



**FARMER MANAGED NATURAL REGENERATION FOR WOMEN'S EMPOWERMENT
AND LIVELIHOODS PROJECT (FMNR4WELIP) IN NABDAM DISTRICT**

**PHASE II: YEAR ONE PROJECT IMPLEMENTATION
SEMI-ANNUAL PROGRESS REPORT
(FEBRUARY – JULY 2025)**

Submitted to
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21 August 2025

Abbreviations and Acronyms

CSA	Climate Smart Agriculture
FMNR	Farmer Managed Natural Regeneration
FMNR4WELIP	Farmer Managed Natural for Women Empowerment and Livelihoods Project
GAPs	Good Agricultural Practices
GSLA	Group Savings and Loans Association
IGA	Income Generating Activity
UER	Upper East Region

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The Project Goal and Objectives

The Project Goal

The Project contributes towards increased food security and empowerment of 400 women/girls as well as men/boys through promotion of sustainable livelihoods in two rural farming communities (Dasang and Kparaboug) in Nabdam District of Ghana's Upper East Region (UER). The project seeks to enhance people's livelihoods using the Farmer Managed Natural Regeneration (FMNR) agroforestry practice to restore degraded farmlands, which then leads to multiple benefits like increased crop yields, improved soil health, improved access to fuelwood, and ultimately improved economic and social well-being.

The project goal remain unchanged under the second phase (February 2025 – January 2027) after the first phase has been successfully implemented. However, the project specific objectives, results and outputs have been modified to reflect a revised project strategy aimed at consolidating the gains achieved under phase one and based on lessons learned.

Project Objectives and Outputs

The revised project objectives, expected results and outputs are as follows:

Objective 1: To enhance capacity of farmers in target communities to adopt FMNR and related Climate Smart Agricultural (CSA) practices/technologies for improved household food and livelihoods security.

- Output 1.1: FMNR Lead Farmers trained in selected CSA practices
- Output 1.2: FMNR Lead Farmers trained in selected crop nutrient management practices.
- Output 1.3: Community bushfire preparedness and management capability enhanced.

Objective 2: To increase farmers, particularly female farmers, access to alternative livelihoods that reduce pressure on tree resources.

- Output 2.1: Diversified alternative livelihood options for women, the youth and the most vulnerable developed to reduce pressures on woodlands due to overdependence.
- Output 2.2: Group Savings and Loans Associations (GSLA) in project communities strengthened.

Phase II Activities Identification

At the end of project phase one in January 2025, the Project Team held a series of consultative meetings with key stakeholder representatives in the two project communities. Stakeholder groups consulted were project FMNR Lead Farmers, Community Fire Volunteers, Group Savings and Loans Associations (GSLAs) and representatives of community leaders. The meetings were held to review the project performance, identify implementation lessons learned (successes and challenges) and to jointly agree on phase two implementation priorities. Hence, it was agreed that for effective impact, Phase II project activities should prioritise the following.

- a) The project should strengthen the community-based fire management approach by enhancing bushfire preparedness capacity of Community Fire Volunteer Squads (CFVS), and supporting them to conduct community fire awareness campaigns.
- b) The project should consider introducing beekeeping activity under phase two. The beekeeping intervention can be used to achieve multiple objectives in the project target area. These include sustainable income generation (honey and beeswax production), enhancing plants (crops and trees) pollination, deterring elephants from raiding crops, supporting biodiversity conservation, promoting sustainable agriculture through FMNR uptake, reducing bushfires incidences in order to protect beehives and contributing to environmental conservation.
- c) It was also recommended that support to the GSLAs activity should continue. The activity has proved very effective for achieving rural micro-enterprise development, ensuring income security among vulnerable women and youth groups and building community cohesion.
- d) The community members (farmers) also requested for training on selected crop nutrient management practices, particularly on the safe and appropriate use of agrochemicals.

Hence, this second phase project implementation is to strengthen the positive results achieved as listed above to ensure they are sustainable and can be built upon for future progress. This report presents progress made in the project implementation for the period February 2025 to July 2025.

Activities Implemented (February – July 2025)

Activity 1: Three-day Micro-Enterprise Development Training for Savings Groups

5-7 February 2025: The FMNR4WELIP Project aims at improving the status of rural women in the target communities. Hence, the project supports income generating activities (IGAs), targeting women involved in savings groups and micro-enterprises development. The objective is to contribute to women's empowerment, financial independence and decision making power in households and communities. In addition, when women participate in IGAs, the well-being of families is likely to improve.



