking an MSc Course in Climate & Disaster Management	Bakole Alex	Busitema University
11	Lamwo	Production	Master of Science in Agro ecology	Komakech Richard Cyrus	Uganda Martyrs University
12	Lamwo	Production	Master of Science in animal production and marketing	Dr. Avudraga Stanely	Gulu University
13	Moyo	Engineering	Master of Science in Water and Sanitation Engineering	Oja Albine Bayi	Kyambogo University
14	Moyo	Production	Master of Science in Agriculture and Rural Development	Ajiri Alfred	Uganda Christian University (Mukono)

	<b>District</b>	<b>Department</b>	<b>Course</b>	<b>Beneficiary / Student Name</b>	<b>Training institution</b>
15	Obongi	Production	Master of Science in Agro-Ecology	Guli Martine	Uganda Martyrs University
16	Pakwach	Engineering	Master of Science In Construction Management and Technology	Ochakachon Geoffrey Avola	Kyambogo University
17	Zombo	Engineering	Master of Science in Construction Management	Ruvakuma Lawrence	Makerere University
18	Zombo	Production	Master of Science in Agro Ecology - Msc in Agricultural Extension & Education)	Canpacho Michael Onega	Uganda Martyrs University
<b>POSTGRADUATE STUDENTS</b>					
1	Agago	Engineering	Undertake PGD in construction Project Management	Oroma Emmanuel	Makerere University
2	Agago	Production	Undertake PGD in Agriculture and Rural Innovation	Ojwee Charles	Bishop Stuart University
3	Agago	Production	Undertake PGD in Project planning and management	Komakech Jimmy	Uganda Management Institute
4	Agago	Production	Undertake PGD in Agriculture and Rural Innovation	Owiny Michael Jackson	Bishop Stuart University
5	Agago	Production	Undertake PGD in Agriculture & Rural Innovation	Okot George	Uganda Management Institute
6	Agago	Production	Undertake PGD in project planning and management	Oryem Edward Basil	Uganda Management Institute
7	Arua	Production	Post graduate diploma in Food safety Management	Eriku Benard	Kyambogo University
8	Arua	Production	Post graduate diploma in Food safety Management	Adile Nelson	Kyambogo University
9	Arua	Production	Post Graduate Diploma in Project Planning and Management	Agani Rebecca Ayiseni	Makerere University Business School
10	Koboko	Production	Undertaking Post-graduate Diploma Course in Livestock Development, Planning & Management	Dr. Angutoko Gilberts	Makerere University School of Veterinary Sciences and Biosecurity
11	Lamwo	Engineering	Undertake PGD in construction Project Management	Akena Leonard	Makerere University

	<b>District</b>	<b>Department</b>	<b>Course</b>	<b>Beneficiary / Student Name</b>	<b>Training institution</b>
12	Lamwo	Engineering	Undertake PGD in Construction Project Management	Acayo Grace	Makerere University
13	Lamwo	Production	Undertake PGD in project planning and management	Ocora Wilfred	Uganda Management Institute
14	Moyo	Production	Post Graduate Diploma in Project Planning and Management	Lagua Jane	Uganda Management Institute (UMI)
15	Moyo	Production	Post Graduate Diploma in Project Planning and Management	Oduti Deogracious	UMI
16	Nebbi	Engineering	PGD Construction project Management (Weekend)	Anican Evelyn	Uganda Management Institute
17	Obongi	Production	Post Graduate Diploma in Project Planning and Management	Opigo Johnson	Uganda Institute of Banking and Financial Services
18	Pakwach	Engineering	Post Graduate Diploma in Construction Management	Oweknimungu Benedicto	Makerere University
19	Zombo	Production	Post Graduate Diploma in Agricultural Risk Management and Finance	Upenjmungu Moses	Mountains of the Moon University -Fort Portal
20	Adjumani	Engineering	Post Graduate Diploma in Construction & Project Management	Drate Ewi Christopher	Makerere University
<b>HIGHER DIPLOMA STUDENTS</b>					
1	Agago	Engineering	Undertake training of Higher Diploma in Civil Engineering	Oryem Francis	Uganda Technical Collage - Lira
2	Arua	Engineering	Higher Diploma in Mechanical Engineering (National Higher Diploma in Mechanical Engineering)	Adriko David	Uganda Technical Collage - Lira
3	Koboko	Engineering	Undertaking Higher Diploma Course in Building and Civil Engineering	Amba Manase	Uganda Technical Collage - Lira
4	Moyo	Engineering	High Diploma in Mechanical Engineering	Mawadri Nicholas Akuku	Kampala Polytechnic Mengo
<b>TOTAL NUMBER OF STUDENTS</b>				<b>43</b>	

