

Njira DFAP Final Performance Evaluation

Summary Brief

INTRODUCTION

The Njira Development Food Assistance Project (DFAP) was launched in Fiscal Year 2015 and aimed to reduce food insecurity in Malawi through three purposes:

- Purpose 1 (P1): Increased income from agricultural and non-agricultural activities.
- Purpose 2 (P2): Improved health and nutrition of pregnant and lactating women (PLW) and children under five (CU5).
- Purpose 3 (P3): Improved capacity to prepare for, manage, and respond to shocks.

This brief summarizes the results of the final evaluation conducted by [TANGO International](#). The evaluation measured Njira's development outcomes and presented evidence that:

- Layered, cross-purpose interventions tailored to beneficiaries create a pathway of change and are an effective resilience strategy.
- Supporting local governance institutions that promote community empowerment and confidence in collective action enhances sustainable outcomes.
- Closely integrated collaboration between project and government staff builds local institutional capacity to support cause-effect outcomes.
- Low-cost innovative agricultural practices can improve production and increase household income.
- Severe external shocks can neutralize the benefits of project activities in any given year.
- Communities are now empowered to solve their own problems, and many participants have learned new skills that have become part of their adaptation "toolkit."



Photo Credit: Timothy Finan

ABOUT NJIRA

Primary Focus Areas: Agricultural production, nutrition and health of pregnant and lactating women and children under five, enhancing community resilience to shocks and stresses

Implementing Organizations: Project Concern International (PCI) and Emmanuel International

Funding Source: United States Agency for International Development (USAID) Office of Food for Peace (FFP)

Intervention Period: FY 2015 – FY 2019

Intervention Areas: Eleven Traditional Authorities in Balaka and Machinga districts



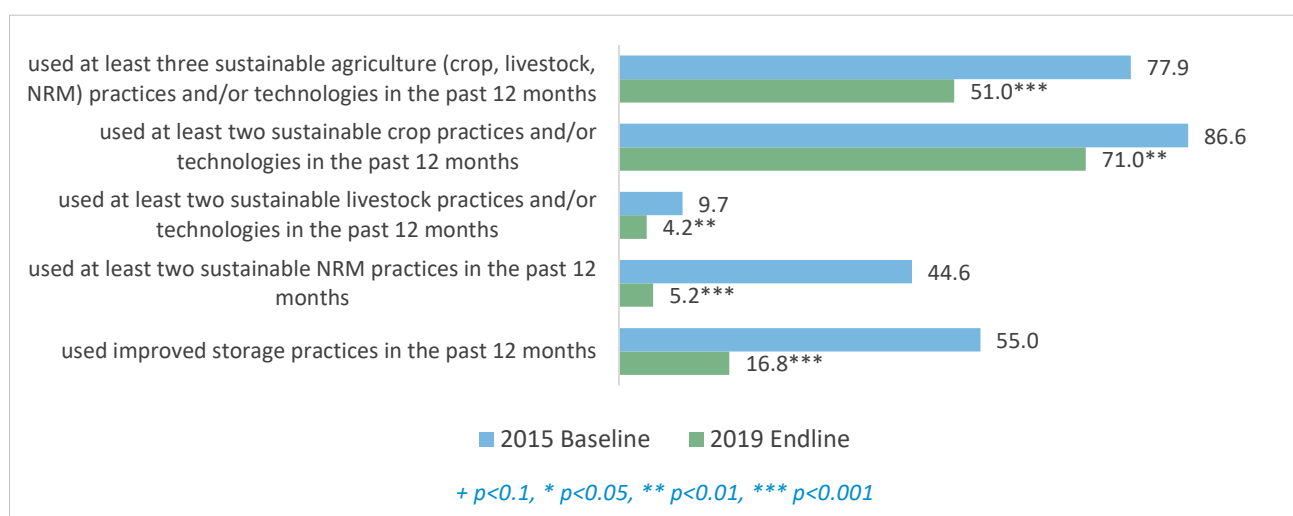
KEY FINDINGS

Increased Income from Agricultural and Non-Agricultural Activities (P1)

P1 sought to introduce innovative technologies including improved seed and farming practices, expansion of irrigation, cash crops to increase market participation (and income), and small livestock as a source of food and income. The population-based quantitative survey (PBS) findings for P1 suggest that over the two districts as a whole, the adoption of project-promoted farm practices decreased during the life of the activity (LOA); however, project annual survey data and the qualitative study among Njira participants suggest significant and positive impact on families that employed these practices.

