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Report No: PAD5336

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF US\$300 MILLION

TO THE

UNITED REPUBLIC OF TANZANIA

FOR A TANZANIA FOOD SYSTEMS RESILIENCE PROGRAM

AS PHASE 2 OF THE FOOD SYSTEMS RESILIENCE PROGRAM FOR EASTERN AND SOUTHERN AFRICA
UNDER THE MULTIPHASE PROGRAMMATIC APPROACH, APPROVED BY THE BOARD ON JUNE 21, 2022
WITH AN OVERALL FINANCING ENVELOPE OF US\$2.3 BILLION EQUIVALENT
AND PROPOSED TO BE INCREASED TO US\$2.75 BILLION EQUIVALENT

MAY 9, 2023

Agriculture and Food Global Practice
Eastern and Southern Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2023)

Currency Unit = Tanzanian Shilling (TZS)

US\$1 = TZS 2,350

FISCAL YEAR

January 1 - December 31

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Acting Regional Director: Holger A. Kray

Country Director: Boutheina Guermazi

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ABBREVIATIONS AND ACRONYMS

AFE	Eastern and Southern Africa
ACBP	Africa Climate Business Plan
ADU	Agriculture Delivery Unit
AFSLD	African Food Security Leadership Dialogue
ASA	Agricultural Seed Agency
ASDP II	Agriculture Sector Development Program (second phase)
AU	African Union
AUC	African Union Commission
CAADP	Comprehensive Africa Agriculture Development Program
CAADP-BR	Comprehensive Africa Agriculture Development Program Biannual Review
CPF	Country Partnership Framework
CSA	Climate Smart Agriculture
DADP	District Agriculture Development Plans
DALFO	District Agricultural Livestock and Fisheries Offices
ESSA	Environmental Social Systems Assessment
FCV	Fragility, Conflict, and Violence
FAO	Food and Agriculture Organization
FSRP	Food Security Resilience Program
FYDP III	Third Five-Year Development Plan
GASFP	Global Agriculture and Food Security Program
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoT	Government of Tanzania
IAG	Internal Auditor General
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IPC	Integrated Food Security Phase Classification
JSC	Joint Steering Committee
LGA	Local Government Authority
MAINRL	Ministry of Agriculture, Irrigation, Natural Resources and Livestock (Zanzibar)
MIIT	Ministry of Investment, Industry, and Trade
MPA	Multiphase Programmatic Approach
MoFP	Ministry of Finance and Planning
MSMEs	Micro, Small, and Medium-sized Enterprises
MTEF	Medium Term Expenditure Framework
NIRC	National Irrigation Commission
NRM	Natural Resource Management
OMM	Operations Maintenance and Management
PAD	Program Appraisal Document
PBZ	People's Bank of Zanzibar
PforR	Program-for-Results
PDO	Program Development Objective
PFADC	Presidential Food and Agriculture Delivery Council



PMT	Program Management Team
PO-RALG	President's Office Regional Administration and Local Governments
PPRA	Public Procurement Regulatory Authority
PS	Permanent/Principal Secretary
RA	Results Area
RISE	Resilient, Inclusive, Sustainable, and Efficient Infrastructure
RGOZ	Revolutionary Government of Zanzibar
SCD	Strategic Country Diagnostic
SEA	Sexual Exploitation and Abuse
TARI	Tanzania Agricultural Research Institute
TDV 2025	Tanzania Development Vision 2025
TOSCI	Tanzania Official Seed Certification Institute
TOC	Theory of Change
TFSRP	Tanzania Food Systems Resilience Program
VA	Verification Agency
WBG	World Bank Group
WEAI	Women's Empowerment in Agriculture Index
WRS	Warehouse Receipt System
ZARI	Zanzibar Agriculture Research Institute
ZSGRP	Zanzibar Strategy for Growth and Reduction of Poverty III



TABLE OF CONTENTS

DATASHEET.....	1
I. STRATEGIC CONTEXT	8
A. Country Context	8
B. Sectoral Context	9
C. Relationship to the Country Partnership Framework and Rationale for Use of Instrument	14
II. PROGRAM DESCRIPTION.....	18
A. Government Program	18
B. Multiphase Programmatic Approach.....	18
C. Theory of Change	22
D. PforR Program Scope.....	23
E. Program Development Objective (PDO) and PDO Level Results Indicators	26
F. Disbursement Linked Indicators and Verification Protocols	27
G. IPF: Project Activities in Zanzibar	33
H. IPF: Technical Assistance for Tanzania Mainland and Zanzibar	36
III. PROGRAM IMPLEMENTATION	40
A. Institutional and Implementation Arrangements.....	40
B. Results Monitoring and Evaluation	42
C. Disbursement Arrangements	43
IV. ASSESSMENT SUMMARY	44
A. Technical (including program economic evaluation)	44
B. Fiduciary	46
C. Environmental and Social	49
V. GRIEVANCE REDRESS SERVICE	52
VI. KEY RISKS	52
ANNEX 1. RESULTS FRAMEWORK MATRIX	54
ANNEX 2. DISBURSEMENT LINKED INDICATORS, DISBURSEMENT ARRANGEMENTS AND VERIFICATION PROTOCOLS	73
ANNEX 3. SUMMARY TECHNICAL ASSESSMENT.....	104
ANNEX 4. SUMMARY FIDUCIARY SYSTEMS ASSESSMENT	118
ANNEX 5. SUMMARY ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT	137
ANNEX 6. PROGRAM ACTION PLAN	146
ANNEX 7. IMPLEMENTATION SUPPORT PLAN	149
ANNEX 8. FIDUCIARY ASPECTS OF THE INVESTMENT PROJECT FINANCING COMPONENT	151



