





# END REPORT OF TAP II PRORAMME

JULY 2020, DAR ES SALAAM

#### LIST OF ABBREVIATIONS AND ACRONYMS

**ACT:** Agricultural Council of Tanzania

**ASDP:** Agricultural Sector Development Program

BDS: Business Development ServicesBMOs: Business Membership OrganizationsBRITEN: Building Rural Income Through Enterprise

BPS Bulk Procurement System
CA: Conservation Agriculture
CAA: Community Agro-Agent

**CAADP:** Comprehensive Africa's Agricultural Development Programme

CBO: Community-Based Organizations
CFU: Conservation Farming Unit
CIP: Commodity Investment Plan
CSA: Climate Smart Agriculture
CSO: Civil Society Organization

**DADPs:** District Agricultural Development Plans

**DAICO:** District Agricultural, Irrigation and Cooperative Officer

**DFAP:** Digital Farmer Aggregation Platform

**EAC:** East Africa Community FAB: Farming as Business FOs: Farmer Organizations

FINCA: An international non-profit, microfinance organization

FtMA: Farm to Market Alliance
GDP: Gross Domestic Product
LGAs: Local Government Authorities

**LOA:** Letter of Award

MEL: Monitoring, Evaluation and Learning

MFIs: Micro Finance Institutions
MIS: Market Information System

MKUKUTA: Swahili acronym for "National Strategy for Growth and Reduction of

Poverty"

NMB: National Micro-finance BankNFRA: National Food Reserve AgencyNGOs: Non-Governmental Organizations

Norad: Norwegian Agency for Development Cooperation PASS: Private Agricultural Sector Support programme

**PPP:** Public-Private Partnership

**RUDI:** Rural Urban Development Initiatives

**RUCODIA:** Ruvuma Commercialization and Diversification of Agriculture

SACCOS: Saving and Credit Cooperative Societies
SADC: Southern African Development Community

**SAGCOT:** Southern Agriculture Growth Corridor of Tanzania

**SHFs:** Smallholder Farmers

SMEs: Small & Medium Enterprises SRI: System of Rice Intensification

**TAFSIP** Tanzania Agriculture and Food Security Investment Plan

TAP: Tanzania Agricultural Partnership

**TARI:** Tanzania Agricultural Research Institute

**TDV:** Tanzania Development Vision

VCA: Value Chain Approach
VICOBA: Village Community Bank

WISE: Women in Social Entrepreneurship

WRS: Warehouse Receipt System

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#### **EXECUTIVE SUMMARY**

- Agricultural Council of Tanzania (ACT) has completed the implementation of TAP II programme. Initially, the programme duration was 5 years i.e. from Nov. 2014 to October 2019 but was extended to 31<sup>st</sup> May 2020. Norad the Norwegian Agency for Development Cooperation mainly financed the programme.
- It was planned that the programme's goal/impact would be to contribute to improved food security and poverty reduction through commercially oriented activities and investments. To achieve that the programme pursued 5 strategic objectives, viz.:(i) Agricultural Productivity and Profitability Increased ii) Smallholder Farmers' Access to Markets Improved iii) Financing and Investment in Agriculture Increased iv) Increased Advocacy and networking v) Cross-cutting Issues Mainstreamed in the programme.
- TAP fostered the PPP approach whereby most activities were implemented in collaboration between the private and public sectors. Value chain approach was the main implementation strategy used under TAP II to bring together different partners and stakeholders whilst simultaneously addressing critical constraints along 9 selected agricultural value chains. The TAP management was tasked with the function of coordinating and facilitating partners to do their work better.
- Based on an internal outcome survey towards the end of the programme, results (outputs, outcomes and impact) were generally good with many indicators meeting the set targets to satisfactory levels. Achievements of some of the most important results as related to their respective indicators are briefly discussed below.
- The impact of the programme was to contribute to improved food security and poverty reduction in the programme areas. Two selected indicators for the programme impact were: Reduction of income poverty by 17% (MKUKUTA II) and Child malnutrition reduced by 5%. By the end of the project, income poverty and child malnutrition in the programme areas had decreased by 8% and 4%, respectively.
- The programme purpose 'agricultural sector growth increased' was measured through agricultural GDP, smallholder Gross Income and yield of strategic crops. Results indicate that, with the exception of agricultural GDP, the other 2 indicators changed positively. The gross income of maize and paddy increased by 54.5% and 83% from the baseline values of TZS 664,000/ha and TZS 2,300,000/ha, respectively. Whereas their corresponding average yields were 4.3 mt/ha and 6.25 mt/ha showing impressive gains as compared to baselines of 1.9 mt/ha and 3 mt/ha, respectively. Average agricultural GDP dropped slightly to 3.4% (from 4% baseline), which could be attributed to a combination factors e.g. restricted cross-border trade and reduced investments in some years.
- Use of improved inputs in the programme areas has increased by 51% from the baseline value significantly surpassing the LOA target of 25%. This is a result of useful practical

knowledge imparted to farmers coupled with strong business relationships forged through increasingly robust input distribution networks involving agro-dealers and input suppliers further upstream.

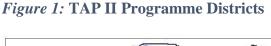
- Promotion of Conservation Agriculture (CA) resulted in 26,159 trained farmers compared to the baseline value of 23,500 farmers. Maize productivity under CA rose by 126.3% from the baseline value of 1.9 mt/ha to 4.3 mt/ha during the programme duration. On the contrary, the rise in adoption rates was not as dramatic with only 2,757 farmers practicing CA towards the end of programme which is 30% of the programme target. The main reason for this was inadequate ripping services from TSPs to enable farmers expand CA on their field farms.
- The programme generated 10,699 SRI trained farmers representing 55.2% of the overall target. Total paddy area converted into SRI was 1,977.2ha compared to the programme target of 3,422has. Average productivity of paddy increased from 3 mt/ha in 2015 to 6.25 mt/ha by the end of 2019; equivalent to a remarkable increase of 108.3%.
- A total 32 trained smallholder farmers' groups and associations (166.7% increase from the baseline value) were using rehabilitated warehouses towards the end of programme; whilst average produce stored per season in each rehabilitated warehouse was 180 mt (90% of the LOA target). The number of operational warehouses linked to financial services increased from the baseline of 10 in 2015 to 21 in 2019 out of 13 of the LOA targets.
- Aggregation of farmers produce by the private sector involved quite significant investments in warehouses estimated around TZS 3.3 billion ≈ US\$ 1.4 million over the whole programme duration. The stock level in those warehouses increased from 33,000 mt of the LOA target to 41,448 mt reported by the end of 2019 thereby surpassing the LOA target by 25.6%.
- The programme through PASS linked financial institutions, the majority being commercial banks, to farmer organizations with the view of improving financial services to the latter. Farmers and rural-based agricultural entrepreneurs in 5 out of the targeted 10 districts (50% achievement) were able to access loans through TAP II efforts. More than 15,000 farmers acquired loans amounting to US\$ 1.26 million as working capital to cover crop production costs.
- A total of 397 champion farmers which is 99% of the target (52% women) were trained gender and youth related issues. These champions were required to pass on the knowledge to their fellow farmers organized in groups of 25-30 members. Empowered women have increased their income, developed stable livelihoods, contributed to ensuring food security, gained confidence, built capacity to solve different problems and improved their participation in different agricultural value chain activities. The end-line survey showed that 34% of interviewed women do other activities in the value chain such as selling agro inputs, agro-processing and produce marketing.