The PBS data portray a decrease between baseline and endline values for some key P1 indicators (Figure 1); however, these findings should be interpreted in the context of the multiple external shocks that southern Malawi experienced in four of the five years of the project, heightening food insecurity in an already vulnerable region and making it more difficult to achieve and maintain project gains, and to achieve spillover effects in non-targeted communities. For example, the PBS showed that overall, the use of at least three sustainable agriculture practices and/or technologies in the past 12 months decreased, as did use of at least two sustainable livestock practices and/or technologies, and use of improved storage practices (Figure 1). A regression analysis of P1 outcomes showed that participants had better outcomes than non-participants for some indicators; for example, the percentage of participant farmers who used at least three sustainable agriculture (crop, livestock, NRM) practices and/or technologies was 63.0 percent compared to 47.7 percent for non-participants. Eight out of ten farmer participants (80.1 percent) used at least two sustainable crop practices and/or technologies, compared to 68.5 percent of non-participants.

Figure 1: Percentage of farmers using sustainable agriculture practices or improved storage practices in the past 12 months



The qualitative results also suggest that Njira participants achieved significant desired outcomes with regard to both sustained production and increased income. In the producer groups (28,600 beneficiaries), focus group participants noted the widespread adoption of low-cost, climate-smart agricultural innovations, including the expanded use of improved seed, plant spacing, mulching, greater access to irrigated land, and the introduction of orange-fleshed sweet potato. There was widespread recognition of the value of the demonstration plots and the multiple trainings that participants received. Farmers said that the simple, low-cost technologies increased their crop yields and crop diversity, highlighting one of the best practices

applied by Njira. Female participants credited their vegetable gardens with increasing their dietary diversity to include the “six groups,” indicating an effective layering of nutrition messages in Care Groups and agriculture extension. However, some poor farmers lost free access to irrigated plots at the end of the project: one of Njira’s lessons is that post-project tenure must be part of an agreement and clearly communicated to all stakeholders.

Njira promoted a value-chain model to better integrate project participants with markets and to diversify income-generating activities. The livestock value chain activities, particularly the distribution of chickens and goats, generated clear participant satisfaction. PCI reported significant increases in overall livestock numbers in the communities. The pass-through mechanism of disseminating livestock functioned well in most places: the evaluation team found that the model worked when participants were adequately prepared, had affordable veterinary care, and received an animal that they valued, and where community social pressure sustained the pass-through practice. The formation and training of Women’s Empowerment/Village Savings and Loan groups (WE/VSL) was widely cited by participants as an important activity. Over 33,000 people, mostly women, participated in these groups. The WE/VSL annual earnings provide critical income for investments in home improvement, school fees, asset acquisition, and improved diet. A cash-crop value-chain initiative for pigeon pea was not successful due to international market factors.

Njira introduced important changes in small-scale, rainfed agriculture that have been adopted as standard farming practice. Njira’s crop, livestock, and gardening activities increased and diversified household diets using foods from homestead production rather than market purchase. Household incomes increased due to participation in VSLs, revenue from irrigated products, and some sales of livestock and livestock products. The PBS data show that the use of financial services decreased from 40.4 percent of farmers to 28.4 percent; the regression analysis found that 49.5 percent of Njira households use financial services versus 28.2 percent of non-participant households. The PBS data show that per-capita expenditures (as a proxy for income) increased from US\$1.63 at baseline to US\$1.99 at endline. While these gains were moderate (due to the scale of the activity), in a cash-poor economy, marginal increases can be important, and the income gains were recognized as significant by the project participants. Overall, P1 interventions contributed to food security among participants.

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Before the project we did not know anything regarding water harvesting, nor did we know the gains that are attached to irrigation farming. The coming of the project has opened our eyes and with the new farming technologies we are able to maximize our production.”

– Njira participant

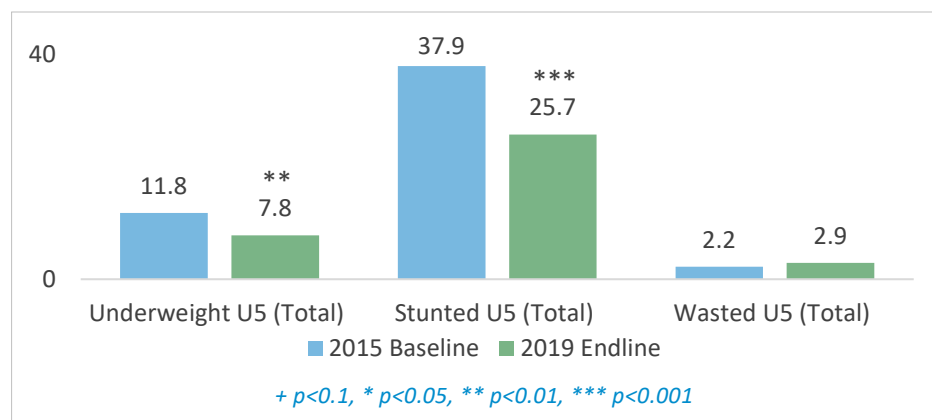
Improved Health and Nutrition of PLW and CU5 (P2)