The project funded a three-day training of 45 women, who are members of Group Savings and Loans Associations (GSLAs) established in the two project communities, in basic micro-enterprise development. The participants were female FMNR lead farmers, widows, female household heads (HHs) and other identified vulnerable groups. The training enhanced their entrepreneurial knowledge and skills to be able to identify locally viable income generating activities (IGA) for development as micro enterprises. Specifically, the training equipped the GSLA members with basic business management knowledge and skills needed to operate and/or begin viable rural IGAs.

The IGAs supported by the project include; a) agricultural production, b) agro-processing, c) poultry raising and d) handicrafts, petty trading and services.

Two staff of the Bolgatanga Municipal Business Advisory Centre (BAC) of Ghana Enterprises Agency (GEA) facilitated the three-day participatory and practical training, which was held at Kparaboug Community. The participants were taken through; 1) the basic features of good micro-enterprises, 2) basic financial management, 3) preparation and marketing of their products, and 4) how to sustain operations of their micro-enterprises.

Immediate results/outcome of the training

- ⇒ 45 women involved in savings groups gained basic business development knowledge and skills.
- ⇒ Improved financial literacy among the 45 participants
- ⇒ Participants gained increased awareness of micro enterprise funding opportunities
- ⇒ Strengthened teamwork and business collaboration within groups.



Scenes from the training

Activity 2: FMNR Lead Farmers Trained on Safe Handling and Use of Agro-chemicals

29 April 2025: Agrochemicals (pesticides and inorganic fertilizers) are widely used among farmers in the project communities. However, unsafe handling, inappropriate use and overuse of these chemicals can have adverse impact on human and livestock health, crops, soil, water and the environment. In addition, many farmers apply pesticides without the appropriate personal protective equipment (PPE), further exposing them to chemical poisoning and related health consequences.

Thus, the Project in partnership with Nabdam District Department of Agriculture trained 20 FMNR Lead Farmers (10 males/10 females) from the two project communities (Dasang and Kparaboug) on the safe handling and appropriate use of agrochemicals. The participatory practical training was organised at the request of the farmers to; a) improve their proper handling and use of chemical agro pesticides, b) enhance farmers awareness regarding the safe use of agrochemicals and the long-term benefits of adopting safe practices, and c) empower the FMNR lead farmers to educate other farmers on safe handling and use of agrochemicals. Ultimately, the objective is to help reduce the health risks from agrochemicals.

Sumaila S. Saaka (FONAR Executive Director), Emmanuel Akotba and Samuel Ngaad (both Technical Officers of the District Department of Agriculture) co-facilitated the workshop. Topics covered included; basic understanding of agrochemicals, the importance of using appropriate PPE when applying agrochemicals, basic agrochemical application principles and techniques, safety tips when applying agrochemicals, types of agrochemicals application equipment, and the proper timing for applying pesticides. The training ended with a practical outdoor training. FONAR also presented PPEs (nose mask, overall coats, goggles, gloves) to the training participants.

Immediate training results/outcomes (from evaluation)

- ⇒ Increased awareness of participants about the importance of using PPE in pesticide application
- ⇒ Increased participants understanding of basic agrochemical application principles and techniques.
- ⇒ Increased awareness on the need for precaution when handling and using pesticides.

Overall, the training empowered the participants to adopt safe pesticide use practices, promote safe agrochemical use in their communities, and pass on the knowledge and skills to other farmers.



<https://accessagric.com/fonar-advocates-safe-farming-practices-through-agrochemical-education/>

Activity 3: Three-day Modern Beekeeping Training for Farmers

Modern beekeeping (apiculture) is an empowering means of tackling poverty in rural subsistence farming communities. Beekeeping fits in well with FMNR promotion as a sustainable forest and tree management tool by enhancing tree regeneration and biodiversity through pollination, discouraging deforestation by providing alternative source of income and promoting ecological awareness among communities. FMNR implementation experience from Talensi has shown that the high economic value of beekeeping can be an incentive for communities and individuals to increase tree cover on farms and prevent bush burning. Frequent crop raiding by elephants in the project communities hinders FMNR restoration efforts, so long-term solutions are urgently needed to tackle the problem. Fortunately, it is evident from Kenya that fences of beehives are effective in deterring elephants from raiding food crops, and thus reducing human-elephant conflicts.

It is for these reasons that FONAR in consultation with the project communities at a meeting held on 21 March 2025 at Dasang, selected eight (8) farmers (4 from each community) to pilot the beekeeping activity for income generation. Each of the selected beekeeping farmers (4 females/4 males) received two beehives and beekeeping equipment. This is to enhance their modern beekeeping knowledge and skills for honey production.