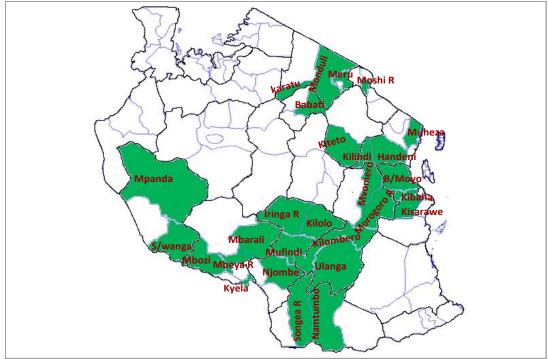
- Throughout the programme period, ACT/TAP advocated on various issues related to key policy challenges that acted as obstacles to the achievement of the program objectives. All 6 targeted issues were addressed as planned. These included: institutionalization of CIPs; combating distribution of fake inputs; Food price stabilization; Challenges for Implementation of WRS to smallholder farmers; Effectiveness of Fertilizer Bulk Procurement System (BPS); and Impediments to private sector participation in the implementation of ASDP II. The Government is currently taking some measures to address these issues such as the review of WRS Act and Fertilizer BPS.
- Since its inception, the TAP II programme identified 11 potential risks and outlined mitigating measures to address them. These risks included unfavorable market conditions, unpredictable Government policies, political interference, reluctance of large scale off-takers to be involved in the partnership, to mention but a few. Throughout the programme, these risks have been monitored very closely in order to check in time their likelihood of occurrence. Overall, no significant (adverse) long-term changes were observed which could be interpreted as alarming or out of control.
- Major lessons learned out of the TAP II experience include: (i) capacities of smallholder farmers through groups, networks and associations take time to be established. Business development of these entities should start at 'apex levels' and be closely linked with local SMEs e.g. the success of AMBERICO in Mbeya Region (ii) the farmer-to-farmer extension system for both CA and SRI lacked appropriate incentives to lead farmers who were such a crucial link in the dissemination of technologies (iii) Capacities of potential service providers should be prioritized for accelerated adoption of technologies e.g. the case of CA dissemination in Northern Tanzania.
- By design, the programme has always strived to enhance sustainability of its interventions at all levels. TAP II activities sought to sustain farmers, resources and communities by promoting best farming practices available (CA and SRI) that are profitable, environmentally friendly and socially acceptable (women and youth empowerment). Engagement of key stakeholders to ensure ownership, stronger private sector to ensure commercial viability and inclusion of the public sector for policy support and general assistance, would to a large extent, assure continuation of all successful achievements under TAP II.
- As can deduced from the performance and results of TAP II, the programme has positively contributed to the goal (Food security and poverty reduction). With the high momentum gained towards the end of the programme, the partners are willing to continue the partnership activities under an expanded partnership arrangement. In order to create effective synergies and complementarities, there is a need to devise ways and methods to utilize better partners' relative strengths for upscaling these interventions. In future similar programmes, this approach could enable the partnership to reach out several hundred thousands primary beneficiaries or possibly more.

#### 1 INTRODUCTION

Agricultural Council of Tanzania (ACT) has been coordinating and facilitating the implementation of Tanzania Agricultural Partnership (TAP) National Rollout programme. TAP started its operations in 2006 in five districts in Southern Highlands as a fast track, since then had passed through two distinct phases. The first phase of National Rollout of TAP started in October 2008 operating in 25 districts, which was successfully ended in March 2011. Phase II of the programme (TAP II) was implemented for five years (October 2014-November 2019). Subsequently, the programme received funding from Norad for six months (December 2019-May 2020) consecutive interim periods under which project activities were continued. Norad is the Norwegian agency for development cooperation.

The programme goal was to contribute to improved food security and poverty reduction through commercial based activities and investments that enhance the growth of agricultural sector in Tanzania. The strategic objectives of TAP II programme included i) Agricultural Productivity and Profitability increased ii) Smallholder farmers access to market improved iii) Financing and Investment in agriculture increased iv) Increased advocacy and networking v) Cross-cutting issues mainstreamed in the programme.





# 1.1 Brief Partnership Description

# 1.1.1 Partners implementing TAP II programme

The TAP II programme is an inclusive public-private partnership (PPP) programme followed a value chain approach that supported 9 crops (maize, paddy, beans, sunflower, sesame, lablab, safflower, pigeon peas and sorghum), and supported a range of local, national and international partners from public and private sectors in the areas of agricultural production, inputs supply, marketing development, credit, and private sector investment. TAP Management Unit had a key function of coordinating and facilitating these partnerships by bringing different agricultural practitioners and stakeholders, predominantly smallholder farmers and rural based entrepreneurs to work together along the specific agricultural value chains. The management unit work to identify and outsource service providers based on ACT's procurement policies and regulations; commission assignments to service providers as summarized to annex 2, monitoring, support business relationships and share results with partners/stakeholders and the donor, Norad.

# 1.2 Brief Description of the Project

In Tanzania, smallholder agriculture is the main source of livelihoods for most of the population, employing over 70% of the population and contributing 25% to the Gross Domestic Product (GDP)<sup>1</sup>. The sector low contribution to GDP is due its low productivity which eventually lead to the smallholder low income and food insecurity. The main factors that limit productivity of smallholder agriculture in the country include land degradation and poor soil fertility; climate variability; crop pests and diseases; low adoption of improved agronomic practices as a result of inadequate access to information and unreliable agro-input supply systems and institutional barriers such as poor markets for inputs and farm products; and poor farmer organization<sup>2</sup>. smallholders' farmers are also challenged with limited access to financial services, high post harvest losses due to inadequate post harvest processes (handling, storage, value addition and processing).

The government and private sector investments has also been minimal; in productivity enhancing technologies such as fertilizers, pesticides, improved seeds and agricultural machinery, Others factors include low investments, in agricultural research and extension services, in irrigation and rural infrastructure.

In efforts to address some of these challenges, The Government of Tanzania and its development partners have developed and implemented several policies and programs aimed at improving agricultural productivity including; the Tanzania Development Vision (TDV 2025), CAADP country strategy, which translates into the Food Security Development Plan (TAFSIP – 2016/17 – 2020/21); Agricultural Sector Development Plan II (2016/17 – 2020/21); the National Multi-Sectoral Nutrition Action Plan (NMNAP – 2016/17 – 2020/21), District Agricultural

 $<sup>^{\</sup>rm 1}$  World Bank. World Development Indicators 2016. Washington, DC: The World Bank. 2016

<sup>&</sup>lt;sup>2</sup> MAFSC. National Agriculture Policy. Dar es Salaam: Ministry of Agriculture, Food Security and Cooperatives.

Development Plans (DADPs), and the Southern Agricultural Growth Corridor of Tanzania (SAGCOT).

The establishment of Tanzania Agricultural Partnership programme (TAP) were among those efforts by the Government of Tanzania and its development partners to address the specific challenges confronting agriculture. The Agricultural Council of Tanzania (ACT) together with other partners initiated TAP (a National Rollout Programme) in 2008, which is coordinating and facilitating on a daily basis. TAP is an inclusive Public-Private-Partnership (PPP) with partners at district, national and international levels which uses a Value-Chain Approach (VCA) to improve access by Tanzanian smallholder farmers to affordable credit, appropriate input and profitable output market value chains. The programme is financed by the Norwegian Agency for Development Cooperation – Norad.

## 1.3 The TAP Programme Implementation Strategy

The key implementation strategy of TAP programme was to facilitate the private sector to directly be involved and contribute to the value chain development activities. The programme identified areas where the private sector can play important roles. TAP fostered the PPP approach, and, in its implementation, plan included several activities that were implemented in collaboration of either the private sector or the public including government institutions. TAP coordinated and facilitated partners to work together in a better way; and not do the work for them. A summary of the division of partners' roles is attached on.

In order to scale up Conservation Agriculture (CA), TAP collaborated with input/equipment suppliers (John Deere, Yara, Syngenta, Monsanto, Bytrade, Suba-Agro, Seedco, Tanseed International etc.), financial institutions (Banks, Equity for Tanzania, SACCOs, VICOBA) that supported the private sector in developing and providing mechanized services for minimum tillage service provision. The approach was piloted in 5 districts (Kiteto, Babati, Monduli, Moshi Rural and Same) that are very vulnerable to climate change effects.