International Students collaborating with NURI

<b>International Masters/ PhD students collaborating with NURI</b>			
Mikkel Bagger	Roskilde University	Master's Thesis	Agrifoods value chains
Sune Thusen	University of Copenhagen	Master's Thesis	Barriers to refugee youth access to land
Cecilia Smitt Meyer	Uppsala Univerisity	Master's Thesis	Gender Equality impact on adoption of CSA
Nicholas Wainman	Aarhus University	PhD Thesis	Anthropology/Refugees
Geoffrey Kwala	Aalborg University	Master's Thesis	Transition to permaculture on-going
Signe Røn Langelund Nielsen	Aarhus University	Master's Thesis	Gender – on-going

## Annex 7: Lessons Learnt Papers



### Northern Uganda Resilience Initiative (NURI) Contributions to pillar 2 of the JLIRP

#### Enabling entrepreneurial led development and market growth pillar system

**The Northern Uganda Resilience Initiative (NURI) was a four-year initiative (2019-2022) financed by Denmark's Ministry of Foreign Affairs as part of the Uganda Programme for Sustainable and Inclusive Development of the Economy (UPSIDE).**

- NURI aimed to enhance the resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and refugee-hosting communities.
- NURI was implemented in 13 districts in Northern Uganda, working in three areas: 1) Climate Smart Agriculture (CSA); 2) Rural Infrastructure (RI); and 3) Water Resources Management (WRM).

NURI contributed to two pillars in the Government of Uganda's Jobs and Livelihoods Integrated Response Plan for Refugees and Host Communities (JLIRP). Ahead of the Global Refugee Forum in December 2023, a round-table will be organised to discuss sustainable livelihoods and self-reliance in the Uganda refugee response in relation to the JLIRP. This 2-pager demonstrates relevant approaches and lessons from the NURI programme relating to Pillar 2. A separate 2-pager summarizes contributions relating to Pillar 3.



## Pillar 2: Enabling entrepreneurial led development and market growth pillar system

The Rural Infrastructure component aims to improve refugee and host community access to input and output markets and services through improvements to agriculture-related infrastructure, particularly community access roads (778 km) and markets (12). A labour-intensive Cash-for-Work (CfW) approach was used to implement activities, offering opportunities for refugees and hosts to come together for planning and user-groups, as well as earning income. Through its implementing partner, Danish Refugee Council (DRC), NURI piloted, tested, and adapted resilience design (RD) approaches to build climate-smart rural infrastructure. This included testing and introducing water drainage from roads that feed into production, including permaculture garden demonstrations, and the introduction of Food Forests to replace the woodlots established in earlier programmes. Food Forests included a range of tree species and other plants, established in such a way as to copy the growth of natural forests. The improvement of local markets included, for example, improved security and general facilities at the Point J market in the newly created Terego District, which is an economic hub for both communities.

NURI worked with Parish Development Committees (PDCs), including local leaders and representatives of communities, to revalidate Parish Development Plans and prioritize projects suitable for implementation through labour-based approaches (community access roads, markets, water ponds, spring protection, food forests). Identified projects went through technical screening, and investment plans were developed approved by districts. Community groups made up of refugees and hosts (58% youth) were formed, trained and provided with tools. These groups participated in the implementation of 1,504 projects. Eighty-six percent of stakeholders report a reduction in time and/or cost of transporting goods to a marketplace.

The WRM component focused on water in the landscape in micro-catchments, selected by Ministry of Water and Environment (MWE), including several that covered refugee settlements. The aim was to enhance the resilience of agricultural-related water infrastructure (physical and natural) in eight WRM micro-catchments, based on plans developed by the Upper Nile Water Management Zone (UNWMZ) under the MWE. Using the same CfW approach described above, 435 WRM infrastructure projects were implemented. There were seven types of projects, with food forests counting for more than half (279), followed by spring protection, water ponds, green roads for water, soil and water conservation, a valley tank, and a gravity flow scheme. New resilience design approaches were tested and adapted, such as the green roads for water concept, where run-off from roads was channelled into productive activities.

