

Temwa's Farming Futures Project Mid-Term Report - April 2025

Project Context and Aims

This report shares an update on the first 6 months of our Farming Futures project's third year, which began in October 2024. The Farming Futures Project seeks to address the significant challenges faced by farming communities in Nkhata Bay North. With 90% of the population relying on subsistence farming and over half surviving on less than 50p a day, households are struggling with low food security and incomes and vulnerability to the impacts of climate change and environmental degradation. Low crop yields cause farmers to bring yet more land under cultivation and lead to households resorting to cutting trees to sell for firewood and charcoal. This exacerbates vulnerability to climate change, as lack of forest cover causes soil erosion and increases the impact of droughts, floods and strong winds, further undermining agricultural productivity.



The Farming Futures Project aims to build communities' climate resilience, improve stewardship of natural resources and increase household incomes and food security. The Project is supporting Farmers Groups engage in sustainable agricultural practices, including through the adoption of winter-cropping and through growing a broader variety of crops that can withstand climate stress and regenerate the soil. The Project also seeks to support Farmers Groups engage in forest-friendly enterprises such as livestock rearing and bee-keeping, reducing the incentive to cut trees. This complements Temwa's Forestry project that has so far

led to the planting of over 1.6 million trees, including through Temwa's Carbon Balance scheme. *Left - Banana sucker grown at Usiska Demonstration plot.*

Project Achievements

Beneficiary farmers are being supported both through the rainfed agriculture season (November to April) and through the adoption of winter cropping season (May to October). The project has so far worked with 496 farmers to adopt climate adaptive solutions, and an additional 266 farmers on income generating activities through the establishment of 22 farmers groups engaged in Forest-Friendly Enterprise. For many of the individual beneficiary farmers, adoption of sustainable agricultural practices has improved yields and their household food status. For the Farmers Groups, Temwa has seen a transition from smallholder farming to a more commercial approach which is helping to transform the lives of participating households.

Outcome 1: Improved Community Engagement with Climate Change Solutions

The Project has continued to engage communities through education and awareness activities that have empowered farmers to make informed decisions about their land use and farming practices. In October, Temwa produced a film to demonstrate techniques to increase the uptake of soil and water conservation, to promote the use of organic manure and natural pesticides and to familiarise farmers with the use of seasonal weather forecasts. The film has been shown in 14 villages between November and early January, reaching over 1,500 people.

Also in October, Temwa partnered with Radio Tigabane, Radio Usisya, the Malawi Meteorological Office, and Agricultural Extension Officers to provide farmers with a long-range weather forecast for the 2024-2025 rainy season. Over 1,000 farmers attended events in Chigwere, Bununkhu, and Lukhanda, where they were informed about the best types of crops to grow, planting times, and soil and water conservation techniques. Drama performances and dances were conducted to engage the audience, and over 1,000 leaflets detailing expected rainfall patterns were distributed to participants.

The success of the October event led to further weather forecast events in December. Seven events took place across various communities, including Chigwere, Kalonga, Nyapwere, and Lukhanda. During these events, more than 500 community representatives were taught how to adapt their farming practices in response to climate change. Farmers were encouraged to plant drought-resistant crops, such as Bantum maize, Msangu trees (a thorny drought resistant tree), and Pigeon Peas (a drought-resistant legume rich in protein and materials to help balance soil nitrogen levels). These crops help restore soil fertility, reduce soil erosion, and provide food security during dry spells. Following the awareness campaigns, 2,000 households committed to growing Msangu trees (covering 916 acres), while 3,500 households committed to planting Pigeon Peas. In January, 717 households planted 4,302 Msangu trees on 290 acres, and 2,000 households planted pigeon peas on 102 acres.

In March, Temwa enhanced visibility at a national level by collaborating with Times Television Broadcasting station to document Temwa's work through the Farming Futures Project. The initiative is helping Temwa to improve its partnership with the broadcasting stations to promote climate smart agriculture and resources management nationally.

Temwa has also been making full use of its demonstration plots to support communities adopt sustainable agricultural practices. Between October and December, 112 farmers from Mchulu and Chikondo villages benefited from trainings at the Usiska garden on manure and pesticides production. Home visits were conducted to these farmers by the Garden Manager and it was reported that 80% of them had utilised the knowledge and skills gained from the garden during the 2024-2025 rainfed season. Demonstration centres (at Usiska and more recently, Honga) have also been used to promote plantain banana production

as part of a strategy to diversify crop production and boost nutrition. Between October and March, 2,500 banana suckers were grown at the Demonstration sites and distributed to 178 households. With many of the plants flowering in December, it is expected that bananas will start to be harvested in November 2025. *Left - Farmers from Mabuli Village receiving banana suckers after training in banana multiplication, production and management.*



Outcome 2: Increased Income Security of Farming Households through Forest-Friendly Enterprises

The project has made good progress in helping farmers diversify their income streams through forest-friendly businesses, such as bee-keeping, small livestock rearing, and the production of a diverse range of cash crops. This is helping to reduce destructive practices such as felling trees for firewood and charcoal-making.