In the implementation of the Climate Smart Agriculture (CSA) intervention, TAP outsourced a strategic partner, the Conservation Farming Unit (CFU) – Tanzania which is managed by its parent organization in Zambia. CFU possesses vast and long experience in promoting CA to smallholder farmers in the SADC and EAC regions. Farmer-to-Farmer (FtF) extension model/approach was deployed to ensure rapid dissemination and adoption of CA minimum tillage to small, medium and large scale farmers.

TAP developed a strong Monitoring, Evaluation and Learning (MEL) system that was used to track the successes of a programme or in achieving its objectives and in achieving the expected benefits to its beneficiaries and the community as a whole. The MEL system had four key elements (a) monitoring the achievements of the program interventions; (b) collecting and analyzing performance information to track progress toward planned results; (c) using performance information and evaluations to influence management decision-making and resource allocation; and (d) communicating results achieved, or not achieved, to advance learning and inform key stakeholders.

The MEL system helped the management it seeing its commitment in using development resources as effectively as possible in order to achieve intended programme results. Through various MEL studies it was easy for the management to gauge the programme impact and by producing evidence to inform all partners and stakeholders whether change is happening as planned or not, and what is working or not working so that the needed adjustment are done (adaptive management) during implementation. The system has effectively improved knowledge, transparency of practice, and accountability to the programme different stakeholders.

#### 2 RESULTS OF THE PROGRAMME

TAP II programme activities were implemented in 29 districts. The TAP II came to an end in October 2019 with remarkable achievements, it had reached an approximate total of 80,000<sup>3</sup> smallholder farmers and rural based entrepreneurs (82.5% of the LOA target) through training, that has led to 36,858 smallholder farmers (88.7% of the LOA target) to apply and practice new agricultural technologies and management practices i.e. CA and SRI technologies.

These exciting results not only reflect TAP programme efforts, but also, they demonstrate private sector investments in the programme areas of operations and accelerated agribusiness as the area promising a future robust agricultural growth beyond TAP programme. The following are detailed strategic objectives, interventions, and their achievements.

# 2.1 The Goal/Impact

The impact of the programme was to contribute to improved food security and poverty reduction in the programme areas. Two selected indicators for the programme impact were: Reduction of income poverty by 17% (MKUKUTA II) and Child malnutrition reduced by 5%. By the end of the project, income poverty and child malnutrition in the programme areas had decreased by 8% and 4%, respectively. Due to increased well-being and prosperity of farmers in the programme area there is noticeably an increased rate in building modern houses, consumption of manufactured items (TVs, motorbikes, cars etc.) and change in lifestyles. However, these aspects would better be captured in an ex-post evaluation.

## 2.2 Programme Purpose/Outcome

The programme purpose 'agricultural sector growth increased' was measured through agricultural GDP, smallholder Gross Income<sup>4</sup> and yield of 10 strategic crops. Results indicate that, with the exception of agricultural GDP, the other 2 indicators changed positively. The gross income of maize and paddy increased by 54.5% and 83% from the baseline values of TZS 664,000/ha and TZS 2,300,000/ha, respectively. Whereas their corresponding average yields were 4.3 mt/ha and 6.25 mt/ha showing impressive gains as compared to baselines of 1.9 mt/ha and 3 mt/ha, respectively. Average agricultural GDP dropped slightly to 3.4% (from 4% - baseline), which could be attributed to a combination factors e.g. restricted cross-border trade and decreased investments in some years.

<sup>&</sup>lt;sup>3</sup> According to an internal Annual Outcome Survey of 2019/20.

<sup>&</sup>lt;sup>4</sup> Originally, the recommended indicator for measuring smallholder profitability was Gross Margin, which later on proved to have data collection complications. Upon obtaining sound advice from the M&E specialist, the Project Management opted to use the Gross Income instead.

## 2.3 Strategic Objective 1: Agricultural Productivity and Profitability increased

TAP II introduced new proven innovations that enabled many smallholder farmers to increase production, productivity and profitability of farming practices. To ensure this is achieved in a sustainable manner four sub-component had been developed (i) increased access to and use of improved inputs (ii) promotion of Conservation Agriculture (CA); (iii) promotion of system of Rice Intensification (SRI); (iv) promotion of Farming as a Business (FAB).

Below are the descriptions of each sub-component, associated activities that were implemented and their achievements.

## 2.3.1 Increased access to and use of improved inputs

TAP II programme in collaboration with government agencies; private sector & input companies (e.g. YARA, SeedCo, Lonagro, Syngenta etc.); NGOs, Agro-dealers and other like-minded partners have addressed challenges that hinder effective use of improved inputs and ensure that smallholder farmers access appropriate inputs.

The programme produced 340 trained agro dealers on technical and business skills in agro dealership, 254 trained (rural based entrepreneurs, Community Agro Agents (CAA) and others who were willing to do inputs business) and 150 agro dealers who linked to financial institutions. Meanwhile, 11 districts were facilitated to strengthen/revive their agro-dealers' associations in order to improve input supply chain.

Also, the programme created 1 e-voucher input subsidy system (100% of LOA target) which was piloted in Kilombero district with a total of 304 trained farmers and stakeholders about its' use and benefits. It was originally designed to address shortfalls of the then Government's conventional voucher-based input subsidy scheme. Since 2017 the Government has abandoned its countrywide input subsidy program thereby significantly reducing the relevance of TAP II e-voucher system.

The end-line survey reveals that; the use of improved inputs in the programme areas has increased by 51% from the baseline value (out of 25% of LOA target) and farmers can conveniently access agro inputs. Agro dealers reported that, currently about 75% of farmers have awareness on the importance and the contribution of improved inputs to the agricultural productivity.

## 2.3.2 Promotion of Conservation Agriculture

TAP in collaboration with relevant partners i.e. Government Agencies, NGOs, Farmer Organizations, inputs & equipment companies, and development partners devoted to promote Conservation Agriculture in 5 districts (*Kiteto, Babati, Monduli, Moshi Rural, and Same*) that are very vulnerable to climate change effects. The table below summarizes the programme outputs/outcomes for various activities implemented concerning CA technology.

Table 1: Programme achievements under CA-subcomponent

LOA target	Outputs/Outcomes
Planned	Achievement
44 trained extension agents	253 extension agents were trained on CA practices.
800 trained lead farmers	1,415 lead farmers were trained.
23,500 trained farmers	A total of 26,159 farmers have been trained.
400 trained service providers and entrepreneurs	A total of 184 service providers and entrepreneurs were facilitated.

The programme generated 2,757 CA adopters (30% of the LOA target) who converted 5,723ha into CA. Through contribution of enumerated programme interventions/activities farmers have increased their yield by more than double compared to previous ways of farming (conventional farming). The end-line survey shows that, maize productivity under CA has increased by 126.3% from 1.9MT/ha of the baseline value to 4.3MT/ha during this reporting period.

## 2.3.3 Promotion of System of Rice Intensification

System of Rice intensification is one the Climate Smart Agriculture (CSA) components designed to improve rice production while adapting to adverse effects of climate change as it increases water use efficiency and reduction of Methane gas (dramatically by 50%) emitted by anaerobic methanogenic bacteria that thrive well in flooded paddy field. SRI. Based on this, TAP synergized and complement the efforts of the government and other development partners to ensure that SRI is promoted and adopted by many smallholder farmers. The technology promoted in 10 districts namely; *Morogoro rural, Mvomero, Kilombero, Iringa rural, Mbarali, Namtumbo, Kyela, Mbozi, Sumbawanga, and Mpanda.* TAP sub-contracted credible service providers (RUCODIA, RUDI) with knowledge and experience to implement this sub-component.

The programme has generated 349 trained lead farmers (87.25% of LOA target), 48 trained extension officers out of 20 from the LOA, 10,699 trained farmers (55.2% of LOA target), and 7,113 farmers applying SRI (83.2% of LOA target) who converted 1,977.2ha into SRI (57.8% of the LOA target).

As a result of these initiatives, the average productivity of paddy in districts where SRI technologies are being promoted has increased from 3 tons/ha in 2015 to 6.25 tons/ha by the end of 2019 equivalent to 108.3% increase from the baseline value.

