

REACH

Resilient Efficient Agribusiness Chains

Uganda

Annual Report

April-December 2017



Ministry of Foreign Affairs of the
Netherlands

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Acronyms

| | |
|--------------|---|
| AHHS | Annual Household Survey |
| CET | Common External Tariff |
| CSA | Climate-Smart Agriculture |
| DDP | District Development Plan |
| DLG | District Local Government |
| EKN | Embassy of the Kingdom of Netherlands |
| ERC | Eastern Rice Company |
| FaaB | Farming as a Business |
| FBG | Farmer Business Group |
| FG | Farmer Group |
| GAP | Good Agricultural Practice |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit |
| IFDC | International Fertilizer Development Center |
| IPM | Integrated Pest Management |
| IITA | International Institute of Tropical Agriculture |
| ISSD | Integrated Seed Sector Development |
| km | kilometers |
| LSB | Local Seed Business |
| MAAIF | Ministry of Agriculture, Animal Industry and Fisheries |
| M4P | Making Markets Work for the Poor |
| MELS | Monitoring, Evaluation, Learning and Sharing |
| MIFA | Mengiya Integrated Farmers Association |
| MIS | Management Information System |
| MOC | Memorandum of Cooperation |
| MOU | Memorandum of Understanding |
| MSMEs | Micro, Small, and Medium-Sized Enterprises |
| mt | metric ton |
| NAADS | National Agricultural Advisory Services |
| NAO | Stichting NAO Projecten |
| NARO | National Agricultural Research Organization |
| REACH | Resilient Efficient Agribusiness Chains |
| SSP | Spray Service Provider |
| TBD | To Be Determined |
| VSLA | Village Savings and Loan Association |

Resilient Efficient Agribusiness Chains in Uganda (REACH-Uganda)

Annual Report | April-December 2017

Introduction

The Annual Report for the Resilient Efficient Agribusiness Chains in Uganda (REACH-Uganda) project covers a nine-month reporting period from April to December 2017.

Significant progress was achieved during the period under review. The project conducted scoping and screening of 13 micro, small, and medium-sized enterprises (MSMEs) and project partners for potential inclusion in the project, alongside the development of a pipeline of potential partners for 2018 and beyond. At the same time the successful rollout of the project's field activities, resulted in direct engagement and training of over 18,000 farmers. During the reporting period, public-private partnership (PPP) infrastructure activities were launched in the 19 districts where the project operates, and the first three projects were identified. Participating farmer business groups (FBGs) reported average turnovers of approximately €9,000 from their commodity sales.

The potato value chain was particularly vibrant during the reporting period with a landmark introduction of new potato varieties, partners, and technology. In partnership with four Dutch potato seed producers (HZPC, Agrico, Stet, and Den Hartigh) and through a series of on-farm demonstrations, REACH-Uganda conducted the first commercial promotion of Dutch potato material in Uganda. This increased farmer awareness and demand for Dutch-developed potato varieties. Demand is now more likely to be met through local production since the entry of Namakwaland/High Grow Agri "Ug" farm into the ware and seed potato market.

The REACH-Uganda project, through its Memorandum of Cooperation (MOC) with Cycas/House of Seeds, has been instrumental in the initiation of testing the world's first approved True Potato Seed variety, Oliver F1, in Uganda. This represents a potential technological leap forward for farmers. Within the reporting period the REACH-Uganda project renewed its relationship with Stichting NAO Projecten (NAO). Resulting from past performance and strong relationship with NAO, an additional 17 varieties from five firms (HZPC, Agrico, Europlant, Meijer, and Den Hartigh) will now commence National Varietal Performance Trials.

In contrast to the potato sector, the opportunities in the rice sector were more limited. Developments in late 2017 indicated that rice traders are now willing to focus on developing local supply chains while supplementing supplies through imports. However, during the early part of the reporting period, the project encountered a number of obstacles that hindered progress. Continued uncertainty over the impact of the suspension of the Common External Tariff (CET) on rice inhibited partners' willingness to substantially commit to activities.

The reporting period also demonstrated key advances for the project’s operational system, with the development and rollout of the Monitoring, Evaluation, Learning and Sharing plan (MELS). This has helped improve the speed of data collection for some output indicators, which are now captured in ‘real time,’ in the Management Information System (MIS). This has enhanced the efficiency of management decisions. With support and guidance from the Embassy of the Kingdom of the Netherlands (EKN), the project completed the formulation of two of its cross-cutting strategies: Gender and Climate-Smart Agriculture. Both represent ‘hot-button’ topics which were initiated in 2017 and will feature prominently in REACH’s activities in the coming years.

Strong synergies are essential for the success of the REACH-Uganda project. During the reporting period, the project team worked closely with two EKN-supported projects, the URC-implemented Integrated Seed Sector Development Project + (ISSD+) and the International Institute for Tropical Agriculture (IITA)-implemented PASIC project. Linkage with the ISSD+ project has been helpful in developing the seed potato supply chain, especially for Quality Declared Seed. Working with the PASIC project has assisted the REACH-Uganda project to nuance its approach to Climate-Smart Agriculture (CSA) and landscape planning. Beginning in October 2017, the REACH project team also has been working closely with its sister project, Promotion of Nutrition-Sensitive Potato Value Chains (PNSP), funded by GIZ. This activity is focused in eastern Uganda on Mt. Elgon.

While 2017 was a productive year for REACH-Uganda, challenges and obstacles remain. Market system projects are sometimes considered “a holistic solution to unsustainable development.” The REACH project team believes that market system projects if implemented well, are more effective at accomplishing sustainable long-term change within markets. To overcome stakeholders’ reticence, project implementers must continually promote a mindset change. Stakeholders must be willing to approach the opportunities offered by the project with an open mind. Some potential stakeholders will continue to look for projects that offer short-term cash and/or material incentives. During the reporting period REACH-Uganda identified commercial partners with a longer-term vision of how they can benefit under the support offered by the REACH project, without direct cash investments.

Objective 1

To integrate market-oriented farmers and (farmer-led) agribusinesses into the commodity value chain using the pulling power of upstream lead firms or off-takers

Table 1. Objective 1 Targets and Achievements

| Indicator | Target (2017) | Achieved |
|--|---------------|-----------|
| Outcome 1.1: Market-oriented farmers aggregate and sell to lead firms | | |
| Output 1.1: 800 Farmer Groups (FGs) identified, selected, and legally registered (80% old, 20% new) | | |
| - # FGs registered with local authorities | - 800 FGs | - 339 FGs |

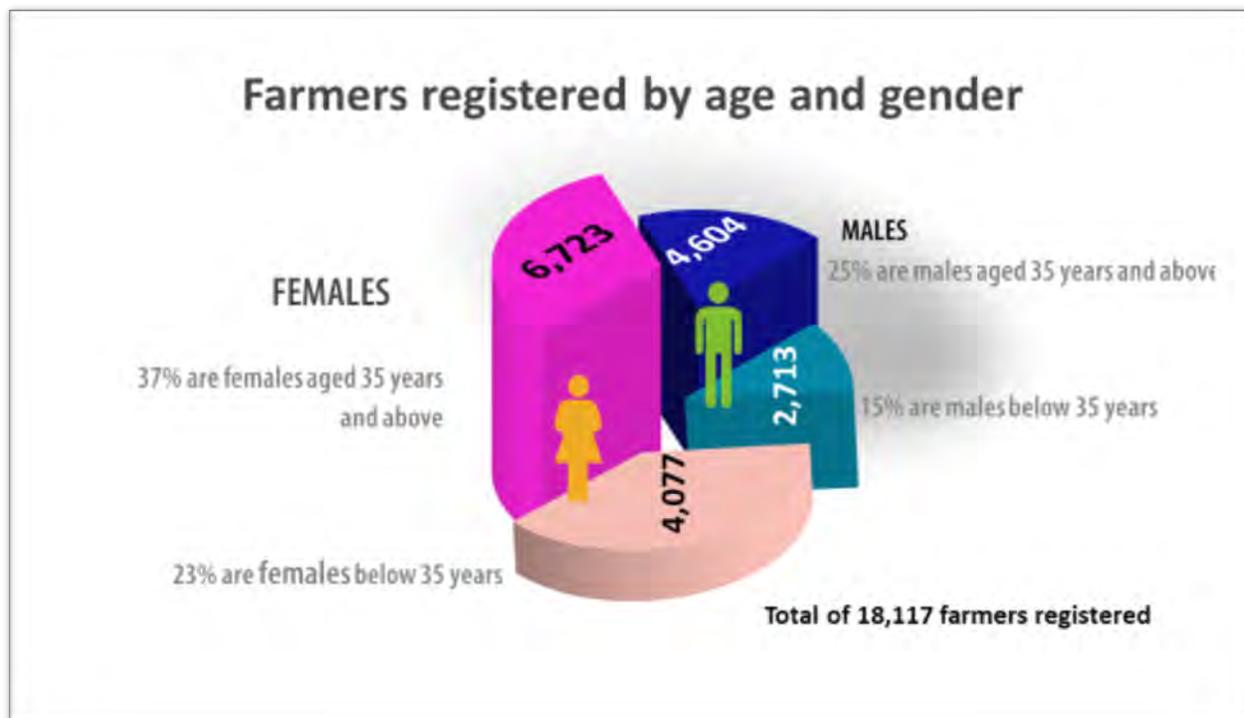
| Indicator | Target (2017) | Achieved |
|---|----------------------|--|
| - # FG members (disaggregated by gender and age category) | | - Total FG membership: 18,117 - 10,800 females, of which: o 6,723 < 35 years o 4,077 ≥ 35 years - 7,317 males, of which: o 4,605 are < 35 years o 2,712 males ≥ 35 years |
| Output 1.2: Lead firms/MSMEs screened and a minimum of 5 selected | | |
| - # MSMEs identified and screened through Making Markets Work for the Poor (M4P) approach | - 10 | - 13 |
| - # MSMEs have signed an MOC with the project | | - 5 |
| Output 1.3: 174 FBGs gain skills in organization, governance, and business management | | |
| - # FBGs receiving training in group governance and business management | - 174 | - 142 FBG |
| - # FGs receiving training in group governance and business management | - No target for 2017 | - 154 FG |
| Output 1.4: Develop and formalize business cases with action plans with 5 lead firms | | |
| - # action plans developed and activated with FBGs | - 5 | - 1 |
| - # action plans developed and activated with MSMEs | - 5 | - 5 |
| Output 1.5: Facilitation of 50 linkages between FBGs, intermediary agents, and lead firms | | |
| - # FBGs' profiles used by MSMEs | - 50 | - 8 |
| - # business cases developed and formalized between MSMEs and FBGs | - No target for 2017 | - 11 |
| Outcome 1.2: Lead firms/SMEs transfer primary processing, quality control activities, and employment down the chain in their business models | | |
| Output 1.6: 4 Lead firms/SMEs identify opportunities for FBGs in primary processing and quality control | | |
| - # trainings conducted between MSMEs and FBGs | - 4 | - 8 |
| - # investments made between MSMEs and FBGs | - No target for 2017 | |
| Output 1.7: 10 work placements created at FBGs and lead firms/SMEs | | |
| - # work placements with FBGs (for young graduates) | - 10 | - 0 |

Output 1.1

Using information collected during the CATALIST project in Uganda (2012-2016) and additional information provided by District Local Governments (DLGs), a total of 890 farmer groups (FGs) were compiled in the Management Information System (MIS) for review. Of these, 814 FGs were reviewed through a FG survey and 334 provided valid certificates of registration at the time. The remaining groups either had expired certificates of registration or could not produce any certificate at the time of review. Total membership for the reviewed groups was

18,117, of which over 10,000 were female. The combined total for males and females under the age of 35 was almost 7,000 members.

Further analysis revealed that, during the reporting period, a number of the FGs were economically active and engaged. FGs in eastern Uganda reported selling an average of 4.9 metric tons (mt) of rice collectively, while farmers in southwestern Uganda sold 7.3 mt of potatoes collectively. Additionally, 144 FBGs reported that they were conducting primary processing activities on the commodities they were selling. This included grading, sorting, and washing.



Output 1.2

Scoping (identification of potential interventions/partners) and screening (assessment of the suitability of potential partners/interventions) are ongoing processes conducted through 75% of the lifecycle of a market systems project. Screening, in particular, can be attritional, with a large percentage of firms/interventions failing to meet project criteria. In the reporting period the REACH project screened 13 potential interventions, of which five met the project criteria, and MOCs were signed with MSMEs.

Output 1.3

During the reporting period, the primary objective for activities under this output was to ensure that the REACH project maintained contact with FBGs that it had worked with previously. This was in order to continue building their skills and to explain the REACH project and its approach to the membership of these structures. Training on Farmer Institutional Development and Group Governance was successfully completed for 142 of the 174 FBGs targeted. The contracted agents experienced some group dropout after it became clear to farmers that there would be no direct

‘giveaway by the project. In addition, the project trained the members of 154 FGs; these were groups new to IFDC interventions. Group members received training on Group Governance and Farmer Institutional Development, which are important precursor trainings.

Output 1.4

During the reporting period, a total of five MOCs and action plans were developed and signed with the following firms: SWT Tanners, Cycas House of Seeds, Namakwaland Farm, Psalms Confectionary (Annex 1), and Responsible Suppliers. MOCs with these firms were signed at various points during the year. See Table 2 for more information.



Potato crisp manufacture taking place at Psalms Confectionary, MSME partner of the REACH-Uganda project



Denis Ngabirano, Managing Director of Psalms Confectionary, showing his branded product

Table 2. Signed Memorandum of Commitments

| Partner | Sector | Title of Intervention | Objective |
|---|--------|---|--|
| SWT Tanners | Rice | Market linkage between SWT and rice farmers in Eastern Uganda | Provide markets at a fair and agreed price for farmers for rice. |
| HighGrow Agri Ltd. (HGA)/ Namakwaland Farm | Potato | Commercialization of Dutch potato varieties in Uganda through setting up modern production and processing facilities for both ware and seed potato production and linking them with small-scale farmers | Improved marketing channels for Dutch-developed seed potato and outgrower development. |

| Partner | Sector | Title of Intervention | Objective |
|--|--------|---|--|
| Cycas International and Bejo Zaden B.V | Potato | Trials on True Potato Seed (TPS) in Uganda | Increased availability of high-yielding and clean potato planting material in Uganda. |
| Psalms Food Industries Ltd. | Potato | Market linkage and quality improvement of Irish potato crisps | Increased market access availability of potato for crisps production. |
| Responsible Millers | Rice | Facilitation of business engagement among farmer business groups (FBGs), Responsible Suppliers Ltd. and Microfinance Support Centre | Increased availability of finance for FBGs and increased supply of paddy rice for Responsible Millers. |
| Stichting NAO Projecten | Potato | On-farm promotion of Dutch potato varieties in Uganda | Dutch potato varieties are approved by Uganda authority. |

By the end of 2017, only the intervention with Responsible Suppliers had matured to the point where they were working directly with FBGs. It is anticipated that, during 2018, the other firms will engage with REACH-supported FBGs. Table 3 lists potential partners undergoing screening.

Table 3. Potential Partners in Pipeline

| Partner | Sector | Title of Intervention | Objective | Status as of March 2018 |
|---|--------|---|--|-------------------------|
| Uganda Breweries Ltd. | Barley | Capacity building and skilling of the barley farmers in Kapchorwa district in Eastern Uganda | Improved business process and productivity of farmers working with UBL and introduce potato into the crop rotation system. | In progress |
| Pearl Rice | Rice | Capacity building and market linkage between Pearl Rice Ltd. and farmers in Eastern Uganda | Improved business process and productivity of farmers working with Pearl Rice | In progress |
| Eastern Rice | Rice | Market linkage between Eastern Rice Company (ERC) and farmers in Eastern Uganda | TBD | In progress |
| Upland Rice | Rice | Profiling rice FGs and FBGs in Eastern Uganda; capacity building and strengthening linkage with Upland Rice Millers | Increased productivity through capacity building of the farmers | In progress |
| Mengiya Integrated Farmers Association (MIFA) | Potato | TBD | TBD | In progress |
| Rice Millers Council | Rice | TBD | TBD | In progress |

| Partner | Sector | Title of Intervention | Objective | Status as of March 2018 |
|------------------------------------|-------------|---|---|-------------------------|
| Divine Masters Ltd. | Rice | Capacity building of smallholder rice farmers and strengthening market access through private sector partner | Increased productivity | In progress |
| Katiba Traders | Potato | Strengthening market access for smallholder potato farmers and small potato processors | Improved business process and linkage with the farmers | In progress |
| Uganda Crop Care Ltd. | Agro-inputs | Increased availability of quality agro-inputs for rice and potato growers | TBD | In progress |
| NARO/NAADS/ screen house owners | Potato | Enhancing farmers to generate clean seed potato through screen houses for increased potato production in Uganda | Improved availability of high-quality seed potato through screen house establishment and multiplication | In progress |

Output 1.5

Despite a slower than anticipated commencement of action plan components, eight of the proposed 50 linkages were achieved. Some of the delays experienced were due to unfamiliarity with the implementation methodology on the part of lead firms and MSMEs. This led to protracted negotiations during the development of MOCs as firms sought capital equipment, working capital, etc., which are not supported in a market systems-style project. During 2018, as the action plans with lead firms speed implementation, the project anticipates that a significantly higher accomplishment rate will be achieved.



Output 1.6

Progress was registered under this output despite being affected by the same delays as noted under Output 1.5. Responsible Suppliers conducted trainings with FBGs that they had developed sales agreements with on agronomy and post-harvest handling. As project activities ramp up in 2018, it is anticipated that there will be an acceleration of this type of training, and responsibility for quality control and primary processing will be transferred to FBGs.



Milling activities at Responsible Suppliers, contracted off-taker from Mbale-based rice producers trained by the REACH-Uganda project



Branded product from Responsible Suppliers using rice supplied by REACH-Uganda-supported farmers

Output 1.7

During the reporting period the administrative process for placement of graduate interns was completed. The interns will report for duty in 2018, and currently, the process is underway for the second cycle. Slower-than-anticipated development of MOCs with MSMEs and other bodies meant that placement opportunities took longer to be identified. Additionally, delays were experienced during the candidate shortlisting process due to the high volume of individual applications, which exceeded 700.

Objective 2

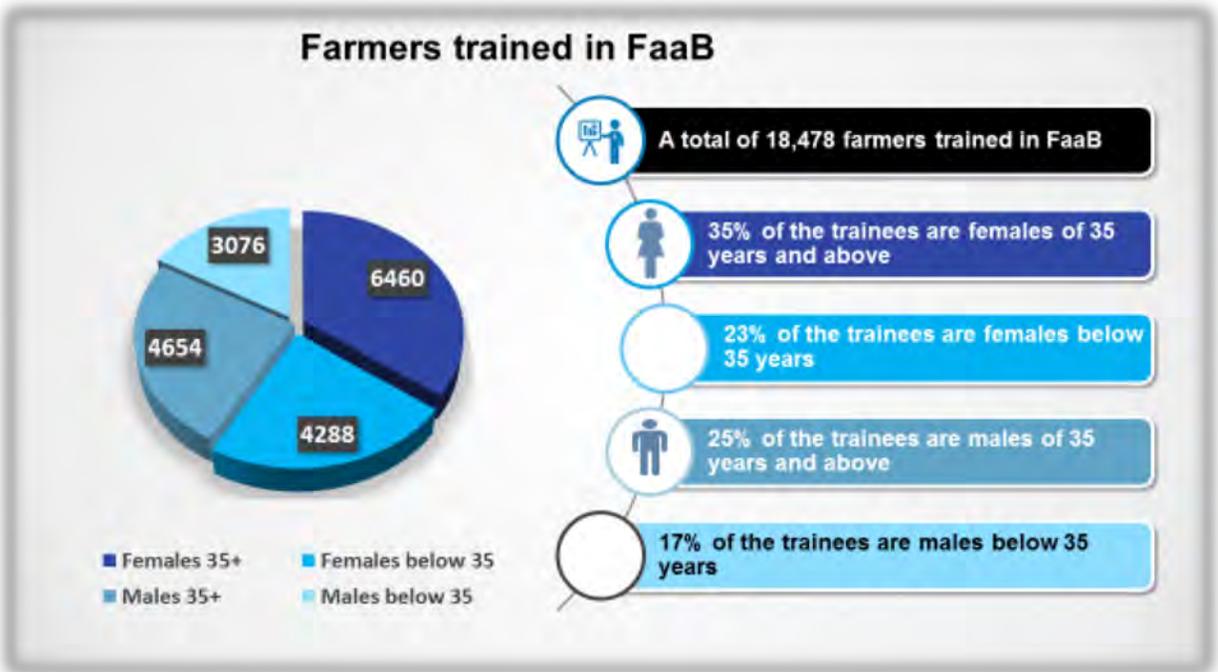
To enhance productivity of market-oriented farmers in the commodity value chains

Table 3. Objective 2 Targets and Achievements

| Change/Indicator | Target (2017) | Achieved |
|---|--------------------|---|
| Outcome 2.1: Farmers increase their yield (potato and rice) to at least 65% optimal level | | |
| Output 2.1: Farmers are trained in Farming as a Business (FaaB) and Good Agricultural Practices (GAPs) | | |
| # farmers trained in FaaB (disaggregated by gender and age category) | 18,000 | T: 18,478 - F: 10,748 - M: 7,730 - < 35: 7,364 - ≥ 35: 11,114 |
| # farmers trained in GAPs (disaggregated by gender and age category) | 18,000 | T: 15,167 - F: 8,862 - M: 6,305 - < 35: 6,008 - ≥ 35: 9,159 |
| Outcome 2.2: Farmers adopt and use resilience strategies | | |
| Output 2.2: Farmers are trained in resilience strategies | | |
| # farmers trained in income diversification | 18,000 | T: 8,910 - F: 5,227 - M: 3,683 - < 35: 3,378 - ≥ 35: 5,532 |
| # farmers trained in access to finance | 18,000 | 0 |
| # farmers trained in joint decision-making | 18,000 | T: 4,766 - F: 2,801 - M: 1,965 - < 35: 2,949 - ≥ 35: 1,817 |
| # farmers trained in relevant climate-smart agriculture practices/techniques (all disaggregated by gender and age category) | 18,000 | T: 9,566 - F: 5,612 - M: 3,954 - < 35: 3,657 - ≥ 35: 5,909 |
| Output 2.3: FGs and FBGs supported to develop business plans | | |
| # FBGs trained in business plans | No target for 2017 | 118 |
| # FGs trained in business plans | No target for 2017 | 0 |
| # FBGs using business plans | No target for 2017 | 27 |
| # FGs using business plans | No target for 2017 | 0 |

Output 2.1

Over 18,000 farmers were trained in Farming as a Business (FaaB). Over 58% of farmers trained were women and 40% were youths. The training covered several key areas including: price determination and negotiation, projected income statement, recordkeeping, and cost-risk reduction strategies. The understanding and adoption of the FaaB approach are key in shifting farmers' mindsets from farming merely as a livelihood to a more business-minded approach.