In October, Temwa staff, with the support of the Lunyangwa Research Station, took 60 soil samples from selected fields across 15 farmlands, both upland and lakeshore, and found the soil to be acidic. Farmers were encouraged to apply lime and organic manure to balance the Ph of the soil and were recommended to grow crops suitable to the soil. Planning meetings were also held in preparation for the rainfed agricultural season, with 4 groups in October and 8 groups in November. These groups started mobilising seed and other resources and started to prepare their land.

Also, in October and November, 4 new Farmer Groups were formed, taking the total number of Farmers Groups supported by Temwa to 22. The new groups will increase the area of land that they will jointly cultivate with a view to boosting their combined income from growing groundnuts and beans. In January, 45 members from the new groups were trained in crop production and management techniques, such as manure production, pest control, and intercropping. Farmers from these groups are already seeing positive results. For example, the beans planted by one farmer, Minase Chiumia, had a 100% germination rate and are growing healthily, despite some pest challenges.



In February, Temwa facilitated a workshop of the Denthema Farmers Group (pictured left) to support business plan development for pig-rearing. The group was taken through the entire value chain and different strategies were developed for each stage of the value chain.

Since then, the Group has managed to source Mk85,000 through social funding activities which was used to procure feed for their pigs. This shows that the resource mobilisation skills taught are already being put to good use.

In February and March, the project supported the development of business plans for the Fukafuka, Chitemwano and Nyongolo Farmers Groups. This has helped to shape their production and marketing strategies for the next 3 years. The Nyongolo Farmers Group, supported in February, has already embarked on business diversification, undertaking both pig rearing and growing Irish potatoes on an acre of land.

In March, the Temwa staff facilitated quarterly review meetings in March for six of the Farmer Groups involved in crop production. These groups are already planning to plant early during the winter period in response to the extended dry spell to ensure enough access to food and to increase their annual incomes.

The Livestock Pass-On Scheme, which involves the transfer of pigs and goats to new farmers, continued to benefit many households. For instance, the Temwanani Pig Production Group celebrated its first pass-on in November, giving seven piglets to new group members. These pigs help improve crop production by providing manure for fertilisation, as well as generating income through the sale of piglets. 8 members of the group are expected to obtain 3 piglets each through the Pass-On Cycle in late July because 3 of their sows are expected to give birth by the end of May.

Farmers Groups also benefited from material support over the last 6 months. In December, Temwa bought 6 tins of groundnuts for Manyuzo and Banda Farmers Groups to support expansion of land under cultivation – from 2 to 5 acres for one, and 3 to 6 for the other. In January, Temwa provided essential materials to support Chigwere, and Jembe Groups, including 110kgs of beans, and 1,000 banana plants. The Fukafuka and Chitemwano Farmers Groups also received 5 and 6 tins of groundnuts respectively, whilst the Nyongolo Farmers Group received 3 pigs.

Monitoring of Winter-Cropping (The Winter-Cropping season - May to October 2024)

In October, a monitoring visit was paid to 223 farmers who had adopted biochar for winter cropping between June and September of 2024. A quarter were found to have increased their income by 20% through sales of vegetables (including rape, Chinese cabbage, green beans and eggplant) grown with biochar. 95% of farmers also reported an improvement to their diets through increased consumption of vegetables. In November, Temwa staff visited 4 groups who grew Irish potatoes successfully as a winter crop and found that they had diversified successfully into green maize production.



In January, 223 subsistence farmers were surveyed who had been supported to grow winter maize for the first time. 71% said they would have enough food to sustain their households in the hunger persistent months of February to March. 83% reported that they had planted more than 2 staple crops during the rainfed season, including maize, cassava, sweet potato, cassava and yams. This is expected to increase the availability of food for their households despite extended dry spells. *Left - Chigwere farmers group members harvesting their winter grown maize.*

In February, Temwa staff visited 21 randomly selected farmers in 3 villages who had been trained in July 2024 and found that all had harvested their winter cropped maize using the biochar manure, with 15 confirming their access to food had improved. Staff also visited 96 farmers in 6 other villages in March that were trained in the first year of the project to see the impact of winter cropping and use of biochar on their food security. The results showed that at least 90% of the farmers have been producing enough food for their families for the past 2 years through rainfed, winter production and crop diversification practices. *Right – Boyd, also a member of Chigwere Farmers Group, showing his maize field intercropped with beans.*



