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NAFAKA STAPLES VALUE CHAIN ACTIVITY

TASK ORDER NO. AID-621-TO-11-05000

ANNUAL PERFORMANCE REPORT
(October 1, 2013 – September 30, 2014)



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LIST OF ACRONYMS

AIRD	Associates for International Resources and Development
BCC	Behavior Change Communication
BDS	Business Development Services
CAADP	Comprehensive Africa Agriculture Development Programme
CBAP	Capacity Building Action Plans
CRS	Catholic Relief Services
DCO	District Coordination Officers
DPS	Direct Paddy Seeder
EMMP	Environmental Management and Monitoring Plan
EPA	Environmental Protection Agency
FA	Field Agent
FFS	Farmer Field School
FICA	Farm Inputs Care Centre
FIPS	Farm Input Promotions-Africa
FtF	Feed the Future
GAP	Good Agricultural Practices
IFDC	International Fertilizer Development Center
IWD	International Women's Day
KATI	Kizimbani Agricultural Training Institute
KATRIN	Kilombero Agricultural Research and Training Institute
KPL	Kilombero Plantation Limited
KVTC	Kilombero Valley Teak Company
M&E	Monitoring and Evaluation
MFTC	Mkindo Farmer's Training Centre
MIS	Management Information System
MSME	Micro Small and Medium Enterprises
MVIWATA	Mtandao Wa Vikundi Vya Wakulima Tanzania
NFRA	National Food Reserve Agency
PASS	Private Agriculture Sector Support
PERSUAP	Pesticide Evaluation Report and Safer Use Action Plan
PMP	Performance Monitoring Plans
PO	Producer Organizations
QDS	Quality Declared Seeds
RCT	Rice Council of Tanzania
RGoZ	Revolutionary Government of Zanzibar
RUDI	Rural and Urban Development Initiative
RUP	Restricted Use Products
RYMV	Rice Yellow Mottle Virus
S	Standard Indicator
SACCO	Savings and Credit Cooperatives
SARO 5 (TXD 306)	Semi-Aromatic Tanzanian Cross Dakawa 306 Improved Rice Seed
SILC	Savings and Internal Lending Community
SMFM	Sell More For More
SP	Service Provider
SPSS	Statistical Package for Social Sciences
STTA	Short-Term Technical Assistance
TAPP	Tanzania Agriculture Productivity Program
TFRA	Tanzania Fertilizer Regulatory Authority
TOSCI	Tanzania Official Seed Certification Institute
ToT	Training-of-Trainers

TPRI	Tropical Pesticides Research Institute
TSh	Tanzanian Schillings
UDP	Urea Deep Placement
USAID	United States Agency for International Development
USD	United States Dollar
USEPA	United States Environmental Protection Agency
USG	United States Government
VBAA	Village-Based Agricultural Advisor
WFP	World Food Program
WOG	Whole of Government Indicator
YOSEFO	Youth Self Employment Foundation
ZARI	Zanzibar Agricultural Research Institute

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I. Executive Summary

The NAFKA Staples Value Chain Activity is a five-year Task Order issued by USAID under the Tanzania Feed the Future (FtF) Initiative and administered by ACIDI/VOCA. NAFKA integrates agricultural, gender, environment and nutritional development efforts to improve smallholder farmer productivity and profitability within the rice and maize value chains in Morogoro (Kilombero and Mvomero Districts), Dodoma (Kongwa District) and Manyara (Kiteto District) on the mainland, as well as Pemba and Unguja in Zanzibar. NAFKA's goal is to sustainably reduce poverty and food insecurity by increasing incomes for smallholder farmers, including men, women, and youth.

This Annual Performance Report for the period October 1, 2013 – September 30, 2014 contains the following sections consistent with the annually reporting format requested by USAID/Tanzania: (1) this Executive Summary; (2) Introduction; (3) Implementation Progress; (4) Activities Implemented in Zanzibar (Unguja and Pemba); (5) Key Achievements/ Results; (6) Problems/Challenges; (7) Planned Activities; (8) Special Issues; and (9) Cross-Cutting Issues. Annex 1 of this report includes quantitative information on performance against PMP indicators, while Annex 2 includes four success stories submitted to the Mission during this reporting period. Financial information for the reporting period is submitted under separate cover.

Project Scale-Up

During this reporting year, NAFKA focused its efforts on building on successful methodologies across project activities, scaling out interventions into new villages, deepening interventions along the rice and maize value chains on the mainland, and also expanding rice productivity activities in Zanzibar. The project dedicated significant resources to:

- Expanding interventions into 117 new villages in Kongwa, Kiteto, Mvomero, Kilombero, and Zanzibar.
- Assessing existing input supply networks and VBAA capacity to inform models for integration of input suppliers, agro-dealers, and VBAA's into a more streamlined and efficient input supply chain.
- Strengthening Capacity Building Action Plans (CBAPs) with NAFKA's two main local subcontractors, MVIWATA and RUDI.
- Launching two large grants in Zanzibar with local partners, Zanzibar Agricultural Research Institute (ZARI) and Kizimbani Agricultural Training Institute (KATI), to work with a total of 4,000 beneficiaries in 40 locations on Unguja and Pemba islands.
- Launching the grant agreement with Kilombero Rice Plantations to transition NAFKA activities to KPL, adding an additional 2,500 beneficiaries for a total of 5,800 beneficiaries total on improved agricultural production and profitability.
- Launching the grant agreement with KINNAPA Development Program to stabilize and increase maize productivity and profitability among smallholder farmers in Kiteto District by organizing smallholder farmers into groups or associations for collective efforts. The program is also working with farmers and

SNAPSHOT OF NAFKA

- Value Chains: Rice and Maize
- Program Approach: Association Development, Savings and Internal Lending Communities, Demonstration Plots, Farmer Field Days, and Farmer Exchange Visits
- Program Extension Service Providers: Village-Based Agricultural Advisors, Lead Farmers, and Agro-Dealers
- Cross-Cutting Activities: Gender Integration, Environmental Compliance and Natural Resource Management, Monitoring & Evaluation, and Behavioral Change Communications
- FtF Partners: Mwanzo Bora Nutrition Program, iAGRI – Innovative Agricultural Research Initiative, TAPP – Tanzania Agriculture Productivity Program, TUBOCHA – Tuboreshe Chakula Project, SERA, and Infrastructure Project – CDM Smith
- Public-Private Partnerships: Kilombero Plantation Limited, Kilombero Valley Teak Company, Rice Council of Tanzania

- agro-pastoralists in Kiteto to strengthen livelihoods and community development.
- Releasing the Enterprise Development Co-Investment Grant initiative, designed to catalyze private sector investment into agricultural value chains, with a particular focus on integrating smallholder producers into staples value chains.
- Launching the Phase II Input BCC campaign, promoting use of fertilizer and improved seed.
- Identifying new regions - Iringa and Mbeya – and new activities for possible expansion in the coming year.
- Coordinating 13 ST technical assignments in public-private partnerships, market access, productivity, finance and administration, communications, monitoring and evaluation, and 2014-2015 annual work planning to build the capacity of local staff and provide targeted expertise to project activities.
- Developing agro-dealer networks by designing grants for selected VBAs to strengthen their relationships with input suppliers and develop them as wholesalers or retailers of farm inputs.

Results

Since project inception in 2011, NAFKA has reached more than 104,700 direct beneficiaries, and close to half a million total beneficiaries (direct and indirect), already exceeding the life-of-project target by a substantial margin. Please refer to Table I below containing the NAFKA Outreach Summary and Figure I below illustrating the breakdown between new and continuing beneficiaries.

The intensive scale-up effort which took place during the FY2014 project year described above underpinned the rather dramatic results achieved in this reporting period and presented in this Annual Report. Annex I of this report contains the NAFKA PMP Data Matrix Table comparing results against both FY2014 and life-of-project targets. NAFKA tracks 20 indicators, 9 of which are outcome indicators and 11 of which are output indicators. Of these 20 indicators, FY2014 targets were achieved or exceeded on 15, many of which far exceeded 100% of FY2014 targets (although we did take the liberty to consider two, at 99% and 93%, as “achieved”). Of these, 6 are outcome indicators and 9 output indicators. Three considered “not achieved” reached 86%, 76%, and 74% of FY2014 targets.

Compared with life-of-project targets, results on 8 (3 outcome, 5 output) of the 20 indicators have already been achieved or exceeded, with 7 others considered “not yet achieved” reaching 85%, 83%, 83%, 77%, 73%, 69%, and 64% (we took the liberty to consider one at 95% and one at 90% as “achieved”). *Again, these are cumulative results compared to life-of-project targets, and this after only three growing seasons, the first of which was truncated given that we were still in start-up mode!* A complete report of the results of our Annual Outcome Survey (AOS), conducted in August of this year in preparation for this Annual Report, is currently being prepared and will be presented to the Mission in November. This AOS report will contain a thorough analysis of the results for each outcome indicator.

The PMP Data Matrix Table in Annex I reveals that results have fallen significantly short on only two of the 20 indicators. The one on value of new private sector investment came in at only 31%, primarily due to an unfavorable policy environment discouraging private investment. Case in point: the large volumes of duty-free rice imports that took place in early-2013 resulted in a dramatic and persistent decline in the price of rice, calling into question the very survival of significant, already-existing private investment such as KPL. When this target was established in the early stages of the project, we had (perhaps naively) envisioned other KPL-like investors coming to Tanzania, which has not materialized. These policies have contributed to decisions by EAC countries to impose CET import tariffs on Tanzanian rice. Indeed, it is difficult to imagine new investors risking entry into that kind of policy environment until a more transparent rules-based system governing rice imports is instituted. Smallholders holding stocks were also badly hurt; the bumper crop in rice should have resulted in substantially higher gross margins than were actually registered. Similarly in maize, in which high demand for Tanzanian maize in EAC countries is largely satisfied through illegal cross-border trade given difficulties in securing export permits.

The results on number of beneficiaries with home gardens also fell far short of the FY2014 target. This is a NAFKA custom indicator and our only one measuring nutrition outcomes. In addition to the need to consider recalibration of the targets for this indicator and for strengthening our mechanisms for counting the numbers of home gardens established, the indicator as currently designed is too restrictive to adequately capture other interventions being made to improve nutrition, i.e., training in alternative legume and vegetable crops after the rice and maize harvests, and distribution of vegetable seed to farmers by VBAAAs. As such, we propose establishment of an additional indicator that will capture results of these broader nutrition interventions. We will discuss this with the Mission and, upon receiving concurrence, add a new indicator to our PMP and Annual Outcome Survey.

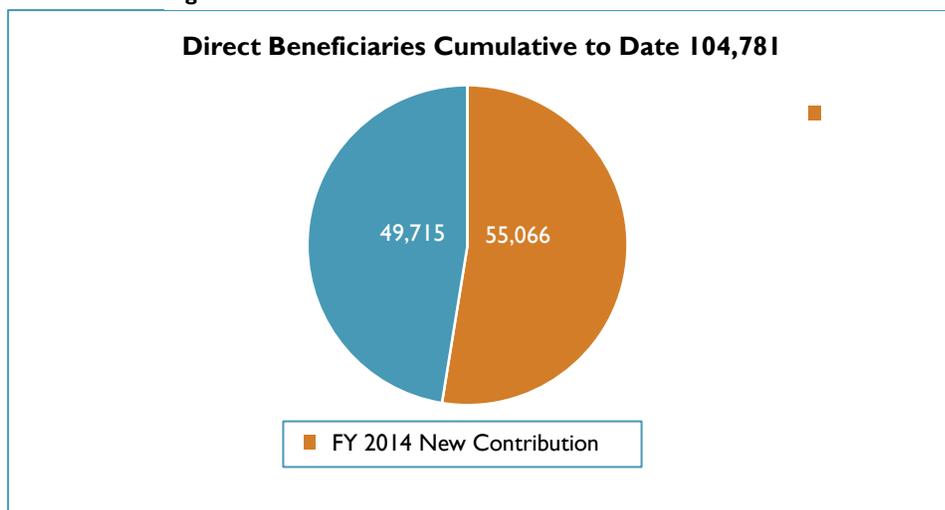
During this reporting period, NAFKA reached 71,195 direct beneficiaries (52% M / 48% F), 55,066 of whom were new (53% M / 47% F) and 16,129 (52% M / 48% F) of whom were continuing from a previous reporting period. Since NAFKA interventions impact all members of a beneficiary household by facilitating improved economic status, family members are counted as indirect beneficiaries. These numbers are estimated by applying a household-size multiplier to the direct beneficiary count for each of NAFKA’s ten geographic areas.¹ Combined, total beneficiaries (direct and indirect) for the year were 325,154, of whom 250,289 were new.²

Table I: NAFKA Outreach Summary

NAFKA Outreach	FY 2014 – New	FY 2014 – Continuing	FY 2014 – Total	Cumulative -to-Date ³
Direct Beneficiaries (Farmers, Service Providers, or Clients of Service Providers)	55,066	16,129	71,195	104,781
Total Beneficiaries (Direct and Indirect)	250,289	74,865	325,154	481,047

As depicted in Figure I below, this year’s new direct beneficiary count contributed approximately 47% to NAFKA’s total direct beneficiary count to-date, reflecting a balanced approach to sustaining contact with continuing beneficiaries while simultaneously expanding outreach to new ones.

Figure I: Direct Beneficiaries Cumulative to Date



¹ The number of total beneficiaries reached – direct and indirect – is calculated by adjusting the number of direct beneficiaries in two stages: 1) estimating the number of households reached by applying a downward multiplier to account for multiple direct beneficiaries within the same household, then 2) estimating total beneficiaries by applying cluster-specific, household-level multipliers to the estimated households reached. The downward multiplier used to calculate households – .967 – is based on NAFKA primary data that 96.7% of SILC group and association members come from unique households. Separately, data for population and number of households per ward in which NAFKA works was taken from the Tanzanian 2012 National Census and used to generate cluster-specific household-level multipliers that estimate total direct and indirect beneficiaries.

² Indirect beneficiaries cannot be sex disaggregated because multipliers are used to calculate the figures.

³ Cumulative-to-Date figures are the sum total of all final Year-to-Date figures for each reporting year. Beginning Q3 FY 2014, NAFKA revised its methods for calculating cumulative beneficiaries per USAID approval.

Improved Value Chain Productivity

- **Outreach:** NAFKA reached 325,154 total beneficiaries during this reporting period, far exceeding the FY2014 target. Of these, 71,195 were direct beneficiaries. These figures include both individuals new to the program, as well as those continuing from previous years. Since project inception, NAFKA has reached over 104,700 direct beneficiaries and a half million total beneficiaries (direct and indirect). These figures represent a level of outreach far exceeding established targets.
- **New Technology Adoption:** 60,279 farmers adopted new technologies this reporting year, representing an 80% adoption rate. This virtually matches the life-of-project target for this indicator.
- **Hectares under Improved Technologies:** More than 89,000 hectares of land were under improved technology or management practices at the end of the project year, far exceeding the FY2014 target for this indicator.
- **Increase in Yields:** Paddy yields increased by 5% to 3,139 kg/Ha during this reporting period, while maize yields increased by 74% to 1,223 kg/Ha. Life-of-project targets for both these indicators have already been achieved.
- **Demonstration Plots and Good Agricultural Practices (GAP) Training:** Fourteen GAP technologies for maize and rice were promoted on 648 rice and maize demonstration plots through GAP training and technical assistance by Lead Farmers and Village-Based Agricultural Advisors (VBAs). GAP technologies included land preparation, proper spacing, appropriate use of fertilizer and improved seeds, water management, pest and disease control, and pre-harvest/harvest/post-harvest practices. Additionally, NAFKA promotes a System of Rice Intensification (SRI), a combination of technologies that ensures high returns with low investments in both irrigated and rain-fed areas. NAFKA also conducted GAP Training of Trainers (ToT) to 11 Agronomists and 5 District Coordination Officers (DCOs).
- **Service Provider Development:** NAFKA continued to support networks of private sector service providers, including 98 agro-dealers, 212 village-based agricultural advisors (VBAs), 28 members of youth groups that provide agricultural services, 52 Savings and Internal Lending Community (SILC) field agents, and 32 certified SILC private sector service providers.
- **Private Sector Engagement:** Input supply companies contributed approximately \$38,778 in in-kind products (primarily seeds and fertilizers). Participating companies include Seed Co, Yara Tanzania Limited, Bytrade, Tropical Seed, Minjingu, TANSEED, Pioneer Hybrid, and Monsanto. Six hundred and forty-eight (648) demonstration plots were used as training platforms in partnership with these companies. Initial training sessions were conducted on the plots by the companies' agronomists to demonstrate the effectiveness of their inputs and to develop a customer base among project beneficiaries.
- **Engaging Agricultural Research and Training Institutes:** NAFKA continued its collaboration efforts with six research and training institutions including Ilonga Research Institute, Kilombero Agricultural Research and Training Institute (KATRIN), Cholima Research Institute, Mkindo Farmer's Training Centre (MFTC), Zanzibar Agricultural Research Institute (ZARI), and Kizimbani Agricultural Training Institute (KATI).
- **Alternative Crops:** NAFKA encouraged the introduction of alternative nutritious crops through intercropping and crop rotation in maize areas hit particularly hard by drought and disease last season, as well as other project areas. Ilonga Research Institute introduced a new cowpea variety that is able to withstand the striga parasitic weed that affects maize crops in many parts of Kilosa District. This natural cowpea variety will help reduce pest damage in a more affordable, environmentally friendly fashion than most herbicides. In the paddy production areas, NAFKA introduced alternative crops for off-season production. This activity has 3 goals – integrated soil fertility management, food security, and nutrition at the household level.

Expanding Markets and Trade

- **Associations:** NAFKA expanded its network of producer associations this year to include 56 new associations for a total of 112. NAFKA facilitated the formation and registration of producer associations

in order to formalize the farmer organizations, build capacity of the associations in marketing, leadership, management skills, and to be more service-oriented towards their members.

- **Apex Associations:** NAFKA facilitated the formation of 6 new apex associations, three in rice in Kilombero District, one in rice in Ulanga District, (affiliated with KVTC), and two in Mvomero District – one for rice and the other for maize.
- **Market Information System (MIS):** NAFKA supported MVIWATA to commercialize the Market Information System by linking it to Airtel Telecommunications Company so that it can serve a larger audience and also support itself through user fees. The MIS provides information on commodity prices for area markets, volumes requested by sellers, and contact information for relevant stakeholders.
- **Buyer Agreements:** NAFKA facilitated buyer agreements worth ██████ for paddy (1,205 MT) and ██████ for maize (620 MT), achieving just over 100% of the FY2014 target. An additional 68 MT of paddy are currently in association warehouses for sale later in the season.
- **Incremental Sales:** Incremental sales exceeded \$8.1 million during this reporting period, achieving 76% of the annual target. The value of sales was constrained in the past year due to unexpectedly low paddy prices caused by large-volume imports of low cost, duty-free rice. Gross margin targets for both rice and maize have been achieved, however.
- **Access to Finance:** NAFKA facilitated ██████ in formal rural agricultural loans to 316 farmers through YOSEFO, CRDB, and Opportunity International Tanzania Ltd. An additional ██████ in loans were issued to vulnerable households through the informal SILC mechanism as described in the vulnerable groups section below.

Increased Private Investment in Agriculture

- **Private Sector Investment:** NAFKA facilitated just under half a million dollars in new private sector investment during the reporting period – and over \$2.4 million since project inception. Results for this indicator continue to lag given the unfavorable business environment for rice that includes low prices due to large volumes of duty-free imports and a generally inhospitable policy and business environment which discourages investment.
- **Public-Private Partnerships:** NAFKA continues to work with KPL and KVTC to mutually develop outgrower programs that promote provision of agricultural inputs and crop marketing within the rice value chain. These two entities are really the only major private investors in rice in the SAGCOT region. Additionally, NAFKA offers support to the Rice Council of Tanzania (RCT), an advocacy platform for the rice sub-sector in Tanzania. RCT provides an important collective private sector voice advocating for the Tanzanian rice industry.
- **Input Supply Company Relationships:** Twelve input supply companies partnered with NAFKA to demonstrate their products to smallholder farmers (seed, fertilizer, and agro-chemicals) in order to develop a rural customer base and distribution channels. In addition to attending Farmer Field Days, they also participated in workshops organized by NAFKA to link input suppliers and agro-dealers.
- **NAFAKA Grants:** NAFKA administered the following grants to support local businesses, associations, individual farmers, and institutions: 1) Warehouse Upgrading Grants for storage refurbishment, furniture, and equipment supply (15 grantees) 2) Enterprise and Program Development Grants (KPL and KINNAPA) and 3) Research and Training Grants (ZARI and KATI). Grants issued in previous reporting periods to agro-dealers (5), Progressive Farmers (48), TANSEED, and UWAWAKUDA were completed this year.