To reduce malnutrition and improve diets, Njira used a cascading model of disseminating knowledge on nutrition and child care through local groups and lead mothers to reach a maximum number of households. The PBS found a significant decrease in underweight CU5 and stunting among CU5 (Figure 2). There were no significant changes in other key nutrition and health indicators as measured by the PBS or the regression analysis, including women’s nutritional status and dietary diversity, and household hunger.

In qualitative interviews across both districts, P2 participants demonstrated a clear understanding of the health and nutrition messages and their incorporation into standard household practices. Focus group participants consistently asserted that the nutrition activities contributed to improvement in the nutritional status of CU5 and PLW, and reduced acute malnutrition and illnesses in the beneficiary population. The delivery of these messages followed a cascading strategy where lead mothers from Care Groups passed

learning from their training sessions to “cluster mothers” who then disseminated the content to neighborhood mothers in local meetings. This system was particularly effective with the importance of a

Figure 2: Prevalence of underweight, stunted, and wasted CU5 at baseline and endline



diverse diet (participants were quite aware of the six major food groups) and nutritious food preparation. Also, childcare messages regarding breastfeeding, weaning foods, and child hygiene offered evidence of widespread understanding and adoption. This enhanced access to information through Care Groups was complemented by targeted food distribution to PLW and CU2. Most of the Care Groups

interviewed offered testimony of improved nutrition among the children and a significant reduction of referral to Nutrition Rehabilitation Units. Njira, especially with the Care Group model, applied the best practices for social and behavioral changes (FANTA 2018), which emphasizes community consultation, barrier analysis, and peer-to-peer interaction. Fathers’ groups were also highly effective in involving men in Care Group activities, and provided a forum for reflecting on gender relationships and a platform for collective problem-solving.

P2 addressed water, sanitation and hygiene (WASH) challenges by expanding safe water access and working with communities to become open-defecation free. The WASH component restored or constructed community water points that were managed by the community. Access to safe water improved; the percent of households that can obtain drinking water in less than 30 minutes (round trip) increased from 51.7 percent at baseline to 65.6 percent at endline. Water point committees, primarily women, organized the water supply and maintained the infrastructure, including boreholes, protective fences, and safe run-off of water. There was significant female participation in leadership roles (including lead farmers) across all three purposes and the central role of women on many of the committees appears to have enhanced their status throughout their villages. The sanitation component promoted the community-wide acceptance of improved latrines and washing structures. Care Group members said that cholera, once an annual plague, had not appeared for several years. While there was progress toward open-defecation-free villages, the issue of sustainability was not solved, and many houses experienced the collapse of their open-pit latrines and washing stations during the rainy season. The PBS data show that the percentage of households using improved sanitation facilities decreased from 56.6 percent at baseline to 38.8 percent at endline.

Improved capacity to prepare for, manage, and respond to shocks (P3)

P3 supported disaster management institutions, particularly at the village level, building community capacity to develop disaster management plans. Njira worked with local communities to manage their watersheds to harvest run-off, reduce soil erosion and flooding, and increase soil moisture. Major initiatives were directed at reforesting hillsides and managing existing woodlands.

During the LOA, there were destructive floods on an annual basis, three major drought years, and a fall armyworm infestation. The Njira approach to disaster management was to facilitate mobilization of a Village Civil Protection Committee, which was trained in disaster planning and response. The committees cited examples of using early warning systems and rain and river-line gauges to alert residents of impending

floods and to move them to safety. This was complemented by the establishment of watershed committees. In each village, elected members of the watershed committee were responsible for community mobilization and the rehabilitation of local watersheds by managing large water and soil conservation structures. The committee was intensively trained in watershed management principles, and external technical support and regular project staff supervision were provided. During the LOA more than 7,500 ha of watershed received water and soil conservation works.