Farmers Groups supported by the Farming Futures Project

Group	Type of Business	Membership			Production size	Date of establishment
		Total	Male	Female		
Munkhoza	Honey	15	6	9	20 beehives	2022
Penjani	Beans	14	3	11	8 acres	2022
Chanjati	Honey	13	8	5	31 beehives	2022
Biliwili	Honey	11	6	5	20 beehives	2022
Temwanani	Beans	11	8	3	3 acres	2022
Duwe	Bananas	23	10	13	1600 banana plants	2022
Sakalani	Irish potatoes	16	8	8	2 acres	2023
Banda	Groundnuts	16	8	8	3 acres	2023
Chikondo	Bananas	13	6	7	300 banana plants	2023
Chigwere	Irish potatoes and beans	10	6	4	Irish- 1.5 acres, Beans- 13 acres	2023
Jembe	Irish potatoes	15	11	4	4 acres	2023
Manyuzu	Groundnuts	10	7	3	10 acres	2023
Kanolo	Irish potatoes, onions, sweet potatoes and maize	19	12	7	50 acres	2023
Dauzya	Honey	10	7	3	32 beehives	2024
Mahowe	Irish potatoes	10	6	4	1.5 acres	2024
Lukanga	Honey	13	12	1	115 beehives	2024
Umoza	Honey	11	5	6	40 beehives	2024
Nkhanga	Beans	8	5	3	8 acres	2024
Chitemwano	Groundnuts	9	3	6	1.5 acres	2024
Tigwilizane	Livestock	13	6	7	5 pigs	2024
Bula	Irish potatoes	8	4	4	3 acres	2024
Njiri	Livestock	10	5	5	5 pigs	2024
Total		266	112	154		

Monitoring of Rain-Fed Agricultural Season (November 2024 to April 2025)

Temwa staff visited 157 farmers in November 2024 as they prepared for the rainfed agricultural season. It was found that manure production rates were higher than the previous year with 75% of farmers surveyed having prepared manure (compared to 33% last year). The focus on manure production was a response to the reduced availability of fertiliser from the Government's Agriculture Input Programme, and the rising cost of inorganic fertiliser on the open market. In February 2025, the adoption of manure proved to be the game changer with the growth of maize reported to have been vigorous, promising bumper yields later.

In March, Temwa conducted a crop inspection in both the lakeshore and upland areas following reports of long dry spells in the catchment areas. Temwa selected 25 farms at random to visit and found that unreliable rains are jeopardising crop productivity, with a third of households reporting that their rainfed maize fields have dried up. A report from the Chigwere VDC also indicated that 30 out of every 100 farms in their area have been badly affected. There are increasing concerns that the rainfed agriculture will not produce sufficient yields to provide enough food for households. Efforts have intensified to promote diversified cropping and the planting of drought resistant varieties such as cassava and sweet potatoes. On a positive note, the extended dry spell has helped to dry out maize yields from last season's winter cropping. Of 11 winter cropping households visited, 9 reported to have harvested sufficient food to support themselves for 3 months, from April to June.

Monitoring of Bee-keeper Groups

In late 24 and early 25, Temwa staff visited the first 4 Bee-keeper groups established and reported high rates of honey harvesting. The total harvested by all 4 groups by the end of January was 616 kgs. Temwa supported the groups find buyers, one local in Usingini and three in Mzuzu, with the price of raw honey fetching 5,000 Kwacha per Kg. This contributed to an increase in the household annual average income by 30% for the 45 participating households.

The Umoza bee-keeping group members is enjoying the prospect of honey production a year earlier than expected. Through proper coordination amongst Umoza bee-keeping group members and with Temwa's support, the group managed to produce and hang 47 standard beehives between August and October. Through the 15 colonised beehives, the group has managed to harvest 60kgs of honey and earned Mk300,000 which was disbursed amongst 11 group members, representing an extra income of Mk30,000 per household.



Right – bucket of honey harvested by Beekeeping Group in January 2025.

Outcome 3: Strengthened Community Stewardship of Local Natural Resources

By strengthening local governance structures and supporting community-led efforts to manage forests and water sources, the project aims to reduce deforestation and promote the sustainable use of natural resources.

In October, a three-day training session was held with 30 members of the Bununkhu Village Development Committee to develop a Forest Management Plan. This training focused on mapping local resources, understanding the importance of forest conservation, and creating new bylaws to regulate the use of forest resources. As a result, the community has committed to restoring the Choma Hills, a vital water source, and conserving key areas through bee-keeping.

