



Tanzania Agro-Industries Development Flagship

Programme Document

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List of Acronyms and Abbreviations

ACFTA	African Continental Free Trade Area
ACT	Agricultural Council of Tanzania
ADD	Agriculture Delivery Division
AEZ	Agro-Ecological Zones
AfDB	African Development Bank
AGRA	The Alliance for a Green Revolution in Africa
AIGC	Agro-Industrial Growth Corridors
AIPs	Agro-Industrial Parks
AKIBA	AKIBA Commercial Bank
AMCOS	Agricultural Marketing Co-operative Societies
AMDT	Agricultural Markets Development Trust
AMP	Agriculture Marketing Policy
ANSAF	Agricultural Non-State Actors Forum
ASDP	Agriculture Sector Development Programme
ASDS	Agriculture Sector Development Strategy
ASLMs	Agriculture Sector Lead Ministries
ASLMs MTEFs	Agriculture Sector Lead Ministries Medium Term Expenditure Frameworks
AWPBs	Annual Work Plans and Budgets
BEE	Business Enabling Environment
BEST	Business Environment Strengthening for Tanzania
BFAP	Bureau for Food and Agriculture Policy
BR	Biennial Reviews
BWM-SEZ	Benjamin William Mkapa Special Economic Zone
CAADP	Comprehensive Africa Agriculture Development Programme
CAADP	Comprehensive Africa Agricultural Development Programme
CAMARTEC	Centre for Agricultural Mechanization and Rural Technology
CBO	Community Based Organisation
CC	Component coordinator
CCF	Coordination & Consultative Forum
CEO	Chief Executive Officer
CGE	Computable General Equilibrium
CIs	Collaborating Institutions
CRDB	Cooperative Rural Development Bank
CTI	Confederation of Industries in Tanzania
DAICOs	District Agriculture, Irrigation and Cooperative Officer
DED	District Executive Director
DFID	Department for International Development - UK
DG	Director General
DLFOs	District Livestock and Fisheries Officer
DPG	Development Partners Group
DPP-MoFP	Director of Policy and Planning Ministry of Finance and Planning
DPs	Development Partners
EAC	East African Community

EDZ	Economic Development Zones
EMA	Environmental Management Act
EPZ	Export Processing Zone
EPZA	Export Processing Zone Authority
ESA	East and Southern Africa
ESMP	Environmental and Social Management Plans
ESRF	Economic and Social Research Foundation
FAO	Food and Agricultural Organisation
FDIs	Foreign Direct Investments
FICU	Flagship Implementation Coordination Unit
FIM	Flagship Implementation Manual
FISFAP	Financial Inclusion for Smallholder Farmers in Africa Project
FY	Financial Year
FYDP	Five Year Development Plan
GDP	Gross Domestic Product
GOR	Government of Rwanda
GoT	Government of Tanzania
HBS	Household Baseline Survey
HDR	Human Development Report
IA	Implementing Agency
IAIPs	Integrated Agro-Industrial Parks
IIDS	Integrated Industrial Development Strategy
IPs	Implementing Partners
ISO	Industrial Support Organisations
LGA	Local Government Authority
LMIRA	Livestock Micro-Reforms in Agribusiness
M&E	Monitoring and Evaluation
MAFC	Ministry of Agriculture Fisheries and Cooperatives
MDA	Ministries Departments and Agencies
MDAs	Ministries, Departments and Agencies
MGF	Matching Grant Fund
MIT	Ministry of Industries and Trade and Investment
MITI	Ministry of Industry, Trade and Investment
MLDF	Ministry of Livestock Development and Fisheries
MLF	Ministry of Livestock and Fisheries
MME	Micro Manufacturing Enterprise
MoA	Ministry of Agriculture
MoFP	Ministry of Finance and Planning
MSMEs	Micro, Small and Medium Enterprises
MTEF	Medium Term Expenditure Framework
MUTEX	Musoma Textile Mills Tanzania Limited
MVA	Manufacturing Value Added
NBS	National Bureau of Statistics
NCU	National Coordination Unit
NDC	National Development Corporation
NDS	National Skills Development Strategy
NEMC	National Environment Management Council

NGOs	Non-Governmental Organisations
NIRC	National Irrigation Commission
NMB	National Microfinance Bank
NSAs	Non-State Actors
NSDS	National Skills Development Strategy
NTP	National Trade Policy
NTT	National Task Team
OHS	Occupational Health and Safety
PASS	Private Agricultural Sector Support
PC	Project Coordinator
PIUs	Project Implementation Units
PMO	Prime Ministers' Office
PMO-RALG	President's Office – Regional and Local Government
POPC	President's Office Planning Commission
PPP	Public-Private Partnership
PSE	Private Sector Engagement
PS-MoFP	Permanent Secretary Ministry of Finance and Planning
RIAPA	Rural Investment and Policy Analysis
RRA	Rwanda Revenue Authority
RS	Regional Secretariat
SACCOS	Savings and Credit Co-Operative Society
SADC	Southern African Development Community
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SAGCOT CTF	SAGCOT Catalytic Trust Fund
SAM	Social Accounting Matrix
SCL	SAGCOT Centre Limited
SCPZ	Staple Crop Processing Zone
SCVF	Social Venture Capital Funds
SELF	Small Entrepreneurs Loan Facility
SEZ	Special Economic Zone
SIDO	Small Industries Development Organisation
SIDP	Sustainable Industrial Development Policy
SMEs	Small and Medium-Sized Enterprises
SNNP	Southern Nations, Nationalities and People's
SPV	Special Purpose Vehicle
TADB	Tanzanian Agriculture Development Bank
TAFSIP	Tanzania Agriculture and Food Security Investment Plan
TAIDF	Tanzania Agro-Industries Development Flagship
TAMCO	Tanzania Automobiles Manufacturing Company
Tanzania IUMP	Tanzania Industrial Upgrading and Modernisation Project
TBS	Tanzania Bureau of Standards
TCD	Technical Committee of Directors
TCT	TAIDF Coordinating Team
TDCs	Technology Development Centres
TDHS	Tanzania Demographic Household Survey
TDV	Tanzania Development Vision
TEMDO	Tanzania Engineering and Manufacturing Design Organisation

TFDA	Tanzania Food and Drugs Authority
THD	Tanzania Human Development Report
TICU	TAIDF Implementation Coordination Unit
TIRDO	Tanzania Industrial Research and Development Organisation
TLMP	The Tanzania Livestock Master Plan
TNBC	Tanzania National Business Council
TOR	Terms of References
TPSF	Tanzania Private Sector Foundation
TSC	TAIDF Steering Committee
TSC	TAIDF Steering Committee
UN COMTRADE	United Nations Common format for Transient Data Exchange
UNIDO	United Nations Industrial Development Organisation
URT	United Republic of Tanzania
VAT	Value Added Tax
VETA	Vocational Educational and Training Authority
WFP	World Food Programme
WRS	Warehouse Receipt System

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Executive Summary

1. Background

The contribution of the manufacturing sub-sector to Gross Domestic Product (GDP) in Tanzania is low, accounting for only 8.1% to the GDP (MoFP, 2019). The Government of Tanzania recognises industrialisation as a key driver of economic development towards consolidating the country's middle-income economic status by 2025. Tanzania became a lower-middle income country on July 1, 2020, following an upgrade by the World Bank when its GNI per capita increased to US\$ 1,080 in 2019 from US\$ 1,020 in 2018 (Battaile, 2020). Industrialisation is prioritised in numerous strategic documents, and it is the main economic policy agenda of the Fifth Phase Government. The administration of H.E. John Pombe Magufuli, the President of Tanzania, is keen to lead the country towards achieving the targets for the manufacturing sector set by the Second Five Year Development Plan (FYDP II). The targets seek to increase the manufacturing sector's share to 18% of GDP by 2025, boosting its share of employment to 12.8% and ensuring that the sub-sector provides 40% of all new job opportunities. Agriculture accounts for 28.7% of the GDP, employs 66.3% of the total population, and contributes about 30% of the total export earnings. Agro-industrialisation would enhance GDP and social benefits such as the creation of employment opportunities. The FYDP II has set clear targets related to agro-industrialisation, among them, the prioritisation of revitalised textile, garment and clothing industries; establishing leather industries in Dodoma and Singida; and increasing edible oil production from 100,000 Metric Tonnes in 2015 to 250,000 Metric Tonnes by FY 2020/21, and to 600,000 Metric Tonnes by FY 2025/26. Thus, the importance of practical actions to facilitate the achievement of these targets by 2025.

The Tanzania Agro-industries Development Flagship (TAIDF) is a Government framework for mobilising and coordinating investments towards agro-industrialisation. The Secretariat of the Agriculture Sector Development Programme (ASDP II) designed the framework through a process of extensive consultations with various agro-industry stakeholders including Government representatives, Development Partners, the private sector, farmer organisations, research and academic institutions and the civil society.

2. Situational Analysis and Justification for Developing TAIDF

TAIDF will complement current and earlier Government efforts in the promotion of industrialisation. The Second National Five-Year Development Plan (FYDP II), developed in 2015 under the theme 'Nurturing Industrial Development for Economic Transformation and Human Development' sets ambitious targets for the manufacturing sector and includes specific agro-industry related targets. In several of his speeches, the President of Tanzania has emphasised the country's interest in investing in agro-based industries for farm implements as well as for processing crops, livestock, and fisheries products. The Government has demonstrated its

commitment to promoting agro-industrialisation through the enactment of laws and strategies that offer the regulatory frameworks and incentives for entrepreneurs to invest in manufacturing. One such policy is the Sustainable Industrial Development Policy (SIDP), that is implemented through the Integrated Industrial Development Strategy (IIDS) 2011-2025. The Export Processing Zone (EPZs) Act enacted in 2002 and implemented in March 2003, is yet another bold effort by the Government to promote industrialisation. That Act provides incentives such as exemption from corporate tax, remission of custom duty and other taxes on raw materials and capital goods. However, despite the favourable measures put in place by the Government to promote industrialisation and agro-industrialisation, some deterrent challenges to rapid industrialisation in general, and agro-industrialisation persist.

As indicated in the recent ‘ease of doing business report’, the unfriendly business environment encountered by private sector operators is one among several challenges. Some specific constraints cited by the private sector include inconsistencies in policy implementation, high energy and transport costs as well as lengthy and costly processes for compliance with various business regulations. The Blueprint that was published in 2017 and approved by the Cabinet in 2018 is both an acknowledgement by the Government of the regulatory and policy challenges to business and a sign of goodwill that these will be addressed. As a result, 125 fees, levies and charges have been abolished to facilitate investments and the Government is at an advanced stage of enacting the “Business Facilitation Act” which would provide a permanent solution to the recurrent binding constraints to business and investments.

At the operational level, the low use of installed capacity is a major challenge, that is symptomatic of inadequacy in the year-round supply of raw materials. Literature and findings from stakeholder consultations indicate that the following factors are the main causes of low industrial utilisation capacity: (i) unreliable supply of good quality raw materials and inputs to support agro-industrialisation; (ii) the scattered nature of small quantities produced by each smallholder farmer; (iii) long distances between areas of production and the location of agro-industries leading to high transport costs; iv) low levels of agro-processing infrastructure, especially among SMEs; v) unreliable and expensive electricity supply; vi) insufficient domestic demand; vii) poor transport facilities/high transport costs; and viii) a costly operating environment (power supply, customs procedures and employment costs, especially related to work permits) (UNIDO, 2017; Mbele and Kabanda, 2018). Other challenges include inadequate skilled labour to work in agro-industries, the prohibitive cost of energy and a limited supportive infrastructure.

Due to the deficient performance of agro-industries, Tanzania’s main imports are agriculture machinery and inputs, such as machinery feeding into agricultural production and agro-processing plants, chemical fertilisers, and packaging materials. The level of agro-processing is exceptionally low in Tanzania, leading to the marketing of most agricultural products in their raw forms. Examples of low levels of agro-processing in Tanzania include the following:

- i) It is estimated that less than 3% of milk produced domestically is processed (Kurwijila *et al*, 2012; Michael, 2020);

- ii) Tanzania processes only about 20% of its own cotton after ginning, and it exports the rest unprocessed (Page, 2016);
- iii) About three-quarters of locally produced raw hides and skins are exported, and 95% of the rest is exported after limited processing (Page, 2016);
- iv) About 90% of cashews are exported in their raw form due to limited processing capacity.

Although there are many challenges for agro-industrialisation in Tanzania, many opportunities also exist. The key ones are:

- i. Tanzania has a young and rapidly growing population hence, there are many youths that can be employed along commodity value chains and agro-industries.
- ii. Strong political will by the Government to promote agro-industrialisation.
- iii. High potential for agro-resource-led industrialisation (the country has good land and climate for supporting various commodities). It has ample arable land for crop production and the existence of different livestock types.
- iv. Development and integration of regional markets in Africa. Tanzania is a member of two major regional organisations (the Southern African Development Community (SADC) and the East African Community (EAC), both of which are evolving stronger common markets.
- v. Existence of several industries including the dormant ones, that can be revived. These provide a skills base and support services to start and build on.
- vi. National efforts to invest in strategic national infrastructure along key priority corridors (railways, roads, electricity, water, communication, and air transport).
- vii. Increase in per capita incomes, higher urbanisation, and the growing numbers of women in the workforce in Tanzania engender greater demand for high-value commodities, processed products, and ready-prepared foods, creating opportunities for agro-processing industries.
- viii. Recent developments in infrastructural development in Tanzania. The country has made great progress in reforming its trunk roads, improving the quality of the road network in both urban and rural areas. The country has also seen significant gains in ICT networks and recently allocated significant resources to support electricity generation, industrial parks, and construction of the standard gauge railway (SGR). Similarly, the country has invested heavily in agricultural infrastructure (warehouses, irrigation infrastructure, marketing infrastructure and others).

3. Overview of TAIDF

3.1 Objectives and Components of TAIDF

TAIDF is a detailed implementation plan for the Government strategy to strengthen agro-industrialisation in Tanzania. The Goal of TAIDF is to achieve enhanced structural economic transformation towards agro-industrialisation through improved agro-industry based economic growth that is inclusive of youth and women. This goal will be achieved through the following specific objectives:

- (i) To expand and strengthen local agro-industry through increased public and private sector investment in agro-industrialisation;
- (ii) To contribute towards agriculture modernisation and intensification to produce raw materials of adequate quality and insufficient quantities for agro- industries;
- (iii) To enhance market opportunities for agricultural products (raw materials as well as value-added products from the agro-industries);
- (iv) To enhance individual and institutional capacity to implement and sustain agro-industrialisation efforts in the country.

TAIDF will strategically support the development of the agricultural value chains to induce private sector investment in the production of agro-inputs and value addition. The TAIDF support will be a catalyst public sector investment for crowding-in private sector investors. The support will not constitute the direct involvement of the Government in the production of agro-products but rather, the TAIDF's public sector investment will aim at creating a conducive, enabling and efficiency-enhancing business environment with the full-fledged support infrastructure and services that are attractive to agro-industry entrepreneurs.

TAIDF will focus its interventions on three broad areas or components, that are interlinked. These will have several sub-components, each with a set of key implementation activities and expected outputs and intermediate outcomes. Table I below presents the components of TAIDF, and a brief description of the sub-components and the interventions contemplated under each component.

Table I: Summary of TAIDF Components and Sub-components

Description of Component	Sub-components
Component One Infrastructure, Support Services and Incentives for Agro-Industrial Development	1.1 Rehabilitation and improvement of the existing agro-industry infrastructure
	1.2 Construction of new agro-industry infrastructure
	1.3 Construction and/or rehabilitation of supportive infrastructure for agro-industrialisation
	1.4 Strengthening the enabling environment for agribusiness and agro-industry development
Component Two Agriculture Modernisation and Intensification	2.1 Modernisation of agricultural production
	2.2 Strengthening private sector capacity for agro-industrialisation
	2.3 Strengthening market linkages
	2.4 Strengthening agro-financing
Component Three Support to individual and institutional capacity strengthening for effective agro-industrialisation	3.1 Development of quality skills for agro-industrialisation among youths, women and men
	3.2 Supporting key public and private Institutions to strengthen their capacity to facilitate effective and sustainable agro-industrialisation
	3.3 TAIDF coordination, monitoring and evaluation

Operational industries to produce agriculture inputs and agro-processing are few and many operate below their capacity. There have been limited investments in the establishment of new agro-industries, while at the same time previously established industries have performed poorly or even shut down. Consequently, opportunities for the local manufacture of agriculture inputs

and value addition to agricultural products through agro-processing are limited. Growth and enhanced competitiveness of Tanzania's agro-industrialisation requires the rapid growth of private sector investments. Enhancing and expanding such investments requires supportive infrastructure; an affordable supply of the necessary technologies, adequate and high standards in human and institutional capacity, and a business environment that is attractive to the private sector. TAIDF provides a framework to guide such investments.

TAIDF encourages investments in agro-industries for the manufacture of agricultural inputs and for processing agricultural products. In strengthening and expanding these two categories of agro-industries in Tanzania, TAIDF will contribute to the following outcomes. It will address the problem of limited local production of agricultural inputs (resulting from the existence of few functional industries for the manufacture of agricultural inputs). Secondly, through enhanced value addition, TAIDF will lead to several positive outcomes including, a reduction of post-harvest losses, increased availability of value-added products that are produced in Tanzania, thus reducing the importation of value-added agricultural products (such as processed food) and potentially increase the quality and quantity of exported processed agricultural products. Furthermore, enhanced value addition expands market opportunities for agricultural producers, thereby stimulating increased production and productivity in agriculture.

3.2 Proposed Agro-Industrialisation Models to be used under TAIDF

The Government plans to establish regional industrial parks as a strategy for attracting private investments. The Kurasini Trade and Logistics Centre in Dar es Salaam is a typical example, and already at an advanced level of preparation. The TAIDF aims to support and complement Government efforts, particularly with regard to agro-industries. Several models for delivering on agro-industrialisation exist, all of which have been tested within Tanzania and in the region, specifically in Rwanda, Kenya and Ethiopia where they were found to be satisfactory. The three common models that governments have used to incubate and catalyse industrialisation are: i) agro-industrial parks ii) agro-clusters and iii) agro-corridors. The Tanzania Government has already made substantial investments in the development of industrial parks in the country, and thus, TAIDF implementation has adopted the agro-industrial park model.

An agro-industrial park is a centrally managed, physical platform that offers high quality infrastructure, logistics and specialised facilities and services to a community of tenants, formed by agro-industries, related agribusiness firms, service providers, research and knowledge institutions. There are several discrete advantages to investing in an agro-industrial park resulting from the incentives provided by concentrating infrastructure and services. Other advantages include:

- Attracting private domestic and foreign investments.
- Working in proximity provides for the rationalisation of management, supervision, of services and, with a measure of goodwill on the part of the 'Association of Food Producers' on the estate, of shared market exploitation.

- Using agro-industrial parks allows firms to gain from economies of scale and positive externalities through the sharing of infrastructure – roads, power, communication, storage, packaging, by-product utilisation, effluent treatment, logistics and transport, laboratory facilities, etc. – and taking advantage of opportunities for bulk purchasing and selling, training courses and extension services.
- The different enterprises are able to share and/or exploit the complementarity of raw materials, utilities, information resources, transport, export/import arrangements and other similar co-ventures that comes from cooperative and well-coordinated industrial estates supported by both Local Government and private industries.

3.3 TAIDF Priority Regions and Implementation Phases

TAIDF interventions will be implemented in 16 regions. These are: 1) Arusha; 2) Dar es Salaam; 3) Dodoma; 4) Geita; 5) Iringa; 6) Kagera; 7) Kigoma; 8) Manyara; 9) Mara; 10) Mbeya; 11) Morogoro; 12) Mtwara; 13) Mwanza; 14) Singida; 15) Shinyanga; and 16) Tanga.

The prioritisation of regions is based on multiple criteria, among them, the availability of raw materials through the production of priority commodities under ASDP II; the existence of necessary infrastructure; past investments in agro-industrialisation to be leveraged on; human population; market opportunities and connectivity to key consumption centres. All TAIDF interventions will take place in the 16 regions, except for the development of the Agro-Industrial Parks (AIPs), which will target 12 regions (which are sub-sets of the 16 regions). In an ideal situation, it would have been useful to have AIPs in all the 16 regions, but due to high resource requirements (financial, human and technical), it is proposed that Tanzania initially invests in AIPs in 12 regions over the next 10 years. Furthermore, due to financial resources and management capacity limitations in the establishment of AIPs in all 12 regions at once, a phased implementation approach is proposed. The regions to be targeted in each of these phases are showed in Table 2.

Table 2: Proposed Phasing of Agro-Industrial Park Development

Phase	Period/ Years	Priority regions for location of agro-industrial parks
Phase 1	2020/21-2022/23	Dar es Salaam/Pwani*, Dodoma, Mwanza, Arusha
Phase 2	2023/24-2025/26	Iringa, Morogoro, Geita, Kigoma
Phase 3	2026/27-2028/29	Mbeya, Mara, Tanga, Manyara

Notes: Dar es Salaam is small in land area but has a relatively large population, while Pwani which potentially has a big land area neighbours Dar es Salaam by completely circling it. Therefore, industries could be located in Pwani while destination markets and the exit point to other markets will be Dar es Salaam.

The other regions (Kagera, Singida, Shinyanga and Mtwara) will include a catchment area for the Agro-Industrial Parks. For example, Singida will be part of the catchment area for the Dodoma AIP; similarly, with Manyara region for the Arusha AIP.

4. Investment Requirements and the Rate of Return on Investment

4.1. TAIDF Investment requirements

The Public and the Private Sector will be both required to make investments into TAIDF. Government investments will target the provision of catalytic infrastructure, services, and the administrative and institutional support for the rollout of TAIDF. The Government and Development Partners will invest a total of US\$ 320 million during the first six years of TAIDF as seed money (Table 3). In turn, the resources from the public sector are expected to leverage investments of US\$ 2,669.1 million by the private sector; including farmers, primary processors and local and foreign agro-industrial investors (Table 4).

Table 3: Summary of the Proportional Distribution of the TAIDF Government Costs by Component

TAIDF Component	Costs in Million USD	% Share of TAIDF Government Costs
Infrastructure, Support Services and Incentives for Agro-Industrial Development	229.1	71.2
Agriculture Modernisation and Intensification	55.8	17.4
Support to Individual and Institutional Capacity Strengthening for Effective Agro-Industrialisation	19.9	6.2
Contingency	15.2	4.8
All components	320	100

Table 4: Summary of the Estimated Private Sector Costs for TAIDF (2020/21-2025/26)

S/N	Components	Total Costs	
		In Million USD	As % of costs of TAIDF to the private sector
I	Infrastructure, Support Services and Incentives for Agro-Industrial Development	120	4.5
II	Agriculture Modernisation and Intensification	2,422	90.7
III	Support to individual and institutional capacity strengthening for effective agro-industrialisation	Negligibly small	0
Total		2,542	95.2
Add 5% Contingency		127.1	4.8
Grand Total		2,669.1	100

4.2 Estimation of the Internal Rate of Return for TAIDF

TAIDF's Internal Rate of Return (IRR) is estimated at 54.5% based on the total initial cost of the Flagship. The rate makes the Flagship financially and economically viable as it indicates that within the six years of implementation, the rate of return on investment is higher than any other feasible rate potentially attainable from the funds. The pay-back period of six years is also relatively short given the size of the investment.

5. Expected Impact of TAIDF

TAIDF will have direct and indirect beneficiaries to its interventions. These include the primary producers of the priority commodities and their associations, people living in the areas with

TAIDF supported activities, traders of the priority crops and related business activities (e.g. inputs distribution, SMEs, agro - industrialists, job seekers in the agro-processing sub-sector, the unemployed youth in urban and rural areas, as well as public and private institutions involved in the implementation of the TAIDF.

Direct and Indirect Beneficiaries of TAIDF

TAIDF interventions will reach and directly benefit the people and institutions involved in the priority commodity value chains in the selected regions. These include agricultural producers (crop farmers, livestock keepers, and fish-farmers), farmer cooperatives and unions, livestock keepers' associations, traders, agro-processors, input suppliers, members of SMEs, private investors, the staff of relevant public and private institutions.

The TAIDF interventions will have spill-over effects in the form of indirect benefits to households and institutions that will not have been directly reached. These include the rural populations in the coverage areas, who will enjoy improved levels of infrastructure, increased employment, financial services, transport service providers and consumers of products from production and the agro-industries. The following is a summary of expected impacts from TAIDF:

- **At least 5%** increase in the total GDP by 2025
- An additional contribution of **9.7%** to manufacturing GDP by 2025
- At least 12% in agro-processing GDP
- **7 million** households will benefit either directly or indirectly by 2025. Of these, 5 million households will be direct beneficiaries, while 2 million will benefit indirectly. This translates into about 32.2 million people.
- The **5 million** households benefiting directly will include:
 - **3.5 million** farming households (reaching 7 million farmers)
 - **1.5 million** non-farming households (operating as primary processors, aggregators/traders, secondary processors, input suppliers, etc.)
- **1 million people** (mainly women and youth) will have new employment opportunities in TAIDF related activities
- Of the 1 million new jobs, **100,000** will be direct jobs in agro-industries (for input production and agro-processing) to be built or rehabilitated under TAIDF
- **At least 600** small and medium sized enterprises (SMEs) in agro-industry will be supported
- **At least 60** public and private Institutions at the national and sub-national levels will be supported to effectively implement the Government's agro-industrial goals

6. Mobilisation for TAIDF Implementation

The TAIDF will be implemented through a three-pronged strategy for resource mobilisation (Table 5). **First**, TAIDF Secretariat will work with the Government Ministries to integrate the envisaged public investments into ongoing and prospective Government programmes and budgets. **Second**, is the promotion of interventions that facilitate the crowding-in of private sector investments into agriculture and agro-industry. These will include: i) Measures to enhance an enabling business environment and agriculture and processing productivity; ii) Measures to clearly define the space for the private sector *vis-a-vis* the public sector; iii) Advocacy on further public investments that attract more private sector investments by reducing private sector risk and enhancing efficiency. **Third**, TAIDF Secretariat will work with the Development Partners who have already committed to supporting ASDP II, as well others pursuing programmes/projects related to agro-industrialisation to support the relevant activities of the TAIDF.

Table 5: Key Resource Mobilisation Strategies of the TAIDF

Source of Funding	Strategy	Action
Government	<ul style="list-style-type: none"> Implementation of Government commitments to increase public spending in the agriculture sector and agro-industrialisation to meet the CAADP Malabo target of 10%. Mainstreaming of the public investments envisaged in the TAIDF into ongoing and prospective Government programmes and budgets under the ASDP II. 	<ul style="list-style-type: none"> Include in the TAIDF implementation, the development of a comprehensive and transparent system for tracking and advocating for increased public, DP and private sector resources into agriculture and agro-industrialisation. Then continue to monitor and advocate for increased public funding of agriculture and agro-industrialisation. Review of existing, ongoing and prospective Government programmes to find the resources that align well with the TAIDF activities.
Development Partners	<ul style="list-style-type: none"> Involve the Development Partners (DPs) who have already committed to supporting ASDP II in financing the TAIDF through basket and off-budget arrangements. 	<ul style="list-style-type: none"> Work with the ASDP II Secretariat to involve the DPs involved/interested in the agricultural sector to support the TAIDF.
Private Sector	<ul style="list-style-type: none"> Support efforts to enhance farm productivity and organisation of farm produce markets to reduce the challenge of agro-industries having adequate raw materials. This will enhance the competitiveness of agro-industry value chains and entice private sector investments into agriculture and agro-industry. Establish a catalytic fund, credit guarantee schemes and insurance schemes to reduce the risks of private sector breaking-in into agriculture and agro-industry. Support efforts to improve the business environment for agro-industrialisation. 	<ul style="list-style-type: none"> Include as part of the TAIDF implementation, development of a comprehensive and transparent system to track the improvements in the competitiveness of priority value chains/agro-industries and the business environment in general. Establish public-private partnership framework and forum for networking the public and private sector sources of investments to support the TAIDF. Design and establish suitable catalytic funding, credit guarantee schemes and insurance models.

7. Risks and Risk Mitigation Strategies

Overall, TAIDF is regarded as a moderately risky intervention. Its components and sub-components as well as interventions are based on proven approaches and focus on the areas successfully implemented in other countries with similar socio-economic conditions with Tanzania. **Table 6** summarises the envisaged risks to TAIDF and the recommended mitigation measures. The TAIDF coordination team will regularly undertake detailed assessments of the risks involved to develop and implement mitigation measures in consideration of the overall 'programme' and 'project' levels. The team will also develop and implement a comprehensive risk management strategy. The purpose of the TAIDF Risk Management activities will be to identify the evolving critical risks and develop strategies to prevent them from occurring or minimise their impact on the Flagship where they do occur.

Table 6: Assessment of the Major Risks to the Success of the Flagship

No	Risk	Probability of Occurrence	Mitigation
1	Slow and inadequate efforts to enhance farm productivity for priority commodity value chains	M	The Government is implementing ASDP II with vigour and within a public-private partnership framework that encourages key stakeholders to be effectively involved and engaged. Improving farm productivity is a key agenda in ASDP II as there is wide appreciation of the constraining factors of low productivity in ensuring adequate and competitive availability of raw materials for agro-industries. Furthermore, the Flagship includes measures to enhance selected strategic capacity for farm productivity as part of the bigger picture for agro-industrialisation.
2	Low private sector investment in agro- industrialisation	H	The Flagship is conceived to create an enabling environment for private sector investments that crowd-in agro-industrialisation. Private sector organisations will be actively involved in the implementation of the Flagship. The Flagship's prioritisation of value-addition and the broader ASDP II focus on farm productivity will improve the commercial viability of the whole agro-industry value chain and hence make it more attractive for local and foreign private investment.
3	The ease and cost of doing business will remain challenging	M	The Government is committed to implementing the blueprint on regulatory reforms. The Flagship has also included interventions to support the implementation of the blueprint as well as additional measures to address the conflicting objectives of the various policies, laws and regulations and procedures affecting the agro-industries for the priority commodity value chains.
4	Capacity gaps	H	The Flagship has a strong component on capacity development for agro-industrialisation
5	Conflicting mindsets will hamper implementation	M	Although capacity changes and, especially mindset change take time, the possibilities for success exist since the capacity development interventions will be implemented early in the Flagship. The Flagship's implementation manual requires actors to sign a compact to ensure their commitment.
6	Inadequate commitment of partners to release earmarked funding for the Flagship's implementation	H	The Government (i.e. MOFP) – through the PMO - supported by the MoA, the MIT and the MLF will implement resource mobilisation activities to ensure constant engagement with all committed and potential sources of funding for the successful financing of the Flagship. This Flagship document includes a section with proposals on resource mobilisation for the TAIDF.
7	Administrative export restrictions especially for agricultural products and agro-industrial products following Government concerns about food security	M	Government has in the recent years committed to end the frequency of export bans.
8	The insufficient capacity of regional and district authorities as well as marketing infrastructure management committees to effectively manage and supervise the various TAIDF activities	M	This will be mitigated by the various tailor-made capacity-building activities that the programme will provide to various implementers at different levels aimed at enhancing their competencies to cope with the demands of the programme. The Government will also leverage ongoing and future efforts on capacity strengthening for government officials.
9	Coordination challenges as TAIDF will be implemented under a complex institutional structure – multi-sectoral, multi-donor environment, in tandem with several standalone projects. This may lead to a conflict of agenda and interests, as well as inadequate capacity to effectively manage and coordinate several activities under different projects	H	A coordination framework managed under the ASDP II has been proposed for TAIDF and is designed and expected to harmonise the implementation of various projects contributing to the Flagship. This is elaborated in detail in the section on implementation arrangements.

I: Introduction

I.1 Background

I.1.1 Country Profile and Overview of the Agriculture Sector

Tanzania is one of the countries in the East African region. It became a lower-middle income country on July 1, 2020, following an upgrade by the World Bank, when its GNI per capita increased to US\$ 1,080 in 2019, from US\$ 1,020 in 2018 (Battaile, 2020). The leading contributors to Tanzania's economy are agriculture, construction, trade and repair, manufacturing, transport, storage and mining (MoFP, 2019). The country has considerable potential for agricultural and livestock production as well as fisheries (URT, 2016; Page 2016). Agriculture is the main source of livelihood accounting for about 28.7% of Gross Domestic Product (GDP) and employing about 65.5% of the total population (MoA, 2020). The sector contributes about 30% of the total export earnings and supplies 65% of all industrial raw materials in the country (MoFP, 2018; MoA, 2020). The agricultural sector in Tanzania is dominated by smallholder farmers, practicing subsistence farming. Women compose the primary source of the agricultural labour force in the country (Mmasa, 2013). A greater proportion of women than men (69.9% vs. 64.0%) work in agriculture (Idrisi, 2018).

Although agriculture is key to the Tanzanian economy, the sector's annual growth rate is lower than the Comprehensive Africa Development Programme's (CAADP) minimum target of 6% that African countries committed to in 2003, calling for among other requirements, a commitment of 10% of national budgets to agriculture as well as aim at a 6% annual growth rate for the sector. For the three years (2016 – 2018), the growth of the agriculture sector averaged a rate of 5.3% (MoFP, 2020). There are several constraints to agricultural growth in Tanzania, the key ones being: i) under investment in agriculture, especially for research and development initiatives; ii) inadequate agricultural infrastructure (such as electricity, rural roads, storage facilities, marketing infrastructure and agro-processing infrastructure); iii) inadequate access to agriculture inputs (such as chemical fertiliser, vaccines, improved seeds, animal feeds and artificial insemination (AI)); iv) an underdeveloped agro-processing sub-sector which leads to limited value addition; v) poorly integrated markets and poor market access by the agricultural producers; vi) limited access to agricultural finance and high interest rates where financing opportunities exist; vii) unfavourable policy and regulatory framework, frequent institutional and policy changes, and weak implementation of policies, laws and regulations, which among other things, discourages private sector investments; vi) limited public investments to the sector; vii) high post-harvest losses viii) low competitiveness; ix) inadequate availability of financial and human resources to implement agriculture projects and programmes; x) weak capacity of producer organisations, and; xi) underutilisation of the existing irrigation potential (currently, only 5% of the country's irrigation

potential is utilised) (Mmasa, 2013; Timisia, 2014; URT, 2016, BFAP *et al*, 2018; PMO and MITI, 2018 and FAO and AfDB, 2019).