The World Bank

Tanzania Food Systems Resilience Program (P179818)

**DATASHEET****BASIC INFORMATION**

Country(ies)	Project Name		
Tanzania	Tanzania Food Systems Resilience Program		
Project ID	Financing Instrument	Does this operation have an IPF component?	Environmental and Social Risk Classification (IPF Component)
P179818	Program-for-Results Financing	Yes	Substantial

Financing & Implementation Modalities

<input checked="" type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Fragile State(s)	
<input type="checkbox"/> Contingent Emergency Response Component (CERC)	<input type="checkbox"/> Fragile within a non-fragile Country	
<input type="checkbox"/> Small State(s)	<input type="checkbox"/> Conflict	
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Responding to Natural or Man-made Disaster	
<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)		
Expected Project Approval Date	Expected Closing Date	Expected MPA Program Closing Date
31-May-2023	31-Jul-2028	30-Jun-2031

Bank/IFC Collaboration

No

MPA Program Development Objective

To increase the resilience of food systems and preparedness for food insecurity in the participating countries.

MPA Financing Data (US\$, Millions)

MPA Program Financing Envelope	2,750.00
with an additional request to IDA	450.00

Proposed Program Development Objective(s)

To support food systems resilience by strengthening agricultural service delivery, the adoption of climate resilient



technologies and fiscal performance in the agricultural sector.

Organizations

Borrower :	United Republic of Tanzania
Implementing Agency :	Ministry of Agriculture
Contact:	Gerald Mweli
Title:	Permanent Secretary
Telephone No:	255784443545
Email:	ps@kilimo.go.tz
Implementing Agency :	Ministry of Agriculture, Irrigation, Natural Resources and Livestock
Contact:	Seif Shaaban
Title:	Principal Secretary
Telephone No:	2552233320
Email:	ps@kilimoznz.go.tz

MPA FINANCING DETAILS (US\$, Millions)

Board Approved MPA Financing Envelope:	2,300.00
MPA Program Financing Envelope:	2,750.00
of which Bank Financing (IBRD):	0.00
of which Bank Financing (IDA):	2,750.00
of which other financing sources:	0.00

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	1,793.00
Total Operation Cost	300.00
Total Program Cost	280.00



IPF Component	20.00
Total Financing	300.00
Financing Gap	0.00

Financing (USD Millions)

International Development Association (IDA)	300.00
IDA Credit	300.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Total Amount
Tanzania	300.00	0.00	0.00	300.00
National Performance-Based Allocations (PBA)	120.00	0.00	0.00	120.00
Regional	180.00	0.00	0.00	180.00
Total	300.00	0.00	0.00	300.00

Expected Disbursements (USD Millions)

Fiscal Year	2023	2024	2025	2026	2027	2028	2029
Absolute	13.30	52.90	64.30	51.60	53.20	64.70	0.00
Cumulative	13.30	66.20	130.50	182.10	235.30	300.00	300.00

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture and Food

Contributing Practice Areas

Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)



Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Moderate
9. Other	Moderate
10. Overall	Substantial
Overall MPA Program Risk	Substantial

COMPLIANCE**Policy**

Does the program depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the program require any waivers of Bank policies?

☐ Yes ☒ No

Legal Operational Policies

	Triggered
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No



Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Schedule 2 to the FA, Section I.B.1(b): GoT to establish by not later than one (1) month after the Effective Date, and thereafter maintain throughout the period of implementation of the Operation, a joint steering committee ("Joint Steering Committee") with terms of reference agreed with the Association

Sections and Description

Schedule 2 to the FA, Section I.B.1(c): GoT to establish by not later than one (1) month after the Effective Date, and thereafter maintain throughout the period of implementation of the Operation, a steering committee ("Mainland Steering Committee") with terms of reference agreed with the Association

Sections and Description

Schedule 2 to the FA, Section I.B.1(d): GoT to establish by not later than one (1) month after the Effective Date,



and thereafter maintain throughout the period of implementation of the Operation, a technical committee (“Technical Committee”) with terms of reference agreed with the Association

Sections and Description

Schedule 2 to the FA, Section I.D.1: GoT to appoint by not later than one (1) months after the Effective Date, and thereafter maintain at all time during the implementation of the Program, an independent verification agent (IVA) with experience and qualifications and under terms of reference acceptable to the Association, and ensure that the IVA carries out the DLIs/DLRs verification process(es) in accordance with the Verification Protocol.