# 2.3.4 Farming as a Business developed and Practiced

TAP II sub-contracted Prorustica and RUDI to train farmers on FAB principles by considering that, many primary beneficiaries especially women and youths had inadequate knowledge on 'Farming as a Business' meanwhile it is the first step in farm budgeting and planning as it enables farmers to directly compare the relative profitability of similar enterprises and consequently provides a starting point to deciding or altering the farm overall mix.

The programme has generated 267 (42.3% female) trained lead farmers and 7,082 trained farmers (56.5% of the LOA target) on (a) principles of FAB; (b) utilization of farm ledgers to collect facts on the farm activities (c) profitability calculation for a set of the most common crops for the purposes of comparing performance of different cropping systems. This intervention has been helpful to farmers, as the end-line survey reveals that 90.4% of interviewed farmers who attended the trainings were able to simply practice Farming as business skill especially on calculations of costs of production and revenues.

## 2.4 Strategic Objective 2: Smallholder farmers access to market improved

To eliminate smallholder farmers to operate individually or working under weak farmer organizations which affect competitiveness and limiting their scope for marketing penetration and leaving them vulnerable to exploitation, TAP II adopted and facilitated a value chain approach focused on four key output areas i) WRS improved and expanded, ii) Increased Value Addition on farmers produce, iii) MIS established and promoted and iv) Aggregation of farmers produce by private sector actors enhanced.

## 2.4.1 Warehouse Receipt System improved and expanded

TAP II worked closely with the public sector, private sector, development partners, and farmers' groups/association in order to assist smallholder farmers through their associations to develop vibrant Warehouse Receipt Systems (WRS) that will enable them to access reliable and lucrative markets through aggregation of produce and market services, enhanced bargaining power and improved access to financial services. The table below summarizes the outcomes produced by the programme concerning WRS.

Table 2: Programme achievement under WRS-subcomponent

LOA target	Outputs/Outcomes
Develop 23 trained FOs and 10 SMEs on business skills	20 trained FOs, and 22 trained SMEs developed.
Three (3) central warehouses constructed	3 warehouses constructed (1 fully completed and functioning; the other 2 are in advanced stages of completion).
Create business linkages between 10 producers and 10 SMEs	Business linkages between 32 FOs farmers and 22 Processors (SMEs) created.
Establish 1 digital aggregation platforms and commodity exchange starting with 7,000 farmers.	1 digital aggregation platform created and implemented. Already more than 8,000 farmers have been registered into the system.

From Annual Outcome Surveys, it shows that 32 trained smallholder farmers' groups and associations (166.7% increase from the baseline value) are using warehouses while average Metric tons of produce stored per season in each rehabilitated warehouse was 180MT (90% of the LOA target), and number of operational warehouses linked to financial services has increased from 10 of the baseline value, 2015 to 21 in 2019 out of 13 agreed to the LOA target.

#### 2.4.2 Increased Value Addition to Farmers' produce

TAP contracted other organizations/institutions such as RUDI, to undertake this activity which entailed training and sensitization to create awareness on the importance of value addition and how to realize it. The programme supported refresher training to SMEs, farmer's groups/organizations on the importance of Value Addition in respect to food safety.

The programme produced a total of 40 trained SMEs out of 10 from LOA, and 1,135 (316 women, 227 Youth) trained farmers against the target of 1,000 (113.5% achievement) who

acquired knowledge on value addition, product quality standards, packaging and product marketing.

## 2.4.3 Marketing Information System (MIS) established and promoted

TAP II had continued to explore new ways by bringing together the lessons from different Marketing Information Systems (MIS) that were in place and supporting the establishment of a wider system that would respond to farmers' needs. The system was expected to help users to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers (farmers).

Based on that, ACT commissioned Market Axis Consultancy firm to undertake an assignment to make an inventory of and analyze the existing Market Information Systems (MIS) in 10 districts. Key to this MIS research was assessment of possible innovations in technologies as well as product market dynamics. It was observed that the existed MIS lagged behind the rapid changing agricultural commodity markets hence failed to meet users' needs. Therefore, the proposed MIS recommended the technical feasibility, to employ technologies that were accessible by target users and be maintained by available skills and financially viable to ensure sustainable services.

# 2.4.4 Aggregation by Private sector enhanced

The programme has established 1 Digital Aggregation Platform (DFAP) linked to commodity exchange, and developed credible warehouse operators in the SAGCOT and other areas where TAP operates. They include Rapha Group, Mtenda, Kyela Rice Co Ltd, Sare Enterprises, Siza Agro Trading, Mbomole Enterprises to mention a few, have constructed warehouses and established linkages with smallholder farmers for storage services.

The programme sensitized interested partners on opportunities available in investing in grain storage infrastructures. Generally, the stock level in those warehouses exceeded the LOA target of 33,000 mt o to 41,448 mt reported by the end of 2019. This surpassed the LOA target by 25.6%.

# 2.5 Strategic Objective 3: Financing and Investment in Agriculture increased

#### 2.5.1 Public- Private Sector investments leveraged

TAP II by collaborating with LGAs and other stakeholders have created 25 against target of 20 Commodity Investment Plans (CIPs) to allow public sector to co-invest with private sector actors in activities that catalyze changes in the selected agricultural value chain. CIPs have been used as investment plans to establish and support value chain linkages over medium-long term.

Through CIPs various private sector and CSO actors such as CFU, Yara, NAFAKA, BRITEN, Plan International, MIVARF, and Agakhan Foundation and public sector actors like TADB, TARI and NFRA have invested in agricultural inputs, processing plants and produce handling facilities like silos and warehouses. In some districts of SAGCOT, new investments in storage

facilities & processing plants is 69% and inputs supply is 87% attributed by the implementation of CIP in the districts.

## 2.5.2 Financial services improved

TAP II has facilitated Commercial Banks and Micro-Finance Institutions (MFIs) to understand and appreciate investment opportunities in agricultural value chains, and to identify risk management and risk mitigation measures. In this context, TAP II has created awareness to smallholder farmers on access to finance through training which was provided to 34,215 farmers (32.6%, women) in 10 districts of Mvomero, Morogoro Rural, Ulanga, Malinyi, Sumbawanga, Mpanda, Tanganyika, Mbarali and Iringa.

TAP II through PASS have linked farmers with financial institutions such as FINCA, NMB, CRDB, Equity Bank, Akiba Commercial Bank and Mkombozi bank and more than 15,000 farmers have acquired loan amounting USD 1,264,768.77 as working capital for the production costs of various crops.

5 out of 10 targeted districts famers and private agricultural entrepreneurs have been able to access loan through the efforts of TAP II. These districts are Mbarali (AMBERICO), Ulanga (Minepa Farmers' organization), Malinyi (Itete Irrigation Scheme), Kilombero (Mang'ula, Magombera, Katurukila and Michenga Farmers' group) and Morogoro rural (Umoja na Maendeleo Farmers' group).

The initiative helped value chain actors to get loan easily and at a relatively low interest rate of 18% prior to 25% which was charged before TAP intervention.

# 2.6 Strategic Objective 4: Increased Advocacy and Networking

#### 2.6.1 Policy advocacy

Throughout the programme implementation, ACT/TAP has carried out various advocacy activities to ensure key policy challenges that act as barriers to the achievements of the program objectives are resolved. As part of advancing advocacy issues, ACT/TAP applied different approaches in addressing the key challenges which were identified in the course of implementation of the programme. These include conducting research studies to assess the magnitude and impacts of the issues to the project beneficiaries; organizing stakeholders' workshops to validate and coming up with a common position regarding the issues, preparing policy briefs and holding structured meetings with policy makers and decision makers particularly the Government and its agencies. In this regard, six major advocacy activities were undertaken as outlined below:

- Understanding, adoption, Institutionalization and impacts of Commodity Investment Plans (CIPs) at district level
- Effectiveness of legal and regulatory frameworks to combat the distribution of fake agricultural inputs.
- The role and capability of Mixed Cereal and other produce Board and National Food Reserve Agency (NFRA) in supporting for Food Security and guarantee for food price stabilization

- Challenges and Opportunities for Implementation of Warehouse Receipt Systems (WRS) to Smallholder farmers; Case of Cereals and Pulses. The focus was to look for appropriate approaches that can help smallholder farmers of cereal and legumes to enjoy the benefits of WRS.
- Effectiveness of the Fertilizer Bulk Procurement System (BPS) in Tanzania.
- Impediments to private Sector participation in the implementation of ASDP II: Case of
  grain Off-takers. The drive for this activity emanated from the fact that ACT/TAP works
  with private sector players along the agricultural value chains that are constrained with
  various investment challenges.