### Lessons Learned

Lessons learned from the NURI Rural Infrastructure and WRM activities relating to JLIRP Pillar 2 are:

1. Investing in market infrastructure close to refugee settlements gives opportunities for income generation from household production and strengthens interaction between refugees and hosts.
2. In CfW activities where refugees and hosts are in mixed groups the dynamics of refugee life needs to be considered – i.e., distribution days and fluctuating numbers.
3. Plans for community maintenance of infrastructure through user-groups needs to take into account the type of support available (e.g., from UNHCR) in settlement areas vs non-settlement areas.
4. Resilience design in rural infrastructure activities offers greater sustainability of infrastructure investments in the face of climate change but requires substantial planning and financial resources.
5. Community and local government participation in dialogue meetings prior to the start of infrastructure activities minimises land conflicts and complications during implementation.

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# Northern Uganda Resilience Initiative (NURI) Contributions to pillar 3 of the JLIRP

Increasing agricultural productivity, production, and marketable volumes

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- NURI aimed to enhance the resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and refugee-hosting communities.
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MINISTRY OF FOREIGN AFFAIRS  
OF DENMARK  
Danida

### Pillar 3: Increasing agricultural productivity, production, and marketable volumes

The objective of the CSA component of the NURI programme was to increase agricultural output of refugees and host communities. By the end of the project, there was a 20% increase in annual agricultural cash income of participating households, a 22% increase in average yields, and a reduction of households reporting food insecurity. This was achieved through a combination of support to farmers groups in CSA techniques, marketing, financial literacy, training and support from agricultural extension, and Village Savings and Loans Association (VSLA) teams.

**CSA:** NURI worked with 4,388 farmers' groups, approximately 100,000 households, to improve skills in CSA. There were four types of farmers groups: 1) old national farmer groups continuing from the previous programme; 2) new national farmer groups; 3) mixed refugee/host farmer groups; and 4) women refugee farmer groups. NURI followed a field crop model with mixed refugee groups, selecting a main crop and an intercrop. Women refugee groups were supported with one food crop, three vegetable and three fruit trees, selected by the individual households, for backyard gardening and to supplement household food security. Each crop was assessed based on suitability to climate conditions, marketability, crop resistance to pests and diseases, crop yield potential and labour requirements.

**Production and Marketing Plans (PMPs):** National and Mixed farmer groups prepared PMPs to develop realistic production and marketing targets. NURI provided support to train marketing committees, collect and disseminate market information, link farmer groups to buyers and inputs suppliers, and encourage bulking and collective marketing of produce. By bulking and storing their produce, groups strengthened their negotiation position and took advantage of price fluctuations. Bulk prices were generally between 10-20% higher than prices for smaller quantities marketed individually.

**VSLA training:** To improve access to finance, all farmer groups not previously organised as savings groups were offered VSLA training. In total, 3,020 farmer groups were trained on financial literacy and VSLA methodology, starting with a process of household visioning. VSLA savings provide a financial safety net, reducing the risk of households selling productive assets during emergencies. The NURI VSLA team monitored portfolios of groups for 13 months. NURI farmer groups cumulatively saved UGX 13,6 billion with an annual growth rate in savings of 71%. Return on savings was 22.5%. Women saved more than men with their savings constituting 78% of the overall. Cumulatively, group members borrowed approximately UGX 14 billion in loans, at an interest rate of 10% per month, to fund primarily business and agricultural production. Agricultural loans made up 38% of loans taken.

Extension staff were trained on planning processes, extension methodologies, CSA, marketing, and post-harvest handling. Extension teams made household visits to reinforce learning and encourage adoption. Seed and planting equipment was given to national groups for 1-acre demo fields, and to refugees and mixed groups for demo and individual fields. NURI recruited staff with local language skills from the areas of implementation. Refugees were recruited, often as community-based trainers.