In addition, over 15,000 farmers were trained in Good Agronomic Practices (GAPs) for rice and potato. Over 58% of the trainees were women, and 40% were youths. Post-training interviews with farmers revealed that their understanding of key GAPs in rice and potato has improved to the extent that they would like to see the project focus on the agronomy of supplementary or ancillary crops going forward. The reduction in participation toward the end of the training is an indicator that farmers who were part of the previous CATALIST project feel that they no longer need further training in this area. Data from the AHHS also revealed that 84% of the farmers had adopted four out of nine GAPs, which indicates that the knowledge gained is being put into practice at the farm level. Moreover, 16% of the farmers are now meeting the optimal productivity levels (2 mt/acre for rice and 5.5 mt/acre for potato) versus the baseline of 10%.

The FaaB and GAP training was conducted by a combination of implementing partners and individual consultants. Data from the REACH MIS and follow-up exercises conducted revealed that individual trainers performed better than implementing partners on the quality of training delivery and number of participating farmers. This led the project team to rethink the training delivery strategy of the project with a shift toward individual trainers that would be more embedded in the agribusiness structures (under Objective 1 of the project) where possible.

Output 2.2

The project improved resilience at the household level by targeting four key components of household resilience: income diversification, access to finance, joint decision-making, and CSA. Over 9,000 farmers were trained in key approaches in CSA under the two pillars of improved productivity and short-term adaptation to climate change. Data from the AHHS revealed that farmers were using at least three CSA approaches/techniques in 2017, which indicates early signs of adoption of some key practices.

Furthermore, 8,910 farmers were trained in income diversification and 4,716 on joint decision-making. Farmers were not trained in financial access in the reporting period due to the partnerships with financial institutions that have not been fully developed and the financial literacy manual had not been customized to the projects requirements. As such, the financial literacy training that was done was focused on FBGs and will be rolled out to FGs in 2018 (see Output 3.1).

Objective 3

To improve availability and uptake of public and private support services related to the core commodity value chains

Table 4. Objective 3 Targets and Achievements

| Indicator | Target (2017) | Achieved (2017) |
|--|--------------------|-----------------|
| Outcome 3.1: FGs and FBGs achieve financial objectives | | |
| Output 3.1: FGs, FBGs, agro-dealers have received financial literacy training | | |
| # FBGs received finance training | 87 | 153 |
| # FGs received finance training | 337 | 0 |
| # Agro-dealers received finance training | 20 | 0 |
| # VSLAs established and trained | 337 | 705 |
| Output 3.2: FGs, FBGs, support services, and agro-dealers are linked to financial service providers | | |
| # FBGs accessing loans | No target for 2017 | 23 |
| # FGs accessing loans | No target for 2017 | 71 |
| % Farmers accessing loans | No target for 2017 | 39% |
| # Spray service providers accessing loans | No target for 2017 | 0 |
| # Equipment providers accessing loans | No target for 2017 | 0 |
| # Agro-input dealers accessing loans | No target for 2017 | 0 |
| # MOUs between financial institutions and the project | No target for 2017 | 1 |
| Outcome 3.2: Farmers, FGs, and FBGs make increased use of support services | | |
| Output 3.3: Investments made in public infrastructure through match funding with DLG/private sector | | |
| Amount invested in public infrastructure (roads, irrigation, storage) | €1.5m | €0.44m |
| # km of roads constructed and rehabilitated between farmers and markets | No target for 2017 | 0 |
| Output 3.4: Private sector is supported to produce clean potato seed and supply the Ugandan market | | |
| # new Dutch potato varieties registered | No target for 2017 | 2 |
| # businesses introducing Dutch potato varieties to Ugandan market | 2 | 1 |
| # seed multipliers linked to Dutch businesses | N/A | 1 |
| # mt of clean seed potato produced and supplied per year | 2,000 mt | 163 mt |
| Output 3.5: FBGs invest in mechanization packages | | |
| # FBGs that have received loans to invest in rice mechanization | No target for 2017 | 2 |
| Output 3.6: MSMEs provide private extension services | | |

| Indicator | Target (2017) | Achieved (2017) |
|--|--------------------|-----------------------------------|
| # trainings provided to MSME extension workers on GAPs | No target for 2017 | Deferred to 2018 as per work plan |
| # extension agents employed by lead firms | No target for 2017 | Deferred to 2018 as per work plan |
| % farmers accessing extension services provided | No target for 2017 | 3% |
| Output 3.7: Youth entrepreneurs supported to be spray service providers (SSPs) | | |
| # youth spray service providers trained | 30 | 27 |
| # youth sprays service providers operating a functioning business | No target for 2017 | Deferred to 2018 as per work plan |
| Output 3.8: Identification and development of bylaws and ordinances for rice and potato | | |
| # bylaws and ordinances identified and put forward for development | No target for 2017 | 2 |

The project is supporting several key service functions that are essential for improved access and uptake of sustainable services for market-oriented farmers and MSMEs. These are financial services, infrastructure, agro-input provision/services (seed potato, spray services), mechanization (rice), and extension services.

Although it is early in the project cycle, results from the AHHS revealed that farmers (through either their FBGs or FGs) are starting to invest in key support services, including financial and mechanization services. This is a good indication of future sustainability and will need to be built upon throughout the project. At the same time, activities in infrastructure were slightly delayed, and the extension component was deferred until 2018; therefore, limited progress was recorded in these components.

Outputs 3.1 and 3.2

REACH is working to improve financial literacy and financial access for market-oriented farmers, agro-dealers, and spray service providers (SSPs) in partnership with key financial institutions. In period under review, the project trained the leadership structures of 153 FBGs on several key areas of Financial Literacy and Business Skills, including: budgeting and financial planning, savings and resource mobilization, financial service providers and their products, essential business skills, and developing and operationalizing business plans. The training manual for financial literacy was adopted from the Bank of Uganda/GIZ's *Financial Literacy for Smallholder Farmers* manual, and the business skills manual was developed with a consultant from Makerere University. Since these were new areas of intervention for the REACH project, a post-training farmer feedback exercise was conducted. The feedback revealed the areas in which farmers had been able to learn and implement new knowledge and areas that they considered less relevant, such as crop insurance. Some practical areas of implementation reported in the post-training exercise are: saving, investment (in business), loan management, and customer care. With a simplified manual in place, the Financial Literacy and Business Skills training will be rolled out to farmer groups and agro-dealers in 2018.

Post-training farmer feedback also revealed that Village Savings and Loan Associations (VSLAs) were a key preference of farmers to ensure they were able to save and borrow for some of their immediate needs. Data from the AHHS revealed that 705 FGs had functioning VSLAs. These VSLAs are important for the coherence and continuity of the farmer groups and will be further strengthened in 2018.

To improve financial access, the project will partner with a number of financial institutions that are active in Eastern and Southwestern Uganda and are able to offer farmer-appropriate financial packages. A scan of potential financial institutions revealed several potential partners, including DFCU Bank, Post Bank, Centenary, and Microfinance Support Centre. The partnership with DFCU was formalized, and others will come on board in 2018.

One of the challenges engaging with the financial institutions is an expectation that the project will subsidize the cost of lowering the interest rates for smallholder farmers, which goes against the ethos of the market systems approach. This requires efforts in informing and negotiating with financial institutions before contributions to partnerships can be agreed upon. Despite this, over 39% of project farmers accessed loans in 2017, with 71 FGs and 23 FBGs accessing loans at the group level.

Output 3.3

The project is seeking to improve public infrastructure through leveraged investments with the public sector. Initial meetings were held with 17 out of 19 District Local Governments (DLGs) in April and May 2017. During these meetings, the DLGs were sensitized on the criteria for selection of infrastructure projects, which included coverage in a District Development Plan (DDP); the number of farmers reached; access to markets; cost-share at 50%; the lowest cost per beneficiary reached; and a sustainability plan.

Following the meetings with the DLGs, districts were requested to submit their proposals' for priority infrastructure projects that would meet the criteria. Letters from nine districts were received by August 2017 and potential projects underwent a screening tool to enable the development of a shortlist. Most districts prioritized road rehabilitation projects over other productive infrastructure, such as irrigation or storage. The rehabilitation of three roads in Kween, Kanungu, and Butaleja emerged as the preferred projects after further consultation with the Districts.

A consultant engineer was sourced in late 2017 to undertake a feasibility study of the three road projects. It is anticipated that work to rehabilitate 44 kilometers (km) of roads will start in the second quarter of 2018. To accomplish this, a total of €0.44 million has been earmarked.

The approach adopted by the project, which is in line with market systems, is to engage in an equal cost-share partnership with the DLGs based on a 50-50 contribution. The challenge is that the DLGs may be unwilling or unable to provide this level of contribution (especially if it is a cash contribution). This resulted in the project team selecting DLGs that were willing to contribute and adjusting the criteria to allow in-kind contributions (equipment, personnel, and materials) rather than cash only.

Output 3.4

The project will improve access to clean seed potato available through two routes: varietal testing and marketing of Dutch varieties and multiplication of local varieties through the screen house/local seed business (LSB) system. A cost-share partnership was negotiated with the National Agricultural Research Organization (NARO) for the testing of an additional 17 Dutch varieties from 2018 to 2020. Moreover, two additional Dutch varieties (Taurus and Panamera)

were accepted by NARO/Ministry of Agriculture, Animal Industry and Fisheries, resulting in a total of nine Dutch varieties approved during the project period. The challenge may be getting these approved varieties onto the Ugandan market. Namakwaland/High Grow Agri has expressed an interest in multiplying three Dutch varieties, some of which are likely to be made available as seed for other farmers to purchase during 2018.



Representative of Den Hartigh potato seed exporter at Kisoro Farm Demonstration

Plot overview of harvest activities at Kisoro farmer demonstration site

In addition, the project has continued to invest time and resources in building the capacity of six screen house owners in Southwestern Uganda to improve the production of minitubers. The screen house operators were trained in business skills, constitution development (for a screen house owners association), and the provision of hands-on technical support.

Over 128,193 minitubers were produced by the screen house businesses in 2017, which was multiplied into 163 mt of pre-basic and basic seed. Part of the seed sold in 2017 generated a total of €22,511 collectively. Discussions were held with the Integrated Seed Sector Development – Plus (ISSD+) project on linking the screen house owners to LSBs who will purchase the basic seed to multiply into quality declared seed for selling to ware farmers.

Outputs 3.5 and 3.6

It has been challenging to find genuine private sector partners providing mechanization or extension services capable of passing the project’s screening process. Regarding mechanization, the project is partnering with DFCU, which will cover some financial services to farmers to invest in mechanization; however, this is still at the preliminary stages. By the end of 2017, a total of 34 FBGs were investing in rice mechanization; some of these investments were through linkages to formal financial access and some used internal savings. At this stage, the investment is mainly for the hire of services (ox-plowing) rather than the purchase of machinery/assets. Regarding extension services, one MSME (Responsible Suppliers) partner is investing in the provision of training and advice to farmers; therefore, this will be a key area of partnership intervention for 2018.

Output 3.7

In partnership with CropLife Uganda, a total of 27 SSPs from Southwestern Uganda were trained on integrated pest management (IPM) under Output 3.7. The objectives of the training were to equip the SSPs with knowledge on factors influencing pest management and the IPM circle and to equip SSPs with skills to correctly apply IPM techniques. By the end of 2017, the 27 SSPs were providing crop protection spray services to 1,188 clients, which is an average of 44 clients per SSP.



Integrated pest management training for spray service providers in Kisoro District



Participants engaged in a landscape mapping exercise in Tororo District

Output 3.8

The project seeks to improve the regulatory environment in place at the district level in relation to the rice and potato value chains. The district of Tororo was initially selected given the synergies that could be created with IITA and the effects of climate change (particularly drought) that were apparent. Two ordinances were put forward for development – Watershed Management and Counterfeit Inputs – which will be operationalized in 2018.

Cross-Cutting Issues

Gender and CSA are cross-cutting themes that are mainstreamed into the project. Following the program-level gender strategy provided by the EKN, the REACH project engaged a gender expert to develop a Gender Action Plan (see Annex 2). The REACH project will focus mainly on the promotion of access to resources and agency in decision-making in its mainstreaming approach. The consultant was able to assess the current gender mainstreaming training materials and propose where improvements were required. While the development of the Gender Action Plan is ongoing, the project was able to train 4,766 farmers on the introduction to gender mainstreaming.

Results from the AHHS revealed that 57% of the female rice farmers and 77% of female potato farmers have engaged in most or all of the decisions made at the household level. This is a substantial increase from the baseline figures of 40% and 49%, respectively.

On the cross-cutting theme of CSA, REACH recognizes the importance of climate change future-proofing of project interventions. The project is promoting key CSA techniques to smallholder farmers under Output 2.2; however, the project also recognizes the need to understand the key climate change issues at the immediate policy level (DLGs).

In partnership with IITA, the REACH project facilitated two district-level agro-ecological landscape mapping exercises in Kisoro and Tororo. During the workshops stakeholders identified major enterprises, constraints, solutions, and opportunities for adoption of CSA practices at the farm, household, and market/policy levels. In 2018, action plans will be operationalized by the key actors, including DLG, projects, and the private sector. See Annex 3 for Landscape Map and Report from the Tororo District landscaping exercise.

Lessons Learned

- Market Systems style projects takes time for actors to understand and requires ongoing sensitization. During the first nine months of project implementation, the team faced the challenge of introducing a new methodology that is inherently different from the traditional project approach. Farmers, MSMEs, and public sector departments are used to input-rich, direct-intervention projects. It has taken time for these partners to see the benefit of the Market Systems approach, which is more facilitative and offers technical assistance rather than grants. The project accepts that this requires more intensive and ongoing sensitization (particularly at the farmer and MSME levels) on how to create longer-term impact through market-level interventions with less emphasis on short-term gains. Now that there is a practical example of an active partnerships with a MSME that demonstrates how farmers will benefit, this approach should be more translatable at the grassroots level going forward.
- Due to the underperformance of partners responsible for farmer training, the project will rethink its strategy. In the reporting period, the project provided training on key areas, such as GAPs, FaaB, gender, CSA, financial literacy, and business skills through implementing partners or contracted agents. Since the REACH project now has a functional MIS in place (through the real-time Kenga platform), the training figures reported by implementing partners have been verified with discrepancies identified faster. At the same time, individual consultant trainers performed better in terms of the quality of training and will be preferred going forward. For sustainability purposes, the project recognizes the need to embed these individual training services within the public and private sector actors (and will focus on that in 2018 and onward) rather than the shorter-term measure that was employed.
- The public sector prefers in-kind cost-sharing instead of cash cost-sharing. For the DLGs, it was originally anticipated that districts would provide a 50% cash contribution to the infrastructure projects selected. After initial meetings with the districts, it was realized that funds for roads were administered at the Central Government level and the districts only had a budget for annual road maintenance. The initial response from DLGs to submit their priority projects was limited, with only one district willing to invest a small percentage of cash into the partnerships. Subsequently, the project reduced the stipulation from cash to in-

kind (but monetized) contributions and received an improved response from the districts. The project will still push for 50% monetized contribution either through road equipment (which most districts now have) and or materials.

- The suspension of the CET on rice has stagnated investment by MSMEs in local supply chains. This has had a detrimental impact on the number and depth of project partnerships in the rice sector as MSMEs tend to reorient their business model toward importation of cheaper rice from Pakistan. Despite this, through the Market Systems approach, the project has found a few genuine partners in the rice sector that are looking at the medium- to a longer-term timeframe rather than short-term gains. Furthermore, the REACH project has supported efforts to lobby for the reactivation of the CET at the central level.
- Experience in 2018 has shown that a March deadline for the Annual Report of the preceding year is too early to allow for complete data collection of the results generated from activities during the reporting period. While the project's real-time data collection system has created greater efficiencies in collecting data on training activities, all other data generated from AHHS, annual FG and FBG surveys has to be collected, collated, and analyzed manually. The project implementers' would like to request a revised reporting deadline of end of April annually.

List of Annexes

Annex 1: Concept Note and Action Plan for Psalms Food Industries

Annex 2: Gender Action Plan

Annex 3: Landscape Map and Report from Tororo District Landscaping Exercise

REACH

Resilient Efficient Agribusiness Chains

Uganda

Annual Report Annexes

April-December 2017



Ministry of Foreign Affairs of the
Netherlands

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Annex 1. Concept Note and Action Plan for Psalms Food Industries

Integrating Market-Oriented Farmers and Farmer-Led Agribusiness into the Potato Value Chain

Intervention Area: Potato

Background

The Government of Uganda's National Development Plan (NDP II), Uganda Vision 2040, Agriculture Sector Development Strategy and Investment Plan (DSIP 2009/10-2014/15) and the subsequent Agriculture Sector Development Strategy (2015-16-2019/20) identified potato as a priority commodity reflecting investment programmes in production and productivity and market access and value addition. The agriculture sector remains a major sector for the socio-economic development of Uganda. The main thrust of the policy frameworks is to address the existing bottlenecks in the economy that are hindering the transformation of the agriculture sector into an industrial value-added exports sector. This includes the continued existence of the gaps between production and processing for enhanced value addition, a scenario attributed to supply-side constraints for raw materials; the low availability of raw materials is a continued result of high post-harvest losses, poor markets, and low farmer incentives to invest in commercial primary production. This proposed intervention intends to adequately develop an inclusive model that can be used as a basis for farmers to access markets and for processors to access sufficient quantity of quality material inputs for enhanced potato value addition.

The International Fertilizer Development Center (IFDC) is a public international non-profit organization addressing food security, the alleviation of global hunger and poverty, environmental protection, and the promotion of economic development and self-sufficiency. IFDC, through the CATALIST project with support from the Embassy of the Kingdom of the Netherlands (EKN) has constructed eight screen houses for farmers, which have shown very good results.

The Resilient Efficient Agribusiness Chains (REACH-Uganda) project is an innovative four-year agribusiness initiative proposed by IFDC and supported by EKN. The project will improve market engagement for 40,000 market-oriented farmers, strengthen household resilience, and deepen the availability of agriculture support services for farmers and businesses. The Making Markets Work for the Poor (M4P) methodology has been integrated fully into REACH-Uganda's objectives to achieve full engagement with the private sector and sustainably and favourably integrate 40,000 smallholder farmers into commercial supply chains. Using this methodology and new partners, the REACH-Uganda project will draw on lessons learned and best practices from the CATALIST-Uganda project. The project is working on Irish potato and rice value chains in two regions of Uganda, Eastern and Southwestern, and has the following objectives:

Objectives

Objective 1: To integrate market-oriented farmers and (farmer-led) agribusinesses into the commodity value chain using the pulling power of upstream lead firms or off-takers

Objective 2: To enhance productivity of market-oriented farmers in the commodity value chains

Objective 3: To improve availability and uptake of public and private support services related to the core commodity value chains

Problem/Gap Analysis

Smallholder farmers and farmer business groups that are engaged in potato farming have no access to ready markets and do not make well-informed decisions in managing and marketing their produce due to limited skills and lack of access to market information. The farmers are thus constrained with lack of reliable markets for their produce.

Psalms Food Industries lacks efficient and sustainable supply of quality potato to enable the company to increase and commercialise production operations of the processing plant for profitability. The company has challenges in dealing with post-harvest storage. The products that this company develops lack visibility in the market. In addition, according to the assessment, Psalms lacks business management skills.

Intervention Objective

To enhance productivity of potato market-oriented farmers and agribusinesses and integrate them into the potato value chain using the pulling power of upstream lead firms or off-takers

Business Model

The proposed intervention is intended to be a win-win situation for the farmers and Psalms Food. It is focused on building the farmers' capacity in both business and farm management and linking farmers to a ready market that offers fair prices for their produce. Psalms Food, on the other hand, will benefit from a sustained supply of quality potatoes to enable commercialization of their production plant. They will increase their products' visibility in the market through proper branding and will acquire management skills that will help better their business.

Activities

This proposed intervention is focused on an inclusive model that demonstrates the benefits of working together to promote development and will comprise the following main activity areas:

Activity 1: Strategic planning with Psalms Food

This will be a two-day activity to review Psalms' business model, complete a needs assessment, and carry out a strategic planning activity:

- 1) Establish their real business issues
- 2) Identify viable solutions to those issues

- 3) Develop a work plan for Psalms Food
- 4) Establish and agree on roles for each partner, stating clearly who does what and who pays.

Activity 2: Brand concept development for Psalms Food Industries Ltd.