Sections and Description

Schedule 2, Section I.D.1(b)(i): Ensure that the Independent Verification Agent carries out the DLIs/DLRs’ verification process(es) in accordance with the Verification Protocol; and (ii) submits to the Association the corresponding verification reports in a timely manner (at least once a year), and in form and substance satisfactory to the Association

Sections and Description

Schedule 2, Section I.E.1: GoT to carry out the Program Action Plan agreed with the Association, in accordance with the schedule set out in the said Program Action Plan, and in a manner and substance satisfactory to the Association.

Sections and Description

Schedule 2, Section I.F.1: GoT to prepare and furnish to the Association, by no later than March 31st of each year during implementation, an annual work plan and budget containing all activities proposed to be carried out during following fiscal year, as well as their proposed financing plans for the expenditures required thereunder.

Sections and Description

Schedule 2 to the FA, Section I.G.1& 2: GoT to ensure the Project is carried out in accordance with the Environmental and Social standards, and in accordance with the Environmental and Social Commitment Plan.

Sections and Description

Schedule to the PA, Section I.A.2(b): RGoZ to establish by not later than one (1) month after the Effective Date, and thereafter maintain throughout the period of implementation of its Respective Parts of the Project, a steering committee (“Zanzibar Steering Committee”) with terms of reference agreed with the Association.

Sections and Description

Schedule to the PA, Section I.C.1: RGoZ to prepare and furnish to the Association, by no later than March 31st of each year during implementation of its Respective Parts of the Project, an annual work plan and budget containing all activities proposed to be carried out during following fiscal year, as well as their proposed financing plans for the expenditures required thereunder.



Sections and Description

Schedule to the PA, Section I.D.1&2: RGoZ to ensure its Respective Parts of the Project are carried out in accordance with the Environmental and Social Standards, and in accordance with the Environmental and Social Commitment Plan.

Conditions

Type Effectiveness	Financing source IBRD/IDA	Description The Subsidiary Agreement has been executed and delivered and all conditions precedent to its effectiveness and to the right of the Project Implementing Entity to borrow/make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.
Type Effectiveness	Financing source IBRD/IDA	Description Program Management Teams has been established in Mainland and Zanzibar by the Recipient in a manner and substance satisfactory to the Association.
Type Effectiveness	Financing source IBRD/IDA	Description The Operation Manual has been developed and adopted by the Recipient pursuant to Section I.C.1, of Schedule 2 to this Agreement.
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made from Category 8 until GoT has established, publicized and made operative, an accessible grievance mechanism for its Respective Parts of the Project in a manner and substance satisfactory to the Association.
Type Disbursement	Financing source IBRD/IDA	Description No withdrawal shall be made from Category 9 until RGoZ has: (i) prepared and adopted the Project Operations Manual; (ii) established the Project Management Team; and (iii) established, publicized and made operative, an accessible grievance mechanism for its Respective Parts of the Project; all in a manner and substance satisfactory to the Association.



I. STRATEGIC CONTEXT

A. Country Context

- 1. Tanzania is affected by climate change which is projected to further intensify temperature and precipitation extremes.** The incidence of extreme temperatures and climate-related disasters, such as flooding or droughts, has increased over the last decades. Temperature in Tanzania is projected to rise by between 1.4°C and 3.6°C by 2080 compared to pre-industrial levels and most models project a significant increase in drought exposure. Weather-related disasters account for 69 percent of Tanzania's recorded disasters since 1872, and 73 percent occurred between 2000 and 2019. Climate models consistently predict an increase in temperature in Tanzania, with a higher number of very hot days and highly uncertain precipitation. Future dry and wet periods are likely to become more extreme. Models also project a significant increase in drought exposure, impacting crop and livestock production and yields. The availability of water for food production and other uses is projected to decline. Climate change-induced extreme weather events are also expected to affect Tanzania's infrastructure (including irrigation, post-harvest infrastructure, and rural communications).
- 2. Tanzania's economy recovered after the COVID-19 pandemic.** However, the crisis derailed its positive economic growth trajectory. Two decades of steady growth have enabled Tanzania to access the status of a lower-middle-income country in 2020. Zanzibar experienced substantial Gross Domestic Product (GDP) growth, with its real GDP per capita growing 3 percent annually between 2009 and 2019. The COVID-19 pandemic reduced the GDP growth rate from 5.8 percent in 2019 to 2 percent in 2020, with per capita GDP contracting by 1 percent¹. The year 2021 witnessed fragile signs of economic recovery as the real GDP growth rate reached 4.3 percent. The World Bank projects Tanzania's GDP growth to reach 5.1 percent in 2023—about 2.2 percent per capita—as investment increases and external terms of trade improve. However, Tanzania is only projected to reach its potential growth rate of 6 percent in 2025. However, to reach the ambitious development goals stated in the Government of Tanzania's (GoT) Tanzania Development Vision 2025 (TDV) 2025², Tanzania needs an annual GDP growth rate of 8 percent. This will require the government "to revise, strengthen, and expand its existing efforts to support struggling firms while implementing structural reforms to address long-standing constraints on private investment and women's access to economic opportunities"³.
- 3. The current macroeconomic situation calls for efficient and well-targeted public spending and increasing levels of private funding.** Achieving TDV 2025 will depend on creating 8 million jobs and sustaining improvements in social indicators, requiring growth in labor-intensive sectors such as agriculture, particularly agro-processing. At the same time, the overall fiscal deficit declined from 4 percent of GDP in 2020/2021 to 3.6 percent in 2021/2022⁴. It remains above the 2.7 percent national target. The fiscal deficit is driven by spending on service delivery and implementation of capital investment projects. The deficit is equally funded by domestic and foreign borrowing, with debt service consuming almost 37 percent of domestic revenue in 2021/2022⁵. The latest joint IMF-World Bank Debt Sustainability Analysis, conducted in July 2022, concluded