#### Lessons Learned

The main lessons learned from NURI relating to Pillar 3, relating to refugees and host communities are:

1. Developing a household vision can create a reinforcing cycle where planned production contributes to savings and savings finance increased production.
2. Refugees working together with host communities in farming and savings groups developed relations that led to refugees' improved access to land at no or relatively low cost.
3. VSLA is a vital part of CSA. Access to small loans and savings assist refugees and hosts to increase production, as well as dealing with shocks and household needs that affect their productive lives.
4. Flexibility in the selection of crops, integration of intercrops, and technical assistance is highly demanded by refugees and hosts but are demanding on the time and capacity of extension teams.
5. Access to and affordability of agro-inputs continues to pose a challenge to agricultural production for refugees and host communities in Northern Uganda.
6. Actively targeting refugees when recruiting staff is highly appreciated and creates good will within the refugee community.

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# Northern Uganda Resilience Initiative (NURI)

## Resilience Design (RD): lessons in infrastructure, water management and food forest activities

**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.**

- The aim of NURI was to enhance the resilience and equitable economic development in supported areas of Northern Uganda, including for refugees and refugee-hosting communities.

NURI was implemented in 13 districts in Northern Uganda and focused on three areas:



Climate Smart Agriculture (CSA)



Rural Infrastructure (RI)



Water Resources Management (WRM)

Approximately 30% of activities were in refugee hosting areas.



*NURI achievements, challenges and lessons gathered from implanting partners’ reports,*

NURI achievements, challenges and lessons gathered from implanting partners’ reports, external assessments and learning and reflection workshops, are contributing to knowledge and learning on Resilience Design (RD), amongst other topics. This note aims to highlight lessons which are of interest to others implementing, or planning to implement, programmes integrating RD.



## Integration of Resilience Design in NURI

**RD is the planning and designing of the built environment to sustain under the probable impact from progressive climate change and episodic natural disasters.**

In NURI the RD approach incorporated designs responding to the environment, hydrological behaviour within micro-catchments and the ecology of project areas. The aim being to contribute to reduced soil erosion, build healthy, water-retaining soils and regenerating local biodiversity for long-term landscape resilience and replenishment of natural resources.

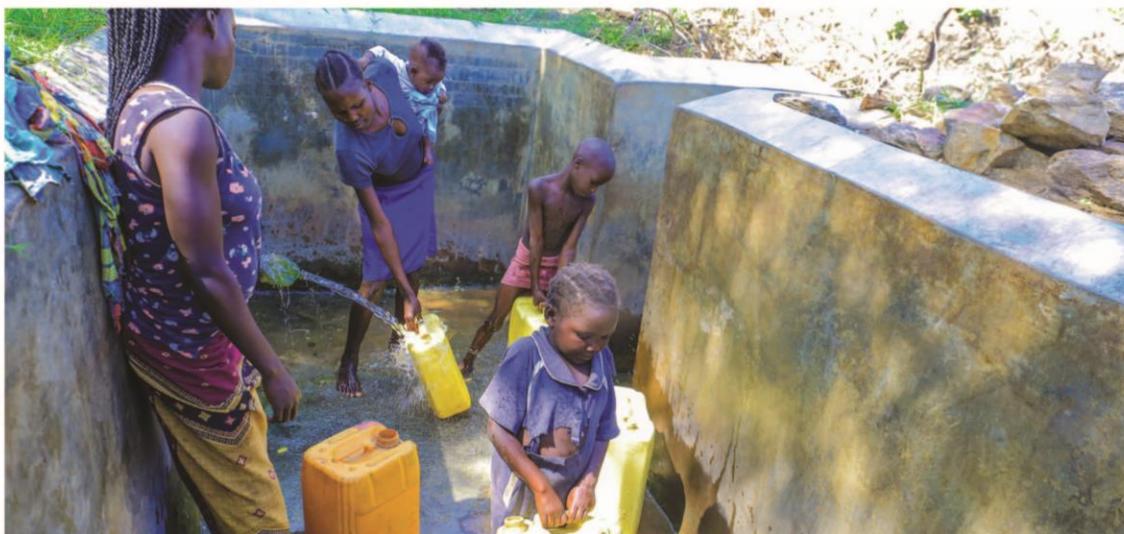
Rural Infrastructure (RI) and Water Resource Management (WRM) activities under NURI aimed to improve farmers' access to markets and enhance the resilience of agriculture-related water infrastructure. Major activities implemented were the construction of community access roads, water structures including ponds and spring protection, food forests and tree growing, as well as upgrading local markets. Water activities were concentrated in eight micro-catchments selected by the Ministry of Water and Environment (MWE), and based on plans developed by the Upper Nile Water Management Zone (UNWMZ) under MWE.