Tapping the potential in the sector requires substantial changes in policy and the legal framework, coupled with sustained enhanced investments by both the public and private sectors to attain agricultural transformation. Thus, the Government has continuously been improving the policy and strategic frameworks to enhance the development, performance, and contribution of the agricultural sector to the national economic growth. The key strategic document guiding the transformation of the sector is the *Agricultural Sector Development Strategy II (2015)*.¹ Similarly, as a step towards the implementation of CAADP, the country designed the Tanzania Agriculture and Food Security Investment Plan (TAFSIP) (2011/12 – 2020/21) as a road map for agricultural and rural development. ASDS II and TAFSIP are implemented through the *Second Agricultural Sector Development Programme (ASDP II)*. *ASDP II aims at transforming the agricultural sector by enhancing productivity (of the crops, livestock, and fisheries sub-sectors), markets, value addition, farmer’s income, food security and nutrition.* **Table I.1** presents data on selected socio-economic and agriculture-related indicators in Tanzania.

Table I.1 Selected socio-economic and agriculture-related indicators for Tanzania

Indicator	Indicator Value and year	Data Year	Data Source/ Reference	
	Total population (Millions)	52.6	2017	MoFP, 2019
	The proportion of the population living in rural areas (%)	70	2017	THD, 2017
	Percent of children under five years of age are stunted	34	2015–16	TDHS 2015–16
	Percent of children under five years of age are underweight	14	2015–16	TDHS 2015–16
	Youth population (15-35 years) (%)	35.1	2012	NBS, 2019
	Population living below poverty line	26.4	2018	HBS, 2018
	Extreme poverty line (%)	17.7	2015	HDR 2017
	Unemployment rate (%)	9.7	2018	NBS, 2019
General Economic Indicators	GDP at current prices (billion)	129,364	2018	MoFP, 2019
	GDP per capita at current prices	TZS 2,175,949 (or US\$ 1,008)	Avg.2013-2018	NBS, 2019
	Real GDP growth %	7.1	Avg.2013-2018	MoF, 2018; NBS, 2019
	Unemployment rate (%) for Tanzania (mainland)	9.7	2014	NBS,2018
	Total exports (FoB)	TZS 8,727 billion	2018	NBS, 2019
	Total imports	TZS 19,368 billion	2018	NBS, 2019
Key Agriculture Indicators	Proportion of agriculture GDP in the total GDP (%)	30.1	2017	MoF, 2018
	Agriculture GDP growth rate (%)	3.6	2017	MoF, 2018
	GDP growth rate for the crop sub-sector (%)	3.7	2017	MoF, 2018
	GDP growth rate for the livestock sub-sector (%)	2.8	2017	MoF, 2018
	GDP growth rate for the forestry and hunting sub-sector (%)	6.3	2017	MoF, 2018
	GDP growth rate for the fishing sub-sector (%)	2.7	2017	MoF, 2018

¹ ASDS II is a sector-wide approach for planning, coordinating and harmonising the resources (public and private) required to accelerate the implementation of initiatives in the agricultural sector.

	Amount of agriculture land under irrigation (Ha)	461,000	2017	MoA
	Fertiliser per hectare	10 Kg /ha	2016	URT, 2016

Source: Compiled by the Authors based on the sources indicated in the last column

1.1.2 Industrialisation in Tanzania

Industrialisation is important to the economies of countries as it adds value to local produce, generates crucial externalities in technology and skills development; and more fundamentally, it underpins the competitiveness of production (MITI, POPC and UNIDO, 2012; UNIDO, 2013; FAO and AfDB, 2019). The contribution of the manufacturing industries sector to the GDP in Tanzania is low at 8.1% (MoFP, 2019). Food processing and beverage production are the most significant contributors to manufacturing value addition (MVA), with food processing accounting for 36.9% of total manufacturing employment. Textile production is also an important source of manufacturing employment (20.9%) (Mbele and Kabanda, 2018).

A recent report on progress towards industrialisation in Tanzania (Mbele and Kabanda, 2018) shows that the total number of industrial establishments as per the NBS census of industrial production in 2013 was 1,322; of which 210 were mining and quarrying; 87 were water supply, sewage, waste management and remediation activities; 27 establishments were electricity, gas, steam and air conditioning supply; and the bulk of them, or 998 (75.5%) establishments were in manufacturing.

Despite the importance of the agricultural sector in Tanzania and the existing potential to produce high quantities of agricultural raw materials, agro-processing is still is incredibly low in the country. Most agricultural products are marketed in their raw forms (Mmasa, 2013; ESRF, 2015 and Page, 2016). The following examples illustrate the low levels of agro-processing in Tanzania:

- i) It is estimated that less than 3% of milk produced domestically is processed (Kurwijila et al, 2012 and MLF, 2019);
- ii) Tanzania processes only about 20% of its own cotton after ginning, and exports the rest unprocessed (Page, 2016);
- iii) About three-quarters of locally produced raw hides and skins are exported, and 95% of the remainder are exported after limited processing (Page, 2016).

Strategic Frameworks for Industrial Growth in Tanzania

In recent times, the Government of Tanzania (GoT) has been intentional about stimulating industrialisation in the country, putting in place various measures to stimulate it. The key ones include: i) development and implementation of relevant strategies and policies; ii) identification and implementation of priority projects; iii) strengthening of institutional frameworks to address coordination challenges in agro-industry development; and iv) development of supportive infrastructure projects. The key strategic framework guiding industrialisation in Tanzania is the Integrated Industrial Sector Development Strategy (IIDS 2025) whose aim is to spearhead GDP

growth, job creation, foreign exchange earnings, and strengthening small and medium-sized enterprises (SME) development. **Table I.2** presents a summary of the main strategic frameworks governing industrialisation in Tanzania.

Given that the Tanzanian economy is agriculture-based, the GoT considers agro-industrialisation as a viable path to sustainable economic growth. GoT is committed to implementing the second Agriculture Sector Development Programme (ASDP II) interventions as a basis of the country's industrialisation push and employment creation. This is a promising approach, given the role that agro-industrialisation can play to spur economic transformation in developing countries such as Tanzania is well documented in literature (Fatah, 2007; Da Silva *et al.*, 2010; O'Sullivan *et al.*, 2011; Rais *et al.*, 2013; Page, 2016; Woldemichael *et al.*, 2017). The literature further shows that due to its backward and forward linkages, agro-industrialisation increases value addition opportunities and GDP, with a huge potential for the creation of employment opportunities, as well as increasing incomes and thereby improving nutrition and alleviating poverty (*Op. Cit.*).

Table I.2. Strategic Documents supporting industrialisation and agro-industrialisation in Tanzania

Policy Document	Brief Description
Development Vision 2025 (TDV 2025)	This is a National Composite of Tanzania Development Vision 2025 that was launched in the year 2000. It envisages Tanzania's aspiration of becoming a semi-industrialised middle-income country with a GDP per capita of US\$ 2,500 by the year 2025. It intends to: i) transform Tanzania into the industrial and logistics hub of East and Central Africa; ii) promote rural industrialisation through an agriculture-development; and, iii) provide growth opportunities for MSMEs. In 2005, the GoT prepared the Mini-Tiger Plan 2020, to implement the Vision. This plan led to the establishment of Special Economic Zones (SEZs) and Export Processing Zones (EPZs).
Sustainable Industrial Development Policy for Tanzania (SIDP 1996- 2020)	SIDP was adopted in 1996 to realise sustainable industrial sector growth targeting favourable levels of employment, economic transformation, equitable development and export promotion with the private sector as the main vehicle for making direct investment in the sector while the Government provides an enabling environment.
Tanzania's Integrated Industrial Development (IIDS) Strategy 2011-2025	The strategy identifies and provides the direction for policy instruments available to lead the process of industrialisation in the desired direction. It provides strategies to achieve SIDP objectives and for the realisation of TDV 2025.
The Second Five Year Development Plan 2016/17–2020/21 (FYDP II)	The Second Five Year Development Plan (FYDP II 2015/16 – 2020/21) is centred on the need to boost industrialisation and productivity growth across the economy, targeting light manufacturing and resource-based industries. Targets for the manufacturing sector set by the FYDP II are in Table 2.2 .
National Skills Development Strategy (NSDS) 2016–2021	This strategy seeks to increase the supply of skills for industries. The World Bank's Education and Skills for Productive Jobs Project is funding the implementation of the NSDS.
National Trade Policy (NTP) 2003	The policy identifies industrialisation as one of the key strategies to boost trade. It states that the Government will encourage investments in commercial farming and agro-processing industries as growth poles of the sector throughout-grower, contract farming schemes and other market linkage relationships.
Agricultural Marketing Policy (AMP), 2008; National Agricultural Policy (NAP), 2013	One of the objectives of this policy is to promote and support value addition in agricultural produce. It has the following policy statements: (i) Primary agro-processing and value addition will be promoted and strengthened; (ii) The Government will put in place special programmes and incentives for investors in agro-processing firms; (iii) Consumption of locally processed agricultural products in the domestic market will be promoted; and (iv) Investment in research and development for agro-processing will be promoted. Complementarily, the NAP seeks to improve agricultural processing with a view to adding value to agricultural products and creating jobs; Enhance the production of quality products in order to improve the competitiveness of

Policy Document	Brief Description
	agricultural products in the markets; and Increase foreign exchange earnings from the export of agricultural products;
Strategy for Fast-tracking Industrialisation in Tanzania: 2016-2020	The strategy seeks to enhance the synchronisation of industrial development efforts (policies, plans and initiatives) for more impactful results. It recognises the need for greater investments in promoting commercialisation of agriculture in tandem with agro-industrialisation.
Small and Medium Enterprise Development Policy 2003	Small and Medium Enterprise Development Policy 2003: This policy specifically acknowledged the special role of SMEs in the context of Tanzanian industrialisation. It aimed to address the constraints to industrialisation and to tap the full potential of Tanzania's SME sector. The policy has had a beneficial impact on SME performance, but the many constraints it sought to address still exist to this day.
The Tanzania Livestock Master Plan (TLMP)	The TLMP has prioritised investment in industries for processing livestock products. For example, it recommends the provision of incentives and an easing of bureaucracy for investors seeking to establish milk processing plants.
Blueprint for Regulatory Reforms to Improve the Business Environment	The blueprint has been formulated to improve and strengthen the business enabling environment (BEE) in Tanzania. Through its implementation the Government aims to attract both local and foreign investors to enter and participate in the different sectors of the economy at the scale required to accelerate and sustain industrial transformation.

Sources: GoT, 2018; MITI, 2017; MITI, 2018, PMO and MITI, 2018

1.1.3 The Role of Private Sector in Promoting Agro-Industrialisation in Tanzania

The Government acknowledges the key role of the private sector in investments to drive industrialisation and agro-industrialisation. The ASDS and the FYDP II articulate the importance of creating an enabling environment for private sector to invest in agro-industrialisation. The two documents show that the GoT will provide a conducive policy and regulatory framework, land and a supportive infrastructure for industrial development to attract investments from the private sector. The private sector-led ASDP II initiative is also keen to support enhanced private sector involvement in agro-industrialisation.

There are, however, some important challenges that need to be addressed in order for the private sector to effectively contribute to agro-industrialisation. The key one is the challenge of an unfriendly business environment for the effective operations of the private sector. This challenge and the ongoing Government interventions to address it are discussed in section 2 of the document.

1.2 Purpose of this Document

The Government, with technical back-stopping from the Alliance for a Green Revolution in Africa (AGRA) developed the Tanzania Agro-industries Development Flagship (TAIDF), presented in this document. The programme aims to contribute directly to Component Three of ASDP II, whose objective is to attain improved and expanded rural marketing and value addition promoted by a thriving competitive private sector and effective farmer organisations (URT, 2016). TAIDF is also designed to stimulate the outcomes of the other components of the ASDP II.

1.3 Justification for Developing TAIDF

The Government recognises industrialisation as a key driver of economic development and as the path to realising Tanzania's ambition of becoming a middle-income economy by 2025. The

Second National Five-Year Development Plan (FYDP II), themed ‘*Nurturing Industrial Development for Economic Transformation and Human Development*’ developed in 2015, has ambitious targets for the manufacturing sector and includes specific agro-industry related targets (see **Table 1.2**). The 5th current Government has industrialisation as its main development agenda. The President of Tanzania, H.E. John Pombe Magufuli has stated that his administration is committed to ensuring that the country meets the targets stated in **Table 1.2**. In his inaugural speech to the National Parliament in November 2015, the President emphasised, “*agro-based industries (for farm implements, inputs as well as for added value to crops, livestock and fisheries produce).*”

The strong Government commitment to industrialisation is in response to the rather low performance of the manufacturing sector. The Government is working to ensure that deliberate measures are in place to meet the 2025 targets for the manufacturing sector. TAIDF is designed as one of the programmes that will contribute to the efforts to fast-track agro-industrialisation in the country.

Table 2.1 Baseline and key targets for the manufacturing sectors, Mainland Tanzania, 2015, 2020 and 2025 as defined by the FYDP II

	2015	2020	2025
Share of GDP (%)	5.2	12.5	18.0
Real growth (%)	6.5	10.5	12.2
Share of total employment (%)	3.1	5.4	12.8

Notes: The FYDP II includes specific agro-processing targets, including revitalising the textile, garment and clothing industries, setting up leather industries in Dodoma and Singida, and increasing edible oil production from 100,000 Metric Tons in 2015 to 250,000 Metric Tons by FY 2020/21, and 600,000 Metric Tons by FY 2025/26.

I.4 Document Structure

The rest of the document is organised as follows. Section 1 presents the background of industrial development and agro-industrialisation in Tanzania. It gives a summary of the efforts in the promotion of agro-industrialisation and discusses the existing challenges and opportunities for agro-industrialisation. Section 2 presents a situation analysis of agro-industrialisation in Tanzania. Section 3 gives an overview of the methodology and approaches used in the design of TAIDF. Section 4 gives a synthesis of practical foundations that informed the design of TAIDF. Specifically, this section presents findings of the literature review and a technical analysis conducted to guide the TAIDF focus, propose an approach to TAIDF’s implementation and priority geographical focus. Section 5 presents TAIDF’s main objectives, components, sub-components and activities. Section 6 presents budget and cost estimations for TAIDF. Moreover, sections 7 and 8 respectively present the institutional framework and accountability and monitoring mechanisms for TAIDF. The section on accountability mechanisms presents the TAIDF theory of change, indicators for tracking implementation progress in the implementation of TAIDF and assumptions made during TAIDF design. Section 9 discusses funding mechanisms and presents a preliminary resource mobilisation strategy. Section 10 gives an overview of the potential risks to TAIDF

implementation and proposed mitigation measures. Section II concludes with how the management of environmental and social impacts of TAIDF will be carried out.

2: Situation Analysis: Agro-Industrialisation in Tanzania

The overview on the status of agro-industrialisation in Tanzania, focusing on recent efforts, provided the background information that informed the design of the TAIDF. Two major periods of the country's post-independence era characterised the evolution of industrialisation in Tanzania. The first one outlines *earlier efforts* spanning the period 1961–1995, which involved changes from private-led import substitution (1961-1966) to state-led import substitution (1967-1985) and gradually to de-industrialisation under the structural adjustment programme and liberalisation (1986–1995). The second one covers *initiatives* of the two recent decades during which Tanzania has implemented SIDP (1996-2020). The focus of the overview hereinafter is on the second period.

2.1 Recent Efforts to Promote Agro-industrialisation in Tanzania

To implement SIDP, the Government prepared the Integrated Industrial Development Strategy 2011-2025, with a principal focus on the accumulation and concentration of industrial firms through cluster development, supported by Special Economic Zones (SEZs). This strategy has guided the more recent initiatives to promote agro-industries which include the following:

2.1.1. Creating an Enabling Environment to Attract Private Sector Investments in Agro-Industrialisation

The Government has been working to create a conducive and enabling environment to attract investments from the private sector. To augment the efforts to attain SIDP goals, the Export Processing Zones (EPZs) Act was passed in April 2002, and its implementation started effectively in March 2003. The objectives of EPZs are to attract and promote investments in export-led industrialisation, to increase foreign exchange earnings, to create and increase employment opportunities, to attract and encourage the transfer of new technologies and to promote the processing of local raw materials for export (value addition). Among the incentives offered by the Act include a 10-year exemption on corporate taxes; remission from custom duty, VAT and other taxes on raw materials and goods of a capital nature that are related to production in EPZs; authorization to sell 20% of produced goods on the domestic market; access to the export guarantee scheme; and the unconditional transfer of profits, dividends, royalties, just to mention but a few of the incentives (Wangwe, 2016).

As an incentive to attract the private sector to invest in industries, the Government indicated that investors could establish manufacturing operations in the Special Economic Zones (SEZ) using either the SEZ User License or SEZ Export User License and enjoy the lucrative incentives provided by the scheme. In response to the Government incentives to private sector investment in industrialisation, several industries have been established. For example, Tanzania Tooku Garments Co. Limited is one of the FDIs under the EPZ regime with huge benefits to the country. The Chinese company produces and supplies high quality garments --jeans and t-shirts -- to markets in the United Kingdom, United States of America, Germany and Czech Republic. Such

investments are paying off. Available data show that since EPZA opened doors for business in 2008, the country has received 1.27 billion US dollars (about 2.7trn/-) in capital investments, with about 800 million US dollars (over 1.6bn/-) generated in export revenues. The 130 registered firms have so far created 31,923 jobs.

Many of the industries that were previously state-owned were privatised following Government steps towards privatisation (See selected examples in **Table 2.1**) – resulting in both successful and unsuccessful cases. The unsuccessful ones have faced implementation constraints such as the lack of financial resources to run the factories, and the inability to access adequate raw materials, among other challenges. As a result, many of these industries have been dormant or run below capacity for some years. The Government has been working to resolve these challenges using various measures, which have included repossessing some of the failed (formerly privatised) industries. Plans are underway by Government to bring in new investors for the repossessed industries. In support, TAIDF is expected to create an enabling environment, including catalysing increased access to financial resources and raw materials for agro-industries.

Table 2.1: Examples of Previous State-Owned Industries, now Privatised

Name	Region (HQ)	Status
Musoma Textile Mills Tanzania Limited (MUTEX)	Mara	Not operational
Mbeya Textile Mill Ltd	Mbeya	Not operational due to inadequate raw materials.
Moshi Leather Industries Ltd	Moshi	Operational but facing a challenge of inadequate quality raw material at prices that support profitable operations
Kilimanjaro Textile Mills	Arusha	Not operational due to failure to meet Government regulations
Ubungo Garments Ltd	Dar es Salaam	Privatised by outright sale of assets. (It is no longer an industry)
Shinyanga Meat Factory	Shinyanga	Not operational
Dakawa Rice Mills Ltd	Morogoro	Not operational
Newala Cashewnut Industry	Mtwara	Not operational
Tripple S Beef Ltd	Shinyanga	Not operational
Lindi Cashewnut Processing Plant	Lindi	Not operational
Tanzania Breweries	Dar es Salaam	Well performing. Has two divisions: beer, and wines and spirits. Owns various brands, Operates breweries in Dar es Salaam, Arusha, Mwanza and Mbeya. Listed on the Dar es Salaam stock exchange.
Tanzania Cigarette Company Ltd	Dar es Salaam	Well performing. Has several cigarette brands for the local and export markets. Listed on the Dar es Salaam stock exchange.
The Bahkresa Azam Group (of which a part was acquired from the former National Milling Corporation)	Dar es Salaam	A well performing diversified group of companies with a good footprint in the food and beverage sector in Tanzania with growing outreach to other countries in Africa.

Source: Compiled by the Authors based on information from key informant interviews in 2019 and information from the Ministry of Trade and Industries

2.1.2 Revival of the Old Agro-industries and Establishment of New Ones

The Government has taken the initiative to revive some of the old agro-processing industries and establish new ones as one of its strategies for the industrialisation agenda. Examples of large agriculture-related industries that have been recently established are: (i) Seif For Tobacco Trade Limited; ii) Wegmar Packaging Limited; iii) Jambo Food Products Limited; iv) Phiss Tannery Limited; and v) Tanfroz Limited. A speech by the Minister of Finance and Planning to Parliament in March 2020 indicated that during the period 2016/17-2019/20, over 7,000 industries were established in Tanzania (201 large, 460 medium, 3,406 small and 4,410 very small).

2.1.3 Allocation of Land for Industrial Establishments

The Tanzanian Government issued a directive to all local authorities (districts, towns, municipalities, and cities) to set aside land for industrial establishments, and a further requirement to embrace at least one hundred industries. This creates a promising future for an industrialised country. The President's Office – Regional and Local Government's (PO-RALG) Budget speech for 2020/21 showed that as of February 2020, the Local Government Authorities (LGAs) had allocated 854,821.59 hectares of land for investment as follows:

- (i) 403,784.92 ha for big, medium and small industries.
- (ii) 45,231.33 ha for markets and various businesses like hotels and shops.
- (iii) 405,805.34 ha for agriculture, livestock, forestry and mining

2.1.4 Establishment of Industrial Parks and Sub-Sector Industrial Clusters

The Government, in collaboration with other agricultural sector stakeholders has established agro-industry clusters in various parts of Tanzania. These efforts are coordinated by the Export Processing Zones Authority (EPZA), which is the principal Government agency for promoting investments in SEZs. The EPZA was established in 2006 to manage EPZs and SEZs. For example, established under the EPZA, the Benjamin William Mkapa Export Processing Zone in Dar es Salaam has 82 established firms (by 2019), of which about 42 or 50% are agro-industries. To date, six industrial parks have been developed.

2.1.5 Establishment of the Joint Inter-Ministerial Programme to Support Implementation of the Industrialisation Agenda

To spur implementation and to address the coordination challenge, the GoT recently prepared a joint inter-ministerial programme to support the implementation of the industrialisation agenda (MITI, 2017). This is being coordinated under the Prime Minister's Office (PMO) and is chaired by the Minister of State for Policy and Coordination. It includes ministers and permanent secretaries in the Ministries of Industry and Trade; Finance and Planning; Water and Irrigation; Works, Transport and Communication; Energy; Minerals; and Agriculture, Livestock and Fisheries; and President's Office – Regional Administration and Local Government. It also includes some relevant Government agencies (the National Development Corporation, NDC, and EPZA), and private sector participants (through the Tanzania National Business Council (TNBC), and the

Tanzania Private Sector Foundation, TPSF). The committee has contributed to increased coordination, dialogue and planning focussed on industrialisation. Both inter-sector and public-private coordination are improving. Key national plans and programmes, for example, the FYDP II have industrialisation as one of the strategic foci.

2.2 Challenges and Opportunities for Agro-Industrialisation in Tanzania

The design of TAIDF is informed by a review and analysis of the main challenges and opportunities for industrialisation in Tanzania. The expectation is that implementation of TAIDF will facilitate the alleviation of the challenges (some) and leverage the opportunities. As the key performance indicators of TAIDF presented in Section 8 imply, a positive outlook for agriculture and agro-industrialisation is envisioned.

2.2.1. Challenges

Industrialisation in Tanzania has many constraints as well as opportunities ((URT, 2008, Mwakapugi *et al.* 2010; Kilimo Trust, 2011; AfDB, 2014; Timisia, 2014; Kipene, 2016; BFAP *et al.*, 2018; Kweka, 2018; Mbele and Kabanda, 2018; URT, 2019). A review of the salient constraints and opportunities informed the design of TAIDF. Thus, TAIDF will address the challenges while taking advantage of the existing opportunities. The following is an overview of the key constraints:

Policy Constraints: Although the manufacturing sector (including agro-industries) enjoys a range of incentives from the Government, there is still room to improve the business environment to enable it further to attract investments by the private sector. The consultations conducted during the process of designing this programme found that the private sector actors were concerned by the lengthy and costly processes of complying with various business regulations and considered the business environment unfriendly for private sector operations. The 2020 World Bank Doing Business Report 2020 provides data to back up this concern. The report ranked Tanzania at the 141st position, which is an indication of the unfriendliness of business environment.² It showed that the regulatory environment in Tanzania lagged behind (ranking above 100,) particularly with regard to: starting business (162), dealing with construction permits (149), registering property (146), protecting minority investors (105), paying taxes (165), cross-border trade (182), and resolving insolvency (116). Seven out the ten metrics (70%) are above the 100 rank. These regulatory as well as institutional constraints raise the cost of doing business and inhibit the growth and competitiveness of the private sector in Tanzania. Other factors that contribute to the high costs of doing business are high energy and transport costs as well as the unpredictability of the policies that affect trade. The private sector actors consulted noted that some policy decisions were made on a short-term basis, making it difficult for companies to take long-term (investment) decisions - for example - policy interventions such as setting of minimum prices by the Government that hinder free market competition. There is also the challenge of inadequacy or delays in the implementation of industrialisation policies. An example being the delays related

² The World Bank Doing Business Report 2020 released in 2019 (World Bank, 2019) ranks countries based on the ease of doing business (Number 1 being the best performers while the last one, number 190th being the worst performer).

to the swift implementation of the policies required to enhance industrial competitiveness e.g. IID 2025, business environment strengthening to address issues such as (i) cost and quality of raw materials, (ii) cost and quality of labour, (iii) technology and productivity, (iv) supporting infrastructure and (v) business and regulatory framework (Kweka, 2018).

Although Tanzania has a comprehensive set of good manufacturing-related policies in place, difficulties and delays in implementation are inevitable. Strengthening private sector participation in agriculture and agro-industrialisation requires deliberate efforts for further improvements to the ease of doing business in Tanzania and addressing these policy related challenges.

The Government is aware of the importance of improving the business environment and has implemented various interventions towards that end. The key intervention is the Business Environment Strengthening for Tanzania (BEST) Programme implemented by the GoT and several Development Partners in different phases from 2005 to 2019, and the Road Map on Improvement of the Investment Climate in Tanzania. Some improvements have been observed as a result of BEST interventions, but several challenges remain. To address the remaining challenges, the GoT through the Ministry of Industry and Trade published a Blueprint for Regulatory Reforms to improve Tanzania's Business Environment in 2017. Approved the Cabinet in 2018, the blueprint enables Government to attract both local and foreign investors to enter and participate in the different sectors of the economy on the scale required to accelerate and sustain industrial transformation. Agriculture and agro-processing are among the areas prioritised by the Blueprint; hence the potential to address the constraints to private sector participation in agro-industrialisation.

As of 2019, among the actions undertaken include the reduction of crop cess, a reduction/abolition of 108 regulatory fees and charges on crops, 9 fees and regulatory charges on livestock and fisheries, increased import tariffs on some food products, import tariff waivers on farm inputs and technologies, as well as duty waivers on raw materials for productive investments.

At the same time, work on institutional restructuring and aggregation is ongoing. In addition, the Government recognises the high risk associated with agriculture production activities (vagaries of weather, pests and diseases, volatility of commodity markets etc.) necessitating an exploration into agriculture sector specific investment incentives. The Government is also working on enhancing predictability of policy decisions.

Legal and Regulatory Environment: issues related to access to land/tenure and construction permits, corruption, and inconsistent rules across the various regions of the country constitute to the constraints for the manufacturing sector and unfair competition from improperly taxed imports.

Low Utilisation of Installed Capacity: The average production capacity utilisation is low. For example, a report by the Textile Development Unit in the Ministry of Industry, Trade and Investment (2017) revealed that, in 2016, there were 18 textile and garment factories in the country, but only 11 were operational (about 61%) (Mbele and Kabanda, 2018). The literature review and findings from stakeholder consultations indicate that the main causes of low industrial utilisation capacity are: (i) Unreliable supply of good quality raw materials and inputs to support agro-industrialisation; (ii) Weak institutions for aggregating smallholder farmers' production into viable volumes for off-takers/processors. (iii) Long distances between areas of production and the location of agro-industries leading to high transport costs; iv) Low level of agro-processing infrastructure, especially among SMEs; v) Unreliable and expensive electricity supply; vi) Insufficient domestic demand; vii) Poor transport facilities/high transport costs; and viii) A high-cost operating environment (power supply, customs procedures and employment costs, especially related to work permits) (UNIDO, 2017; Mbele and Kabanda, 2018).

Inadequate Skilled Labour: Recent comprehensive data on the demand and supply of skills in Tanzania is not yet available. However, available studies indicate that the country experiences challenges in the availability of skilled and semi-skilled labour to work in agro-industries (Mmasa, 2013; Rolence 2016). There are gaps in the following skills: industrial engineers, agro-processing technologists and technicians with skills in the operation and maintenance of manufacturing plants and equipment. There is a mismatch between the available technical skills and market demands due to poor linkages between training institutions and the industry. Finally, most of the skilled workers are at retirement age.

High Operational Costs: mainly due to the high cost of energy (electricity and fuel), high prices of imported spare parts, unavailability of appropriate processing machines and spare parts, as well as limited knowledge in operation of the machines.

Insufficient Capital: There is limited access to affordable financing to invest in agro-industrialisation and limited access to proper financial products (for agro-industries). The available financing opportunities charge high interest rates, ranging from 18% to 24%, compared to 10% or lower in the developed countries. However, the Tanzania Agricultural Development Bank (TADB) is among the few institutions with lower interest rates, at between 7%–12%, depending on the nature of the targeted financing. Private sector actors interested in investing in agro-industries (especially the small and medium enterprises) face the challenge of not getting the required financing necessary for the purchase of equipment since banks are reluctant to give them loans due to perceived high risk of default.

Limited Supportive Infrastructure: This is a critical constraint to the development of agro-industries from the perspective of both the supply of raw materials and the marketing and trade of finished products.

Marketing Constraints: The marketing and market infrastructure remains a challenge in terms of limited technological machinery, storage facilities, road networks, communications, and energy. There is also the challenge of inadequate market information among the agro-processors

Inadequate Research & Development Relevant to Agro-Industrialisation – leading to very limited home-grown technologies and/or local capacity to search for, import and absorb knowledge and technologies from other countries.

Institutional Constraints: There are several institutions with responsibility to support the country’s agro-industrialisation agenda. These include TIC, SIDO, TIRDO, TFDA and EPZA to mention a few. However, most institutions do not offer effective support to the manufacturing sector.

2.2.2 Opportunities for Agro-industrialisation in Tanzania

Although there are many challenges for agro-industrialisation in Tanzania, many opportunities also exist. The key ones are:

- i. Tanzania has a young and rapidly growing population that requires training and skill acquisition to expand agro-industrialisation.
- ii. Strong political will by the Government. As noted in Chapter One, the fifth Government has strong determination and intention to promote industrialisation and is putting in place the policy and strategic framework for industrialisation with a special focus on agro-industrialisation.
- iii. High potential for agro-resource-led industrialisation. The country has good land and climate for supporting various commodities. It has good availability of arable land for crop production and existence of different livestock types³.
- iv. Development and integration of regional markets in Africa. Tanzania is a member of two major regional organisations, the Southern African Development Community (SADC) and the East African Community (EAC), both of which are growing towards stronger common markets.
- v. Existence of several industries, skills base, and support services to start and build on. It is much easier to drive the agro-industrialisation agenda by using the existing resources well.
- vi. National efforts to invest in strategic national infrastructure along key priority corridors (railways, roads, electricity, water, communication, and air transport).
- vii. Increase in per capita incomes, higher urbanisation, and the growing numbers of women in the workforce in Tanzania engender a greater demand for high-value commodities, processed products, and ready-prepared foods. This creates opportunities for agro-processing industries.

³ Tanzania is endowed with about 44 million hectares of land with potential for agricultural production. Of these, only 10.8 million hectares equivalent to 25% of the land area are currently under crop production (URT,2013).

3: Development of TAIDF: Approach and Methodology

3.1 Overview of the Process

The design of TAIDF involved a combination of approaches. They included a series of technical meetings to develop the initial ideas about the Flagship, two inception workshops (one targeting the state actors and the other targeting the non-state actors in agriculture, desk reviews, interviews with key informants, reviews of lessons learnt on the agro-industrialisation efforts from Tanzania and other developing countries across the world, articulating a theory of change to guide the development of the Flagship, Flagship and stakeholder validation and finalization workshops. The following is a brief description of each of these approaches.

3.2 Technical Meetings and Write shops

The conceptualisation of the Flagship on agro- industrialisation begun with a series of in-depth discussions and brainstorming sessions among the technical officers of the Agriculture Sector Lead Ministries (ASLMs). The meetings were aimed at developing a draft of the agro-industrialisation Flagship, building on the ASDP II document and the other strategic documents described in Chapter One of this document. The draft summarised what the Flagship should look like, the value chains to be prioritised, and proposed priority areas for investment by agro-industries. Once that draft was developed, another meeting involving the technical officers was held to review the draft document. AGRA provided technical support to this meeting and a resolution was made to recruit national consultants to support the Government in developing the Flagship, building on the initial ideas drafted by the government officials. AGRA and the Government collaborated in developing TORs for the assignment and a joint recruitment was carried out.

3.3 Inception Workshops

Two stakeholder inception workshops were organised – in Dodoma and Dar es Salaam respectively, to solicit stakeholder inputs to TAIDF. The two workshops were deemed necessary to ensure adequate involvement of both public and private sector stakeholders. The Dodoma workshop targeted participants from the ASLMs and government institutions, while the Dar es Salaam one targeted non-state actors (private sector, civil society and farmers’ organisation). It was necessary to have the two workshops since most of the non-state actors are based in Dar es Salaam, and hence could not make it to the meeting in Dodoma. Engaging with the state and non-state actors separately was beneficial to accommodating the differences between the two groups in terms of issues, priorities and concerns as far as agro-industrialisation is concerned. For example, the private sector workshop was a useful forum to discuss policy and other constraints affecting agriculture and agro-industrialisation in Tanzania. Such information was useful in

informing the design of TAIDF. However, government and non-government actors would have a joint meeting to validate the TAIDF document before endorsement for implementation.