Increased Income for Vulnerable Smallholders

- **Expanded Savings and Internal Lending Communities:** NAFKA assists vulnerable households by building the capacity of local savings groups. This reporting period, NAFKA reached 7,897 vulnerable households with SILC services through mobilizing and training, far exceeding annual targets for this indicator.

- **Food Security and Nutritious Crops:** Three hundred seventy-five SILC group members received training on sustainable organic farming and vegetable crop production to improve household-level nutritional intake. Four hundred SILC members have adopted home gardens. These figures are far below proposed targets, and activities will be scaled up.

2. Introduction

Project Description

NAFAKA aligns with the Feed the Future (FtF) goal to harmonize regional hunger- and poverty-fighting efforts in countries with chronic food insecurity and insufficient production of staple crops. NAFKA works with rural communities and the Government of Tanzania to analyze the local rice and maize value chains and to develop strategies to strengthen them. NAFKA represents a commitment to Tanzania's country-led Kilimo Kwanza initiative to reinvigorate agricultural growth emerging from the Comprehensive Africa Agriculture Development Programme (CAADP) process.

The NAFKA team is composed of a consortium of subcontractors that include:

- ACDI/VOCA – Overall project management, operations, and technical leadership.
- Rural and Urban Development Initiative (RUDI) and Mtandao Wa Vikundi Vya Wakulima Tanzania (MVIWATA) – Local service providers focused on developing farmer associations in target locations.
- Farm Input Promotions-Africa (FIPS) – An East African organization developing village-based extension.
- International Fertilizer Development Center (IFDC) – Providing technical expertise in rice production, irrigation, and agro-dealer networks.
- Danya International – Providing technical expertise in behavior change communications.
- Catholic Relief Services (CRS) – Addressing the needs of the most vulnerable in target regions.
- Short-term technical support from MatchMaker Associates, Crown Agents, and Associates for International Resources and Development (AIRD).

Goals and Objectives

The goal of NAFKA is to sustainably reduce poverty and hunger by improving the productivity and competitiveness of value chains that offer job and income opportunities for rural households. The goal aligns with the Feed the Future Initiative (FtF) overall goal, “to sustainably reduce poverty and hunger.” NAFKA promotes growth by facilitating competitiveness of the smallholder-based rice value chain, and balances these impacts on growth and broader effects to reduce poverty through investments aimed at improving the competitiveness and productivity of the maize value chain.

To sustainably reduce hunger and poverty, NAFKA is:

- Improving the competitiveness and productivity of the rice and maize value chains.
- Improving domestic and regional trade in rice and maize.
- Expanding the depth and breadth of benefits from the growth of the rice and maize subsectors, including increased benefits to women and youth.
- Enhancing rural household nutrition by promoting women-focused value chain development and improved consumption of a quality diet.

Geographic Zones of Influence

NAFAKA is implemented in four districts on the mainland and also on Zanzibar. Key areas of intervention and on-the-ground partnerships are described below:

- Kilombero District: A rice-growing area in the south of the Morogoro region:
 - Ifakara North, Mlimba, and Mang'ula Clusters: NAFKA is engaged in association development and increasing productivity in 56 villages (20 in Ifakara North, 16 in Mlimba, and 20 Mang'ula), focused mainly on rain-fed production.
 - Kilombero Rice Plantation (KPL) & Kilombero Valley Teak Company (KVTC): NAFKA is facilitating KPL outgrower schemes in 10 villages. NAFKA is also working with KVTC employees and teak outgrowers to develop their own rice operations in 11 villages.
- Mvomero District: A rice and maize growing area in the north of the Morogoro region. NAFKA is developing associations and increasing productivity with rain-fed and irrigated rice and maize producers in 34 villages (29 rain-fed and 5 joint rain-fed and irrigated).
- Ulanga District: A spillover from activities with KVTC in Kilombero District. NAFKA formed 14 associations and trained 668 members (53% M / 47% F) in good agricultural practices.
- Kongwa and Kiteto Districts: maize-growing areas in Dodoma and Manyara regions. NAFKA is developing associations and increasing productivity with maize producers in 95 villages (50 in Kongwa and 45 in Kiteto).
- Zanzibar: NAFKA is focused on increasing productivity with rain-fed and irrigated rice producers in 37 wards/shehia in (20 in Unguja and 17 in Pemba).

3. Implementation Progress

This section presents NAFKA's progress in implementing activities according to the key result areas as per the NAFKA project document. The key result areas of NAFKA are:

- Improved value chain productivity.
- Expanding markets and trade.
- Increased private investment in agriculture.
- Increased income for vulnerable smallholders.

Cross-Cutting Issues are addressed under Section 9 of this report, which include gender integration, behavior change communication, environment and natural resource management, and monitoring and evaluation.

IR.1. Improved Value Chain Productivity

NAFAKA's productivity enhancement efforts are reducing poverty by sustainably improving the productivity and competitiveness of rice and maize value chains. Our agricultural productivity activities utilize multiple interventions designed to bring about positive change in farmers' practices through integration of core behaviors in their farm activities. This year focused on increasing the number of service providers to support the expansion into 117 new villages and continuing interventions in 126 current villages.

1.1. Enhanced Human and Institutional Capacity Development for Increased Sustainable Agriculture Sector Productivity

During the reporting year, NAFKA facilitated both seasonal and specific, one-off trainings that focused specifically on increased productivity in the rice and maize value chains to 60,842 (54% M / 46% F) individuals across four districts on Tanzania mainland and Zanzibar. This achievement far exceeded annual targets for this indicator.

More details on this are described under Section 1.1.4 and Section 4.

1.1.1. Build Capacity of Local Implementing Partners

Prime contractor ACDI/VOCA supported capacity development efforts of local partners Rural Urban Development Initiatives (RUDI) and Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA) through their respective capacity-building action plans (CBAPs). A consultant has been identified to complete a strategic plan review for RUDI, and the process of identifying a capacity building consultant to complete a financial manual review and revision for both RUDI and MVIWATA has begun. Both consultations are scheduled for implementation in the coming project year.

These local implementing partners have been receiving capacity-building services through a combination of customized training workshops and on-site technical assistance on a regular basis from NAFKA. This year, ToTs were provided to both local organizations on the ACDI/VOCA Sell More for More (SMFM) training curriculum in order for them to deliver the course to association leaders in their respective regions. Both sub-contractors also attended Inside NGO training facilitated by USAID. The topics covered included: USAID Rules & Regulations; USAID Procurement Planning & Execution; and USAID Proposal Development from RFA/RFP to Proposal.

1.1.2. Producer Associations and Group Strengthening

During the year, NAFKA's primary activities under association development focused on sensitizing new villages to the benefits of association creation and facilitation of the Sell More for More (SMFM) participatory training program to 346 (56% M / 44% F) association leaders. Sell More for More develops gender-integrated association leadership by equipping farmers with the skills and marketing knowledge to meet quality specifications and manage their operations effectively. It includes practical lessons in areas such gender-integrated leadership, record-keeping, marketing, and operations management.

“Before training on GAP, many association members were storing their produce in their homes and struggling with low yields due to unproductive traditional farming practices. But after learning and applying GAP, members’ yields have increased significantly, and we are now storing our produce and practicing farming collectively as a business,” said Josephine Liulika, Secretary of Vigaeni Farmers Association. She added, “SMFM training has enhanced collaboration and commitment amongst the members.”

The association development unit facilitated the formation of 56 new producer associations and continued its capacity-building efforts to the 56 associations established in previous years – including the existing water user associations Mgongola and UWAWAKUDA – covering topics in GAP, advocacy, credit access, and management training.

1.1.3. Engaging Agricultural Research and Training Institutes

NAFAKA continued its collaborative efforts with six research and training institutions: Ilonga Research Institute, Kilombero Agricultural Research and Training Institute (KATRIN), Cholima Research Institute, Mkindo Farmer’s Training Centre (MFTC), Zanzibar Agricultural Research Institute (ZARI), and Kizimbani Agricultural Training Institute (KATI). During the project year, NAFKA introduced an Agricultural Research Institute Grant and opened an Expression of Interest to run for 2 years, primarily in geographic zones aligned with the Southern Agricultural Growth Corridor (SAGCOT) that include Morogoro, Manyara, Dodoma, Iringa⁴, Mbeya, and Zanzibar. The EOI aims to provide capacity building, technical assistance, and investment to zonal

⁴ Prospective NAFKA initiatives in Mbeya and Iringa are in planning stages only and contingent upon formal approval by USAID.

research and training institutes involved in rice, maize, and alternative crop value chains, with a particular focus on developing products and services that contribute to smallholder farmer productivity.

Ilonga Research Institute

Ilonga Research Institute specializes in alternative seed research. NAFKA worked with Ilonga Research Institute to promote the use of alternative crops such as pigeon peas, sorghum, and sesame seeds that can provide income diversification in areas that are vulnerable to extreme weather conditions (e.g. drought or flood) and/or where household nutritional improvement is being promoted. Alternative crop production allows smallholder farmers to take advantage of different markets to better spread economic risk if their primary crop fails. Alternative crops can also be used as a form of Integrated Pest Management (IPM), an effective and environmentally sensitive approach to manage invasive insects and weeds.

During the year, Ilonga Research Institute introduced a new cowpea variety that is able to withstand the striga parasitic weed that affects maize crops in many parts of Kongwa District. This natural cowpea variety will help reduce pest damage in a more affordable, environmentally friendly fashion than most herbicides. NAFKA will promote this variety in the coming cropping season for mixed cropping in maize-growing areas.

Kilombero Agricultural Research and Training Institute and Cholima Research Institute

NAFAKA continued the work it began in FY 2012 on Urea Deep Placement (UDP) trials with Kilombero Agricultural Research and Training Institute (KATRIN) (Kilombero District) and Cholima Research Institute (Mvomero District). The Government of Tanzania requires trials on any new fertilizer applications to run for three years before the Tanzania Fertilizer Regulatory Authority (TFRA) can consider it for approval. The UDP trials on the mainland were concluded this year, and a detailed report of the findings will be presented in the coming year. In partnership with Zanzibar Agricultural Research Institute (ZARI), UDP trials were expanded to Zanzibar this year. More details on this can be found under Section 4, Zanzibar Activities.



Above: NAFKA beneficiaries harvest the alternative crop, green grams.

Mkindo Farmer's Training Centre

In collaboration with Mkindo Farmer's Training Centre (MFTC) in Mvomero District, NAFKA continued providing extension services. Thirty-nine farmers from Mgongola Irrigators Association graduated from a four-month Farmer Field School (FFS) training, conducted by Mkindo Farmer's Training Centre with support from NAFKA. The training was offered to selected smallholder farmers who became 'Master Trainers' of Good Agricultural Practices (GAP) and then subsequently executed cascade training methodology to 25 farmers in their groups. Also in collaboration with MFTC, NAFKA conducted a Farmer Field Day on the demonstration plot at the training center so that farmers could visually see the results of applying GAP on their own plots. Private sector companies had an opportunity to showcase the benefits of their input products and to provide technical explanations about cost and proper application.

Zanzibar Agricultural Research Institute (ZARI) and Kizimbani Agricultural Training Institute (KATI)

The Ministry of Agriculture in Zanzibar has been an excellent partner with NAFKA in improving rice productivity in Zanzibar through activities implemented in collaboration with Zanzibar Agricultural Research Institute (ZARI) and Kizimbani Agricultural Training Institute (KATI). ZARI and KATI

representatives worked closely with us during this reporting period to develop demonstration plots and conduct GAP and SRI training to 4,986 (54% M / 46% F) individuals across Unguja and Pemba in Zanzibar. More than 5,600 beneficiaries on Zanzibar have received GAP training sponsored by NAFKA since project inception.

1.1.4. Training on Good Agricultural Practices (GAP)

NAFAKA's agricultural productivity activities are designed to facilitate positive changes in farmer practices through integration of core behaviors in their farm activities. NAFKA uses a combination of training approaches that includes on-farm cascade training in good agricultural practices (GAP), demonstration plots, residential trainings, farmer exchange visits, and Farmer Field Days to instill these key behaviors. The trainings are facilitated by NAFKA agronomists, village-based agricultural advisors (VBAs), agro-input companies, agro-dealer extension agents, and government extension agents.

NAFAKA GAP Training Program: For farmers to achieve maximum impact on yields and quality, NAFKA has designed a productivity training program – comprised of land preparation, proper spacing, use of fertilizer and improved seeds, water management, pest and disease control, and pre-harvest/harvest/post-harvest practices – intended to equip farmers with skills and knowledge in GAP. Such training is the initial step to develop knowledge and skills so that producers build their capacity to adopt improved practices and, in turn, increase marginal sales and yields. This year, more than 47,000 farmers (54% M/46% F) were trained in various GAP technologies.

The training program promotes 14 technologies in three modules that are introduced on demonstration plots and address the entire crop production cycle in both rice and maize. The status of each module implemented during the year is highlighted below:

Module 1—Mwanzo: Input selection, land preparation, planting, first top-dressing.

NAFAKA delivered the first round of Training of Trainers (ToT) of the module to the project's eleven agronomists and five district coordination officers (DCOs). The second round of ToT was then delivered by the agronomists and DCOs to 302 Lead Farmers and 212 VBAs.

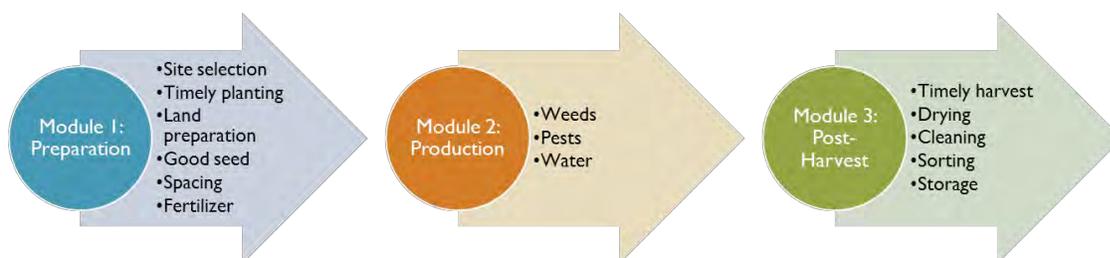
Module 2—Nufaisha: Weed & pest identification and management, second top dressing.

The first round of Training of Trainers (ToT) to the project agronomists and district coordination officers (DCOs) was delivered during the second quarter. The second round of ToT was delivered by the agronomists and DCOs to 302 Lead Farmers and 154 VBAs during the third quarter, after which they started delivering the training program directly to farmers.

Module 3—Imarisha: Pre-harvest, harvest, and post-harvest practices.

The productivity team finalized content for this module during the last quarter of the year. In the next reporting year, NAFKA will use the same cascade training approach implemented with the previous modules in disseminating the training program.

Figure 1: Modules



1.1.5. Developing Extension Service Providers

NAFAKA has established a continuously growing sustainable network of village-based agricultural agents (VBAs), agro-dealers, and select Lead Farmers to increase farmer access to improved services and inputs, such as seed, fertilizer and agro-chemicals. NAFKA builds the capacity of these individuals by facilitating ToTs that cover topics ranging from GAP to business management – and by creating market linkages amongst the service providers and between the service providers and customer farmers.

Village-Based Agricultural Advisors (VBAs)

NAFAKA continued to strengthen our network of 212 rural, village-based agricultural advisors (VBAs) that includes 52 in Mvomero, 22 in Mang'ula, 21 in Ifakara, 18 in Mlimba, 47 in Kiteto, and 52 in Kongwa. VBAs are farmers who are based in rural areas and are selected by their community to provide extension services and inputs to other farmers within their village. They are closely monitored by 5 NAFKA district coordinating officers (DCOs). While VBAs are not certified agro-dealers, many are registered under associations as dealers in fertilizer and seeds and serve as agents of agro-dealers, re-selling inputs to farmers in their village for a small commission and providing valuable access in the most remote areas.

Formation of Associations: NAFKA has continued to strengthen existing VBA associations, in addition to encouraging VBAs to form new associations in order to increase the number of sustainable economic agricultural enterprises that can provide inputs and services throughout the rice and maize value chains. As registered association members, a VBAs can access seed dealer and fertilizer stock list certificates for official distribution of seed and fertilizer inputs at the village level – rather than only act as agents of agro-dealers. Additionally, an association structure allows VBAs to purchase inputs in bulk at lower cost. NAFKA facilitated the formation and registration of four VBA Associations in Kiteto District (17 members), Kongwa District (33 members), Mvomero District (27 members), and Kilombero District (62 members). NAFKA also facilitated constitution and leadership training to the newly formed VBA Associations.

GAP Training: During the reporting year, NAFKA provided various trainings to VBAs on GAP modules: 212 on GAP I; 154 on GAP II; and 157 on business management skills, discussed above in Section 1.1.4.

VBA Small Grants Program: During the last quarter of the reporting period, NAFKA conducted a needs assessment to determine challenges and opportunities for VBAs within their communities. Based on the findings of the assessment, NAFKA seeks to develop agro-dealer networks through approximately 30 grants, half of which will be given to selected VBAs to strengthen their relationships with input suppliers and develop them as wholesalers or retailers of farm inputs. This grant program has been introduced under the umbrella of the NAFKA Enterprise Grant as both a strategy for incentivizing VBAs, as well as for improving input availability at the village level by training promising VBAs to more formally participate in the input supply chain.

Agrotech, a wholesale input supplier based in Dodoma, has increased sales in some villages by up to 3 tons this year compared to last year based on demand created and facilitated by NAFKA VBAs. Through this unique approach, the project is expanding demand-driven access to inputs through private sector vendors in new villages, with VBAs serving as brokers to aggregate village-level demand and facilitate the purchase of services and inputs.

Agro-Dealers

Agro-dealers are generally based in semi-urban areas and are certified and registered as private inputs dealers. Although demand for improved seed, fertilizer, and agrochemicals has increased at the field level due to NAFKA interventions, accessibility and affordability remain as constraints. Farmers in remote areas continue to lack access to affordable high-quality inputs and the necessary technical knowledge to use them properly. This hinders their ability to increase productivity and to diversify into higher-value agriculture production. To address this, NAFKA is supporting a network of 98 trained and certified agro-dealers by providing GAP training and encouraging the use of improved inputs to farmers throughout its zone of intervention.

Demonstration Plots: During the year, NAFKA worked with agro-dealers to establish 23 agro-dealer demonstration plots (7 in Kongwa and Kiteto, 2 in Mvomero, and 14 Kilombero). These demonstration plots were used to demonstrate a wide variety of agro-inputs and best practices in inputs and chemical usage. Of the 23 agro-dealers who established a demonstration plot, 14 needed further instruction and were trained on the effective use and application of fertilizer in their plots.

GAP Training: In promoting best practices in inputs and chemical usage, NAFKA trained 94 agro-dealers and VBAs on crop protection products. Additionally, 59 agro-dealers and VBAs were trained on the use of mobile money technology to improve their technical and business skills.

Agro-Dealer Workshops: NAFKA organized an Agro-Inputs Stakeholders Workshop to devise strategies to strengthen linkages and support the agro-inputs supply chain in the four districts of Mvomero, Kiteto, Kongwa, and Kilombero. Fifty-six (56) participants attended the workshop in Morogoro: 19 inputs companies, 26 agro-dealers, and 11 NAFKA staff. Some key strategies discussed include strengthening existing agro-dealer associations by promoting collective efforts, developing hub agro-dealers in semi-urban towns for closer proximity to rural agro-dealers and VBAs, and issuing grants to enable agro-dealer hubs to access credit for bulk purchases.