A labour-intensive Cash-for-Work approach was used, wherever possible, offering opportunities for communities to earn income, as well as to form user groups for the maintenance of created assets.

NURI, through its implementing partner, Danish Refugee Council (DRC), piloted, tested, and adapted RD approaches to build climate-smart rural and water infrastructure. Implementation included draining water from roads into agricultural production, including permaculture garden demonstrations, and the introduction of Food Forests to replace the woodlot concept which was implemented in earlier programmes.

NURI worked with Parish Development Committees to revalidate Development Plans and prioritize projects suitable for implementation. Selected projects went through technical screening, and investment plans were developed and approved at the district level. Community groups were formed, with a large segment of youth (58%), trained and provided with tools. These groups participated in the implementation of 1,504 projects. Reduction in time and cost of transporting goods to market was reported by 86% of stakeholders.

RD was introduced during the second year of implementation, with training of relevant District Local Government (DLG) and project staff. Throughout implementation RD approaches were further tested and adapted. Many projects were interconnected, for example, with soil and water conservation linked to recharging springs, water from road drainage structures feeding into small dams, and dams built to protect roads from damage by heavy rain episodes.



*Bapaa Spring, Terego District, Uganda*



## Resilience Design in Infrastructure



### Community Access Roads and Green Roads for Water

Resilience design includes road-water harvesting and management through bioswales, infiltration pits or silt traps, mitre drains, scour checks and tree and grass planting as appropriate. Also borrow pit management, and where possible conversion to water storage. Bioswales constructed to reduce flooding of roads provide fertile soils and moisture for permaculture. Bioswales also limit erosion on roadsides. There are examples of community replication of bioswales in their farmlands.



### Food forests

Resilience design involves multi-species tree and shrub planting, including fibre, fuel, food, fodder, medicinal and nitrogen-fixing species. Food forests include soil and water harvesting and management with structures such as bioswales, infiltration pits/silt traps, smile berms and farmer-managed natural regeneration (FMNR) of trees on the site.



### Protected Spring

Protected springs are constructed at sites of natural springs, with sufficient water flow to justify investment in spring improvement. RD includes the establishment of water recharge systems, including bioswales and road water harvesting

systems and infiltration pits/silt traps. Depending on the site, further interventions included stone-works such as check dams and one-rock dams as well as extensive planting of trees and ground cover to protect earthworks and stone-works.



### Soil and Water Conservation Structures

These were, in most cases, implemented as part of other WRM projects. Soil and water conservation structures include bioswales, infiltration pits, bench terracing, gully plugging, one-rock dams, slope management and tree and vegetation establishment. Soil and water structures also included riverbank restoration or protection, with RD in this case including training the river course, excavation of catch drains and bioswales, and planting of trees and deep-rooted vegetation to stabilize river embankments.

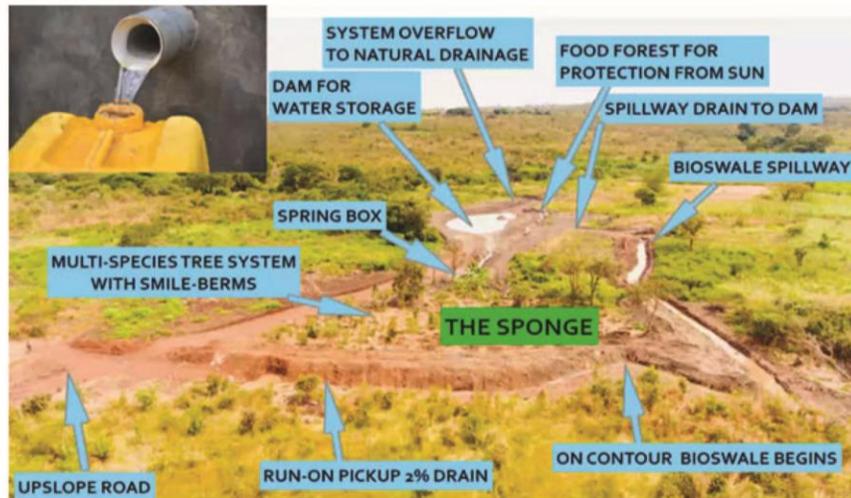


### Water Ponds

RD includes excavation of ponds, extending catchment areas using bioswales, smile berms to encourage vegetation growth, and shallow infiltration pits and check dams, as well as protection of embankments through the establishment of trees, and deep-rooted grasses.