During the workshops, participants discussed and arrived at a consensus on: i) The approach to be used in the Flagship design by providing feedback to the inception report; ii) The priority commodities to be considered in the process of Flagship design; iii) Stakeholders to be consulted during Flagship design; and iv) How to foster strong public-private partnerships in the design and implementation of the Flagship. The lists of the participants of the two workshops are presented in **Annex 2**.

3.4 Desk Reviews

A comprehensive desk review of the agro-industry relevant policies, performance reports, documentation of challenges and opportunities was conducted to gather relevant information to inform the Flagship design. A review of the literature covered relevant published documents on the sector including reports of the government, national and international think tanks and other sources of information covering the years 2001-2019. The desk review also focussed on recent value chain analysis reports on the eleven priority commodities targeted by ASDP II and IIDS (2025). The analysis delineated and synthesised the critical issues requiring attention by the Flagship. The analysis of each commodity value chain sought out the limiting factors or constraints to growth/productivity, competitive prices, and access to technologies, finance and markets. It included identifying and streamlining further the areas of interventions for the Flagship in line with the broad areas of outcomes of the Flagship on agro-industrialisation – i.e. more jobs, enhanced markets of agro-products, growth and enhanced food security.

3.5 Synthesis of Lessons from Other Countries

The process of developing the Flagship programme likewise, included a review of the approaches to driving agro-industrialisation with a focus on the main lessons from the country and neighbouring African countries. It specifically drew on lessons from Kenya, Rwanda and Ethiopia so that a rich and diverse experience is used to inform the design of TAIDF. The thrust of the review was the approaches that would assist Tanzania in firmly evolving a commercially viable and competitive agro-industrial development framework.

3.6 Interviews

As alluded to earlier, the development of TAIDF involved an extensive consultative process with key stakeholders of the agro-industrialisation drive in Tanzania. Each of the selected commodity value chains was strategically scoped to identify key stakeholders to be interviewed. These consultations served to make them aware of the Flagship and to get their views and inputs into the design of the interventions in each value chain. Interviews were held with government officials, Development Partners, financial institutions, agricultural support organisations, entrepreneurs, private sector, civil society, academic researchers, investment promotion authorities, financial institutions and non-governmental organisations. **Table 3.1** indicates the main stakeholder groups

consulted with the detailed list of respondents provided as **Annex 3**. The interviews focused on how best to improve and expand agro-processing in Tanzania by unlocking the potential for agro-industries as well as local and regional markets – including the policy and regulatory bottlenecks and potential implementation bottlenecks of the envisaged Flagship.

3.7 Development of Theory of Change and TAIDF Document

The outputs of the desk review and process of the consultations (attached as annexes to this document) provided key inputs in designing the Flagship document. These included a synthesis of critical issues facing agro-industrialisation. Further technical analysis of the issues facilitated the development of a befitting theory of change, the TAIDF components, sub-components and main activities. The document was finally validated by a private sector stakeholders' virtual conference and the ASLMs Technical of Committee of Directors.

4: Practical Foundations for the Design of TAIDF

This section contains strategic information that informed the practical development and structuring of TAIDF. The design of TAIDF is grounded on three practical foundations: i) Relevant lessons learnt from different approaches to promote agro-industrialisation in Tanzania and other similar countries (Section 4.1); ii) The strategic selection of the priority value chains whose analysis of challenges and opportunities informed the design of TAIDF (Section 4.2); and, iii) The selection of the proposed sites for agro-industrial parks in Tanzania (Section 4.3).

4.1 Review of the Lessons Learnt in Tanzania and Other Countries

The process of developing TAIDF included a review of relevant lessons from approaches to drive agro-industrialisation drawn from Tanzania and other developing countries with similar socio-economic conditions (including Rwanda, Ethiopia, and Kenya). Based on the literature review, there are three major approaches for driving agro-industrialisation: agro-clusters, agro-industrial parks, and agro-corridors.

i. **Agro-clusters**

These are *geographic areas with concentration of inter-linked firms* – integrating agro-processors, financial services, government services, etc. to leverage the advantages of co-location and cooperation. FAO gives the alternative definition as: “a concentration of producers, agribusinesses and institutions that are engaged in the same agricultural or agro-industrial sub-sector, and interconnect and build value networks when addressing common challenges and pursuing common opportunities” (FAO, 2010). This approach involves the establishment of focused agro-processing industrial clusters for specific commodities in places where production is taking place. Smaller variations of agro-clusters are Micro Manufacturing Enterprise (MME) parks and Small and Medium Enterprise (SME) parks, established in towns to accommodate micro and small-scale manufacturing enterprises. The approach of the sub-sector industrial clusters ensures improved quality of end products and guarantees producers dependable markets as well as the benefits associated with the economies of scale.

ii. **An Agro-Industrial park**

An agro-industrial park is a centrally managed *physical platform* that offers high quality infrastructure, logistics and specialised facilities and services to a community of tenants, formed by agro-industries, related agribusiness firms, service providers and research and knowledge institutions. It can also be defined as a well-defined industrial platform where agro-industries and other companies engaged in agro-processing are concentrated. There are several discrete advantages to setting up a dedicated agro-industrial park that will attract similar or complementary enterprises. They include:

- Attraction of private domestic and foreign investments.

- Rationalisation of management and supervision of services.
- Using agro-industrial parks gains economies of scale and positive externalities for firms through shared infrastructure – roads, power, communication, storage, packaging, by-product utilisation, effluent treatment, logistics and transport, laboratory facilities, etc. – as well as taking advantage of opportunities for bulk purchasing and selling, training courses and extension services.
- Agro-industrial parks increase the efficiency and value-capturing capacity of the firms located in them, while reducing their transaction costs. They combine the pursuit of value addition and industrial efficiency with the principles of industrial ecology and innovation.

iii. Agro-corridors

An agro-corridor initiative is an economic development *tool for agricultural development that fosters agriculture* – and other promising economic sectors – in a territory connected by linked lines of transportation such as highways, railways, ports or canals. The defining feature of these corridors is that they integrate investments in infrastructure, policy and regulatory frameworks, institutional strengthening and capacity building (FAO, 2014). Agro-corridors seek to simultaneously enhance the so-called “three Cs”: connectivity, (agricultural) competitiveness and sense of community.

Lessons Learnt from the Three Approaches to Agro-Industrialisation

Several pertinent case studies of the three approaches to agro-industrialisation are hereinafter analysed for their lessons for TAIDF.

4.1.1 Case Studies of Agro-Industrial Clusters and Lessons Learnt

Tables 4.1 and **4.2** analyse two cases of the agro-industrial cluster approach by delineation of lessons learnt.

Table 4.1 Case Study I on Cluster Approach - Sunflower Cluster in Central Tanzania

Initiative (Project / Programme Name)	Tanzania Industrial Upgrading and Modernization Project
Value chain	Sunflower
Location	The cluster is in Dodoma, Tanzania. It processes sunflower produced in Dodoma and Singida regions
Implementers	The Tanzania Industrial Upgrading and Modernisation Project (TIUMP) was implemented by the Ministry of Industry and Trade with the support of United Nations Industrial Development Organisation (UNIDO), from 2011-2016.
Objective	To promote competitive industrial production, improve the quality and quantity of industrial output, and facilitate access to national, regional, and international markets for local manufacturing, small and medium enterprises (SMEs). The project aimed at improving the institutional and technical capacities of Industrial Support Organisations (ISOs) to enable them to deliver upgrading services for the wider community of local industrial enterprises. This case study is about the component of the project in support of sunflower.
Approach	A team consisting of UNIDO international experts and trained national consultants provided enterprises with diagnostics services and assistance with implementing upgrade plans. Micro and small-scale oil producers in Dodoma were advised to form a cluster, invest in common facilities to store, clean and refine sunflower seeds, and to take joint marketing actions in order to enhance the productivity and competitiveness of their

	businesses. Among other interventions and value chains, TIUMP supported the development of the sunflower industry in Tanzania, including the Central Zone Sunflower Oil Processors Association (CEZOSOPA). TIUMP mobilised members of CEZOSOPA to establish a cluster that would benefit its members in different ways. This included making contributions to establish a common fund for acquiring land for the development of the “sunflower industrial park”. The project has also enabled producers to access affordable technology for sunflower oil refining.
Outcomes	<p>Some cluster members provided contributions used to acquire a 70-acre plot of land at Buigiri in Chamwino District, Dodoma Region. Part of the contributions were used to start construction of roads and procedures for supplying the site with water and power.</p> <p>TIUMP closed in 2016 when developments at Buigiri were still at very early stages. Around that time (2016) Government announced the relocation of the capital from Dar es Salaam to Dodoma and repossession of the land that the Sunflower cluster had acquired at Buigiri. This brought to a halt all cluster activities at the site and, as such, the development of the land into an industrial park could not be realised.</p> <p>As a result, the main lessons are on the process, which was successful, but could not be continued attaining the intended result of establishing a “sunflower industrial park” in Chamwino District.</p>
Challenges	<ul style="list-style-type: none"> • Small scale processors have challenges in accessing land in the agro-industrial parks • Capacity challenges (technology and skills) among the producers and processors • Marketing challenges • Value chain coordination (SMEs dominate the highly fragmented and uncoordinated smallholder production of sunflower). Farmers cooperatives are weak due to poor leadership and management and lack of appropriate storage and linkage with processors. • Policy issues: sunflower producers and processors must pay taxes to local authorities although to a large extent this has been addressed by the recent government move to abolish many of those fees.

Source: Authors’ compilation based on literature review from the Dodoma sunflower development strategy

Table 4.2 Case Study 2 on Cluster Approach-Ihemi Agro-processing Cluster in Iringa Tanzania

Initiative (Project / Programme Name)	Ihemi Cluster of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT)
Location	Ihemi cluster located in Iringa is the centre of commercialisation of agriculture and agro-processing industries. The production cluster covers the Iringa and Njombe regions.
Value chain/s	Maize, potato, tomato, soya bean, and dairy
Implementers	SAGCOT Centre Ltd (honest brokerage role); SAGCOT Catalytic Fund (provider of strategic finance); the private sector (investing in various segments of the value chain from inputs, production, and agro-processing), farmers and farmer groups.
Objective	SAGCOT’s cluster model approach seeks to connect investors to smallholder out-grower schemes in the vicinity of large-scale farms throughout the Corridor.
Approach	<ul style="list-style-type: none"> • The main approach has been to forge partnerships with smallholder farmers who are organised in groups. Working with the farmers and supporting them to enhance their productivity via training programmes on business skills, good agricultural practices, business skills, financial literacy and demonstration of new agricultural technologies. The farmers also receive support in developing financial strategies to procure and utilise the inputs, services and technologies that major agribusiness companies have introduced. • Leveraging public-private partnerships (PPPs) has also been the main approach used in the Ihemi cluster to resolve problems and regulatory issues that are commodity-value chain specific.
Outcomes	<ul style="list-style-type: none"> • The cluster approach has enabled the participation of small, medium and large-scale farmers in the cluster activities; it has also made it possible for them to share the benefits that derive from the clusters. • Reduced transportation costs of shipping inputs, which could encourage new investments in processing plants, input suppliers, etc. • Through the Ihemi cluster, the actors have been able get access to services and advantages that they would never have managed to get had they worked in isolation in a specific area or without collaborating with others (in strategic partnerships). • Improved business-enabling environment.

	<ul style="list-style-type: none"> Enhanced access to dedicated financial facilities and non-financial services targeting agribusiness firms (particularly those working with smallholder farmers). Enhanced access to land. Improved power and telecommunications services.
Challenges	<ul style="list-style-type: none"> Slow progress in the implementation of the initiatives in the corridor mainly as a result of some challenges including: <ul style="list-style-type: none"> Policy and regulatory constraints such as delay in getting tax relief for imports of processing machines and farm building materials and VAT on animal feeds. Also, included in these constraints is the unpredictable policy/strategy. Land related challenges including land tenure problems and delayed issuance of title deeds. Inadequacy of supportive infrastructure, e.g. unreliable power supply to processing plants, lack of irrigation infrastructure and inadequacy of cooling infrastructure. Coordination challenges - initially there was no clear coordination mechanism among the various stakeholders. Inadequate access to improved farm inputs by the producers (i.e. improved seed, improved genetic materials for animal production). The flow of private sector investment took longer than what was initially anticipated. Sustainability of the clusters in terms of ability to attract processors with capacity to connect and respond to strong local and international markets. Reliable access to finance for smallholder farmers as well as processors. Access to adequate support services such as extension, logistics, quality control and data. Access to reliable supplies of raw materials for existing processing factories. There is limited availability of strong smallholder farmer groups/associations with the ability to engage with large processors and farmers.
What is working?	<ul style="list-style-type: none"> The continuous visible demonstration of positive results has earned the trust of private sector, government, and Development Partners. Continuous dialogue with the government has been useful in resolving policy constraints. Collaboration between various stakeholders has been instrumental in addressing various challenges. Provision of support to producers in terms of inputs, equipment, access to finance and technologies. Capacity enhancement for the producers and other actors (in various areas such as: good agricultural practices, business skills, agribusiness leadership, financial literacy and demonstration of new agricultural technologies). Strong PPPs, for example, the multinational Unilever is working with SAGCOT in the United Republic of Tanzania to source its raw materials from the region.
Lessons	<ul style="list-style-type: none"> Sustainable market solutions motivate smallholder production. The creation of an enabling environment for investments in the cluster requires continuous approaches to encourage dialogue amongst partners, with conversations broadened at all stages to include actors such as farmers' associations, civil society, local companies, financial institutions, and relevant Ministries, as well as other stakeholders in the agriculture sector. Use of a phased approach is useful because it facilitates learning from the initial interventions and builds on the lessons as other clusters or industrial parks are established.

Source: Authors' compilation based on FAO, 2017; Rugangira, 2017 and Personal Communication with Mr. Geoffrey Kirenga, CEO, SAGCOT centre and <http://sagcot.co.tz/index.php/sagcot-clusters/>

Notes: Ithemi cluster was the first cluster of SAGCOT and it became operational in 2015. In 2017 the Mbarali cluster became operational and in 2018 the Kilombero Cluster became operational.

Summary on Agro-Industrial Clusters

Based on the review of literature and case studies the following are the important conditions for the success of agro-industrial clusters:

- i. Presence of an initial set of enabling conditions (land, roads, electricity, water, sanitation services, other operating firms).
- ii. Strong and effective institutional leadership based on agreed public-private partnerships that will serve to mobilise private sector investments and partnerships in the cluster.
- iii. Effective financing mechanism – calling on clusters to provide potential investors with access to catalytic funding with which to overcome/reduce the initial costs/risks.

- iv. Skills enhancement for the value chain actors.

4.1.2 Case Studies on Agro-industrial Parks and Lessons Leant

Agro-industrial parks in Africa have received prominent attention from the developing countries as a viable approach to agro-industrialisation. Within the Eastern Africa region, the approach has been used by Ethiopia, Kenya and Rwanda. Compared to Kenya, Ethiopia and Rwanda have made more advanced steps in the development of agro-industrial parks. Tanzania has established industrial parks in the form of Export Processing Zone (EPZs) and Special Economic Zones (SEZs). The country has also encouraged each of its 26 regions to set aside land for industrial park developments although they are not specifically earmarked for agro-industry. **Tables 4.3 and 4.4** summarise cases studies of agro-industrial parks in Ethiopia and Rwanda, respectively.

Table 4.3 Case Study I on Integrated Agro-Industrial Parks (IAIPs) in Ethiopia

Initiative (Project / Programme Name)	Construction of four pilot integrated agro-industrial parks (IAIPs) in Ethiopia under the Ethiopia Integrated Agro-industrial Parks (SCPZ) Support Project at a cost US\$ 84.22 million
Location	Bure (Amhara), Bulbula (Oromia), Yirgalem (SNNP), and Baeker (Tigray)
Value chain/s	<i>Baeker</i> for sesame, sorghum and livestock; <i>Bulbula</i> for cereal and milk; <i>Bure</i> for cereals, pulses and spices, and <i>Yirgalem</i> for coffee, fruit and vegetables.
Implementers	Government of Ethiopia (represented by the Ministry of Trade and Industries, Ministry of Agriculture and the Ministry of Finance and Planning), Development Partners (AfDB, Korea Exim Bank, European Union, UNIDO and Big Wynn) private sector and agricultural producers.
Objective	To drive forward the structural transformation of the country's economy, reduce rural poverty, and create a better environment for increased investment in agro-food and allied sectors. Specifically, the project aimed at constructing agro-industrial parks to host agro-processing factories and to strengthen the agro-industrial parks link with producers and Small and Medium Enterprises with strategic industrial clusters.
Approach	The Government of Ethiopia with support from the Development Partners invested in the infrastructural works for the agro-industrial parks while the private investors themselves are expected to build the work sheds within the parks.
Outcomes	Since the agro-industrial park operations are still in the initial stages, most of the outcomes reported here are expected outcomes. The Government of Ethiopia expect the IAIPs to bring about the following positive outcomes including: increased agricultural productivity; increased commercial investment in agribusiness; increased job opportunities for youths; increased private sector interest to set up food processing plants in bumper producing areas therefore enhancing value addition for agricultural products, linking farmers to processing plants and creating wealth for them; reduced post-harvest loss; and, accelerated rural economic growth in Ethiopia.
Challenges	<ul style="list-style-type: none"> • Delayed implementation. There have been several challenges in the planning design phases that led to delayed implementation. For example, redesigning of the parks led to major delays. The study for the four the parks took 2 years and the construction took place from 2016-2018. Initially the construction of the parks was expected to be completed in 2018. The parks were completed in the second half of 2019 and now investors are being mobilised to set-up industries. • Inadequate budget allocation to support services such as electricity. There was an under-estimation of some costs. For example, each of the parks consumes 40-50 MW, meaning there was a need for new electricity sub-stations, but shortage of foreign currency has inhibited the construction of the sub-stations. • Policy and Institutional challenges: lack of an effective and functioning policy, regulatory and institutional framework; poor business environment. • Capacity gaps: weak strategic planning and demand driven approach; poor on-and-off site infrastructure planning; lack of specific on-and-off-site costing, performance agreements, and economic and financial analysis; absence of institutional capacity to oversee industrial parks development; and inefficient procedures and controls. <p>Park management and operational know-how and experiences: Most of the park developers, including the relevant Government agencies, do not have the zone management and operational experiences.</p>

What is working?	<p>Continuous Government commitment, leadership and support from Development Partners. The Government of Ethiopia's leadership has been instrumental in driving the efforts towards the establishment of the IAIPs. The interest by the Development Partners in supporting the project has been quite facilitative.</p> <p>There is a specific legal framework and government agency for integrated industrial parks development in the country. The law also supports the development of privately-owned industrial parks under the purview of the Government.</p>
Lessons	<p>With the Government's revision of its growth strategy to allow for a much greater private sector role in driving growth and job creation, the parks are expected to provide an important entry point for increased private sector investments in agriculture and agro-processing. The policy change has seen a growing foreign private sector interest in Ethiopia considering the new incentives and enhanced business environment.</p> <p>Budgeting for agro-industrial parks needs to be comprehensive. The example here showed that budgeting overlooked the cost of establishing power processing plants.</p> <p>Resource mobilisation for the agro-industrial parks can be time consuming. For example, the Ethiopia IAIPs were started in 2016, but the country only signed the agreement to support this activity with the AfDB on December 19, 2018. This means that the government must be ready to continue investing its own resources while continuing with resource mobilisation efforts. It must also act fast on resource mobilisation efforts and on creating an enabling environment for constructing and operating such parks.</p>

Source: Authors' compilation based on literature review. Also, see <http://abdias.org/2019/10/22/ethiopia-to-construct-agro-industrial-parks-in-four-states/>

Table 4.4: Rwamagana Industrial Park in Rwanda

Initiative (Project/ Programme Name)	Rwamagana Industrial Park
Value chain	Textiles, tomatoes, banana, wood processing factory, animal feed factory
Location	Rwamagana, 55km east of Kigali in Rwanda
Implementers	Government of Rwanda, represented by the Ministry of Trade and Industry (MINICOM) and Private Sector Federation
Objective	The Government developed an industrial park which is expected to host over 50 factories by 2022, the majority of which will be in the agro-processing sub-sector.
Approach	The park development is taking a phased approach. The park is planned at 80ha, with 50ha for tenant occupation. Of this, 20ha of the 80ha is for medium scale industries, 17 ha for small scale industries and 10ha for large scale industry. 64% of the industrial park land is for industrial use, 31% for amenities and 5% for offices and administration. The PPP funding model has been explored, where the government funds 90% of the cost through international MDB or donor loans, with private sector funding 10%.
Outcomes	<ul style="list-style-type: none"> • The industrial park has brought benefits to industries in terms of access to infrastructure, clustering and networking opportunities. • Various investors (local and international) have invested by establishing factories in the industrial park. For example, by mid-2018, three industries were operational while seven were being established. The commodity value chains involved include tomato processing and the production of banana wines and biscuits. • The park is expected to create over 5000 jobs; with several jobs already created by the operational factories. • Skills enhancement for youth undertaken. For example, a textile firm recruited and trained youth to acquire skills to work in their factory. • Enhanced market opportunities for the agricultural producers in Rwamagana and neighbouring districts.
Challenges	<ul style="list-style-type: none"> • Infrastructural: not all infrastructure was in place in the initial stages of the operation of the industrial park. There was no water, no electricity although these facilities were included in the master plan. • Inadequate availability and inconsistent supply of raw materials.

	<ul style="list-style-type: none"> • High electricity tariffs and inconsistent supplies of energy. There was a challenge of frequent power outages. • Limited availability of accommodation facilities for the new investors. • Skills shortages and inadequacy of training opportunities on skills required for agro-industrialisation. • Labour costs are high in the short term due to the limited number of specialised personnel and skilled labour available. • Poor access to affordable finance for businesses. • Policy constraints: inconsistent enforcement of laws and regulations. For example, investors are concerned that tax incentives included in deals signed by Rwanda Development Board are not honoured by the lead tax agency, the Rwanda Revenue Authority (RRA). There is also a problem of delayed VAT reimbursements.
What is working	<ul style="list-style-type: none"> • The strong commitment to industrial development shown by Rwanda's leaders has been essential to the country's achievements. • Rwanda enjoys high rankings in the World Bank's Ease of Doing Business Index, and a reputation for low corruption. The Government of Rwanda (GOR) has undertaken a series of policy reforms intended to improve Rwanda's investment climate and increase foreign direct investment (FDI).
Lesson	<ul style="list-style-type: none"> • Competent and motivated leadership as well as a transparent and goal-driven institutional setting can go a long way in driving a country's agro-industrial development. • Improving the ease of doing business is an effective way to attract local and international investors to invest in agro-industries. • Agro-processing can be integrated in parks that produce non-agricultural products.

Source: Authors' compilation based on MINICOM, 2019. See <https://allafrica.com/stories/201805290683.html>

Summary on Agro-Industrial Parks

Based on the literature review and a review of case studies, the following is a summary of the crucial factors for the successful operation of the Agro-Industrial parks:

- i. Industrial parks need to be planned as part of a larger vision and initially, this needs government leadership. They require supportive policy, legal and institutional frameworks, and they must be part of a national strategic master plan for industrial parks.
- ii. There must be strong government commitment to optimise local resources to finance agro-industrial parks and a deliberate effort to attract investors and financiers into agro-industrialisation.
- iii. Establishment of agro-industrial parks needs to be subjected to a financial and economic viability assessment.
- iv. It is important to have in place, early on, an incentive scheme for investors setting up shop in industrial parks that is enshrined in law.
- v. It is possible to have multi-use or single-use parks - that is having agro-processing industries in a park that also produces non-agricultural products.
 - Agro-industrial parks may follow various models. They can vary according to their industrial activity, use of space and development objectives. Different enterprises in a park can share and/or exploit the complementarity of raw materials, utilities, information resources, transport, export/ import arrangements and other similar co-ventures that come from cooperative and well-coordinated industrial estates supported by both local government and private industries. A model may include several complementary industries (FAO, 2017). An agro-industrial park may include, for example, the processing

of oil crops such as groundnuts, cottonseed, sunflower seed and rice bran; it may re-direct oils to a common packaging plant or to some other food producers, and re-direct wastes and spent crop to an animal feed plant or to an agro-wastes energy producer on site (FAO, 2017).

- vi. Management of parks may be private or public. Some parks are managed by the public sector and others by private actors or via PPPs. A good example is in Ethiopia where there is a law that allows for both private, public and PPP owned industrial parks, however, all of them are regulated by one government authority.
- vii. Industrial parks must be spread around the country and tailored to the value chains in the given locations.

4.1.3 Case Studies on Agro-corridors Lessons Learnt

Agro-corridors are increasingly used as a tool for promoting inclusive agribusiness and agro-industry development in low and middle-income countries. Agro-corridors promote spatially targeted and coordinated public and private investments. The strength of this approach is in its integration of investments, policy frameworks and local institutions as seen in the case study of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) in Tanzania. This case study is described below.

SAGCOT Case Study

The SAGCOT was established as a Public-Private Partnership (PPP) in May 2010, to promote agricultural development in the Southern Corridor of the United Republic of Tanzania. This (transport) corridor spans 930 km from Dar es Salaam to the Democratic Republic of Congo, Malawi and Zambia. It runs along a backbone multimodal infrastructure, including roads, airports, rail and power, anchored by the Tanzanian port of Dar es Salaam. Within the country the corridor covers approximately 28.7 million hectares and is host to some nine million people. It passes through an area with some of the richest farmland in Africa, running from the Republic's coastal plains and the valleys of Kilombero and Ruaha, to the hills and valleys of the Southern Highlands and the Usangu flats.

The objective of SAGCOT is to achieve accelerated agricultural green growth in the Southern Corridor of Tanzania by attracting strategic private sector partners with environmentally responsible business models to enhance linkages with smallholders and fix critical links in the value chains.

SAGCOT is coordinated by the SAGCOT Centre Limited (SCL), a company jointly owned through a tripartite agreement by the Government of Tanzania, Agricultural Council of Tanzania (ACT) and the Confederation of Industries in Tanzania (CTI). SCL's main role is as an honest broker and catalyst to facilitate partners to deliver inclusive, sustainable, and commercially viable agricultural value chains in the SAGCOT for 20 years from 2010 to 2030. Members of "The Partnership" represent Farmers, Governments (Central and Local), the Tanzanian and Global

Businesses, Development Partners, Foundations and Non-Governmental Organisations (NGOs) and is guided by agreed principles. The main work streams of SCL during the period 2011 to 2018 included - Cluster and Partnership Development; Enabling Environment and Policy Analysis; Information Communication and Education; and Effective Monitoring and Evaluation. During the 2011- 2018 period SCL has been funded by ten (10) donors including the World Bank, USAID, and DFID.

SAGCOT initially planned to focus on six agro-based clusters. These clusters were selected based on the presence of both small and large-scale commercial farms, land availability, transport and productive infrastructure, along with the potential for profitable groupings of farming and processing to emerge over time. Building on existing operations and planned investments, these clusters are intended to bring together nucleus farms and out-grower schemes, irrigated block farming operations, processing and storage facilities, transport and logistics hubs, agricultural research stations and related service providers (SAGCOT, 2011).

To facilitate funding for the corridor, the SAGCOT Catalytic Trust Fund (SCTF) was established as an independent public-private finance institution to accelerate private sector investment in commercially viable agribusiness. Consultations with the management of the fund revealed that the Government had included SCTF in the FYDP II as a strategic project and there are ongoing efforts to restructure it.

The major successes of SAGCOT are captured by an internal review report of the SCL five-year work plan for 2013–2018 available at SCL. In summary, the notable achievements during the review period include:

- Private sector investments worth US\$ 0.456 billion against a target of US\$ 0.525 billion facilitated by SCL for 67 companies;
- 1,221 jobs against a target of 1,500 created by the companies brokered by SCL;
- Directly linking 96,278 smallholder farmers against a target of 100,000 with SCL private companies in the clusters;
- Farming revenue values at US\$ 22.8 million generated in the SAGCOT Corridor for five targeted priority value chains.

There are challenges and lessons that can be drawn from SAGCOT which will be useful in informing the design of TAIDF. The lessons and challenges specific to cluster operations were presented in the case study of Ihemi cluster (see **Table 4.2** above), while the general issues related to agro-corridors are summarised in **Table 4.5** below.

Table 4.5: Challenges and Lessons from SAGCOT

Challenges	<ol style="list-style-type: none"> 1. Funding challenges: Funders’ transitions, shrinking donor funds and uncertainties in Government funding. 2. Limited access to finance value chain actors. 3. Shortage of raw materials for existing processing factories. 4. Weak/unclear linkages between big farmers/processors and smallholder farmers except for a few crops like avocados, cocoa, rice, etc. For many of the crops such as maize, oil seeds, etc., the majority of farmers are not structurally linked to processors. The absence of a legal framework for contract farming has contributed to this challenge. 5. Inadequate linkages to strong national, regional and export markets. 6. Multiplicity of uncoordinated regulatory institutions, policies, and outdated legislation.
Lessons	<ol style="list-style-type: none"> 1. An effective agriculture corridor requires more than investment in basic transport infrastructure such as roads, railways or waterways. It requires investments in feeder roads, dams, irrigation, power facilities and logistics support, as well as in input infrastructure, distribution networks, service provision (transport, finance, technical advice) and attention to the post-production food chain (in some cases, the cold chain). 2. A significant amount of facilitative public funding is required until the critical boundary conditions related to enabling infrastructure, policy and regulatory frameworks, skills development, confidence and trust are fairly in place. Consequently, fund-raising has been a regular critical function for SAGCOT. Likewise, strong and predictable government policy is crucial. 3. The role of SCL as an honest, neutral broker and catalyst for public-private investments has been quite useful in creating trust and confidence between the public and private sides. 4. Limited public sector investment in facilitative infrastructure for agro-industries.

4.1.4 Takeaway for the Design of the Tanzania TAIDF

The reviewed lessons above provide various ideas that could shape the thinking around the development of TAIDF. One key observation noted is that the approaches to agro-industrialisation are not mutually exclusive and should be considered within an integrated national framework. It is possible to use a combination of approaches to meet country objectives. For instance, from the lessons above, it is possible to have an integrated model that is a combination of agro-corridors, industrial parks, and industrial clusters. The choice of the model will suit various locations given the geographical distribution of the farming communities, access to primary and secondary markets, type of crops and other considerations that may make agro-processing more efficient in both processing and marketing.

Tanzania has already prioritised the use of multiple approaches to industrialisation. Several government documents have recommended using a combination of approaches in the efforts towards agro-industrialisation. For example, the IIDS 2025 proposes that the country uses the accumulation and concentration of industrial firms through cluster development, supported by Special Economic Zones (SEZ) as pathways through industrialisation. Similarly, the trade policy, 2003 states that the government will promote industrialisation through investments in Export Processing Zones (EPZs) and Industrial Parks. The FYDP II emphasises interventions to promote industrialisation, including establishing special economic zones (SEZs/ export processing zones (EPZs) and industrial parks. The EPZA was established in 2006 to manage EPZs and SEZs. For example, established under the EPZA, the Benjamin William Mkapa Export Processing Zone in

Dar es Salaam has 82 established firms (by 2019), of which about 42 or 50% are agro-industries. Other EPZA projects include Millennium Business Park (DSM), Hifadhi EPZ Park (DSM) Kisongo EPZ Park (ARUSHA), Global Industrial Park EPZ (KISARAWA), Kamal Industrial Estate EPZ (BAGAMOYO), and Kigoma SEZ. EPZA is also working to establish two SEZs in Mtwara and Ruvuma, respectively. According to the Minister of Industry and Trade's 2020/21 budget speech, the Ministry, through EPZA has carried out three studies to evaluate efficiency/impact of the investors in EPZs. By December 2019, under the BWM-SEZ, exports had earned the country US\$ 127.64 million. Other business development services paid through TRA had earned the country a total of US\$ 7.50 million. The total number of direct jobs had reached 3,000.

One of the lessons from Ethiopia is that Industrial parks need to be spread around the country and tailored to the value chains in a given location. This is an important lesson for Tanzania given that the country is vast with varying agro-ecological zones that make the country suitable to produce a wide range of agricultural commodities. Based on the country's resource endowments, there is potential for the country to have "several" integrated agro-industrial parks under Government– private ownership and leadership. An initial number of parks has been proposed in this TAIDF document.

4.2 Priority Value Chains to Inform the Design of TAIDF

In principle, agro-industrial parks will attract investments across all commodity value chains; there will be no selectivity bias against any crops. However, for the purpose of identifying and selecting suitable catchment agro-ecological zones for locating the industrial parks, prioritisation is necessary just as was the case with ASDP II and IIDS 2015.

An analysis and synthesis of information on the value chains to prioritise in promoting agro-industrialisation in Tanzania considers both the commercial viability or business case and the Government priorities – essentially required to inform the design of TAIDF. The consideration being that Tanzania has diverse agro-ecological zones (AEZs) giving the country opportunities to produce a wide range of agricultural commodities (**Table 4.6**).

Table 4.6 Agro-ecological zones of Tanzania

Agro-ecological zone	Regions in a zone	Most Competitive Value Chains for each Zone*
1. Central zone	Dodoma and Singida.	Beef cattle, hides and skin, sunflower, maize and poultry
2. Eastern zone	Morogoro, Dar es salaam, Tanga, Coastal region, Unguja and Pemba islands.	Rice, dairy, sugar, oil crops (sunflower and sesame), maize
3. Western zone	Kigoma, Katavi and Tabora regions	Palm oil, cattle (beef), tobacco, maize, cassava
4. Lake zone	Mara, Simiyu, Geita, Shinyanga, Mwanza and Kagera	Beef Cattle, dairy, cotton, rice, oil crops (sunflower and groundnut), fish
5. Northern zone	Arusha, Manyara, and Kilimanjaro regions	Beef cattle, dairy, horticulture, maize, wheat
6. Southern zone	Lindi and Mtwara	Cashewnut, oil Seeds (sunflower and sesame), cassava
7. Southern highlands zone	Mbeya, Songwe, Iringa, Njombe, Ruvuma, and Rukwa	Maize, rice, dairy, horticulture

Source: Ministry of agriculture

Notes: The most competitive value chains have been informed by data on production of the commodities in the zone and the number of households involved in the production of the commodities.