¹ World Bank, Country Overview, March 24, 2023.

² TDV is currently implemented through the Third National Five-Year Development Plan (FYDP III, 2021/22-2025/26), with the theme "Realizing Competitiveness and Industrialization for Human Development".

³ World Bank. Tanzania Economic Update, 2022.

⁴ World Bank. 18th Tanzania Economic Update, 2022.

⁵ World Bank. 18th Tanzania Economic Update, 2022.



that Tanzania's risk of external debt distress remains moderate. Tanzanian shilling (TZS) also remained relatively stable. Coupled with fuel subsidies, inflation has been among the lowest and least volatile in the East Africa Community. Consumer price inflation was 4.8 percent in September 2022⁶.

4. **Malnutrition and household spending on food are persistently high.** Currently, 30 percent of children under five are stunted, and the proportion of the population that is undernourished is 7.8 percent, above the 5 percent target of the African Union. Between November 2021 and April 2022, in Mainland, about 437,000 people suffered high levels of acute food insecurity (Integrated Food Security Phase Classification (IPC) Phase 3 or above) and 785,000 people were classified in IPC Phase 2 (Stressed)⁷. In Zanzibar, between October 2022 and February 2023 all analyzed regions were classified in Stressed (IPC Phase 2). Around 147,000 people were found to face Crisis levels of acute food insecurity (IPC Phase 3), with no people classified in higher phases. About 594,000 people were in IPC Phase 2. The latest IPC assessment indicates that, in 2017, 14 percent of the population was classified as IPC Phase 3 and 69 percent (604,000 people) as IPC Phase 2 or above. Food production is on an upward trend. Tanzania's Mainland now produces about 18 million tons of food against the 13 million tons of food demand yearly. Yet, among households in the lower income quintiles, spending on food staples still consumes more than 30 percent of total household spending.

B. Sectoral Context

5. **Agricultural productivity in Eastern and Southern Africa (AFE) remains low by international standards and has yet to be the primary driver of sector growth.** Africa's yields have lagged behind most of the world. Most countries have achieved a significant rise since 1961. But across much of Africa, yields have stagnated⁸. As a consequence, the global inequality in yields has increased over the past several decades, agricultural growth in Sub-Saharan Africa has been owed more to its expansion than its intensification. Studies suggest that only about one-quarter of the increase in crop output has been attributable to yield growth. Agriculture's expansion has damaged the Region's forests, water resources, soil, and biodiversity. The agricultural sector has been the leading driver of soil degradation, land use change, and forest and biodiversity loss in AFE and the wider Region. In turn, the conversion of forests and grasslands into cropland and pasture, the degradation of soil and water resources, the loss of ecosystem services, and climate change have put downward pressure on agricultural productivity. For example, land degradation has been ranked as the top environmental problem for Tanzania for more than 60 years, with soil erosion affecting about 61 percent of the land area and depleting its fertility.
6. **Despite these challenging circumstances, there are several reasons to be highly optimistic about the potential for agriculture-led growth to build up food systems resilience in the Region.** First, the agriculture and food sector remain a significant source of economic growth and job creation in AFE. For example, 13 million labor days were created by emerging medium-scale farmers in Tanzania between 2008 and 2014⁹. Second, ongoing shifts in consumption are expected to create agri-food business opportunities. Third, there is wide potential in AFE to enhance agricultural productivity and climate resilience through innovation, public good investments (infrastructure, human capital), and related service delivery systems. The Government of

⁶ World Bank. 18th Tanzania Economic Update, 2022.

⁷ Tanzania IPC Acute Food Insecurity Analysis. November 2021 - September 2022.

⁸ Tian, X., & Yu, X. (2019). *Crop yield gap and yield convergence in African countries*. *Food Security*, 11(6), 1305-1319.

⁹ World Bank (2019). Tanzania Economic update. Transforming agriculture: Realizing the potential of agriculture for inclusive growth and poverty reduction. December 2019, Issue 13. Washington, D.C.: World Bank Group.



Tanzania, like in other countries in the Region, recognizes the agri-food sector as one of its core sources of inclusive economic growth and rural poverty reduction. In 2021, agriculture in Tanzania Mainland accounted for about 26.1 percent of GDP, 30 percent of exports, 65 percent of inputs to the industrial sector, 65.6 percent of the workforce¹⁰, and 90-95 percent of the food requirements for the country. Its stable supply has been instrumental in maintaining low inflation. In Zanzibar, the sector contributed 21.2 percent of the GDP in 2019 and employed 70 percent of the population in 2020.