Spring/Ground Water Recharge – Water Management a round a spring source – Pakele Sub-County, Adjumani District, Uganda



Spring-Protection and Hydrological Recharge - Bapaa Spring, Terego District, Uganda

## Lessons Learned

1. RD in rural infrastructure activities offers greater sustainability of infrastructure investments in the face of climate change. However, successful implementation requires substantial planning, technical and financial resources, as well as community engagement.
2. Implementation of RD required programme flexibility and adaptability, as by its nature, RD is context specific and is implemented in dynamic and unpredictable environments.
3. Time spent on community awareness of Resilience Design concepts and understanding, as well as integration of local interests and adaptations is important for ownership. Community ownership is a prerequisite for the maintenance of RD structures and vegetative interventions, including protecting sites from livestock and fire.
4. Almost all RD structures include tree growing, whether around dams, above protected springs or along roads. To ensure community engagement tree growth must take account of community interest and ensure ownership and user arrangements.
5. Community and local government participation in dialogue meetings prior to the start of activity implementation minimises land conflicts and complications during implementation. Land conflicts are the greatest risk to the implementation of projects, and most RD projects require land beyond the actual infrastructure, for example, for soil and water conservation structures.
6. Larger projects, combining a range of resilience design structures can have real impact on water holding capacity of the landscape, recharging water ecosystems, recharging springs and ponds, and reducing run-off and the destructive effects of surface water runoff to roads and landscape.
7. Infrastructure integrating RD is best implemented with a combination of construction equipment and community cash-for-work, and cannot realistically be implemented through cash-for-work alone.
8. Rural and water infrastructure activities integrating RD require sequencing of roll out, considering periods of rainfall, and the time needed to establish vegetation protecting the infrastructure from weather events and livestock.
9. Impacts of RD take time to establish and become apparent, and may appear after the end of the programme. Once established, however, the impact can continue to grow as natural resources regenerate. Community acceptance therefore requires investment in awareness creation, knowledge and understanding.
10. Actively targeting refugees when recruiting staff is highly appreciated and creates good will within the refugee community.

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## Annex 8: Success Stories

### Onion Production – Adokorach Dokorach Furwasuazi, Akworo Subcounty, Nebbi District

Adokorach Furwasuazi is a 25-year-old woman with a family of 4 lives in Jupalai village, Kituna parish, Akworo Sub County, Nebbi district. Her story of change shows how onion production and collective marketing gradually moved her towards achievement of her life goals.

Before her group joined NURI Adokorach grew crops like cassava, beans, groundnuts and maize in small quantities and mainly for home consumption. “I would have very small quantities left for sale and in this situation my family hardly saw good money”, says Adokorach.

This all changed when her group-Utungkic prioritized onion as their strategic enterprise after a thorough cost benefit analysis and training in farming as a business by NURI extension staff.

The group received training in Climate Smart Agriculture practices and collective marketing. “This helped the group and I to get empowered and apply better Post Harvest Handling Practices hence improved quality of produce”, she confirms.

In 2021, she opened 0.25 acres and planted onion (red creole variety). However due to the poor weather, she only got 578kgs. From this production, in January 2022 her group did collective marketing and she sold 500kgs at a unit price of UGX 1,600. This earned her UGX 800,000. “I did not sleep that night after earning that amount for the first time in my life”, recalls Adokorach.



I told my family and some group members about the hidden treasure in onion production. This excited and encouraged me to embrace onion production. I invested the money to purchase a sewing machine worth UGX 270,000 and paid tuition worth UGX 400, 000 to pursue a tailoring course. “This I intended since I wanted to have a steady source of income to provide for my family”, brags Adokorach. I used the remaining balance UGX 130,000 to purchase a goat that has now produced twins.

Adokorach plans to continue with onion production and increase the acreage from 0.25 to 0.5 next year. “I also plan to get a place in a busy trading center such that I can earn a targeted income of UGX 500,000 from sewing alone.” This she said will substantiate on her sources of income to aid construction of a semi-permanent house in 2023.