- 1) Develop a terms of reference (ToR) for brand concept development
- 2) Identify and engage an agency to develop the brand concept
- 3) Develop sample marketing merchandise
- 4) Develop a quality manual

Activity 3: Product process improvement

- 1) Identify and engage needed personnel
- 2) Evaluate production processes and recommend necessary improvements to improve the process
- 3) Assess factory setup
- 4) Develop a product manual

Activity 4: Identify a potato variety suitable for crisps

- 1) Share the available information on approved potato varieties in Uganda
- 2) Select the variety Psalms requires
- 3) Identify farmers to grow the selected variety

Activity 5: Develop and implement a business and marketing plan

- 1) Engage a consultant to develop a business plan
- 2) Engage a consultant to develop a marketing plan
- 3) Identify and engage a consultant to develop a quality assurance manual

Activity 6: Provide extension services

- 1) Identify two interns to offer extension services
- 2) Train the interns
- 3) Link the interns with farmers and Psalms
- 4) Follow up to assess progress

Activity 7: Intervention M&E

- 1) Develop the intervention logical framework
- 2) Develop the intervention measurement plan
- 3) Discuss and agree with Psalms Food on the data to be collected
- 4) Develop the data collection tools
- 5) Monitor the intervention progress/challenges/lessons learned, etc.

Activity 8: Launching new brand

- 1) The new Psalms brand appears in the market
- 2) Marketing activities begin (flyers, aprons, etc., as outlined in the marketing plan)

Activity 9: Farmer engagement

- 1) Identification and preparation of farmers
- 2) Farmer workshop – management and farm needs assessment
- 3) Farmer workshop – training on expectations and how the partnership will work

Activity 10: Farmer training

- 1) Introduction to modern farming methods
- 2) Advise farmers on the production system and quality control
- 3) Provide training on gaps identified: business skills training/financial literacy/climate-smart practices

Activity 11: Establishment of a potato storage facility (factory-based)

- 1) Construction and installation of a potato post-harvest handling demonstration centre
- 2) Organise visits to the demo centre for farmers
- 3) Encourage other regions to visit the centre and scale it up to their regions

Activity 12: Linking Psalms to Market

- 1) Identify potato product suppliers and sellers and link Psalms to them

Activity 13: Transition phase

REACH will initially facilitate and oversee the process up to the implementation phase. Through the process, Psalms Food and the partnering farmers will be trained, mentored, and positioned to ensure sustainability of the business and capability to continue once REACH is no longer involved.

Activity 14: Market study for fortified food products

Relevance of the Intervention to REACH-Uganda Objectives

This intervention is designed to provide technical assistance to selected smallholder potato farmers and farmer business groups in Southwestern Uganda in partnership with a farmer-led organization (Psalms Food) to build the intervention partner's capacity and skills in both business management and farm management. Its planned activities are within budget and could be achieved during the life of the project. The concept of the intervention is based on market systems development approaches, which ensure that once the intervention is implemented it remains sustainable as long as it is well managed. The intervention could be replicated and scaled up to other farmers and farmer business groups in different regions. This intervention, if successful, will improve the quality and quantity of potato production and enhance farmers' market engagement.

The intervention will help the project to deliver two of its objectives:

Objective 1: To integrate market-oriented farmers and (farmer-led) agribusinesses into the commodity value chain using the pulling power of upstream lead firms or off-takers

Objective 2: To enhance productivity of market-oriented farmers in the commodity value chains

Partner Organisations and Scope of Work

| Main Areas of Cooperation | Role of Partner Organization - Psalms | Role of REACH |
|--|--|---|
| Strategic planning and business needs assessment | Create time to be available and to participate actively in the workshop | Facilitate the workshop |
| Brand concept development for Psalms Food Industries Ltd | Share ideas and any needed information. Attend meetings and give input as required | Identify and engage an agency to develop the brand concept |
| Product development | Engage required personnel | Provide technical support within the project's scope |
| Develop and implement a business and marketing plan | Work with the consultant to develop the marketing plan | Provide technical and financial support |
| Business skills training | Mobilise the Psalms team to establish the training needs Attend training and implement skills learned | Facilitate the needs assessment activities Facilitate development of the training materials Identify and engage a suitable trainer Facilitate training logistics |
| Intervention M&E | Assist in the management of data and make it available as and when required | Develop measurement plans Develop data collection tools Facilitate any surveys as may be needed |
| Launching new brand | Mobilise participants | Augment Psalms' efforts in the launch activities. Provide financial support |

| Main Areas of Cooperation | Role of Partner Organization - Psalms | Role of REACH |
|---------------------------------------|--|--|
| Farmer identification and preparation | Share the current list of farmers supplying Psalms | Facilitate selection of farmers to work with Psalms |
| Training of farmers | Identify the training needs | Organise training |
| Linking Psalms to market | Quantify the requirements | Create linkages with commercial sellers |
| Transition phase | Psalms builds its capacity to take over | REACH tapers off activities, allowing Psalms to gradually take over activities |

Intervention Sustainability

The results of the project will have practical application due to inclusion of farmers actively engaged in smallholder household farming activities. The intervention proposes physical investments in terms of a model post-harvest handling storage facility centre that shall accommodate farmers’ produce at the processing facility. This will provide the necessary credence to sustainable impact of the intervention results. The potential direct benefit to industry is seen in the introduction of new innovative potato value-added products with longer shelf life and aesthetic appeal, which will be sold at profit for income generation to sustain processing operations.

Psalms Food has operations within the proposed action areas and therefore will have capacity to fund the monitoring of the various farmer activities, maintenance of the established infrastructure, personnel and farmer training, and any other required costs beyond the lifespan of the intervention. Sales revenue from the marketing of the value-added potato products shall sustain the purchase of primary production inputs.

The central focus of the intervention is sustainable availability of raw materials through reduced post-harvest losses and increased production and processing operations. This intervention has been designed on linkage establishment for the supply of quality potatoes for processing and the interaction process will be mainly facilitated by the voluntary activities of these benefiting farmers, who will largely be the drivers of their processes and activities. Therefore, even when the project ends, these farmers will supply the processing facility and utilise the skills and knowledge acquired in post-harvest handling for the supply of quality inputs.

Value Addition

- **Technology transfer:** Training farmers within a rural setting on quality management and post-harvest handling for freshly harvested potatoes before delivery to the potato processing plant
- **Business skills training:** Farmer empowerment through business management skills upgrading for better business decisions

- **Branding:** Commercializing production and marketing of potato crisps and other potato products to increase daily market uptake of potato.

Proposed Work Plan / Time Schedule

| Phase | Step | Activities | Year 1 | | | | Year 2 | | | | |
|--|------|--|--------|----|----|----|--------|----|----|----|--|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | |
| I. Strategic planning with Psalms Food | | | | | | | | | | | |
| | 1 | MOU signing | ■ | | | | | | | | |
| | 2 | Review Psalms' business model | | | | | | | | | |
| | 3 | Carry out strategic planning | | | | | | | | | |
| | 4 | Complete a needs assessment report | ■ | ■ | | | | | | | |
| | 5 | Develop a workplan | | ■ | ■ | | | | | | |
| | 6 | Engage a consultant to develop a business plan | | | | | | | | | |
| II. Brand concept development for Psalms Food Industries Ltd. | | | | | | | | | | | |
| | 1 | Develop a ToR for brand concept development | ■ | | | | | | | | |
| | 2 | Identify and engage an agency to develop the concept | | | | | | | | | |
| | 3 | Develop sample marketing merchandise | | | | | | | | | |
| | 4 | Develop a process quality manual | | | | | | | | | |
| | | | | ■ | | | | | | | |
| III. Product development | | | | | | | | | | | |
| | | Develop a product manual | | ■ | | | | | | | |
| | | Identify and engage needed personnel | | ■ | | | | | | | |
| | | Identify and source new potato variety for crisps | | | ■ | | | | | | |
| | | Make any needed improvement on production efficiency and launch production | | | ■ | | | | | | |
| | | Identify and engage a consultant to develop a quality assurance manual | | | ■ | | | | | | |
| IV. Develop and implement a business and marketing plan | | | | | | | | | | | |
| | 1 | Engage a consultant to develop a marketing plan | ■ | | | | | | | | |
| | 2 | Roll out the marketing plan | | | | | | | | | |
| | 2 | Monitor marketing activities | ■ | ■ | ■ | | | | | | |
| | 3 | Complete marketing reports | | | | | | | | | |
| V. Launching new brand | | | | | | | | | | | |
| | 1 | Select the venue for launching | | ■ | | | | | | | |
| | 2 | Invite relevant persons | | ■ | | | | | | | |
| | | Launching | | | | | | | | | |

| Phase | Step | Activities | Year 1 | | | | Year 2 | | | |
|---|------|--|--------|----|----|----|--------|----|----|----|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| VI. Establishment of a potato storage facility (factory-based) | | | | | | | | | | |
| | 1 | Designing the store layout | | | | | | | | |
| | 2 | Construction of the store | | | | | | | | |
| VII. Linking Psalms to broader market | | | | | | | | | | |
| | 1 | Assess supply and demand of the potato products in broader markets | | | | | | | | |
| | 2 | Identify potato products' suppliers and sellers and link Psalms to them | | | | | | | | |
| VIII. Business management skills training | | | | | | | | | | |
| | 1 | Develop a business skills curriculum based on needs established | | | | | | | | |
| | 2 | Develop training materials | | | | | | | | |
| | 3 | Identify and engage a trainer | | | | | | | | |
| | 4 | Conduct training sessions | | | | | | | | |
| | 5 | Carry out a follow-up phase through coaching and mentorship programme | | | | | | | | |
| IX. Intervention M&E | | | | | | | | | | |
| | 1 | Develop the intervention logical framework | | | | | | | | |
| | 2 | Develop the intervention measurement plan | | | | | | | | |
| | 3 | Discuss and agree with Psalms Food on the data to be collected | | | | | | | | |
| | 4 | Develop the data collection tools | | | | | | | | |
| | 5 | Monitor the intervention progress/ challenges /lessons learned | | | | | | | | |
| X. Farmer engagement | | | | | | | | | | |
| | 1 | Identification and preparation of farmers | | | | | | | | |
| | 2 | Farmer workshop – management and farm needs assessment | | | | | | | | |
| | 3 | Farmer registration, MOUs signing, and linking with Psalms Food | | | | | | | | |
| | 4 | Farmer workshop – training on expectations and how the partnership will work | | | | | | | | |
| XI. Farmer training | | | | | | | | | | |
| | 1 | Introduction of high-yield quality potato seeds | | | | | | | | |
| | 2 | Introduction to modern farming methods | | | | | | | | |
| | 3 | Advise farmers on the production system and quality control | | | | | | | | |
| | 4 | Business skills training/mentorship | | | | | | | | |

| Phase | Step | Activities | Year 1 | | | | Year 2 | | | |
|------------------------------|------|--|--------|----|----|----|--------|----|----|----|
| | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| | 5 | Develop post-harvest training manual | | | | | | | | |
| | 6 | Training of farmers in post-harvest handling and quality management | | | | | | | | |
| XII. Transition phase | | | | | | | | | | |
| | 1 | Throughout the intervention, REACH to prepare and position the partners to be able to take over the intervention | | | | | | | | |
| | 2 | Close-out event – REACH hands over to the partners | | | | | | | | |

Proposed Budget

| Item Description | Total Amount (check currency):UGX □ | Partner Contribution Amount (check currency):UGX □ | REACH Contribution Amount (check currency):UGX □ |
|--|--|---|---|
| Strategic planning with Psalms Food | 10,000,000 | 0 | 10,000,000 |
| Brand concept improvement for Psalms Food Industries Ltd. | 32,000,000 | 6,000,000 | 26,000,000 |
| Identification of interns extension/logistics person to work with Psalms | 10,000,000 | | 10,000,000 |
| Launching new brand | 25,000,000 | 5,000,000 | 20,000,000 |
| Training of farmers | 10,000,000 | 0 | 10,000,000 |
| Establishment of a potato storage facility (factory-based) | 50,000,000 | 40,000,000 | 10,000,000 |
| M&E activities | | | |
| Product process improvement | 20,000,000 | 10,000,000 | 10,000,000 |
| Market study for fortified food products | | | |
| Total Budget | 147,000,000 | 51,000,000 | 96,000,000 |

Annex 1 Appendix

Project Partner Background

Psalms Food Industries Limited

Psalms Food Industries Limited has been in existence since 2010. It all started in 2009 while at a tour in Kenya at Fort Jesus (Mombasa), the founder, Mr. Ngabirano Dennis, had an interaction with a vendor who was frying raw banana crisps. This impressed him because he was using a charcoal stove, a vegetable slicer, and frying pan.

While pursuing further education at St. Lawrence University as a student, Dennis took a compulsory entrepreneurship class, and the lecturer requested the class for a business plan. He started with a business plan on goat rearing, which proved to be very expensive and he abandoned the idea. He shared again with his lecturer, focusing on banana crisps frying, a simple business plan, which had motivated him, and he had not seen this type of business in Uganda. The lecturer approved his business plan and they started their business on a verandah of the house they were renting. They started supplying a few retail shops around Nansana and received a very positive response from the customers. This encouraged him, together with his wife Maureen, to grow the business to where it is to date.

As of today, Psalms Food Industries Ltd. employs more than 95 staff members, has a factory certified by UNBS, and supplies more than 500 outlets in Wakiso, Mukono, Homia, and Kampala districts. Through the strong commitments to quality and customer service, they have developed a solid reputation within the food industries and large supermarkets.

Objectives of the Partnership

Overall objective of the intervention is to improve the current process flow and brand development and create market linkages for the smallholder farmers and farmer business groups in Southwestern Uganda through the development of a sustainable and innovative potato supply system to facilitate production and commercialization of potato crisps and other value-added potato products.

Relevance of the Intervention to Psalms Food

The present situation indicates operating below the production capacity due to inefficiencies in raw material input supply (ware potato and flavours) and processing equipment upgrading. Currently, there is no active specific market access and value addition linkage system for farmers and Psalms as processors that would ensure the availability of required quantity and quality material inputs for processing. As a result, minimal impact has been realised on the economic front of transforming the heavily subsistence farmers toward improving their livelihoods and strengthening household resilience through better markets for farmers' produce. Issues to be addressed in the action include a post-harvest handling storage facility for ware potato, guaranteed market access for farmers, and value addition for production of value-added potato products while upgrading equipment, production upscaling, and commercialisation. Psalms Food will therefore through this action take the lead in building a local-based market access and value addition linkage system model.

Relevance of Intervention to Smallholder Farmers and Farmer Business Groups

The intervention shall contribute directly to a guaranteed ready market at fixed or predictable prices for smallholder farmers and farmer business groups, through a developed market access linkage system that will function more effectively, sustainably, and benefiting all target farmers, leading to an improved farmers' market engagement, raised farmer incomes, and strengthened household resilience. This will, in turn, encourage farmers to scale up potato production for enhanced productivity to meet the quantity and quality demanded.

Specific potato processing varieties will be promoted among farmers for large-scale commercial production to be supplied for processing into potato crisps and other value-added potato products. Through proactive interventions, the quality and quantity of potatoes produced will be improved through field monitoring and application of good agricultural practices for increased quality and reduced post-harvest losses. Farmers will acquire skills in post-harvest handling and quality management and will access a ready market through direct procurements and supply to Psalms Food Industries. The intervention will thus lead to a system of production that ensures all-year access to markets by farmers and uninterrupted availability of potatoes for processing.

Smallholder farmers and farmer business groups are largely impoverished and inundated by numerous market-related challenges. The aim of this intervention is to address some of the major obstacles that limit the capacity of farmers to optimize their productivity due to unpredictable market distortions, thereby creating confidence in potato primary production decisions. Farmers in the value chain are not fully facilitated to access markets and deliver their outputs, largely attributed to absence of strong linkages with output markets. This can be adequately reversed with an innovative linkage system as suggested in this intervention.

The foreseen work shall focus on the establishment of market access and value addition linkage system for farmers that shall be supported in the duration of the project action to adopt and access a range of services and skills for improving their individual incomes from primary potato production.

Under the arrangement, farmers will increase their incomes by engaging in production of specific potato varieties utilized for the processing industry. As a result of transfer and adoption of efficient post-harvest technologies, the annual primary production of potato varieties suited for crisps processing and other value-added products is expected to reach 300 MT and the post-harvest losses reduced by at least 20% per annum. The production of high-quality potato products is expected to significantly increase by 50% per annum from the output of the participating farmers.

With support from the REACH-Uganda project, selected farmers' produce shall be delivered to the potato processing plant. Processing equipment will be upgraded and product flavours procured for seasoning and production of value-added products. These will be processed, contributing to the local industrial development by the introduction of potato crisps and other value-added products into the local and regional markets. At least 30 tons of raw potato will be processed every month, and potato crisps will be packaged in

150 g and 75 g in all flavours; other value-added potato products will be developed, tested, and marketed.

Annex 2. Gender Mainstreaming Strategy and Action Plan (February 2018)

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1.0 Background

1.1 IFDC's Vision for Change

The International Fertilizer Development Center (IFDC) is an international non-governmental organization based in Muscle Shoals, Alabama, USA, with global field programs throughout Africa and South Asia. IFDC was established in 1974 and has conducted agricultural research and implemented development projects in more than 100 countries in sub-Saharan Africa, Asia, Europe, and Latin America for close to five decades. IFDC's main focus has been on increasing and sustaining food security and agricultural productivity through the development and transfer of effective and environmentally sound crop nutrient technology and agribusiness expertise.

Central to IFDC's vision and mission is to build a world free of hunger and poverty through conducting research, promoting the use of agricultural technologies, innovations and management practices and fostering market development to increase farm-level productivity and incomes.

IFDC's broad goal and vision is to be recognized as a global center of excellence, empowering farmers and agribusinesses through independent and innovative fertilizer and soil fertility research, technology transfer, agricultural policy advocacy, and market development. Its mission is to enable farmers in developing countries to increase agricultural productivity, generate economic growth, and practice environmental stewardship by enhancing their ability to manage mineral and organic fertilizers responsibly and participate profitably in markets.

One of IFDC's core performance areas is the management of projects at national, regional or global scale through high-quality development assistance and program implementation. A list of current projects can be accessed at www.ifdc.org/.

1.2 The REACH Project

The Resilient Efficient Agribusiness Chains (REACH-Uganda) project seeks to improve market engagement for 40,000 market-oriented farmers, strengthen household resilience, and increase availability of agricultural support services for farmers and businesses in the rice and potato value chains. These are value chains of high strategic importance to both the Government of Uganda and the funding agency, the Embassy of the Kingdom of Netherlands. The goal of REACH is to strengthen the efficiency, productivity, and inclusiveness of the agricultural market system while contributing to improved household resilience in selected value chains in Uganda.

REACH, which is to be implemented over the period 2016-2020, will employ the Making Markets Work for the Poor (M4P) approach to develop market systems so they will function more effectively, sustainably, and beneficially for poor farmers. IFDC partners with Cardno Emerging Markets, a private sector business development and market engagement firm, to implement M4P and connect low-income entrepreneurs to large commercial firms.

1.3 The External and Internal Context for Gender Mainstreaming in REACH

1.3.1 The External Context: The Global, Regional and National Environment with Implications for REACH Gender Mainstreaming (GM) Efforts

This section aims at elaborating the relevance of international and national policy and regulatory frameworks to institutionalising gender mainstreaming within REACH.

Gender mainstreaming is a global strategy for sustainable development. There are international declarations, agreements, and plans of action that Uganda has signed and ratified, making it imperative for all institutions and organisations to mainstream gender into their policies, programmes, and activities.

It has been almost four decades since the Convention on the Elimination of all forms of Discrimination against Women (CEDAW 1979) was ratified by Uganda on 22nd July 1985. This Convention sets up an agenda for national action to foster greater gender equality. It puts up legally binding principles and standards for realising women's rights. It is also over two decades since the Beijing Declaration and Plan of Action (1995) that reflected a new international commitment to the goals of equality, development and peace for all women everywhere was mooted.

At the international level, the Frameworks have evolved and have been redesigned to address specific existing gender challenges in line with the changing socio-economic environment. Notable among these are:

- a. The Nairobi Forward-Looking Strategies for the Advancement of Women, 1985
- b. The United Nations Conference on Environment and Development, 1992
- c. The Cartagena Protocol on Biosafety, 2000, which was ratified by Uganda on 11th September, 2003
- d. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilisation, 2010
- e. United Nations Conference on Sustainable Development, Rio+20
- f. The 2030 Agenda for Sustainable Development (Sustainable Development Goals), which was ratified by Uganda on 21st September 2016.

All the above international frameworks emphasise the vital role women play in development and call for their effective and equitable participation in national development activities.

At the national level, the importance of gender in development has been recognised through the regulatory framework, including several pieces of legislation as shown in Table 1 below.