ACT in collaboration with other stakeholders, engaged the Government and its agencies to address these issues. Already, some measures are in place like the review of the Warehouse Receipt System Act and Fertilizer Bulk Procurement System. TAP helped ACT to develop evidence-based information tor lobbying policy issues that provoke changes beyond the areas and actors involved in TAP's activities. ACT/TAP contributed to the maize export ban lifting (2018), as a result farmer who lost hope in agriculture were encouraged to engage more in farming. Strategic Objective 5: Cross-cutting issues mainstreamed in the programme

#### 2.6.2 Gender mainstreaming

Based on the importance of women and youth in the development of agricultural sector and rural economy, TAP II considered that gender equality and empowerment of women and youth has important principles that should be mainstreamed in all segments and stages of value chain development

The programme contracted other organizations like, Women in Social Entrepreneurship (WISE) to design a gender and youth mainstreaming framework. A total of 397 champion farmers which is 99% of the target (52% women) were trained on issues related to gender and youth. These champions were required to pass on the knowledge to their fellow farmer's organized in groups of 25 - 30 members. Empowered women have increased their income, developed stable livelihood, contributed to ensuring food security, gained confidence, built capacity to solve different problems and improved their participation in different agricultural value chain activities.

## 2.6.3 Engagement of Youth in Agriculture Improved

Maize and Paddy are the major crops that employ a large percent of the population. For these value chains, jobs are created at different stages of the value chains, such as in farm production, provision of services, transportations, storage, processing, whole selling and retailing. This initiative has helped youth to change the negative perception towards agriculture as 'agriculture is for uneducated and has extremely low return' as it enables to generate income, provided more jobs hence reducing unemployment and poverty.

The programme have managed to create 13 youth trained agro dealers and 126 trained community agro agents who have already established inputs businesses, 184 youth trained entrepreneurs engaged in provision of CA services such as spraying and land ripping and 27 processors who reported to create time-based jobs to 85 women and 168 youth through their

processing factories. Correspondingly 3,209 youth have been transformed and actively participating in production of crops through new promoted technologies of SRI and CA.

#### 3 OVERALL PROGRAMME ACHIEVEMENTS/OUTCOMES

## 3.1 Risks summary

Since its inception, the TAP II programme identified 11 potential risks and outlined mitigating measures to address them. These risks included unfavorable market conditions, unpredictable Government policies, political interference, reluctance of large scale off-takers to be involved in the partnership, to mention but a few. Throughout the programme, these risks have been monitored very closely in order to check in time their likelihood of occurrence.

Some risks e.g. Government crop export bans recurred at different intervals but in late 2019, the Government strongly pledged not to intervene in produce marketing again. Overall, no significant (adverse) long-term changes were observed which could be interpreted as alarming or out of control. Detailed description on the selected risks, mitigation measures and status is shown on Appendix 3.

## 3.2 Sustainability of the results and prognosis for a possible continuation

TAP II sought to sustain farmers, resources and communities by promoting best farming practices and methods that are profitable, environmentally sound and good for communities. The positive outcomes of TAP II are clearly been visible among the agricultural stakeholders who benefited from the program directly or indirectly. Engagement of key stakeholders, stronger involvement of private sector actors and inclusion of the public sector especially LGAs will lead to the continuation of all successful activities conducted by TAP II. DAICOs of various districts have committed themselves to spread the best farming practices such as CA and SRI technology in their districts (especially to other villages that were not reached by TAP) and share the practices with other DAICOs in their regions at large through the use of extension officers. Same and Monduli districts are very good examples of these endeavors.

Also, the programme emphasized and facilitated farmers to form groups/associations. These farmers' groups/associations are now strong and most of them have been linked to financial institutions and processors/off-takers through which farmers can access credit to expand their and capital and market for their produce.

Strong involvement of the private sector in the TAP II program i.e. from input distribution to marketing has enabled the creation of viable business linkages, through competitive means, among different players along various agricultural value chains. These are very important in ensuring (i) value chain efficiency and (ii) increased and continued investments in the agricultural sector further leading its growth and development. The partnership has established good working relationships among different partners driven by private sector partners e.g. Yara (input distribution), Lonagro (agric machinery supply & distribution), Rapha Group (crop produce off-taking) e.t.c. Such business relationships are expected to continue to drive the partnership forward in the long run.

Achievement of this programme has gained momentum to take and improve this performance to the next higher level. In Tanzania, 70% of the poor population live in rural areas and almost all of them are involved in the farming sector. Sustainable and profitable farming has been a challenge for many of them, lack of finances and farming education has caused many to remain as subsistence farmers and pose severe challenges to their living standards. Continuation of this programme will help to a large extent commercialize their farming activities, reduce poverty and improve the living standards of these farmers.

# 3.3 Project impact on the environment

During the implementation of the programme, TAP II in its all trainings have been ensuring the themes of proper use of pesticides and other hazardous chemical especially training to ASPs such as Agro dealers and SSPs, and also conservation of the natural resources such as water sources and forest have been addressed. The programme introduced activities related to natural resources management which largely related to awareness and simple preventive measures such as promotion of technical method for improving production while taking into account soil properties and water constraints i.e. CA and SRI. The use of CA, has helped on environment preservation as it promotes maintenance of a permanent soil cover, minimum soil disturbance and diversification of plant species hence reduce soil erosion.

## 3.4 Project impact on gender equality

TAP II had been successfully including women and youth in project activities such as CA, SRI, FAB trainings, distribution of inputs as community agro agents, agro dealers or hub agro dealers' trainings, and also women have been engaging in groups/associations where some are leaders. The programme ensured that women's voices are heard and their decisions are taken into consideration. This has contributed to women's income increase and through awareness creation on gender mainstreaming, the control over asset such as land (farms) and decisions on families' income have increased.

# 3.5 Procurements and Sales Carried Out Under the Project

The requirement of section 8 of the contract between Norad and ACT requires that any procurement to be taken during the implementation of the project shall be based on competition, and carried out in accordance with good business practice, ensuring transparency, verifiability, equal treatment, predictability, and non-discrimination on the basis of nationality or local ties so that the best possible conditions may be obtained. When the total value of procurement exceeds NOK 100,000 excluding VAT, the grant recipient shall draw up a written report with documentation of all assessment and decisions during the entire procurement process from the planning stage to the signing of the contract.

In general, the TAP Management worked with partners most of whom were identified right from the beginning and documented in the Programme Document. Some of these partners were CFU, RUDI, Kilcher (later changed to Prorustica/AgrIinsight etc.). These were given specific assignments according to their areas of competence with binding contracts signed between TAP and these partners and thus no procurement procedures were required.

However, as per the requirement of part 8 of the contract between NORAD and ACT which stipulates that any supply exceeding NOK 100,000 (which was equivalent to \$ 11,500) should follow procedures laid down on the said section. TAP II did manage to outsource services from various service providers and followed laid down procedures in the Procurement Manual. Service providers are selected based on the selection criteria prescribed in section 1.6 of TAP procurement guidelines.