*Compiled by AFARD NEBBI*

## **Resilient Farming through Permagardens, Aleleniconi Farmer Group, Aluru Subcounty, Moyo District**

It is one chilly Tuesday morning in a hilly Lama Village located in Moyo District when we met the excited Aleleniconi Farmer Group welcoming us with a song that the group has composed about NURI, thanking NURI extension team for making them see the light.

According to the group chairperson Louga, historically, Lama was a very fertile land where everyone who put down seed would at least reap something good. "We used to plant maize, cassava and sorghum which yielded well because our hilly soils were so good for production." However, production gradually declined. Group member, Lillian, explains "It started when the refugees from South Sudan were settled here in Lama Village in 1996, consequently a lot of our trees were cut down, land was over cultivated, and their cattle trampled on the land degrading our land, our usual streams started disappearing, and more so the level of the fertility reduced". After their repatriation in early 2000, yields continued to reduce and households hardly afford a meal per day. Firewood was in short supply and some households slept without having a meal because of no fuel firewood to cook.

"It was a real hurdle managing the situation, saving for emergency wasn't an idea, then came my friend who told me the community was forming a saving group and asked if I could join the group," said Lillian.

### **The turning point**

In 2015, Aleleniconi Savings Group was founded by the community members, with the aim of saving for emergencies. According to Louga, it was difficult to save as members complained a lot about lack of money since crop yields were low and this was exacerbated by their limited knowledge in farming.

"God blessed us and in 2020 when the extensionist from NURI arrived in our village and our group was selected to benefit from the program. During enterprise selection, we chose cassava as an enterprise and were trained on production technologies" said Lillian. The group established a 2 acres NAROCAS I demonstration site, from which they reaped **2,000,000 UGX** upon sale of cassava chips.



At the start of 2021, out of all the groups in Moyo district, "we were very lucky to be selected to demonstrate a new farming technique called "Resilience Design in CSA" where we established perma-gardens" noted Louga. .... "the choice of the new practice with our group was because our land was degraded and soils were exhausted and prone to runoff, we wondered how the resilience designs farming style would change the infertile soils", It was an inclusive practical exercise that involved both the farmers and Extension Officers. ....

"we learnt how to establish water conservation structures like bioswales, smile berms and double dug beds to take good care of the vegetables" ....., narrated another group member. "The process was labour intensive and involved integration of locally available resources like charcoal dust, green manure, animal dug and even use of stones as mulch in the establishment of the resilience design structures" narrated Louga.

### **What was the game changer from resilience designs knowledge?**

Upon planting the different species of vegetable seedlings on the established structures, it was like magic when the vegetables sprouted excellently and the state of the site changed dramatically within 2 weeks. .... "First to be harvested was Sukuma wiki which was earned us 40,000 UGX



per week," says the group treasurer with joy on her face. "The structures were functioning well as runoff from upstream reduced drastically. Secondly, water was being stored in the perma-garden and everywhere was green."

What got so interesting was when the eggplants, cabbages, tomatoes and onions were ready and the group was earning 200,000 UGX weekly from the vegetables. "The production became sustainable because our laponyi (Extensionist)

taught us organic pest and disease management and minimized our expenditures." Said Mr. Louga the earnings from the site totaled to about 3,526,000 UGX which the group reinvested into production.

### **What is exciting about the resilience design site?**

In Aleleniconi Farmer group, 7 of our group members adopted at least one or two of the technologies promoted under resilience design in their individual farms and testimonies indicate adoption of the knowledge. According to Lillian, she also got interested in growing vegetables. "From our VSLA, I borrowed 150,000 UGX. I bought a packet of onion seeds, 2 packets of cabbage seeds and 1 packet of tomato seeds. I am too excited because I have started selling my tomatoes. I have already earned 200,000 UGX from the sale of the tomatoes yet more are still in the garden. I expect to earn 1,500,000 UGX because the cabbages have some weeks to be ready for harvest while the onions are almost ready. We cannot express our happiness to NURI, we are so happy and thank you NURI for empowering us by not giving us fish but the net to go fishing ourselves"

*Compiled by RAU Moyo/Obongi team*

## **Local Seed Business, TII PIKWONI Farmer Groups, Lokung Subcounty, Lamwo District.**

Tii Pi Kwoni Farmer Group is one of the fastest growing “local seed business” community groups in Lokung sub-county Lamwo district. “In 2022, we planted 3 acres of soybean foundation seeds ready for local seed multiplication business,” said Atoo Jane, the group chairperson. Local seed business is one of the major objectives for this group, which in 2019, was founded primarily for purposes of annual social engagements, especially during festive seasons. Tii Pi Kwoni major objective then was that “once in a while, they would come together and enjoy festivities”. Ocitti John, who was the founding chairperson and the current secretary, added that, “We didn’t think of financial development plans at all, all we ever wanted was, that people come together once in a while”.