In January, Temwa facilitated engagement meetings with each of the 4 traditional chiefs (Jembe, Ganunkha, Matemanga and Dube) where the project is being implemented to get an update on their village plans towards natural resources management. It was noted that engagement has improved, with on average 16 households participating in each of the villages engaging in natural resources management, for example, by planting trees. In February, Temwa participated in a Village Development Committee meeting for Chigwere and Kalonga, sharing its plans for 2025. As a result, it is now working closely with the Agricultural sub-committee of Chigwere VDC, to conduct monitoring and also to promote winter cropping and the planting of drought resistant crops such as cassava and sweet potatoes.

Throughout the reporting period, Temwa also raised awareness about the Forest Amendment Act of 2020, which imposes strict penalties for deforestation and trafficking forest products. The Project held events in markets and public meeting places, reaching over 2,350 people and encouraging the creation of new community by-laws. Further events in January, supported by local theatre groups, helped spread awareness to an additional 2,500 people in Kalonga, Bununkhu, and Nyapwere.

The Project's profile has been good at local and district level. In October, participation in the Food Sustain Festival (attended by 2 farmers and 2 Temwa staff) raised the project's profile to national level. This provided an opportunity for Temwa to share its experiences through a national learning platform. Similarly, 3 staff members participated in the 2024 NGO Board Excellence Awards in Blantyre, which helped Temwa network with potential stakeholders, including FERT and Biodiversity Conservation Initiative (BCI).

As part of the project's forest restoration efforts, 75,000 tree seedlings were planted across various communities. These efforts complement Temwa's broader goals of increasing forest cover and improving local water management. Communities have also been trained in maintaining firebreaks and establishing nurseries to support ongoing afforestation projects.

Successes and Challenges

Temwa has supported 22 Farmers Groups, representing 266 members, with over half women. With an estimate of 6 members per participating household, the Project is well on track to reach 1,650 direct beneficiaries by the end of the Project. Our monitoring suggests the support provided by Temwa is making a significant difference to households, in terms of achieving food security and additional income in the short term. The introduction of winter-cropping and the adoption of organic fertilizer and pesticides for example, is already providing significant amounts of additional food for families in the 'hungry' season. Longer term benefits are expected thanks to the wide adoption of sustainable agricultural practices,

engagement in forest-friendly enterprises, and investment in local governance structures to ensure more effective stewardship of natural resources. This should increase communities' resilience to future climate shocks. Temwa will continue to monitor, measure and report on the broader impact of its activities as it moves into the next stage of its support. This will involve an intensified approach to commercialization efforts, for groups already established as well as new ones, whose membership will include graduates of Temwa supported Farmer Field Schools.

The Project has faced several challenges. In particular, inflation has increased the cost of material inputs which has meant that Temwa has not been able to provide as much support as planned, such as the provision of high yield drought tolerant seed varieties (for example, the price of red groundnuts skyrocketed between November and January). However, Temwa was able support some groups mobilise resources from elsewhere, and supplemented Farmers Groups efforts where it could. Lack of community facilitators also affected the tracking of some outcomes of the project. In future, the Agribusiness support officer will receive additional support from new staff members. The Project has also struggled due to the scarcity of fuel. This has affected some scheduled activities, in particular, it has reduced the ability of Project Officers to visit the communities as often as originally planned. Temwa has attempted to minimise fuel usage by combining monitoring visits with those of other projects and by conducting other joint activities. Finally, scarcity of water for the rain-fed agriculture season has also been a significant challenge – Temwa's support to weather forecasting information has helped farmers time their planting in response.

Community Story - *Mr. Banda's Journey to Sustainable Farming*

In the 2023 winter cropping season, Mr. Wilson Banda, a beneficiary from Jembe Village, received two tins of Irish potatoes from Temwa. He successfully harvested eight tins, selling five for income and reserving three as seed for the 2024 winter season. Through engagement meetings on sustainability, Mr. Banda decided to expand his production. From the three tins he had saved, he purchased an additional 11 tins, bringing his total seed stock to 14 tins. He cultivated an acre of land and invested MWK 342,000 in labour, seed, and farm inputs.



His efforts resulted in a harvest of 136 tins of Irish potatoes. He sold 126 tins for MWK 1,402,000 and kept 10 tins as seed for the next winter cropping season. Using part of his profits, he planted 10 kg of maize seed on the same piece of land. Additionally, he purchased inputs for the rainfed season and bought five tins of bean seed, from which he expects to harvest 30 tins.

Left - Mr Phiri posing in front of his new house.

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Charity No: 1185889