Table 1: National Policy and Regulatory Frameworks for Gender Mainstreaming

| Policy/Framework | Key Requirements |
|---|---|
| The Uganda Vision 2040 | The Government acknowledges that women and men are partners in Uganda’s socio-economic transformation and thus aims to ensure gender-responsive policies, programmes and actions. |
| The Uganda Gender Policy, 2007 | The Uganda Gender Policy (UGP) aims at establishing a clear framework for identification, implementation and coordination of interventions designed to achieve gender equality and women’s empowerment in Uganda. The policy requires sector ministries to translate the UGP into sector-specific strategies and activities, build capacity, monitor and evaluate and commit resources for implementing the activities, among others. |
| The National Agricultural Policy, 2013 | This policy is directed towards ensuring that the fundamental principles and rights for agricultural workers and labour standards are understood and adhered to by large-scale agricultural farmers. Additionally, it also seeks community empowerment and mobilisation strategies so as to achieve policy objectives of engaging women, men, youth and vulnerable populations in agricultural programmes and ensuring optimal utilisation of agricultural services. |
| The National Extension Policy, 2016 | This policy commits to enhancing access to extension services by youth, women, and other vulnerable groups by deliberately addressing constraints that have limited their effective participation and equitably benefiting from them. |
| The National Agricultural Research Organisation (NARO), Strategic Plan, 2008/09 – 2017/18 | It highlights NARO’s willingness to mainstream gender in all research processes. It is further mentioned that public research institutes and registered private researchers will be equipped with skills for gender analysis and participatory research. To achieve and develop appropriate technologies for the different social groups, NARO will establish mechanisms for needs assessment for gender-responsive technologies. Other key interventions for ensuring gender responsiveness are defined institutional arrangements for allowing stakeholder participation in demand articulation and priority setting. |
| The Public Finance Management Act, 2015 | Section 13 (15) (g) states that “ <i>A Policy Statement shall contain a certificate issued by the Minister responsible for Finance in consultation with the Equal Opportunities Commission (i) certifying that the policy statement is gender and equity responsive; and (ii) specifying measures taken to equalise opportunities for men, women, persons with disabilities and other marginalised groups.</i> ” |
| The EKN Gender Strategy | The strategy provides direction on the key performance indicators of focus for funded projects. |

1.3.2 The Internal Context

An internal scan focusing on the current status of gender responsiveness among implementing partners and target beneficiaries was done in early November.

In order to understand the REACH project's status quo on gender mainstreaming, the following approach was used:

- a) **Documentation review:** The following documents were reviewed in order to gain a more in-depth understanding of the degree of gender mainstreaming within the REACH project.
 - The Project Baseline Survey Report
 - IFDC Strategic Plan
 - The Project Results Framework
 - EKN Basket of Indicators
- b) **Field-level interviews:** Interviews were held with a few farmer groups/farmer business group members, field staff and implementing partners to gain insights on the status of gender inequalities across some of the principal domains of gender inequality, the gender responsiveness of the project management approach and the gender responsiveness of service delivery, respectively.

The information from the above activities was analysed and used as part of the process of ascertaining the status quo pertaining to gender mainstreaming within REACH and to inform the strategic actions required to ensure equality of outcomes for men and women stakeholders of the project. Some of the major opportunities or challenges and proposed actions are presented below:

1.3.2.1 Gender Inequalities at Farmer Group/Household Level

Due to time constraints, the quick scan with farm group members focused on four main domains of gender inequality in agribusiness: Access to and control over production resources and services; gender roles and division of labour in production and quality control; decision-making in the household, including access to and control over benefits; and representation in group membership, leadership and value chain governance. Focus group discussions were held with the Bukinda Farmer Business Group (FBG) in Kabale, and the Idinda FBG and Namundudi FBG in Iganga districts. The results are hence only indicative at best and not fully representative of all REACH project beneficiaries.

a) Access to and control over production resources and services

Rice: The groups in Iganga defined productive assets for rice production as encompassing land, improved seed, herbicides, fertilizers, pesticides, irrigation equipment, improved storage facilities, tarpaulins, jute bags, weighing scales, power tillers, ox-ploughs, conical weeders, harvesting knives, rakes, rice threshers, mobile phone, radio, savings account, knapsack sprayer, and a bicycle or motorcycle.

Women and men reported joint ownership of assets, except land which is vested in men. About 9 out of 10 women in the group hire land for their own rice production, mostly paid for by themselves, although some access support for land hire from their husbands. Women's use of hired land is still sub-optimal, however; women currently hire in small pieces of land below their requirements because of limited access to appropriate credit facilities that allow payback at the end of the season. An acre of land costs 500,000 UGX or approximately U.S. \$140 per season. Both men and women stated they do not use improved rice varieties because they are not aware of them or where to purchase them. About only 1 in 10 women use fertilizer, which is applied either by broadcasting or as a foliar application. This is mainly driven by limited know how, limited access to the investment capital required, and limited mobility since they would have to travel a relatively considerable distance to Iganga town to purchase the fertilizer. Current gender norms and expected behavior result in the idea that women who need to purchase anything from stores that far should send their husbands.

Herbicide use was reported as optimal for both men and women, with about 8 in 10 women and men applying it. However, discussions revealed that many are thinking of stopping using the products due to the prevalence of fake inputs that "burn" the rice fields without killing the weeds. The meeting also concluded

that women's understanding of the correct herbicides to use and proper application skills were low. Only 20% of the women reported owning a knapsack sprayer mostly as a joint household asset. Only 4 out of 10 women own tarpaulins or have access at the household level. Both men and women's groups also stated that they do not own improved storage facilities. When asked why they do not invest in their own tarpaulins, sprayers, or other productive assets, the women indicated that returns from rice production are always below household expenditure requirements and they are unable to allocate proceeds to investments in productive assets. The proposal was that access to credit for investment could help increase their commitment to invest in assets. Optimal use by men and women was reported for only ox-ploughs, harvesting knives (also known as "buyuya" in the local language), phone and radio and jute bags. The database of registered farmers indicates that 66% of registered male farmers in the project have a phone contact address which is taken here as a proxy for owning or having access to a phone compared to 47% of the women across intervention districts.

Potato: Access to land for production was reported as optimal for men and women. About 90% and 60% men and women, respectively, own the land on which they produce potato either jointly or solely. Other productive assets are considered to be jointly owned. Use of improved potato seed is high among women but low for male youths, especially because of their low participation in groups, which is where most improved seed is accessed. Improved seed as used here is seed potato of improved varieties originally obtained from KAZARDI or elsewhere through various channels; it may or may not have been recycled in farmers' fields several times and may or may not be certified or clean. Fertiliser use is low for both men and women due to insufficient capital. About 43% of women potato producers own a knapsack sprayer; however, no household reported ownership and use of protective gear. About 70% of farmers are now using herbicide although use was considered low among female-headed households; in addition, prevalence of fake inputs and limited know-how on application is affecting the extent of use. Only 2 out of 10 households own improved storage facilities, mainly due to lack of low-cost storage options. Similarly, only two households own a weighing scale. It was not clear why the storage facilities set up under CATALIST were not being used. Jute bags were the only asset rated unanimously as optimally used by both men and women.

Rice: The following support services were identified – financial services, extension and training, equipment services, spray services, bulk input procurement from high-quality suppliers identified by the project, bulk transportation and marketing at MSMEs, product incubation/value addition, linkages to research to access climate-smart options and infrastructure support services.

Bulk transportation and marketing in the Idinda FBG is accessed by close to 80% of the group members across men and women. The other 20% who don't use the service are mainly poorer households with limited disposable income who sell off their produce soon after harvest to village level traders to meet immediate pressing needs. Currently FBG leaders (only the men) manage the process and remit cash back to members. Payment through other options, such as mobile money or individual savings accounts, was discussed but considered irrelevant because, as indicated by the focus group members, their leaders are trustworthy and keep detailed records which are also shared with all members in a transparent manner. According to the men, women's non-involvement in marketing is due not only to their triple role and time poverty but also their lack of exposure to markets in general and hence low negotiation skills.

Access to extension and training and VSLA services is accessible to all members. However, it was noted that other income sources are needed to boost members' capacity to repay loans. Farmers' capacity to implement advice on GAPs is also limited by their low access to investment capital.

About 70% of the group members procure inputs collectively. It was however, noted that farmers do not plant paddy rice at the same time, making it difficult to schedule the bulk input procurement. The extent of use of other services including equipment hire (thresher, moisture meter, weighing scales, drying facilities, etc.) from the FBG could not be ascertained in the meeting because provision of these services is not yet fully developed into a business.

Potato: Services were defined to cover training and extension, bulk input procurement, bulk marketing, transportation, hired labour, spray hire services, financial services and group membership. VSLA services have generally been branded as for women; hence, men are not using this service optimally. A savings culture is also not widely entrenched among men with a high preference to spend their earnings on alcohol. Training is also largely attended by women because men perceive it as time wasting and often attend if a transport refund is to be given. Only about 30% of the women bulk their potato and market through the FBG. Low use was attributed to the need to meet immediate needs but also the perception – true or not – that the FBG has no capacity to market all their potato if on average each farmer has 50 bags. Participation in groups is also low for men, resulting in limited knowledge and skills and investment in productive assets.

b) Gender roles and division of labour in production and quality control

Rice: Gender division of labour in rice production was assessed both at field level and for activities to assure quality. Within the household, rice may be grown on three different types of fields – on fields solely managed by men, on fields for the “household” and on plots usually hired in by women. The gender division of labour tends to vary with the type of rice field under consideration. The bulk of work in the rice fields managed by men and household fields is undertaken by men except when it comes to planting which is mainly done by the children. Rice in the area is a commercial crop and the main source of income for men who also control the sales proceeds from their sole or household plots. The women’s role in these fields is taken as supportive and the bulk of them do not get any direct monetary benefits. The women indicated that they are rewarded with school fees for their children and other household requirements, although on occasion, if it’s a bumper harvest and prices are good, the return to their labour might be a co-wife. Women’s position within the context of these fields is hence as invisible players operating as unpaid family labour rather than co-business owners. As noted earlier however, 9 out of 10 women cope by hiring in their own pieces of rice fields, and depending on the power dynamics within the household and the extent of their participation in rice markets; they largely control the proceeds from these rice plots.

On the household and men’s plots, the women provide complementary labour to that of men during weeding, draining of the fields, harvesting, drying and winnowing and contribute a bit too to all other activities apart from spraying, fertilizer application and land clearing. As the men work in the fields, women are often engaged in preparing meals for their husbands and or other workers in addition to other household chores. It is worth noting that although women provide labour on men’s and the household fields, they may not get reciprocal support on their own rice fields although some are able to supplement with hired male labour. However, the time available for women to supervise hired labour and get quality work done is also limited. Furthermore, participation of women in marketing is low both at household and group level; the men noted that women have no know how in marketing, no negotiation skills and generally fear to engage in markets lest they get cheated. Table 2 shows how men and women contribute to activities to assure high-quality rice.

Table 2: How men and women in Idinda, Iganga contribute to high-quality rice produce for markets

| Quality Specification | Activity Needed to Achieve Specification | How Do Men and Women Contribute to the Activity? | |
|--------------------------------------|--|--|-----|
| | | M | W |
| 1. Pure rice without stones or husks | 1. Spreading on tarpaulins to dry | XXX | XXX |
| | 2. Good hygiene – clean hands and feet | XXX | XXX |
| | 3. Harvesting stalks at an angle way above the ground to avoid soil contact | XXX | X |
| | 4. Threshing on tarpaulins | XXX | X |
| | 5. Packing in bags in the evenings during the 3-5 days of the drying process | XXX | XXX |
| 2. Whole grain | 1. Proper and timely harvesting | XXX | X |

| | | | |
|----------------------------------|---|-----|-----------------|
| | 2. Timely transportation from fields (drying should commence within 2 days) | XXX | XX ¹ |
| | 3. Regular turning of rice on the tarpaulins (in 2X2 square ft portions) | XXX | XXX |
| | 4. Ensure appropriate heat levels to allow for slow progressive drying | XXX | XXX |
| 3. Whiteness | 1. Timely transportation from the fields | XXX | XX |
| | 2. Timely sun-drying (within 2 days after harvesting from the fields) | XXX | X |
| | 3. Choice of variety | XXX | XXX |
| 4. 13-14% Moisture content (dry) | 1. 3-5 days of sun drying (depends on weather) | XXX | XXX |

xxx – High involvement; xx- average level of involvement; x- low involvement; - no involvement

Potato: The bulk of work in potato production is undertaken by men, implying that they are highly involved at every stage of the production to marketing process except for irrigation and cleaning & sorting which is largely the role of women. Women provide just as much labour as men during ploughing, planting, weeding, harvesting and farm-gate marketing. Women are also the only ones engaged in processing of potato into other consumer products such as crisps, chips, etc. Four main issues were proposed towards enhancing efficiency of production and processing processes. These include access to credit for women to hire land for production, access to labour saving technologies for weeding, harvesting; actions to integrate women in markets beyond the farm gate, and access to starter capital for investment in processing equipment such as fryers, slicers, packaging materials, etc.

c) Decision-making in the household including access to and control over benefits

The assessment of how men and women participate in decision-making within households was undertaken using an adapted version of the women empowerment in agriculture index (WEAI)² with two farmer groups. Men and women participants in each focus group discussion in Bukinda, Kabale and in Idinda, Iganga were asked to score the way they participate with their spouses (when applicable) in production, marketing, saving and investment decisions. If the woman makes no input in a specific decision, she scores 1 while the man in the household having made an autonomous or unilateral decision scores 5. If on the other hand, the man informs his partner or requests for minimal input into the decision to be made, they score 4 while the woman scores 2. If both the woman and man discuss and build consensus and arrive at a joint decision, then each scores 3.

The assessment looked at the following decision points (**production decisions** - which variety to plant; how much land to allocate to the crop; whether to use fertilizer; and whether to attend a training/extension meeting; **marketing decision** - who to sell to; **saving and investment decisions** - how to use sales proceeds; whether to invest in labour saving tools; where and how much to save). Overall, production decisions tend to be arrived at jointly, although men exercise more control over how much land to allocate to either potato or rice. The decisions on marketing are made by men to varying degrees – men and women in the farmer group in Bukinda indicated that women may contribute to this decision. In Idinda, this decision is made by men although women get to control the proceeds from women-managed plots which they hired for own-rice production. On average, for both locations, men make unilateral decisions on how to use sales proceeds, how much to save and how much to invest in productive work or assets. A few women, nevertheless, plan together with their husbands on the use of sales proceeds.

¹ Women ferry the rice from the fields to the main road from where the men carry it to the homesteads
² <http://www.ifpri.org/weai-training-materials>; https://www.ifpri.org/sites/default/files/Basic%20Page/a-weai_q.pdf
 (Page 2)

Table 3: How men and women participate in decision-making

| Nature of Decision | Potato | | Rice | |
|---|--------|---|------|---|
| | M | W | M | W |
| Production decisions: | | | | |
| Which variety to plant | 3 | 3 | 4 | 2 |
| How much land to allocate to potato | 4 | 2 | 4 | 2 |
| Use of fertilizer | 3 | 3 | 3 | 3 |
| Attending training/extension meetings (women) | 2 | 4 | 3 | 3 |
| Attending training/extension meetings (men) | 5 | 1 | 3 | 3 |
| Marketing decision: | | | | |
| Who to sell to | 4 | 2 | 5 | 1 |
| Saving and investment decisions: | | | | |
| How to use sales proceeds | 4 | 2 | 5 | 1 |
| Where and how much to save | 4 | 2 | 5 | 1 |
| Whether to invest in labour saving tools | 4 | 2 | 3 | 3 |

Scale: 1= No input in decision; 2 = Provides minimal input in the decision; 3 =Joint decision; 4 = Seeks minimal input in the decision; and 5 = Makes an autonomous decision

d) Representation in group membership and leadership

By November 2017, project activities encompassed 17 districts in eastern and western Uganda with a total of 17,959 registered farmers, 60% of whom are women (See Annexes Figure 1 to 3). Registration of women in farmer groups is generally high, higher than parity in most of the intervention districts including Kanungu (70%); Budaka (68%); Kabale (66%); Kisoro (64%); Kween (62%); Rubanda (62%); Tororo (61%); Kapchorwa (58%); Butaleja (57%); and Pallisa (57%). Representation is closer to parity in only three districts – Mbale (52%), Bulambuli (50%); Bugiri (50%) and is just slightly below parity 41-45% in three districts (Namutumba, Sironko and Kibuku). The average age of registered farmers is 40 years with no statistically significant difference in mean age between men and women³. In general, farmer groups tend to have more women than men and more female youth than male youth. As noted by the women in the Bukinda farmer group, the lower participation of men in groups leads to their low uptake of improved technologies which eventually leads to low production and productivity in the value chain.

A representative dataset of 888 farmer groups shows that 66% of farmer group leaders across intervention districts and commodities are men. The distribution doesn't vary even when leaders are classified by age into youth and adults. Overall, 49% of farmer group leaders are men above 35 years; 17% are men 34 years and below; 25% are women 35 years old and above and 9% are women 34 years and below. At a mean age of 43 years old for both men and women, farmer group leaders tend to be just slightly older than the average age of group members. There are some interesting variations from the mean nevertheless with four groups; 1 in Budaka and 2 in Bulambuli reporting farmer group leaders who are 17 years old (male) and one group in Tororo with a 15-year-old group leader (female).

Overall participation of women in leadership is highest in Kween (52%) followed by Tororo (43%), Kabale (42%) and Rubanda (39%) see Figure 1 and 2. All the other districts require interventions to varying degrees to bring more women and youth into leadership at farmer group level. The greatest need is in districts where women constitute less than 30% of farmer group leadership positions i.e. Iganga (11%), Sironko (12%), Mbale (13%), Bugiri (21%), Pallisa (25%), Kapchorwa (27%) and Kisoro (28%).

³ Excludes 24 registered farmers below 14 years but includes 143 farmers aged between 14 and 17. The oldest registered farmer is 95 years old.

Figure 1: Distribution of farmer group leaders by sex and age in the potato intervention districts

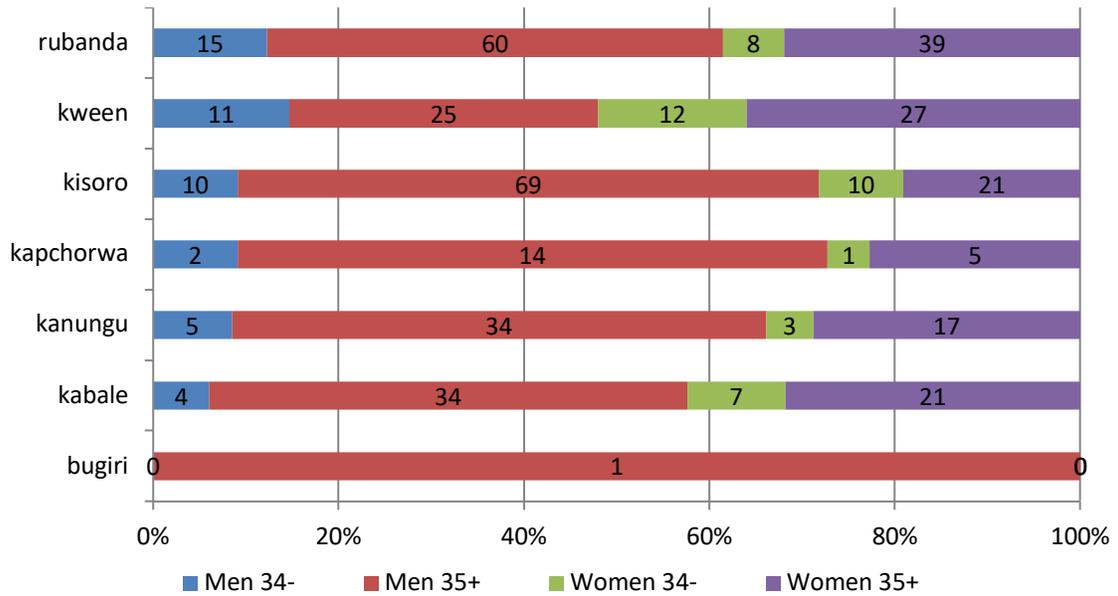
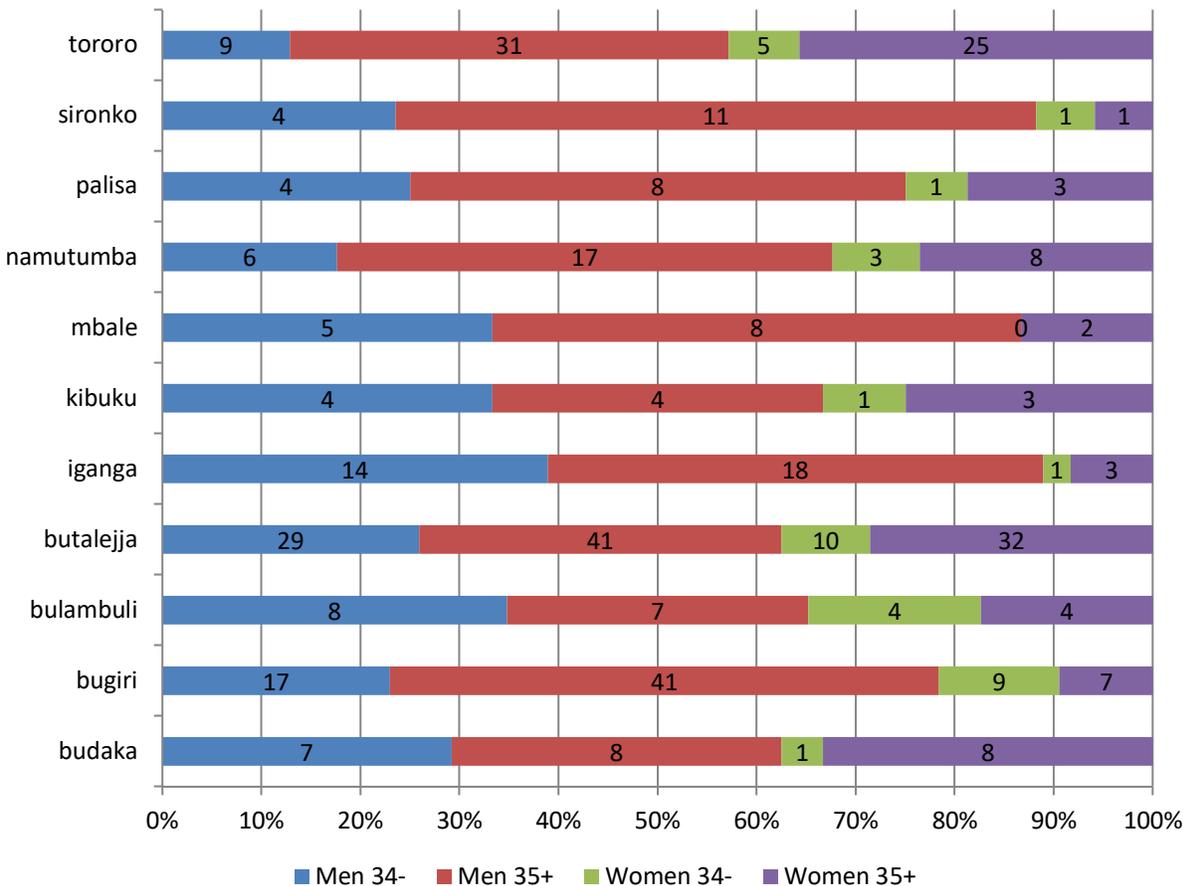


Figure 2: Distribution of farmer group leaders by sex and age in the rice intervention districts



e) Opportunities for value addition and job creation in the rice value chain

Men and women were asked to discuss separately in their focus groups. The following table outlines actions proposed by men and women and the roadmap they charted out on how they are likely to get there. No prioritization of the actions was undertaken.

| Men | | Women | |
|--|---|---|--|
| Actions Proposed | Roadmap | Actions Proposed | Roadmap |
| <ul style="list-style-type: none"> • Upgrade into other products e.g. rice flour and rice bran for animal feeds • Start packaging milled rice for consumer outlets • Purchase and provide equipment hire services – Reaper, Hydro power tiller, thresher, etc. • Water reservoir • Establish inputs shop • Store to offer storage services • Lorry to offer transport facilities • Drying yard | <ul style="list-style-type: none"> • Raise capital by providing spray services • Increase acreage under rice production • Get agricultural loan • Training in value addition • Use improved seed to enhance yields • Linkages to input dealers • Working harder • Transform VSLA into a SACCO • Collective marketing • Identify sales outlets for packaged rice • Strengthen the FBG | <ul style="list-style-type: none"> • Establish a rural input store • Upgrade from milled rice to rice flour production • Use bran to produce rice-based animal feeds • Pack milled rice in 2Kg/5Kg/10/25Kg bags for direct sale to consumers in rural/urban outlets • Become improved rice seed producers • Diversify into ground nuts production | <ul style="list-style-type: none"> • Can avail the structure for the retail input shop • FBG members can contribute starter capital matched with a grant from the project • Access to credit to hire more land for production |

f) Other issues raised

A wrap up discussion with the women raised some additional issues affecting their participation in the value chain.