The service providers falling under category for the requirements of part 8 of the Grant Letter Agreement were qualified and emerged winners on their respective tenders supervised by Procurement Committee. These service providers are shown in the list below:

- 1. TanzConsult Limited for Undertaking Mid-Term Review Total Contract value \$46,473. The procedure was as follows:
  - Call for Proposals for the consultancy advertised in the local newspapers on 9<sup>th</sup> and 10<sup>th</sup> October, 2017 (*The Guardian* and *Mwananchi*)
  - Evaluation of Proposals by a team comprising of ACT/TAP staff chaired by the Finance Manager on 27<sup>th</sup> October 2017.
  - Negotiations with TanzConsult on the Contract
  - Contract Signing
- 2. Women In Social Enterprise (WISE) to design a Gender and Youth Mainstreaming Framework Total Contract value \$11,500.
  - Call for Proposals for the consultancy advertised in the local newspapers on 2<sup>nd</sup> October, 2017 (*The Guardian* and *Mwananchi*)
  - Evaluation of Proposals by a team comprising of ACT/TAP staff chaired by the Finance Manager on 27<sup>th</sup> October 2017.
  - Negotiations with WISE on the Contract
  - Contract Signing
- 3. Toyota Tanzania to supply two four-wheel drive Toyota make with a total contract value of \$ 114.580.
  - Call for Quotation from suppliers was advertised in the local context.
  - Receipt of the quotations from three suppliers, and evaluation process by procurement team on 17<sup>th</sup> September 2015 chaired by finance Manager.
  - Negotiation with Toyota Tanzania Limited were conducted.
  - Contract signing.
- 4. Market Axis to conduct inventories and analyzing market information system (MIS) with a contract value \$ 52,200.
  - Call for proposals for the consultancy advertised on 20<sup>th</sup> October 2015.
  - Receipt of the proposals from various service providers
  - Evaluation of the Proposals by team comprising of ACT/TAP staff chaired by the Finance Manager.
  - Selection of Market Axis to be the service providers.
  - Negotiation with Market Axis on the contract details.
  - Signing of the contract.
- 5. Mtenda Kyela rice consultancy to train Lead farmers and extension agents on SRI with contract value \$ 30,975
  - Call for proposal was advertised on 7<sup>th</sup> September 2015.
  - Proposal were received from three service providers

- Evaluation of the proposals were done by team comprising of ACT/TAP staff chaired by Finance Manager.
- Selection of Mtenda Kyela Rice to be service provider on SRI.
- Negotiation of contract with Mtenda Kyela rice.
- Signing of the contract with the service providers.

Section 9 of the contract between Norad and ACT describe on the right of ownership on property, equipment and intellectual property rights. To quote, the section reads: "If such property and/or equipment are sold before the end of the support period, the sale shall be made at market price unless otherwise approved by Norad". During the 2015 – 2019 support period, ACT did not sell any property, equipment or intellectual property rights.

#### 4 MAIN LESSONS LEARNT, CONCLUSIONS AND RECOMMENDATIONS

Throughout the implementation of TAP, the Management unit was committed to identifying lessons learned from successes and challenges associated with TAP implementation. Below, we highlight key lessons learned.

## 4.1 Main Lessons Learned from TAP II implementation

## 4.1.1 The capacity of smallholder farmers must be enhanced

The capacity of smallholder farmers must be enhanced in different aspects in order to improve their ability to access financial services and be able to invest in agriculture through purchasing of agro-inputs (mechanization, seeds, fertilizer and agro-chemicals), general farm operations and output marketing.

Many smallholder farmers were reached by the programme through training. The agro-dealers' networks, selection of trusted community based entrepreneurs and lead farmers were strengthened, and furnished with business and technical skills through a series of capacity building interventions. Farmers were trained on CA and SRI while TAP partners facilitated WRS training and capacity building of farmers organizations to enable effective implementation of WRS. Capacity building was a strong platform that helped farmers to develop new knowledge and skills to improve their yields, income, business opportunities and food security. The trainings were key aspect in influencing and sustaining the CA and SRI adoption and need to be considered how the trainings will be continued in and maintained in future after the TAP programme closes out.

# 4.1.2 The apex organizations should be emphasized and facilitated

The capacities of smallholder farmers through groups, networks and associations take time to be established. Business development of these entities should start at 'apex levels' and be closely linked with local SMEs e.g. the success of AMBERICO in Mbeya Region.

#### 4.1.3 The capacity of potential service providers should be prioritized

The training of potential service providers who are linked to financial services and machinery/equipment suppliers should be prioritized. As more service providers are able to access loans to buy suitable and reliable machinery and equipment, these services would become readily available to farmers and solve the problem of impediment towards rapid adoption of CA technology as many farmers prefer ripping using tractors as it is more convenient and scalable.

#### 4.1.4 Climate Smart Agriculture (CSA) practices expanded to other districts

There is a need for deepening and expansion of training to other districts on good agricultural practices related to climate smart agriculture (CSA) interventions such as CA and SRI technology and continue improving access to farm inputs and credits to smallholder farmers. Notwithstanding the achievements in the outgoing phase, TAP partners are in general agreement that numbers reached on climate smart agricultural technology transfer are inadequate to trigger 'critical mass' levels. Working together in an expanded partnership (including new potential partners) could facilitate the upscaling of the initiative in order to impact on more beneficiaries.

#### 4.1.5 Provision of incentives to lead farmers

The farmer-to-farmer extension system for both CA and SRI lacked appropriate incentives to lead farmers who were such a crucial link in the dissemination of technologies. The incentives such as inputs and transport facilities e.g. bicycle should be provided in order to increase lead farmers' eagerness to teach many other farmers with excellence and timely.

#### 4.1.6 The development of farmers groups, networks and associations

It is important to put greater attention to the development of effective farmers' groups, networks and associations in the programme areas with lead farmers capacitation and empowerment being part of it as the first level of support at the farmer/farmers group level. This ensures ownership of programme activities at the grassroots level which is fundamental to its sustainability. TAP II experience shows that working with 'apex' organizations which are facilitated and closely linked to local SMEs is more effective in business development than merely doing the capacity building of individual organizations at lower levels. The apexes are better positioned to utilize the economies of scale. AMBERICO's success in increasing access to inputs and off-taking to its members, is a case in point.

# 4.1.7 Supporting the community agro-Agent (CAA) model

The Community Agro-Agent (CAA) model should be encouraged and supported to all the value chains, as it has improved the adequate volumes delivery of appropriate agricultural inputs and services to smallholder farmers at affordable and timely bound.

The program efforts to strengthen the inputs distribution networks in rural areas through identification of community agro agents has played a key role to ensure access, availability and reliability of input supply in villages that are geographically distant from distributors /suppliers' centres.

#### 4.1.8 Strengthening market systems

It is important to conduct market linkage meetings between buyers and farmers organization prior to production (farming) period so that farmers understand the demand of buyers beforehand. This was particularly difficult in most of the farmer's organizations, as they could not give an estimated production to buyers during business—to-business meetings (B2B). The input-outputs for farmers organization should be promoted in order to improve the access to farm input supply, marketing, storage, and post-harvest technologies and identifying marketing opportunities for POs and economic empowerment activities for women and youth.

#### 4.1.9 Commodity Investment Plan (CIP) is the approach

Commodity Investment Plan (CIP) is the approach that TAP adopted since the beginning and some districts have implemented the CIPs very effectively. But most of districts (about 80%) did not manage to mobilize the desired investments for CIPs apparently due limited engagement and follow-ups on potential private sector investors. With TAP II experience, CIPs should be developed on demand and effective sensitization should be done first before embarking on the task.

#### 4.1.10 Engagement with the government and collaboration among partners enhanced

It is important to forge collaboration among partners at local levels to encourage more other stakeholders to participate in partnerships as a vital practice to mobilize resources and leveraging investments for prioritized CIPs. The Strengthening of ACT engagement with the Government to lobby on policy related issues will continue to sustainably build an environment where the private sector can thrive.

#### **4.1.11** Demand for construction of storage facilities

Demand for construction of storage facilities. Shortage (some say absence) of association or farmer-owned storage facilities reduces low-season sales, product quality and safety, and prevents farmers from maximizing their profit potential. Renting and leasing warehouse space seems to be a short-term solution to this problem.