Notes: The number of agro-ecological zones is customarily determined differently by various institutions depending on the objective.

Notes: TAIDF will not include Zanzibar.

Although the country can produce many agricultural commodities, it is important to prioritise the commodities to facilitate the strategic focus of the agro-industrialisation efforts. Prioritisation is important for several reasons: i) Resources (finances, human resources and time) are limited; ii) Private sector is unlikely to invest without profitability, therefore the need to prioritise commodities that attract private sector investments; iii) Import substitution for the country's food imports are on the increase, and iv) the value of starting small to develop an investment model then expand slowly based on lessons learnt. This sub-section proposes priority commodities (value chains) to inform the design of TAIDF. The proposed prioritisation is based on information from the stakeholders consulted and an analysis of existing national data and evidence generated by recent analytical and empirical studies. This approach has been motivated by the growing appreciation of the importance of using a combination of data and analytical tools to inform policy interventions in the developing countries (Thurlow, *et al*, 2018; BFAP *et al*. 2018). Thus, the analysis draws heavily from the findings of recent studies on value chain prioritisation and value chain analysis carried out in Tanzania (Thurlow *et al*, 2018; BFAP *et al*. 2018).

A list of identified priority commodities to inform the design of TAIDF based on stakeholder consultations, literature review, review of strategic government documents and further analysis is presented in **Table 4.7**. The list includes maize, rice, beef, leather/hides and skin, dairy, edible oil crops (sunflower, sesame, groundnut, and palm oil), cotton, cashew nuts, livestock feed and fish. The list of the priority crops is useful for guiding the location of the TAIDF industrial parks

in which investments from all types of agro-processing will be promoted. The criteria that informed the selection of these commodities were: importance of the commodity to food and nutrition security, their role in import substitution, potential for domestic markets and export to the regional and international markets, business viability, potential to contribute to employment and potential contribution to economic growth. The analysed commodities were not intended as an exhaustive list of the commodities to be produced under TAIDF. They only serve to guide the process of identifying potential areas for the location of agro-industries and sequencing of TAIDF which was inevitable given resource constraints. Thus, the industrial parks to be developed will accommodate the processing of all other commodities available in the regions based on the economic viability and investment priorities of the industrial investors.

Table 4.7: Priority commodities and the strategic documents that prioritise them

Commodity/ Strategic Government Document	IIDS 2025	ASDP II	FYDP II	TLMP
Beef (cattle meat)		X	X	X
Cashew	X	X		
Cotton (textile)	X	X	X	
Dairy (milk and milk products)	X	X	X	X
Edible oil crops (sunflower, groundnut, sesame, and palm oil)	X	X		
Leather /hides and skin	X	X	X	X
Maize		X	X	
Rice		X	X	
Fish		X	X	
Livestock Feed (Soybean, sunflower oil cake)		X		X

Source: URT, 2011; MITI, 2016; URT, 2016

Note: This selection is supported by other studies that identified the same sub-sectors and value chains as having the best potential to impact many producers and to meet unmet market demand

Tables 4.8 and 4.9 give a brief description on the selection criteria for each of the commodities. Table 4.8 focuses on the considerations for meeting internal needs for food and jobs., while Table 4.9 elaborates the potential for Tanzania to produce the commodities to meet local demand as well as the demands of external trade (within Africa and beyond). Production of agricultural commodities for external trade is important as it gives local producers incentives to produce more and opportunities to gain more income over and above what they could achieve through local trade. The table shows the commodities that Tanzania is already exporting and could export more of in the context of the African Continental Free Trade Area (**ACFTA**).

Table 4.8 Criteria for Identification of Priority Commodities to inform the design of TAIDF

Commodity	Food and nutritional security	Amount imported	Production potential	Economic and employment potential (support to livelihoods)	Existing value addition (agro-processing) efforts
Maize	Maize is the first food crop in Tanzania in terms of kilocalories of food intake. The local demand for maize is high.	Insignificant because the country produces surpluses of the commodity.	Production is widely distributed across agricultural development zones and regions. The Southern Highlands lead in maize production. Approximately half of all corn produced in Tanzania comes from the Southern Highlands.	Accounts for 20% of total agricultural GDP. Produced by 60% of farming households. Maize is grown by 3.5 million farming households (60%). The maize sub sector has more than 7 m operators (AASS 2016/17). Small-scale farmers produce 85% of national production while medium and large-scale farmers make up 10% and 5% respectively. Maize is also an important source of cash income throughout the value chain.	Maize flour is the largest segment in the flour milling industry of Tanzania. There are various maize millers across the country.
Rice	Rice is the second most important food crop in Tanzania. Demand for rice is high and increasing, particularly in urban areas.	The country produces 100% of its needs with surplus exported to the neighbouring countries.	Tanzania is the leading producer of rice in Eastern and Southern Africa. The country has huge potential for increased productivity.	High, with huge potential to be a commercially viable enterprise for small medium and large enterprises. Rice is highly tradable and an important source of income	Various millers across the country, various products now being produced.
Cattle for meat (Beef)	Nutritionally good and greatly required to mitigate stunting in children in the country. There is a growing demand for beef and beef products particularly in the urban areas.	A considerable volume of beef is imported.	Tanzania is third in population of livestock in Africa. Tanzania has 22 million cattle.	High. About 36% of 4.9 million agricultural households keep livestock. The AASS 2016/17 shows that out of the 8.76m operators, 41.8% were in crops and livestock while 2.4% were in livestock only.	There are a few meat processing factories in the country.
Hides and Skin (leather)		Finished leather products are imported	Large population of livestock represent a formidable supply of Hides & Skin	It has huge potential to generate employment to the youth. However, the potential has not been exploited adequately	Limited processing of hides and skin
Dairy and dairy products	Nutritionally good and greatly required to mitigate stunting in children in the country. Growing demand as the country works towards achieving 200 litres per capita as per the FAO's recommendation. Currently at 45 litres. Per capita.	Tanzania is a major importer of dairy products, accounting for 9% of commercial dairy imports into sub-Saharan Africa.	Although the country has a large cattle population, the potential for increased milk production is not so high at the moment because most cattle are of low milk producing breeds. The indigenous shorthorn East African zebu make up more than 96% of the population. Local cattle produce only about 1-3 litres/animal per day.	High. About 36% of 4.9 million agricultural households keep livestock.	As of 2019 there were 99 milk processing plants with installed capacity of 862,100 litres per day with capacity ranging from 500-150,000 litres. However 8 plants with installed capacity of 179,200 litres were not operational resulting in net operational capacity of 682,900 litres per day

					(URT, MLDF, Budget speech 2019/20).
Oil Seed (sunflower, sesame, soybean and palm oil)	<p>Growing demand of sunflower for health reasons. Of the several edible oils, sunflower is a fast-growing industry in Tanzania contributing about 40% of the national cooking oil requirements.</p> <p>Sunflower constitutes 35% of the total oilseeds in Tanzania and contributes about 40% of the total national edible oil requirement.</p>	<p>Very high imports of edible oil. Tanzania spent about US\$ 358 million to import edible oil in 2017 (BoT Sunflower study).</p> <p>Total imports of edible oil – crude and refined was US\$ 186,140,332 in 2019.</p>	<p>Tanzania is the largest sunflower seed producer accounting for 40% of the total continent's production.</p> <p>Sunflower cultivation occupies an estimated area of 1.7 million hectares, with average yield for local varieties of 1.6 tons per hectare. In 2018 total production was 768,188 mt.</p>	<p>Sunflower is grown mostly by small-scale farmers. Therefore, the development of the sunflower oil sector has a great potential for improving livelihoods and the welfare of relatively poorer households...</p>	<p>Various processors across the country, oil seed production for oil extraction is expanding.</p> <p>Strong potential backward and forward linkages particularly with regard to the animal feed industry.</p>
Cotton	Cotton seed produces edible oil.	Cotton seed oil will potentially add on domestic production to reduce imports	Tanzania is one of the largest cotton producers in Africa, with around 500,000 farmers growing cotton in farmlands of 412,000 hectares in 13 regions.	Textile sub-sector is a highly labour-intensive industry. Cotton sector can create many jobs in the population. Textiles, clothing apparel and leather together make up almost 14 % of manufactured employment in Tanzania, making it the third most important sector in terms of employment (MITI, 2016). Many of the privatised textile industries were shut down because of competition from cheap imports.	Limited, it is estimated that 70 % of the cotton produced is currently exported as cotton lint without processing. There is limited processing of the by-product i.e. cotton seeds.
Cashew nut	Smallholder farmers use income from cashew to buy food		<p>Well suited to the Tanzanian environment of cashews.</p> <p>Tanzania is Africa's largest cashew nut grower after Nigeria and Ivory Coast, and the world's eighth biggest producer.</p> <p>Tanzania is among the world's largest producer of raw cashew nuts in 2017/18, it realised a total production of 313,826 metric tonnes</p>	Main source of cash income for 250,000 smallholder farmers in the poorest southern regions. About 90% of the area planted with cashew nuts is found in three regions of Mtwara, Lindi and Pwani	Some progress has been made by small and medium scale processors in the recent years, but they still process very little because of limited competitiveness of the products in markets in terms of quality and price. About 90% of cashew nuts exported in their raw form owing to the country's slow processing capacity..

Fish			Tanzania has one of the largest fisheries sectors in Africa, ranking in the top 10 countries in terms of total captured fisheries production.	Has great potential to support livelihoods. Many youth and women are employed in the fisheries sub-sector.	The country has several food processing factories which face quality and quantity constraints largely because of lack of raw materials leading to capacity underutilisation
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Source: Compiled by Authors based on data from: Ministry of Agriculture (Various reports); MAFC, 2013 Kilimo Trust, 2016; USDA, 2017; BFAP *et al*, 2018; FewNET, 2018; FAO and AfDB, 2019

Table 4.9: Potential for Intra-African Trade for Selected TAIDF

	Production based on the latest data	Estimate of the current demand	Existence of tradable surplus	How local production compares with that of the neighbours	Potential for increase in production and productivity	Current Export Trade
Maize**	The annual production was 6,147,000 MT in 2016 (National Bureau of Statistics, 2017).	5.4 million metric tons per year (2019).	Tanzania produces surplus maize and could have more surplus with enhanced productivity. High, potential to export when there are no export bans.	Tanzania was the leading producer of maize among her EAC counterparts in the period 2006-2016 and is ranked 5th in Africa (Kilimo Trust, 2017).	Tanzania has huge potential to increase production and productivity. Maize production has significantly increased over the past 10 years, largely through the expansion of planted areas rather than increased yields.	The country exports maize to Zambia, Malawi, Rwanda, Burundi, the Democratic Republic of Congo (DRC) and Kenya.
Rice**	1.68 million MT of milled rice (in 2017). Tanzania is the leading rice producer in the ESA region	Per-capita consumption of milled rice in Tanzania exceeds 39.4kg per year. The country produces 92 percent of rice consumption needs and the gap is filled with imports from the Asian countries (e.g. Pakistan, Thailand, Vietnam and India). Rice is occasionally not imported every year.	Due to productivity constraints and high consumption the country tends to have occasional deficit status. High potential to produce surplus consistently.	The United Republic of Tanzania is the main rice producer in the EAC region, producing over 75% of all available rice. The country is the second largest producer of rice in Eastern and Southern Africa after Madagascar.	Production of rice in Tanzania has been increasing but with very limited increase in productivity and competitiveness. Tanzania has huge potential for increasing productivity in rice production. The average yield are generally low, ranging between 1.6 to 2.4 t/ha, but with irrigation, production can increase to more than 5 t/ha. Some parts of the country such as Morogoro have achieved yields of 4–5MT/ha (FAO and AfDB, 2019).	Tanzania exports rice to neighbouring countries, including Kenya, Rwanda, Uganda, Burundi, DRC, Zambia, Malawi and Mozambique.
Beef Cattle*	Production of beef is estimated at about 679,992 (2018)MT	Demand is estimated at 450,000 metric tonnes of red meat	Limited. However, a large cattle population that can potentially produce large amount of	Large numbers of cattle but potential to produce high quality beef is yet to be fully exploited. Meet export is	High potential to increase production through interventions to fatten animals and increase their productivity. Tanzania has	Tanzania exports beef cattle (live animals) to Kenya, Mauritius and middle East.

	Production based on the latest data	Estimate of the current demand	Existence of tradable surplus	How local production compares with that of the neighbours	Potential for increase in production and productivity	Current Export Trade
			beef. This is not the case now because most cattle are kept under the pastoral and agro-pastoral systems whose productivity is low.	limited and uncompetitive. For example, Kenya has a competitive advantage in meat export compared to Tanzania.	the third largest livestock population in Africa.	
Fish**	Tanzania is one of the largest fishing nations in Africa. Annual fish production is 376,000 metric tons a year	Fish is one of the key exports of the country	The country has an average annual fish landing of more than 300,000 metric tonnes and an estimated production potential of 730,000 metric tonnes.		Potential for increased production is high - through better fishing methods.	Tanzania exports fish to Rwanda, DRC, Malawi, Mozambique, Zambia and Zimbabwe
Sunflower oil and sunflower seed*	The MoFP estimates for 2018 show that the country produced 768,188 metric tons of sunflower		The country has no surplus but has potential to increase production and produce surplus	Tanzania is one of the top ten sunflower oilseed producers in the world. It is the leading producer in the EAC, FO		Tanzania exports refined and crude sunflower oil to Kenya, DRC, Malawi, Mozambique and Zimbabwe. The country exports sunflower oilseed cake
Milk	2.4 billion litres	Demand is higher than the current supply. The per capita milk consumption in Tanzania is estimated at 43 litres per year. This amount is only 20% of recommended amount by FAO. The unmet demand in Tanzania presents important opportunities for improving the welfare of producers and their market agents, through income and employment generated in dairy production, processing and marketing.	No Surplus. A vast quantity of milk sold in Tanzania's formal market is imported from other countries, especially Kenya, South Africa, United Arab Emirates and the Netherlands. It is estimated that 30-40 million litres of liquid milk equivalent is imported in the form of mostly milk powder (both whole and skim milk), infant formula, UHT milk, butter and cheese.	The country's dairy industry is small. The neighbouring countries (Kenya, Uganda and Rwanda) have a more developed dairy industry.	Milk productivity is low because the national dairy cattle herd includes the traditional sector that contributes 70% of the total milk produced. Milk productivity of the traditional cattle is low. Also, losses are high due to absence of proper processing, storage and transport infrastructure in most of the rural areas where milk is produced (mainly from traditional cattle breeds). Total milk production has increased at a rate of 2.8% per year over the past 20 years as a result of the growth in the cattle population, rather than an increase in productivity per cow, reflecting a rather inefficient milk production system.	There are virtually no export markets for domestically produced milk, except through small-scale trading activities across borders with neighbouring countries (LMIRA and BMGF, 2018)

	Production based on the latest data	Estimate of the current demand	Existence of tradable surplus	How local production compares with that of the neighbours	Potential for increase in production and productivity	Current Export Trade
Hides/skin	Amounts of raw hides and skins collected annually is approximated at between 2.9 million and 4.3 million respectively.	Local demand for genuine leather is growing. Hides and skins are raw materials for production of finished leather and leather products such as shoes and bags.		Local production of hides and skin is not as advanced as in Kenya and Ethiopia	Tanzania's leather sector has huge opportunity to expand and become a reliable supplier of leather and leather products in the region and beyond. However, the full potential of hides and skins is not realised in Tanzania mainly because of the low quality of the raw hides and skins produced resulting into poor demand in both domestic manufacturing industries and in the export market.	Tanzania exports some hides and skin to Kenya but the official statistics are missing because most trade is informal due to export bans. UN COMTRADE data shows that in 2012 Tanzania Exported to Kenya Hides and Skins (Fresh or Preserved) worth US\$ 18.96 Thousand. Most of the Tanzania's hides and skins are mainly exported as mixed grades to the Asian markets particularly Pakistan, Hong Kong, China and India.

Source: Compiled by the Authors

Tanzanian's Participation in Regional Food Trade

Tanzania is generally a surplus producer of staple cereals and pulses (**Figure 5.1**), and exports significant quantities of these commodities to neighbouring countries in the Eastern and Southern Africa (ESA) region including: Kenya, Malawi, Zambia, Uganda, Rwanda, Burundi and the Democratic Republic of Congo (**Table 4.9**). Of the commodities prioritised in TAIDF, maize and rice are the leading commodities exported from Tanzania to the ESA region through both formal and informal trade. Tanzanian rice enjoys attractive prices in some markets in Kenya, Uganda and Rwanda where it is preferred because of its aroma and high-water absorption that makes it swell (USDA, 2019). The existing demand and the fact that Tanzania has a high potential to increase rice productivity has seen numerous studies recommend to the GoT to implement a strategy on rice for export promotion to the neighbouring countries.

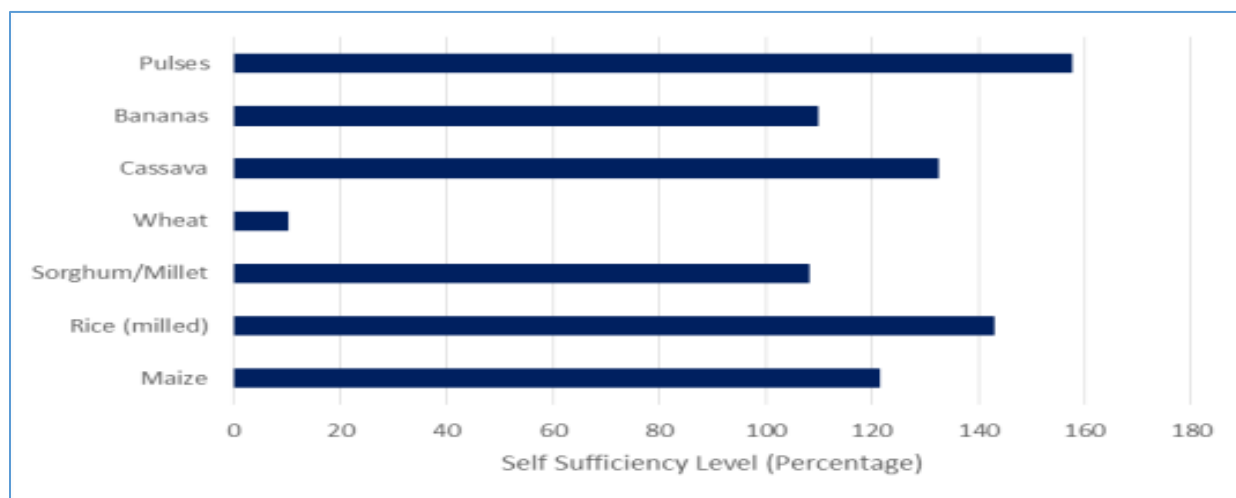


Figure 5.1. Tanzania's average self-sufficiency status for key staple foods (2014/15–2017/18)

Source: Source: FEWS NET calculations using data from the FAO and Government of Tanzania (2018) available in FEWSNET, 2018

There are, however, constraints to the regional cross border food trade. The key ones are: the recurrence of export bans that were recently abolished, policy and regulatory challenges and the low price and quality competitiveness of Tanzanian maize and rice in the regional market. Enhancing competitiveness, value addition and the business environment through TAIDF will expand opportunities for agricultural entrepreneurs to benefit more from intra-African trade.

Sequencing of Value Chains

As noted above, prioritisation is important. Given that the initial list of priority commodities is large, it would be important to consider which value chains to start with. That is, the sub-set of the priority commodities to be considered in the initial stages of TAIDF implementation. As emphasised earlier on, the identification of suitable and commercially viable locations for agro-industrial parks is matched to the priority crops. Eventually, all the crops (e.g. horticultural products, coffee, tea, etc.) and livestock (e.g. poultry, piggery, etc.) will potentially benefit from

TAIDF. Given that an industrial park will eventually host multiple agro-manufacturing industries or plants, it is deemed necessary to consider several crop value - chains adequate for attracting many and diversified investors in agro industries when determining the list of priority value chains. The ASDP II is already dealing with crop production; TAIDF will focus on agro- industrialisation across the crop value chains. Out of the list of priority commodities presented in Table 4.7 above, it is proposed that the initial phases of TAIDF to focus on the following value chains: 1. Cotton; 2) Nuts (groundnuts and cashew nuts); 3) Oil seeds; 4) Cattle (for beef, dairy as well as hides and skin); 5) Maize; 6) Fishing and 7) Rice. The reason for prioritising these commodities is, in addition to emerging as priority commodities during consultations and the literature review for TAIDF development, analytical studies show that these commodities are the most effective for achieving the multiple policy objectives. For example, a study by Thurlow *et al*, 2018 came up with the results summarised in **Figure 5.2**. The figure indicates that by investing in cotton, nuts and oil seed, the objectives of enhancing nutrition and growth effect will be achieved. It also shows that maize and fishing meet two objectives, reducing poverty and generating economic growth, while dairy production has the potential to improve nutrition and reduce poverty (Thurlow *et al*, 2018). Rice has been prioritised due to Tanzania’s potential for productivity increase and its huge potential for income generation through intra-regional trade in Eastern, Central and Southern Africa. TAIDF comes in as an intervention for incentivising investments from the private sector to agro-industrialisation and agriculture at large.

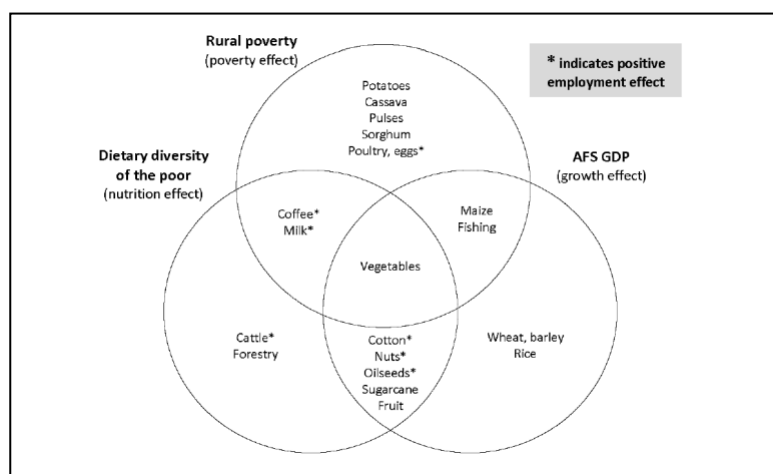


Figure 5.2: Agricultural value-chains in Tanzania with strong poverty, nutrition, economic growth and employment effects

Source: RIAPA CGE Model and SAM for Tanzania in Thurlow *et al*, 2019

4.3 Selection of Priority Regions for TAIDF

In proposing the priority sites for agro-industrial parks development and the promotion of agro-industries under TAIDF, lessons on site selection for agro-industrial parks from other developing countries are used while at the same time paying attention to country specific considerations, especially in the discussions in subsection 4.2. Experience from various countries in the world

show that, it is important to ensure an unbiased selection of the agro-industrial parks and anchoring locations based on the competitiveness of potential facilities' locations and value chain combinations.

Given that investment in agro-industries are largely expected to come from the private sector, it is crucial that a location is perceived to be economically viable by the private sector. To meet the objectives of competitiveness, the extant literature recommends the following criteria to guide the choice of location of an agro-industrial park: i) An area that maximises logistical gains (due to availability of high quality infrastructure such as roads, railway, airports, water ways); ii) an area with abundant raw materials to minimise the cost of transporting raw materials; iii) areas with access to other necessary services for the functioning of the agro-industries such as electricity, water and communication; iv) an area with other firms and agro-industries to take advantage of agglomeration economies derived from the co-location of agribusinesses and agro-industries; v) an area with critical masses in consumption and labour markets, and in existing distribution patterns. These criteria are also used here to inform the choice of location for the promotion of agro-industries including the location of agro-industrial parks under TAIDF.

Tanzania Agro-ecological Zones and their potential to guide the location of the Agro-Industrial Parks

Agro-ecological conditions are key determinants of agricultural production in Tanzania. They influence the kind of agricultural enterprises to be produced in the regions of the country and thus, are likely to influence the availability of the raw materials. Given the importance of the AEZ in determining availability of raw materials for the agro-industries we will use the seven Tanzania's AEZ (**Table 4.6**) as the organising framework to guide location of agro-industrial parks.

In an ideal situation it would be good to have at least one AIPs in each AEZ. However, noting resource constraints, the importance of ensuring economic feasibility and the potential to attract private sector investments in the AIPs, there are situations where it might be appropriate to have more than one AIPs in some AEZs while not have any in some (at least in the initial phases of TAIDF implementation).

With the above considerations in mind, TAIDF interventions are to be implemented in 16 regions⁴. These are: 1) Arusha; 2) Dar es Salaam; 3) Dodoma; 4) Geita; 5) Iringa; 6) Kagera; 7) Kigoma; 8) Manyara; 9) Mara; 10) Mbeya; 11) Morogoro; 12) Mtwara; 13) Mwanza; 14) Singida; 15) Shinyanga; and 16) Tanga (**Table 4.10**). The regions have been prioritised based on multiple criteria including: availability of raw materials through production the priority commodities discussed in Section 4.2, existence of necessary infrastructure, past investments in agro-industrialisation for which to leverage on, human population (which is a proxy for the potential number of beneficiaries), market opportunities and connectivity to key consumption centres.

⁴ Tanzania has 31 regions

In an ideal situation it would have been useful to have AIPs in all these 16 regions but, due to high financial requirements for their development, it is proposed that Tanzania initially invests AIPs in 12 regions (out of the 16 TAIDF regions) over the next 10 years. Furthermore, due to limitations in financial resources and management capacities for the establishment of AIPs in all 12 regions at once, a phased implementation approach is recommended. The regions to be targeted in each of the area as follows:

- Phase 1: Dar es Salaam/ Pwani*, Dodoma, Mwanza, Arusha
- Phase 2: Iringa, Morogoro, Geita, Kigoma
- Phase 3: Mbeya, Mara, Tanga, Manyara

Regions that are targeted for TAIDF but with no AIPs (Kagera, Singida, Shinyanga and Mtwara) will make use of the Agro-Industrial Parks located in the other regions. For example, Singida will benefit from the AIP in Dodoma, while Manyara will benefit from the AIP in Arusha. Details of TAIDF implementation phases are presented in the next section of the Flagship document (see **Subsection 5.8**).

Table 4.10: Proposed Priority Sites for TAIDF and Criteria for their Selection

Region	Agro Ecological zone	Availability of raw materials (TAIDF priority commodities produced in the region)	Strategic consideration for proposing the region	Number of Industries in the Region	% of Total Industries in the country	Total Population in millions in 2018 (Potential impact)
Arusha	Northern	Dairy, beef, sunflower, rice and sesame,	<p>Market Potential Third biggest city with commercial connection with Kenya, Somalia and Southern Sudan. Is the biggest tourist attraction region in the country</p> <p>Infrastructure Main roads are well developed and linked to the neighbouring countries and other regions in the country. Well linked to the regional export markets - The Northern Railway line links Arusha with many regions.</p> <p>Other Industries existing in the region Arusha has several agro-processing industries including beef processing, dairy processing and textile industries.</p>	2,311	5%	2.0
Dar es Salaam/Coast region	Eastern	Fish	<p>Market Potential Commercial capital and the largest city. Biggest exit point for exports and imports.</p>	7,786	16%	5.1
Dodoma	Central	Beef cattle, maize, oil seeds (sunflower, sesame, and groundnuts), hides and skin	<p>Market Potential Capital city and the fourth largest city. There is a rapid increase in the Dodoma population, caused by the advent of Government offices.</p> <p>Infrastructure Main roads are well developed and well linked to other regions – particularly major distribution and export points (DSM, Arusha, Mwanza, etc.). Dodoma is located along the Central Corridor of East Africa. This corridor comprises a network of roads and railways passing through the Lake Victoria zone to the south.</p> <p>Other Industries existing in the region Dodoma has many micro, small and medium scale agro-processing industries. As of June 2018, Dodoma had 1,262 maize milling industries, 436 sunflower oil processing industries and 6 wine processing industries.</p>	1,877	4%	2.5
Iringa	Southern Highlands	Maize, rice, sunflower, soya beans, dairy, horticultural crops	<p>Centrally located for connection with Mbeya, Ruvuma and Sumbawanga – biggest crop producers.</p> <p>Infrastructure Main roads are well developed and well linked to the neighbouring countries and other regions in the country. Well linked with the TAZARA railway line for distribution to other parts of the country and export markets. Also, Songwe Airport and Iringa Airport are well located for air transport</p>	2,515	5%	1.1

Region	Agro Ecological zone	Availability of raw materials (TAIDF priority commodities produced in the region)	Strategic consideration for proposing the region	Number of Industries in the Region	% of Total Industries in the country	Total Population in millions in 2018 (Potential impact)
			Other existing Firms/ Industrial efforts There are several agro-processors including small, medium and large. Ihemi Cluster for SAGCOT is in Iringa.			
Kagera	Lake	Fish, dairy, cotton	Market Potential Kagera's strategic location gives it high potential for cross-border trade. Kagera is the only region in Tanzania that borders four countries (Uganda, Rwanda Burundi and Kenya), with whom they share a common border in Lake Victoria. Infrastructure The region has well developed infrastructure. Roads are in good condition and are easily passable in all seasons. Kagera is served by marine transport through Lake Victoria and has an airport.	2.87	5%	3.0
Kigoma	Western	Maize, palm oil, fish, livestock, rice,	Market Potential Strategically located for export markets to Congo DRC, Burundi, Rwanda and Zambia. Infrastructure Infrastructure in the region is not well developed. Kigoma is served by marine transport through Lake Tanganyika and has an airport.	1.051	2%	2.6
Manyara	Northern	Cotton, beef, dairy, sunflower, hides and skin	Market Potential Strategically located for tourism business and a rich source for agro raw materials	2,288	5%	1.8
Mara	Lake	Cotton, beef, dairy and Fish	Market Potential Strategically located for cross border trade with Kenya and Uganda Infrastructure Infrastructure in the region is not well developed. Mara is served by marine transport through Lake Victoria and has an airport.	3,574	7%	2.2
Mbeya	Southern Highlands	Rice, dairy	Market Potential Has a high population which serves as potential market. Strategically to Congo, Rwanda, Zambia, Malawi Infrastructure . The region has well developed infrastructure. Roads are in good condition, including the Tanzania-Zambia Road (TANZAM) and are easily passable in all seasons. Mbeya is served by TAZARA linking Tanzania and Zambia and has the Songwe International Airport.	2,982	6%	2.1

Region	Agro Ecological zone	Availability of raw materials (TAIDF priority commodities produced in the region)	Strategic consideration for proposing the region	Number of Industries in the Region	% of Total Industries in the country	Total Population in millions in 2018 (Potential impact)
Morogoro	Eastern	Dairy, oil Seeds (sunflower and sesame), maize, rice,	<p>Market Potential Strategic connection to the cost regions, Southern and Northern Regions</p> <p>Infrastructure The region has well developed infrastructure. Roads are in good condition and are easily passable in all seasons.</p>	3,304	7%	2.6
Mtwara		Cashew, sunflower and sesame	<p>Market Potential Availability of market/high demand in Dar es Salaam which is not far from Mtwara. There is potential for exporting sunflower oil to Malawi, Zambia, Congo and other SADC countries.</p> <p>Infrastructure Mtwara is well connected to Dar es Salaam by Road and has a port on the Indian Ocean. Has natural gas that is important for supporting industrial development.</p>	1,081	2%	1.4
Mwanza	Lake	Cotton, rice, maize, sunflower, beef, dairy, hides and skin	<p>Market Second largest city, and well located with the biggest lake in Africa connecting four countries.</p> <p>Infrastructure Main roads are well developed and well linked to the neighbouring regions. Linked to the regional export markets in the Lake Zone.</p> <p>Other existing Firms/Industrial efforts Has many agro-processing industries in the cotton value chain, oilseeds, and beef/meat production.</p>	1,471	3%	3.5
Geita	Lake	Cotton, rice, maize, sunflower, beef, dairy, hides and skin	<p>Market Potential This includes neighbouring land-locked countries, i.e. the Democratic Republic of Congo (DRC), Rwanda, Burundi and Uganda.</p> <p>Infrastructure There are well established roads and the recently commissioned Chato International Airport will facilitate the flow of goods in the East African Community (EAC) region and beyond.</p> <p>Other existing Firms/Industrial efforts Has many agro-processing industries in the cotton value chain, oilseeds, and beef/meat production.</p>	421	1%	2.2

Region	Agro Ecological zone	Availability of raw materials (TAIDF priority commodities produced in the region)	Strategic consideration for proposing the region	Number of Industries in the Region	% of Total Industries in the country	Total Population in millions in 2018 (Potential impact)
Shinyanga		Cotton, rice, beef, dairy and sunflower, hides and skin	<p>Market Well located for agro-raw materials and has several sunflower, rice and beef agro- industries.</p> <p>Infrastructure Well-developed roads with connections to other regions in the lake zone (Shinyanga, Mwanza and Geita) and the Central zone (Singida and Dodoma). Served by the Tanzania Railways and has an airport.</p> <p>Other existing Firms/ Industrial efforts There are a number of rice and cotton processing industries as well as oil processing industries for both sunflower oil, cotton oil and its by-products.</p>	1,243	3%	1.9
Singida		Sunflower, dairy, hides and skin	<p>Market Well located for agro-raw materials and has several sunflower agro-industries. Second largest source of sunflower,dairy and leather as a catchment area for Dodoma.</p> <p>Infrastructure Well-developed roads with connections to the lake zone (Shinyanga and Mwanza), Northern zone (Manyara and Arusha) and Central zone (Dodoma)</p> <p>Other existing Firms/ Industrial efforts There are a number of sunflower processing industries for both sunflower oil and its by-products</p>	1,661	3%	1.6
Tanga		Dairy and beef, Fish	<p>Has several old agro-industries and a good source of dairy products.</p> <p>Market Well located for dairy materials and has several dairy agro-industries.</p> <p>Infrastructure Well-developed roads with connections to Arusha, Kilimanjaro and Dar es Salaam. Also served by a port on the Indian Ocean and has an airport.</p> <p>Other existing Firms/Industrial efforts There are a number dairy processing industries.</p>	1,816	4%	2.3

Source: Authors' compilation

5: TAIDF Objectives, Components, Theory of Change and Activities

5.1 Objectives and Scope of the TAIDF

The goal of TAIDF is to enhance structural economic transformation through improved agro-industry based growth, inclusive of the youth and women. It will be achieved through the following specific objectives:

- (i) To expand and strengthen local agro-industry through increased public and private sector investment in agro-industrialisation.
- (ii) To contribute towards agriculture modernisation and intensification to produce raw materials of adequate quantity and quality for agro-industries.
- (iii) To enhance market opportunities for agricultural products (raw materials as well as value added products from the agro industries).
- (iv) To enhance individual and institutional capacity to implement and sustain agro-industrialisation efforts in the country.