7. **Tanzania has a robust policy framework to support the agri-food sector.** TDV 2025 and the Third Five-Year Development Plan (FYDP III) recognize the centrality of agriculture to reach national objectives and set ambitious goals for transforming the sector. Since 2018, the Government has significantly improved the agribusiness environment by alleviating taxes and opening trade. It removed over one hundred fees to reduce production costs, promote investments, and protect domestic industries. Efforts include exemptions of import duties for all agricultural inputs, value added tax exemptions for selected agriculture products and inputs (e.g., feed additives), and strategic industries such as leather, machines, and processing plants. On the trade side, the Government has moved away from imposing export bans for maize and rice since 2017.
8. **The Government is committed to strategic public investment in the agri-food sector.** Since 2017/2018 and until 2021, agriculture has been averaging 2.25 percent of its national budget and about 0.5 percent of GDP. The tight agricultural budget left little fiscal space for development expenditures and has hampered the implementation of the current National Agriculture Investment Plan- Agriculture Sector Development Program (ASDP II), slowing down the agricultural transformation needed to realize TDV 2025 and deteriorating critical aspects of public service delivery (see Box 1). Acknowledging the need for additional resources, the Government increased budget commitments to the Ministry of Agriculture by 13 percent in 2021/2022 and 2022/2023 by 155 percent. Beyond levels, predictable budgets enable agencies to create viable medium to longer-term plans and engage more effectively in the resilience and climate-smart agenda. For example, researchers can establish greenhouses to explore new drought-resistant plant breeds; extension agencies can establish a multi-seasonal learning curriculum and invest in models that enable greater social inclusion and develop improved skills in climate-smart practices; irrigation agencies can develop, apply, monitor, and adjust models for enhancing operations and maintaining irrigation schemes and thereby reducing the impact of droughts. Furthermore, the GoT has demonstrated an openness to repurposing its current fertilizer subsidy programs to maximize their contributions to resilience and long-term productivity gains.

¹⁰ Economic Survey (2021).



Box 1: Impact of Tanzania's low and volatile agriculture sector budget.

Irrigation: Irrigation areas cropped by farmers went down from a low of 3 percent to 2 percent of all farmed areas between 2008 and 2020, due to lack of maintenance, monitoring, rehabilitation, and modernization. (Source: Ministry of Agriculture).

Knowledge Services: Between 2008 and 2022 access to extension services collapsed from 67 to 7 percent with women being the most affected (Source: World Bank, PER, 2022).

Research: Funding for agriculture research shrank to rank among the fourth lowest in Africa. Despite its importance, public varietal development is crucially underfunded.

Competitiveness: The competitiveness of Tanzania's agri-food value chains is constrained by underdeveloped market, market infrastructure, farm-level value addition, and poor rural infrastructure. (Source: Global Center on Adoption, 2021).

9. **Private sector investment remains a challenge.** Private sector investment remains constrained by limited access to long-term capital, low-capacity levels, and business skills. However, agriculture GDP growth picked up during the period of recent policy reforms. Interestingly, the upturn in growth overlaps the period of policy reforms and reallocations of the public sector budget to agriculture. This indicates that Tanzanian agriculture's growth rate is responsive to policy reforms.
10. **Further steps to strengthen the private sector's engagement could accelerate progress toward increased productivity and resilience.** Immediate reform areas include reducing the distortive effects of subsidies and identifying commercially focused private-public partnerships in key areas (for example, the seed sector and post-harvest storage). Harmonization of policies at the regional level will also facilitate intra-regional trade. Reducing or eliminating distortive trade measures and reducing the cost of on-farm fixed capital formation would help increase efficiency. Improving access to rural finance could also foster private farm and cooperative innovation. Protecting innovation also implies counterfeit fighting inputs; this requires the development of government laboratories, strengthening Tanzania Official Seed Certification Institute's (TOSCI) role in seed quality control, and scaling up its current initiatives against fake seeds.
11. **Climate change adaptation and mitigation are urgent and crucial for Tanzania and require significant scale-up of investments in climate-smart agriculture research, training, and extension.** According to climate change projections, the surface of Tanzania exposed to at least one drought per year will multiply five-fold by 2080, with expected overall rise in temperatures (between 1.4° and 3.6° Celsius by 2080) and increased probability of extreme rainfall for the coming decades¹¹. Therefore, capacity-strengthening and resilience-building investments are critical in enhancing Tanzania's readiness to improve its resilience against climate change impacts. The agri-food system is highly vulnerable to climate change since crops are predominantly rainfed, making resource-efficient water management a key aspect of climate change adaptation in Tanzania. Climate change will likely impact the suitability map for certain crop production systems as agroecological zones might shift. Climate change exposes farmers to risks such as limited access to high-quality inputs due to poor road infrastructure and low yields and crop failures due to climate-related disasters. Increases in pest and disease outbreaks are also predicted due to the rise in temperatures. These climate hazards result in low-quality produce which negatively impacts both national and regional markets.