#### 4.2 Conclusions & Recommendations

From the foregoing discussion, the TAP II programme has positively contributed to the goal (Food security and poverty reduction) and it was in line with contemporary Government policies/thinking as stipulated in the policy document and the ASDP II framework. Partners were also more enthusiastic to work together to reach out more people who needed the interventions and benefits arising thereof. With the high momentum gained towards the end of the progamme, these partners are willing to continue the partnership activities under an expanded partnership arrangement. In order to create effective synergies and complementarities, there is a need to devise ways and methods to utilize better partners' relative strengths for upscaling these interventions. In future similar programmes, this approach could enable the partnership to reach out several hundred thousand primary beneficiaries or possibly more.

Appendix 1: Overall Summary of TAP II Results

LOA target	Status at the end of Progamme	Remarks
Improved Food Security and Poverty Reduction		
Reduction of income poverty by 17%	Income poverty was reduced by 8%.	47.1% of the target was realized.
Child malnutrition reduced by 5%	Child malnutrition was reduced by 4%.	80% of the target was achieved.
Agricultural Sector Growth Increased		
Agric. GDP in TAP districts increased to 6% p.a. from the current 4% p.a.	Average agric. GDP actually decreased to 3.4% p.a.	A combination of external factors including restricted cross-border trade and reduced investments in the ag. sector could be attributed to this.
Gross Income increased by 30% from the baseline value	Gross Income Increased by 83%.	228.3% of the target was attained.
Yield of strategic crops increased between 50%-200% from the baseline figures	Average yields increased by 117.3%.	Achievement was around the middle of the LOA target range.
Agro-inputs		
1450 trained agro-dealer (300 Fe) produced.	340 trained agro dealers were trained	Only 23.5% of target was achieved. The main reason was that there was gross underestimation of budget for this activity.
20 agro dealers' associations strengthened.	11 agro dealers' associations strengthened	Achievement was 55% of the target.
250 trained community agro agents created	254 trained community agro agents created	Achievement just surpassed the target.
At least 15 district input supply networks are developed and operational	11 input supply networks were developed and functioning.	The target was attained by 73.3.3% which is quite substantial.
1 e-voucher input subsidy system created	1 e-voucher input subsidy system created	100% achievement.
Quantity of invested inputs by	Use of improved inputs in the	LOA target was exceeded by 26%.

LOA target	Status at the end of Progamme	Remarks
smallholder farmers increased by 25%	programme areas has increased by 51%.	
CA technology:		
5 trained field staff	5 field staff were trained	100% achievement.
44 trained extension agents	253 extension agents were trained	Target surpassed by more than five-
800 trained lead farmers	1,415 lead farmers were trained	folds (575%). Target was exceeded by 76.9%.
23,500 trained farmers	26,159 farmers have been trained.	Target was surpassed by 11.3%.
400 CA trained service providers produced	184 trained CA service providers produced	46% of target achievement. Participation of service providers was limited due to inadequate capital to buy the machinery (e.g. tractor) and equipment.
SRI technology: 20 trained Extension agents	48 Extension agents trained	Target realized by more two-fold
400 trained lead farmers	349 lead farmers trained	(240%). 87.25% achievement.
19,400 trained farmers	10,699 farmers trained	55.1% achievement.
3,422 ha under SRI	1,977 ha were converted to SRI	57.8% achievement.
Business skills; 11,500 trained farmers on FAB produced	7,082 trained farmers produced.	61.6% achievement.
23 trained farmers groups organization and 10 SMEs on business skills created	20 trained farmers' groups/associations and 22 trained SMEs on business skills created	87% achievement for FOs and 220% for SMEs.
WRS and business linkage: 3 central warehouses constructed	3 warehouses constructed as planned.	100% achievement.
13 operational warehouses linked to financial services increased by 30%.	21 warehouses linked to financial institutions	The target was exceeded by 61.5%.
Linkage between 10 SMEs and 10 farmers' groups/associations created	Linkage between 32 farmers groups/associations and 22 processors (SMEs) created.	320% achievement. 220% achievement.

LOA target	Status at the end of Progamme	Remarks
1 digital farmer aggregation platform developed.	1 digital farmer aggregation platform (DFAP) developed and implemented.	100% achievement.
Value addition; 10 trained SMEs  1,000 trained farmers on value addition produced	40 SMEs were trained on value addition. 3,635 farmers (816 women, 927 youth) were trained on value addition.	400% achievement. 363.5% achievement.
Aggregation: 33,000MT of produce aggregated by private sector	41,448MT of produce aggregated	Target surpassed by 25.6%.
Loans: Facilitate farmers and rural based entrepreneurs in 10 districts to access loans		50% achievement in terms of number of districts. The loan portfolio is impressive benefiting more than 15,000 farmers.
PPP investment; 20 Commodity Investment Plans (CIPs) developed	25 CIPs were developed.	Target exceeded by 25%.

Appendix 2: Division of roles between cooperative partners

Activity	Responsible Partner
Strategic Objective 1: Smallholder farmers productivity and productivity increased	
Output 1.1: Increased access to and use of improved inputs	
1.1.1 Conduct training to agro-dealers on technical & business skills	RUDI/CSDI
1.1.2 Facilitate ADs to strengthen their associations	RUDI
1.1.3 Facilitate linkages between agro-dealers and Financial Institutions	RUDI
1.1.4 Facilitate linkages between farmers, agro-dealers and input supply Companies	RUDI
1.1.5 Promote expansion of commercial input supply networks	RUDI
1.1.6 Design and implement a community-based agro-agents scheme	CSDI
1.1.7 Design and pilot an e-voucher input subsidy system	Service Providers
Output 1.2: CA promoted and practiced	
1.2.1 Prepare tender documents, tender and select Service Provider	TAP
1.2.2 Identify and Develop ecologically suitable CA packages	CFU Tanzania
1.2.3 Conduct training to project field staff, extension agents, lead farmers and Farmers on CA	CFU Tanzania
1.2.4 Conduct training to service providers and entrepreneurs	CFU Tanzania
1.2.5 Facilitate service providers to acquire required equipment and Facilities	CFU Tanzania
1.2.6 Facilitate linkages between services providers and smallholder	
farmers	TAP, CFU Tanzania
1.2.7 Design and establish demonstration plots	CFU Tanzania
1.2.6 Facilitate linkages between services providers and smallholder	
farmers	TAP, CFU Tanzania
1.2.7 Design and establish demonstration plots	CFU Tanzania
1.2.8 Source and distribute inputs for demonstration plots inputs	CFU Tanzania
1.2.9 Organize farmers field days	CFU Tanzania
1.2.10 Organize a study visit	CFU Tanzania
Output 1.3: SRI Promoted and adopted	
1.3.1 Conduct preliminary survey to select suitable irrigation scheme	RUDI, RUCODIA
1.3.2 Identify lead farmers	RUDI, RUCODIA
1.3.3 Training extension agent, lead farmers and farmers	RUDI, RUCODIA
1.3.4 Facilitate Lead Farmers to design, establish and monitor SRI learning plots	RUDI, RUCODIA
1.3.5 Source and distribute inputs for SRI demo plots	RUDI, RUCODIA