5.2 Scope of the TAIDF

TAIDF focuses on addressing the key bottlenecks to agro-industrialisation in a way that substantially contributes to enhanced markets, jobs, growth and food security in the country. Its scope is agro-industry, encompassing all interventions along the agriculture value chain (for crops, livestock and fisheries). TAIDF interventions will be implemented in 16 regions of Tanzania. These are: 1) Arusha; 2) Dar es Salaam; 3) Dodoma; 4) Geita; 5) Iringa; 6) Kagera; 7) Kigoma; 8) Manyara; 9) Mara; 10) Mbeya; 11) Morogoro; 12) Mtwara; 13) Mwanza; 14) Singida; 15) Shinyanga; and 16) Tanga. The criteria for prioritising and selecting the sixteen regions include availability of raw materials through production of key priority commodities for ASDP II and TLMP, the existence of necessary infrastructure, past investments in agro-industrialisation for which to leverage on, human population, high potential for market opportunities and connectivity to key consumption centres. Details on how the selection of the regions was conducted have been presented in Sections 4.2 and 4.3 of the Flagship document. TAIDF will reach agricultural producers, agricultural traders, agricultural processors, and government ministries and institutions with the mandate to implement the country's agro-industrialisation. TAIDF will support (including technical, business services and risk-sharing) existing agro-industries (including the run-down ones) and new agro-industries to be established during the TAIDF implementation period.

5.3 The TAIDF Problem Context and the Development Opportunity

The level of agro-industrialisation is very low in Tanzania despite various efforts and strategies developed by the government to promote industrialisation (see description of the efforts in Sections 1 and 2 of this document). Operational industries for the production of agriculture inputs

and agro-processing are very few and many operate below their capacity. There have been limited investments in the establishment of new agro-industries while at the same time, the previously established industries have either performed poorly or shut down. Consequently, local manufacturing of agriculture inputs and value addition to agricultural products through agro-processing is limited.

Low farm productivity and production have a backward and forward induction. The backward induction reduces demand for farm inputs leading to under investment and low production or supply of farm inputs. The forward induction constrains supply of agro-raw materials to agro-processors causing constrained supply of agro-products and thus uncompetitive prices.

Farm input' markets are disorganised and disjointed from farm production and sometimes non-existent. Markets for farm produce are also disorganised and disconnected from processors leading to poor market access, low commercial viability of agro-products and thus, leading to high risks to dealers in the agro- industry sector. This constrains profitability and investment across the agro-value chains.

Given the centrality of the agricultural/rural sector, which employs nearly 70% of the population, Tanzania has a huge opportunity to attain significant economic growth and reduce poverty through agro-industrialisation. This development opportunity can be leveraged by promoting agro-industries through the strengthening of existing ones to enhance their capacity utilisation as well as developing/building new agro-industries. The country has enormous potential to have a critical mass of skilled labour to work in the agro-industries by training the youth who constitute about a third of the national population. The growth and enhanced competitiveness of Tanzania's agro-industrialisation requires the rapid growth of private sector investments. Enhancing and expanding such investments requires supportive infrastructure; affordable supply of the necessary technologies, adequate and high standards in human and institutional capacity, and a business environment that is attractive to the private sector. TAIDF provides a framework to guide such investments.

5.4 The TAIDF Theory of Change

TAIDF focuses on developing competitive agro-industries as a pathway towards the main development outcomes of increasing incomes and reducing food insecurity and poverty among the participating agricultural producers (crop farmers, livestock keepers and fish farmers), traders and processors through both direct and indirect benefits resulting from stronger agro-industrialisation. TAIDF encourages investments in agro-industries for the manufacture of agricultural inputs and those for processing agricultural products. By strengthening and expanding these two categories of agro-industries in Tanzania, TAIDF will contribute to the following outcomes. On one hand, it will address the problem of limited local production of agricultural inputs (resulting from the existence of few functional industries for the manufacture of agricultural inputs). Increasing production of agricultural inputs (agriculture equipment, farm machinery tools,

seeds, fertilisers, agro-chemicals, animal feeds etc.) will stimulate increased agricultural production and productivity.

On the other hand, through enhanced value addition, TAIDF will lead to several positive benefits including, a reduction of post-harvest losses, increased availability of value-added products that are produced in Tanzania, which will reduce the importation of value-added agricultural products (such as processed food), and potentially increased quality and quantity of exported processed agricultural products. Furthermore, enhanced value addition will enhance market opportunities for agricultural producers and thereby stimulate increased production and productivity in agriculture.

By modernising and intensifying agriculture, there will be an increased supply of raw materials for the agro-industries. The double effect from the induced demand and increased supply of agro-raw materials will ensure a supply of adequate raw materials to enable agro-industries to run more efficiently by increasing their capacity utilisation, including venturing into more efficient technologies. For example, the use of improved farm inputs in edible oil seed production could double productivity, incomes and enhance commercial viability of the value chain in Tanzania.

Meanwhile, strengthening the capacity of institutions and individuals involved in support services and/or investment in agro-industrialisation will enhance and sustain the process of developing agro-value chains including agro industrialisation⁵. For instance, organising smallholder farmers into producer groups will create sizeable sources of supply of raw materials, improve handling and storage, and potentially reduce transactional costs in the marketing of farm produce. This will enhance market competitiveness of farm produce. Meanwhile, input supply would be enhanced through the same effects. Consequently, commercial viability for agro-processing would be enhanced and crowd-in commercial business services including finance and insurance among others. **Figure 5.1** presents a summary of TAIDF results.

The benefits of enhanced agro-processing to crop producers will primarily result from: (i) better access to markets and value addition for agricultural products; (ii) reduced transaction costs due to improved marketing; (iv) reduced post-harvest losses due to enhanced agro-processing; (v) enhanced food safety due to increased crop production, jobs and agro-processing; (vi) improved product quality;⁶ (vii) increased production and productivity will enhance local and cross-border trade due to increased surplus in production; and (viii) improved economies of scale due to organised and expanded production across the crop value chains.

⁵ Individual capacity strengthening will focus skills development for youths to prepare them for employment in agro-industries. Institutional capacity strengthening will target producers' and traders' associations, private sector (e.g. small and medium scale enterprises), government ministries, other government organisations and parastatals that will contribute to the promotion of agro-industrialisation in Tanzania.

⁶ The strengthening of existing agro-industries and the establishment new ones is expected to have a direct and indirect positive impact on the quality and quantity of agriculture products produced, postharvest loss, and ultimately farm-gate prices.

Increased agro-processing will increase the share of the manufacturing sector to GDP and so with the share of population engaged in non-farm activities – potentially transforming the economy towards a more vibrant industrial base for economic growth, employment creation, increasing incomes and food security. **The government will play a leading role in putting in place supportive modern industrial infrastructure, including agro-industrial parks for leveraging private sector investment in the agricultural value chain.**

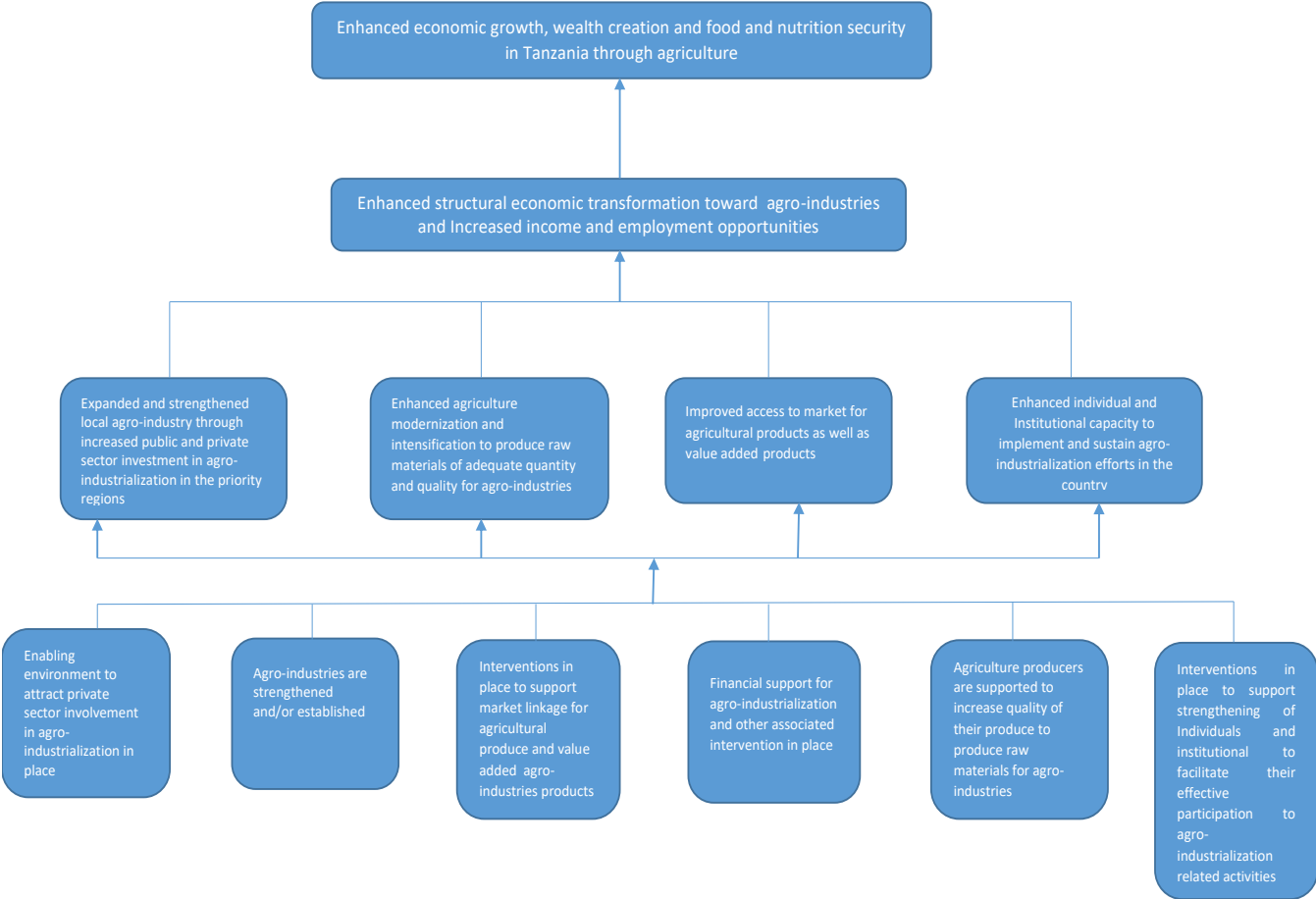


Figure 5.1: Summary of TAIDF Results
 Source: Authors' compilation

5.5 Description of TAIDF Components and Sub-components

TAIDF will strategically support the development of agricultural value chains to induce private sector investment in production and productivity of the selected value chains, production of agro-inputs and value addition. The TAIDF support will be a catalyst public sector investment for crowding in private sector investors. The support will not be a direct involvement of the government in the production of agro-products rather, the TAIDF public sector investment aims at creating a conducive, enabling and efficiency-enhancing business environment with fully-fledged

support infrastructure and services attractive to agro- industry investors. TAIDF will focus its interventions on three broad interlinked areas or components. These will have several sub-components, each with a set of key implementation activities and expected outputs and intermediate outcomes. The three components of TAIDF are: (i) Infrastructure, Support Services and Incentives for Agro-Industrial Development; (ii) Agriculture Modernisation and Intensification; and (iii) Support to Individual and Institutional Capacity Strengthening for effective Agro-industrialisation. Each of the three components has several sub-components as shown in **Table 5.1**.

The following is a description of the three TAIDF components:

Component One of the Flagship seeks to improve and expand agro-industry infrastructure and support services, including strategic incentives to attract more investments in the agro-industries for the production of agricultural inputs as well as for value addition. This will be achieved by designing and investing in an incentive package in the form of public-private partnerships (PPP) that will crowd-in private sector investment to rehabilitate and improve the existing agro-industry infrastructure (**Sub-component 1.1**); construct new agro-industry infrastructure (**Sub-component 1.2**); and constructing and rehabilitating supportive infrastructure for agro-industrialisation (**Sub-component 1.3**). The enabling environment for agro-industrialisation is not yet adequately conducive for accelerated investment by the private sector; as such, TAIDF will implement interventions to improve, increase and speed up private investments in agricultural value chains (**Sub-component 1.4**). The interventions are expected to increase agro-industry activities and capacity in Tanzania including improvement of price and quality competitiveness of agro-products, and ultimately enhance the contribution of agro-industries to the manufacturing sector and to GDP in general.

Component Two of the Flagship seeks to modernise and intensify agriculture in order to meet the increasing demand for quality and quantity of agro-raw materials emanating from the expanding agro-industrial capacity. This will provide strategic support to improve production productivity of the relevant value chains and agro-marketing as a way of incentivising sustainable investments in agro-industries in Tanzania. TAIDF will support the strengthening of marketing systems and institutions for the priority commodities for input production and supply on the one side; and for crop production, storage and marketing on the other side. This will be achieved through three main interventions: promoting the competitiveness of the agricultural value chains (**Sub-component 2.1**); the second is to support key public and private institutions to strengthen their capacity to facilitate effective and sustainable agro-industrialisation (**Sub-component 2.2**); creating and improving market linkages (**Sub-component 2.3**), and ensuring inclusive finance (**Sub-component 2.4**). Implementation of the interventions is expected to increase productivity and production of the ASDP II priority value chains, improve marketing of domestic agro-products, and enhance access to finance for agro-value chains in Tanzania.

Component Three will provide support to strengthen individual and institutional capacity for effective agro-industrialisation. The interventions will address capacity gaps in agro-processing skills in the labour market and SMEs; in organisational and managerial skills for SMEs; in processing and production, sorting, branding, and marketing skills for SMEs; in TAIDF implementation skills, framework, and monitoring and evaluation; in coordination framework and skills for ASLMs; in framework of supervision and oversight by the TAIDF coordination team. Therefore, there are three main sub-components in component three. The first is to develop quality skills for agro-industrialisation particularly among the youth and women (**Sub-component 3.1**); the second is an intervention to strengthen the capacity of the private sector for agro-industrialisation (**Sub-component 3.2**); and lastly is support for TAIDF coordination and monitoring and evaluation (**Sub-component 3.3**).

Table 5.1: Summary of TAIDF Components and Sub-components

Description of Component	Sub-components
Component One Infrastructure, Support Services and Incentives for Agro-Industrial Development	1.1 Rehabilitation and improvement of the existing agro-industry infrastructure
	1.2 Construction of new agro-industry infrastructure
	1.3 Construction and/or rehabilitation of supportive infrastructure for agro-industrialisation
	1.4 Strengthening of enabling environment for agribusiness and agro-industry development
Component Two Agriculture Modernisation and Intensification	2.1 Modernisation of agricultural production
	2.2 Strengthening of private sector capacity for agro-industrialisation
	2.3 Strengthening of market linkages
	2.4 Strengthening of agro-financing
Component Three Support to individual and institutional capacity strengthening for effective agro-industrialisation	3.1 Development of quality skills for agro-industrialisation among youths, women and men
	3.2 Supporting key public and private Institutions to strengthen their capacity to facilitate effective and sustainable agro-industrialisation
	3.3 TAIDF coordination and monitoring and evaluation

Source: Authors' compilation

5.7 TAIDF Outputs and Key Activities

Component I: Infrastructure, Support Services and Incentives for Agro-Industrial Development

Sub-component 1.1: Rehabilitation and improvement of the selected, existing Agro-industry infrastructure

Tanzania has many agro-industries that are old and run-down (see Section 2 of this document on the status on agro-industrialisation in Tanzania). Many of them were privatised with a view to revamping their performance, but they have not recovered. Ironically, many agro-industries have been dormant for many years while others have been completely shut down. The revival of such industries calls for rehabilitation and technological improvement for modern and efficient agro-processing business operations. The Government is seeking investors for the industries that had been repossessed. This sub-component of TAIDF focuses on interventions to support the

rehabilitation and improvement of the existing agro-industries in the country. Priority industries will be those that add value to agriculture products as well as those that involve the manufacture of agriculture inputs (e.g. agricultural machinery, fertilisers, and other inputs).

Output Area: Selected existing agro-industries renovated and improved

S/N	Priority Activities	Results
1.1.1	<ul style="list-style-type: none"> Identify priority agro-industries to be supported and carry out needs assessment and feasibility studies to Identify the support required to revive selected agro-industries the needs assessment findings to develop a framework for infrastructural support as well as capacity building support. Carry out a series of activities to attract private investors to invest in repossessed industries in the TAIDF regions. Examples of the activities include the development of a business case, development of a motivation scheme to prospective investors in agro-industry in the country. 	<p>Priority industries for renovation and improvement identified, needs assessment report produced for each industry</p> <p>New Investors attracted to invest on the dormant industries</p>
1.1. 2	<ul style="list-style-type: none"> Renovate agro-industries and install modern machinery as informed by the needs assessment and feasibility studies. 	<p>Selected agro-industries renovated, and modern machinery installed by investors.</p> <p>The functional capacity of existing priority industries enhanced</p>

Sub-component 1.2: Construction of new agro- industry infrastructure

TAIDF will increase the capacity of agro-industry in the country by constructing new fully-fledged industrial parks in selected regions. The agro-industrial parks to be developed under TAIDF will be well designed and located with all the requisite facilities (good roads, water supply, roadside pipes, firefighting system, telecom infrastructure, power supply infrastructure, sewerage/waste/effluent disposal system, landscaping, sheds, one-stop business services centre, etc.). Through innovative leveraging of the private sector investors, it is envisaged that the parks will crowd-in private investment in agro-inputs and agro-processing.

Output Area: Agro-industrial parks constructed/developed in selected regions

S/N	Priority Activities	Results
1.2.1	Liaise with the Tanzania Export Processing Zone Authority (EPZA) and regional and local authorities to carry out feasibility studies (structures and business development services included) for establishing agro-processing industrial parks in the priority regions.	Feasibility study reports are completed and approved. The viability and operationalizability of agro-processing industrial parks in the priority regions ascertained
1.2.2	Restructuring EPZA operational framework to accommodate the development and management of AIPs.	The EPZA operational framework enhanced to support AIPs
1.2.3	Build agro-industrial parks. This activity will involve several sub-activities including: the development of basic infrastructure (road, drainage system, water supply system, electricity and securing the area), construction of working shades/business premises and construction of operational office facility.	Eight industrial parks built with basic infrastructure (road, drainage system, water supply system, electricity)

S/N	Priority Activities	Results
1.2.4	Mobilise and incentivise potential investors to establish agro-processing plants and agro-input firms in the designated industrial parks	Agro-industrial parks begin to crowd-in investment (SMEs and large scale) in agro-industries

Sub-component 1.3: Construction and rehabilitation of supportive infrastructure for agro-industrialisation

A supportive agro-industrial infrastructure in the country is inadequate and in need of rehabilitation. This includes unstable connectivity or the lack of connection to grid power, poor and inadequate marketing infrastructure (such as warehouses, limited irrigation schemes and poor feeder roads). TAIDF will promote and support the construction and rehabilitation of supportive infrastructure for agro-industrialisation.

Output Area: Supportive infrastructure for agro-industrialisation

S/N	Priority Activities	Results
1.3.1	Install last mile connection to grid power and/or installation of mini-grids to reach the agro-industries	Agro industries are connected to grid power
1.3.2	Construction/rehabilitation of marketing infrastructure as identified by need assessments (e.g. cold storage facilities, milk collection/chilling centres, warehouses)	An effective and efficient market infrastructure to support agro-industries in place
1.3.1.3	Establishment of collection centres and handling facilities for perishables (e.g. milk, fish and horticultural products)	Post-harvest facilities for perishables in place
1.3.1.4	Promote Rehabilitation and Development of Irrigation Schemes for the priority crops	Reliable irrigation services to support priority crops cost-effectively, available
1.3.1.5	Promote construction of feeder roads and bridges to facilitate movement of agricultural products to the markets or agro-industries	Feeder roads constructed
1.3.1.6	Facilitate development, maintenance and rehabilitation of Warehouse Receipt System (WRS) infrastructure including upgrading technologies and retooling of equipment to the warehouse	Effective functional warehouses with functioning tools

Sub-Component 1.4: Enabling environment for agribusiness and agro-industry development

The Government has issued a *Blueprint document for improving the business environment in Tanzania*. Among other things, the document has identified policy and regulatory constraints to agro-industry business in the country and the EAC in general. This includes the ease of issuance of permits related to business activities, import and export business, business licensing, registration, putting in place friendly regulatory regimes for business activities including one-stop business centres, etc. TAIDF will support interventions for the speedy implementation of the Blueprint, including the easing of any other policy and regulatory constraints that affect the development of agro-industry in the country.

The current EPZA has developed extensive experience in the construction and management of industrial parks. This will be the appropriate institution under which the new agro-industrial parks can be effectively managed. Since EPZA is under the Ministry responsible for industries, it will get the necessary support and guidance for the development and management of the parks. The legal framework establishing and operationalising EPZA is fully supportive of it as a national umbrella institution for the development and the management of SEZs and EPZs. As such, TAIDF will seek to strengthen the legal and regulatory framework for EPZA to establish and manage the new agro-industrial parks.

Output Area: Enabling environment for agro-industrialisation

S/N	Priority Activities	Outputs
1.4.1	Facilitating the implementation of the Blueprint. TAIDF will facilitate the MIT to undertake strategic assessment, prioritisation and development proposals of key smart regulatory changes and incentives to significantly catalyse agro-industrialisation. The facilitation will include supporting the operations of a standing government-private sector team that will be the think tank and implementation arm with a smart focus on prioritised cross-cutting, agro-industrialisation specific and capacity development issues. The team will support the implementation of quick-win, short-term, medium-term and long-term measures. The team will also assist the MIT in engaging and supporting the relevant Government and private sector partner in addressing the priority issues and actions, related to agro-industrialisation, in accordance with the recommendations of the Blueprint.	Improved business environment for agro-investments and markets
1.4.2	Creation of public-private partnerships in the development of agro-industrial infrastructure. Within the framework provided by the Public-Private Partnership Act (2011) and its regulations of 2011, TAIDF will develop institutional capacities for the technical analysis and negotiation of public-private partnerships and associated contracts in the development of agro-industrial infrastructure. The target groups will include relevant government agencies/officials and the private sector organisations and companies. Examples of infrastructure that could benefit from PPP arrangements are irrigation, power projects, market centres, EZs/SEZs and AIPs. TAIDF will support the MIT, CTI and TPSF to have strong in-house technical assistance capacity to facilitate government agencies and private sector interest in the creation of public-private partnerships in the development of agro-industrial infrastructure. TAIDF will also identify and promote PPP opportunities in agro-industrial infrastructure.	Functioning PPP in development of agro-industrialisation infrastructure
1.4.3	Implement measures to enhance the legal and regulatory framework for EPZs/SEZs and AIPs). TAIDF will support MIT to undertake a study to review the current status of regulatory measures and incentives, review lessons from other countries and establish the crucial improvements in regulatory measures and services for effective implementation of EZs/SEZs and AIPs in Tanzania. The effort will culminate in a costed implementation action. It will also support the Government in the implementation of the proposed action plan for the improvement of regulatory reforms and services.	An effective and conducive regulatory framework for EZs/SEZs and AIPs

S/N	Priority Activities	Outputs
1.4.4	Provide incentives to the processing industry to invest in new equipment including maintenance or re-tooling infrastructure. A review of the status of Tanzanian industries to invest in new processing equipment in order to enhance processing efficiencies and competitiveness will be undertaken in close consultation with pertinent industry and Government stakeholders. The review will focus on strategic (one-time) as well as operational incentives such as tax-relief incentives. TAIDF will support the activities of MIT in getting the proposals approved by the Government. It will also support the dissemination of the approved incentives.	Increased motivation for investments in new equipment by processing industries
1.4.5	Enforce the execution of laws in order to provide guarantees to attract foreign direct investment. While there are already very good laws that aim to attract foreign direct investment into the country, their implementation leaves much to be desired. The TAIDF's support to the execution of laws will be on mapping all laws pertinent to agro-industrialisation as well as the respective stakeholders to be involved in their execution; packaging the information and sharing the same with the stakeholders. The support will also include advocacy measures to enhance execution. Likewise, it will regularly monitor and evaluate the extent of execution of each specific law and advise the government accordingly for further action.	Increased foreign direct investment in agro-processing industries

Component 2: Agriculture Modernisation and Intensification

Sub-component 2.1: Modernising Agriculture Production

Improved and expanded agro-processing activities in Tanzania will increase the demand for the quantity and quality of agricultural raw-materials required as inputs by industries. This calls for increased use of improved agricultural inputs, e.g., improved seeds, fertilisers, pesticides, and agro-machines. This will be coupled by increased acreage production of the crops and livestock, leading to the modernisation and intensification of agricultural production to meet the new and increasing demand for raw materials by agro-industries.

TAIDF will support interventions to enhance the production and productivity of the priority commodities in the selected Flagship regions. The support will involve the commercialisation of agricultural production by strengthening farmers’ groups as primary business units engaged in input supply, extension services, quality management, product sorting, pricing, auctioning, negotiation and contracting with other agro-business dealers. This is consistent with the findings of a very recent study of the sunflower value chain by BFAP *et al.* 2018, which concluded that strengthening of farmers’ groups was a key ingredient to unlocking Tanzania’s agricultural potential. The Government is already undertaking a big programme on the land tenure system, with the intention of issuing land right/use certificates to smallholder farmers. This will incentivise private sector investment in the agricultural value chain in the country.

TAIDF will support the development and nurturing of agro-inputs production and supply systems by enhancing the capacity of the suppliers to ensure the timely availability of adequate agro-inputs to farmers. This will include support to R&D institutions to develop their capacity to disseminate improved agricultural inputs and agro-industry technologies.

The extension services for agribusiness activities are inadequate and not effectively accessible to the most needy farmers. TAIDF will improve extension services by focusing on the specific needs of each commodity value chain and the timely facilitation of the officers to reach more farmers effectively.

Output Area: Availability and use of improved agricultural inputs by farmers

S/N	Priority Activities	Results
2.1.1	Strengthening the capacity of producers (and producer organisations) to modernise agriculture production and transit from subsistence farming to commercial agriculture. This could be done by designing and providing training programmes on management of producer groups, product quality management, product sorting, pricing, auctioning, warehouse receipt system (WRS), negotiation, contracting and contract farming, agro-inputs procurement etc.	Effectively functioning producer groups with all the necessary basic skills for enhancing their performance
2.1.2	Design and implement an effective programme on sensitisation, demonstration, and training of agricultural producers (for crops, livestock and fisheries) about good agricultural practices.	
2.1.3	Liaise with the public and private producers and suppliers of improved agriculture inputs to enhance their capacity for availability and timely distribution of their services.	Strengthened capacity of the dealers in the production and marketing of agriculture inputs
2.1.4	Provide strategic support to selected R&D institutions to develop and disseminate improved agricultural inputs.	Enhanced capacity of R&D institutions for improved agricultural inputs
2.1.5	Enhance the capacity of extension service providers (public and private) by redeployment, training and providing them with working tools	Improved availability and effectiveness of extension services

Sub-component 2.2: Strengthening private sector capacity for agro-industrialisation

The capacity of the private sector to engage in agro-industrialisation is constrained by among other factors, use of old and inefficient processing technologies, lack of economies of scale for SMEs, poor product quality management, product sorting, pricing, auctioning, negotiation, contracting and procurement of raw materials and technical machines/services. The entrepreneurial culture in Tanzania is generally low and the skills thereof. SMEs lack the necessary institutional business techniques/skills to develop, organise and expand their business activities.

TAIDF will develop interventions to address these gaps by targeting selected youth and women groups and existing SMEs in the selected TAIDF regions. Among other interventions, TAIDF will provide in-door training; facilitate access to efficient technologies; strengthen agro-processors groups to tap the benefits of economies of scale in production and marketing; and also,

strategically, through public-private partnerships, support the construction of industrial production business sheds for agro-processing groups, business capital support, product promotion, etc.

Output Areas: Capacity to private sector for agro-industrialisation

S/N	Priority Activities	Results
2.2.1	Link SME processors with suppliers of efficient technologies including invitations for demonstrations/promotion to the agro- processors (e.g. During the International and domestic Trade Fair in Tanzania)	A shared understanding of the needs and opportunities and required interventions (development of investment plan)
2.2.2	Strengthen agro processors’ groups including their commercial viability (e.g. by designing and providing training programmes on the management of the groups, product quality management, product sorting, pricing, auctioning, negotiation, contracting and procurement of raw materials and technical machines/services for their equipment)	Effectively functioning agro processors groups with all the necessary basic skills for enhancing their performance. SMEs attain Tanzania Medicine and Medical Devices Authority (TMDA) and Tanzania Bureau of Standards (TBS) standard requirements
2.2.3	Facilitate the intervention of support services for SMEs in order to increase the enterprises’ share of the market (this could be through the provision of information (on markets, standards, technologies)	Increased market share for SMEs involved in agro= processing activities
2.2.4	Support the establishment of youth led PPP on agro-industrialisation.	Youth led PPP in place and active in agro-industrialisation related activities
2.2.5	Provide technical assistance to the development of small-scale processing units that sell to the larger factory for further processing, grading and packaging, grading and packaging (SIDO)	Increased ability of small-scale producers to supply large-scale factories

Sub-component 2.3: Market Linkage

Farm input markets are disorganised and disjointed from farm production and sometimes non-existent. Markets for farm produce are also disorganised and disconnected from processors leading to poor market access, low commercial viability of agro-products and thus leading to high transaction costs and risks to dealers in the agro-industry value chains. This constrains profitability and investment across the agro-value chains. Organising small-holder farmers into sizeable producer groups will create sizeable sources for the supply of raw-materials, improve handling and storage, and potentially reduce transaction costs in the marketing of farm produce and agricultural inputs. This will enhance the market competitiveness of agro-products and agro-inputs.

The Flagship design supports the establishment of formalised market linkages between agro-industrialists and producer groups to improve agro-marketing. This will include connecting the producer groups and agro-processor groups to new and existing markets including promoting their products in the domestic and regional markets.

Output Areas: Effective markets for agro-products

S/N	Priority Activities	Results
2.3.1	Link farming households, farmer cooperatives and AMCOS to agro-processing firms in the IAIPs.	Effective marketing linkages between farmer groups and agro-processing firms
2.3.2	Establish advisory one-stop shops that will connect producers and agro-processors.	Improved interactions between producers and agro-processors established
2.3.3	Encourage investment by trading companies in backward linkages and post-harvest systems.	Enhanced investment in primary processing by trading companies
2.3.4	Promote and strengthen producers' organisations to enhance bulking of produce, collective marketing and bargaining power.	Enhanced bargaining power of farmers through strong producer groups
2.3.5	Liaise with the associations of the existing agro-industries to promote and support formalized linkage with established producer groups/cooperatives for efficient marketing of agro-inputs and farm produce.	Established/strengthened markets for agro-inputs and agro-industries raw materials
2.3.6	Promote 'buy Tanzania' agro-products and connect agro-processors to new national, regional and other international markets.	Increased market awareness and appreciation of Tanzanian agro-products

Sub-component 2.4 Agro-Financing

TAIDF will need investment from both the public and private sector. In both cases there will be a need for financing. TAIDF will have a comprehensive resource mobilisation plan to attract resources from the public sector actors and will also support access to finance by the private sector. TAIDF will support/promote initiatives that help the financial institutions to have financial products suitable to finance private participation in its implementation. In promoting access to finance to farmers and other agro-entrepreneurs, TAIDF promotes the use of innovative financing approaches that have so far been used in Tanzania. The following examples show the agriculture financing approaches that have been used in Tanzania.

Example 1: The SAGCOT Catalytic Trust Fund (SAGCOT-CTF): This fund was designed to provide innovative forms of financing, to reduce the risks and costs traditionally associated with the agricultural sector. The fund is backed by the Government and Development Partners. SAGCOT-CTF uses the following mechanisms: Matching Grants Fund (MGF) and the Social Venture Capital Fund (SCVF). The following is a summary of these facilities.

- The MGF is a US\$ 45 Million fund designed to catalyse investments in the SAGCOT Region through US\$ 250,000 - 1.5 Million grants in capital or operational expenditure or technical assistance to improve the productivity of smallholder farmers into commercial supply chains.
- SCVF is a US\$ 20 Million fund designed to offer debt financing to earlier stage companies to facilitate the growth of emergent agribusinesses on a commercial scale and develop greater engagement with smallholder farmers.

That **SAGCOT-CTF** is already financing various activities related to TAIDF is a good indication that there is room to build on this fund. Examples of relevant TAIDF interventions supported by SAGCOT-CTF are the Njombe and Asas Milk Processing Plants.