Rice: Some of the women rice farmers noted that increasingly men prefer to rent out family land to sugarcane growers and spend the money on alcohol rather than allocating the land for household production. Consequently, more and more women have to rely on land markets to produce food and raise some income for the household. Because of limited participation in produce markets, control over sales proceeds from own plot production is not always guaranteed. The women suggested that the project needs to sensitize men on some of these issues e.g. through conducting seminars for couples on joint household planning and visioning and equitable benefit sharing.

Access to water for production is also a challenge the project needs to address - upstream farmers usually block the water flow and are especially adamant when it is women's fields that are affected. There is need to promote cooperation in water management in the rice fields.

1.3.2.2 Gender Responsiveness of Service Delivery

If gender-sensitive services are to be provided to farmers, the point of entry of interventions is the institutions providing these services. Interviews were hence held with a select group of implementing partners to ascertain the gender-responsiveness of service providers and proposed actions going forward.

A. Gender sensitive input provision

Only one agro-dealer, based in Kabale was interviewed. The farmers' agro-dealers network in Kabale is owned by a woman and has four female permanent employees. The firm also outsources the services of an auditor (male) who comes in on a specified schedule to cross check the books of accounts. Women constitute about 30% of the firm's customers. Besides the marketing and sale of agro-inputs the firm provides two main ancillary services. These include training farmers in good agricultural practices related to input use usually in partnership with seed companies or large agro-chemical importers like Balton; this

service also includes on-site provision of advisory services on a customer need basis. There is no perceived significant difference between the proportions of women to men accessing this service.

The other main service to farmers is the provision of input supply credit. About 80% or more of those who access this service are men. The condition for access to credit is continued patronage; repeat customers can obtain credit in line with the volumes they usually purchase. However, the firm prefers to extend credit to men because they have control of the land resources, purchase bigger volumes and consequently require bigger credit amounts. The proprietor indicated that women tend to require smaller credit amounts which are hard for her or her personnel to monitor resulting in company losses. The company has a client register and seeks customer feedback especially when preparing to stock for a new season. The main factors affecting women's participation as input clients include their limited mobility, inappropriate sizes of input packages (too big)⁴; and their limited access to land for own production leading to low input demand.

The following actions were proposed for mainstreaming in the project to foster positive outcomes for women:

- a. Organize women for bulk input procurement at farmer group level
- b. Facilitate women's access to credit suppliers to enable them hire land for production over which they might have greater control and consequently more willingness to invest in inputs
- c. Partner with IFDC/REACH to organise mobile sales in rural areas just prior to the onset of the planting season. To be more effective, mobile input sales should not be organized on market days or training days; but should be advertised in advance to allow farmers to come prepared to buy.
- d. Partner with agro-dealers to train rural women in good agricultural practices including input use
- e. Foster customer loyalty by ensuring inputs to REACH farmers are "verified"⁵ for quality
- f. Establish a network of rural agro-dealer stores owned by women and youth linked to the REACH agro-dealers for input supply credit which could be guaranteed by the project to lower the risk to agro-dealers.

B. Gender sensitive training and extension service delivery

Two implementing partners were interviewed, EPSEDEC in Mbale and CARITAS Kabale Diocese. EPSEDEC was established as an exit strategy for 16 UNDP supported NGOs and local governments. It is owned and operated by this consortium. It has eleven core staff (9 men and 2 women) and 12 field staff (10 men and 2 women). Several factors come into play when organizations try to attract female employees to operate at the field level. Where firms are unable to attract women, gender-aware men can just as effectively offer extension services in ways that meet the needs of men as well as the women farmers. This implies that ensuring staff competences in gender mainstreaming within service delivery is critical especially for field teams. Two of the core staff and three of the field staff of EPSEDEC have received training from VODP in joint household planning and decision-making.

With regard to the project's extension outreach and distribution; four field staff are handling 53 Farmer groups (FGs) in Butaleja; Five field staff work with 75 FGs in Kween and 2 field staff are working with the 25 FGs in Kapchorwa. Each farmer group is composed of 20-30 members with 3-5 FGs coming together to form a Farmer Business Group (FBG). The extension: farmer ratio is hence better than the government of Uganda's policy recommendation of 1:500⁶ and almost within the internationally recommended ratio of 1:303.

⁴ Discussions with seed companies and input distributors have not yielded much with regard to more appropriate packaging for women and smallholder input requirements. In the short term, agro-dealers measure off and re-package inputs in line with customer requirements however this may lead to the risk of adulteration. The best option seems to be to organize women for bulk input procurement which they can reapportion at FG level.

⁵ The Ugandan input market now has two private sector-led quality verification labels used in tandem with the MAAIF label – "Agverify" for seed and "KAKASA" for agro-chemicals.

⁶ MAAIF. 2016. National Agricultural Extension Policy and Strategy

The firm is providing training and extension services to FGs and FBGs working on rice in Butaleja and potato in Kween and Kapchorwa. About 53% of those accessing the service in Butaleja are women, with women slightly outnumbering men irrespective of age group. In contrast, the number of women in the participating farmer groups in Kapchorwa and Kween are relatively lower. Overall representation of women in the Kapchorwa FGs is 32%; however, age plays a significant role in group entry dynamics. Younger women tend to participate more than older women accounting for 60% of membership when only the youth category is considered. On the other hand, older women account for only 20% of total group membership for the age category of 35 years and above. The challenges young men and older women are facing that constrain their participation hence need to be investigated further so as to deal with any gender-related barriers to access to group membership and related services for the Kapchorwa cluster. In Kween, women account for 42% of group membership, with no significant differences in the levels of participation of young (45%) and older women (43%).

The firm offers two related services – a) training and extension; b) demonstration trials

REACH training and extension services are in principle accessed by farmers in organized groups. To be eligible for group membership, you should be commercially oriented, farming within the project operational area, use improved seed and fertilizer to an extent, should have participated in a farmer based institution for not less than two years. Registered farmer groups should have a minimum of 20 members but not more than 30 members; be willing to follow recommended guidelines, undertake bulk marketing, and to cluster into FBGs and should be registered or should have initiated or be willing to formally register their group. The requirement on commercial orientation is likely to bar entry of youth who usually have limited experience with farming and or capacity to purchase inputs.

About 40% of the demonstration trials are hosted by women⁷. To participate as a demo host farmer; you must have access to land, must have leadership skills, and be recognized by peers as a model farmer. Affirmative action may be required to ensure more participation of women and youth as host farmers.

With regard to the conditions of access, the firm noted that the timing and venue are agreed by the farmer groups; each farmer group is trained separately within the vicinity of their residences to ensure more access for women⁸; the service is cost free; and field staff are allocated to areas where they can speak and train in their native language accompanied by ample use of illustrations and demonstrations. Feedback from farmer groups on the trainers and the training is usually obtained by IFDC staff.

CARITAS Kabale Diocese, another REACH implementing partner in the South West implementing sites doesn't differ much from EPSEDEC. Caritas has 20 employees equally distributed between men and women. CARITAS is implementing another project funded by MISSEORI whose main focus is to empower women. As a consequence, CARITAS has set clear gender equality objectives in its strategy, staff are more gender aware, and each project implemented by CARITAS has a dedicated staff to handle gender mainstreaming. The staff are mainly using IFDC gender training manuals in which they were inducted by the Coordinator. CARITAS offers three main services in the REACH project – training and extension; mobilizing farmers into Savings and lending communities (SILC) and organizing farmers for bulk marketing including enabling linkages to MSMEs or Lead firms. The criteria for accessing these services is similar – you must be a farmer affiliated to a farmer group, you should not be residing in a trading center, must have access to land for farming either owned or hired, must be willing to plant the variety preferred by the lead firm and should not have diversified sources of income. Leadership quotas have also been enforced to ensure that women also participate in group leadership. Youth however, tend to get left out of the group mobilization and formation process.

To enable equitable access to services, farmers are mobilized through the Catholic structures and local government officials; field extension workers use the native language when training; and meetings are

⁷ Demonstration trials have not yet been set up under REACH. The figure is based on the CATALIST project.

⁸ Field visits elsewhere seemed to indicate that trainings are undertaken at FBG level

organized separately for each farmer group in mutually agreed venues, from 9.00 – 11.00 am for a maximum of 2 hours to cater for women’s time poverty. For men a decision to avoid conducting training in trading centres ensures that they do not end up in drinking bars. Training needs assessments are however not undertaken to customize content to women and men’s needs. Evaluation of the quality of the training is done by IFDC staff, there is however no structured mechanism to use the results to re-tailor content.

The two implementing partners proposed the following actions for mainstreaming in the project to foster positive outcomes for women:

- IFDC support training of all IP field staff in gender sensitive extension and training service delivery and tailoring training content and tools to GM principles.
- Impose affirmative action to ensure more participation of older women and young men in farmer groups. Actions include imposing a quota and or registration of both husband and wife.
- Facilitate bulk input procurement linked to supply credit so that farmers are enabled to immediately put the learning in practice.
- Review criteria used for farmer group membership and demos hosts to ensure more participation of women and youth

C. Gender sensitive spray service delivery

Spray service provision is relatively new to the project and providers were still being mobilized by the time the field work was conducted. An interview was however, held with one provider from Kabale who is experienced in the business. Kitumba spray service providers is owned by two male youth entrepreneurs. Clientele for the spray service are mostly women (over 70%). The business currently attracts about 20 unique orders/potato gardens sprayed on average up to four times per season. The charge is about 30,000 per acre equivalent to gross earnings of about U.S. \$1,333 per year. Farmer group members tend to pay lower fees because they usually provide the water themselves and to get involved in the exercise. The spray service employs about two casual labourers, mostly women who fetch the water used every time the service is provided.

In addition, the spray service providers also provide expert advice to farmer group members and other farmers on the most effective chemicals, correct application techniques, etc. for free. Farmer group fora and church meetings have been the main avenue for marketing the service; providers also survey farmer gardens to ascertain need and to inform their marketing strategy. Orders are usually placed in face to face meetings; however, a few farmers, especially repeat clientele have started placing their orders by phone. Some of the drivers of customer satisfaction and growth in the business have been the use of good quality chemicals which have dealt with tough grasses, improved soil state (easy to till), and reduction in labour requirements.

The action proposed for mainstreaming in the project to foster positive outcomes for women was to empower female youth as spray service providers too given the availability of protective gear and training. Current legislation allows men and women equal rights to work in any type of job including jobs classified as “hazardous.” However, evidence from IFDC research doesn’t lend support to participation of women as spray service providers and this action cannot be supported.

D. Gender sensitive financial service provision

Post Bank indicated that they have already developed a product that adequately addresses the specific needs of women. In addition, a few changes to the lending methodology have been undertaken to lower the risk to the bank of unpaid loans. The Bank’s entry point remains the VSLA groups but farmers will access individual loans only. The bank is also partnering with Airtel to integrate the credit service and offer it via the mobile money platform which should lower the costs associated with cash transactions. More motor cycles have also been procured to enhance outreach by the bank’s mobile VSLA agents.

The following actions were proposed for mainstreaming in the project to foster positive outcomes for women:

- Hold discussions with IFDC on how to address the significant loan defaults incurred by the bank under the CATALIST project
- Negotiate a partnership agreement in which the bank directly offers the financial literacy training to avoid conflicting messages and in which IFDC guarantees all credit advances to farmers
- Mobilise women to access credit from the Bank in partnership with local leaders and IFDC in line with REACH targets
- Promote use of the mobile banking facility and platform among farmers

Box 1: Post Bank's VSLA Group financial service model

Post Bank Requirements for accessing financial services as a VSLA group

- Member of a VSLA group registered by the Local Government with a certificate certified by the Sub-County Community Development Officer (CDO)
- The VSLA group should have a Constitution certified by the CDO
- Letter from the LC I
- Three signatories Chairperson, Treasury and Secretary – all with three passport photos
- Minutes reflecting that the group wants to open an account with Post Bank
- Valid IDs of the signatories (National IDs)

Types of services offered to the VSLA group

- VSLA Group account
- Individual accounts for each group member
- Initial individual loan amounts of up to UGX 500,000 at an interest rate of 2.5% per month flat rate not reducing balance
- One free withdrawal per week (charge free) for deposits
- No service charges on the VSLA Group and individuals accounts
- Quick loan processing
- Agricultural loans with a six-month grace period and business loans with a four-month grace period
- Minimum balance on the account UGX 50,000 for the Group Account and UGX 15,000 for individual accounts
- Minimum group loan amount UGX 3,500,000
- Free financial literacy training

Actions to ensure more equitable access to credit by women

- Loans are tied to level of savings with the group
- Additional collateral requirements depend on whatever assets the individual has to offer in addition to the group guarantee
- Women's mobility constraints are addressed by the Bank's VSLA agents who are mobile and reach out to each VSLA group to pick deposits and monthly payments during their VSLA meetings.

Challenges the bank is facing with this service model for which a strategic partnership with IFDC is needed

- Most groups are not formally registered due to bureaucracies at local government level
- Takes time to build trust with the VSLA group
- Illiteracy hence inability to write farmer group constitutions
- Significant level of default loans under the CATALIST project which haven't been recovered more than two years after project closure
- Incorrect information provided to farmers on bank policies during financial literacy trainings handled by non-bank staff which is largely responsible for the high default rate
- Abuse of the provision where only three group leaders sign off the group loan. In the past, farmer groups have dissolved and reformed with a new executive and consequently accessed new loans from other banks without clearing old debts
- Few motorcycles for the bank's mobile VSLA agents

E. Gender sensitive market access services

Discussions were held with two lead firms or MSMEs – Responsible Suppliers in Mbale and Katiba Traders in Kabale. Responsible suppliers is owned by three men and employs an additional ten employees, seven men and three women and six male casual labourers. The firm offers three main services to REACH farmers. Commercial milling – about 40% of all those who seek the service are women. The firm offers the service to clientele who have at least 50 bags or 5 MT of unmilled rice. The rice should have a moisture

content of 13-14% and a maximum of 5% impurities. Farmers who bring rice with high moisture content can pay for drying services at 500 UGX per bag. The minimum accepted for drying is at least 10 bags. Currently, the firm's main service is a ready market for farmers' unmilled grain. Forty percent of the farmers who sell their grain to Responsible suppliers are women.

The main constraints faced by women include limited access to land and hence low supplies to the market, limited participation in marketing due to lack of transport facilities and cultural limitations on mobility, including limited access to storage facilities.

Katiba Traders is owned by two men and employs twelve staff – 7 men and five women. The firm provides a ready market for potato; offers a transport subsidy to its suppliers and also trains farmers in PHH to enhance their capacities to meet its quality specifications and in value addition. Specifications that must be met by suppliers include the following; the variety must be Rwangume or Kachpot, a minimum tuber size of 40mm in diameter; mature tubers; moisture content of 17-20%, at least 1MT, willingness to be paid on a per Kg basis. Currently 70% of Katiba's suppliers are women while those who receive training in PHH are 50% women. Training in value addition is only offered to women. Feedback on services is usually obtained in the quarterly meetings held with farmer groups to review the MoUs and in routine monitoring field visits. Some of the key outcomes of the feedback sessions with suppliers have been the decision to offer transport services or a cash subsidy in lieu to Katiba suppliers and the new flavoured potato crisps.

The following actions were proposed by the Lead firms to enhance volumes sold by women:

- Establish a good database on who the women participating in REACH are and their current supply characteristics and constraints
- Communicate end market requirements and ensure access to training and PHH tools by farmers and MSMEs
- Promote access to transport facilities – IFDC purchases truck, RS maintains and farmers contribute fuel
- Brand and package milled rice from FBGs in smaller retail packs – 2 Kg, 5 Kg, 10 Kg for marketing by women at FBG level
- Pay for farmers produce directly into individual bank or mobile money accounts to enhance women's control over sales proceeds
- Procure a potato storage facility through a Katiba Traders-IFDC cost sharing arrangement
- Train MSMEs in value addition, food safety and quality assurance

1.3.2.3 Gender sensitive project management

The analysis focused on two key elements of project management; staff and the monitoring and evaluation system. The document review indicated that there is no specific policy statement on gender on which to anchor the strategy. However, gender equality is widely recognised as important in project delivery as evidenced in past projects such as CATALIST, in the human resource policy, and on the agenda of staff meetings. Some of the staff received training on gender mainstreaming under the CATALIST project and training manuals are available. IFDC as an institution doesn't have a competency development plan, nor is gender awareness mainstreamed as a requirement in job descriptions. However, staff expressed a need to enhance their skills in gender mainstreaming given that it is a deliverable in all their work plans. Staff have an opportunity to include training in gender mainstreaming as part of their personal and professional development in their performance plans at the beginning of the year. However, a project-staff wide training might be easier to execute than a piece meal strategy.

REACH also has a plan to recruit a project specific gender mainstreaming coordinator. A blended model is however preferred; where staff have the ultimate responsibility and skills to implement gender mainstreaming activities in their specialised fields as an integral part of their terms of reference/ job description while the coordinator oversees the implementation of the gender strategy, provides staff

capacity building, and supports colleagues in mainstreaming gender considerations into their operations, including knowledge management, M&E indicators and results measurement.

The IFDC HR policy specifies an up to 15% salary increment for excellent performance. Discussions with staff indicated that good performance on gender can also be rated as part of the performance appraisals and awarded in line with existing incentive systems.

Overall, with regard to working conditions; female staff on the project are few but they reported enjoying the same privileges and opportunities as anyone else working on the project. The HR policy makes provision for flexi time to cater for breastfeeding mothers, staff are free to go to the field with their babies and a nanny although the nannies costs have to be covered by the respective staff. National regulations on paternity and maternity leave are also fully enforced. It was observed though that discussions with Landlords should be initiated so that toilet facilities in regional offices are designated by sex.

Other concerns raised by staff were that gender mainstreaming in the project is relatively marginalised: Reporting on gender usually gets the last thirty minutes on the staff meeting agenda and training on gender has only two days allocated for the entire cropping season. This underpins the need to enhance gender mainstreaming skills for all staff rather than implementing stand alone actions.

M&E indicators, sex-disaggregated data and analysis

The M&E system needs to generate credible, evidence-based data on what does and doesn't work for men, women and youth in REACH interventions. A project baseline survey was conducted and the results framework is already in place. The approach to mainstreaming gender in the M&E system will be to embed gender mainstreaming actions within the overall project measurement system. The project will collect and analyse sex-disaggregated data wherever applicable. Specific gender case studies - highlighting stories of change and lessons learned will also be produced for partners and other stakeholders. Reporting templates for partners will include gender tracking.

From the assessment of the internal context, the project implementing team has some capacities for gender mainstreaming and considerable support from the development partner. The bulk of effort needs to be placed on providing clear policy guidelines, budgetary support, reinforcing capacities and reframing the value proposition for gender mainstreaming for the few whose mindset and understanding of its relevance to project design and implementation is still a challenge. There is also a need to allocate adequate financial resources and staff time to support the implementation of the gender-related actions proposed by this strategic plan.