The challenges highlighted in the Agro-Inputs Stakeholders Workshop were discussed further in the Input Stakeholders Roundtable, a higher-level meeting that was organized by NAFKA during the fourth quarter in Dar es Salaam with 33 participants. These discussions sought private sector partnerships to strengthen the agro-dealer and input supply network in Tanzania. The attendance included senior executives of private fertilizer, seed, and agro-chemical companies, financial institutions, crop insurers, government agencies, NGOs, hub agro-dealers, and input distributors in the Morogoro region.

Agro-Dealer Assessments: NAFKA conducted an assessment of input market initiatives that support cereal value chains in Tanzania (Morogoro, Kilombero, Mvomero, Kiteto, and

NURU KANYEMKA, AGRODEALER



Nuru Kanyemka is an agro-dealer who runs an agro input shop called Gairo Agrovet in Mlimba village, Kilombero District. He became affiliated with NAFKA in 2012 as an agro-dealer grant recipient and has received support from the project through GAP training and crop protection products.

Nuru has had an opportunity to market his products to farmers and associations through the 4 demonstration plots he installed, resulting in an increase in sales and expansion of his business. He reached 201 farmers, training them on farm preparations, use of improved and high yielding seed varieties, pest control, fertilizer application, and pre- and post-harvest skills.

By the end of 2013, Nuru had increased his customer base by 80%. His best-selling agro input products are improved rice seed variety SARO 5 (TXD 306) and alternative crop sesame seed. His profits have increased by 38%, and his proceeds have enabled him to purchase a small business vehicle and open a new hardware shop.

Kongwa Districts). Sixteen agro-dealers, 2 government extension officers, 2 VBAA focus groups, 4 agro-dealer focus groups, and 3 farmer focus groups were interviewed to better understand existing constraints within the inputs supply chain. The assessment identified that transport cost and access affect input supply the most in rural areas, while the lack of access to capital and trust barriers prevent efficient bulking and distribution at every point throughout the chain.

NAFAKA conducted a separate assessment of 14 pre-identified “high potential” hub agro-dealers and collected the preliminary information needed to create a business plan for each one. The objective of these business plans is for agro-dealers to identify business opportunities that could potentially be supported by NAFKA grants and also act as an introductory document to solicit credit. The business plans have been completed and submitted to the grants department for further action.

Lead Farmers

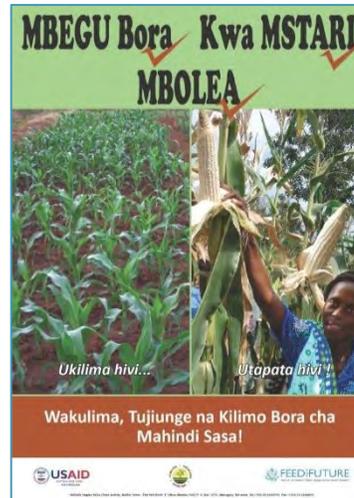
Of the farmer groups that have demonstration plots, one Lead Farmer is chosen by group participants to manage the plot and provide guidance to others. During the year, these Lead Farmers established 286 demonstration plots. NAFKA agronomists provided training to 349 Lead Farmers on GAP I and II modules and continued to provide general advice and support on improving agricultural practices.

1.1.3. GAP Behavioral Change Communication (BCC) and Material Development

NAFAKA uses BCC materials to support behavior change and adoption of selected practices or technologies that allow farmers to increase yields and incomes. During this reporting period, the NAFKA BCC team, coordinated by our subcontractor Danya International, developed a series of communications materials to promote GAP adoption, designed a Collective Storage and Marketing campaign, and conducted research for the design of the association promotion campaign to be rolled out next year.

Campaign Promoting the Use of Quality Seeds and Proper Use of Fertilizer: During the first quarter of the year, NAFKA’s BCC team launched the Phase II Inputs campaign. The campaign built on last year’s seasonal campaign that promoted the benefits of using improved seed and fertilizer and applying good farming practices, such as proper land preparation and spacing. The multi-channel campaign included print materials, radio spots, and radio talk shows.

Posters that promoted the use of improved seed and fertilizer and correct spacing for both paddy and maize were disseminated through VBAs and association leaders for placement in areas with maximum visibility within their respective communities. The posters were used during demonstrations, classroom trainings, Farmer Field Schools, and other field events.



Far left: A3 sized, landscape, rice farming poster promoting the use of improved seeds, correct spacing, and proper use of fertilizer.

Left: A3 sized, portrait, maize farming poster promoting the use of improved seeds, correct spacing, and proper use of fertilizer.

Radio Messaging: Radio is an important channel to reach large numbers of farmers in isolated areas to increase awareness of different NAFKA activities. The project used both short spots and longer-form radio talk shows to transfer information on improved agricultural practices. Four community radio stations were selected to air the NAFKA-produced rice and maize radio spots – Pambazuko Radio (Ifakara), Mwangaza Radio (Dodoma for Kiteto and Kongwa), Abood Radio (Morogoro), and Ulanga FM (Mahenge).

The short spots began heavy rotation in the first quarter of the year. Each station broadcasted a total of 720 spots throughout the year during primetime and regular hours, based on listening preferences identified in the informal survey of farmer listenership conducted during the Public Service Announcement (PSA) pre-test. The NAFKA training team also used electronic copies of the PSAs to supplement the teaching aids/tools during training sessions.

Each of the four radio stations featured one talk show that was live and interactive. The programs promoted dialogue on the major issues of rural development, as well as providing a platform for farmers (listeners) to call in questions that were answered by NAFKA technical staff and successful farmers. Topics covered included land preparation methodologies, use of certified seeds, fertilizer application, weeding, and topdressing.



Above: Neema Urassa (seated) Kiteto VBAA, sharing her farming success and the project interventions during a radio talk show at Mwangaza radio in Dodoma, March 2014.

Videography: The BCC team developed three video clips to diffuse innovations and share beneficiary successes. The team also initiated planning for a time-lapse video to demonstrate GAP application over the course of a year. Planning and consultative preparations began in the third quarter, and videography for the first three videos took place in the fourth quarter. The video clips have been shared with the Mission and have been uploaded on the USAID-Tanzania Facebook page for public viewership. Details of the videos are as follows:

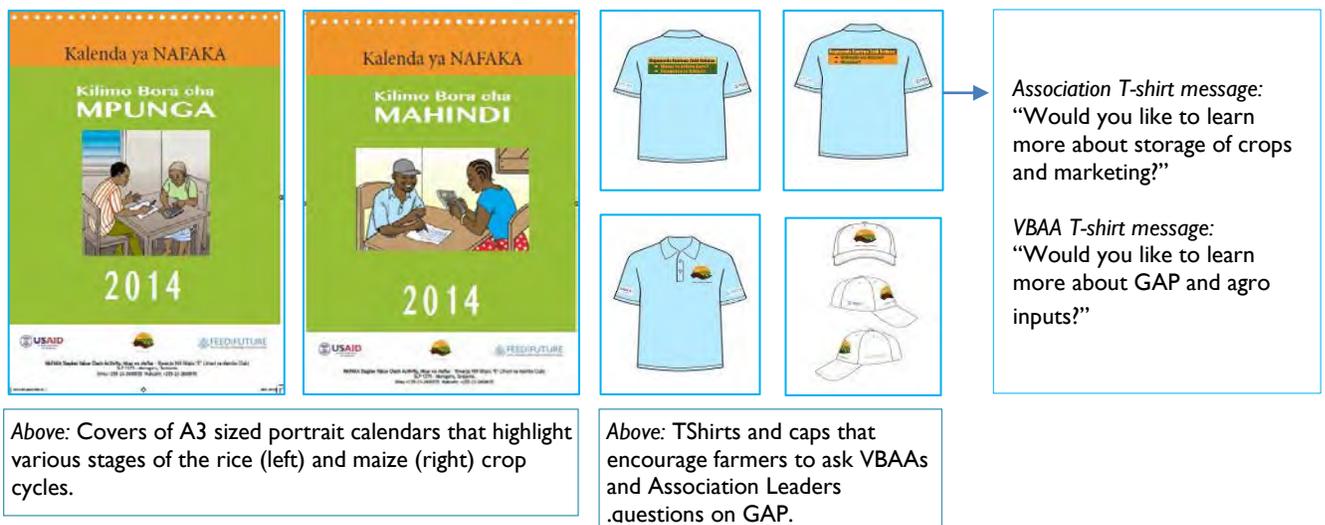
- **Wooden Rice-Weeder Fabricator:** This video focused on [REDACTED], a young entrepreneur in Dakawa, Mvomero, who replicated a wooden version of a hand weeder to simplify weeding activities in rice farming.
- **Bumper Rice Harvest:** This video featured a testimony from Ziada Ally, a rice farmer from Mbalaji,

- Kilombero, who had a bumper harvest after adopting GAP last season.
- Seed Producer: This video featured a testimony from ██████████, a rice farmer from Kisegese, Kilombero, who was one of the 54 rice seed growers recruited and contracted to produce certified rice seeds for purchase by the national seed company TANSEED.

The video consultants also undertook pre-production and planning for a time-lapse video to document the differences in GAP adoption versus traditional planting. With time-lapse videography, an entire crop cycle will be compressed into a short video clip. The video will be shot from March through June of 2015 and will cover all the maize crop stages from farm preparation, planting, top dressing, pest and weed management through the harvest stage. The developed products will be shared through a road-show, while parts of the video will be repurposed and included in GAP training as a visual supplement.

GAP Toolkit: Building on previous BCC campaigns, the BCC team launched materials with creative prompts designed to encourage farmers to ask VBAs and association leaders questions about best farming practices. The prompts were printed on t-shirts distributed to VBAs and association leaders, as well as on seasonal farming calendars. The calendars highlighted various stages of the maize and rice crop cycles that correspond to each month and are intended to reinforce farming best practices at each stage of the production cycle. One thousand calendars (600 rice and 400 maize) were distributed to VBAs, Lead Farmers, association leaders, agro-dealers, district offices, village offices, and individual farmers. One thousand t-shirts and caps were distributed to VBAs and association leaders during the year.

The final BCC material designs are shown below:



Above: Covers of A3 sized portrait calendars that highlight various stages of the rice (left) and maize (right) crop cycles.

Above: TShirts and caps that encourage farmers to ask VBAs and Association Leaders questions on GAP.

BCC Campaign Effectiveness Survey: This assessment assessed the effectiveness of the print materials (posters) and radio initiatives (spots and talk shows) that focused on GAP and the proper use of improved seeds and fertilizer. The purpose of the survey was to assess the impact, reach, and overall reception of the campaign. Evidence of behavior change among small-scale farmers around the increased use of certified seeds and appropriate use of fertilizers and herbicides was documented across the six project clusters. Findings estimate that BCC campaigns have reached 585,340 people. Of the farmers who were familiar with BCC materials in the target districts, 67% reported that they are applying various GAP technologies:

- Use of certified seeds by 53% farmers
- Appropriate use of fertilizers by 48% farmers
- Use of storage facilities by 38% farmers
- Joint selling of crop produce by 35% farmers

1.2. Enhanced Technology Development, Dissemination, Management and Innovation

NAFAKA promotes and demonstrates the application of improved technologies to our targeted beneficiaries. The key technologies targeted under the strategy include popularizing improved seeds and fertilizers, ripping technology, UDP application, quality declared seeds (QDS), and the use of a direct paddy seeder (DPS).

1.2.1 Demonstration Plots for Improved Technologies and Management Practices

NAFAKA uses demonstration plots as teaching and experimentation tools to allow farmers to visually observe the benefits of GAP application and to compare various combinations of GAP techniques. These demonstration plots promote up to seven technologies and practices that include land preparation, proper spacing, appropriate use of fertilizer and improved seeds, water management, pest and disease control, intercropping with food security crops (pigeon peas, cowpeas, green grams, and soybeans) and pre-harvest/harvest/post-harvest techniques.

Demonstration plots are managed by VBAs, Lead Farmers, and agro-dealers who use them to provide direct training to farmers with technical support from NAFKA agronomists and DCOs. A total of 648 demo plots (322 rice, 326 maize), were established throughout the year in Mlimba (42), Ifakara (64), Mang'ula (58), KVTC (19), KPL (87), Kongwa (135), Kiteto (120), Mvomero (83), Unguja (26) and Pemba (14). A total of 162 demonstration plots were destroyed due to floods, drought, or disease and pest outbreak. Through NAFKA GAP training, disseminating promotional seed packs, and maintaining demonstration sites, VBAs and Lead Farmers are raising awareness of the agronomic benefits of improved seed and fertilizer to community farmers.

1.2.1 Private Sector Input Supply Engagements

NAFAKA recognizes that private sector investment in agricultural supply chains contributes to sustainable development. Through demonstration plots and ToTs, NAFKA has created a platform for input companies to showcase and demonstrate their improved technologies (seeds, fertilizers, and agro-chemicals) with the objective of creating awareness. This year, \$38,778 USD was invested by private sector input companies in demonstration plots and distribution of small packs of seeds. The table below highlights the types and amount of inputs distributed during the reporting period in our areas of operation.

Table 2: Contributions of Inputs within NAFKA Intervention Areas Oct 2013 – Sep 2014

Input Type	Input Name	Quantity (Kg/Liter)	Value TSh	Value in USD (1,600:1 XR)	Company Name
Fertilizer	Minjingu Mazao	2850	1,994,880	1,247	Minjingu Mines and Fertilizer Ltd
Fertilizer	Yara Mila Cereal	3,550	4,260,000	2,663	YARA Tanzania Ltd
Fertilizer	Yara Bela Sulfan	1,700	2,210,000	1,381	YARA Tanzania Ltd
Fertilizer	Yara Vita Tracel BZ	31	465,000	291	YARA Tanzania Ltd
Fertilizer	Yara Nitrobar	1,250	1,625,000	1,016	YARA Tanzania Ltd
Herbicide	Stompo	10	18,000	11	BASF
Herbicide	Basagram	10	15,000	9	BASF
Maize Seed	TZH 538 (SUBA)	320	1,280,000	800	Subagro
Maize Seed	Pioneer 3253	625	2,812,400	1,758	Bytrade
Maize Seed	Pioneer 2859	1,730	7,785,000	4,866	Bytrade
Maize Seed	Pioneer 2859W	3,000	13,500,000	8,438	Bytrade
Maize Seed	Longe 6	100	400,000	250	FICA Seed
Maize Seed	Dekalb (DK)	1,950	8,774,880	5,484	Monsanto
Maize Seed	TAN H 600	300	1,350,000	844	TANSEED Intl Ltd
Maize Seed	TAN 254	300	750,000	469	TANSEED Intl Ltd
Maize Seed	TAN 250	300	750,000	469	TANSEED Intl Ltd
Rice Seed	SARO 5 (TXD 306)	5,000	10,000,000	6,250	TANSEED Intl Ltd

Input Type	Input Name	Quantity (Kg/Liter)	Value TSh	Value in USD (1,600:1 XR)	Company Name
Maize Seed	SC 627	250	1,125,000	703	Seed Co Ltd
Maize Seed	SC 403	250	1,125,000	703	Seed Co Ltd
Maize Seed	SC 513	250	1,125,000	703	Seed Co Ltd
Sorghum Seed	SILA	50	250,000	156	Seed Co Ltd
Maize Seed	TMV- I	50	100,000	63	Tropical Seed
Maize Seed	Staha	50	100,000	63	Tropical Seed
Sunflower Seed	Record	50	225,000	141	Tropical Seed
		23,956	63,407,160	38,778	

Farmer Field Days: Farmer Field Days have proven to be an effective training approach because farmers are given the opportunity to gather together, share what they have learned about innovative farming practices, and compare inefficient traditional farming practices to GAP techniques. During this reporting year, twenty-five (25) Farmer Field Days (FFDs) were organized and conducted in Kongwa, Kiteto, Kilombero, Mvomero, and Ulanga Districts. FFDs are conducted on actual demonstration plots where private sector companies are on-hand to answer questions and showcase the benefits of their products.



Above: Erkus Ngapulila explains how he adopted GAP techniques on his eight-acre plot during the Farmer Field Day conducted in Alabama village, Ulanga District.

This year, seventeen (17) agro-dealers and seventeen (17) input supply companies participated in Farmer Field Days. Those input supply companies included YARA Tanzania Limited, (Fertilizer), Mea Fertilizer (Fertilizer), Arysta Life Science (Agro-Chemicals), Tanseed (Rice and Maize Seeds), Seedco (Maize Seed), Minjingu (Fertilizer), Monsanto (Maize Seed and Agro-Chemicals), and Subagro (Maize Seed) – plus two new participants AgriScope (Agro-Chemicals), Mahoo Agravet (Agro-Chemicals), TATA Africa (Fertilizer and Agro-Chemicals), Money Maker (Agri-Implements), Export Trading Group (Fertilizer and Seed), Parner Seed Company (Seed), Syngenta (Agro-Chemicals), China Pesticides (Fertilizer) and Ultravet (Agro-Chemicals), all of whom provided information and technical assistance directly to farmers. The FFDs attracted a total of 3,369 farmers (57% M, 43% F), most of whom are participants in NAFKA farm trainings through demonstration plots.

Farmer Exchange Visits: NAFKA organized exchange visits during the reporting period to provide an opportunity for beneficiaries to learn and share experiences with their counterparts. Seventy-three association members from 17 associations (13 rice and 4 maize) located in Mvomero district visited Dihombo and Dihinda Crop Banks to learn about crop banking best practices. Also, 18 association leaders from 13 maize associations and 4 board members from Mvomero and Turi SACCOS visited Kondoa (Kwamtoro and Soko kuu SACCOS) and NFRA zonal offices in Dodoma to learn about the NFRA business model. Two VBAAAs, 2 agro-dealers, and 9 association leaders were sponsored by NAFKA to assist in the Feed the Future pavilion during the Nane Nane exhibition in Morogoro.

1.2.2 Quality Declared Seed (QDS) and Certified Seed Production

Quality Declared Seed (QDS): Local availability of high-quality seed is integral to increased yield potential of smallholder farmer crops. NAFKA supports the efforts of quality declared seed (QDS) producers by providing GAP training for QDS producers, as well as marketing strategies to distribute the seed they produce. During the year, NAFKA facilitated certification of 48 QDS producers (40% M / 60% F).

During the last quarter of the year, NAFKA's Seed Specialist and the Kilombero District Seed Inspector, working under the Ministry of Agriculture, Food Security and Cooperatives, collected samples of QDS rice from

twenty-two (22) fields. All samples were submitted to Tanzania Official Seed Certification Institute (TOSCI) for assessment of purity, viability, disease infection, and pest infestation. Approval from TOSCI will be announced in October 2014, enabling the QDS producers to sell seed to their neighbor farmers in the next cropping season.

Under implementation by ZARI, QDS production expanded to Zanzibar during the reporting year. Training on seed production was provided to 30 QDS seed producers for Supa BC rice seed, chosen because it is high-yielding, drought-resistant, semi-aromatic, has high-tillering ability, and is preferred by most consumers in Zanzibar. Additionally, KPL plans to introduce a QDS local seed production plot to evaluate the performance of SRI QDS, SARO 5 (TXD 306) QDS, and seven aromatic QDS rice varieties that include Supa India, Kisegese, Zambia, Kalimata, Lawama, Mbawa mbili, and Nahuruka. Although these varieties are known to produce lower yields than SARO 5 (TXD 306), the varieties have a high consumer demand due to their aromatic and palatability qualities. KPL management has planned to produce 20 MT of QDS during the 2014/2015 growing season for their farmers. Sources for these varieties have not been confirmed but ASA, KATRIN, and CHOLIMA research institutes are potential partners in the program.

Certified Seed: While QDS producers sell directly to local customers in their village area, certified seed producers sell to national seed companies that have contracted with them in advance. NAFKA currently works with 16 certified seed producers (50% M / 50% F) by offering training and technical assistance. NAFKA plans to eventually upgrade all QDS producers to certified seed producers.

Rice farmer Jeremia Magaja from Ifakara North in Kilombero used to sell rice from his two-acre plot for about \$970. After receiving training on good farming practices (GAP) from USAID's Feed the Future NAFKA Staples Value Chain Activity and qualifying as a certified seed producer, Jeremia began producing improved rice seed and was given a contract by a national seed production company to produce for them. In his first season as a seed producer, he earned \$3,630. With his profits, Jeremia was able to farm four more acres of his land. He now expects to earn over \$9,000 per year from the sale of certified seed.