Example 2: Financial inclusion for smallholder farmers in Africa project (FISFAP)

AGRA, in partnership with the MasterCard Foundation has provided matching grants and technical expertise to local organisations in Tanzania to accelerate innovative business models for (financial) services delivery to small-scale staple crop farmers in Tanzania. The project provides grants and technical assistance to organisations by developing innovations that improve farmer access to critical financial and non-financial services that could improve their productivity and operations. It also conducts a range of learning activities, aimed at crowding-in financial service providers, governments, and other organisations to deliver improved financial and non-financial products and services for smallholder farmers. Through FISFAP, AGRA has supported partners in Tanzania to develop and deploy digital delivery channels, digital (financial) solutions, and aggregation and value chain finance solutions. The case of the Small Entrepreneurs Loan Facility (SELF), a wholesale micro-finance project illustrates FISFAP's work in Tanzania. SELF manages an AGRA fund that supports three local financial institutions to develop and deploy a digital 'income smoothening' loan product with the help of AGRA-supported technical experts. The loans are disbursed in tranches including a household expenses cash disbursement just before harvest, which prevents farmers from selling their produce prematurely and at low prices.

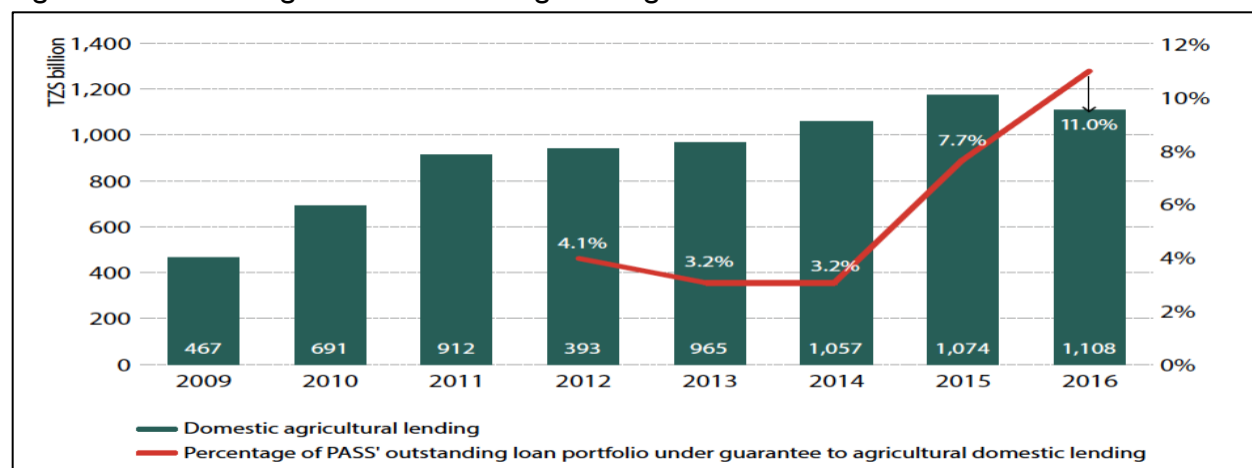
Example 3: AGRA Yield Wise Maize Programme in Tanzania

World Food Programme is a co-leader of this partnership; other implementing partners include the Centre for Sustainable Development Initiatives, Rural and Urban Development Initiatives, Building Rural Income Through Enterprise, Innovare L3, Input Suppliers (YARA, BAYER, SYNGENTA, SEEDCO, PANNAR) and Commercial Banks (Equity, NMB, CRDB and AKIBA). Besides the Tanzania Government, other stakeholders are Farmer Organisations, Maize Commodity Traders and Processors, Agro-Dealers, Manufacturers of Post-harvest Technologies and Smallholder maize producers. This initiative aims at reducing food loss and waste by half by 2022. In Tanzania the programme aims to attain this objective by addressing four key constraints to agriculture: Low maize productivity, access to markets, maize post-harvest losses reduction and access to finance. With support from the WFP-led Patient Procurement Platform, forward delivery contracts are used to collateralise input loans - loans for fertiliser, hybrid seeds and herbicides. Similarly, through Yield Wise, AGRA has made progress with financial institutions to develop innovative financial products targeted at smallholder farmers.

Example 4: Private Agricultural Sector Support (PASS)

PASS is an independent trust established in Tanzania to promote and facilitate investment in the primary agricultural sector and agribusinesses. PASS provides access to financial and business development services to the sector, for both smallholder farmers and agribusinesses through the provision of credit guarantees to partner financial institutions and assisting potential borrowers in the development of business plans. Financial institutions that partner with PASS in Tanzania are the Cooperative Rural Development Bank (CRDB), National Microfinance Bank (NMB) and Tanzanian Agriculture Development Bank (TADB). Findings of a PASS evaluation carried out in 2018 showed that the use of a credit guarantee instrument rather than offering loans directly has enabled PASS to gain the confidence of financial institutions to be able to support the agribusiness sector. By operating through partner financial institutions, PASS increases its reach to the agricultural sector by leveraging its own capital with that of financial institutions (DANIDA, 2019). A recent evaluation of PASS⁷ has found that through its interventions to promote the development of bankable business plans and the provision of credit guarantees, “the proportion of loans guaranteed by PASS relative to the overall agriculture financing market has increased over time” (Figure 5.2).

Figure 5.2: PASS & Agricultural Marketing Lending in Tanzania



Example 5: SIDO and the CRDB Bank Partnership

SIDO and the CRDB Bank have an operational funding partnership through which agro-processors in the country can access loans. The CRDB bank disbursed Tshs 1.34 billion to 34 agro-processors (SMEs) in loans between July 2015 and September 2019. The loan amount ranges from Tshs 10m to 50m per SME. SIDO guarantees the loans under its Credit Guarantee Scheme – funded by the Japanese Government’s Agriculture Food AID Counterpart Programme.

⁷ http://www.netpublikationer.dk/UM/evaluation_tazania_march_2019/Pdf/evaluation_tazania_march_2019.pdf

Takeaways for TAIDF

The above examples show how several financial solutions have been successfully used to support agriculture in Tanzania. They show that there is already a good foundation on the solutions for agriculture financing. Thus, TAIDF will leverage on these initiatives, by building on them to the extent possible as well as making use of lessons on what works and what doesn't work as far as financing agriculture is concerned.

Output Area: Agro-finance access to agricultural producers and agro-industry investors

S/N	Priority Activities	Results
2.4.1	Liaise with financial institutions including commercial banks and other business providers (e.g. insurance services) to develop suitable/customized financial services for agro-industrialisation (e.g. value chain approach) and promote them accordingly.	Appropriate financial products and other services are developed and accessed by producers and processors
2.4.2	Support innovation in loan products, lending methodologies, delivery mechanisms and risk assessment methodologies	
2.4.3	Link agro-industry associations/groups to the financial institutions to facilitate their access to finance	Appropriate financial products and other services are accessed by producers and processors
2.4.4	Mobilise the existing and other viable sources (e.g. prepayment schemes) of micro finance for farm inputs to negotiate and facilitate smallholder farmers' access to sources of concessional and commercial credit	Improved access to agro finance towards commercialization of the agro inputs and products markets
2.4.5	Enhance uptake of existing risk Sharing and Financing Mechanism (Grant, Soft loans, Equity Financing, and Risk Guarantee Fund) for financing private sector involvement in agro-processing and agro-industrialisation (paying attention to women/ youth led agribusinesses)	An effective risk sharing mechanism and support facility in place
2.4.6	Link women and youth farmers to financial services to support for development of small and medium sized agro-industries, this includes provision of technical assistance to enable them develop quality business plans and loan applications.	Youth and women access financial services for the development of small and medium sized agro-industries

Component 3: Support to Individual and Institutional Capacity Strengthening for Effective Agro-Industrialisation

Sub-component 3.1: Development of quality skills for agro-industrialisation

Section 2 of this document has shown that Tanzania has a shortage of people with skills relevant for agro-industrialisation. There is a shortage of engineers, technologists, technicians and craftsmen who are innovators with training on the operation and maintenance of manufacturing plants and equipment. There is also a shortage of people with skills in business, entrepreneurial and management operations. More information on the skills required to facilitate the

implementation and realisation of the objectives of this Flagship on agro-industrialisation is presented in Section 7 of this document. TAIDF will invest in developing these skills with priority to the youth and women. In implementing this component TAIDF will also carry out a skills assessment to define and establish the quality skills needed to drive agro-industrialisation. The assessment will map out the current situation, gaps and opportunities in relation to the development of quality skills.

Output Area: Availability of quality skills for agro-industrialisation

S/N	Priority Activities	Results
3.1.1	Undertake comprehensive agro-industrialisation skills gaps and implement skills development interventions (such as industrial attachment and internships) targeted at youth and women to provide them with relevant agro-industrial and entrepreneurial skills (SIDO)	Increased availability of the right skills mix to support agro-industrialisation and value addition
3.1.2	Liaise with the technical and vocational training authorities, universities, and stakeholders of each value chain to improve the training curriculum for agro-processing in training institutions. Improve the quality and relevance of the training provided through the Vocational Educational and Training Authority (VETA).	Enhanced relevance of the skills and competencies of graduates from technical and vocational training authorities, universities for agro-industrialisation. Competent and competitive human capital (vocational, technical, professionals, graduates and postgraduates) in areas relevant to agro-industrial development

Sub-component 3.2: Support key public and private institutions to strengthen their capacity to facilitate effective and sustainable agro-industrialisation

TAIDF's objectives are to be achieved through the involvement of several key public and private institutions. Most of these institutions generally lack the essential capacity to facilitate effective and sustainable industrialisation. Thus, capacity development is required and TAIDF has included several institutional capacity development initiatives under this sub-component. Moreover, in Section 7, a capacity development plan is presented which focuses on the required skills and attitudes for staff in these institutions. The plan indicates who is targeted, the required skills and how the skills will be strengthened.

Output Area: Individual and Institutional Capacity Strengthening

S/N	Priority Activities	Results
3.2.1	Develop a detailed capacity development plan for all key institutions to be involved in the implementation of TAIDF (i.e. implementing partners and collaborating institutions)	Capacity development plan developed
3.2.2	Build capacity of relevant staff to enhance their skills in different areas such as business planning, contract negotiation, stakeholder engagement, contract negotiation, PPP arrangements, resource mobilisation	Capacitated and skilful staff for agro industrialisation in place
3.2.3	Build capacity of public and private institutions at national, regional and district levels to improve their abilities for park management and administration, investor mobilisation and marketing and value chain development.	Strengthened public and private institutions at all levels for participation in agro-industrialisation

S/N	Priority Activities	Results
3.2.4	Support capacity strengthening for institutions responsible for manufacture/assembly of tractors and agricultural tools (CAMARTEC-Arusha, TAMCO – Kibaha,	Increased availability of affordable and appropriate tractors and agro-tools.
3.2.5	Develop the capacity of TEMDO in terms of suitable technologies (machinery, equipment and devices)	Increased availability and adoption of suitable technologies to support agro-industrialisation
3.2.6	Establish new agro-technology development centres (TDCs) and strengthening seven existing TDCs	A shared understanding of the needs and opportunities and required interventions (development of investment plan)
3.2.7	Train TAIDF Projects' Implementing Partners (IP), Collaborating Institutions and Key Stakeholders on the TAIDF (components, sub-components, activities, institutional framework, M&E, etc.)	Capacitated and knowledgeable TAIDF Implementing Partners
3.2.8	Support the review of the EPZA operational framework to integrate agro-industrial park establishment and management	Enhanced EPZA for effectively supporting integrated agro-industrial park establishment and management
3.2.9	Train ASDP II Agricultural Sector Steering Committee (A-ASC); TAIDF Steering Committee; TAIDF Coordinating Unit; & TAIDF Consultative & Coordinating Forum on the Agro-Industrialisation and the Flagship and their roles in its implementation.	A good understanding of contemporary thinking in agro-industrialisation in Tanzania; the TAIDF; and their roles in the ensuring effective implementation of the TAIDF.
3.2.10	Design and implement a special scheme (additional incentives – e.g. connections to mass markets) for investors in the following agro-products: production of vaccines and veterinary medicines, production of improved seed varieties, producers of fertilisers, processors of by-products, producers of pesticides, and producers of light agro-industrial machines and spare parts	Increased production of agro-inputs for farming and processing. Increased processing of industrial by-products
3.2.11	Support local research institutions to carry out applied research focusing on developing business cases and upscaling existing technologies for agro-industrialisation. The research will focus on identifying practicable and commercially viable innovations that have already been developed and proved to be successful in Tanzania and other parts of the world.	Increased new knowledge on business models and approaches for upscaling technologies for agro-industrialisation.
3.2.12	Strengthen the system for enforcing food safety controls based on traceability and proper handling.	Improved system of food safety controls
3.2.13	Provide strategic support to the National Irrigation Commission (NIRC) in collaboration with selected R&D institutions to develop and disseminate low cost and efficient irrigation technologies.	Low-cost irrigation technologies disseminated

Sub-component 3.3: TAIDF Coordination and Monitoring and Evaluation

TAIDF is a large-scale and complex national programme requiring that it be well coordinated and managed to ensure the effective implementation and attainment of the intended results. Thus, it needs a strong and well-equipped implementing team. In Section 7 and in the implementation manual, a suitable institutional structure, key positions and job descriptions (the kind of staff and capacity required) have been presented. Arrangements for staffing the TAIDF's structure and the institutions to be involved in the implementation are also presented. Likewise, in Section 8 and the implementation manual, detailed guidelines for TAIDF's monitoring and evaluation framework are given. The framework will facilitate the provision of timely and reliable information on TAIDF's physical and financial progress and as well as outcomes and impacts.

Output Area: Capacity and Operational Support for TAIDF Implementing Team

S/N	Priority Activity	Outputs
3.3.1	Recruitment/ secondment of TAIDF staff	Suitable staff in place for effective and efficient implementation of TAIDF
3.3.2	TAIDF implementation activities including implementation planning, technical supervision, Flagship coordination, resource mobilisation, fiduciary (financial management, procurement), environmental and social safeguards implementation and monitoring and evaluation for all project activities	TAIDF Annual work plan and budget, proposals for funding of TAIDF activities, implementation progress reports, coordination meetings held
3.3.3	Purchase of equipment for the TAIDF Secretariat	Equipment
3.3.4	Facilitate the regular operations of the TAIDF Secretariat and organs.	Financial and logistical support availed

5.8 Phases of TAIDF Implementation

To effectively implement TAIDF, it is important to have a long-term vision whose implementation will happen in phases. Therefore, it is envisaged that TAIDF will be implemented over a 10-year timeframe in blocks of three phases, organised as summarised in **Table 5.1**. The first two phases will be implemented in a total of six years, three years for each phase, from 2020/21 to 2025/26, and the third phase will cover four years from 2026/2027-2029/30. This programme document focuses on the first two phases. After the six years of implementation, a comprehensive performance review will be carried out to plan and prepare the implementation of phase three.

Phase One will concentrate on the construction of four agro-industrial parks, the rehabilitation of industrial infrastructure and building new industries. In addition to improving the enabling environment for agro-industrialisation in Phase One, agriculture will be modernised including linkages to efficient markets, availability and access to inclusive finance, and capacity building of individuals and institutions for agro- industrialisation. Phase Two will see the creation of another four new agro-industrial parks and the completion of the activities started in Phase One.

As elaborated in section 4.3 of this document, TAIDF interventions in Phases One and Two will be implemented in 16 regions, namely: Arusha, Dar es Salaam, Dodoma, Geita, Iringa, Kagera, Kigoma, Manyara, Mara, Mbeya, Morogoro, Mtwara, Mwanza, Singida, Shinyanga and Tanga. The industrial parks will be built in 12 out of the 16 TAIDF regions. **Table 5.2** proposes the regions for the location of the agro- Industrial parks.

Table 5.1 Major TAIDF Interventions by Phases*

Phase	Key Interventions
Phase 1 2020/21-2022/23	<ol style="list-style-type: none"> 1. Carrying out studies and assessments (feasibility studies, needs assessment for the agro-industries, skills assessment) 2. Resource mobilisation for TAIDF implementation 3. Strengthening of the institutional framework for TAIDF implementation 4. Rehabilitation and improvement of the existing Agro-Industry infrastructure 5. Construction of 4 new agro-industrial parks 6. Construction or rehabilitation of supportive infrastructure for agro-industrialisation 7. Implement interventions to strengthen the enabling environments for agribusiness and agro-industry development 8. Implement interventions on inclusive finance 9. Interventions on agriculture modernisation and competitiveness 10. Support to individual and institutional capacity strengthening for effective agro-industrialisation
Phase 2- 2023/24-2025/26	<ol style="list-style-type: none"> 1. Construction of another 4 new agro-industrial parks 2. Construction and rehabilitation started in Phase 1 continued (for a different set of agro-industries) 3. Continue to strengthen the enabling environment for agro-industrialisation 4. Continue to implement interventions on inclusive finance 5. Continue and complete the initiatives on inclusive finance started in Phase 1. 6. Capacity strengthening started in Phase 1 continued
Phase 3: 2025/26-2028/29	<ol style="list-style-type: none"> 1. Review of achievements and challenges of Phase 1&2, plan 2. Prepare and implement Phase 3 including construction of another 4 agro-industrial parks

*For activity details, open Annex 5.

Table 5.2 Proposed Phasing of Agro-Industrial Park Development

Phase	Period	Priority regions for location of agro-industrial parks
Phase 1	2020/21-2022/23	Dar es Salaam/ Pwani*, Dodoma, Mwanza, Arusha
Phase 2	2023/24-2025/26	Iringa, Morogoro, Geita, Kigoma
Phase 3	2026/27-2028/29	Mbeya, Mara, Tanga, Manyara

Notes: Dar es Salaam is small in land area but has a relatively very large population while Pwani which potentially has very big land area neighbouring Dar es Salaam by a completely circling it. Therefore, location of industries may be in Pwani while destination market and exit point to other markets are in Dar es Salaam.

During Phase One and Two, agro-industrial infrastructure and capacity of Tanzania will be expanded and improved in the TAIDF regions, while at the same time agriculture will be modernised and intensified involving the selected priority commodity value chains. The modernisation will include the improvement of agro-input production, supply and improvement of marketing for agro-products. This will include a cross-cutting improvement in the availability and access to improved inclusive finance for agribusiness activities, especially for SMEs involving women and youth groups. TAIDF will have direct and indirect catalyst activities along the entire agro-value chain. Expanded and improved processing will stimulate the production of the priority

commodities – a direct catalyst intervention of TAIDF; while increasing production of the priority commodities will stimulate production-cum-supply of improved farm inputs – another indirect catalyst activity of TAIDF; and increasing the production of improved agro-inputs will require expanded and improved agro-industrial infrastructure and capacity – to be directly catalysed by TAIDF.

6. Budget Estimates for TAIDF (2020/21-2025/26)

The estimated total government and private costs of Phases One & Two of TAIDF is **US\$ 2,989.1 million**, of which the Government and Development Partners are expected to contribute a total of **US\$ 320 million** during the six years of the Flagship (**Table 6.1**). In turn, the projected investment from the private sector including farmers, primary processors and agro-industrialists is **US\$ 2,669.1 million** during the six years of implementation of the two first phases of TAIDF.

Analysis of the cost estimates for TAIDF differentiates between two main sources of finance; the Government including Development Partners, who will mainly contribute a catalyst or seed fund for the Flagship, and the private sector from which much of the investment costs will come from. The TAIDF document makes a description of the costs and estimates for the two sources for each component of the Flagship. TAIDF's direct benefits of US\$ 16,690.44 will be realised against the total investment of US\$ 2,989.1 million of which 10.7% will come from the Government and Development Partners and 89.3% will come from private sector investments including smallholder farmers.

6.1 Description of Government Implementation Costs for TAIDF

Component One of TAIDF has four sub-components and four sub-components to be achieved with total costs of US\$ 229.1 million. The cost of each sub-component has been estimated from the list of the planned main activities and the expected results presented in **Annex 5** of this TAIDF document; the annex shows the costing details for each intervention or sub-component. Rehabilitation and improvement of the existing Agro-Industry infrastructure will cost the Government a total of US\$ 10.4; while the estimated budget for rehabilitation and construction of supportive infrastructure is US\$ 10.9.

Construction of new agro-industry infrastructure - mainly agro industrial parks, (Sub-component 1.2) will cost US\$ 194 million; estimated from the average cost of building a standard industrial park (100 - 300 acres) of US\$ 25 million (EPZA's cost estimates, 2019; FAO, 2006⁸). During the implementation of TAIDF's first two phases, a total of eight integrated agro-industrial parks (IAIPs) will be built. The Sub-component 1.4 on ensuring an enabling environment for agribusiness and agro-industry development in the country has an estimated budget of US\$ 13.8 million for the six years of the Flagship.

⁸ FAO 2006: Agro-industrial parks: Experience from India by K. Laxminarayana Rao

Agriculture Modernisation and Intensification, Component Two, focuses on the promotion of commercialisation and competitiveness of the agriculture sector, market linkages and inclusive finance with an estimated cost of US\$ 55.8 million in the six years of the TAIDF. This will include US\$ 11 million for promoting agriculture sector competitiveness, US\$ 20 million for strengthening private sector capacity for agro-industrialisation, and US\$ 9 million for establishing and strengthening market linkages, and US\$ 15.8 million for ensuring inclusive agro finance.

Support to individual and institutional capacity strengthening for effective agro-industrialisation, will cost a total of US\$ 19.9 million. The support includes the development of quality skills for agro-industrialisation at an estimated cost of US\$ 3 million; strengthening the capacity of public and private sector institutions to facilitate effective and sustainable agro-industrialisation at a total cost of US\$ 11.9 million; and support for TAIDF Coordination and Monitoring and Evaluation at a cost of US\$ 5 million.

Table 6.1: Summary of the TAIDF Government⁹ Implementation Costs for Phases One & Two

Component	Description of Component	Sub-components	Main Outputs	TAIDF Costs to the Government in Million USD	
				By Sub-component	By Component
1	Infrastructure, Support Services, and Incentives for Agro-Industrial Development	Sub-component 1.1: Rehabilitation and improvement of the existing Agro Industry infrastructure	Selected agro industries that are fully renovated and improved	10.4	229.1
		Sub-component 1.2: Construction of new agro-industry infrastructure	Eight new and fully-developed agro industrial parks in selected ecological zones	194	
		Sub-component 1.3: Construction or rehabilitation of supportive infrastructure for agro-industrialisation	Supportive infrastructure for agro-industrialisation	10.9	
		Sub-Component 1.4: Enabling environments for agribusiness and agro-industry development	Enabling environment for agro industrialisation	13.8	
2	Agriculture Modernisation and Intensification	Sub-component 2.1: Promoting agriculture sector competitiveness	Availability and use of improved agricultural inputs by farmers	11	55.8
		Sub-component 2.2: Strengthening private sector capacity for agro-industrialisation	Strong and capable private sector for agro-industrialisation	20	
		Sub-component 2.3: Market Linkages	Effective markets for agro-products	9	
		Sub-component 2.4: Inclusive Finance	Availability of agro-finance across agro- value chains and access by all potential investors	15.8	
3	Support to individual and institutional capacity strengthening for effective agro-industrialisation	Sub-component 3.1: Development of quality skills for agro-industrialisation (focusing on youths and women)	Availability of quality skills for agro-industrialisation	3	19.9
		Sub-component 3.2: Support key Public and Private Institutions to strengthen their capacity to facilitate effective and sustainable agro-industrialisation	Strong and capable public and private institutions for agro-industrialisation	11.9	
		Sub-component 3.3: TAIDF Coordination and Monitoring and Evaluation	Strong and effectively capacitated TAIDF implementing team	5	
Total				304.8	
Add 5% Contingency				15.2	
Grand Total				320	

Source of Data: TAIDF Priority Activities Costing: Annex 5

⁹ Includes costs to be funded by the Development Partners.

In Component One of TAIDF, the lions' share of costs, i.e., 71.2%, will be investments in agro-industrial infrastructure, support services, including the enhancement of an enabling business environment for agro-industrialisation in Tanzania. Component Two, Agriculture Modernisation and Intensification, has a budget share of 17.4%; and Support to Individual and Institutional Capacity Strengthening for effective agro-industrialisation, in Component Three, will take 6.2% of the TAIDF costs (**Table 6.2**).

Table 6.2: Summary of the Proportional Distribution of the TAIDF Government Costs by Component

TAIDF Component	% Share of TAIDF Government Costs
Infrastructure, Support Services and Incentives for Agro-Industrial Development	71.2
Agriculture Modernisation and Intensification	17.4
Support to Individual and Institutional Capacity Strengthening for Effective Agro-Industrialisation	6.2
Contingency	4.8
All components	100

Data Source: TAIDF Costs in Table 6.1

6.2 Estimation of the Projected Private Sector TAIDF Investment Costs

Government investment in TAIDF is expected to trigger private sector investments in agro-industrialisation for agro-processing and production of the priority commodities and agro-inputs. During the first phase of TAIDF, four industrial parks will be built and effectively begin operating in Year 4 of the Flagship. EPZA's estimate shows that, on average, an agro-processing plant costs about US\$ 2 million to establish. Based on the EPZs performance as indicated earlier, once construction of an industrial park is completed, investors in agro-industries will be innovatively incentivised and begin to establish manufacturing plants in the park. This will be a gradual process before the park is fully occupied. TAIDF will provide strategic incentives for speedy agro-industry investment in the parks. It is projected that construction of four agro-industrial parks will be completed in Phase One, i.e., at the end of the third year of implementation of TAIDF. The design of the Flagship projects is such that during its six years of implementation, for each of the completed Phase One developments, four agro-industrial parks will be able to attract at least five industries per year (source: consultation with EPZA). The Phase One agro-industrial parks will begin operations in Year 4, and the total expected private sector investment for agro-industries during the six years of implementation of the Flagship is US\$ 40 million per year (i.e. five plants x 4 Phase One completed industrial parks x US\$ 2 million = cost of establishing a plant), sequentially from the fourth to the sixth year of the Flagship and beyond. During Phase Two of the TAIDF, four more IAIPs will be built by the end of the sixth year, for which there will be more investments from the private sector.

The TAIDF will include investments in agriculture modernisation and intensification leading to increased production of crops, livestock and fish. The improvements are anticipated from two sources of impact; one being increasing productivity for the three sub-sectors, while the second will be expanding acreage production for crops, as the demand for agro-industry raw materials increase when agro-industry capacity expands. The increase in production will be associated with increased investment in the production of crops, livestock and fish by the private sector – basically smallholder producers. As indicated in the next section on estimation of TAIDF benefits, additional investments from small-holder farmers and fishers is estimated to constitute about 50% of the additional gross income from farming activities; which has been estimated at TZS 5,497.75 billion (US\$ 2,421,915,198.2). TAIDF includes interventions on sensitisation, demonstration and training producers to make the switch to increased use of improved inputs and finance. As a result, smallholder farmers/fishers will benefit from the Flagship gradually, as they participate in the TAIDF interventions and tap into potential opportunities emanating from the Flagship. This is assumed to happen incrementally and reach 100% (by the number of participating households and depth of adoption of improved farm inputs) in Year 3 of the Flagship (i.e. sequentially at 20%, 40%, and 40%, respectively, for the first three years of the Flagship), and continue as reinvestments throughout the Flagship period and beyond. With 3.5 million beneficiary households, the average investment per household will translate into TZS 314,157 in Year 1, and TZS 628,314 in Year 2 and 3, respectively. The investment is expected to be mainly on agro-inputs for both production, primary processing, storage, and marketing. As such, implementation of Components One and Two of TAIDF is expected to address some of the risks in the agricultural value chain and attract increasing commercial finance not only agro-industries, but also farm production of raw materials by smallholder farmers.

Table 6.3: Summary of the Estimated Private Sector Costs for TAIDF (for 2020/21-2025/26)

S/N	Components	Costs in Million USD
I	Infrastructure, Support Services and Incentives for Agro-Industrial Development	120
II	Agriculture Modernisation and Intensification	2,422
III	Support to individual and institutional capacity strengthening for effective agro-industrialisation	Negligibly small
Total		2,542
Add 5% Contingency		127.1
Grand Total		2,669.1

Data Source: Estimates using various Reports and Table 6.6

6.3 Projected Financial Benefits of TAIDF

Key Assumptions and Estimation of Direct Benefits to Farmers

Expanded agro-processing coupled with increased domestic production of inputs is expected to accelerate improved farming. The TAIDF investments will stimulate productivity and production of the priority crops, livestock and fisheries through increased use of improved inputs. The review of the existing value chain analysis reports for the priority commodities, as indicated earlier in **Annex I**, shows that the proportion of all farmers using improved farm inputs is 19.8% on average. As indicated in the next sections, TAIDF envisages reaching 50% of farmers/fishers engaged in the priority value chains (in the selected regions); implying that about 30% of the farmers/fishers will be incentivised by the Flagship to use improved farm inputs. The assumed impact on production is estimated to be a 30% increase in production, at the minimum, during the six years of the implementation of the Flagship.

Increased agro-processing will increase the demand for agro-industry raw materials such that the increase in crop production will not have a negative effect on farmgate prices. Therefore, the increase in production is expected to increase farm incomes of households by 30%; and thus increase per capita rural income (GDP) by 30% - from TZS 2,276,500 to TZS 2,959,450 (NBS, 2018) – constituting an increase of TZS 682,950 per capita.

The total number of operators/households involved in each of the priority crop in the country, available from NBS Agriculture Survey 2016/17, is given in **Annex 6**. The existing reports of value chain analysis for the priority commodities show that about 70% of the crop producers and other operators in the crop value chains are in the TAIDF areas/regions. The TAIDF will seek to reach 50% of the operators in the selected commodity value chains which include primary producers or farmers and other operators. About 26% of farmers do not sell their produce; it is used for subsistence consumption; and, it is only 25% who sell more than 50% of their produce (World Bank Blogs, 2013). Therefore, to adequately meet the increasing demand for agro-industry raw materials due to the interventions of the Flagship, TAIDF interventions will need to directly reach at least 50% of farming households engaged in farm production in the priority crops.

Estimates from the NBS 2016/2017 Agricultural Survey Results (**Annex 6**) indicate that there were 10,037,341 operators; of which 50% is 5,018,671. Of these operators, about 3.5 million are estimated to be households out of which the estimated 7 million beneficiary farmers will come from. Therefore, TAIDF is expected to benefit about 3.5 million farming households directly in the 15 regions covered by the Flagship. Total incremental income per year for the beneficiaries

(farmers) is $682,950 \times 3.5\text{m households} \times 4.6$ (HH size) = TZS 10,995,495,000,000 (US\$ 4,843,830,396.5¹⁰) per year.

Net income to farmers will be 50% of the gross income because farming costs constitute about 50% of the gross earnings - various studies (e.g. UNCTAD 2017, FAO¹¹ 215, Ministry of Agriculture and Food Security, and Mushi & Kundi 2016, including consultations with farmers' associations) indicate that smallholder farming costs range from 40% – 60%. Therefore, Net total income from increased farm production due to the TAIDF interventions is estimated at TZS 5,497,747,500,000 (US\$ 2,421,915,198.2) per year.

As indicated later, value addition by operators other than farmers is estimated at 25%. Using the same NBS Agricultural Survey results, it is estimated that about 1,518,671 operators other than farmers operate in the priority commodities in the TAIDF priority regions; implying that their estimated additional income from the interventions of the Flagship will be TZS 2,748,873,750,000 (US\$ 1,210,957,599). In total, the benefit emanating from activities of the operators (farmers and others) in the priority value chains is TZS 8,246,621,250,00 (US\$ 3,632,872,797.4)

Estimated Direct Benefits from Agro-Industrial Processing During the TAIDF Implementation Period

The value added by agro-processors (at secondary level) ranges from 25%-35% - and averages 30%. Projecting a conservative estimate of value addition of 25% from secondary processing, the contribution of the TAIDF agro-processors to earnings can be estimated as 25% over and above the value of TZS 13,744,368,750,000 (US\$ 6,054,787,995.6) (gross income from primary production and primary processing). This will translate into TZS 3,436,092,187,500 value added by secondary processing; of which their net income is about 25% of the value i.e. TZS 859,023,046,875 (US\$ 378,424,249.72) per year during the six years of the implementation of the Flagship (e.g. in seed cotton value chain processors earn about 28% as net income of their sales, UNCTAD, 2017).

At the end of the implementation of the TAIDF interventions, eight agro-industrial parks will have been established and continue to attract investors. This will increase agro-processing activities and increase further the demand for agro-raw materials; and thus, potentially perpetually increasing the benefits realised from the Flagship.

¹⁰ 1 USD = TZS 2,270

¹¹ When labour costs are not included

Direct Benefits from Increased Domestic Production of Agro Inputs

Domestic production of agro-inputs is currently around 10% of the total needs (Ministry of Agriculture 2019 estimates, **Annex 1**). Increased productivity will approximately have 10% of the associated costs paid to domestic producers of the farm inputs. This implies that 10% of the total additional farm costs is equal to $0.1 \times 5,497,747,500,000$ (TAIDF incremental costs to farmers) = TZS 549,774,750,000 per year - addition gross income to domestic producers of farm inputs. Using the same value added of 25% by agro industry, domestic production of the inputs will earn a net income of about TZS 197,081,288,898.75 (US\$ 86.82 million) per year.

6.4 Financial Cost and Benefit Flows of TAIDF

The financial cost flows of the TAIDF will be associated with the timing of the implementation of the Flagship interventions including the priority activities. Construction and rehabilitation of infrastructure for agro-industrialisation will involve more time than some of the other activities of the Flagship. However, modernisation and intensification of agriculture will begin right away from Year 1 with gradual investment as farmers adopt improved agricultural inputs gradually (**Table 6.4**). The projected benefits will start flowing in Year 2 consistent to the adoption of the improved inputs. TAIDF projects that the full benefits will be realised after the end of Phase One; and this will be gradual at 40% in Year 2, 80% in Year 3, and grow to 100% in Year 4 (**Table 6.5**). Domestic production of inputs will respond to the increase in production; as such, the benefits accrued from this sub-sector will be realised with the same pattern as those emanating from increased production of crops.