6-8 May 2025: The project hired a beekeeping trainer and experienced beekeeper (Emmanuel Nibenye Kaasaah) to facilitate a three-day modern beekeeping training for all the 20 FMNR Lead Farmers in Dasang and Kparaboug. The training equipped participants with basic knowledge of modern beekeeping and basic bee biology. The farmers were introduced to modern beekeeping tools and hive management techniques. They were also trained on how to select suitable apiary sites, how to bait and install beehives, take care of



Emmanuel (L) demonstrating use of PPE

their apiaries and bee pest control measures. The practical training involved the trainer working with the farmers and FONAR staff to identify suitable apiary sites in the two project communities, and baiting and installing hives. The baiting and hives installation were carried out with the farmers to ensure that they have hand-on experience of proper baiting for easy attraction of bees.

Post-training evaluation indicated a high level of satisfaction among participants, that the training was effective in providing new beekeeping knowledge and skills, which the farmers can apply. Many of the participants expressed appreciation for the practical sessions and hands-on experience. They reported that the training was informative, engaging and relevant.



Scenes from the practical beekeeping training (baiting and installation of beehives)

News articles:

<https://gna.org.gh/2025/05/fonar-trains-farmers-in-modern-beekeeping-to-boost-livelihoods-and-conserve-forests/>

Activity 4: World Bee Day Observed – 20 May 2025

FONAR observed this year's World Bee Day on 20 May 2025, emphasizing the urgent need to protect bees from extinction. FONAR highlighted the critical role of bees and other insect pollinators for resilient ecosystems, food systems and biodiversity conservation, urging stakeholders to take action. The Day was observed with an advocacy and awareness creation campaign dubbed: "Time with the Media: Screening of the Pollinators Documentary Film". The "Pollinators film" was screened to educate print and electronic media journalists and officials of the Ministry of Food and Agriculture (MOFA), Forest Services Division (FSD) and the Environmental Protection Authority (EPA) on the importance of bees as pollinators. The film tells the story of migratory beekeepers transporting their cargo of honey bees across the United States of America to pollinate flowers to become fruits, nuts and vegetables. It uncovered the challenges faced by both bees and beekeepers, and explored the vulnerabilities of a chemically reliant global agricultural system. The film effectively underscored the critical importance of these tiny, but often overlooked creatures to global food security and sustainability. Hence, FONAR used the film to create awareness on the importance of bees and the threats they face in Ghana and globally, such as habitat loss from deforestation, widespread use of pesticides and climate change.

FONAR's work of promoting the uptake of Farmer Managed Natural Regeneration (FMNR) and Climate Smart Agricultural (CSA) practices is aligned with the World Bee Day 2025 theme: "Bee inspired by nature to nourish us all". The theme underscored the importance of bees for food security, tree regeneration and sustainable development. The decline in bee populations can lead to reduced crop yields, impacting food security and livelihoods, particularly among poor smallholder farmers in developing countries like Ghana.

While bees are essential for tree regeneration and the establishment of new trees, FMNR can also help address the declining bee population by restoring and expanding habitats that bees rely on for food and shelter. Declining bee population is a serious issue in Ghana, impacting food security and biodiversity.

Call to Action: FONAR called on the journalists and other stakeholders to urge government (local and national), agrochemical companies and dealers as well as individuals to protect and enhance pollinators and their habitats. The media practitioners were entreated to create awareness on the safe use and handling of agrochemicals to protect bees and other pollinators.

Immediate Activity Results/outcomes - Post-film Screening Discussion

Many of the event attendees commented on the impact that the film had on them: "I have been talking about the effects of agrochemical misuse on radio for many years now, but I have never linked the discussions to the effects on bees and other insect pollinators. This is new knowledge to me," said an Official of the Environmental Protection Authority. A participant from the Forest Services Division said: "Watching the film was very inspiring, and I would encourage Ghanaians to take beekeeping as an important venture to ensure food security." A Television Journalist said: "I gained a wealth of knowledge and understanding of the role of bees in crop pollination, the threats they face and why it is important to protect them".