¹¹ Tomalka, J. et al 2020, Climate Risk Profile: Tanzania. Potsdam Institute for Climate Impact Research, GIZ.



12. **In Tanzania, ambitious climate change adaptation plans for the agri-food sector exist but have not been implemented due to insufficient public financing.**¹² Consequently, adaptation to climate change has barely progressed since 2014, as well as sustainable intensification. Yet the cost of climate inaction in agriculture in Tanzania is estimated to be at least US\$1.41 billion by 2040. On the mitigation side, agriculture *per se* contributed to 38 percent of the country's greenhouse gas (GHG) emissions in 2019. As the growth of Tanzania's national agricultural output (+58 percent in real terms between 2007/2008 and 2016/2017) is almost entirely due to expansion of the cultivated area (+ 57 percent between 2008 and 2020) over forests, Land Use Change and Forestry) – overwhelmingly due to agricultural land conversion – amount to 46 percent¹³ Additionally, GHG emissions are caused by food waste and loss in the agri-food supply chain to poor harvesting techniques; a lack of cold storage and proper transport; poor handling practices; exposure to heat and sunlight; inefficient marketing systems. Large potential for climate change adaptation and mitigation exists through significant upscaling of investments in innovation (including seeds and micro-irrigation), sustainable intensification of existing farm areas, improving operations and maintenance in existing public irrigation schemes, reducing land conversion, and dissemination of climate-smart agriculture (CSA) practices such as agroforestry and efficient water use.¹⁴
13. **Under ASDP II, irrigation is the main driver of the sector's modernization.** The Government's commitment to irrigation was emphasized in the President's budget address in 2021 and 2022. In 2022/23, the budget allocation for irrigation was increased by 777 percent to US\$157 million from the 2021/22 allocation. As a result, the area under irrigation will significantly expand. However, half of the public irrigation infrastructure is dysfunctional¹⁵. Two recent World Bank Advisory Services and Analytical products¹⁶ indicated that the irrigation sector can best contribute to agricultural development goals by optimizing the use and sustainability of irrigation assets. Enabling community-driven Operations, Management, and Maintenance (OMM) would enable farmers to support the sustainable use and maintenance of infrastructure, which will increase the efficiency of water management, increase food productivity, and support an increase in the use of climate-smart technologies and overall resilience (including more stable food supply).
14. **There is a significant and persistent gender gap in agricultural growth and poverty reduction.** The gender gap in agricultural productivity is estimated at 20-30 percent. Men and women control different assets and have different decision-making roles and responsibilities, generally resulting in an unequal situation that is disadvantageous to women¹⁷. United Nations Industrial Development Organization reported that agriculture production strategies have to take into account these inequalities in needs, capacities and access to knowledge, resources and livelihoods to ensure that women are fully included in making and asset control in agriculture interventions¹⁸. Gender roles influence the division of labor because labor is valued differently depending on who does it. Studies found that women's low status in the community and their activities they

¹² World Bank and FAO, 2022, Tanzania Agriculture Public Expenditure Review.

¹³ Climate Watch, Country Profiles, 2022

¹⁴ CIAT and World Bank. 2017. Climate-Smart Agriculture in Tanzania. CSA Country Profiles for Africa Series. Washington, D.C: International Center for Tropical Agriculture (CIAT); World Bank.

¹⁵ Agriculture Sample Census data, Government of Tanzania, 2020

¹⁶ World Bank, 2022, Resilient, Inclusive, Sustainable and Efficient (RISE) Irrigated Agriculture in Tanzania: An analysis of sector challenges and opportunities for accelerated growth and Tanzania Assessment of Governance and Institutions of Service Delivery in Irrigation Sector.

¹⁷ IFAD (2011). Investing in Rural People. [<http://www.ifad.org/sf/index.htm>] site visited on 2/5/2020.

¹⁸ UNIDO, IFAD and DIIS (2011). Pro-Poor Value Chain Development: 25 Guiding Questions for Designing and Implementing Agroindustry Projects, Chapter 2: Functional Value Chain Analysis. Vienna: UNIDO.



perform in agriculture are less appreciated than men's and in turn their low status is continued through the low value placed on their activities¹⁹. Different roles, work and valuing of labor create differential access to decision-making, services and benefits. Gender roles assigned to men and women have an impact on their respective access to resources and the power to decide over the benefits of using those resources. They have an impact on women and men's differentiated roles and participation in agriculture and their respective control over decisions that affect the management of the agricultural value chain as well as the use of benefits generated by the activity. It also means that women do not have the cash required to buy agricultural inputs and implements which may contribute to the increase of agricultural productivity, profitability and food security. This contributes to the gender gap in agricultural productivity.²⁰