Right: Jeremia Magaja with his wife on their 6 acres of harvest-ready, quality paddy seed to be purchased by a national seed company.



The TANSEED outgrower program was supported by a grant to increase availability and adoption of conventionally bred, certified rice seed. Thirty-nine (39) of the original 51 participating producers were approved by Tanzania Official Seed Certification Institute (TOSCI) to continue producing seed for local distribution. Of these 39, TANSEED continued working with 14 of the producers, those that had larger farm plots and whose farms have met other agronomic requirements for seed production, such as barrier creation and location relative to other producers. An assessment tool is being designed to evaluate the effectiveness of the program in order to inform future collaboration with inputs supply companies.

1.2.3 Scalable Technology – Urea Deep Placement (UDP)

Consistent with our strategy to increase the availability of inputs to local producers, NAFKA continues its work with Cholima (Mvomero District) and KATRIN Research Institutes (Kilombero District) to promote the use of Urea Deep Placement (UDP) fertilizer. During the year, NAFKA continued to monitor the implemented UDP protocols in close collaboration with the two research institutes. Ten (10) on-farm sites were set as trials on the use and benefits of UDP under close supervision by NAFKA and local district seed inspectors and researchers. Mvomero District has one site in Cholima Research Institute and one on-farm site. Kilombero District has four sites in KATRIN and nine on-farm sites. The trials compare UDP to conventional Urea with one variety of rice seed, SARO 5 (TXD 306).

Results from the trials – which are required to take place for three years by the Government of Tanzania – will influence the decision by the Ministry of Agriculture (in the mainland) to officially allow the technology to be registered and used. Trials on UDP also continued in Zanzibar under implementation by ZARI. Although the mainland will introduce UDP based on the results from the trials, the Revolutionary Government of Zanzibar (RGoZ) has already allowed UDP to be used in Zanzibar.

1.2.4 Ripping Technology

Ripping technology was widely promoted by NAFKA in Kongwa and Kiteto Districts during the first quarter of the year, through facilitating sensitization and training to 1,872 farmers in ripping and conservation agriculture. This farming technology is a conservation agriculture technique that is beneficial to farmers facing low rainfall because it improves soil fertility by significantly reducing soil erosion and water retention within the soil, allowing the deep penetration of crop roots to access water reserves. The technology is being applied by 3,514 (59% M / 41% F) maize farmers in Kongwa and Kiteto. However, rains started in Kiteto during the first quarter, which interrupted ripping exercises since it must be done on dry soil.

Maize Fliers on Ripping: During the reporting period, NAFKA's BCC team worked on developing a flier that demonstrated the steps for ripping and highlighted its benefits compared to traditional tilling methods. The fliers were pre-tested on focus groups consisting of farmers who would be the eventual audience of the information. The intention was to assess effectiveness and appropriateness of the messages, as well as gauge how they resonated with the farmers. The fliers will be distributed in Kongwa, Kiteto, and Mvomero just before the next cropping season begins. A sample of the maize flier is shown on the right.



Above: Sample of maize flier demonstrating the steps for ripping and its benefits compared to traditional tilling method. This is still in draft form; the final version will prominently display the USAID and Feed the Future logos.

IR.2. Expanding Markets and Trade

To be competitive in today's agricultural marketplace, farmers – especially smallholder farmers – need to be integrated fully into the value chain. NAFKA market and trade activities are focused on fostering financial and relationship transactions all along the value chain that benefit from market information systems, collective marketing strategies, buyer linkages, stakeholder networking events, and information sharing platforms.

2.1. Increased Market Efficiency

NAFKA is facilitating investments along the rice and maize value chains by addressing critical constraints in the form of improved and/or less costly access to markets, market information, storage, finance, and transport.

2.1.1. Strengthening Farmer Marketing Associations

Formation and Registration: NAFKA's association development component improves competitiveness and trade. During the year, NAFKA facilitated the formation of 56 new associations in Ulanga, Kongwa, Kilombero, Mvomero, and Kiteto Districts. This brings the total number of associations under NAFKA to 112, comprising 19,277 members (55% M / 45% F).

Forty-five associations are in the process of registration with the Ministry of Home Affairs. The Association registration process requires three major steps: 1) Outreach: Identification of villages, sensitization, and

obtaining expression of interest; 2) Constitution development and election; and 3) Collection of dues, getting local government support, and registration. Additionally, NAFKA worked on building the capacity of apex organizations, which are comprised of several member associations and benefit from a unified voice and economies of scale. NAFKA facilitated the formation of 6 apex associations during the year – three in Kilombero District for rice associations, one in Ulanga District for rice associations, and one in Mvomero District for rice associations, and one in Mvomero District for maize associations. Currently, three (3) apexes are fully registered, and three (3) are in the process of registration with Business Regulatory and Licensing Authority (BRELA).

NAFKA's work with apex associations includes technical assistance at every stage: formation meetings, constitution drafting, leadership and management training, grades and standards training, access to finance through SACCOs, and developing market linkages. These apex associations will enable participant farmer associations to collectively advocate and to aggregate rice and maize in order to supply large commercial buyers, such as National Food Reserve Agency – NFRA (maize), TAMAGRASAI – Tandale Market Grain Sellers Association Investment (milled rice), TANRICE (paddy or milled rice), or KPL (paddy).

Sell More for More (SMFM) Training Program: NAFKA continued to facilitate training and capacity building support to 111 of the existing associations on gender-integrated leadership, managing the marketing process, association record-keeping, and managing association operations through the Sell More for More (SMFM) program. SMFM includes four modules: Leadership, Marketing, Record-keeping, and Operations. This year, 346 (56% M / 44% F) association leaders participated. Kilombero District associations have completed the SMFM training program. Associations that complete the SMFM curriculum will be trained to prepare two-year strategic plans which will guide the further development of associations. These plans will be important guides for association sustainability.



Above: Trust Building exercise conducted with associations in Mang'ula.

Other Training Programs: NAFKA introduced advocacy training to associations in order to equip farmers with knowledge, information, and skills to voice their concerns and communicate their needs to various stakeholders. One hundred and twenty three association members in Kilombero District received advocacy training. NAFKA is promoting District Business Council Meetings as a venue for farmers to voice their concerns and engage government officials and private sector stakeholders in dialogue aimed at improving business and investment environment at the district level.

A total of 373 association members in Kilombero District received GAP Module III training in post-harvest handling practices. Post-harvest losses in rice are as high as 30% and, in maize, as high as 40%, leading to substantial loss of potential income. NAFKA is promoting improved post-harvest handling via proper harvesting and drying techniques, waste management, quality testing, cleaning methods, and sorting and grading. Good post-harvest handling prevents decomposition and the effects of mycotoxins, improving both the quality and quantity of produce available to the market. NAFKA also facilitated warehouse management training to two hundred and sixty (260) association members in Kilombero District.



Above: A Lead farmer from Kongwa District sorts out maize in Kibaigwa market (Dodoma) as a quality control measure demanded by the National Food Reserve Agency (NFRA) before packing in bags for shipment.

Additionally, 724 association members in Mvomero District and 476 in Kilombero District received pre-constitution training. Twenty-nine (29) association leaders participated in a ToT on credit management, the objective of which was to equip association leaders with sufficient skills and techniques of accessing, managing, and repaying loans.

2.1.2. Developing Marketing/Buyer and Input Supplier Relationships

Buyer Agreement with WFP: NAFKA provided advisory services on post-harvest handling, quality control, and warehouse management to the apex Kongwa Cereal Growers Association (KCGA) to facilitate successful completion of a forward contract with World Food Program (WFP). This year, KCGA delivered 220 MT of white maize to the WFP (P4P) Dodoma warehouses. A total of 66 farmers participated. The contract price was TSh 602,000/MT, with farmers directly receiving TSh 590,000/MT (590 TSh/kg).

Buyer Agreements with NFRA: At the beginning of the reporting year, NAFKA facilitated the purchase of 400 MT of maize by NFRA for TSh 550,000/MT, with farmers directly receiving TSh 540,000/MT (540 TSh/kg). During the fourth quarter, three contracts for the purchase of 7,500 MT total from Mvomero, Kiteto, and Kongwa were signed at a price of TSh 530,000/MT.

Participatory Market Survey in Mvomero: NAFKA sponsored marketing agents from eight associations in Mvomero to participate in a training on market commodity price-setting and to meet potential buyers in Dar es Salaam and Arusha. Mkindo Association especially benefited from the training by connecting to a trader at the event, resulting in the sale of 9 MT of rice.

Processing: NAFKA is working with associations to create investment opportunities by encouraging value addition to paddy through milling. During the year, NAFKA identified warehouses with milling facilities in Mang'ula, Ifakara, and Mlimba clusters and surveyed their processing capacity. Although mills established by USAID COMPETE project were identified in Mang'ula and Ifakara Clusters (Kilombero), they are unfortunately not located in villages in which NAFKA is currently implementing activities. In Mlimba, the facility identified was not frequently used due to lack of reliable electricity and no access to generators. Tuboreshe Chakula has supplied 3 milling machines at Madizini, Mvomero, and Magugu villages. NAFKA plans to do sensitization activities in Mvomero to encourage farmers to use the facilities supplied by Tuboreshe Chakula. NAFKA will collaborate with Tuboreshe Chakula and link farmers to facilities that will improve food processing for nutrition and value addition.

Market Information System (MIS): NAFKA is strengthening collaboration and dialogue between stakeholders across rice and maize value chains through an Agriculture Market Information System managed by subcontractor MVIWATA. Seven hundred posters were designed and distributed to five villages in Mvomero to sensitize farmers on the MIS system. Fifty farmers were trained on how to use the system by accessing commodity prices and seller information through their mobile phones.

Additionally, NAFKA supported MVIWATA to commercialize the MIS by linking it to the Airtel telecommunication company so that it can serve a larger audience and also support itself financially by charging users an information acquisition cost. MVIWATA has signed a contract with Airtel and assigned a consultant to work on improving the existing MAMIS database. Once this process is complete, it is estimated that MAMIS will receive at least 5,000 hits per day compared to its current 2,500 hits per day and will expand to include information regarding transportation dealers, pest outbreaks, seed varieties and agro-dealer contact information. The MIS system represents 26 urban markets, 72 traders, 25 associations, and 3,728 farmers from Mvomero District – and includes information on volumes requested by traders, place of delivery including dates, contact information of traders, and crop prices.

Nane Nane: The Nane Nane Agricultural Fair is an annual national event that honors the nation's farmers and celebrates their accomplishments and contributions to the Tanzanian economy. The fair provides an opportunity for farmers and other stakeholders to exchange knowledge and best practices and to network for business purposes. USAID's Feed the Future implementing partners NAFKA, Mwanzo Bora, iAGRI, TAPP, and Tuboresha Chakula joined forces and shared a pavilion at the Nane Nane grounds in Morogoro. Demonstration plots were also developed to showcase maize and rice (NAFAKA), fruits and vegetables (TAPP), and student agriculture research projects (iAGRI) – all promoting project-recommended technologies and good agricultural practices. Additionally, subcontractor MVIWATA hosted Nane Nane activities for 428 farmers from 26 farmers' associations in Turiani village (Mvomero District).

2.1.3. Storage and Warehouse Management

Collective Storage: A total of 1,273 MT of paddy were aggregated, 1,205 MT of which were sold collectively between January and March from last year's production at a total value of \$372,722. For maize, 620 MT were aggregated, all of which was sold collectively for \$220,010. Although paddy prices were low due to the importation of large volumes of low cost, duty-free rice combined with the unlawful levying of tariffs on Tanzanian rice within the region, farmers have limited options in terms of whether to sell because of cash demands for field activities and household needs. Paddy was sold on average at \$31 per 100 kg, depending on the quality and region. These prices were significantly lower compared to the previous two years, when prices ranged from \$31 to \$56 per 100 kg.

During the last quarter of this year, farmer associations aggregated paddy and maize by entering into contracts with private warehouses for storage. Generally, farmers pay a per-bag storage fee for a six-month period. Access to storage allows farmers to both aggregate their produce to sell in bulk to larger buyers who often pay better prices – and to have more freedom to sell at a time when prices might be higher than they are directly after harvest. A total of 1,273 MT of paddy was aggregated from 30 associations in Kilombero District (873 MT) and one association in Mvomero (400 MT), while one association in Kongwa District consolidated 620 MT of maize. The paddy and maize were aggregated into warehouses, with associations trained on warehouse management.

BCC Campaign to Promoting Collective Storage and Marketing: In the second half of the year, NAFKA developed a Phase II campaign designed to raise awareness on the benefits of selling collectively and using storage facilities as a best practice. The campaign builds on the lessons learned from the BCC Effectiveness Survey conducted last year on Phase I Collective Storage and Marketing.

Prior to launching the campaign, NAFKA's marketing component reassessed the appropriateness of the campaign, given how few associations own storage facilities due to their nascence. Many producer organizations lack efficient management and organizational capacity, good governance systems, and sufficient capital and technology to meet market quality standards. NAFKA is mobilizing smallholder farmer groups into associations to increase their bargaining power, collective strength to mobilize construction of warehouse storage facilities, and their capacity to own and manage their own organization.

Therefore, the Phase II Collective Storage and Marketing campaign, originally scheduled to launch during harvest in the fourth quarter, was put on hold to allow for inclusive discussions among project staff on more appropriate messaging that addresses collective activities at the association level. The revised campaign has been rescheduled to launch in May 2015.

Association Promotion Campaign: In lieu of messaging adjustments to the Phase II Collective Storage and Marketing campaign, NAFKA decided to implement two related campaigns on association membership promotion and market awareness: How to Find Your Market. These two campaigns will increase the sustainability of existing associations by recruitment of new members and build the capacity of associations to link to new markets for their produce. Campaign implementation is scheduled from November 2014 - February 2015.

Warehouse Upgrading Grants: NAFKA launched the warehouse upgrading in-kind grants and issued 15 to farmer associations to facilitate collective marketing in warehouses. These grants included procurement of weighing scales, image equipment (computers and photocopier machines), office furniture, warehouse fittings, fire extinguishers, and moisture meters.

2.1.4. The Rice Council of Tanzania

In March 2014, key stakeholders within the Tanzanian rice industry agreed to form the Rice Council of Tanzania. Building on the achievements of TARIPA, RCT was designed to place strong emphasis on private sector involvement to ensure ownership and sustainability.

The Rice Council of Tanzania will consist of up to 30 members, proportionately representing various stakeholder groups within the Tanzanian rice value chain. The founding members elected a board of 9 directors who govern daily RCT business. The Rice Council of Tanzania is owned, driven, and financed by the private sector, critical to assuring future sustainability. RCT has the following objectives:

- Be the service and information provider to Tanzanian rice industry participants.
- Develop greater trust among value chain actors with 100% private sector ownership and support.
- Be the trusted private sector partner representation to the Government of Tanzania.
- Incorporate the current roles and functions of TARIPA within the Rice Council of Tanzania.
- Take a lead role in formulating communication strategies for rice sector development.
- Cooperate with the Government of Tanzania in rice sector policy development.

NAFAKA's supports salaries of the RCT Executive Director and Rice Partnership Coordinator, the latter whom mentors the Executive Director. We also make available our conference room and other facilities for RCT meetings and other support. Otherwise, RCT is entirely administered by the board of directors. It is important that RCT be seen as managed, driven and overseen by Tanzanian leaders in the rice industry if it is to have any real credibility and legitimacy. NAFKA plays a behind-the-scenes support role to avoid the perception that the Council is a donor-driven initiative.

Since April 2014, the RCT has focused on defining its mission and vision statements, formulating a strategic development plan with input from stakeholders, and creating recognition within the industry. In addition to serving as a platform for facilitating dialogue among key private sector stakeholders, RCT has been supporting the GoT in preparing for negotiations within the East Africa Community (EAC) – particularly with Burundi, Rwanda, and Uganda – to waive the tariffs being imposed on Tanzanian rice in retaliation for duty-free imports allowed to enter Tanzania without the Common External Tariff (CET) being levied.

In the upcoming year, the RCT will focus support and coordination in addressing the issue of data harmonization for the rice industry. The most detrimental issue affecting the Tanzanian rice industry is the inaccessibility and reliability of relevant data on which to base sound policy decisions, continue policy development, and ensure policy implementation.

2.2. Improved Access to Business Development and Affordable Financial and Risk Management Services

2.2.1. Increased Access to Agricultural and Rural Loans

Smallholder farmers are challenged by the lack of access to finance. To improve efficiency in production and to expand adoption of improved technologies, timely access to short-term finance for input purchase is fundamental. Because maize and rice are seasonal crops, costs for inputs are incurred before harvest.

Access to Agricultural and Rural Loans

NAFAKA facilitated access to new formal loans and monitored previously accessed formal loans for 320 smallholder farmers at a total value of ██████████, details of which are shown below:

Table 3: Loans Facilitated by NAFKA during the Year

Name of Financial Institution	Gender		Male Value (USD)	Female Value (USD)	Total Value (USD)
	Male	Female			
YOSEFO	43	7	503	1,033	1,536
CRDB	9	18	94,344	37,000	131,344
Opportunity International Ltd	153	90	73,994	42,919	116,914
Total	205	115	168,841	80,952	249,793

- National Microfinance Bank and YOSEFO: NAFKA continued to monitor last season's 615 loans disbursed in year 2013 by NMB and YOSEFO at around \$250 per loan, with payment in the form of paddy to KPL. For the 2014 season, 150 farmers have completed procedures for loan applications to YOSEFO. NMB has declined to provide smallholder loans in the KPL region this season, citing high transaction costs and difficulties in adequately monitoring loan activity. However, there are efforts for NMB to re-commence in 2015.
- YOSEFO: Fifty (84% M / 16% F) farmers who completed procedures for loan applications to YOSEFO during the year's first quarter were issued loans for purchasing inputs, such as seed and fertilizer, or for farm operations – hiring labor or equipment.
- CRDB and PASS: In UWAWAKUDA, 15 farmers received loans averaging \$2,600-\$3,200 that were approved and guaranteed by PASS. NAFKA continued to train these members on financial management and the importance of loan repayment. NAFKA also assisted 27 farmers from UWAWAKUDA in receiving loans from CRDB Bank, which have been approved and guaranteed by PASS for agricultural activities, primarily the purchase of inputs or for farm operations. This is a result of ongoing financial linkage efforts that have taken place since 2012. The maximum loan amount issued to individuals is \$5,188, representing 12 acres. The minimum loan amount is about \$1,250 for 3 acres. The total loans issued this year amount to \$131,344.
- Opportunity International: In Mvomero, NAFKA assisted 239 farmers to receive a total of \$116,904 in loans from Opportunity International. The loans were used primarily for input supply.
- Savings and Internal Lending Community (SILC) Groups: SILC groups issued loans totaling \$637,079 to 7,112 members. More information on SILC groups can be found under Component 4.

Crop Banking: Crop prices vary during the year depending on market volumes – usually from the lowest price just after harvest to a potential doubling or tripling in times of crop scarcity. A crop bank purchases grain in bulk at its lowest price after harvest, then provides the supply at a constant price throughout the year with a small profit margin incorporated. NAFKA has helped establish a total of 15 crop banks in Mvomero District. Discussions between Mvomero SACCOS and Hembeti Community Cereal Bank are underway in an attempt to facilitate finance to crop bank members by offering credit for inventory or stored commodities that can serve as collateral for financial institutions.

2.2.2. Increased Access to Business Development Services (BDS) for MSMEs

During the year, NAFKA has facilitated access to business development services (BDS) for 12,929 (45% M / 55% F) MSMEs, including farmers.⁶ NAFKA supports the delivery of BDS such as training, access to formal or informal finance, and agricultural services like tilling and agro-input supply.

⁵ Four (4) farmers took loans twice. The total number of farmers who received loans is 316 (65% M / 35% F).

⁶ Note that some beneficiary groups can be considered under multiple BDS disaggregates. To avoid double-counting, NAFKA has placed each beneficiary group in only one BDS area.

- *Training*⁷
 - 346 association leaders received Sell More For More training in business management.
 - 57 SILC Field Agents (FAs) received follow-up trainings to improve their service delivery.
 - 22 agro-dealers and 9 VBAs received training in mobile money applications.
- *Access to Formal or Informal Finance*
 - 316 beneficiaries received input loans from formal institutions – 239 from Opportunity International, 50 from YOSEFO, and 27 from CRDB.
 - 8,166 SILC group members have access to informal finance through their savings and lending groups.
- *Agricultural Services*
 - 3,501 farmers in Kongwa and 13 farmers in Kiteto received ripping services.
 - 499 farmers purchased seeds and other inputs from VBAs.