2.0 The REACH Gender Mainstreaming Strategy

2.1 Strategic Objectives for Gender Mainstreaming in REACH

The overall goal of the REACH gender mainstreaming strategy is to strengthen the efficiency, productivity, inclusiveness and resilience of men, women and youth in the potato and rice value chains. This is expected to be achieved by ensuring that gender responsiveness is the norm at all levels of the institutional framework (staff and implementing partners) and at all stages of the design, planning, implementation, monitoring and evaluation of all interventions.

Objectives:

The strategic objectives are derived from ideas deliberated upon and agreed to among project stakeholders as key drivers towards ensuring equality of outcomes for men and women beneficiaries in the project. These include:

1. To promote gender responsive service delivery across target value chains

2. To facilitate the removal of barriers to entry and effective participation of men, women and youth in value chain operations
3. To promote meaningful involvement of women in economic decision-making at household and group level
4. To create an enabling environment for women's economic empowerment
5. To enhance the gender responsiveness of project management

The target audience:

The project has four main stakeholder groups. The target audience for the strategy has been defined at two levels a) the target beneficiaries and b) project staff and field level implementing partners. Different actions have been developed to ensure that all target audiences are enabled so that the REACH project achieves its stated gender equality objectives.

a) Target beneficiaries

1. Farmer Groups
2. Farmer Business Groups (FBGs)
3. Young graduates placed at FBGs
4. Micro and Small and Micro Enterprises (MSMEs)/ Lead firms
5. Equipment providers
6. Spray service providers
7. Agro-dealers
8. District local governments (infrastructure and policy)
9. Implementing partners (IPs)
10. Other extension agents of MSMEs
11. Financial Institutions
12. Intermediary Agents (Aggregators/Warehouse Operators)

b) Direct implementers

1. IFDC staff
2. Implementing partners
3. Other NGOs working on complementary programmes

c) Knowledge partners

1. Cardno Emerging Markets
2. Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) of the Government of Uganda
3. National Agricultural Research Organization (NARO)
4. Royal Tropical Institute (KIT)

d) Funding Partner

1. Embassy of the Kingdom of the Netherlands

2.2 Actions to Achieve the Strategy

2.2.1 Promote Gender Responsive Service Delivery Across Target Value Chains

As noted earlier if men and women are to equitably access value chain support services, then the providers of these services must deliver services in a gender-aware manner. The following actions were proposed by a select group of service providers as vital to ensuring gender responsive service delivery and consequently equitable access for men, women and youth.

1. Negotiate partnership agreements with agro-dealers in which they commit to supply bulk input procurement orders from FGs/FBGs with embedded supply credit to enable farmers immediately put

their GAP learning in practice. Agro-dealers also commit to buy “verified”⁹ for quality to foster customer loyalty and lower risks to farmers; Further, as an alternative to bulk input procurement and for contexts where synchronized planting is not possible, agro-dealers could organize mobile input sales in rural areas just prior to the onset of the planting season (through a cost sharing arrangement) to cater for women’s mobility constraints and finally; train rural women in good agricultural practices including input use.

2. In build in IP partnership agreements a training organized by IFDC for all implementing partner staff in gender sensitive extension and training service delivery and how to tailor content and tools to GM principles. IFDC conducts spot assessments of the responsiveness of the training content and delivery approach to women and men’s needs across age. Partnership agreements should require the imposition of affirmative action (through quotas or registration of both husband and wife) to ensure equitable participation of men and male youth in particular in farmer groups.
3. Negotiate partnership agreements with banks in which they offer the financial literacy training directly to avoid conflicting messages; the bank promotes the use of its mobile banking facility and platform among farmers & mobilizes women through its mobile VSLA agents to access credit from the Bank tailored to meet their needs e.g. facilitating women’s access to an agricultural loan product that can cover charges for renting land for production and is payable after harvest.
4. Negotiate partnership agreements with MSMEs in which they commit to communicate end market requirements and train FGs and FBGs on how to meet them; provide embedded supply credit to enable farmers access to post harvest management tools; establish aggregation facilities at FBG level; provide transport subsidies e.g. where farmers pay only the fuel cost if they meet the minimum supply order; and facilitate branding and packaging of produce for women to retail at the bottom of the pyramid and additional training in value addition, food safety and quality assurance for women and finally provide for direct payment of women’s produce into their individual bank or mobile money accounts to enhance their control over sales proceeds
5. Link women to agribusiness incubation facilities to develop new potato-rice based products for the market.
6. Establish a good M&E database to profile the REACH project women beneficiaries including their current production and supply characteristics and constraints

Output level indicators:

- Number of gender-responsive partnership agreements signed with REACH support providers
- Number of and percentage of selected lead firms/SMEs implementing institutional actions to promote gender equality and women economic empowerment as part of their business case

Outcome level indicators

- Number of farmers using at least two support services (disaggregated by sex and value chain)
- Number of farmers accessing credit for investment (disaggregated by sex, type of investment and value chain)

2.2.2 Facilitate the Removal of Barriers to Entry and Effective Participation of Men, Women and Youth in Value Chain Operations

The following actions will be pursued to eliminate forms of invisibility and foster greater participation of women and youth as business owners, and or employees in the potato and rice value chains.

1. Demonstrate GAP practices especially fertilizer use and herbicide application and tailor selection criteria to enable more recruitment of women as demo-host farmers

⁹ The Ugandan input market now has two private sector-led quality verification labels used in tandem with the MAAIF label – “Agverify” for seed and “KAKASA” for agro-chemicals.

2. Sensitize FG and FBGs to link their VSLA savings to the purchase of productive assets – tarpaulins, knapsack sprayers, improved storage facilities, labour-saving technologies, etc., and demonstrate the expected returns to investment
3. Set quotas to promote participation of male youth in groups to enhance their access to knowledge and improved seed
4. Support the nomination of women to FBG marketing committees, organize exposure visits to lead firms and train them in negotiation skills
5. Support women and men to implement their business plans for upgrading their position in the value chain [including access to starter capital for investment in processing equipment such as fryers, slicers, packaging materials, etc.]
6. Firm up linkages to lead firms to promote bulk produce marketing

Output Indicators:

- Number of women preferred enterprises incorporated in the FBG business plans
- Proportion of women recruited as demo host farmers (calculated as the percentage of women in the total number of demo-host farmers)
- Number of farmers purchasing at least one productive asset annually (disaggregated by asset, sex, value chain)
- Proportion of women participating on FBG marketing committees (%)

Outcome indicators:

- Percentage of produce sold by farmers through the FG or FBG (disaggregated by sex and value chain)
- Number of new jobs created (disaggregated by sex and value chain)

2.2.3 Promote Meaningful Involvement of Women in Economic Decision-Making at Household and Group Level

Actions here revolve around the recognition that leadership opportunities for men and women go beyond leading at the FG and FBG level. Other processes under REACH such as value chain upgrading, formulation of ordinances and byelaws will require all sorts of representation in which women can be supported to participate. The overarching action is for implementing partners facilitating group formation and strengthening to inculcate a culture of equitable representation for men and women through agreed quotas and for an M&E system that allows for tracking the different dimensions of women's representation in leadership. It also encompasses encouraging women to step up to lead in non-traditional executive positions and to gain a national voice through networking forums. There are two levels of audiences central to the success of this area of intervention. First are the implementing partners who are expected to support and facilitate equitable mobilization of men and women across age categories into farmer groups and farmer business groups and the farmers themselves.

- Facilitate training of implementing partners field staff and IFDC staff in the Gender Action Learning System (GALS) or the Household Approach to build their skills in participatory joint household visioning, planning and budgeting
- Facilitate FGs in joint household visioning, planning and budgeting (include obtaining commitments to equitable role sharing, decision-making and benefit sharing)
- Identify model households at the community level (with regard to equitable role sharing, decision-making and benefit sharing) to inspire other households and catalyze behavior change
- Hold sensitization sessions for men about the importance and benefits of changing gender norms and practices that perpetuate gender inequalities
- Strengthen farmer based institutions – FGs and FBGs through training in group dynamics, support to formal registration, etc.

- Establish and enforce a quota through the IPs for inclusive representation of men and women on the leadership committees of FGs and FBGs, value chain upgrading committees e.g. the quality assurance committees, marketing committees, etc.; and on value chain governance committees
- Conduct training for nominated FG, FBG leaders in leadership, negotiation and communication skills
- Promote nomination of women to non-traditional executive positions – group chairpersons, representation on the planned byelaw/ordinance formulation taskforces, on the water management committees, infrastructure committees, etc.
- Establish an SME Business women’s network forum and provide support to mentoring of women entrepreneurs (match 2SCALE female role models with budding female entrepreneurs under REACH)
- Enable tracking by the M&E Unit of all spin offs such as participation in local governance (at project midline and endline)

Output level indicators:

- Percentage of women participating in farmer-based institutional (FBI) leadership and value chain governance (disaggregated at FG, FBG and other spin off committees, district or national level platforms and by value chain).
- Number of FBG leaders trained on association governance, organization, management (disaggregated by sex and expressed as a percentage of total leaders elected within groups)

Outcome level indicators:

- Percentage of targeted women and men beneficiaries who report perception of self-worth or confidence
- Increase in number or percentage of women who report meaningful involvement with spouse in household decision-making regarding income, productive assets, investments and expenditure
- Percentage of women leaders who perceive that they are meaningfully involved or contribute to decision-making within their groups

2.2.4 Create an Enabling Environment for Women’s Economic Empowerment

Possible actions here include all actions within the boundaries of REACH that tackle underlying or structural causes of gender inequality and foster transformative power relations. Actions within REACH include gender sensitive byelaw and ordinance formulation to cater for the specific needs of men and women e.g. on management of water flows within the wetlands where rice is being cultivated; actions to strengthen women’s access to land especially land for hire; investments in infrastructure that addresses women’s limited participation in the value chain and in markets; actions to ensure safe work environments e.g. use of protective gear; sensitization meetings for men and boys to create awareness on gender norms and cultural practices that perpetuate gender inequalities and discrimination. This section also includes actions to ensure more equitable workloads (i.e. interventions that free up women’s time for other productive work and leisure) either through behavioural change resulting in redistribution of household tasks among household members or promotion of technologies that shift women’s traditional gender roles to men. The specific actions include:

- Support to local governments aimed at developing byelaws and ordinances for the potato and rice sector at district level. The process will ensure inclusion of the voices of men, women and youth to ensure a reform agenda that addresses the specific needs of men and women, their representation on formulation taskforces/working groups and in stakeholder approval processes, and their representation on policy implementation and enforcement committees e.g. the water management committees, etc.
- Investments in marketing infrastructure e.g. within-reach (FBG level) aggregation facilities, transport facilities, roads, etc., to address women’s mobility constraints and limited participation in markets; and equipment for value addition and processing

- Organise sensitization meetings for men and boys, religious and community leaders on gender norms and cultural practices that discriminate against women and or perpetuate inequality and limit women's engagement in economic pursuits
- Include a clause within partnership agreements with Lead firms aimed at promoting a safe and healthy work environment for women and men – e.g. by requiring and monitoring use of protective gear
- Promote the upgrading of women and youth into the production of new products higher up in the value chain which demand less land e.g. parboiled rice, rice feed, rice flour, potato crisps, etc.
- Equipment and practices to eliminate or reduce drudgery in existing tasks e.g. investment in power tillers by FBGs, training in herbicide use, etc. including enhanced use of equipment and spray hire services by women
- Identify and partner with other actors who promote options for reducing drudgery and quality of life for women at household level – roof water harvesting, biogas for fuel and lighting, energy-saving stoves, mills. This would mean that these partners also work with the REACH farmer groups and have a clear intent on ensuring equality of outcomes for men and women.

Output level indicators:

- Number of couples – men and women trained, sensitized through gender trainings aimed at promoting gender equitable relations at household level
- Number of MoUs signed with other NGOs who promote use of labour saving devices at value chain or household level
- Number of women upgrading into value chain nodes that require less labour input
- Number of women accessing and or using labour-saving equipment and spray hire services

Outcome indicators:

- Change in the number of women who report perceived positive change in the gender roles (social and behavioural norms), either within households or their groups that creates an enabling environment for their economic empowerment
- Change in knowledge and attitude of male farmers towards women and gender roles and economic empowerment of women
- Number of byelaws and ordinances addressing the needs of men and women on rice and potato in place at the district

2.2.5 Enhance the Gender Responsiveness of Project Management

The following actions were proposed for this level:

- Project-wide staff training on gender and gender-responsive service delivery
- Mainstreaming of gender skills and competences as a requirement in staff job descriptions and performance appraisals
- Recruitment of a project specific gender mainstreaming specialist to support staff gender mainstreaming efforts
- Designate toilet facilities in regional offices by gender
- Mainstream the project gender equality objectives and indicators in the overall project M&E framework
- Make the collection of sex disaggregated data mandatory at all levels
- Document gender case studies and stories of change
- Establish an information management system on gender statistics and publications for use by staff and other project stakeholders

Output Indicators:

- Number of project staff reporting adequate skills and competences in gender mainstreaming in their specialized field of work

Outcome indicators:

- Stakeholder perception of the gender responsiveness of REACH
- Number of stories of change documented by staff

2.3 Implementation of the Strategy

The implementation of the REACH gender mainstreaming strategy will primarily be conducted with the help of a gender mainstreaming specialist. The implementation of strategic actions at field level will however be the responsibility of project staff with support from the centre with regard to policy direction, time and budget allocations.

2.4 Monitoring and Evaluation

The gender coordinator will work closely with the REACH Monitoring and Evaluation Unit to develop a set of indicators that will be incorporated in the overall project M&E framework and mechanisms. The process will be participatory and follow the existing guidelines in IFDC. In addition, the gender coordinator will keep track of the implementation of the strategy by indicator.

The expected outcomes include:

- Having a participatory gender responsive M & E framework in place.
- Gender analysis reflected at every stage of M & E in the project
- Sex disaggregated data mandatory in M & E reports
- Staff with skills and knowledge to mainstream gender in M&E processes.
- Improved knowledge, attitudes, and skills related to gender evaluation among project staff.

The above efforts will contribute greatly to better monitoring and evaluation, thereby leading to more meaningful and accurate results. It will also help in the precise tracking required to capture the constantly changing socioeconomic dynamics influencing the livelihood of the farmers in the region. The participatory M & E methods are a learning process that will in turn update knowledge, attitudes, and skills in GM approaches in evaluation. The purpose is to move towards achieving the goal of equal opportunity and bringing about the required changes in the procedures and operations of institutions which can respond to the needs and priorities of all categories of REACH beneficiaries and its implementing partner organisations.

3.0 REACH Gender Strategy Action Plan

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|---|--|--|---|-----------------------------|----------------|
| Objective 1: To promote gender responsive service delivery across target value chains | | | | | | |
| 1. Women constitute less than 30% of agro-input outlet customers, purchase small volumes due to land access constraints and even fewer of them access input supply credit services (<20%) | Women's limited mobility due to cultural norms; inappropriate size of input packages (too big) – above women's requirements | Persistence of the gender yield gap | Organize women for bulk input procurement at farmer group level and link them to agro-dealers who sell “verified for quality products.” | Implementing partners | Feb 2018 | |
| | | | Partner with agro-dealers to organise mobile sales in rural areas just prior to the onset of the planting season. | IFDC-REACH, IPs and select agro-dealers | March - April 2018 | |
| | | | Negotiate with agro-dealers to build supply credit into bulk input procurement orders overtime. | IFDC-REACH, IPs and select agro-dealers | July 2018 | |
| 2. Most IP field staff are not trained in gender sensitive extension service delivery | Gender equality training not always mainstreamed in agronomy or extension training modules | Inequality of outcomes for men, women and youth from REACH interventions | Conduct training of all IP field staff in gender sensitive extension and training service delivery and tailoring training content and tools to GM principles | IFDC-REACH | Feb 2018 and as need arises | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|---|---|--|---|-----------|----------------|
| 3. Limited access to appropriate financial services to support investments in the value chain for men and women but more so for women | Limited financial literacy among men and women farmers | Low private investments in value chain upgrading functions | Negotiate a partnership agreement in which financial providers directly offer the financial literacy training | IFDC-REACH, Implementing partners and finance providers | June 2018 | |
| | Limited availability of appropriate financing products tailored to the needs of men and women | | Link women and men to finance providers with appropriate products in line with REACH targets | -do- | -do- | |
| | | | Promote use of the mobile banking facility and platform among women farmers in particular to enhance their control over finances | -do- | -do- | |
| 4. Men's participation in VSLA's and or savings in general is low | Perception that VSLA groups are for women and low financial literacy | Low investment in productive assets leading to low productivity | Conduct a rapid assessment through FGDs on men's saving culture and their perception of VSLAs cognizant also that men may have access to a range of other saving options such as in cattle, land, formal accounts & may have different credit requirements | IFDC-REACH Agribusiness coordinators | Feb 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|---|--|---|--|-----------------|----------------|
| | | | outside the scope of VSLAs. Provide targeted training for men on financial literacy without excluding women | Implementing partners | March 2018 | |
| 5. Limited understanding by lead firms on who the REACH women beneficiaries are and their current supply characteristics and constraints | Lack of a shared database | Inability to develop a procurement strategy for purchasing from women in line with REACH targets | Develop a database on the REACH women beneficiaries and share it with relevant lead firms | IFDC REACH M&E Unit | May 2018 | |
| 6. Limited participation of women in marketing | Lack of transport facilities and cultural limitations on mobility | Low profitability of women managed farm businesses | Promote access to transport facilities or subsidies – IFDC purchases truck, Lead firms maintain and farmers contribute fuel | Cost sharing arrangement between IFDC-REACH and Lead firms | April 2018 | |
| | | | Set up a network of produce aggregators at FBG level | Lead firms | Feb 2018 | |
| 7. Limited access to the PHH equipment required to meet the produce quality requirements of lead firms | Limited capacity to invest in PHH equipment | Supply of low quality produce to lead firms | Support acquisition of PHH equipment for hire at FBG level e.g. drying platforms, tarpaulins, moisture meters, etc. | IFDC-REACH and FBGs | March 2018 | |
| 8. Limited control by women of sales proceeds | | | Pay for women farmers produce directly into individual bank or | Lead firms | May - June 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|---|---|---|---|-----------------------------|----------------|
| | | | mobile money accounts | | | |
| Objective 2: To facilitate the removal of barriers to entry and effective participation of men, women and youth in value chain operations | | | | | | |
| 9. Low participation of men especially male youth in farmer groups | Some of the criteria for group participation may potentially bar male youth participation such as - commercial orientation, at least 2 years prior participation in a group; use of improved inputs and access to farm land – owned or hired. | Low uptake of improved technologies resulting in low production and productivity in the value chain | Review criteria for group membership to allow for limited experience of youth with farming as a business Establish a quota to ensure equitable mobilization of women, men and youth in farmer groups Register both husbands and wives | IFDC-REACH and implementing partners | March 2018 | |
| 10. About 90% of the women in the rice sector are addressing their limited land ownership through land rental markets at a cost of UGX 500,000 or U,S, \$~140/acre/season. However, use of hired land remains sub-optimal – below requirements | Limited access to appropriate agricultural credit facilities with a grace period that allows for pay back at the end of the season. | Sub-optimal production levels especially among the women rice farmers | Ensure the partnership agreements with financing providers provide for access to agricultural credit tailored to improve access to hired land for rice production for women | IFDC – REACH and financing providers | Jan – Feb 2018 | |
| 11. Limited awareness and use of improved varieties especially rice among both men and women | Limited penetration of private and public sector led rice seed operations/ | Sub-optimal yields | Link with NARO-NACRRI and or Seed Companies engaged in rice seed promotion such as NASECO | IFDC –REACH and NARO/NACRRI or appropriate seed companies | Negotiations Jan – Feb 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|--|--------------------------------|--|--|---|----------------|
| | promotions in the area | | Seeds and set up demonstration trials on improved rice varieties. (Ensure parity in the selection of demo host farmers) | | Set up of demonstration plots March 2018 | |
| | | | Upgrade women to hire in land as blocks and operate as rice seed growers for partnering seed companies or to bulk foundation seed for NARO | Women in FBGs supported by IPs with appropriate seed companies | Selection of women in FBGs and identification of appropriate wetlands for block hire Jan – Feb 2018 Field training of selected women in rice seed production and set up of demonstration plots March – June 2018 Signing of out-grower agreement between seed company and the women in the FBG Feb 2019 | |
| 12. Sub-optimal use of fertilizer among men (..%) and women (10%) rice farmers | Limited know-how and lack of access to investment capital to put training in action. | Sub-optimal yields | Demonstration of fertilizer application as part of the GAP training for both men and women | Implementing partners | March 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|---|---|---|---|---|----------------|
| | Rural input stores are rare, which coupled with women's low mobility due to cultural norms limits their interface with input markets | | Ensure the partnership agreements with agro-dealers provide for bulk input procurement on agricultural credit terms. | IFDC – REACH and select agro-dealers FBGs and agro-dealers | Negotiations Jan – Feb 2018 Signing of supply credit agreements between agro-dealers and FBGs – Feb 2018 | |
| 13. Limited understanding by women rice farmers of the correct herbicides to use and proper application skills | Low knowledge and skills | Loss of women's rice fields either due to purchase of fake inputs or improper application | Demonstration of herbicide application as part of the GAP training for especially the women and promote use of spray services | Implementing partners | March 2018 | |
| 14. Limited participation of men in GAP training activities | Low capacity to invest in the assets needed to put the training in use resulting in a perception that the training is a waste of time | Low investment in productive assets leading to low productivity | Link FBGs to providers of appropriate agricultural credit facilities | IFDC-REACH and financing providers | Jan – Feb 2018 | |
| 15. Apart from ox-ploughs, jute bags, phones, radios, bicycles and harvesting knives; there is limited access to all other productive assets [which were reported as owned jointly] including <i>for rice</i> : improved stores (<10%); weighing | Limited access to appropriate agricultural credit facilities with a grace period that allows for pay back at the end of the season. | Low investment in productive assets | Ensure the partnership agreements with financing providers provide for access to agricultural credit tailored to improve access to productive assets for both men and women | IFDC – REACH and financing providers | Negotiations Jan – Feb 2018 Linking financing providers to FBGs Feb 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|---|--|---|---|---|--|
| scales (40%); knapsack sprayer (20%); tarpaulins (40%) <i>For Potato:</i> knapsack sprayers (43%), weighing scales (20%), improved storage facilities (20%). | Low returns to production leading to low purchasing power parity and investments | Excessive drudgery at the production node resulting in high overall costs of production & low profitability | Organise select FBGs to provide equipment hire services at a subsidized rate to members including power tillers, conical weeders, drying platforms, tarpaulins, threshers, irrigation equipment, moisture meters, improved stores for bulking, irrigation equipment, etc. | IFDC – REACH and FBGs with the support of IPs | Finalise the feasibility report and business plan for equipment hire provision at FBG level by Feb 2018 | IP operations and overhead cost Equipment purchase cost |
| 16. Limited involvement of women in marketing to M/SMES at FBG and household level | Women’s triple role and time poverty including a lack of exposure to markets in general and hence low negotiation skills. | Limited exposure of women to end-market requirements and how markets work may affect overall product quality | Establish a quota of at least 30% participation of women on FBG marketing committees and provide related training | Implementing partners | February 2018 | |
| | | | Brand and package milled rice from FBGs in smaller retail packs – 2 Kg, 5 Kg, 10 Kg for marketing by women at FBG level | Lead firms | April - June 2018 | |
| 17. Limited capacity to repay loans from the VSLA for both men and women | Promote other income sources for men and women to boost their capacity to repay loans. | Limited access to capital for investing in growing the farming rice business | Identify men and women preferred enterprise opportunities in the rice value chain and support the | Implementing partners and FBGs | February 2018 – 2020 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|---|---|--|--|----------------------|-------------------------------|
| | | | development of business plans at FBG level | | | |
| Objective 3: To promote meaningful involvement of women in economic decision-making at household and group level | | | | | | |
| 18. Women are not operating as co-business owners and have limited decision-making power and control of sales proceeds – most are coping by hiring-in land however land sizes and time to work or supervise hired labour on these fields is limited. | Limited joint household planning and equitable benefit sharing and division of labour | Low productivity overall on both sole and household level fields Low focus on the long term and hence limited investment in the sector | Implement the GALS or household approach to foster joint household decision-making, visioning, benefit sharing and division of labour | Implementing partners GALS Expert | February 2018 - 2020 | ~U.S. \$135,000 ¹⁰ |
| | | | Identify model households at the community level (with regard to equitable role sharing, decision-making and benefit sharing) to inspire other households and catalyze behavior change | Implementing partners and FGs | August 2018 | |
| 19. Women have low decision-making power with regard to use of sales proceeds, how much to save and how much to invest in productive work or assets | Inequitable power relations at household level | Diversion of women's labour into sub-optimal coping mechanisms resulting in low labour productivity in sole and jointly managed activities | Implement the GALS or household approach to foster joint household visioning, planning, division of labour and benefit sharing | Implementing partners GALS Expert | February 2018 – 2020 | |