15. **Women are unable to obtain adequate quantities of male family labor to work on their plots, also women's ability to work on their plots is constrained by the social expectations that women perform significant quantities of unpaid care and domestic work and that women contribute unpaid labor on their husband's plots while not controlling the output of that work.** At the same time, women are expected to provide the cash necessary to meet household maintenance needs, and when cash is short this requires engaging in off-farm casual waged labor or petty trading, both of which further reduce the amount of time that women have to work on the plots of land that they control. It also means that women do not have the cash needed to buy the pesticides, fertilizers and implements that contribute to the gender gap in agricultural productivity²¹. In 2017, 44 percent of men had a mobile-money account versus just 33 percent of women. About 25 percent of men are sole landowners versus just 8 percent of women. Tanzania's rates of landownership are below the average for Sub-Saharan Africa due to low rates among women.
16. **Tanzania needs to maximize its potential and regional partnerships as a food exporter but has set ambitious targets to improve. Agriculture exports have steadily decreased from US\$2.9 billion in 2014 to US\$1.7 billion in 2019 (-8 percent per annum).** Vegetable products (coconuts, Brazil nuts, cashews, raw tobacco, sesame, coffee, etc.) and dried legumes and foodstuffs are, respectively, the second and third most significant (in value) categories of products exported by Tanzania in 2019. Vietnam, China, India, and Kenya are the main destinations²². Tanzania is undergoing a switch in its export strategy, with cash crop exports being progressively replaced by food crop exports to seize the opportunity from the growing food market in the Region. Under the Agenda 10/30 initiative, Tanzania targets to increase its food crops exports from US\$500 million in 2022 to US\$3 billion in 2030. Specifically, maize, rice, soy, and cashew nuts exports are projected to double from US\$500 million to US\$1 billion within those seven years. Realizing its commercialization potential would require Tanzania to rebuild regional trade partnerships, further engage in regional trade facilitation dialog, and invest in innovation, value addition, storage, feeder roads, and transport hubs.
17. **Tanzania is strategically positioned as a breadbasket for East Africa, significantly contributing to regional food security, nutrition, and resilience.** Maize and rice are strategic crops for food security, import substitution, and export. Tanzania is self-sufficient in maize. Of the 7.8 million tons of maize produced annually, Tanzania consumes 90 percent. It exports the rest to Kenya (8 percent) and the remaining 2 percent

¹⁹ Madaha, R.M. (2018). Challenges and opportunities of Village Community. Networks within the neoliberal context: Women's networks in Africa. *African Identities* 16 (1): 50-66

²⁰ A. Haroon Akram-Lodhi and Immakulata Komba. 2017. What are the Factors Driving the Gender Gap in Agricultural Productivity in Tanzania?

²¹ A. Haroon Akram-Lodhi and Immakulata Komba. 2017. What are the Factors Driving the Gender Gap in Agricultural Productivity in Tanzania?

²² Observatory of Economic Complexity, Tanzania Report, 2021.



to Somalia, Burundi, South Sudan, Rwanda, and Uganda. Tanzania has opened physical markets in South Sudan and the Democratic Republic of Congo to facilitate grain exports in the Region. Demand for maize is projected to quadruple when rains fail in parts of the Region. Finally, Tanzania's highly diversified agriculture (the top 8 agricultural products represent less than 40 percent of the agricultural GDP) presents significant opportunities to develop complementary export value chains with potentially high nutrition contributions, such as pulse, horticulture, oilseeds, and animal feed.

18. **Recent shocks have underscored the need to invest in strengthening the resilience of Tanzania's food systems to contribute to that of the Region.** Russia's invasion of Ukraine, combined with the impacts of COVID-19, has caused higher fuel, fertilizer, and food prices. Increases in the cost of edible oils and wheat will affect all households but severely hit the poorest. Recent estimates show that the combined food, fuel, and fertilizer shocks will lead to an additional 1.2 million people falling below the poverty line. The fertilizer shock is most detrimental for poorer rural households, which rely more heavily on agriculture for their income and spend a larger share of their income on food. It also trickles down to other countries in the Region, Tanzania and Kenya being the two most significant fertilizer sources for the Region (except for Sudan and Ethiopia). The analysis shows that reduced fertilizer availability and use in response to higher prices will make real GDP fall by 1.3 percent. Russia's invasion of Ukraine and COVID-19 may be considered unique shocks; however, the growing implications of climate change indicate that future shocks are likely to be more frequent and severe.
19. **Finally, Tanzania is well-placed to be a key player in the growing momentum to address food systems resilience at the regional level.** The country is a critical player in regional initiatives, including establishing a regional center of excellence for rice mandated to support regional research and dissemination of rice technologies and practices across AFE, coordinated by the Association for Strengthening Agricultural Research in Eastern and Central Africa. In 2019, the African Food Security Leadership Dialogue (AFSLD) was convened in Kigali, bringing together African leaders and development partners and raising the ambition for joint action to solve the Region's food security challenges. Key priorities identified by the AFSLD include food systems' adaptation to climate change, leveraging science and digital technology, and strengthened collaboration among development partners. It emphasized implementing existing agricultural and food security commitments, including the African Union (AU) Agenda 2063 and the Malabo Declaration. The Africa Union Commission (AUC) monitors progress toward delivering the Malabo Declaration every two years. Tanzania is one of only five countries consistently delivering on the Malabo Declaration commitments. This underlines Tanzania's regional role as a leader in transforming the agri-food sector and a source for understanding the processes, policies, and technologies that can help inform governments in the Region.