IR.3. Increase Private Sector Investment in Agriculture

3.1. Develop Strategic Partnerships with Lead Private Sector Firms

NAFAKA continues to work with Kilombero Plantations Limited (KPL) and KVTC (Kilombero Valley Teak Company) to jointly develop outgrower programs that promote private sector involvement in the provision of agricultural inputs and crop marketing within the rice value chain. During the year, NAFKA facilitated GAP and leadership association training to outgrowers and also launched a fixed obligation grant with KPL. The grant will provide partial funding to the outgrower program, while facilitating KPL to take on direct management. With KVTC, NAFKA launched the SMFM association development module within the region.

3.2. NAFKA Innovation and Capacity-Building Grants

The Innovation and Capacity-Building Grant serves to unleash innovation and private sector investment. NAFKA currently administers nine grants as follows and monitors progress each quarter:

Kilombero Plantations Limited (KPL) Grant – This is a two-year grant agreement launched in January 2014. The overall objective of the KPL outgrower program is to increase rice productivity and profitability among smallholder farmers surrounding KPL through improved farming practices, adoption of suitable inputs, and expansion of these improved practices. The total amount of the grant is \$352,890, and KPL has committed to leverage additional funds of \$325,961 in order to complete the grant activities. Activities through the life of the grant include provision of extension activities to 10 villages with an agronomist assigned to each village; access to finance to smallholder farmers; increased availability of agricultural inputs for local purchase; and building capacity of newly formed associations comprised of members who have received SRI training.

Warehouse Upgrading Grant – During this reporting period, NAFKA signed in-kind grants worth ██████████ with 15 farmer associations to facilitate collective marketing in warehouses. NAFKA procured weighing scales, image equipment (computers and photocopier machines), office furniture, warehouse fittings, fire extinguishers, and moisture meters. These grants are designed to contribute to building the institutional capacity of associations and promoting collective marketing using warehouse receipt systems principles.

Zanzibar Agricultural Research Institute (ZARI) Grant – This grant is increasing rice productivity and profitability among smallholder farmers in Zanzibar through the provision of training to smallholder and extension staff, conducting scientific trials, and the production and distribution of improved seeds. The program completed all five milestones during this reporting year, and a total of 2,000 farmers were reached through GAP trainings on

⁷ For the purposes of the BDS indicator, NAFKA includes only numbers for trainings that directly correlate to business development activities.

rain-fed and non-irrigated demonstration plots. The total value of the grant is ██████████, with a counterpart contribution of ██████████. ZARI has submitted a request for its last milestone and a final project report.

Kizimbani Agricultural Training Institute (KATI) Grant – This grant supported the capacity building of KATI to provide quality training services in support of developing an extension and agriculture advisor network in Zanzibar. This grant will increase the productivity and profitability among smallholder farmers in Zanzibar by supporting capacity building of KATI to provide quality training services in support of developing an extension service and lead farmers network. A training needs assessment was conducted during the first quarter of the year, and KATI's standard training syllabus was adapted to meet the needs of farmers based on the information collected in the assessment. The program completed 7 of its 8 milestones this year, and a total of 2,127 farmers and 80 Lead Farmers were reached through GAP trainings facilitated by 40 extension workers under KATI. The total value of the grant is ██████████, with a counterpart contribution of ██████████.

KINNAPA Development Program Grant: NAFKA launched the KINNAPA Development Program Grant this year to increase maize productivity and profitability among smallholder farmers in Kiteto. By organizing smallholder farmers into groups or associations, KINNAPA will focus on aggregation and service provision, developing linkages with market actors (processors, buyers) and financial institutions, promoting the use of improved practices and technologies at all harvest stages, quality processing, and marketing. The program will also work with farmers and agro-pastoralists in Kiteto to strengthen livelihoods and community development. This is a one-year grant amounting to ██████████ with a leverage of ██████████5.

Enterprise Development Co-Investment Grant: During the year, NAFKA launched the Enterprise Development Co-Investment Grant. This grant aims to catalyze private sector investment into agricultural value chains, with a particular focus on integrating smallholder producers into staples value chains. The Enterprise Development Co-Investment Grant will facilitate qualifying businesses (MSMEs primarily, with options for select large firms) engaged in the maize or rice value chains to upgrade their services to benefit smallholder farmers. A total of six grants have been processed and sent to HQ for review and approval process.

TANSEED Grant: The TANSEED Grant completed implementation during the year. This ██████████ grant was developed to increase availability and adoption of certified rice seed, creating a more enabling environment for trade in seeds. Fifty-one (51) rice seed growers were recruited and contracted to produce 250 tons of certified TXD 306 (SARO 5) rice seed, which they successfully delivery to TANSEED. TANSEED purchased the seeds from the farmers at a premium price of \$0.56/kg. A close-out assessment of the grant was also done during this year.

Agro-Dealer Grants: The NAFKA Agro-Dealer Grant was introduced in FY2013 to stimulate demand for improved inputs by involving agro-dealers in demonstrating proper use of various inputs. The program completed its implementation during the first quarter of this year. The value of each of the 5 grants was ██████████, with a counterpart contribution of ██████████. An impact and close-out assessment of the grant will be completed during the first quarter of the coming year.

UWAWAKUDA Grant: The purpose of this grant was to revitalize and build the institutional capacity of UWAWAKUDA Ltd. by strengthening its financial management. The grant allowed UWAWAKUDA to procure office equipment and computerized accounting software and to be trained in the proper maintenance of a financial system. The original grant value of ██████████ was modified upwards to ██████████ at the same time the grant was extended through the end of August. Implementation was completed during the reporting period, and an impact and close-out assessment of will be conducted during the first quarter of the coming year.

Progressive Farmers Grants: In FY2013, NAFKA identified farmers who had the potential to develop into medium-scale, more commercial farmers. These Progressive Farmers agreed to act as model farmers by

implementing and demonstrating GAPs that can be emulated by neighboring smallholder farmers. This year, a total of 48 grantees completed the final milestones of the program, which required them to deposit earnings of not less than 60% of sales proceeds from their plots to be used for next season's production cycle. The value of the grants for all progressive farmers was ██████████, with a counterpart contribution of ██████████ in total. An impact and close-out assessment of the grant will be completed during the first quarter of the coming year.

3.3. Input Supplier Engagements

This year, input suppliers invested ██████████ in demonstration plots and farm inputs such as small packs of seeds and fertilizer. NAFKA created a platform, through demonstration plots and TOTs, for input companies to demonstrate their products with the objective of stimulating demand for these products. During the year ten companies worked with NAFKA, notably YARA Tanzania Limited (fertilizer), TANSEED International Limited (seeds), Bytrade (seeds), Minjingu Mines and Fertilizer Ltd (fertilizer), Seed Co Limited (seeds), Monsanto (seeds), BASF (agro-chemicals), Tropical Seed (seeds), Fica Seed (seeds) and Subagro.

3.4. Association Investment

NAFKA associations invested almost ██████████ in upgrading through purchase of bulk inputs, additional land for production, milling equipment and tractors. NAFKA will continue to work with associations to develop business plans and facilitate access to finance in order for associations to continue to invest in the agricultural value chains in which they work.

IR.4. Increased Resilience for Vulnerable Smallholders

NAFKA is increasing incomes for vulnerable smallholders and enhancing rural household nutrition by promoting activities specifically tailored for more vulnerable members of communities in the NAFKA target districts.

New Farmer Mobilization: During this reporting year, a total of 277 new SILC groups with 5,448 members (35% M / 65% F) were formed and trained in SILC methodology. This brings the total number of SILC groups supported by the program to 423. A total of 8,166 members have been reached by SILC Field Agents, who have been identified and trained on SILC methodology, which includes aspects such as group fund collection and distribution policies, record-keeping, responsibilities of members, member self-selection criteria, and leadership selection.

SILC activities were expanded into 40 new additional villages (10 in Kiteto, 17 in Kongwa, and 13 in Kilombero District) out of a total of 84 villages. Village mapping conducted within the three districts identified potential areas of need based on economic status, level of vulnerability, and existence of other microfinance institutions. Group formation within Kiteto District was low due to existing conflict between pastoralists and farmers. The conflicts cause unrest and limit community meetings, which are necessary for a group's mobilization and training.

Development of SILC Field Agents and Private Service Providers: During this reporting period, NAFKA recruited and trained new community-based Field Agents (FAs) to serve the 40 additional villages it added to the SILC program. There are currently 52 total FAs, whose primary activity is to mobilize and train SILC groups. Refresher trainings were conducted for 57 SILC FAs in Kilombero and Kiteto (some of whom graduated to PSPs during the year) to reinforce the SILC methodology and get feedback on challenges FAs are experiencing in SILC delivery to community members.

Additionally during the year, 17 total FAs graduated to become Private Service Providers (PSPs), who offer SILC training and support services to communities for a fee. This brings the total number of PSPs supported by the program to 32 (88% M / 12% F).

NAFKA introduced a Fundamentals of Agricultural Marketing training program. A ToT was given to Component 4 and partner staff who then trained 23 PSPs, all expected to deliver the training program directly to mature SILC groups. The training will be sold to SILC members and farmer's association members for TSh 500 per session.

Savings and Lending: Collectively, SILC members accumulated a total of ██████████⁸ (30% M / 70% F) in savings for the reporting year, an increase of ██████████ compared to last year's savings of ██████████. The value of issued loans was ██████████ (33% M / 67% F) compared to ██████████ from last year, an increase of ██████████. These increases indicate that community members are adopting the SILC methodology and using it as a source of reliable loans at affordable interest rates.

During this reporting period, 7,112 members total were able to access a loan. Of these new loans, 67% were issued to women. Average loan values for women were \$75, and average loan values for men were \$74. This increase in average loan value for women (from as low as \$46 in past reporting periods) is a good indication that the financial empowerment of females is being developed and sustained. Access to these short-term loans has allowed women to become more self-reliant in their households, improving the overall livelihood of their families.

Local Partner Involvement: CRS has engaged the Caritas Diocese of Ifakara for activities in Kilombero, the Archdiocese of Arusha for activities in Kiteto and the Diocese of Dodoma for activities in Kongwa. Activities include promotion and formation of savings and internal lending communities (SILC), training on organic vegetable production both for home use and sale, and introduction of basic marketing skills.

FtF Partner Involvement: During the year, NAFKA collaborated with Tuboreshe Chakula in facilitating training on flour blending using soya as a source of protein and fat. Ten SILC group members from Kilombero District participated in the training, which covered basic nutrition messages and the opportunity for improving nutrition

FRANK LIBATA, PRIVATE SERVICE PROVIDER



The Private Service Provider (PSP) model prepares existing Field Agents to become independent service providers of SILC services, offering SILC training and support to SILC group members for an agreed fee.

In February 2013, Frank became a certified PSP. As a PSP, Frank has formed and supported 14 SILC groups comprised of 150 members (65% women). The cumulative value of the SILC savings for the groups he supports is TSh 10,941,000, from which TSh 10,304,750 is being issued in loans to members. He receives TSh 1,000 for every meeting he attends with newly formed SILC groups and TSh 5,000 per month for support services offered to SILC groups that have existed for more than a year. Each group also gives him a share of their group social fund when they disburse dividends every year. Frank currently receives an average of TSh 60,000 per month and has recently received a total of TSh 62,000 from share-outs. Frank plans to continue forming new SILC groups in surrounding villages to increase his income further. "I am very happy with my source of income now. The more groups I support, the larger my income portfolio."

With his new income, he has managed to renovate his home with a strong door, brick walls, and corrugated iron sheets for roofing. He has also rented four hectares of land, on which he plans to grow paddy and maize under GAP. The combination of financial and personal incentives of the PSP program will ensure post-project sustainability of SILC services, continuing to help increase income levels to vulnerable individuals.

⁸ SILC savings and lending transactions are conducted in Tanzanian Shillings, but the figures here are converted to U.S. Dollars using a currency exchange rate of 1,600 TSh to 1 USD.

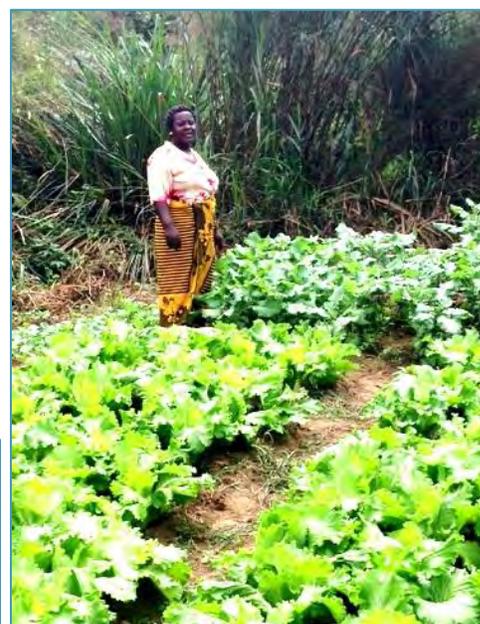
through the use of blended flours. NAFKA will continue to collaborate with Tuboreshe Chakula and link farmers to facilities that will improve food processing for nutrition and value addition.

Vegetable Gardening for Food Security

To help improve nutritional intake and increase incomes for vulnerable households, NAFKA promotes vegetable gardening activities. Currently, there are 400 (34% M / 66% F) beneficiaries engaged in home vegetable gardening, most of whom are women. Vegetable gardening helps vulnerable households in the most rural areas increase earning potential and improve nutritional intake. Home garden protocols are being standardized across the Feed the Future activities, with Mwanza Bora, the nutrition-focused program taking the lead in working with NAFKA and TAPP (Tanzania Agricultural Productivity Project). More information on these protocols will be shared in subsequent reports. Results on the indicator for establishment of home gardens have fallen far short of targets, and activities will be intensified to establish more home gardens in the coming year.

During the year, SILC FAs delivered the vegetable garden training program directly to SILC group members in Kiteto. In partnership with Dodoma Catholic Diocese, a ToT in organic vegetable gardening was facilitated by an external consultant from the Tengeru Livestock Training Institute in Arusha to 4 partner staff and 34 FAs in Kilombero, Kiteto, and Kongwa Districts. The FAs trained 375 SILC group members and covered sustainable organic farming and vegetable crop production through soil and water conservation techniques, pest and disease control, crop rotation, and biological control methods. Different gardening techniques were introduced from sack gardening, compost making, double digging, and raised beds.

Josephina Levi (*right*), reported that she sells \$16 worth of vegetables each week, for an income of approximately \$65 dollars per month. Given project emphasis on the most vulnerable, who primarily live on less than a dollar per day, this is significant income from a single household activity. Women in Josephina's group have started various income generating activities, and Josephina also raises pigs and makes African dress fabric.



4. Activities Implemented In Zanzibar (Unguja And Pemba)

IR.1. Improved Value Chain Productivity

On Zanzibar, NAFKA is improving the productivity of rice cultivation to raise the incomes of smallholder farmers and to support the government of Zanzibar's rice development strategy. Through grants to both ZARI and Kati, NAFKA reached close to 5,000 beneficiaries during the reporting period, bringing the total number of beneficiaries reached on Zanzibar since project inception to more than 5,600. Our efforts this reporting period through the grants to ZARI and KATI resulted in impressive increases in gross margins, number of hectares under improved technologies, adoption of good agricultural practices and yields compared to baseline.

Baseline Survey: The Zanzibar baseline survey launched in December 2013. In conjunction with an external consultant, the NAFKA M&E team presented the results to Zanzibar partners ZARI, KATI, and the

Ministry of Agriculture and Natural Resources. A detailed report on the survey has been submitted to the Mission.

Enhanced Human and Institutional Capacity Development for Increased Sustainable Agriculture Sector Productivity

During this reporting period, NAFKA conducted training in both GAP and SRI – which focuses specifically on increased productivity in the rice value chain – to 4,986 (54% M / 46% F) individuals across Unguja and Pemba in Zanzibar. As such, more than 5,600 producers and extensionists have been trained on Zanzibar by NAFKA since project inception.

Training on Good Agricultural Practices (GAP)

Productivity trainings in Zanzibar start with classroom trainings before moving to demonstration plots for practical applications. The trainings are facilitated by agronomists under the Ministry of Agriculture and Natural Resources. The GAP training program in Zanzibar has been slightly adjusted from the mainland GAP trainings and promotes thirty (30) technologies in four modules that are introduced on irrigated and rain fed demonstration plots and address the entire crop production cycle.

Table 4: Loans Facilitated by NAFKA during the Year

Module 1: Land and Nursery Preparation	Module 2: Sowing and Transplanting	Module 3: Fertilizer application and Pest and Disease control	Module 4: Harvesting
1. Plowing	12. Direct sowing of seedlings	19. Types of fertilizer	25. Pre-harvesting preparations
2. Harrowing	13. Transplanting from the nursery to the plot.	20. Time of applying fertilizer	26. Harvesting
3. Leveling	14. Number of seeds/seedlings per hole	21. Ratio of fertilization application for 2-3 week old plants	27. Threshing
4. Bunds preparation	15. Proper spacing	22. Water management after tillering stage	28. Winnowing
5. Seed selection by salt method and soaking	16. Weed management	23. Weed, pest and disease control	29. Drying
6. Seedbed preparation	17. Water management at sowing/transplanting stage	24. Safe application of chemicals	30. Post-harvest management
7. Site selection	18. Pre-plant incorporated fertilizer		
8. Ratio of fertilization application for seedling			
9. Developing seed beds			
10. Seedling pest and disease control			
11. Seedbed management			

Developing Extension Service Providers

NAFAKA has established a continuously growing sustainable network of government agriculture extension officers and Lead Farmers to increase farmers' access to improved services and inputs, such as seed and fertilizer. NAFKA builds the capacity of these individuals by facilitating ToTs that cover topics ranging from GAP to business management.

Government Agriculture Extension Officers: Agriculture extension provides farmers with the knowledge, information, and technologies needed to increase and sustain productivity. In order to deliver quality agricultural extension services in Zanzibar, NAFKA facilitated GAP I, II, III, and IV trainings to 40 extension officers through ZARI. The extension officers will be expected to deliver the training program directly to farmers in the coming year.

Lead Farmers: Of those farmer groups that have demonstration plots, one Lead Farmer is chosen by group participants to manage the plot. During the reporting year, NAFKA provided training on GAP I, II, III and IV

to 80 Lead Farmers (50% M / 50% F), who will also be expected to deliver the training program directly to farmers in the coming year.

Enhanced Technology Development, Dissemination, Management and Innovation

NAFAKA promotes and demonstrates the application of improved technologies to our targeted beneficiaries. The key technologies targeted under the strategy in Zanzibar include popularizing improved seeds, fertilizers, UDP application and quality declared seeds (QDS).

Demonstration Plots for Improved Technologies and Management Practices

In the first quarter, 40 rice demonstration plots and 3 scientific trial plots were established and used as training platforms throughout the year. Demo plots are managed by government extension officers and Lead Farmers with technical support from ZARI. Demonstration plot trainings covered four modules that included land and nursery preparations; seed sowing/transplanting using SRI technology; fertilizer application and pest and disease control; and harvesting and post-harvesting management. The scientific trials were for UDP observation against conventional fertilizers UREA and Yara Mila on 3 rice seed varieties.

Alternative Crop Demonstrations: During the last quarter of the year, NAFKA introduced trials on alternative crops including NERICA, sunflower, cowpeas, green gram, and maize. The trials are being conducted on an alternative crop demonstration plot located in Kipange and have been introduced for potential adoption during the short rains period after rice harvesting. The selected alternative crops would provide income diversity and allow smallholder farmers in Zanzibar to take advantage of other markets. The results of the demonstrations will be reported next year.

Quality Declared Seed (QDS)

NAFAKA partnered with ZARI and the Zanzibar Seed Production Unit to facilitate increased availability and adoption of rice Quality Declared Seed (QDS). Thirty (30) QDS seed producers (70% M, 30% F) were selected from Unguja Island as part of the seed production program and received GAP training. Variety Supa BC has been selected for the program because it is high-yielding, drought-resistant, semi-aromatic, has high-tillering ability, and is preferred by consumers in Zanzibar.