¹⁰ Assumes 1 GALS Expert at a cost of U.S. \$10,500 for a 5-day training session, travel logistics and virtual follow up; 30 field staff trained in GALS over 5 days as trainers of trainers at a cost of U.S. \$30 per day; a minimum of 3 sessions with 10% of the farmer groups (160 farmer groups or 2,000 couples) at an estimated cost of U.S. \$10 in IP costs per farmer per session. Excludes M&E costs and follow up training sessions.

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|--|---|---|----------------------------------|-----------|----------------|
| | | Low focus on the long term and hence limited investment in the sector | | | | |
| 20. Limited participation of women in farmer group leadership [66% of farmer group leaders across intervention districts and commodities are men]. Priority intervention districts include Iganga, Sironko, Mbale, Bugiri, Pallisa, Kisoro and Kapchorwa. | Beliefs vested in culture or religion that leaders are men. Women's limited voice and agency | Low productivity | <p>Establish a quota to ensure equitable representation of women and youth in FG and FBG leadership committees</p> <p>Structure the M&E system to capture women and youth in leadership at various levels</p> <p>Training of women and youth in group dynamics and leadership, communication skills, etc.</p> | Implementing partners | June 2018 | |
| 21. Limited participation of women in value chain governance | Limited exposure to networking opportunities | Low productivity | Establish an SME Business women's network forum and provide support to mentoring of women entrepreneurs | IFDC-REACH | June 2019 | |
| Objective 4: To create an enabling environment for women's economic empowerment | | | | | | |
| 22. Limited inclusion of women and youth voices in policy processes | Lack of gender-responsive policy facilitation skills | Reform agenda that don't address the specific needs of men and women | Impose a 40% quota on women and youth representation on | IFDC-REACH and local governments | June 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|---|---|---|---------------------------|------------------------|----------------|
| | | | byelaw and ordinance formulation taskforces/working groups and in stakeholder approval processes. | | | |
| | | | Impose a 40% quota on women and youth representation on policy implementation and enforcement committees e.g. the water management committees, etc. | IFDC REACH | June 2018 | |
| 23. Women's limited participation in markets | Mobility constraints due to social norms and lack of transport facilities | Low returns to labour especially for women in the target value chains | Bring markets closer by supporting the establishment of a network of aggregators and aggregation facilities at FBG level | Lead firms | Feb 2018 – August 2018 | |
| | | | Provide transport facilities/ subsidy to FBGs that meet supply contract specifications – REACH supports purchase of trucks, Lead firms maintain and FBGs fuel | IFDC REACH and Lead firms | June 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|---|---|---|--|------------------|----------------|
| | | | Investments in improved road infrastructure | IFDC-REACH and local governments | ?? | |
| 24. Persistence of gender norms and cultural practices that limit women's engagement in economic pursuits | Limited engagement of men and boys on gender issues | Inefficiencies in target value chains | Organise sensitization meetings for men and boys, religious and community leaders | Implementing partners | June 2018 | |
| | | | Promote gender equality awareness using radio talk shows, TV, messaging, etc. | IFDC REACH | July 2018 | |
| 25. Limited investment in ensuring a safe and healthy work environment for women and men | Industry standards exist but are not enforced | Poor health and low labour productivity | Include a clause in partnership agreements with Lead firms on safety and conduct spot audits e.g. on use of protective gear | IFDC-REACH and Lead firms | Feb 2018 | |
| 26. Limited ownership and use of protective gear among both men and women | Lack of access to investment capital to put training into action. | Risk to health in the mid-long term hence low labour productivity | Train farmers on the hazard risk from exposure to agro-chemicals Promote use of the trained spray hire service providers as a safe alternative | IFDC – REACH, implementing partners and spray hire service providers | Jan – March 2018 | |
| 27. Women and youth have limited entitlements to land but are constrained from upgrading into higher value chain nodes that are less land intensive | Limited knowledge in value addition, business incubation and planning and low access to | Participation of women and youth as unpaid unmotivated workers leading to low labour productivity | Identify opportunities for women and youth enterprise in the target value chains and develop business plans [e.g. | Implementing partners | March 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|--|---|--|---|-------------------------|----------------|
| | investment capital | | seed multiplication, value added products, spray services, equipment hire, marketing at the BoP, etc.] | | | |
| | | | Link women and youth to product incubation facilities to develop priority product lines | IFDC-REACH and regional incubation facilities e.g. UIRI | April 2018 – April 2019 | |
| | | | Provide support to business plans [equipment, etc.] through cost sharing arrangements | IFDC-REACH | April 2018 – April 2019 | |
| | | | Provide training in service provision and marketing, product marketing, quality assurance and customer care | Implementing partners | April 2018 – April 2019 | |
| 28. Excessive drudgery in production processes | Use of rudimentary practices and tools | Perpetuates time poverty for women limiting their participation in productive tasks and leisure – low quality of life | Investment in labour-saving devices e.g. power tillers, conical weeders at FBG level through cost-sharing arrangements | IFDC-REACH and FBGs | Feb 2019 | |
| | | | Promote use of spray and equipment hire services especially by female headed households [smart | IFDC-REACH and service providers | Feb 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|---|--|---|--|--------------------------|----------------------------|----------------|
| | | | subsidy, marketing campaign] | | | |
| 29. Excessive drudgery in reproductive tasks | Gender norms and practices on division of labour Low investment in labour saving devices | -do- | Identify and partner with other actors who promote options for reducing drudgery and quality of life for women at household level – roof water harvesting, biogas for fuel and lighting, energy-saving stoves, mills, etc. | IFDC-REACH | June 2018 – end of project | |
| Objective 5: To enhance the gender responsiveness of project management | | | | | | |
| 30. Staff need to upgrade their competences and skills in gender mainstreaming to effectively implement the project work plan | Lack of access to training opportunities | Limited capacity to ensure equality of project outcomes for men and women | Project-wide staff training on gender and gender-responsive service delivery | IFDC | May 2018 | |
| 31. Lack of incentives for staff performance on gender mainstreaming | Gender skills and competences not included as a requirement in staff job descriptions and performance appraisals | -do- | Include gender competences and skills as a requirement in job descriptions and performance appraisal criteria | IFDC | March 2018 | |
| 32. Project doesn't have a designated gender support function | Planned just not yet implemented | -do- | Recruit the project gender mainstreaming specialist | IFDC | March 2018 | |
| 33. Project gender equality objectives and indicators not yet fully | Ongoing | Lack of evidence to assess the | Mainstream the project gender equality objectives | IFDC-REACH M&E Office | March 2018 | |

| Gender-Based Constraint | Cause of the Constraint | Consequence on the Value Chain | Actions to Address the Causes | By Who? | When? | Estimated Cost |
|--|------------------------------|--|--|-----------------------|--------------|----------------|
| mainstreamed in the overall project M&E framework | | impact of gender mainstreaming | and indicators in the overall project M&E framework | | | |
| | | | Make the collection of sex disaggregated data mandatory at all levels | IFDC-REACH M&E Office | Jan 2018 | |
| 34. Limited awareness of gender mainstreaming efforts of past projects | Low focus on sharing results | Limited inclusion of lessons learnt in new interventions | Document gender case studies and stories of change through a range of media | IFDC | Project life | |
| | | | Establish an information management system on gender statistics and publications for use by staff and other project stakeholders | IFDC | June 2018 | |

References

- Bishop, C. 2017. Women's Economic Empowerment and Agribusiness: Opportunities for the gender transformative agenda
- GoU/MAAIF. 2016. National Agricultural Extension Policy and Strategy.
- UN Women, UNDP, UNEP and the World Bank Group. 2015. The cost of the gender gap in agricultural productivity
- World Bank Group. 2015. *Women, Business and the Law 2016: Getting to Equal*. Washington, DC: World Bank. doi:10.1596/978-1-4648-0677-3. License: Creative Commons Attribution CC BY 3.0 IGO

Glossary of Relevant Terms and Definitions

Gender: Gender refers to the social construct of roles, responsibilities and entitlements of women and men in any given culture or location. Gender further defines the relationship between all actors in a given society. These relations are influenced by social, cultural, political, environmental and economic set up.

Gender roles: These are the roles which are classified by sex, with the classification being social rather than biological. In most cases either men or women could have easily undertaken the identified role, unlike with the case of sex roles which are not interchangeable. Gender roles tend to differ between societies and tend to change over time for reasons ranging from education, technology, and economics to social crises among others.

Sex: Refers to the physical and psychological aspects of human beings.

Sex roles: These are roles for men and women, which are biologically determined and limited to one particular sex.

Gender equality: Unlike sex, which refers to the biological difference between male and female, gender refers to men's and women's roles and responsibilities that are socially determined. Gender equality is a principle based on the belief that all men and women are equal before and under the law and should have equal rights, dignity and equal opportunity in economic, political and social life.

Gender equity: Equity means fairness and justice in the distribution of benefits and responsibilities between men and women and boys and girls. Equal opportunities in access to social and economic resources.

Gender statistics: Gender statistics represent gender issues and concerns in society according to sex variables. Not all the data disaggregated by sex will necessarily raise gender issues.

Gender analysis: The process of collecting sex-disaggregated data and other qualitative and quantitative information on gender issues, including access to and control over assets (tangible and intangible), as well as beliefs, practices, and legal frameworks, and analyzing that data to examine gender disparities, differences, and relationships within the broader social context and their implications on development interventions. There are many methodologies available for conducting gender analyses.

Sex-specific data: Data collected according to the physical attributes of male and female.

Gender indicator: Gender-sensitive indicators have the special function of pointing out gender related changes in society over time. Their usefulness lies in their ability to point to changes in the status and roles of women and men over time, and therefore to measure whether gender equity is being achieved. The use of gender indicators and other relevant evaluation techniques will lead to a better understanding of how results can be achieved; using gender-sensitive indicators will lead to more effective planning and program delivery [CIDA, 1997].

Participation: Participation is an often-misunderstood word which means different things to different people. In the context of REACH, it refers to the active involvement of intended target group /beneficiaries, both men and women across the socioeconomic ladder, during all stages of a project.

Stakeholder: A person or organisation with an interest in the outcome of a project. Not all stakeholders will be beneficiaries nor will they necessarily all be supportive of a particular project. Knowing who the stakeholders are and their particular interests is important in designing a project and gaining support for it.

Gender sensitization: This mainly focuses on enhancing opportunities and building the capacities of both men and women, to create awareness regarding the cultural and social differences between men and women and how these result in differing roles, power relations, privileges, responsibilities, needs, access to and control over resources and benefits.

Gender blindness: A number of programmes or policies fail to recognize gender as a key determinant of the choices available to women and men. Gender responsive development programmes on the other hand are those which take gender issues into account.

Gender-neutral: A number of programmes presume that men and women have similar needs and thus merit similar treatment and services. Gender neutral programmes tend to operate on the principle that men and women should be treated equally in order to ensure that gender will no longer be a basis for the allocation of benefits and burdens in society.

Gender mainstreaming (GM): This refers to deliberate efforts to integrate strategies and actions that address gender inequalities into policies, plans, programmes, projects, institutions and laws. The ultimate goal of GM is equal participation in, and benefit from development initiatives for both men and women. It involves identifying and removing constraints that may deter the effective participation and/or benefit of women and men from the development process.

Gender-disaggregated data (GDD): Gender disaggregated data represents gender issues and concerns in society according to sex variables. Not all the data disaggregated by sex will necessarily raise gender issues. The GDD builds on SDD and reflects the status of all socio-economic groups in community, samples or target populations. It identifies disparity in gender roles, identifies the gender concerns and their implications to the projects and programmes by identifying the causes of imbalances and raise consciousness on the issues in the society.

Gender balance refers to equal treatment for both females and males in every aspect that can be envisaged.

Productive activities: Those activities carried out to produce goods and services for payment in cash or in-kind. They include both market production with an exchange value, and subsistence/home production with an actual use-value, but also a potential exchange value (Moser 1993).

Reproductive activities: These are activities relating to biological reproduction and also care and maintenance of the family. Some such activities are caring for the children and the sick, cleaning the home and washing clothes. These activities are not remunerated and payment is not expected for them.

Gender stereotypes: Repeated pronouncement or beliefs repeated or reproduced without variation, corresponding to a fixed or general pattern and lacking individual distinguishing features or qualities. Stereotypes ignore the reality of individual differences and produce normative, standard values, and very often reflect common prejudices.

Gender awareness: The ability to identify problems arising from gender inequality and discrimination, even where they may not be obvious or part of a commonly accepted view. Gender awareness refers to a high level of gender consciousness.

Gender sensitivity: Refers to the ability to recognise and take into consideration gender issues arising from the different social locations of men or women and their gender roles. It must be noted that sensitization only allows an entry point for capacity building but by itself does not foster gender responsive plans. REACH recognizes the importance of GM as a development issue, and has gone further to establish a mechanism to accelerate the progress in the operation.

Gender blindness: This is a situation where people, programmes or policies fail to recognise gender as a key determinant of the choices available to women and men. Programmes or policies fail to recognize gender as a key determinant of the choices available to women and men.

Gender responsive: Gender responsive development programmes are those, which take gender issues into account and respond to the needs and priorities of all people.

Gender planning: This is a planning approach that takes into account the fact that women and men play different roles (gender roles) and therefore have different needs. The gender planning approach provides tools for incorporating gender into development planning.

Empowerment: Empowerment implies enabling people to understand the reality of their situation and to reflect upon the factors shaping that situation. It refers to people gaining the ability to undertake activities, set their own agendas and change events. Empowerment of women involves the radical alteration of the structures that perpetuate their disempowerment on the basis of gender.

Asset ownership: Ownership is recorded if the receipt or title bears the name of the individual in question or if they can sell, lease or exchange the asset. Ownership may not result in complete user rights or access. For instance, women interviewed in focus group discussions reported that when they acquire or receive bicycles from project initiatives these bicycles are mostly or exclusively used by the men in the households and do not necessarily contribute directly to lowering women's mobility constraints. Control and ownership should hence be tracked at several levels – (a) joint ownership by both husband and wife; in which case the land title¹¹ or asset receipt has both names or both the woman and man have a right to sell the asset when need arises; (b) sole ownership; in which case either the man or woman owns the asset i.e. the receipt or title bears their names and they have a unanimous right to sell, lease or exchange the asset; (c) pseudo ownership – in which case, the man or woman do not own the asset but access it on hire-basis from available asset markets; and (d) no asset ownership, or ability to borrow from asset markets in which case, the man or woman does not own the asset nor has the ability to hire it for productive use from available lease markets.

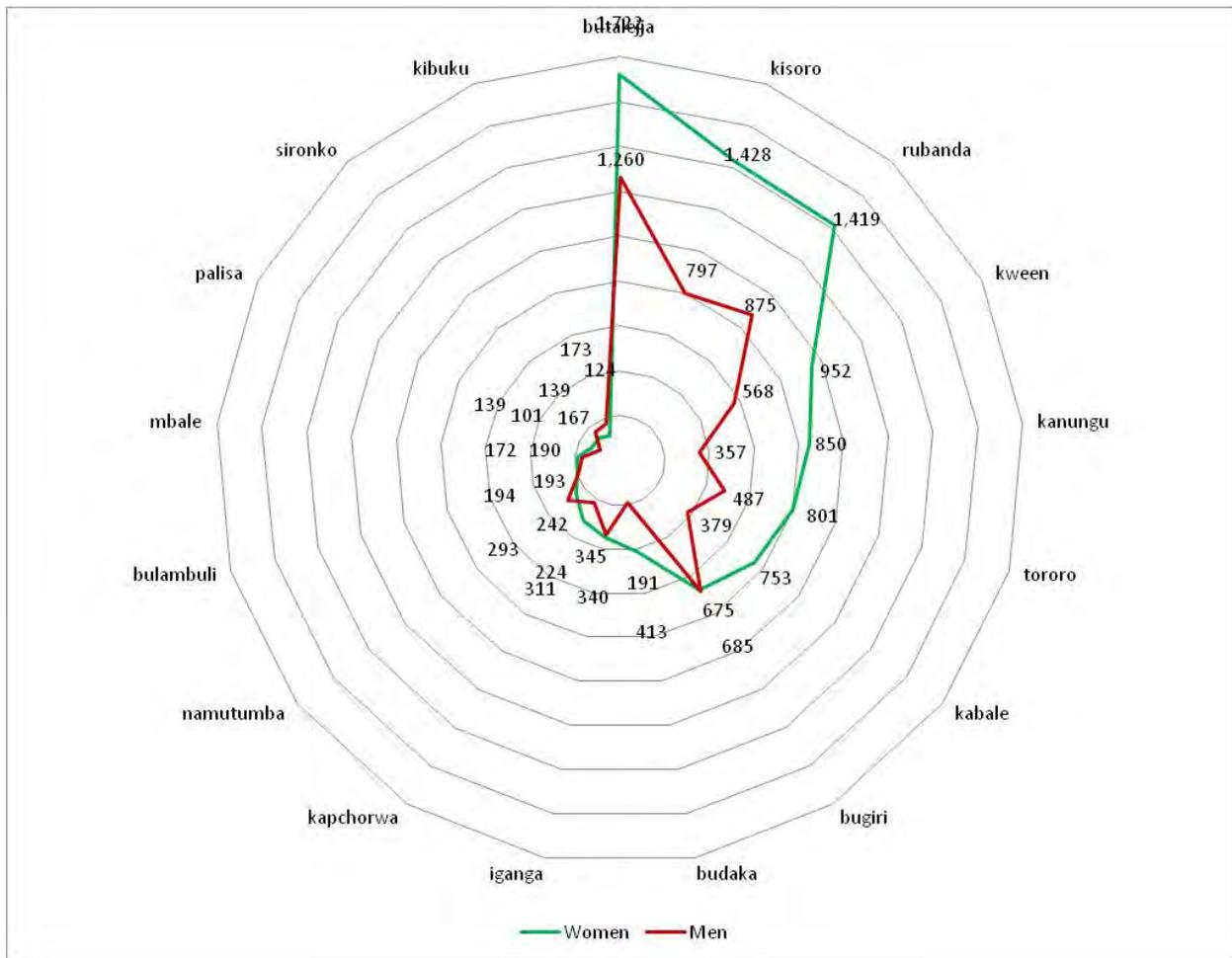
Access and use rights: Irrespective of the mode of ownership, if a man or woman can use the asset to optimal levels then they are considered to have access and use rights.