Table 6.4: Projected Financial Cost Flows of the TAIDF

Investment Costs in USD Million									
S/N	Components		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
1	Infrastructure, Support Services and Incentives for Agro-Industrial Development	GoT	29.7	44.1	63.1	33.1	44.9	14.2	229.1
		Private				40	40	40	120
2	Agriculture modernisation and intensification	GoT	11.3	11.3	11.3	11.3	7.2	3.4	55.8
		Private	484.4	968.8	968.8				2,422
3	Support to individual and institutional capacity strengthening	GoT	4.4	3.5	3.5	3.5	2.5	2.5	19.6
Sub Total Government			48.9	66.8	85.8	51.2	57.9	23.4	304.8
Add Contingency 5% (Government)									15.2
Total Government									320
Sub Total private			484.4	968.8	968.8	40	40	40	2,542
Add Contingency 5% (Private)									127.1

Total private	2,669.1
Grand Total Costs for the TAIDF	2989.1

Table 6.5: Projected Proportions and Time Schedule of the Flows of the TAIDF Financial Benefits

Source of Financial Benefits	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Increased Agro-Processing	0	20%	40%	60%	80%	100%
Increased Production of The Priority Crops	0	40%	80%	100%	100%	100%
Increased Production of Agro-Inputs	0	40%	80%	100%	100%	100%

The projected financial benefits from the TAIDF is US\$ 16,690.44 million for the initial six years of the implementation of the Flagship. The benefits will be accrued from three main sources of impact including production and supply of agro-inputs, increased production and marketing of agro-raw materials, and agro-processing and marketing of agro-processed products. The benefits will continue beyond the Flagship as the agro-processing sector expands and so as crop production and other related agro-activities.

Table 6.6: Projected Financial Benefits of the TAIDF (In USD Million)

Net benefits from	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total for Six Years
Increased Agro-Processing	0	75.6	151.2	226.8	302.4	378	1,134
Increased Production of Agro Inputs	0	34.5	70	86.4	86.2	86.2	362
Increase in Production	0	1472.8	2945.6	3682	3682	3682	15,464.4
Total Direct Benefits	0	1,582.9	3,165.8	3,995	4,070.6	4,146.2	16,690.44

6.5 Estimation of the Internal Rate of Return for TAIDF

TAIDF direct benefits of US\$ 16,690.44 will be realised against a total investment of US\$ 2,989.1 million, of which US\$ 320 million (10.7%) will come from the government and 2,542 (89.3%) will be borne by the private sector. TAIDF's Internal Rate of Return (IRR) is estimated at 54.5% based on the total initial cost of the Flagship. The rate makes the Flagship significantly financially and economically viable as it indicates that within the six years of implementation, the rate of return on the investment is higher than any other feasible rate potentially attainable from the funds. The payback period of six years is also relatively short given the size of the investment.

6.6 Expected Impact of TAIDF

TAIDF will have direct and indirect beneficiaries of its interventions. These will include primary producers of the priority commodities and their associations, people living in the areas with TAIDF supported activities, traders of the priority crops and related business activities (e.g. inputs distribution, SMEs, agro-industrialists, job seekers in the agro-processing sub-sector, other unemployed youth in urban and rural areas, as well as public and private institutions involved in the implementation of the TAIDF.

Direct and Indirect Beneficiaries of TAIDF

TAIDF interventions will reach and directly benefit the different people and institutions involved in the priority commodity value chains in the selected regions. These include agricultural producers (crop farmers, livestock keepers, and fish-farmers), farmer cooperatives and unions, livestock keepers' associations, traders, agro-processors, input suppliers, members of SMEs, private investors, staff of the relevant public and private institutions.

TAIDF interventions will have spill over effects in the form of indirect benefits to households and institutions that will not be directly reached by its support. These include rural populations in the coverage areas who will enjoy improved levels of infrastructure, increased employment, financial services provider, transport service providers and consumers of products from production and the agro-industries.

Annex 4 provides a framework of analysis and estimation of the number of beneficiary farmers of TAIDF using NBS population estimates for 2018. The estimated number of beneficiaries of TAIDF is 7 million households; of which 5 million households will benefit directly, and two million indirectly¹².

Most of the direct beneficiaries of TAIDF will be in the 16 priority regions of TAIDF. These regions have about 50% of the operators of the priority value chains (as per the 2016/2017 NBS Agricultural Survey Data). The operators include farming households and other operators along the value chain (**Annex 6**). The operators come from households – implying that they can be categorised into two: farming households and non-farming households or non-farming operators. In Phases One and Two, five (5) million households (farming and non-farming) in the TAIDF priority regions will benefit directly; of which about 3.5 million are farming households (estimated from 7 million farmers analysed in **Annex 6**) and 1.5 million are other households operating along the agricultural value chains.

¹² This is 70% of all households in the TAIDF catchment areas

The total number of farmers who will benefit from TAIDF is 7,025,630 (estimates based on the population estimates by regions for 2018, and projections by the National Bureau of Statistics (Annex 4). These beneficiaries are also reflected in the estimated beneficiary farming households (3.5 million) indicated earlier on by considering an average of two adult farmers in each household.

TAIDF will reach 7 million households directly and indirectly; implying that the total number of people to be reached by the Flagship is 4.6 (household size in TZ) x 7 million households = 32.2m people, of which 34.9% or 11.24 million (NBS 2018 population estimates) are youth.

Using the current unemployment rate of 9.7% (NBS 2018 gives a total of 1.09 million unemployed youth in the Flagship regions. TAIDF will increase agro-processing activities, which in turn will stimulate agro-marketing, primary processing, transport, storage, production, supply of inputs, crops and livestock production (including fishing). These activities will create employment opportunities for about one million of the unemployed youth and women in the TAIDF area. The youth will be reached through various capacity building activities relevant for agro-industrialisation such as targeted training on agro-industrial enterprises, value addition and entrepreneurial skills, training on agribusiness skills, marketing, internship opportunities, and support to access affordable and youth-friendly financial services for agri-business, support to establish youth PPP initiatives in agro industrialisation and awareness and sensitization.

Estimated Impact on Manufacturing and General GDP

TAIDF is expected to have an increase of 5% on the total GDP by 2025. The Flagship is expected to have an additional contribution of 9.7% to the manufacturing GDP by 2025; and assuming the current growth rate of 7% of the manufacturing GDP remains persistent for the next five years, the contribution of TAIDF to the agro-processing GDP is expected to increase by 12% and raise the contribution of the sub-sector to manufacturing GDP from 65% in 2017 to more than 77% in 2025.

In 2017, the contribution of the manufacturing sub-sector to GDP was 5.5% (NBS, 2019) equivalent to TZS 6.5 trillion at current prices; of which about TZS 4.2 trillion or 65% was agro-processing GDP. The annual GDP growth rate for the manufacturing sub-sector was 7.1% implying that by 2019, the contribution of the manufacturing GDP had reached TZS 7.45 trillion assuming the growth rate was constant. Assuming that the growth rate of 7% persists in the next five years (without the TAIDF), manufacturing GDP would reach a total of TZS 11.2 trillion (5.8% of GDP) by the year 2025. By the end of Year 6, i.e. 2025/26, TAIDF is expected to contribute

TZS 1.2 trillion to the manufacturing GDP, amounting to 9.7% contribution to the manufacturing GDP; and thus, raising the manufacturing GDP from the current 5.5% of GDP to 6.4% by 2025 (see GDP projections below). This is expected to increase further when Phases Two and Three will be fully operational. Using projected GDP growth rates for Tanzania from the statistical data based on international statistics and market data, the country's GDP is expected to reach US\$ 84.81 billion or TZS 192.519 trillion by 2025. With the contribution of TAIDF (TZS 9.5 trillion), GDP is expected to increase further and reach TZS 202.019 trillion in 2025; for which the total contribution of TAIDF to GDP will be about 5%.

Summary of Projected Impacts of TAIDF by 2025

- **At least 5%** increase in the total GDP by 2025
- An additional contribution of **9.7%** to the manufacturing GDP by 2025
- **7 million** households will benefit directly and indirectly by 2025. Out of these 5 million people will benefit directly and 2M indirectly. This will translate to about 32.2 million people.
- The **5 million** households to benefit directly will include:
 - **3.5 million** farming households (reaching at 7 million farmers)
 - **1.5 million** non-farming households (operating as primary processors, aggregators/traders, secondary processors, input suppliers etc.)
- **1 million people** (mainly women and youth) will gain new employment opportunities in TAIDF related activities
- Of the 1 million new jobs, **100,000** will be direct jobs in agro-industries (for input production and agro-processing) to be built or rehabilitated under TAIDF (see indicative numbers in **Table 6.6**)
- **At least 600** Small and Medium Sized Enterprises agro-industry (SMEs) will be supported
- **At least 60** Public and private Institutions at national and subnational levels will be supported to effectively implement the government's agro-industrialisation goal

Table 6.6 Estimated number of jobs to be generated through TAIDF interventions

S/ N	Activity serial number in the TAIDF document	Description of TAIDF Activity/Intervention	Target Beneficiaries	Expected Number of Direct Jobs		
				Self-employment	Wage employment	All
I	I.1.2	Support revival of selected existing agro-industries through provision of strategic support to strengthen their technologies and commercial viability	About seven big agro-industries will be revived with an average support/guarantee of US\$ 2m per industry from the TAIDF. Shareholders of the existing agro-industries, potential employees of the industries		An estimated 200 new jobs from each industry	1,400 (200 employees x seven industries)

S/ N	Activity serial number in the TAIDF document	Description of TAIDF Activity/Intervention	Target Beneficiaries	Expected Number of Direct Jobs		
				Self-employment	Wage employment	All
2	1.2.3, 1.2.4, 2.2.2, 2.2.4, 3.1.1	<p>Build agro-industrial parks</p> <p>Mobilise and incentivise potential investors to establish agro-processing plants in the designated industrial parks including processors of by-products</p> <p>Build the capacity of the agro-processors' groups including their commercial viability</p> <p>Implement skills development interventions targeted at youth and women to provide them with relevant agro-industrial and entrepreneurial skills</p> <p>Support the establishment of youth led PPP in agro-industrialization</p>	<p>Big investors and SMEs – initially about 20 in each AIP – making a total of 20 x 8 parks = 160</p> <p>Each firm is expected to employ about 200 people (current EPZA average in the Benjamin William Mkapa Economic Zone)</p>	<p>600 small agro-processors (with 5 or less employees) will be supported. The estimated employees in each small processor is four. In total 4 x 600 = 2,400. These can be considered as self-employed.</p>	<p>AIPs will employ 200 x 160 = 32,000 people directly in the first six years.</p>	34,200
3	1.3.2, 1.3.3	<p>Construction/rehabilitation of marketing infrastructure as identified by the needs assessment (e.g. cold storage facilities, milk collection/chilling centre, warehouses,</p> <p>Establishment of milk collection/chilling centres</p>	<p>About 40 facilities will be constructed/rehabilitated (at an average cost of US\$ 200,000)</p>		<p>Each facility is expected to employ at least five people. In total there will be 40 x 5 = 200 jobs</p>	200

S/ N	Activity serial number in the TAIDF document	Description of TAIDF Activity/Intervention	Target Beneficiaries	Expected Number of Direct Jobs		
				Self-employment	Wage employment	All
4	2.1.1	<p>Strengthening the capacity of producers (and producer organisations) to modernise agriculture production and transit from subsistence farming to commercial agriculture.</p> <p>2.1.2 Design and implement an effective program on sensitization, demonstration and training of agricultural producers (for crops, livestock and fisheries) on good agricultural practices.</p>	<p>About 3.5m farming households producing the priority commodities will be directly reached by TAIDF. With HH size of 4.9 people, the total number of people to be reached directly is $3.5m \times 4.9 = 17.15$. About 9.7% (NBS, 2018) of the work force (56.1% of the total population) are unemployed. This translates into TAIDF reaching 933,251 unemployed people.</p>	<p>This will increase by 2.8% (population growth rate) per year – leading to an additional 58,392 more people potentially employable in the TAIDF interventions.</p>	<p>Hired labour emanating from the TAIDF interventions will be part of the youth population – who will either become self-employed or seek jobs in the commodity value chains</p>	933,251
5	2.3.5, 2.4.4	<p>Liaise with the associations of the existing agro-industries to promote and support formalised linkages with established producer groups/cooperatives for efficient marketing of agro-inputs and farm produce.</p> <p>Mobilise the existing and other viable sources (e.g. prepayment schemes) of micro finance for farm inputs to negotiate and facilitate smallholder farmers' access to sources of concessional and commercial credit</p>	<p>About 1.5 non-farming HH will be reached by TAIDF interventions on SMEs development (training and facilitation), providing commercial services – e.g. supply of inputs, marketing of produce, processing, etc. Potentially, 441,198 unemployed people will be reached.</p>	Partly self employed	Partly wage employment	441,198 (includes those indicated earlier under no. 1-3 above)

7: Institutional Framework for the TAIDF Implementation

7.1 Executing Agency

The TAIDF, as one of the ASDP II programmes will be implemented under the Prime Ministers' Office (PMO), which coordinates ASDP II implementation. During the design of TAIDF, the stakeholders recommended that the Ministry of Industries and Trade (MIT), assisted and guided by the ASDP Secretariat, be TAIDF's lead execution agency, working jointly with the Ministry of Agriculture (MoA), Ministry of Livestock and Fisheries (MLF) and the President's Office – Regional and Local Government (PO-RALG). They noted MIT's comparative advantage in leading the TAIDF implementation since the ministry had already been working on issues of industrialisation which is the focus of TAIDF. In reality, the responsibility for TAIDF implementation will still be the ASDP II Secretariat's. MIT will only support the Secretariat with the operational implementation of the Flagship.

Given the diverse nature of interventions to be implemented under TAIDF, the Flagship's implementation will also entail well-designed and effectively managed partnerships involving various Government Ministries, Departments and Agencies (MDAs), the private sector, farmers organisations and the Development Partners. Their involvement will depend on the relevance of their mandates and the capacity to handle the various sub-components and constituent activities.

MIT, with the close guidance and on behalf of the ASDP II Secretariat at the PMO will partner with MoA, MLF and PO-RALG to handle the overall operational management of TAIDF activities, providing overall coordination and technical support to the TAIDF's Implementation Coordination Unit (TICU) and Implementing Partners (IPs). Specifically, MIT will (a) ensure that TICU is staffed with highly competent officers, deployed from Government either on a full-time or part-time basis and be appropriately incentivised while keeping their existing positions; (b) provide office space, operational policies and procedures in several areas including financial management, procurement, and environmental and social management; (c) commission and execute the oversight of independent annual performance assessments of TAIDF; (d) communicate the results of the annual performance assessment to the ASDP II organs; (e) request and follow up with the Ministry of Finance and Planning (MoFP) and other funders to disburse funds to IPs on time; (f) and, collect and aggregate data from IPs to track the use of grant funds and other resources earmarked for the TAIDF.

7.2 TAIDF Coordination Team (TCT)

The TAIDF implementation coordination team (TCT) will be formed to work at the TAIDF Implementation Coordination Unit (TICU) to be centred at MIT. TCT shall report to the ASDP II Secretariat and governance organs through to the Permanent Secretary of MIT.

TCT will provide a professional and institutionally neutral platform for overall planning, coordination, and facilitation of TAIDF activities. Specifically, TCT, under the oversight of the Permanent Secretary of MIT (in collaboration with the Permanent Secretaries of MoA, MLF and (PO-RALG), will maintain overall responsibility for the management and supervision of TAIDF, including: i) preparation of the Annual Work Plans and Budgets for approval by the ASDP governance organs; ii) execution of the approved work plan and budget; iii) procurement of goods, works and services; iv) financial management and accounting; v) monitoring and reporting; vi) knowledge management (preparation of reports and other knowledge products related to TAIDF implementation); vii) resource mobilisation for TAIDF and viii) facilitating compliance with environmental, gender and other social safeguards. TCT will also be responsible for reviewing and updating the draft TAIDF implementation manual developed in the process of TAIDF design.

The composition of the TCT will include: i) TAIDF Coordinator (TC); ii) M&E Specialist; iii) Specialist: Infrastructure, Support Services, and Incentives for Agro-Industrialisation Component; iv) Specialist: Agriculture Modernisation and Intensification; v) Specialist: Agro-Capacity Strengthening; and vi) Specialist – Resources Mobilisation for Agro-Industrialisation. This staffing structure ensures that TAIDF is well supported by agro-industrialisation sector specialists who can advise on several aspects including the types of equipment to procure, studies to carry out, etc. In addition, each component gets a lead specialist to ensure its efficient and effective implementation. The specialist for resource mobilisation will lead a resource mobilising team whose role is to mobilise partners for fund raising. MIT in conjunction with the ASDP II Secretariat, MoA and MLF, will constitute a team of experts to support the resource mobilisation drive. Furthermore, MIT will allow and enable TCT to use Ministerial staff to support the administrative, procurement, communication, and accounting activities of TAIDF.

The technical specialists in the TCT will comprise existing Government staff with the necessary competence, deployed to TAIDF either on full-time or part-time basis and incentivised appropriately while keeping their existing positions. The right candidate for the position of TAIDF Coordinator should have extensive experience in implementing large development programmes entailing agriculture production, agro-processing and markets and trade development. The TAIDF implementation manual provides job descriptions for all key positions in TICU. These should be used in identifying the right staff for the TCT. **Figure 7.1** presents the overall implementation coordination management structure.

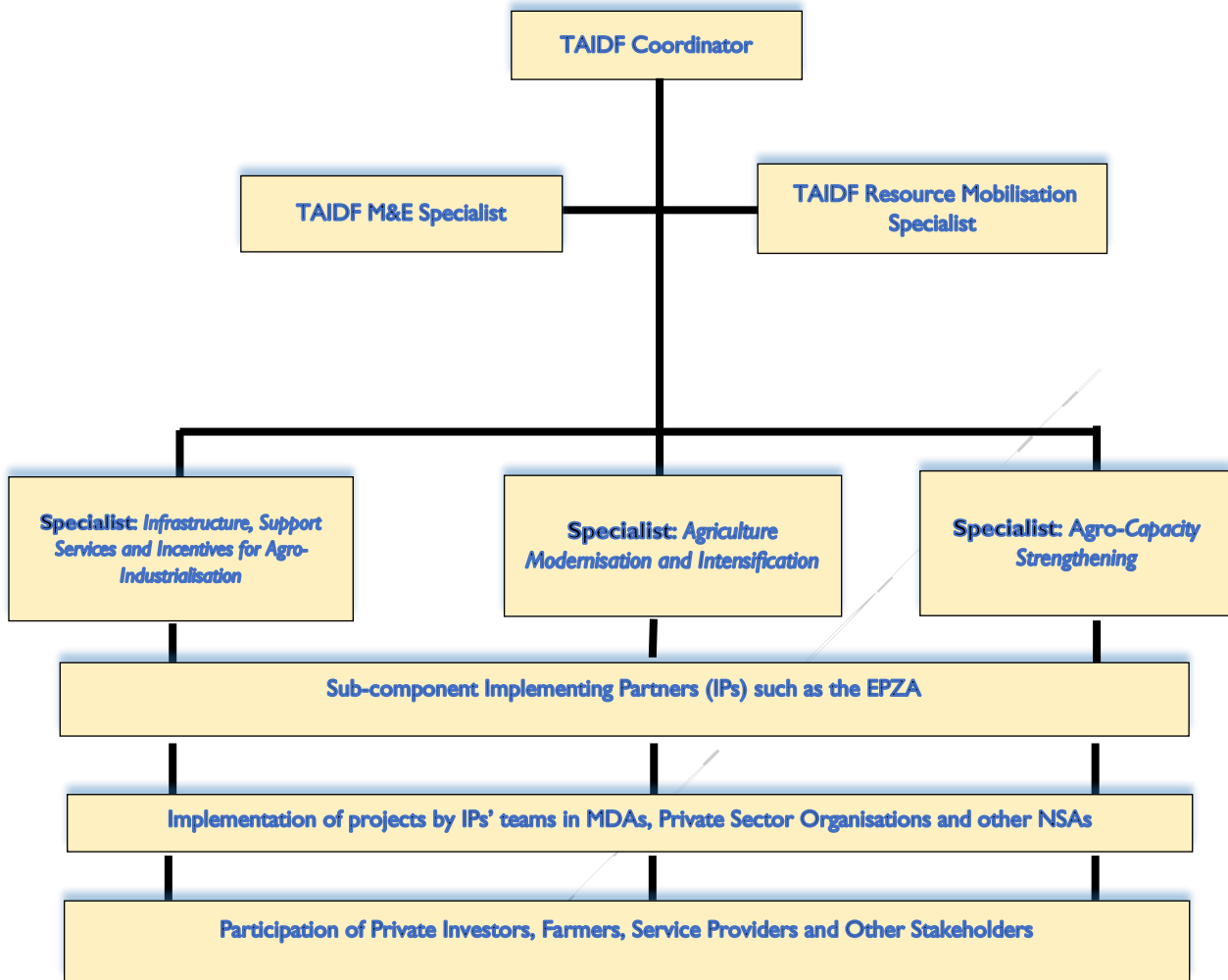


Figure 7.1: Proposed TAIDF Implementation Coordination Structure

Each component specialist (CS) will oversee the assigned TAIDF component under which there will be at least one sub-component. Furthermore, once projects to implement TAIDF have been decided and developed by the ASDP II Organs, they will be assigned to earmarked Implementing Partners (IPs) to manage. The implementation of each project by an IP will be coordinated by a designated Project Coordinator (PC) appointed from within the IP. The implementation of the projects will as far as possible, make use of existing staffing capacities and infrastructural resources of the IPs. Each IP will implement its respective sub-component with the support and involvement of collaborating institutions.

7.3 Decision Making and Participation Structure

Since TAIDF is one of ASDP II programmes, it will be governed, and answerable to the ASDP II key organs (Table 7.1). The TCT will thus report to the ASDP II Secretariat i.e., ASDP II National

Coordination Unit (NCU). In turn, since TAIDF is among the ASDP programmes, the ASDP II Secretariat will be responsible for submitting reports to the ASDP II organs.

The ASDP II organs are designed to ensure the effective and interactive involvement of the public sector, private sector, civil society and Development Partners. As such, they will be able to adequately facilitate an inclusive participation and involvement of all key TAIDF stakeholders, reflecting the public-private partnership nature of the Flagship. Expectedly, this would contribute to enhanced trust between the public and private sectors, that is essential for the success of the Flagship.

Whenever necessary, depending on the nature of the issues being discussed, the TCT will arrange with the ASDP II NCU for the right stakeholders to be invited to the relevant meetings of the ASDP II organ discussing TAIDF.

Roles of key TAIDF coordination and implementation organs/actors are outlined in Table 7.2.

Table 7.1: ASDP II National Level coordination organs, mechanisms, and membership

Forum	Chair	Members
National Agricultural Sector Stakeholder Meeting (NASSM)	Prime Minister	Ministers of Lead Components and Related Ministries (ASLMs), MoFP, Director-NBS, Development Partners, and Private Sector, Non-State Actors (NSAs), RS, LGAs, District Executive Directors (DEDs); DAICOs, DLFOs; research officials; training officials; academia representatives; commodity boards; financial institutions; farmer-based organisations/associations and cooperatives, commodity associations, and successive agriculture associations and SACCOS; representatives of other related stakeholder organisations/players in the agricultural sector
Agricultural Sector Steering Committee (ASC)	Minister Ministry of Agriculture	Permanent Secretaries of Lead Components and Related Ministries (ASLMs), PS-MoFP, Development Partners representatives and Private Sector Representatives/NSAs
Agricultural Sector Consultative Group (ASCG)	Permanent Secretary Ministry of Agriculture,	Permanent Secretaries of Lead Components and Related Ministries (ASLMs), PS-MoFP, DG-NBS, All Development Partners supporting agriculture and Private Sector, NGOs/CBOs, Farmer Based Organisations and Cooperatives, Research and Training Institutions.
Technical Committee of Directors	Permanent Secretary Ministry of Agriculture,	Directors of Lead Components (ASLMs), DPP- MoFP, Economic Director NBS
ASDP II National Coordination Unit (NCU)	National ASDP II Coordinator	Members of National Coordination Unit (NCU)

Table 7.2: Roles of key TAIDF coordination and implementation actors

S/N	Organ/Actor	Roles
1	Agricultural Sector Steering Committee (ASC)	<ul style="list-style-type: none"> (i) Oversee and approve all TAIDF issues. (ii) Review and approve TAIDF plans, budgets, implementation, monitoring and evaluation reports. (iii) Facilitate and approve establishment of TAIDF funding strategies. (iv) Review and approve TAIDF financial and audit reports, (v) Approve TAIDF management, coordination and operational issues
2	Technical Committee of Directors	<ul style="list-style-type: none"> (i) Provide technical advice to the Agricultural Steering Committee on TAIDF technical, governance and management issues. (ii) Guide the NCU on the implementation of TAIDF. (iii) Recommend to ASC on plans, projects, guidelines and procedures for implementation of TAIDF. (iv) Review and scrutinize TAIDF performance and recommend to ASC on courses of action.
3	ASDP II National Coordination Unit (NCU)	<ul style="list-style-type: none"> (i) Coordinate and drive the implementation of TAIDF with operational, executive, support of MIT working only with MoA, MLF and PORAG (ii) Supported by MIT (working only with MoA, MLF and PORAG), prepare and develop draft strategic anchor projects to operationalize TAIDF and assign them to competent Implementing Partners (IPs) and identifying all respective collaborating stakeholders. (iii) Work with existing or potential programmes, projects and initiatives for enhanced alignment with the TAIDF framework. (iv) Supported by MIT, prepare and develop draft consolidated annual work plans and budgets for TAIDF for TCD scrutiny and ASC approval. (v) Supported by MIT, manage, monitor, evaluate, harmonise and coordinate implementation of TAIDF and its implementation projects; (vi) Prepare and consolidate quarterly implementation reports for onward submission to TCD, ASC and other national forums. (vii) Provide analytical and problem-solving support to the TAIDF and its projects. (viii) Production of manuals, guidelines and publicity and communication materials for TAIDF. (ix) Mobilise funding for TAIDF implementation (x) Request and follow up with the Ministry of Finance and Planning (MoFP) and other funders to disburse funds to TAIDF activities on time. (xi) Manage TAIDF M&E functions; establish and share best practices & lessons learnt under TAIDF. (xii) Facilitate and coordinate TAIDF financial audit and submit the same to TCD.
4	MIT jointly with MoA, MLF and PO-RALG	<ul style="list-style-type: none"> (i) House the TICU at MIT on behalf of PMO. (ii) Supervise and monitor TICU on behalf of PMO. (iii) Provide TAIDF logistical support (including procurement, financial and administrative services). (iv) Under the close guidance and on behalf of the ASDP II NCU, operationally manage the implementation of TAIDF activities. (v) Staff TICU with highly competent officers, deployed from Government (vi) Provide TICU with office space, operational policies and procedures in many areas including financial management, procurement, and environmental and social management. (vii) Support the NCU to prepare and develop draft strategic anchor projects to operationalize TAIDF

S/N	Organ/Actor	Roles
		<ul style="list-style-type: none"> (viii) Support NCU to prepare and develop draft consolidated annual work plans and budgets for TAIDF. (ix) Support the NCU on undertaking independent annual performance assessments of TAIDF. (x) Communicate the results of the annual performance assessment to the NCU. (xi) Collect and aggregate data from IPs to track performance and the use of grant funds and other resources earmarked for the TAIDF.
5	ASLMs	<ul style="list-style-type: none"> (i) Support and facilitate the implementation of TAIDF. (ii) Support implementation of TAIDF by mainstreaming relevant interventions in Ministerial budgets and projects. (iii) Participate in the implementation of TAIDF projects as guided by NCU/TCT. (iv) Align respective strategies, plans, projects and interventions, translate within the TAIDF framework.
6	TAIDF's Implementation Coordination Unit (TICU) ¹³	<ul style="list-style-type: none"> (i) Responsible for the day to day operational coordination of the implementation of TAIDF on behalf of the ASDP II NCU. (ii) Prepare draft Annual Work Plans and Budgets for TAIDF. (iii) Execute approved TAIDF work plans and budgets. (iv) Prepare implementation progress report on TAIDF based on reports from IPs. (v) Coordinate the procurement of goods, works and services under TAIDF (vi) Undertake TAIDF financial management and accounting (vii) Responsible for close supervision, guidance, monitoring and reporting of TAIDF projects – implemented by IPs. (viii) Responsible for knowledge management (preparation of reports and other knowledge products related to TAIDF implementation). (ix) Support the ASDP II NCU in resource mobilisation for TAIDF. (x) Responsible for ensuring TAIDF compliance with environmental, gender and other social safeguards. (xi) Responsible for reviewing and updating the draft TAIDF implementation manual developed in the process of TAIDF design.
7	Implementing Partners (IPs)	<ul style="list-style-type: none"> (i) Accountable to TICU for efficient and effective implementation of assigned TAIDF project. (ii) Prepare draft Annual Work Plans and Budgets for assigned TAIDF projects for review and consolidation by TICU. (iii) Execute approved project work plans and budgets. (iv) Prepare implementation progress on assigned projects for review and consolidation by TICU. (v) Responsible for project procurement of goods, works and services under TICU coordination. (vi) Undertake project financial management and accounting under TICU coordination. (vii) Responsible for project monitoring and reporting. (viii) Responsible for ensuring project compliance with environmental, gender and other social safeguards.
8	Private Sector	<ul style="list-style-type: none"> (i) Participate in the implementation of TAIDF projects as guided by NCU/TCT. (ii) Invest in agro-industrialisation in line with the TAIDF framework. (iii) Align respective strategies, plans, projects and interventions with the TAIDF framework.

¹³ The job descriptions for the key positions at TICU are given in the TAIDF Implementation Manual

S/N	Organ/Actor	Roles
		(iv) Promote the benefits of TAIDF. (v) Contribute to the implementation of TAIDF through active participation and involvement in ASDP II organs.
9	Development Partners	(i) Participate in the implementation of TAIDF projects as guided by NCU/TCT. (ii) Facilitate resource mobilisation for TAIDF. (iii) Facilitate technical and other strategic and capacity building support to the implementation of TAIDF. (iv) Align respective strategies, plans, projects and interventions translate with the TAIDF framework. (v) Promote the benefits of TAIDF. (vi) Contribute to the implementation of TAIDF through active participation and involvement in ASDP II organs

7.4 The Implementation Structure for Agro-Industrial Parks

The establishment and management of agro-industrial parks is a major element of the TAIDF. This component requires a befitting institutional framework, using the existing legal and institutional frameworks as far as is practical, to minimise the duplication of efforts and to leverage the existing positive experiences and strengths.

The agro-industrial parks will be integrated into the Export Processing Zones Authority (EPZA). The EPZA is an autonomous Government agency under the Ministry of Industry and Trade - established in 2006. With the amendments of the EPZ and SEZ Acts by the Economic Development Zones (EDZs) Laws of 2011, the EPZA is mandated to manage the EPZ and SEC programmes in the country. Therefore, the Authority is responsible for attracting, promoting, facilitating, and licencing investments for industrialisation through the EPZ and SEZ programmes. The SEZ targets both export and local markets and embraces different types of economic zones, including industrial parks.

While the legal framework of the EPZA is suitable for accommodating agro-industrial parks, its operational framework requires amendments to include a department or unit for the coordination and management of agro-industrial parks. The amendments will be part of the activities of the TAIDF.

The functions of the EPZA vis-a-vis the agro-industrial parks initiatives will include to:

- (i) Establish and manage a critical number of viable agro-industrial parks starting with those envisaged under the TAIDF.
- (ii) Facilitate the integration of smallholder farmers and SMEs within a well-connected supply-chain infrastructure for agro-industrialisation.
- (iii) Support increased investments in agro-industrialisation through the availability of excellent production infrastructure and one-stop-centre services.

- (iv) Support the establishment of effective backward and forward linkages in agro-industrialisation.
- (v) Promote and support increased value addition for farm produce.
- (vi) Promote farm productivity through increased markets for agro-processed products and the production of agro-inputs.
- (vii) Promote increased exports of locally produced agro-processed products through the attraction of strong investors into the agro-industrial parks.
- (viii) Promote the development of an enabling regulatory and institutional framework for agro-industrialisation.
- (ix) Advise the government on how to enhance the incentives for private sector agro-industry investments in the envisaged agro-industrial parks.

Furthermore, each agro-industrial park level should be run as a Special Purpose Vehicle (SPV), a business-oriented centre that is accountable for its profitable performance and ability to deliver its objectives under the TAIDF. Its structure will include a manager and lean team of support staff.

7.5 Private Sector Engagement

Implementation of the TAIDF will accord private sector engagement (PSE) top priority since the main engine for agro-industrialisation is the private sector. Public sector investments, although just as important, remain insufficient for the transformation of agro-industrialisation in the country. The PSE strategy will engage the private sector for their views, ideas, action and participation in the management of the Flagship as well as the implementation of specific activities. Indeed, for some of the activities, the private sector will necessarily have to take a leading role.

The strategy for PSE will include the following main measures:

1. A clearly defined inclusion of the private sector in the implementation of those Flagship activities that directly relate to their areas of competence and comparative advantage.
2. Provision of strategic support and capacity building for the private sector to engage in agro-industrialisation. Specific measures can be seen in the details of the various projects.
3. As part of the TAIDF, the creation of enabling policies, regulations, infrastructure developments and incentives for the private sector to participate in agro-industrialisation.
4. Involvement of the private sector in the decision-making and implementation organs and consultative/coordination forums of the TAIDF.
5. Providing an opportunity for experienced people from the private sector to participate in the implementation of the TAIDF.
6. Involvement of the private sector in the mobilisation of the required investments under the TAIDF especially those that are concerned with commercial production and the provision of services including agro-finance.

7. Involvement of the private sector in the various activities to monitor, evaluate and review the progress in the implementation of the TAIDF.