The development story of Tii Pi Kwoni FG is now a trending one in Lokung sub-county, Lamwo district. In 2020, NURI through RAU Kitgum/Lamwo assessed hundreds of community groups in Lamwo for support in Climate Smart Agriculture component of the NURI programme. Tii Pi Kwoni passed the assessment criteria and was undertaken through several training sessions.

“Our first training was in enterprise selection”, said Atoo Jane. After assessing the options the groups settled on soybean production, an enterprise that was very new in their locality. According to Langoya Patrick, one of the group members, the best part of the training was that they learned practically in the 1-acre demonstration garden the group set-up with the support of an extension officer from NURI.

“Every session of the training was conducted in the garden,” Langoya said. In the end, the learning site yielded 420Kgs of soybean grains despite the challenging weather condition of 2020. The group decided that they would distribute 370Kgs of the harvested grain to individual members, while keeping 50Kgs for their 2-acre block garden in 2021.

In 2021 the group expanded their ambitions to 3 acres, as 1 acre was supported by NURI as a learning site. The 3 acres did so well that, according to the group secretary, they attracted a lot of interests from the Lamwo District Local government, who supported them with a threshing machine to ensure efficient Post-Harvest Handling. The 3 acres yielded 1,770 Kgs of soybean grains, averaging 590Kgs per acre of soybean. Luckily, the selling price was good and at 3,000/- per Kg, the group earned a total of UGX. 5,310,000/-

Tii Pi Kwoni FG has exciting and adventurous youth who decided that in 2022, they would diversify their production. This group undertook



sunflower production by planting 3 acres of hybrid sunflower seeds, alongside 3 acres of soybean. "... So far, we have got UGX. 3,264,000/- from 2,176Kgs of sunflower we harvested...", said Ocitti. The group also planted 3 acres of white sorghum in the second season of 2022"... We hoped that our soybean does well, and we strive to be the biggest soybean local seed business dealer in Lamwo district...", added Ocitti

**What Next?** As indicated by the group chairperson, the group bought local goats and distributed to every member of the group. "... Our group cannot develop if we

don't develop individually also...", Ocitti states. For Tii Pi Kwoni, the goal is to develop the group, but this can only be reflected through individual household development. Further income will be used for group investments.

"We have become responsible youths, because NURI supported us, long live Danida," the group members chanted in chorus!

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## Food Forest, Layet Jane, Kal Subcounty, Lamwo District



Layet Jane was one of the cash-for-work beneficiaries for Cankara David food forest in Alimotiko west, Labigiryang village, Kal sub-county. She is a 26-year-old married woman and a mother of four (4) children.

Mrs. Layet testified that before she was enrolled to get support from DRC under cash for work group, she had been having her usual business of establishing vegetable nursery beds which has taken her 6 years but majorly was on local seeds collection. This could not raise

enough money to buy and access quality seeds which has market.

Layet happily expressed her gratitude to the WRM project where she was selected to be one of the participants to get support through cash-for-work and trained in the establishment of food forest and Permagarden. The training led to results as after the training, she went back home with the idea of starting to raise quality seeds as a business.

After receiving her money, part was used to pay school fees and the balance to buy quality seeds to start up a small vegetable nursery. At the time of narrating her story, seedlings were ready for sale and were being bought from her by the surrounding people. Her household income started increasing because on average she earned 10,000 UGX per week from the sale of her seedlings. After realizing that her family income had increased, Jane decided to increase her weekly VSLA savings from 2,000 to 5,000 UGX every week.

Layet also got felt empowered by the support of NURI staff, who showed interest in her efforts. Jane now plans to start up a big Permagarden from where she will sell multiple vegetables to her neighbours. Her dream is also to have a piggery project because from her own assessment, she found out that pigs have high demand in Kal Sub County and Lamwo district at large.