Acronyms and Abbreviations

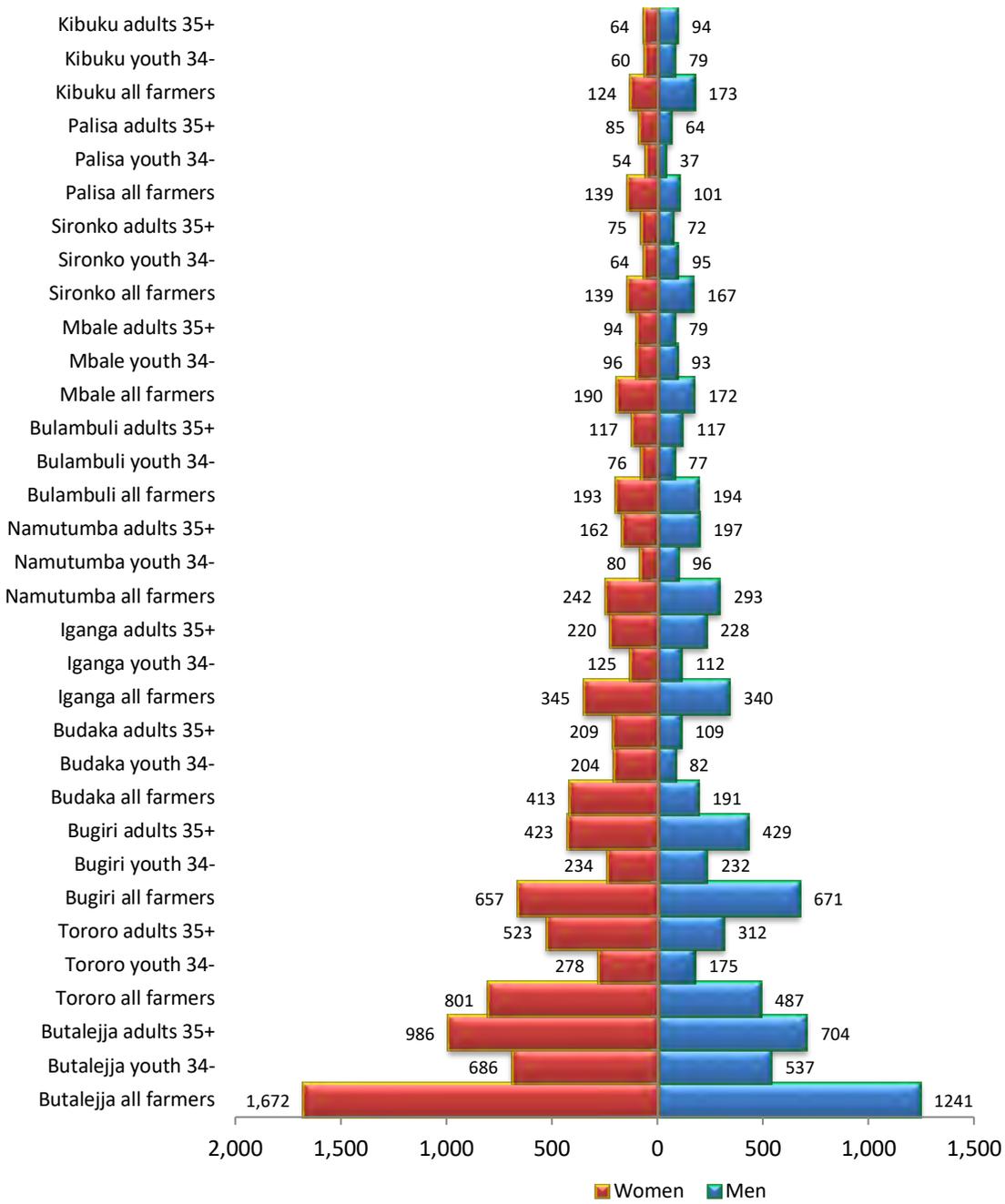
| | |
|--------|---|
| AU | African Union |
| BPfA | Beijing Platform for Action |
| CEDAW | Convention for the Elimination of all forms of Discrimination against Women |
| ECOSOC | United Nations Economic and Social Council |
| FBG | Farmer Business Group |
| GDD | Gender Disaggregated Data |
| GM | Gender Mainstreaming |
| MEL | Monitoring Evaluation and Learning |
| NGO | Non-Governmental Organisation |
| SDD | Sex Disaggregated Data |

¹¹ Studies show that women in Uganda frequently report joint ownership of land when in reality the title or other land document does not bear their names.

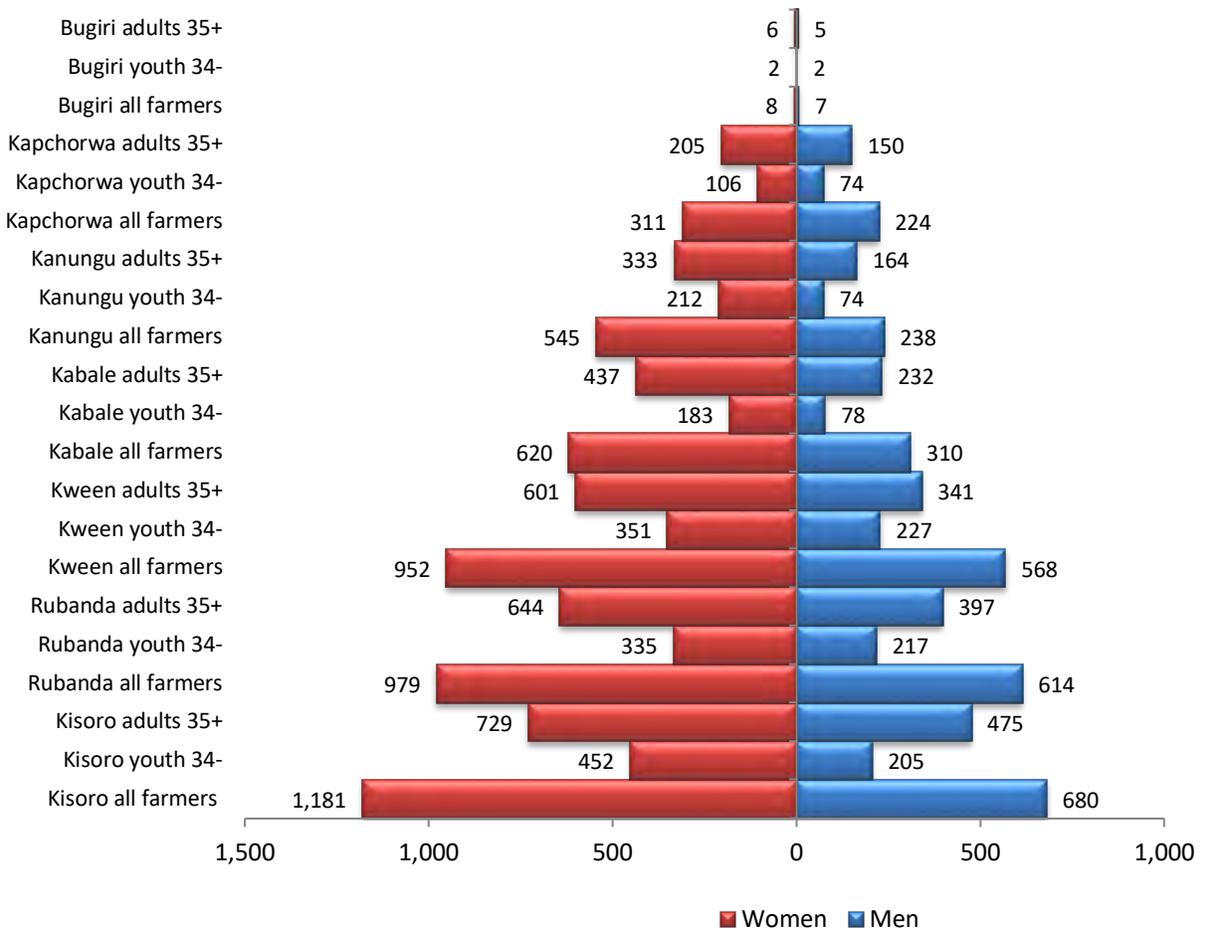
Annex Figure 1: Distribution of registered men and women farmers by district, Nov 2017



Annex Figure 2: Distribution of registered farmers by sex and age in the rice intervention districts, Nov 2017



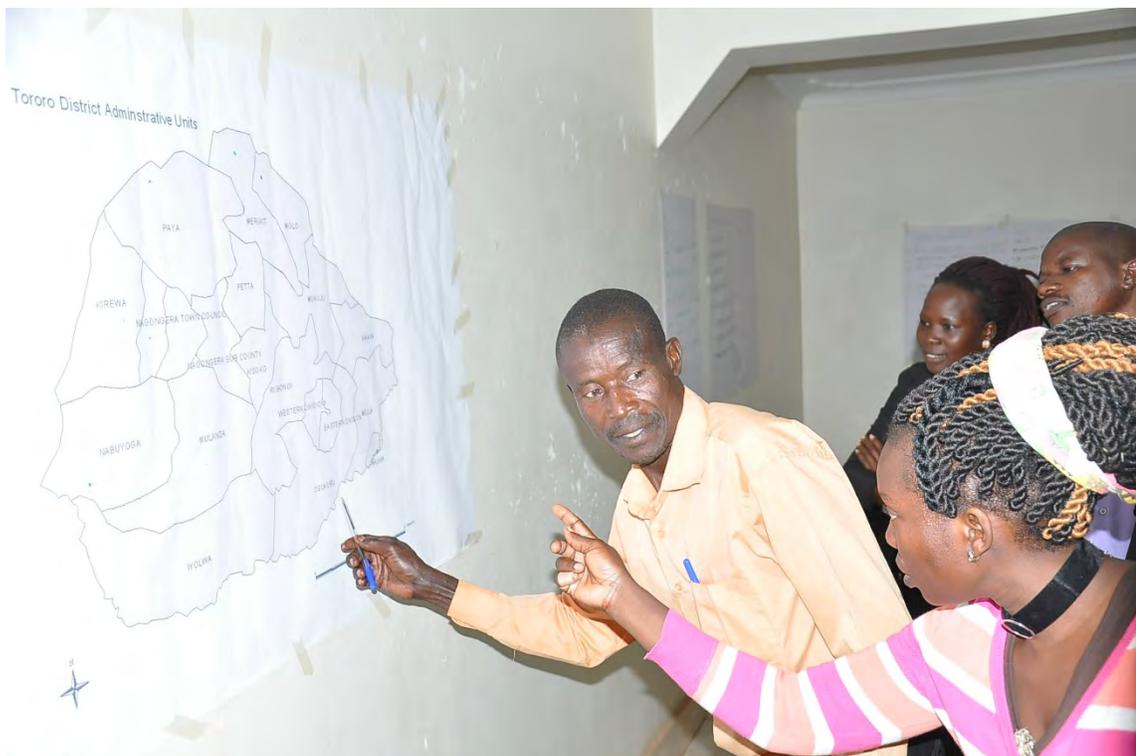
Annex Figure 3: Distribution of registered farmers by sex and age in the potato intervention districts, Nov 2017



Annex 3. Tororo Zonal Planning Report



Tororo Zonal Planning Report



July 2017

Acronyms

| | |
|-------|---|
| CAO | Chief Administrative Officer |
| DPMO | District Production and Marketing Officer |
| EIA | Environment Impact Assessment |
| IFDC | International Fertilizer Development Center |
| IITA | International Institute of Tropical Agriculture |
| MoU | Memorandum of Understanding |
| NUSAF | Northern Uganda Social Action Fund |
| OPM | Office of the Prime Minister |
| OWC | Operation Wealth Creation |
| PAS | Principal Assistant Secretary |
| PASIC | Policy Action for Sustainable Intensification of Cropping Systems |
| TDLG | Tororo District Local Government |

1.0 Introduction

This report describes the zonal planning approach and highlights the criteria stakeholders used for mapping major agro-ecological land use zones for Tororo district. Using a planning framework, stakeholders identified major enterprises, constraints, solutions, and opportunities for adoption of climate-smart agriculture (CSA), with emphasis on the lowland rice production system.

Stakeholders discussed and listed key CSA practices/technologies and indicators for tracking and achieving the three interlinked CSA pillars – of productivity, adaptation, and mitigation – for the lowland rice system. CSA requires very contextual approaches and solutions that are influenced by a host of local factors, including the climate, crops grown, livestock reared, available technologies, as well as knowledge and skills of individual farmers.

Impacts of climate change are felt locally and the response measures must be tailored to local circumstances. Bringing local stakeholders together to identify relevant challenges and strategies for building resilience is important in ensuring that solutions are contextually relevant.

Climate change is a reality and Tororo, like many district local governments, is grappling with the effects of frequent and prolonged droughts, erratic and heavy rains, which have led to floods and landslides in some parts of the country, as well as emergence of pests and diseases such as the army worm that recently ravaged maize fields in many parts of Uganda.

The International Institute of Tropical Agriculture (IITA) and International Fertilizer Development Center (IFDC), in collaboration with Tororo District Local Government, brought stakeholders together to develop locally appropriate adaptation plans, as well as CSA technologies and indicators for lowland rice system.

2.0 Zonal Planning Approach

With guidance from the facilitators, stakeholders agreed on topography and landholding as the major criteria for zoning in the Tororo district. During the zoning exercise, it was clear that the criteria that would give clear distinct zones were crops grown. This was used and the stakeholders came up with the rice, horticulture, and mixed farming zones (as shown in Figure 1).



Figure 1: Map of Tororo district showing prioritized zones (L-R) and stakeholders zoning the district.

After participants were grouped according to the rice, horticulture, and mixed farming zones, and once each zone had appointed a chair and secretary, discussions were held and key issues captured in the planning framework provided.

Participants listed all enterprises for each zone, prioritizing three and identifying the climatic or weather effects on each enterprise, gender constraints faced in advancing the enterprise, as well as solutions and opportunities available, roles of natural resources, policy issues, and gendered actions.

They also identified development stakeholders, their roles, and solutions they bring for each enterprise, as well as approaches for promoting the enterprise and gender issues.

2.1 Rice Zone

| Enterprise | Challenges | Solutions |
|------------|--|--|
| Rice | Lack of farm machinery to ease farm operations | Support farmers with on-farm and off-farm machinery along the value chain |
| | Inadequate equipment High operational costs | Financial linkages |
| | Crop failure Reduced yields | Crop insurance |
| | Washes off the crop | Improved irrigation systems Support farmers with development of wetland management plan |
| | Pests and diseases build up Poor quality of the produce | Form production and marketing cooperatives |

| Enterprise | Challenges | Solutions |
|------------|---|--|
| | Low prices for the poor-quality produce | |
| | Poor seed germination | Provision of foundation rice seed for multiplication |
| | | Advocacy |
| | Inadequate labor for bird-scaring | |

2.2 Horticulture Zone

| Enterprise | Challenges | Solutions |
|--------------|--|--|
| Horticulture | Much rain leads to rotting of onion bulbs and cabbage heads Wash away of gardens | Acquire irrigation kits and make use of the dry season. Construct communal dams to reduce runoff waters and acquire water for irrigation |
| | Little rain leads to withering and drying of horticulture crops Increased drying rate | Soil and water conservation practices Irrigation (sprinkler, drip) |
| | Reduced income Reduced yields High pest infestation High production costs | |
| | Women have limited access to and control over land. Limited access to planting materials because of low purchasing power and long distances | Access to affordable credit |
| | | Forming cooperatives for collective marketing |
| | Inaccessibility due to poor roads | Routine road maintenance |
| | | Solar-powered technology Agroforestry Storage facilities |
| Cassava | Too much rain leads to rotting | Acquire more tolerant varieties |

| Enterprise | Challenges | Solutions |
|---------------|--|---|
| | Highly affected by cassava mosaic, cassava brown streak disease | Tolerant varieties |
| | Women have limited access to planting materials because of low purchasing power and long distances | Awareness creation in the community on the role of women in agriculture |
| Finger millet | Too much rain leads to nutrient loss due to leaching and high losses at harvest | Diversification to similar crops like sorghum |

2.3 Mixed Farming Zone

| Enterprise | Challenges | Solutions |
|--|---|---|
| Maize | Drying of maize | Planting drought- and disease-tolerant varieties |
| | Increased incidences of pests and diseases | |
| | Low yields | Construction of water reservoirs and irrigation |
| | Unequal sharing of proceeds after sale | Trainings for awareness creation on gender roles and the advantages of couples working together |
| | Limitation on land ownership | |
| | Low bargaining power by farmers | Formation of cooperatives and access to market information |
| | Flooding destroys the crop by either washing it away or causing it to rot | |
| Limited storage facilities | Improve market linkages | |
| The energetic youths have limited access to land | Land hire through local leaders | |
| Cassava | Increased incidence of pests and diseases | Planting drought- and disease-tolerant varieties |
| | Low yields | |
| | Low production | Formation of cooperatives |
| | Low bargaining power by farmers | |
| Limitation on land ownership | | |

| Enterprise | Challenges | Solutions |
|-------------|--|---|
| Ground nuts | Low yields | Acquire high -yielding varieties from Serere |
| | Increased incidence of pests and diseases | |
| | Limited storage facilities | Market channel linkages |
| | The energetic youths have limited access to land | Provide incentives for youth involvement in agriculture |

There are cross-cutting challenges for prioritized enterprises in each zone, such as crop failure, reduced yields and consequently reduced income due to frequent droughts, floods, and increased incidence of pests and diseases, as well as low bargaining power for farmers, limited storage facilities, poor roads, unequal sharing of proceeds after sale, and lack of access to and ownership of land by youth and women.

But challenges relating to rice include inadequate equipment and lack of farm machinery to ease farm operations, high operational costs, poor quality rice, low prices, poor seed germination, and inadequate labor for bird-scaring. While rice is a major food and cash crop, its production has led to degradation of wetlands due to poor farming methods. The situation is worsened by high population pressure on land, coupled with unfavorable soils, water stress, and dependence on rain-fed agriculture.

The principle goal of CSA is food security and development while productivity, adaptation, and mitigation are the three interlinked pillars necessary for achieving the goal. Several technologies that exists can be classified as CSA based on their potential to increase productivity, enhance resilience to climate change impacts, and reduce greenhouse gas (GHG) emissions.

Some interventions undertaken by the district and partners include promotion of high-yielding crop and livestock varieties, irrigation, rainwater harvesting, fertilizer use, pest and disease surveillance, and mechanization. Others include use of alternative energy and energy-saving stoves, proper waste management, as well as community sensitization on sustainable land management and building capacity for resilience. For instance, the district has constructed water reservoirs and community ponds for irrigation, fish farming, and watering livestock and encouraged farmers to diversify their livelihoods for alternative sources of income, avoid deforestation, and manage waste.



Figure 5: Participants during a group discussion

3.0 Rice, CSA, and Indicators of Progress

Looking at multi-levels, participants discussed and listed key CSA practices or technologies, and indicators for tracking and achieving the three interlinked pillars of CSA (i.e., productivity, adaptation, and mitigation) for the lowland rice system. They identified the CSA practices/technologies and indicators for lowland rice systems at the enterprise, farm, household, community, markets, and policy levels.

Given the challenges and solutions, the following strategic CSA actions were considered useful for the lowland rice system.

3.1 Crop and Farm Levels

1. Use of drought- and disease-tolerant rice varieties, with a short maturity period, high yielding, good aroma, short stature, and easy to thresh
2. Timely planting and weeding, as well as harvesting and threshing to avoid shattering and spoilage
3. Use of correct amount and type of fertilizers, and deep placement of urea to minimize emission in the atmosphere
4. Use of the right seed rate, correct spacing, and line planting
5. Field scouting for pests and diseases for timely management
6. Water management using bunds constructed around the field, as well as proper land leveling for uniform distribution of water and nutrients
7. Proper field puddling
8. Planting of compatible trees on the roadsides and bunds

3.2 Household and Community Levels

1. Adoption and use of improved rice varieties
2. Development of community-based water management plans that encourage coordinated and efficient use that reduces water waste
3. Organize trainings that increase awareness on sustainable wetland protection and proper use and disposal of agro-chemicals
4. Embrace bylaws that encourage proper use of communally owned resources like wetlands and forests, among others
5. Actively engage in natural resource management committees
6. Participate in communal work, for maintaining irrigation channels
7. Attract support services like VSLA's extension services, private sector players

3.3 Market and Policy Levels

1. Use of combined harvesters and other related equipment to reduce losses
2. Use of threshing machines
3. Encouraging use of simple and affordable drying technologies like tarpaulins
4. Processing machines
5. Availing good storage facilities
6. Promoting and providing incentives for collective marketing
7. Ensure good road network
8. Use rice husks to make briquettes as sources of energy
9. Promoting use of rice straw as animal feeds and composite for soil fertility improvement
10. Ensuring availability of quality inputs like seeds and fertilizers through proper market channels and procedures that discourage counterfeits

4.0 Conclusions

1. Private sector players (farmers) need to be encouraged/incentivized to start rice seed production to act as distribution channels for tolerant varieties. This is especially important since OWC is not providing rice seed.
2. Planning for CSA at farmer level is not sufficient to ensure climate change adaptation and mitigation.
3. There is a need to think and take a multi-level approach, identifying other likeminded partners that can work on other levels that IFDC is not active in.
4. Mitigation efforts in Tororo, like in many other wetland farming areas, have not been effective because of lack of 'user rights and ownership.' Farmers explained that while trees encourage birds, they would plant them but have no incentives to do so since the majority are renting and working in the wetland with no sense of ownership.
5. Planting of trees needs to be targeted at the policy and community levels. The involvement of the extension staff is critical for selection of trees that would be compatible with the wetland, especially along the roads and bunds.
6. Proper land use planning needs to extend beyond agriculture and natural resources and cover other land uses, including settlement as they are all interlinked and affect one another.

TORORO DISTRICT FARMING SYSTEM MAP