7.6 Capacity Building Plan

When its components are broadly considered, TAIDF is largely a capacity development initiative. However, a capacity building plan that is sharply focused on the knowledge, skills and abilities required of people in key TAIDF target groups, implementing partners and collaborating institutions is presented in the Implementation Manual of the Flagship. The plan embraces entrepreneurial culture, technical skills for agro-industries and implementation skills including coordination. Its development is based on feedback from the various stakeholder consultations, the experiences of several programmes, reviews of existing labour market studies and an anticipatory assessment of key training needs implied by the nature TAIDF's sub-components.

In general, the technical specialists in TCT will lead and engage in the provision the capacity development interventions. They will employ a combination of delivery approaches including seminars, workshops, focussed meetings, mentoring, coaching and information sharing. Additionally, specialist support will be drawn (outsourced) from the IPs, Collaborating Institutions, Government Agencies, the Private Sector organisations, other projects and programmes and the Development Partners on a need-to-basis.

7.7 Implementation Action Plan

An implementation action plan for TAIDF is given in **Annex II**. It shows when the proposed sub-components will be implemented and the responsible implementing and collaborating institutions.

8: Accountability, Monitoring and Evaluation

8.1 Accountability

TAIDF will follow the CAADP/ Malabo mutual accountability principles since Tanzania is a signatory to CAADP and the Malabo Declaration and therefore, among the countries committed to the mutual accountability principles. The country is currently implementing a National Agriculture Investment Plan (NAIP) which has various mutual accountability platforms including the Agriculture Joint Sector Reviews and the Annual Biennial Reviews (BR). Progress on the implementation of TAIDF will be reported in these review processes.

8.2 Monitoring and Evaluation

In line with the ASDP II Monitoring and Evaluation Framework, TAIDF has developed a draft Monitoring and Evaluation framework to enable the Government and other stakeholders involved in the implementation of TAIDF assess progress towards achieving its intended objectives. The draft Results Framework is presented in **Table 8.1** and contributes to ASDP II, and, the Component Three results. The results framework articulates the key performance indicators for measuring progress towards achieving the main TAIDF outcomes. The indicators measure key changes expected from TAIDF implementation as per the TAIDF TOC articulated in Chapter 5.

Table 8.1: Results Framework for TAIDF

Result - level	Intervention logic	Indicators	Assumptions
Long-term Impact (High-level country outcomes)	Enhanced economic growth, wealth creation and food and nutrition security in Tanzania through agriculture	<ul style="list-style-type: none"> • Agriculture GDP growth rate • Poverty headcount ratio in rural areas – basic needs poverty line • Prevalence of stunting, underweight and wasting in children in the TAIDF regions • Percentage of households below the food poverty line 	<ul style="list-style-type: none"> • The overall national, political, economic, technological, socio-cultural, regulatory and climatic environment will be supportive of the transformation • Political and economic stability will prevail
Development Objective (Outcomes to which TAIDF contributes)	Enhanced structural economic transformation toward agro- industries, increased income and employment opportunities	<ul style="list-style-type: none"> • Contribution (%) of manufacturing to the GDP • Share of manufacturing to the GDP • Agro-processing value added (in Millions) • Number of different types of processed products (out of the targeted commodities/value chains) • Gross value (in USD) of agricultural imports • Gross value (in USD) of agricultural exports • Ratio of value of processed agricultural export to total agricultural export • Mean per capita Household Income of the beneficiaries • Percentage of the beneficiaries with increased asset ownership 	<ul style="list-style-type: none"> • The thrust and political will of the Government towards an industrial economy will be sustained • The thrust to reform the regulatory environment for vibrant agro-industrialisation will continue.

Result - level	Intervention logic	Indicators	Assumptions
Intermediate Outcomes	<p>Outcome 1 Expanded and strengthened local agro-industry through increased public and private sector investment into agro-industrialisation in the priority regions</p>	<ul style="list-style-type: none"> • Number of new private sector investors locating factories in IAIPs in the priority regions (disaggregated by gender and age) • Total value of new investments (US\$) by private sector companies operating in the IAIPs and other agro-industries supported by the Flagship • Total value (USD) of FDI to agro-industries • % capacity utilisation of benefiting industries • % increase in number of agro-industries including for the ones for value addition as well as the ones for producing agro-inputs • % of total agricultural production that is subject to value addition per value chain 	<ul style="list-style-type: none"> • There will be enhanced momentum to raise farm productivity for priority commodity value chains • Effective catalytic and other incentives for solid private sector investments in agro-industrialisation will be put in place.
	<p>Outcome 2 Enhanced agriculture modernisation and intensification to produce raw materials of adequate quantity and quality for agro-industries</p>	<ul style="list-style-type: none"> • Productivity levels of each priority commodity (crops, livestock and fisheries) • Production levels of each priority commodity (crops, livestock and fisheries) • Average producer revenues for each priority commodity (crops, livestock and fisheries) 	<ul style="list-style-type: none"> • Coordination and alignment of (other) initiatives related to promoting agricultural production and productivity with the goals of TAIDF will be take place. • Smallholder attitudes will improve towards enhanced agricultural production and productivity and commercialisation
	<p>Outcome 3 Enhanced market opportunities for agricultural products (raw materials as well as value added products)</p>	<ul style="list-style-type: none"> • Volume/Value of produce per group/farmer sold to local agro-industries supported by the Flagship • Gross marginal profit per unit of produce (TZS/kg) per value chain • Number of Memorandum of Understanding/contracts between producers, processors, agro-dealers, and traders, signed. • Percentage of postharvest losses for TAIDF priority value chains 	<ul style="list-style-type: none"> • There will be improvement in the competitiveness of Tanzanian agricultural products (raw materials as well as value added products).
	<p>Outcome 4 Enhanced Individual and Institutional capacity to implement and sustain agro-industrialisation efforts in the country</p>	<ul style="list-style-type: none"> • % of capacitated individuals using acquired skills relevant for agro-industrialisation (disaggregated by age, sex and training type i.e. short-term training or long-term training, government /non-state actors). • % of agro-industry firms in IAIPs that are satisfied with the quality of graduates from the technical colleges • % of institutions whose performance in industrialisation activities improved as a result of programme interventions • Number of learning institutions with specific courses on agro- 	<ul style="list-style-type: none"> • There will be appropriate designed and well-targeted capacity building initiatives implemented sufficiently to support agro-industrialisation

Result - level	Intervention logic	Indicators	Assumptions
		industrialisation as a result of TAIDF interventions	
	Outcome 5 Increased agro-industry based employment (targeting youth and women)	<ul style="list-style-type: none"> Total number of new jobs created through the programme (disaggregated by age group, gender and agro-industry type) % of graduates trained from the technical institutions who either become employed or self-employed in agro-value chains or in agro-industries (disaggregated by gender and sex) 	<ul style="list-style-type: none"> There will be sufficiently well skilled youth and women for the various roles opening up in agro-industrialisation
Outputs	Output 1 Agriculture producers are supported to increase quality and quantity of their produce to supply raw materials for agro-industries	<ul style="list-style-type: none"> Number of agriculture producers (including AMCOs, farmer associations and groups) benefiting from various productivity enhancing interventions 	<ul style="list-style-type: none"> Most of the agriculture producers (including AMCOs, farmer associations and groups) will commit to efforts to enhance agro-production, productivity, commercialization and win-win relationships with agro-industries
	Output 2 Agro-industries are strengthened and/or established	<ul style="list-style-type: none"> Number of agro-industries rehabilitated and equipped Number of agro industries built Number of agro-industrial parks established (in the priority regions) 	<ul style="list-style-type: none"> Existing agro-industries will readily commit to investing resources in rehabilitation efforts
	Output 3 Financial support for agro-industrialisation and other associated interventions in place	<ul style="list-style-type: none"> Amount of private sector resources invested in agro-industries Amount of public-resources invested in interventions to support agro-industrialisation Number of agro-dealers, producer groups and agro-processors (including SMEs) that are capacitated and linked to financial service providers (e.g. commercial banks) 	<ul style="list-style-type: none"> The priorities of the Government and Development Partners will be able to accommodate the provision of the facilitative investments in agro-industrialisation
	Output 4 Enabling environment to attract private sector involvement in agro-industrialisation in place	<ul style="list-style-type: none"> Percentage of respondents who indicate that there has been an improvement in business environment for agro-industrialisation Number of new incentives to attract private sector to invest in agro-industrialisation 	<ul style="list-style-type: none"> The political will to reform the enabling environment will be sustained
	Output 4 Interventions in place to support strengthening of Individuals and institutions to facilitate their effective	<ul style="list-style-type: none"> % of students trained from the learning institutions on areas relevant for agro industrialisation Number of youths who have benefited from capacity building programmes to enhance their skills for agro-industrialisation 	<ul style="list-style-type: none"> The modalities to have the individual and institutional interventions undertaken will be expedited in order to facilitate the overall implementation of TAIDF.

Result - level	Intervention logic	Indicators	Assumptions
	participation in agro-industrialisation related activities	<ul style="list-style-type: none"> • Number of private sector organisations including SMEs who have accessed capacity strengthening programmes (e.g. training, mentoring, technical support etc.) • Number of governments organisations that have accessed capacity strengthening interventions • Amount of technical human and financial resources mobilised to support agro-industrialisation in the relevant government institutions 	

8.3 Indicator Monitoring Plan and Activity Milestones

At the outset of the TAIDF implementation, a five-year monitoring plan showing *indicator* data sources, baselines and annual targets will be prepared to facilitate routine monitoring of the Flagship’s progress.

TICU will set key milestones (outputs) for each year, and use them in the annual reviews of the progress of the TAIDF. The review will focus on determining if the planned activities are moving towards achieving the annual targets and will observe if they are on track, off track, or at risk. In addition, the review will track any changes in terms of outputs realised over the period as well as assessing the issues, challenges and lessons learnt over the year and to what extent the outputs delivered contribute towards the achievement of the objectives. The milestone reviews will be conducted quarterly, and their findings used to adjust implementation strategies whenever necessary.

8.4 Periodic Evaluation

A midterm evaluation of the TAIDF will be undertaken after three years of implementation to assess the continued relevance of the Flagship and the progress towards achieving its set objectives. The feedback received will be used to adjust the implementation strategy and activities.

A final evaluation will be conducted towards the end of the sixth year to assess the relevance, extent of implementation, effectiveness, efficiency, impacts, sustainability, and lessons to be learned. The recommendations of the study will be used to inform future phases of the Flagship and/or related future programmes.

9: TAIDF Financing Strategy

9.1 Introduction

Adequately financing TAIDF at a total cost of US\$ 2,989.1 million during the six years of the Flagship will necessarily take an evolutionary approach given the scale of the investment requirements. TAIDF embraces two types of investments – facilitative and productive investments, amounting to US\$ 320 million and US\$ 2,669.1 million respectively. The former will be mainly financed by public resources from the Government and Development Partners, while the latter will be by private sector investors. The TAIDF financing strategy primarily focuses on the mobilisation of facilitative investments and on creating an enabling environment to crowd-in private investments into agro-industry. Thus, the Government through the TSC, operationally supported by TCT, will have the responsibility of brokering and promoting private sector investments. This section outlines the strategy for how the public and the private share of the required funding will be raised and the sequence through which this will be done.

9.2 The Role of the Partnership Approach & Funding Mechanisms

9.2.1 Effective Partnership

Funding for TAIDF facilitative investments requires an effective partnership between the Government and Development Partners. This will be achieved through the current ASDP II institutional framework as well the efforts of the frontline TAIDF actors. The Partnership will help mobilise a range of funds either specifically targeted at TAIDF and/or for broader use across Tanzania. It will also lobby for additional resources for commercial agriculture and agro-industry in general.

9.2.2 Funding Mechanisms

Within the partnership approach and subject to MOFP clearance, TAIDF financing will employ a combination of funding mechanisms ranging from Government budgetary funding, basket funding and off-budget project support. This happens at a time when, in line with the Paris Declaration, the Development Partners (DPs) increasingly align their support to national plans, utilising national systems, increasing the predictability of funding and harmonising the procedures and reporting systems to reduce transaction costs. Public sector resources will be channelled through the government budget, especially the ASLMs to implementing partners (IPs). Some DP funding will also be channelled through government budget, with the rest as off-budget. **Table 9.1** presents an overview of the main funding mechanisms to be promoted and employed for TAIDF.

Table 9.1 Funding Mechanisms for TAIDF

S/N	Funding Mechanism	Suitable Type of Investment	Remarks
1	General budget support (GBS)	Public investment	<ul style="list-style-type: none"> Relevant TAIDF activities included in GBS Full use of government systems
2	ASLMs budget support	Public investment	<ul style="list-style-type: none"> Relevant TAIDF activities included in ASLMs MTEFs or aligned with existing budgets Full use of government systems
3	Pooled or co-DP Funding	Public investment	<ul style="list-style-type: none"> DPs enter into joint financing agreement targeting certain activities in the TAIDF Full use of government systems
4	Project Funding	Public investment	<ul style="list-style-type: none"> Variable degree of alignment and use of government systems. Off-budget arrangements and use of Project Implementation Units (PIUs)
5	Private Sector Funding	Private Sector Investments	<ul style="list-style-type: none"> The TAIDF is designed to attract private sector investments into agro-industries

9.2.3 Indicative Trends in Public Funding for Agro-Industrialisation

Table 9.2 shows the trends in public funding for agriculture, including agro-industrialisation, from Government and Development Partners. Generally, the level funding has increased as a function of the total government expenditure but remains lower than the recommended CAADP target of 10%.

Table 9.2 Trend of actual government disbursements to the Agriculture sector (entailing the Agriculture Sector Lead Ministries - ASLMs)

Financial Year	Government Public Expenditure on Agricultural Sector (Tshs)	Total Government Public Expenditure (Tshs)	Percentage of Government Public Expenditure on the agricultural sector
2003/04	148,626,014,194.00	2,607,205,576,900.00	5.7
2004/05	157,683,020,600.00	3,347,539,008,700.00	4.7
2005/06	233,309,000,000.00	4,035,100,000,000.00	5.8
2006/07	276,578,000,000.00	4,788,500,000,000.00	5.8
2007/08	372,401,851,000.00	6,000,000,000,000.00	6.2
2008/09	517,611,034,570.00	7,216,130,000,000.00	7.2
2009/10	722,000,000,000.00	9,500,000,000,000.00	7.6
2010/11	903,800,000,000.00	11,609,557,000,000.00	7.8
2011/12	926,200,000,000.00	13,530,000,000,000.00	6.8
2012/13	1,103,611,531,000.00	15,000,000,000,000.00	7.4
2013/14	908,079,800,000.00	18,248,983,000,000.00	5.0
2014/15	1,084,700,000,000.00	19,853,300,000,000.00	5.5
2015/16	1,001,400,000,000.00	22,495,493,000,000.00	4.5
2016/17	1,001,400,000,000.00	16,098,898,000,000.00	6.2
2017/18	1,560,000,000,000.00	29,539,603,000,000.00	5.3
2018/19	1,057,703,382,804.00	31,000,000,000,000.00	3.4

Source: Authors' computation based on data from the Ministry of Finance

The Government is increasingly committed to allocating resources for industrial development. In the 2018/2019 budget, for example, a total of TZS 143 billion was allocated to industries, trade, and investments. The funds were aimed at the development of SMEs, development of industrial areas and special economic zones, industrial research, and feasibility studies on the rehabilitation of specified industries.

A further indicative picture of the potential funders/funding of TAIDF can be inferred from the available information on the contributions by the Agriculture Working Group of Development Partners to ASDP II (see **Annex 7**). By 2nd November 2018, about US\$ 1 billion in contributions was mobilised by the Agriculture Working Group of Development Partners for ASDP II of which 36.8% is for value addition and commercialisation, the focus of TAIDF. This status is quite reassuring, wherein with a partnership-focused, serious resource mobilisation effort, there are good chances of financing TAIDF satisfactorily.

9.2.4 On-going Complementary Initiatives

The consultations with several Development Partners as part of the preparation of TAIDF suggested that one of the effective ways of financing the facilitative and other required investments was for the TAIDF management, with MOFP clearance, to work with the Development Partners to align their existing and future programmes and projects with the objectives, components, sub-components and/or philosophy of TAIDF. As such, the partners would be effectively facilitating the development of a vibrant agro-industry in Tanzania.

Fortunately, there is already a good number of potential partners for TAIDF that are on the ground, working on related and complementary activities. First, is the Agricultural Markets Development Trust (AMDT) established by the Governments of Denmark, Ireland, Sweden, and Switzerland to empower smallholder farmers and MSMEs to become more competitive in selected markets and to create an enabling environment for agriculture in the country. Secondly, is the Tanzania Agricultural Development Bank (TADB), which is already partnering with AGRA on several projects to enhance agricultural production.

Thirdly, the Agriculture Fast Track Fund at the AfDB supports new SMEs in agriculture for enhanced jobs and smallholder farmer income. Tanzania is one of the countries already benefiting from this partnership, with four SMEs already funded. The fund is supported by USAID, DANIDA and SIDA.

Fourthly, the AfDB is working with the Government on a programme that entails the establishment of an agro-industrial park for livestock in the Lake Zone (the region will be confirmed after feasibility studies are concluded). The programme is accommodated within the TAIDF framework.

The foregoing examples of complementary funding clearly support the Government's resolve to finance the TAIDF through a partnership approach involving the Development Partners (DPs), Private Sector and Civil Society Sector.

9.3 Priority Funding Sources for TAIDF

The required funding envelope for TAIDF is part of the overall funding framework for implementing ASDP II – estimated in the ASDP II Resource Mobilisation Strategy to the tune of TZS 13.819 trillion. The strategy has outlined several traditional and innovative funding strategies/sources for ASDP II, principally, the Government’s budget; Development Partner contributions and support; municipal bond; global bond; donor funding; and broadening of the tax base.

Informed by the ASDP II Resource Mobilisation Strategy, funding approaches in on-going and past programmes/projects as well as the views of stakeholders, TAIDF will make use of the following traditional sources: Government’s budget and Development Partners’ contribution and support for the facilitative investments. Furthermore, it will implement the three innovative financing facilities to catalyse large volumes of commercial debt and equity into agro-industrialisation. These are usually designed to have effective conditions that readily catalyse the crowd-in value-adding and impactful private investments.

9.3.1 Catalytic Funding

The SAGCOT experience has illustrated the positive role of catalytic funding to facilitate increased private investments into agriculture and agro-processing, especially given that the current levels of investments are considered very low owing to the high costs and risks of investing in commercial agriculture and agro-processing. TAIDF will design and establish a *professionally managed catalytic fund* to provide “kick-start loans” for affordable conditions to step up the momentum for agro-industrialisation investments. The fund’s design and establishment will leverage the existing experiences and capacities at the SAGCOT Catalytic Trust Fund (SAGCOT-CTF). The fund will be disbanded once the country has been able to readily attract private finance. The Government in collaboration with the Development Partners will provide the seed capital funds to, among other priorities, support the acquisition of and finance bridging loans for production, and processing. The catalytic fund will essentially be a revolving fund.

9.3.2 Patient Capital

The Government will approach Development Partners whose mission is to support social-entrepreneurship projects and programmes in agriculture including agro-processing in order to establish facilities to provide patient capital - long-term, low-cost, subordinated seed capital. By reducing the costs and risks of commercial farming, patient capital is expected to catalyse additional private sector investments in agro-industrialisation. A good example of the partners to be engaged is the Africa Enterprise Challenge Fund (AECF) (info@aecfafrica.org), which seeks to fund innovative agro-business projects in Tanzania that benefit the rural populations. To catalyse private sector investments, AECF plans to provide grants and interest free loans to qualifying entrepreneurs to the tune of between US\$ 100,000 and US\$ 1,000,000 for each business.

9.3.3 Credit Guarantee Schemes

With Government approval, TAIDF will work with Development Partners and institutions like SIDO to establish new credit guarantee schemes, or strengthen the existing ones to promote agro-industrialisation. The schemes will be designed and supported to increase the availability of loan guarantees to leverage capital from the domestic banking sector into agro-industrialisation.

9.3.4. Development Finance

TAIDF will approach national, regional, and international Development Finance Institutions like TADB and TIB Development Bank in Tanzania and AfDB, East African Development Bank and TDB (the former PTA Bank) to invest in the establishment of the agro-industrial parks and other components or sub-components of the Flagship. For instance, AfDB already has a Flagship for financing and supporting staple crop agro-processing zones, to be implemented in collaboration with UNIDO.

9.4 Funding Mobilisation Structure and Process

The objective of TAIDF's funding mobilisation structure and process is to ensure a comprehensive and systematic approach that identifies and sets out the processes, sources, and activities for realising adequate and sustainable financial resources for the implementation of the Flagship. At the outset of implementing the Flagship, TICU will develop a comprehensive Resource Mobilisation Plan (RMP) that specifically sets out time-phased funding needs over the whole implementation period. The RMP will outline the base and then raise the required resources. MoFP will champion the mobilisation of resources with the close involvement of MIT, MoA, MLDF, PO-RALG as well as pertinent support institutions (e.g. Development Partners). The support institutions are expected to bring in their experiences in resource mobilisation and the lessons related to technologies, partnerships and models that could be scaled for competitive and inclusive agriculture and agro-industry in Africa.

There are three prerequisites for success:

- a. Coordination and leadership of the TAIDF resource mobilisation drive.
- b. Mapping of and approaching all key institutions as potential funders.
- c. Leveraging ASDP II resource mobilisation efforts.

9.4.1 Coordination and Leadership of the TAIDF Resource Mobilisation Drive

TAIDF plans to have a *national champion* for its implementation in the context of Tanzania's ambitious goal to become an agro-based middle income industrial economy. The champion will take on the burden of ensuring everyone involved is on board and behind the ultimate success of the Flagship. The Flagship will also deploy a dedicated officer responsible for funding mobilisation as well as financial management. One of the main responsibilities of this position will be to develop and maintain relationships, engage partners, coordinate, and manage all fundraising efforts.

9.4.2 Mapping of Institutions to be approached as Potential Funders

TAIDF management in collaboration with like-minded Development Partners will develop a comprehensive mapping of all potential funders. The funders will then be engaged to capture their areas of interest and possible commitment to finance the sub-components of the Flagship.

9.4.3 Leveraging ASDP II Resource Mobilisation Efforts

The ASDP II Resource Mobilisation Strategy, currently in draft form, has documented a comprehensive process for resource mobilisation, including the development of investment proposals as well as roadshows. It has been submitted to MOFP for review prior to endorsement. TAIDF therefore, does not need to re-invent the wheel. Its resource mobilisation efforts will leverage all relevant processes, efforts, capacities, and experiences of the ASDP II Secretariat. As such, all guidelines including the government guidelines on public investments will be observed as appropriate.

9.5 Headline Strategies for Funding Mobilisation

TAIDF will implement a three-prong strategy for resources mobilisation (see also **Table 9.4**). **First**, as provided for under ASDP II, as far as possible GVT systems and procedures would be used including *inter alia* integrating public investments envisaged in the TAIDF into ongoing and prospective Government programmes and budgets.

Second, is the promotion of interventions that facilitate the crowding-in of private sector investments into agriculture and agro-industry. These will include¹⁴:

- Measures to enhance the enabling business environment and agriculture and processing productivity.
- Measures to clearly define the space for the private sector *vis-à-vis* the public sector.
- Advocacy on further public investments that attract more private sector investments by reducing private sector risk and enhancing efficiency.

Third, is the work with the Development Partners that have committed to supporting ASDP II as well others pursuing programmes/projects related to agro-industrialisation to support the relevant activities of the TAIDF.

¹⁴ See *Maximizing Finance for Development – crowding-in the private sector investments in ASDP II* - presentation by Emma Isinika-Modamba, April 10, 2016

Table 9.3 Key Resource Mobilisation Strategies of the TAIDF

Source of Funding	Strategy	Action
Government	<ul style="list-style-type: none"> Implementation of Government commitments to increase public spending in the agriculture sector and agro-industrialisation to meet the CAADP, Malabo target of 10%. Mainstreaming the public investments as envisaged in the TAIDF into ongoing and prospective Government programmes and budgets under the ASDP II. 	<ul style="list-style-type: none"> Raise stakeholder awareness of TAIDF as an important strategic framework for resource mobilisation for agro-industrialisation Include in the TAIDF implementation, development of a comprehensive and transparent system for tracking and advocating for increased public, DP and private sector resources into agriculture and agro-industrialisation. Then continue to monitor and advocate for increased public funding of agriculture and agro-industrialisation. Review of existing, ongoing and prospective Government programmes to ascertain the resources that align well with the TAIDF activities.
Development Partners	<ul style="list-style-type: none"> Involve the Development Partners (DPs) that have already committed to supporting ASDP II in financing the TAIDF through basket and off-budget arrangements. 	<ul style="list-style-type: none"> Work with the ASDP II Secretariat to involve the DPs involved/interested in the agricultural sector to support the TAIDF
Private Sector	<ul style="list-style-type: none"> Support efforts to enhance farm productivity and organisation of farm produce markets in order to reduce the challenge of agro-industries having adequate raw materials. This will enhance the competitiveness of agro-industry value chains and hence entice private sector investments into agriculture and agro-industry. Establish a catalytic fund, credit guarantee schemes and insurance schemes to reduce the risks of private sector breaking-in into agriculture and agro-industry. Support efforts to improve the business environment for agricultural production and agro-industrialisation. 	<ul style="list-style-type: none"> Include as part of the TAIDF implementation, development of a comprehensive and transparent system for tracking the improvements in the competitiveness of priority value chains /agro-industries and the business environment in general. Establish public-private partnership framework and forum for networking with the public and private sector sources of investments to support the TAIDF. Design and establish suitable catalytic funding, credit guarantee schemes and insurance models.

10. Risks and Risk Mitigation Strategies

Overall, TAIDF risks are assessed to be moderate components and sub-components as well as interventions based on proven approaches and a focus on the areas successfully implemented in other countries with similar socioeconomic conditions to Tanzania's. **Table 10.1** summarises the envisaged risks to TAIDF and the recommended mitigation measures. TAIDF coordination team will regularly undertake detailed assessments of the risks involved and develop and implement mitigation measures considering the overall 'programme' and 'project' levels. The team will also develop and implement a comprehensive risk management strategy. The purpose of TAIDF risk management activities will be to identify evolving critical risks and develop strategies to prevent them from occurring, or minimise their impact to the Flagship if they do occur.

Table 10.1 Assessment of the Major Risks to Success of the Flagship

No	Risk	Probability of Occurrence	Mitigation
1	Slow and inadequate efforts to enhance farm productivity for priority commodity value chains	M	The Government is implementing ASDP II with vigour, and within a public-private partnership framework that encourages key stakeholders to be effectively involved and engaged. Improving farm productivity is a key agenda in ASDP II as there is wide appreciation of the constraining factor of low productivity in ensuring adequate and competitive availability of raw materials for agro-industries. Furthermore, the Flagship includes measures to enhance selected strategic capacity to promote farm productivity as part of the bigger picture of agro-industrialisation.
2	Low private sector investment in agro- industrialisation	H	The Flagship is conceived to create an enabling environment for private sector investments to crowd-in agro-industrialisation. Private sector organisations will be actively involved in the implementation of the Flagship. The Flagship's prioritisation of value-addition and the broader ASDP II focus on farm productivity will improve the commercial viability of the whole agro-industry value chain and hence make it more attractive for local and foreign private investment.
3	The ease and cost of doing business will remain challenging	M	The government is highly committed to implementing the blueprint on regulatory reforms as far as possible. The Flagship has also included interventions to support the implementation of the Blueprint and includes measures to address the conflicting objectives of various policies, laws and regulations and procedures affecting the agro-industries for the priority commodity value chains.
4	Capacity gaps	H	The Flagship has a strong component on capacity development for agro-industrialisation.
5	Conflicting mindsets will hamper implementation	M	Although capacity changes, especially mindset changes, take time, there are good possibilities for success since the capacity development interventions will be implemented early on in the Flagship. The Flagship's implementation manual requires actors to sign a compact to ensure their commitment.
6	Inadequate commitment of partners to release earmarked funding for the Flagship's implementation	H	The Government (i.e. MOFP) – through the PMO - supported by the MoA, the MIT and the MLF will implement resource mobilisation activities to ensure constant engagement with all committed and potential sources of funding for successful financing of the Flagship. This Flagship document includes a section with proposals on resource mobilisation for the TAIDF.
7	Administrative export restrictions especially for agricultural products and agro-industrial products following government concerns about food security	M	Government in the recent years is committed to stopping the frequent issuance of export bans.
8	The insufficient capacity of regional and district authorities as well as marketing infrastructure management committees to effectively manage and supervise the various TAIDF activities	M	This will be mitigated by the various tailor-made capacity building activities that the programme will provide to various implementers at various levels aimed at enhancing their competences to cope with the demands of the programme. The government will also leverage the ongoing and future efforts on capacity strengthening for government officials.
9	Coordination challenges at TAIDF will be implemented under a complex institutional structure – multi-sectoral, multi-donor environment, in parallel with several stand-alone projects. This may lead to conflicting	H	A coordination framework managed under the ASDP II has been proposed for TAIDF and is designed and expected to harmonise implementation of various projects contributing to the Flagship. This is elaborated in detail in the section on implementation arrangements.

No	Risk	Probability of Occurrence	Mitigation
	agenda and interests, as well as inadequate capacity to effectively manage and coordinate several activities under different projects		

II. TAIDF Management of Envisaged Environmental and Social Impacts

11.1 Management Approach

The pertinent environment and social impacts will be considered and addressed by TAIDF. For instance, under the component on *Infrastructure, Support Services and Incentives for Agro-Industrial Development*, notable environmental impacts are expected. They are mostly localized, site-specific and small-size in scope. Their effects are expected during the construction phases and will include soil erosion, dust emission, water pollution, etc. The construction of IAIPs and associated infrastructure, construction of new factories, rehabilitation of existing industries and construction or rehabilitation of supportive infrastructure for agro-industrialisation are the main activities whose environmental impacts will be closely managed.

The TAIDF, being one of the interventions to implement ASDP II, will follow the latter’s environmental and social management policies and procedures. These embrace Environmental Safeguards, Environmental and Social Management Plans, Environmental and Social Impact Monitoring and Compensation that are in line with the Tanzania Environmental Management Act (EMA), Cap 191 (2004) which is the principle Act that establishes and sets out roles and responsibilities for institutions and bodies for the management of environmental and social issues of concern.

All the TAIDF priority activities that will undergo ESIA are expected to develop Environmental and Social Management Plans (ESMP) in line with the requirements set out by NEMC. The *TAIDF implementation manual* provides detailed guidance on how environment and social impacts will be identified and managed.

However, TAIDF has in place a strong institutional framework (Chapter 7), accountability, monitoring and evaluation framework (Chapter 8), financial resources mobilisation framework (Chapter 9) and risk management strategies (Chapter 10) all aimed at ensuring the expected positive impacts are realised as effectively and efficiently as possible while negative aspects are effectively mitigated in a timely manner.

11.2 Expected Positive Impacts

TAIDF will significantly increase incomes and reduce food insecurity and poverty among the participating agricultural producers (crop farmers, livestock keepers and fish farmers), traders and processors through direct and indirect benefits resulting from stronger agro-industrialisation given the Flagship's focus on strengthening competitive agro-industries – enhanced local production of agricultural inputs (agriculture equipment, farm machinery tools seeds, fertilisers, agro-chemicals, animal feeds etc.); enhanced value addition (reduction of post-harvest losses, increased availability of value-added products); modernizing and intensifying agriculture; and, strengthening the capacity of institutions and individuals involved in support services and/or investment in agro-industrialisation. The major strategic outcome of TAIDF will be catalysed structural transformation towards agro-industries as the main pulling force for agricultural production, competitiveness and commercialisation.

11.3 Expected Negative Impacts

The expected negative impacts of TAIDF are largely minimal, localised and limited in scope. A good number of them are expected during the construction phases of the following interventions: the construction of IAIPs and associated infrastructure, construction of new factories, rehabilitation of existing industries and construction or rehabilitation of supportive infrastructure for agro-industrialisation. They include impacts linked to soil evacuation, soil erosion on road cuts and the displacement of people to make room for the establishment of parks. Other impacts are related to the waste and other pollution generated by industries during operations. These include such wastes as the spillage of toxic and hazardous materials, as well as noise, dust and air pollution generated by processing plants and equipment.

11.4 Mitigation

Detailed Environmental and Social Impact Assessments (ESIAs) will be undertaken for the construction of IAIPs and associated infrastructure, construction of new factories, rehabilitation of existing industries and the construction or rehabilitation of supportive infrastructure for agro-industrialisation. Likewise, the establishment of new agro-industries will also be subject to the same based on the guidelines issued by the National Environmental Management Council (NEMC). Civil works will be managed by applying environmental specifications in the bidding documents to be implemented by contractors according to the applicable Ministry of Works guidelines. Furthermore, each renovated and new agro-industry is expected to have an Environmental and Social Impact Management Plan in line with NEMC guidelines and national laws. The monitoring of mitigation measures will be carried out jointly by the TICU and the National Environmental Management Council (NEMC).

11.5 Climate Change

TAIDF is designed with climate change adaptability and mitigation in mind. Indeed, the effective realisation of its objectives among other factors assumes that efforts to enhance farm productivity for priority commodity value chains will be successful. This in turn assumes that there will be adequate preparedness to mitigate and/or adapt to climate change effects. The country faces noticeable, impactful and unusual climatic changes resulting in occasional flash floods, especially in low/flat plains as well as drought in some cases. The changes have impacted agricultural production and productivity, construction projects as well road and railway infrastructure.

With regard to TAIDF's component on *Infrastructure, Support Services and Incentives for Agro-Industrial Development*, the ESIA exercises to be carried out on specific sub-components shall ensure that effective mitigation and adaptive strategies are built into their environmental and social impacts management plans. The issues related to climate change will be considered by the sub-components, if applicable, at the detailed project design level. For example, the individual capacity building efforts will include the coverage of pertinent issues related to climate change.

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