Fifteen (15) of the original 30 participating producers were approved by ZARI to continue producing seed for local distribution, while the other half were dropped for failure to abide by the strict quality guidelines set by the program. ZARI purchased 6.7 MT of seed from these QDS producers and plans to distribute to local farmers in the next cropping season. NAFKA will continue to strengthen the capacity of the remaining 15 seed producers in order to improve access to improved, affordable rice seed in Zanzibar.

Scalable Technology – Urea Deep Placement (UDP)

NAFAKA completed the Urea Deep Placement (UDP) trials and demonstrations during this reporting period. The trials were conducted to determine the benefits and suitability of UDP on Zanzibar soils alongside various seed

Zanzibar Leo

ZANZIBAR, US SIGN FEED THE FUTURE PROJECT

The Ministry of Agriculture and Natural Resources in Zanzibar in collaboration with the United States Agency for International Development (USAID) expect to spend USD300,000 implementing training activities with rice growers through agricultural extension officers. The funds will be distributed to Zanzibar Agricultural Research Institute (ZARI) and Kizimbani Agricultural Training Institute (KATI) with the aim to train and develop farmers so that they can implement their farming activities effectively through improved farming practices. The Vice Principal Secretary for the Ministry of Agriculture and Natural Resources, Affan Othman Maalim explained the above during the signing ceremony where he represented the Revolutionary Government of Zanzibar and USAID was represented by Tom Hobgood, the USAID Feed the Future Coordinator. The signing ceremony took place at the Ministry of Agriculture and Natural Resources.

varieties. The current fertilizer recommendation for rain-fed rice production in Zanzibar is an application of 125 kg/Ha of urea during top dressing, which yields 2.5 MT/Ha of Supa BC, the preferred rice variety in Zanzibar. Results from the UDP trials indicate that the use of 112.5kg/Ha of UDP briquettes in rain-fed areas resulted in a 60% higher yield compared to the standard method of broadcasting urea.

For irrigated rice farming, the recommended application is 260kg/ha of urea, which yields 4.5MT/ha, while 225kg/ha of UDP yields 6.7MT/ha, an increase of 49%. UDP is known to reduce nitrogen losses and increasing farmers' yields. The results of the trials will allow NAFKA to formulate an action plan for greater use of the UDP technology in Zanzibar.

5. Key Achievements And Results

Below is a summary of key achievements and results for the reporting period, compiled from data regularly collected during the year, as well as the NAFKA Annual Outcome Survey (AOS), administered in August 2014. The full NAFKA Annual Outcome Survey report will be submitted in November 2014.

To summarize from the Executive Summary section of this Annual Report, since project inception in 2011, NAFKA has reached more than 104,700 direct beneficiaries, and close to half a million total beneficiaries (direct and indirect), already exceeding the life-of-project target by a substantial margin. Annex I contains the NAFKA PMP Data Matrix Table presenting results compared against both FY2014 and life-of-project targets. NAFKA tracks 20 indicators, 9 of which are outcome indicators and 11 of which are output indicators. Of these 20 indicators, FY2014 targets were achieved or exceeded on 15 (6 outcome, 9 output). We took the liberty of considering two results at 99% and 93% of target as "achieved;" three others not counted as "achieved" reached 86%, 76% and 74% of FY2014 targets. Compared with life-of-project targets, results on 8 (3 outcome, 5 output) of the 20 indicators have already been achieved or exceeded (one at 95% and one at 90% were considered "achieved," with 7 others considered "not yet achieved" reaching 85%, 83%, 83%, 77%, 73%, 69% and 64%. Again, these are results compared to life-of-project targets, and this after only three growing seasons, the first of which was truncated given that we were still in start-up mode! The PMP Data Matrix Table in Annex I reveals that results have fallen significantly short on only two of the 20 indicators, as described in the Executive Summary. A complete report of the results of our Annual Outcome Survey (AOS), conducted in August of this year in preparation for this Annual Report, is currently being prepared and will be presented to the Mission in November. This AOS report will contain a thorough analysis of the results for each outcome indicator.

Improving Value Chain Productivity

Project Beneficiaries: This reporting year, NAFKA covered 243 villages in ten clusters by training or facilitating services for a total of 71,195 farmers, group members, and private business owners. Of the 71,195 direct beneficiaries, 55,066 were new and 16,129 were continuing from a previous reporting period. Including household members as indirect beneficiaries, this translates to 325,154 total beneficiaries reached during the reporting period.

Since project inception, NAFKA has assisted a 481,047 total beneficiaries, 104,781 of whom are direct beneficiaries. Fifty-two percent of beneficiaries participate in the rice value chain, while 48% percent are active in the maize value chain.

Gender Integration: Forty-eight percent of NAFKA's direct beneficiaries are women, 41% of whom happen to be the heads of their households. This translates to 20% of all NAFKA beneficiary households being headed by women.

Smallholder Land Use: NAFKA broadly defines two main categories of smallholder farmers whom we are reaching: 1) *Subsistence smallholder farmers*: Smallholders who own and cultivate plots ranging from 0.1 hectares to 2.0 hectares that provides for the farm family's needs with little surplus for marketing; and 2) *Medium-scale*

smallholder farmers: Smallholders with total landholdings between 2.1 hectares and 5 hectares that are often able to market surplus production. Farmers with more than 5 hectares of land are generally outside the scope of NAFKA assistance.

Based on Annual Outcome Survey findings, 71% of all NAFKA beneficiaries are in the subsistence smallholder farmer category, owning between 0.1 and 2.0 hectares, while 19% are considered medium-scale smallholder farmers with between 2.1 and 5 hectares. Ten percent own more than 5 hectares.

Comparing land ownership between the two value chains, maize farmers own relatively larger farms at 5.4 hectares, while rice farmers own 1.5 hectares on average. However, rice farmers *cultivate* 80% of their land, while maize farmers only cultivate 30% of their land, suggesting that maize farmers have proportionately larger portions of land that lay fallow. Data from previous AOS surveys confirms this as a trend – and not simply a single-year phenomenon based on climate or eco-political dynamics.

New Technology Application: The 2014 AOS findings estimate that 80% of farmers who have worked with NAFKA since inception applied at least one improved technology (e.g. GAP or SRI techniques) on their farms during the past growing season. Compared to a 53% application rate in 2012 and a 62% application rate in 2013, this steady increase in rates of application demonstrates the progressive achievements and sustainability of NAFKA's strategy.

Overall, the survey observed no significant differences in the rate of technology application between male farmers and female farmers. Specifically, the findings show that 53% of males and 47% of females applied at least one new technology on their farms.

Hectares under Improved Technologies: According to 2014 AOS estimates, 89,574 hectares of beneficiary land are currently under at least one improved agricultural practice as a result of NAFKA assistance. This represents 61% of all beneficiary land cultivated, compared to 62% in 2012 and 63% in 2013. Although rates for hectares under improved technologies have remained stable, the higher beneficiary application rate of 80% this year indicates that relatively more beneficiaries who own smaller tracts of cultivated land are applying improved technologies.

Yields, Gross Margins, and Prices: This year's average yields for both maize and rice are consistent with both the high rates of technology application and the progressive increase in application. Paddy yields were recorded at 3,139 kg/Ha this year, a 5% increase above last year's yields. It is important to emphasize that these paddy yield increases are now being experienced by a considerably larger number of producers than in previous years, given the ever-expanding outreach of NAFKA interventions. Maize yields at 1,223 kg/Ha were 74% higher than last year, although 2013 yields were uncharacteristically low due to harsh weather conditions.

Gross margins have also continued to improve. This season, rice farmers recorded a gross margin of 682 USD/Ha, a 25% increase from last year's reported figure. Given the low paddy prices caused primarily by the surplus of duty-free imports, this increase in gross margins is especially impressive – and reflects improved yields that are able to substantially offset reduced profit. Maize farmers had a more modest increase of 8% with 111 USD/Ha relative to last year. Despite various climate and market constraints, profitability among producers in both value chains is increasing.

Prices per kilogram for rice have remained essentially stable at \$.34/kg relative to last year, although the last two years are markedly lower than that of FY 2012 at \$.62/kg. While maize prices had been slightly higher last year than the previous year at \$.24/kg, they declined from \$.29/kg to \$.16/kg this reporting year. Market surplus and deficit directly impacts commodity prices, and this is evident in the irregular patterns shown for the prices of both maize and rice. Import surpluses, domestic bumper crops, and consumption substitution all play a significant role in the fluctuation of prices from year to year.

A follow-up market survey will be conducted in February 2015 to capture additional sales from those who stored their crop after harvest. The charts below show progression of yields, gross margins, and prices over the life of the project. Further trend analysis will be provided in the AOS Report to be finalized in November.

Figure 3. Beneficiary progression of yields

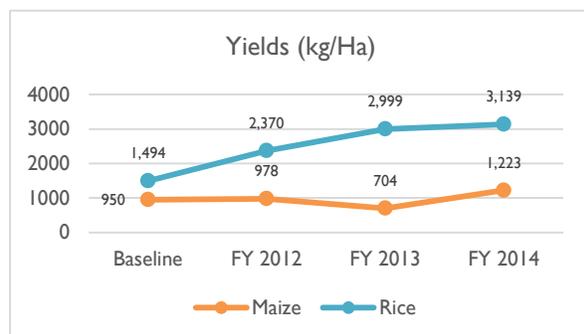
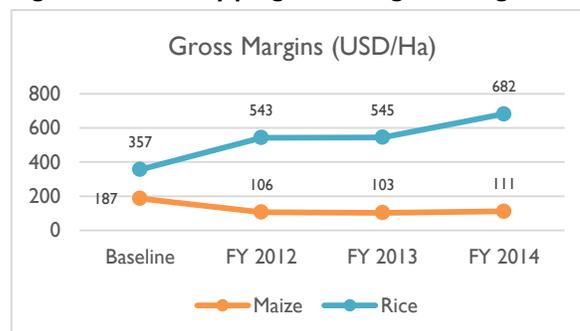


Figure 2. Beneficiary progression of gross margins



Demonstration Plot and Good Agricultural Practices (GAP) Training: Fourteen GAP technologies for maize and rice are promoted on demonstration plots through GAP training and technical assistance by Lead Farmers and Village-Based Agricultural Advisors (VBAAAs). NAFKA has installed 648 demonstration plots during the year – (322 rice, 326 maize) and trained 47,654 farmers on one or more GAP modules.

BCC Campaigns: During the first quarter of the year, NAFKA’s BCC team launched the Phase II Inputs campaign that promoted the benefits of using improved seed and fertilizer and applying good farming practices. The multi-channel campaign included print materials, radio spots, and radio talk shows. Results of the Campaign Effectiveness Survey show significant familiarity with BCC materials within targeted areas and 67% use of various GAP technologies by farmers reached by BCC campaigns.

Service Provider Development: NAFKA continued to support networks of private sector service providers, including: 98 agro-dealers, 212 village-based agricultural advisors (VBAAAs), 28 members of youth groups that provide agricultural services, 52 Savings and Internal Lending Community (SILC) field agents, and 32 certified SILC private sector service providers.

Private Sector Engagement: Input supply companies contributed approximately \$38,778 in in-kind products (primarily seeds and fertilizers) that will be used on demonstration plots that will be established in partnerships with these companies. Participating companies include Seed Co, Yara Tanzania Limited, Bytrade, Tropical Seed, Minjingu, TANSEED, Pioneer Hybrid, and Monsanto.

Expanding Markets and Trade

Associations: NAFKA expanded its network of producer associations this year to include 56 new associations for a total of 112. NAFKA facilitated the formation and registration of producer associations in order to formalize the farmer organizations, build capacity of the associations in leadership and operational management skills, and facilitate the associations to provide service transactions to their members.

Apex Associations: NAFKA facilitated the formation of 6 new apex associations, three in Kilombero District for rice associations, one in Ulanga District for rice associations, and two in Mvomero District – one for rice associations and the other for maize associations.

Access to Finance: NAFKA facilitated \$249,793 in rural agricultural loans to 316 farmers through YOSEFO, CRDB, and Opportunity International Tanzania Ltd.

Buyer Agreements: NAFKA facilitated buyer agreements worth \$372,722 for paddy (1,205 MT) and \$220,010 for maize (620 MT). An additional 68 MT of paddy are currently in association warehouses for sale later in the season.

Incremental Sales: Farmer beneficiaries achieved \$8,122,770 in incremental sales.

Increased Private Investment in Agriculture

Private Sector Investment: NAFKA facilitated \$496,913 in new private sector investment.

Public-Private Partnerships: NAFKA continues to work with KPL and KVTC in mutually developing outgrower programs that promote the provision of agricultural inputs and crop marketing within the rice value chain, expanding the outgrower scheme. Additionally, NAFKA offered support to the Rice Council of Tanzania, an advocacy platform for the rice sub-sector in Tanzania.

Input Supply Company Relationships: Twelve (12) input supply companies have partnered with NAFKA to demonstrate their products to smallholder farmers (seed, fertilizer, and agro-chemicals), providing the opportunity to develop a rural customer base and distribution channels.

NAFAKA Grants: NAFKA administered the following grants to support local businesses, associations, individual farmers, and institutions: 1) Warehouse Upgrading Grants for storage refurbishment, furniture, and equipment supply (15 grantees) 2) Enterprise and Program Development Grants (KPL and KINNAPA) and 3) Research and Training Grants (ZARI and KATI). Grants issued in previous reporting periods to agro-dealers (5), Progressive Farmers (48), TANSEED, and UWAWAKUDA were completed this year.

Increased Resiliency of Vulnerable Smallholders

Expanded Savings and Internal Lending Communities: NAFKA reached 8,166 SILC members through mobilizing and training, of which 5,269 were new to the program this year.

Savings and Lending: SILC groups have accumulated a total savings of \$291,751 for the year and issued \$637,079 in loans to members. Sixty-seven percent of these loans were taken by women.

Food Security and Nutritious Crops: Three hundred seventy five SILC group members received training on sustainable organic farming and vegetable crop production to improve household-level nutritional intake. Four hundred SILC members have adopted home gardens.

Activities in Zanzibar

Agricultural Productivity through GAP Training on Demonstration Plots: In close collaboration with the government of Zanzibar and the Zanzibar Agricultural Research Institute, NAFKA facilitated GAP training to more than 4,986 producers in both irrigated and rain-fed areas.

Quality Declared Seed (QDS) Production: Certification for thirty (30) farmers to become QDS producers was facilitated by NAFKA.

Institutional Capacity Building: Through institutional capacity-building grants to ZARI and KATI developed this year, the project scaled up to provide training to almost 5,000 farmers on both islands.

6. Problems/Challenges

- **Import of Duty-Free Rice:** Waiving the Common External Tariff (CET) that is levied on imports from outside the EAC, the Government of Tanzania allowed the importation of up to 80,000 MT of low cost, duty free rice from Asia, causing a precipitous drop in the price of domestic rice. Additionally, this harmful CET waiver prompted a backlash tariff by EAC members on Tanzanian rice of up to 75% in response. These combined factors have significantly reduced the prices and markets available to rice farmers and are a serious obstacle to attracting investment in the rice sector.

- **Climate:** Erratic rainfall distribution at the onset of the planting season – and a prolonged dry spell when crops were at a critical development stage – inhibited the growth of maize and disturbed the flow of project activities in Kongwa and Kiteto. Floods resulted in some demonstration plots being completely washed away in Mvomero (6 rice; 4 maize), Mang’ula (3 rice), and Mlimba (2 rice). Drought destroyed an additional four maize demonstration plots in Kiteto.
- **Pests/Disease Outbreak:** Outbreak of pests in both rice and maize demo plots, such as mole crickets, stock borers, white flies, army worms, white grubs, and rats, affected the quality of demonstration plots. Leaf spot and striga weed were observed in the maize demo plots. Yellow Mottle Virus (RYMV) adversely affected demo plots in the rice areas, particularly in Kilombero. In conjunction with government extension agents, NAFKA reported these observations to the Ministry of Agriculture and to the research institutes – and have been following up for a solution in the coming cropping season.
- **Infrastructure:** Lack of storage facilities, poor transportation, roads, and irrigation infrastructure affected both agricultural production and marketing.
- **Violence between Farmers and Pastoralists:** Conflicts between farmers and pastoralists over limited land and water resources disrupted project activities in the maize-growing areas in Kiteto and Mvomero. In Kiteto, these conflicts resulted in a few farmer deaths; many farmers were intimidated and fled their homes as a result. Due to the sensitivity and fearful climate, public community meetings were limited or ill-attended during mobilization and training activities. Additionally, productivity and association activities within these areas were stopped temporarily to prevent hostilities from being reignited during the presence of project field staff. Meanwhile, conflicts this year in Mvomero have calmed after local and national government involvement following an increase in violence last season.

7. Planned Activities for 2014-2015

The NAFKA fourth annual work plan for project year 2014-2015 was prepared and submitted to USAID on September 30, 2014, for review and comment. This comprehensive work plan was designed with our PMP indicators and targets as a starting point, with specific activities flowing from them.

8. Special Issues

USAID Mission Visit to NAFKA Implementation Sites

- During the year, NAFKA organized a field visit to Mang’ula and Kongwa with a team from USAID Washington to explore NAFKA’s current productivity and market linkages work and to better understand the maize and rice value chains in Tanzania. The group visited an established rice demonstration plot, a milling facility, and the largest maize market in the region.
- USAID also visited NAFKA implementation sites in Zanzibar to officiate the ZARI and KATI grant-signing ceremony under the Ministry of Agriculture and Natural Resources. Two press articles were featured in two local newspapers, *Zanzibar Leo* and *Nipashe*.

USAID FtF Implementing Partner Meetings

NAFKA participated in the 3rd USAID Implementing Partners Meeting that took place in Arusha in November, and also participated in the USAID FtF Implementing Partners Meeting in Zanzibar. Both meetings sought to establish a common understanding of the food and nutrition security situation in Tanzania and Zanzibar – and to discuss issues often overlooked in food security.

Rice Stakeholder Meeting in Kilombero District

During the year, NAFKA took part in the rice stakeholder's meeting in Kilombero District. The meeting was attended by representatives from the government, non-government organizations, rice research institutes, farmer organizations, rice millers, rice traders, transporters, and a representative of the Rice Council of Tanzania. Important issues pertaining to the rice industry in the district were discussed, and participants agreed to hold similar meetings every six months.

Maize Grain Quality Control Training by NFRA

NAFKA participated in the TOT on maize grain quality control facilitated by NFRA and WFP through its program of Purchase for Progress (P4P). The training was provided to a few selected field staff and farmer representatives who will be directly involved in the collection and supervision of crop quality for NFRA market.

Collaborating with the Private Sector

- NAFKA continues its collaboration with Kilombero Plantation Limited (KPL) and Kilombero Valley Teak Company (KVTC) to provide SRI extension services to paddy outgrowers.
- Seed companies that collaborated with NAFKA throughout the year include: Tanseed, Seedco, Bytrade, Monsanto, Tropical Seed, Subagro, Export Trading Group, Parner Seed Company and FICA Seed.
- Fertilizer companies that collaborated with NAFKA throughout the year include: Yara Tanzania Limited, Mea Fertilizer, TATA Africa and Minjingu Mines, China Pesticides and Fertilizer Limited.
- Agro-chemical companies that collaborated with NAFKA throughout the year include: BASF, Arysta Life Science, AgriScope, Mahoo Agravet, Syngenta and Ultravet.
- Agro-implements companies that collaborated with NAFKA throughout the year include: Money Maker.

Nipashe Newspaper

ZANZIBAR AND USAID TO IMPROVE RICE

FARMING: The United States Agency for International Development (USAID) and Revolution Government of Zanzibar through the Ministry of Agriculture and Natural Resources entered a contract for implementation of NAFKA activities, focusing on rice and vegetable production. The Principal Secretary to the Ministry of Agriculture, Juma Ali Juma, said that the objective of the organization is to increase farmer's income and improve women and children's nutritional intake. He also said that the current implementation activities ongoing with farmers from Kipange village in Donge District are already showing great results that will benefit rice farmers. He said the project intends to reach 5,600 farmers in Unguja and Pemba, allowing farmers to reap the benefits of applying improved agricultural practices and stop practicing traditional farming practices that cause low productivity. He said improved agriculture practices will help increase farmers productivity reducing food scarcity as well as importation of food into the country. The Permanent Secretary to the same Ministry, Afan Maalim said that, the project will also assist in conducting scientific research on improved seeds in order to improve farming practices so that the people of Zanzibar can receive a good nutritional diet. This one-year project will cost USD 300,000, with the Revolutionary Government of Zanzibar contributing USD 100,000 and USAID contributing USD 200,000.