Photos from the activity

Media coverage/Reports on the Activity

- <https://www.a1radioonline.com/74214/fonar-celebrates-world-bee-day-urges-protection-of-bees-from-extinction/index.html>
- <https://www.graphic.com.gh/news/general-news/ghana-news-world-bee-day-commemorated-in-bolga.html>

- <https://www.dreamzfmonline.com/news/bees-other-pollinators-threatened-by-increased-use-of-agrochemicals-fonar-laments/index.html>
- <https://thevaultznews.com/news/general-news/fonar-urges-to-protect-bees/>
- <https://gna.org.gh/2025/05/ngo-calls-for-regulatory-systems-for-agrochemical-use/>
- <https://ground.news/article/transmit-know-how-and-protect-bees-from-the-dangers-that-threaten-them-the-main-challenges-of-beekeepers>

Activity 5: Day to Combat Drought and Desertification observed with Farmers

17 June 2025: FONAR project team spent time with FMNR lead farmers in the Dasang and Kparaboug communities to observe World Day to Combat Desertification and Drought 2025. The Day is observed on June 17 every year to raise awareness about effects of desertification and drought. FONAR observed the event this year under the theme: *"Restore the land, unlock the opportunities, through Farmer Managed Natural Regeneration (FMNR)."*

Frequent agricultural droughts, intensified by climate change, and land degradation pose a severe threat to agriculture in the Upper East Region of Ghana, where FONAR works. By supporting local farmers to adopt the FMNR land restoration technique, FONAR is helping to restore degraded farmlands, reduce erosion and improve soil fertility, thereby enhancing agricultural productivity and resilience to climate change. The Desertification and Drought Day event was used to educate the farmers on the causes of drought and desertification, particularly indiscriminate tree cutting, bushfires, overgrazing and unsustainable farming practices. These practices reduce land productivity and leads to food insecurity, biodiversity loss and forced migration. The farmers were encouraged to embrace the regeneration of multi-purpose native tree species on their farms, and where it is possible, plant more trees to enrich soil and prevent erosion. We also urged them to educate others about the importance of taking care of trees in their communities.

The event was also used to monitor the survival rate and health of the orange and citrus seedlings delivered to farmers in the project communities in June 2024 for planting. The project supplied 150 seedlings at the request of the farmers for long term control of elephants invasion and a source of income. Farmers in Dasang community received 100 seedlings, while Kparaboug farmers received 50 seedlings for distribution to interested FMNR lead farmers and community members for planting.



20 June 2024 – Presentation of 150 orange/citrus seedlings to farmers at Dasang

The first monitoring and assessment of orange and citrus seedlings planted and the survival rate was carried out in August 2024 in the two project communities. Of the delivered 100 seedlings to farmers in Dasang, 78 of them had been planted and were healthy, and 22 seedlings were yet to be planted. In Kparaboug, 22 of the 50 seedlings delivered were planted and most of them surviving, and 28 were yet to be planted. Most of the seedlings were planted on bush farms, which are far from the settlements. Agricultural drought in July/August 2024 delayed planting of seedlings and establishment of those planted. Orange/citrus plants are generally sensitive to water stress and perform poorly in dry conditions, and farmers were not able to water and protect seedlings planted on bush farms.



6-9 August, 2024: Monitoring and assessment of seedlings planted and survival rates

June 2025: Tree survival monitoring and assessment (a year after planting).

- Of the **100** orange/citrus seedlings delivered to Dasang farmers and planted, 26 survived (26% survival rate after one year).
- Out of the **50** orange/citrus seedlings delivered to Kparaboug farmers and planted, 17 survived (34% survival rate)

Causes of low seedling survival rate: lack of watering, bushfires, animal and pest disturbance.



17 June 2025: Photo monitoring

Lesson learned:

Even with the best of intentions, tree planting in dry lands is very tough with disappointing success rate in many situations for a number of reasons. Tree planting in dry areas like northern Ghana is challenging because of the scarcity of water during the long dry season, and the harsh soil and climate conditions that stress young trees and hinder their survival. Other factors include improper planting techniques, insufficient tree care after planting, damage from animals and people and socio-economic barriers like land-use conflicts and a lack of perceived profitability of trees on farms.

This explains why FMNR is widely promoted as a cost-effective method for restoring degraded lands in dry, arid and semi-arid areas like northern Ghana. FMNR leverages farmers' existing tree management knowledge and techniques to regenerate native trees/shrubs from roots and stumps, avoiding the costs and low survival rates associated with traditional tree planting. By managing existing woody vegetation, farmers can improve soil fertility, increase agricultural productivity, and enhance their livelihoods and resilience to climate extremes.

Activities Planned for August 2025 – January 2026

- Train FMNR Lead Farmers on crop nutrient management (appropriate fertilizer application).
- Conduct on-farm FMNR adoption monitoring and extension service support visits.
- Conduct refresher training and tooling of Community Fire Volunteers.
- Conduct community awareness campaign on importance of beekeeping.
- Progress monitoring of beekeeping intervention