The qualitative study found ample evidence of the impact of the watershed interventions. Focus groups stated that damage from surface run-off was virtually eliminated and moisture was retained behind the hillside structures; many cited examples of maize production increasing by 50-75 percent on the protected fields. The watershed committees also mobilized the reforestation of denuded slopes and stressed woodlands; villages created nurseries to produce seedlings and forest management committees to manage the newly planted trees and protect the area from woodcutters. An important P3 outcome was the success in mobilizing collective action to solve a community problem. The ability to reduce the annual destruction from flooding created a strong sense of community empowerment and pride. Two months post-project, several watershed committees continue to expand their soil and management structures. It was common to hear: “Njira gave us the knowledge and the skills; the future is now in our hands.”

RECOMMENDATIONS

Layering

- **The layering approach should be an integral part of future programming – with some adjustments.** The layering approach in Njira should be considered a best practice; it was achieved through planning, targeting, group formation, and the use of the “dynamic” team concept for field facilitation. Two recommended adjustments to the Njira approach are: (i) Refine the design of “tailored pathways” so that the layering reaches a maximum number of beneficiaries. (ii) Reduce the number of interventions. The large number of activities in Njira (more than 20 in P1, plus multiple sub-activities) spread technical assistance too thin and confused the beneficiary population. Future projects should focus on a smaller beneficiary pool with fewer activities that are mutually reinforcing in order to produce more consistent and achievable results.

Strategize for Spill-over

- **Expand strategies to enable greater “spill-over” effects.** Discussions with lead farmers from non-beneficiary villages suggested that the impacts of Njira innovations did not extend widely beyond the project villages. Future programs should design strategies to “open up” the technologies and messages from project interventions to the surrounding population. Njira’s “learning villages” model should become a central feature of programming. The learning that occurs within a project should be disseminated in diverse and proactive ways to make the benefits available to non-participants.

Savings and Loans

- **Promote participant ownership of Village Savings and Loans associations.** VSLs are an effective way for men and especially women in cash-poor environments to increase community liquidity and accumulate lending capital for larger investments, support collective action projects, and cushion

shocks. They are also important community empowerment mechanisms and should be supported as such. As in Njira, these community institutions should be integrated into wider financial networks.



Agriculture and Agribusiness

- **Employ low-cost and low-technology techniques.** Many practical and sustainable measures improve crop yields and are appropriate to communities with cash constraints. These measures, including improved seeds, cultivation, and intercropping, are nearly cost-free and consistently sustainable.
- **The design of agribusiness programs should emphasize the appropriateness of the program to farm-level realities and capacities.** Agribusiness programs are complicated, and their success depends upon multiple external circumstances. Providing guidance and a roadmap to the market alone does not turn a semi-literate smallholder farmer into an effective participant in the market. Value-chain interventions require information and regular orientation not usually available to the cash-poor, vulnerable farm family. Any set of agribusiness activities must address local circumstances and capacities as well as regional and national market characteristics.



Evaluation and Planning

- **Devise within BHA a new strategy for the evaluation of food and nutrition security program results.** The evaluation team found a discrepancy between the PBS data and the qualitative responses from project participants. This is partly due to different sampling strategies: the PBS draws from the entire project area and contains participants and non-participants, while qualitative sampling is purposive and focuses on participants. The PBS approach should be reviewed by USAID with the objective of improving the measurement of project outcomes within the targeted population. While it is important to have measurement systems in place that can capture the indirect project benefits obtained by the wider population in the project area, additional quantitative methodologies should be explored to enable statements about attribution of observed changes to project activities.
- **Add a transition year to assure and document sustainability.** This is recommended to develop the government relationships necessary to support the beneficiary population as they define the continuation of activities, capacity-building, and problem-solving nurtured over the life of the project. The closure of project activities when newly formed local institutions are in the process of maturation can create a void that threatens the sustainability of positive project outcomes. A transition year would not involve direct project assistance, but rather a period of collaboration with and support of the local institutions promulgated by the project.

MIXED-METHODS METHODOLOGY

- Population-based survey (Jul – Aug 2019)
 - 630 households in the three project districts
- Quantitative analysis compared baseline and endline indicators
- Qualitative study (Oct 2019)
 - 42 focus group discussions (352 F, 113 M)
 - 42 key informant interviews (national and site-level) (6 F, 36 M)
 - Site visits to observe infrastructure assets built or rehabilitated with project support (irrigation schemes, *Ubwino* centers, watershed management and reforestation projects, latrines, water points, demonstration gardens)
- Review of project documents, project monitoring data, and secondary sources