Celebrating International Women's Day

In collaboration with Mvomero District Council, NAFKA celebrated the International Women's Day (IWD) in Mvomero District. The event was attended by more than 300 people including village government staff, female council members, District Council staff, and CRDB Bank. Nine (9) farmers (5 women, 3 men, and 1 male youth) and one SILC member – all NAKAFA beneficiaries – explained to the audience that GAP training and association development have helped them increase their farm yields and household incomes. NAFKA also participated in two radio talk shows in Pambazuko and Mwangaza to commemorate IWD. The programs provided a platform for two female farmers receiving NAFKA assistance to express their needs, opinions, and aspirations as women working in agriculture to a public audience.

Collaboration with FtF Partners and Other Partners



Above are photos from the Nane Nane 2014 Trade Fair in Morogoro. *Left:* Tumainrabi Temu (Agro-dealer) as he demonstrates how to use a knapsack sprayer to a visitor. *Center:* USAID's Feed the Future Implementing Partners pavilion entrance. *Right:* Neema Urasa (VBAA) and Gabriel Ngapulila (Association Leader), as they explain the maize demonstration plots to visitors.

- The Nane Nane Agricultural Fair is an annual national event that honors the nation's farmers and celebrates their accomplishments and contributions to the Tanzanian economy. The fair provides an opportunity for farmers and other stakeholders to exchange knowledge and best practices and to network for business purposes. USAID's Feed the Future Implementing Partners NAFKA Staples Value Chain Activity, Mwanzo Bora Nutrition Program, Innovative Agricultural Research Initiative (iAGRI), Tanzania Agriculture Productivity Program (TAPP), and the Tuboreshe Chakula Project (TUBOCHA) joined forces and shared a pavilion at the Nane Nane grounds in Morogoro. Demonstration plots were also developed for maize and rice (NAFAKA), fruits and vegetables (TAPP), and student agriculture research projects (iAGRI) – all promoting project-recommended technologies and good agricultural practices.
- NAFKA collaborated with Tuboreshe Chakula in facilitating training on nutrition through soya processing and the principles of flour blending to 10 SILC group members in Kilombero District.
- NAFKA participated in nutrition-themed workshops facilitated by TAPP and Mwanzo Bora, focusing on best practices in integrating nutrition in agriculture.
- NAFKA collaborated with Land O'Lakes in facilitating youth groups to develop basic skills in developing drama kits and the value of group cohesion and cooperation.
- NAFKA continues to collaborate closely with the FtF Sera Policy Project by providing consultants to perform assessments of the role of the National Food Reserve Agency, developing alternatives to export bans for promotion of food security, and working towards a rules-based system for addressing emergency food security needs.
- NAFKA is reviewing a par-boiled rice initiative with Tuboreshe Chakula.
- Mwanza Bora is taking the lead on refining and standardizing the protocols and messaging relative to home garden and nutrition activities being implemented by TAPP and NAFKA.
- NAFKA is partnering with iAGRI and Ilonga Research Station for the promotion of drought-resistant maize seed. This would involve no cost to NAFKA other than to place our seed specialist on a committee for maize seed production and distribution.

- NAFKA encouraged youth members to participate in the Land O' Lakes Women's Agricultural Innovation Award Expo. Evodius Mulokozi below, was one of the 14 participants that took part in the Expo and one of seven winners for his hand-built rotary rice weeder.

Evodius Mulokozi, a youth member from Mvomero District, was one of the 14 participants that took part in the Land O' Lakes Women's Agricultural Innovation Award Expo. The objective of the expo was to identify, develop, test, and promote locally designed technologies or innovations that address the needs of female farmers to save time and reduce labor burdens. As one of 7 winners, his invention was a wood and iron rotary weeder that earned him an award of \$5,000. His invention reduces women's time and labor in the field from having to weed rice fields by hand, while also improving agricultural yields. NAFKA is working with Evadius and similar entrepreneurs to co-invest in taking their local innovations to scale. In the photo to the right, Evodius (left) explains to a farmer in UWAWAKUDA rice scheme at Dakawa how his hand rice weeder works.



9. Cross-Cutting Issues

Gender Integration

To ensure that men, women, and youth have equal opportunities to participate in the rice and maize value chains, gender and youth considerations are streamlined into all NAFKA activities. Among the farmers supported by NAFKA this year, 48% were women, and 27% were youth.

Component 4 (Vulnerable Groups) used SILC groups as a platform for introducing gender-related messages. The component facilitated discussions on the rights of men, women, girls, and boys at the household level, including the importance of shared decision making. These messages are aimed at facilitating positive behavior change that starts at the household level and eventually spreads to the community level. Women and men have reported being more involved by their spouses in decision making, especially regarding household interests such as budgeting together for children's schooling and purchase of house-hold needs. Women and youth are also encouraged to bid for leadership positions in their groups and to wisely invest borrowed money from their SILC on income-generating activities.

Testimonies of SILC members speak of improvement in the overall health of women and children. Women are now able to positively contribute toward household income, are less dependent on their husbands for simple household needs, are more likely to look for new opportunities to increase incomes, and feel committed to contributing towards improving family health and education for their children.

Youth Group Formation and Training: During the year, NAFKA facilitated the formation of seventeen (17) youth groups in Ulanga (4), Kiteto (1), Mvomero (1), and Kilombero (11) Districts by partnering with Ulanga and Kilombero District Legal Officers and Community Development Officers to give pre-constitutional trainings to the groups. Groups from Ulanga and Ifakara were trained on governance frameworks, dispute resolution, and disciplinary action – and also explained procedures and requirements for group registration at the district level.

After receiving GAP training, NAFKA is further enhancing the capacity of 8 fully registered youth groups with training on minimum tillage and safe handling of crop protection products. These youth groups each established a demonstration plot to demonstrate the performance of the inputs donated to them by input supply companies.

NAFAKA developed an income-generation program for youth designed to capacitate them to become service providers by selling business development services to farmers within their communities. NAFKA linked these groups to agro-dealers, whereby they purchase inputs in bulk and either sell them to farmers directly or apply pesticides, herbicides, or fertilizers to farmer fields for a fee. NAFKA trained them in product knowledge, skills on proper selection and safe use and handling/application of fertilizer, herbicides, pesticides seed, and other agro-chemicals. To date, these groups have earned enough income to purchase their own working tools and equipment in order to expand further. Demand for these services is overwhelming, and NAFKA will continue to train more groups to develop the service provider network for farmers while simultaneously creating an income opportunity for youths.

During the year, NAFKA collaborated with Land O' Lakes in training three youth groups from Mvomero District (40 members) on basic skills in group cohesion and cooperation, as well as practical skills in developing drama kits. These groups performed during the IWD event with a women's empowerment message and will continue assist with the sensitization of farmers in new communities.

Women Farmer Capacity Building: During the year, five new women's groups in Ulanga District were identified, while NAFKA is working with a total of 15 fully registered women's groups. In the SMFM operations module for mixed groups, participants discussed gender-based constraints in their associations and households. Members committed to enhance collaborative decision-making and to share household tasks to reduce women's workload. The gender team also invited female beneficiaries to share their success stories during Farmer Field Days in all targeted districts. Topics included household decision-making, access to resources, and human rights issues.

Behavior Change Communication

NAFAKA designs BCC materials to foster behavior change and adoption of key agriculture practices and technologies that allow farmers to realize an increase in yields and/or incomes. Many behaviors and practices are socially or economically embedded, and thus a more nuanced understanding of the barriers to change is required. The NAFKA BCC team developed a series of communications materials targeting behaviors and practices promoting GAP and marketing/storage. Please refer to Section 1.1.3 and 2.1.3 of this report for a full description of these activities.

ESTHER KIYULE, YOUTH GROUP MEMBER



"Growing up in Mlimba Village as a young woman can be very challenging. You need to seize opportunities as soon as they emerge and refuse to succumb to society's norms of getting married at a very young age so that your parents can receive dowry and have fewer mouths to feed." These are the words of 34-year old Esther Kiyule, now a Chairperson for the Huduma Youth Group in Mlimba, Kilombero District.

The group initially struggled with identifying farm activities that they could perform as a group. In October 2013, Huduma Youth Group consisting of 11 members (45% women), started participating in NAFKA and realized the opportunities available in farming as a commercial business. To date, the Huduma Youth Group has generated a total of TSh 1,647,500 working as service providers within their community - offering spraying services, transplanting, direct seeding, and weeding activities. The group invested some of the income to purchase 1 acre of land, 4 spraying pumps, and 3 dibblers. Huduma Youth Group currently has a customer list of 21 regular clients and has delivered services on a total of 50 acres of land.

NAFAKA is currently building the capacity of 18,839 youth members (51% women).

Environmental Compliance and Natural Resource Management

NAFAKA's activities are guided by our Safer Use Action Plan (SUAP), which was approved by USAID as part of our Pesticide Evaluation Review and Safe Use Action Plan (PERSUAP) submission. All inputs and agro-chemicals promoted by NAFKA, whether they are contributed by input supply companies or purchased for demonstration with project funds, are approved in our PERSUAP. We also ensure that these inputs are promoted in a manner compliant with the SUAP and our Environmental Mitigation Monitoring Plan (EMMP), which was approved by USAID.

During the year, our Environmental Compliance Specialist ensured that NAFKA activities conformed to environmental laws and regulations as stipulated in PERSUAP guidelines. NAFKA integrates environmental compliance aspects into all of its activities, including enforcing the use of standard operating procedures, GAP trainings, BCC activities, field monitoring and environmental systems, and guidelines review and redesigning. The compliance activities focus on three major areas of environment and natural resources associated with the use of pesticides, namely human health and safety protection, solid waste management, and wastewater management.

Environmental Compliance Guidelines Review/Updates: Our Environmental Compliance Specialist, with the support of STTA, finalized the 2012 PERSUAP report. NAFKA is also planning to develop an Integrated Pest Management training module to enhance various practices other than pesticides application to manage crop pests.

The standard operating procedures for pesticide control acceptable by United States Environmental Protection Agency (USEPA) and Tropical Pesticides Research Institute (TPRI) were also finalized and disseminated to project staff for implementation. Also, our Environmental Specialist and Learning and Knowledge Management unit conducted an environmental compliance monitoring assessment in Kilombero, Mvomero, Kongwa, and Kiteto Districts. The activity was integrated into the GAP Adoption Survey.

Integration of Pesticides Waste Management Systems and Procedures: NAFKA has introduced a waste management technique – a soak pit – within our demonstration plots that will be used to advocate best practices in disposal of pesticide-contaminated waste water. The design for the soak pit is finished and will be introduced in the next implementation year.

Monitoring, Evaluation and Learning

During this year, the M&E department conducted and accomplished the following key activities:

- Three new field agents and a field coordinator were recruited to provide better data collection and validation coverage to all project areas, considering the increasing number of villages and beneficiaries with which NAFKA is working. A Zanzibar-specific field officer was also hired to lead all M&E activities for the two islands.
- The data collection, validation, and reporting processes were re-structured to better support timely and consistent delivery of project results.
- The Regional M&E Specialist delivered an SPSS follow-up training and conducted an internal data and system audit in order to strengthen the NAFKA data management and reporting system. The Regional M&E Specialist assessed the effectiveness of both the NAFKA M&E system and project partners to meet the data quality needs.
- The final draft of Project Monitoring and Learning Plan (PMLP) was submitted to USAID Tanzania in August. From this document, a more user-friendly version, "The M&E Standard Operating Procedures (SOPs)." was prepared and distributed to all NAFKA staff to serve as a guide to M&E requirements.
- All NAFKA Data Collection Forms (DCFs) were reviewed and updated to suit different data needs for NAFKA indicators. Updated forms were shared with all staff, and refresher training on data collection was provided. To address data collection for beneficiaries that receive multiple services from NAFKA, registers will be introduced to be used for any group, association, or private service provider to

streamline the data collection process.

- The Zanzibar Baseline Survey was completed this year. The findings were presented to NAFKA's implementing partners in Zanzibar, ZARI, KATI, and the Ministry of Agriculture and Natural Resources.
- The 2012-2013 NAFKA Annual Outcome Survey, summarizing the annual performance of the project and key annual outcomes, was prepared and submitted to USAID. The report of the 2013-2014 Annual Outcome Survey is currently being prepared and will be submitted to USAID in November 2014.
- The M&E Team conducted three quarterly meetings to review progress of project activities. The workshop served to share implementation challenges faced by project staff and develop strategies for addressing them.
- The M&E Team collaborated closely with the BCC team to conduct a BCC Effectiveness Survey in May 2014, intended to gauge the impact of NAFKA's BCC campaigns and to solicit farmers' views on whether or not the campaigns and approaches played a role in changing targeted behaviors.
- The Learning and Knowledge Management component was formally introduced to NAFKA this year. This component developed the project's learning and knowledge management agenda, which contributes to the wider FtF and USAID Learning Agenda. During the reporting period, a Learning Working Group was formed, the collection and central sharing of project documents at NAFKA was initiated, and a project staff documentation and learning needs assessment to determine the state of knowledge management at NAFKA was conducted. The component conducted the GAP Adoption Survey and was involved in organizing and conducting the BCC Effectiveness Survey.

ANNEXES

Annex 1: Performance against PMP Indicators

**Annex 2: Success Stories Submitted to USAID
Mission during the Year**

Annex I: Performance against PMP Indicators

NAFAKA Annual PMP Data Matrix

SR/ NO	FtF/ NAFKA	Performance Indicator	FY 2014 Achieved ⁹	FY 2014 Target	FY 2014 Percentage Achieved	Cumulative Achievements To-Date ¹⁰	LOP Target	LOP Percentage Achieved
IR_1: Improved Agricultural Productivity								
IR_1.1: Enhanced Human and Institutional Capacity Development for Increased Sustainable Agriculture Sector Productivity								
1	FTF- 4.5-16, 17, 18	Gross margin per hectare (RiA) (Outcome)						
		Maize	111	112	99%		123	90%
		Rice	682	595	115%		683	100%
Abbreviated Indicator Definition: Gross margin per hectare is a measure of net income for that farm activity. The gross margin is the difference between the total values of the agricultural production minus the input cost of producing that item, divided by the total number of hectares.								
2	USAID Tanzania	Yields: kg per hectare						
		Maize	1,223	739	165%		774	158%
		Rice	3,139	3,150	100%		3,137	100%
Abbreviated Indicator Definition: Yield is measured as kilograms per hectare of harvested land of rice and maize. Production data on maize and rice relate to crops harvested for dry grain only. Crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded. Most of a crop harvested near the end of a year will be used in the following year.								
3	FTF-4.5.1-27	Score, in percent, of combined key areas of organization capacity amongst USG direct and indirect local implementing partners (S)¹¹	No longer tracking this indicator by agreement with USAID.					
Abbreviated Indicator Definition: This combined score represents the percentage capacity of local organizations measured across seven key capacity areas using the Organizational Capacity Assessment Tool (OCAT). The key capacity areas include: 1) Governance 2) Administration 3) Human Resources Management 4) Financial Management 5) Organizational Management 6) Program Management and 7) Project Performance Management.								
4	FTF-4.5.2-7	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (RiA) (WOG) (OUTPUT)	60,842	34,137	178%	92,665	108,793	85%

⁹ Year-to-Date figures are the sum total of all unique beneficiaries for each quarter within the current reporting year. Disaggregations for all indicators can be found in the NAFKA IPTT, distributed each quarter in Excel format with the NAFKA Quarterly Performance Report.

¹⁰ Cumulative-to-Date figures are the sum total of all final Year-to-Date figures for each reporting year. Note that this calculation methodology was adjusted in Q3 FY 2014.

¹¹ USAID Feed the Future has discontinued this indicator from its framework.

NAFAKA Annual PMP Data Matrix

SR/ NO	FtF/ NAFAKA	Performance Indicator	FY 2014 Achieved ⁹	FY 2014 Target	FY 2014 Percentage Achieved	Cumulative Achievements To-Date ¹⁰	LOP Target	LOP Percentage Achieved
<p>Abbreviated Indicator Definition: The number of individuals to whom significant knowledge or skills have been imparted through interactions that are intentional, structured, and purposed for imparting knowledge or skills should be counted. This includes farmers, and other primary sector producers who receive training in a variety of best practices in productivity, post-harvest management, linking to markets, etc. It also includes rural entrepreneurs, processors, managers, and traders receiving training in application of new technologies, business management, linking to markets, etc., as well as training to extension specialists, researchers, and others who are engaged in the food, feed, and fiber system and/or natural resources and water management. Farmers that receive training via input supplies, agro-business, processors, or through NAFAKA supported training of trainers (ToT) rather than directly with farmers themselves are considered direct beneficiaries.</p>								
5	FTF-4.5.2-5	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (RiA) (WOG)	60,279	32,121	188%	81,063	85,520	95%
<p>Abbreviated Indicator Definition: Total number of farmers, individual processors (not firms), rural entrepreneurs, managers and traders, etc. that applied improved technologies anywhere within the food system as a result of USG assistance. This includes innovations in efficiency, value-addition, post-harvest management, sustainable land management and water management, managerial practices, and input supply delivery.</p>								
6	FTF-4.5.2-11	Number of food security private enterprises (for profit), producer organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) receiving USG assistance (RiA) (WOG) (OUTPUT)	796	559	142%	1,200	1,552	77%
<p>Abbreviated Indicator Definition: Total number of private enterprises, producer associations, cooperatives, producer organizations, fishing associations, water users associations, women's groups, trade and business associations, and community-based organizations, including those focused on natural resource management, that received USG assistance related to food security during the reporting period. Organizations assisted should only include those organizations for which implementing partners have made a targeted effort to build their capacity or enhance their organizational functions.</p>								
7	FTF-4.5.2-42	Number of private enterprises (for profit), producer organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) that applied improved technologies or management practices as a result of USG assistance (RiA) (WOG) (OUTCOME)	648	475	136%	986	1,355	73%
<p>Abbreviated Indicator Definition: Total number of private enterprises (processors, input dealers, storage and transport companies), producer associations, cooperatives, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs), including those focused on natural resource management, that applied improved technologies or management practices in areas including management (financial, planning, human resources), member services, procurement, technical innovations (processing, storage), quality control, marketing, etc. as a result of USG assistance.</p>								

NAFAKA Annual PMP Data Matrix

SR/NO	FtF/NAFAKA	Performance Indicator	FY 2014 Achieved ⁹	FY 2014 Target	FY 2014 Percentage Achieved	Cumulative Achievements To-Date ¹⁰	LOP Target	LOP Percentage Achieved
IR_1.2 Enhanced Technology Development, Dissemination, Management, and Innovation								
8	FTF-4.5.2-13	Number of rural households benefiting directly from USG interventions (S) (OUTPUT)	68,846	38,711	178%	100,388	72,514	138%
<p>Abbreviated Indicator Definition: A household is a beneficiary if it contains at least one individual who is a direct beneficiary. An individual is a direct beneficiary if s/he is engaged with a project activity or s/he comes into direct contact with the set of interventions (goods or services) provided by the project. Individuals merely contacted or involved in an activity through brief attendance (non-recurring participation) does not count as a direct beneficiary. See indicator <i>Number of beneficiaries reached (direct and indirect)</i> for a comprehensive definition of a beneficiary. This indicator includes vulnerable households. To prevent double-counting of households that may contain more than one direct beneficiary, total direct beneficiaries are adjusted by .967 (derived from internal estimates based on the NAFKA Annual Outcome Survey).</p>								
9	NAFAKA	Number of beneficiaries reached (OUTPUT)	325,154	204,823	159%	481,047	363,347	132%
<p>Abbreviated Indicator Definition: Beneficiaries are those individuals within the target area that receive direct benefits (i.e., goods or services) from the program (including where applicable, families receiving food rations). For NAFKA, beneficiaries include individuals who receive training, participate in demo plots, benefit from grants/loans, receive small packs of technologies, receive technical assistance from VBAs, participate in SILC groups, receive support to improve business operations, or receive technical assistance from a variety of BDS providers with whom NAFKA has worked. Farmers (and other primary producers) that work directly with input suppliers, agro-businesses, processors, or through training of trainers (TOT) with whom NAFKA works will still be direct beneficiaries. After multiplying the total number of direct beneficiaries by .967 to adjust for potential double-counting of beneficiaries living within the same household (derived from internal estimates based on the NAFKA Annual Outcome Survey), a cluster-level household multiplier is then applied to account for family members indirectly impacted, which is based upon official census data.</p>								
10	FTF-4.5.2-2	Number of hectares under improved technologies or management practices as a result of USG assistance (RiA) (WOG) (OUTCOME)	89,574	49,162¹²	182%	132,352	159,890	83%
<p>Abbreviated Indicator Definition: Total area (in hectares) of land under improved technology or management practice during current reporting year. Technologies to be counted are agriculture-related innovations and improvements, including those that address climate change adaptation and mitigation.</p>								
IR_2: Expanded Market and Trade (Corresponds to NAFKA Component 2 Activities)								
11	FTF 4.5.2-23	Value of incremental sales (collected at farm-level) attributed to FTF implementation in USD (RiA) (OUTCOME)	8,122,770	10,690,394	76%	16,972,015	30,690,033	55%
<p>Abbreviated Indicator Definition: Both volume (in metric tons) and value (in US dollars) of purchases from smallholders of targeted commodities are used for calculation. The value of incremental sales indicates the value (in USD) of the total amount of agricultural products sold by farm households relative to a base year and can be calculated based on the total value of sales of a product (crop, animal, or fish) during the reporting year minus the total value of sales in the base year. Note that quantity of sales is part of the calculation for gross margin under indicator #4.5—4, and in many cases this will be the same or similar to the value here.</p>								

¹² Figures for FY 2013 achieved, FY 2014 target, and LOP targets for this indicator were updated in January 2014 per USAID instructions for revisions in methodology. Therefore, data presented for this indicator in the FY 2013 Annual Report has been revised – and is now represented accurately in both in the FTFMS and throughout this report.