Activity	Responsible Partner
1.3.6 Supervise and monitor SRI demo plots	RUDI, RUCODIA
1.3.7 Facilitate farmers to organize field days	RUDI, RUCODIA
1.3.8 Organized farmers exchange visit to project/companies practicing SRI	RUDI, RUCODIA
Output 1.4: Farming as Business developed and practiced	,
1.4.1 Conduct surveys on farmers' household management	Prorustica
1.4.2 Identify youth model farmers for Training on FAB	Prorustica
1.4.3 Formulate and implement a training module for farmers on FAB	Prorustica
1.4.4 Train youth model farmers on entrepreneurship and business skills	Prorustica
Strategic Objective 2: Access to markets improved	
Output 2.1: WRS improved and expanded	
2.1.1 Conduct training to farmers groups/organizations on business skills	RUDI
2.1.2 Establish central warehouses in selected districts	RUDI
2.1.3 Facilitate formation / registration of farmers' groups and apex organizations	RUDI
2.1.5 Facilitate linkages to DFAP in output supply chain	RUDI
Output 2.2: Increased Value Addition on Farmers' Produce 2.2.1: Identify credible SMEs to be involved	RUDI
2.2.1: Identify credible SMEs to be involved	RUDI
2.2.2: Identify relevant Value Addition packages	RUDI
2.2.3: Create awareness to farmers on importance of Value Addition	RUDI
2.2.4: Training to SMEs, farmers groups and organizations	RUDI
2.2.5: Facilitate business linkages between SMEs and producers	RUDI
Output 2.3: MIS established and promoted	
2.3.1: Analyse existing MIS for farmers, rural entrepreneurs and traders	Market Axis Consult
2.3.2: Convene stakeholders meeting to facilitate estab. of MIS	Market Axis Consult
2.3.3: Develop and implement an MIS based mobile phone platform	Market Axis Consult
2.5.5. Bevelop and implement an vivo based mobile phone platform	Warker bus consuit
Output 2.4: Produce aggregation by private sector enhanced	
2.4.1: Identify private sector actors in produce aggregation	RUDI
2.4.2: Sensitize and promote private investment in WRS	TAP, RUDI
2.4.3: Link private sector buyers to farmer organizations	TAP, RUDI
2.4.4: Facilitate linkages to digital aggregation platforms and CE	TAP, AGRIINSIGHT
2.4.5: Develop infrastructure for WRS by private sector	Several Private Sector Partners
Strategic Objective 3: Increased Financial and Investments in Agriculture	
Output 3.1: Public- Private Sector investments leveraged	

Activity	Responsible Partner
3.1.1: Convene national stakeholders meeting on VC and PPP	TAP
3.1.2: Organize district partners forum on VC and PPPs	TAP
3.1.3: Support and backstop LGAs to adopt Commodity Inv. Plans (CIPs)	ACT/TAP
3.1.4: Upgrade and promote CIPS	Service Providers
Output 3.2: Financial services improved	
3.2.1: Identify potential financial partners	PASS
3.2.2: Prepare and compile directory	PASS
3.2.3: Organize awareness creation meetings to financial institutions	PASS
3.2.4: Conduct trainings to VC actors on credit acquisition opportunities	PASS
3.2.5: Organize facilitation meetings to link farmers and other VC actors with banks/financial institutions	TAP, PASS
Strategic Objective 4: Advocacy and Networking	
Output 4.1: Advocacy of policy issues enhanced	
4.1.1: Conduct research/studies for evidence-based advocacy	ACT
4.1.2: Convene stakeholders' validation workshops	ACT
4.1.3: Prepare policy brief/position papers	ACT
4.1.4: Organize structured meetings with Govt and policy makers	ACT
4.1.5: Develop and implement communication strategy	ACT
4.1.6: Coordination and facilitation of lobbying and advocacy processes	ACT
Output 4.2: Networking with partners improved	
4.2.1: Identify collaboration areas with like-minded organizations	ACT/TAP Management
4.2.2: Agree on specific collaborative activities	ACT/TAP Management
4.2.3: Identify major lessons, best practices and innovations	ACT/TAP Management
4.2.4: Disseminate lessons, best practices and innovations	ACT/TAP Management
Strategic Objective 5: Cross-Cutting Issues	
Output 5.1: Gender Mainstreaming	WISE
Output 5.2: Engagement of Youth	WISE
Output 5.4: M&E Activities	Part time Service Provider

Appendix 3: Anticipated Risks and Mitigation Measures

	IDENTIFY RISK AND CONSEQUENCES		HANDLE AND FOLLOW UP RISK	
Risk ID	Risks (factor, event)	Description of Consequences	Action	Incharge
1	Unfavorable market conditions	The government imposed maize export ban in 2017 and allowed unnecessary importation of grains. This disincentivized smallholder farmers and their farm income affected significantly.	ACT lobbied the government against export bans and discretionary importations urged the authorities to incorporate them in the trade policy. The ban was lifted towards the end of 2017. In 2018 and 2019 the Government strongly pledged not impose such bans again.	ACT- Policy officer
2	Unpredictable government policies	It was anticipated that the frequency at which the Government changed agricultural and related policies/strategies would be relatively high. The past trend disruptive and detrimental to long term planning.	ACT on behalf of the Programme and the agricultural community, had continued to use its growing knowledge on advocacy to engage with the Government to advocate for more stable policies and strategies. Currently, all agric. policy matters seem to be derived from the ASDP II framework.	ACT - ED
3	Misconception by partners on TAP's strategy/approach	TAP's main function was to facilitate partners to work together in a better way; not to do the work for them. Besides, TAP was only involved in the start-up of new operations or innovations. Apparently, some partners were slow to understand this approach which, at times, lead to hesitations in the participation of TAP activities.	TAP developed ways to ensure its work and impact – especially the 'soft actions' – were appropriately recognized through more effective communication and PR.	TAP – National Coordinator

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4	Reduced credibility due to communication challenges	Reaching out and communicating effectively with a wide range of value chain actors was essential. Though was challenging especially under the expanded TAP II programme.	The TAP Team demonstrated strong technical, communication and inter- personal skills which helped to maintain the credibility.	TAP – Communicat ion officer	
5	Political interference	Inevitable in any development initiative, TAP expected political interference in technical matters; this includes the choice of CIP crops and the selection of fertilizer types.	TAP II developed a strategy of directly engaging influential political figures as 'normal value chain actors' e.g. farmers, agrodealers, etc. This was likely to turn potentially negative political interference into a positive discussion about the options.	ACT/TAP, District councils	
6	Substandard performance of service providers and consultants	Experience showed that quality of performance could vary; not only between different service providers, but also between different assignments of the same contractors.	Vigilance and close supervision were maintained for high quality work and timely outputs/deliverables.	TAP – National Coordinator	
7	Resistance to change	The strength of traditions and custom remained highly significant and resistance to change was everywhere. This was likely to affect adoption of innovations and technology.	TAP through ACT worked with other like-minded organizations to gradually institute a paradigm shift among the Tanzanian population towards understanding the concept of 'farming as business'.	TAP & Partners	

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8	The reluctance of SHFs to respond to the incentives created by the partnership.	Most smallholder farmers tended to be risk averse. That, once farmers identified farming systems that guarantee them a minimum return; they stacked to it and tended to resist taking up new farming systems.	TAP II demonstrated new interventions such as SRI and CA techniques which had more potential to increase SHFs productivity. Coupled with Farming as Business training, this increased confidence in embracing new systems and diversification.	TAP - Field Operation Officer & CA Programme officer
9	The reluctance of large-scale off- takers to be involved in the partnership	Large-scale traders tended to shy away from working together with smallholder producers because they wanted to maintain the <i>status quo</i> which heavily favors them. Without taking them on board, the downstream segment of value chain was likely to remain weak.	TAP continued to sensitize and create awareness to large scale off-takers in view changing market dynamics. Due to increased national and international campaigns to empower and organize SHFs, the situation had favorably changed e.g. Murzah Wilmar Company and Rapha Group are buying paddy rice directly with TAP-empowered farmers.	Commercia I Linkage Officer
10	Financial mismanagement	With expanded TAP II programme involving substantial resources, a robust financial system was needed to avoid misuse or abuse of resources. The concern was that inappropriate use of resources might jeopardize achievement of programme objectives.	ACT/TAP hired a full-time accountant and any additional training required to run and manage the new systems provided. Among others, this provided fundamental guidance on best practices in conducting procurement of goods, services and consultancies.	ACT-ED

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11	Drop out of partners	TAP was an inclusive 'coaliation' of willing partners. In the course of programme implementation it could have happened that some partners became inactive for one reason or another. This could have derailed implementation of programme activities leading to failure in meeting some of targets.	The programme continued to promote and demonstrate the benefits of working together in VCD. Furthermore, Memorandum of Understanding (MoU) or Letter of Agreement (LoA) to enhance shared control of partnership roles and responsibilities was instituted.	TAP Team, Field-based Coordinator s