NAFAKA Annual PMP Data Matrix

SR/NO	FtF/NAFAKA	Performance Indicator	FY 2014 Achieved ⁹	FY 2014 Target	FY 2014 Percentage Achieved	Cumulative Achievements To-Date ¹⁰	LOP Target	LOP Percentage Achieved
12	NAFAKA	Number and value of buyer agreements (informal or formal) (OUTPUT)						
		Number	28	30	93%	65	101	64%
		Value	592,732	585,760	101%	1,186,838	1,853,490	64%
Abbreviated Indicator Definition: Number and Value of informal or formal agreements between farmers/producer organizations and value chain actors. Non-financial agreements should also be counted.								
13	NAFAKA	Volume sold by producer associations: MT (OUTPUT)	1,825	1,312	139%	3,266	4,261	77%
Abbreviated Indicator Definition: All produce sold by an association or members of an association or group through bulking or any other form of contracts. The sales may involve formal or informal arrangements which must be captured by associations themselves or NAFKA staff.								
R_2.1: Improved Market Efficiency								
14	FTF 4.5-10	Total increase in installed storage capacity (m³) (S) (OUTPUT)¹³	No longer tracking this indicator by agreement with USAID.					
R_2.2 Improved Access to Business Development and Affordable Financial and Risk Management Services								
15	FTF 4.5.2-29	Value of agricultural and rural loans (RiA) (WOG) (OUTPUT)	249,793	335,420	74%	567,912	452,014	126%
Abbreviated Indicator Definition: Total value of formal loans disbursed during the reporting period to producers (farmers, fishers, etc.), input suppliers, transporters, processors, and other MSMEs in rural areas that are in a targeted agricultural value chain, as a result of USG assistance. The indicator counts loans disbursed to the recipient, not loans merely made (e.g. in process, but not yet available to the recipient). The loans can be made by any size formal financial institution from micro-credit through national commercial bank, and includes any type of micro-finance institution, such as an NGO.								
16	FTF 4.5.2-30	Number of MSMEs, including farmers, receiving USG assistance to access loans (S) (OUTPUT)	7,428	2,058	361%	10,070	9,924	102%
Abbreviated Indicator Definition: Total number of micro (1-10), small (11-50), and medium (51-100) (parentheses = number of employees) enterprises (MSMEs) that have received USG assistance which resulted in a loan from any financial institution, formal or informal, including MFIs, commercial banks, or informal lenders, as well as from in-kind lenders of equipment (e.g. tractor, plow) or other agricultural inputs (e.g. fertilizer or seeds), or transport, with repayment in cash or in kind. USG assistance may include partial loan guarantee programs or any support facilitating the receipt of a loan.								
17	FTF 4.5.2-37	Number of MSMEs, including farmers, receiving business development services from USG assisted sources (S) (OUTPUT)	12,929	15,000	86%	15,992	52,800	30%
Abbreviated Indicator Definition: Total number of micro (1-10), small (11-50), and medium (51-100) enterprises (parentheses = number of employees) receiving services from FTF-supported enterprise development providers. Services may include, among other things, business planning, procurement, technical support in production techniques, quality control and marketing, micro-enterprise loans, market linkages, input access, etc. Clients may be involved in agricultural production, agro-processing, community forestry, fisheries, input suppliers, or other small businesses receiving USG assistance.								

¹³ This is a dormant indicator that NAFKA is in the process of formally removing from its official indicators.

NAFAKA Annual PMP Data Matrix

SR/ NO	FtF/ NAFAKA	Performance Indicator	FY 2014 Achieved ⁹	FY 2014 Target	FY 2014 Percentage Achieved	Cumulative Achievements To-Date ¹⁰	LOP Target	LOP Percentage Achieved
IR 3: Increased Investment in Agricultural or Nutrition Related Activities (Corresponds to NAFKA Component 5 Activities)								
18	FTF 4.5.2-12	Number of public-private partnerships formed as a result of FTF assistance (S) (OUTPUT)	28	22	127%	55	28	196%
<p>Abbreviated Indicator Definition: A public-private partnership is considered formed when there is a clear agreement, usually written, to work together to achieve a common objective. There must be either a cash or significant in-kind contribution to the effort by both the public and the private entity. USAID must be one of the public partners and is almost always represented in the partnership by its implementing partner. For-profit enterprises and NGOs are considered private. A public entity can be national or sub-national government, as well as a donor-funded implementing partner. It could include state enterprises which are non-profit. A private entity can be a private company, a community group, or a state-owned enterprise which seeks to make a profit (even if unsuccessfully).</p>								
19	FTF 4.5.2-38	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation (RiA) (OUTCOME)	496,913	1,595,218	31%	2,447,112	5,300,159	46%
<p>Abbreviated Indicator Definition: Investment is defined as any use of private sector resources intended to increase future production output or income, to improve the sustainable use of agriculture-related natural resources (soil, water, etc.), or to improve water or land management, etc. – in both upstream and downstream investments. Upstream investments include any type of agricultural capital used in the agricultural production process such as animals for traction, storage bins, and machinery. Downstream investments could include capital investments in equipment, etc. to do post-harvest transformation/processing of agricultural products as well as the transport of agricultural products to markets. Private sector includes any privately-led agricultural activity managed by a formal, for-profit company.</p>								
R 5: Increased Resilience of Vulnerable Communities and Households (Corresponds to NAFKA Component 4 Activities)								
20	FTF 4.5.2-14	Number of vulnerable households benefiting directly from USG assistance (S) (OUTPUT)	7,897	5,541	143%	11,334	16,379	69%
<p>Abbreviated Indicator Definition: As a proxy for vulnerable households, NAFKA uses the total number of SILC group members and applies its .967 multiplier to account for the potential of more than one beneficiary living in the same household.</p>								
21	NAFAKA	Value of savings accumulated by SILC groups under NAFKA (OUTCOME)	\$291,751	\$144,527	202%	\$385,039	\$464,196	83%
<p>Abbreviated Indicator Definition: Through the SILC methodology, community members self-select into groups of 15 to 25 people who receive intensive capacity building to strengthen their skills in group and financial management through internal savings and lending. SILC groups focus on vulnerable populations.</p>								
22	NAFAKA	Number of beneficiaries with home gardens or alternate crops as proxy for access to nutritious foods and income (OUTCOME)	400	14,700	3%	1,956	36,290	5%
<p>Abbreviated Indicator Definition: Beneficiaries refer to target individuals who own or have owned a home garden during the reporting year. A home garden generally emphasizes staple crops and horticultural products and is in close proximity to the household. Within a household, each beneficiary with a distinct home garden may be counted once each, but several household members sharing one home garden will only be counted once. A garden generally focuses more on mixed cropping with emphasis on vegetables and fruits but may include grains, roots, tubers and other traditional staple crops as well. A garden may be used for home consumption or commercial sale or a mix of the two. Home gardens refer to those managed by an individual household – not by an entire community.</p>								

Annex 2: Success Stories Submitted to USAID Mission during the Year

Success Story: Quarter I



SUCCESS STORY

Developing sustainable links through local and private partnerships

Increasing availability and adoption of certified rice seed



Photo: Filbert Mzee

Isaac Mashauri from TANSEED International, conducting a training on seed production to the selected rice seed growers in Kilombero District.

Producing rice seed under the guidance of USAID provides me with 3 times the income on the same portion of land” Jeremiah Yombo, certified seed producer.

Telling Our Story
U.S. Agency for International Development
Washington, DC 20523-1000
<http://stories.usaid.gov>

Quality seed is often unavailable to Tanzanian smallholder farmers in rural areas – negatively affecting yields and incomes. As a result, the majority of smallholder farmers in Tanzania use farmer-saved seed that is not uniform and tends to be mixed with seed of wild rice, local unimproved and improved rice varieties that have built-up with disease from previous planting. This system of seed production results in declining seed quality and yields, and the product is considered of low-quality in the market.

In 2013, USAID Feed the Future, through the NAFKA project, has engaged in a partnership worth \$150,000 with TANSEED, the sole private entity currently producing and distributing certified rice seeds in Tanzania. The cost share element between the two is USAID \$130,000 and TANSEED \$20,000. The partnership’s aim is to increase availability and adoption of conventionally bred certified rice seed through developing an outgrower program for this seed with 54 smallholders from Mvomero and Kilombero Districts. The selected seed variety for the program was TXD 306 (SARO 5) because it is semi-aromatic, has high yields, is drought resistant, has a high tillering ability and has a short term before harvesting.

Jeremiah Yombo was one of 54 rice seed growers recruited and contracted to produce 250 tons of certified rice seeds in a total of 100 acres. “This was my first time to plant a crop for seed production. The trainings by demonstration allowed me to learn by doing, noticeably seeing the importance of regular field inspections and rouging (the removal of undesirable rice plants) to prevent any contamination to the seed,” said Jeremiah.

The selected rice seed growers had to be inspected and registered as ‘producers of certified seed’ under the Tanzania Official Seeds Certification Institute (TOSCI), before being trained on seed production skills. The trainings were based on the national seed production regulations, monitored by the government under TOSCI and covered topics on land preparation, planting, weeding, fertilizer application, diseases and pests management and harvesting. The rice seed growers successfully met and exceeded delivery to TANSEED, by producing 280 tons in total of high quality SARO 5 seeds.

Jeremiah says, ‘After successfully producing rice seed under the guidance of USAID, I have gained confidence to also produce hybrid maize seeds to supply to TANSEED. This success has improved my status in my community which has currently elected me to be the Chairman of the Local Irrigation Water Users Committee.’ The program has contributed in increasing seed producers’ income, as TANSEED purchased the seeds from the farmers involved at a premium price of Tsh. 900 per kilo compared to purchasing price of paddy that is produced for milling that is purchased at Tsh. 250 per kilo. Since the farmers under the program are now registered ‘certified seed producers’, they can continue on-farm production of quality rice or maize seed to TANSEED on a contractual basis with continued field inspection from TOSCI.

This initiative has strengthened the capacity of seed producing communities, helping establish long-term sustainable links with seed companies, regulating institutions and local rice seed producers, resulting in improved access to appropriate, affordable and timely seed within the Mvomero and Kilombero Districts and other parts of the country.

Success Story: Quarter 2



SUCCESS STORY

Collective marketing bring higher prices and income to small holder farmers

Association strengthening for increased rice value chain competitiveness



Photo: Neema Salali

USAID is building the capacity of self-governing associations through institutional and operational mechanisms that enable them to seize market opportunities along the rice value chain

“Before training on GAP many association members were storing their produce in their homes and struggling with low yields due to unproductive traditional farming practices. But after learning and applying GAP the members’ yields have increased significantly and we are now storing our produce collectively and practicing farming as business.”

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In contrast to large scale farmers, smallholder farmers lack the access to inputs and bargaining power to meet commercial buyers’ quantity and quality standard to obtain a high market price—often accepting the low farm gate price offered by local traders. Collective efforts undertaken by smallholder farmers associations are vital to increasing the competitiveness of the rice value chain. However, many producer organizations face constraints such as lack of efficient management and organizational capacity, the absence of good governance systems and insufficient capital and technology to meet market quality standards. In an effort to address this issue USAID’s Feed the Future Staples Value Chain Activity – NAFKA is building the capacity of 90 self-governing associations comprised of 11,973 registered members (6,739 male and 5,234 female), through institutional and operational mechanisms that enable them to seize market opportunities across the rice value chain.

Through this intervention associations like Vigaeni Farmers in Ifakara with 83 registered members (33 male and 50 female) have been able to reduce their input costs and aggregate their rice production to collectively obtain a higher market price in the past quarter. Vigaeni Farmers Association participated in NAFKA’s technical training programs including Good Agricultural Practices (GAP) training and Sell More For More™ (SMFM)- the participatory training program to develop association leadership by training association leaders in collective marketing principles, governance and recordkeeping. As a result, association members organized themselves and rented a warehouse to store 12 tons of paddy (unprocessed rice), which enabled them to delay the sale of their paddy and get Tsh 60,000 per 85 kg bag, representing a sale price 71% higher than 7 months ago. The association sold all 12 tons of the paddy produced. Samson Dimos, a member of Vigaeni Farmers Association shared, “I now see the benefits of selling collectively. Initially when selling individually to a local traders I had no storage facilities and had to sell my paddy immediately after harvest to prices as low as Tsh 30,000 per 85 kg. Now that I sell collectively with my fellow members, we can bargain better and afford warehouse facilities.” In addition to this, the NAFKA program has facilitated private sector service provider networks that include agro dealers, village-based agriculture advisors and Savings and Internal Lending Communities field agents. Farmer associations are linked to these service providers from which they can access capital, agricultural technical assistance and improved inputs such as seeds, fertilizers and agrochemicals. Through these linkages, Vigaeni Farmers Associations has been able to buy inputs in bulk and distribute to its members allowing them to save substantially in agricultural input costs.

The farmers’ association has agreed to add value to their rice through improved post-harvesting methods. The association has decided to build a warehouse with milling equipment from funds contributed by its members. Land has already been purchased and 827 bricks have been bought in preparation for building the warehouse. The warehouse will be used by the members of the association to stock their produce safely after harvest while waiting for the best collective selling price.

“Before training on GAP many association members were storing their produce in their homes and struggling with low yields due to unproductive traditional farming practices. But after learning and applying GAP the members’ yields have increased significantly and we are now storing our produce and practicing farming as business collectively,” said Josephine Liulika, Secretary of Vigaeni Farmers Association. She added, “SMFM training has enhanced collaboration and commitment amongst the members”.



SUCCESS STORY

USAID creates opportunities for farmers to progress

USAID “Progressive Farmer Development Program” helps farmers boost productivity and strengthens their capacity to compete in the marketplace.



Photo: Cosmas Kirenga

Sabina Masana is one of the thirty female farmers selected for the Progressive Farmer Development Program.

“Many farmers come to me seeking advice because they want their fields to look like mine. This gives me an opportunity to talk about the improved technologies I learned from NAFKA and encourage even the very poor farmer to use these technologies on their small plots to increase productivity.”

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While most Tanzanians are engaged in agriculture at the subsistence level, in Morogoro region, some smallholders have the potential to develop into medium-scale commercial farmers. These are farmers who own land, have access to credit, and are much less risk averse to the application of improved technologies to increase productivity and profitability. Despite these relative advantages, low yields due to inefficient traditional farming practices (as little as 1.2 tons/acre for rice and 0.5 tons/acre for maize) restrict further advancement into the market.

However, through training on Good Agricultural Practices (GAP) and with access to and use of high-quality agricultural inputs, this group of farmers can make a significant contribution to the agricultural sector in Tanzania by creating a more robust medium-scale commercial farming segment.

To facilitate the transition of these small-scale farmers, USAID’s Feed the Future NAFKA Staples Value Chain Activity initiated the Progressive Farmer Development Program in 2012. Through this pilot program, fifty-five small-scale farmers (55% women) were selected to receive GAP training, along with a production grant for expenses such as farm operation costs or improved seeds and fertilizers – in return for a commitment to train other farmers on the techniques and technologies they had learned. Selection of participant farmers was contingent upon their having traditional ties to farming and significant land on which to farm, as well as leadership potential to serve as facilitators for demonstrating good agricultural practices to other farmers.

Progressive Farmers used their own farms as learning platforms for improved technologies, showcasing planting techniques and corresponding yield increases compared to those of traditional practices, such as broadcasting with local seed that has been recycled for several years. This visualization helped bring the trainings to life and demonstrate that farming can be a commercially viable business. The Progressive Farmer network provided extension services to a total of 956 smallholder farmers (43% female), who have increased their own productivity and continue to share improved techniques with fellow farmers.

Says Sabina Masana, a Progressive Farmer from Kilombero district, “Many farmers come to me seeking advice because they want their fields to look like mine. This gives me an opportunity to talk about the improved technologies I learned from NAFKA and encourage even the very poor farmer to use these technologies on their small plots to increase productivity.” The concept of the Progressive Farmer Development Program pilot was successfully integrated into NAFKA’s Lead Farmer and VBAA models, programs that allow farmers throughout Morogoro region to harvest similar benefits.



SUCCESS STORY

Improved seed sows opportunity for rice farmers

Use of improved seed varieties increases both productivity and profitability for Tanzanian smallholder farmers.



Photo: Filibert Mzee

Seed producers at a demonstration plot in Kilombero District, observing the effects of using fertilizer in seed farming, after receiving GAP on fertilizer application.

“I can testify that there is a significant difference between farming in the improved way and farming in the old way.” Chetu Ommari, Rice seed producer

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Tanzanian smallholder rice farmers often use traditional seeds saved from past seasons to plant their fields each year. Since indigenous seeds have usually been recycled several times, most have lost potency or developed various diseases, resulting in low productivity. Reliance on weak and damaged seed with low yields constrains agricultural development. With access to improved seed, farmers can significantly increase the profitability of the agriculture they practice.

To increase the supply of improved seed – especially in the most rural areas – the USAID Feed the Future Initiative has provided training in Good Agricultural Practices (GAP) to facilitate the certification of 91 rice seed producers to grow and sell improved rice seed variety SARO 5 (TXD 306) either to neighboring farmers as Quality Declared Seed (QDS) or directly to companies for national distribution as certified seed. This has assisted 35 QDS producers (51% female) and 56 certified seed producers (43% female) in improving their own economic opportunities – while creating greater market access to this valuable input for Tanzanian farmers at the same time.

Rice producer Chetu Ommari’s yields increased six-fold while using improved seed in conjunction with GAP practices such as proper spacing and fertilizer application. She then decided to qualify as a seed producer herself. In her first year as a QDS producer, Chetu sold 2,300 kg of QDS to 105 farmers in her village, after which she graduated to a certified seed producer and entered into a contract to sell directly to a national seed company, TANSEED. She has tripled seed production and appreciates the security of a guaranteed market saying, “I can testify that there is a significant difference between farming in the improved way and farming in the old way.”

To date, the project’s 91 improved seed producers have sold 26,500 metric tons of QDS and 240 metric tons of certified SARO 5 (TXD 306), increasing both productivity and profitability for Tanzanian smallholder farmers. The QDS and certified seed producer programs expand market access to improved seed for Tanzanian farmers in even the most remote areas while simultaneously offering an alternative income source for qualifying rice farmers.

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