C. Relationship to the Country Partnership Framework and Rationale for Use of Instrument

20. **The Phase 2 of the Food Systems Resilience Program (FSRP) for Eastern and Southern Africa using a Multiphase Programmatic Approach (MPA) is aligned with key regional World Bank Group (WBG) strategies.** It supports thematic pillar 2 ("Promoting Trade and Market Integration") and thematic pillar 4 ("Reinforcing Resilience") of the 2020 Africa Regional Integration and Cooperation Assistance Strategy Update for FY21–FY23, and it directly contributes to the pillars of the FCV strategy 2020–2025 on preventing violent conflict and helping countries transition out of fragility, as well as the Climate Change Action Plan 2021–2025. Mainstreaming climate change and addressing climate resilience constitute critical priorities in the WBG 2025 climate targets. The Phase 2 is also aligned with the WBG Gender Strategy (FY16–FY23) on enhancing human development outcomes, improving economic opportunities, and removing barriers to asset ownership; and



the Africa Region Gender Action Plan (FY19–FY22). The Climate Change Action Plan outlines a solid commitment to improving the planning and implementation of interventions to address climate-related risk more robustly and systematically through the WBG Green, Resilient, and Inclusive Development approach. Under its Reinforcing Resilience thematic pillar, the Africa Regional Integration and Cooperation Assistance Strategy seeks to enhance resilience to shocks (including the drought-related risks the Phase 2 seeks to address) and promote effective management of challenges that cut across boundaries. The MPA pillars focus on agropastoralism, food security and climate change adaptation and mitigation, conflict and forced displacement, transboundary waters, and natural resource management (NRM). Investments in the resilience of the Region's food systems will also advance the World Bank's commitment to the Next Generation Africa Climate Business Plan (ACBP) for 20 countries. The ACBP aims to implement climate-smart policies and programs designed to scale up integrated landscape approaches on 60 million ha and provide 150 million people with access to impact-based warnings to facilitate the adoption of climate-smart agriculture by 28 million farmers. In addition to the above, the operation is aligned with the WBG Global Crisis Response Framework (GCRF) which includes: (i) responding to food insecurity through supporting production, facilitating trade, supporting the vulnerable and investing in sustainable food systems, (ii) protecting people and preserving jobs to help mitigate the medium- to long-term impact of crises, (iii) strengthening resilience by identifying and supporting paths to build long-term resilience, and (iv) strengthening policies, institutions and investments for rebuilding better to utilize long-term policies to improve development outcomes.

21. **Tanzania's current Country Partnership Framework (CPF) (Report No 121790-TZ, 2018 - 2022) discussed by the Board of Executive Directors on February 14, 2018, identifies agriculture (and agro-processing) as a strategic sector where additional productive jobs can be generated to promote more inclusive, diversified, and equitable growth in Tanzania.** The Systematic Country Diagnostic (SCD, 2017-2022) emphasizes addressing challenges related to increased climatic variability, pressure on natural resources, rapid urbanization, limited institutional capacities, and the need to create employment. The SCD also pinpoints the need for a transformational approach to investments in the agricultural sector, built around diversification, market linkages, technological change, agro-industry, and agro-processing. The proposed operation considers these elements and will contribute to inclusive, sustainable, and private sector-led agricultural growth, including small-scale farmers.
22. **The operation is aligned with the first CPF strategic focus area for Tanzania (enhancing productivity and accelerating equitable and sustainable growth), which promotes agriculture commercialization, market orientation, addressing gender productivity gaps, and improving the sector's resilience to climate change.** Specifically, the program-for-results operation (PforR) will support the CPF: (i) Objective 1.1: Strengthening the business environment for job creation in agribusiness by promoting commercialization of selected value chains and service delivery systems in agriculture, (ii) Objective 1.2: Improving access to credit, particularly for micro-, small and medium-sized enterprises (MSMEs) and women by supporting the agriculture enabling environment, focusing on women, and (iii) Objective 1.3: Managing natural resources for resilient economic growth by supporting the innovation and knowledge systems, and dissemination of climate-smart agriculture technologies, including modern irrigation infrastructure and water management practices needed to ensure the resilience of the country's resource base.
23. **The PforR will be among the critical interventions in the CPF to build resilience in agriculture, infrastructure, and natural asset-based growth and contribute to meeting corporate priorities of green growth, social**



inclusion, and resilience to climate change (see Table 1). The PforR will also contribute to the overall CPF targets on gender by supporting women through women's access and adoption of improved agricultural technologies and women's participation in different value chains and marketing practices.

24. **The PforR is the most appropriate financing instrument for delivering sustainable transformations at scale in the Tanzania Mainland.** The justification for selecting the PforR instrument includes: (a) building resilience into Tanzania's food systems requires a transformation of systems that can affect change at a national level, (b) Tanzania has a national program that is technically sound, funded through the national budget and implemented through the relevant technical agencies, and (c) the Government, in partnership with the World Bank and other development partners, has conducted a series of robust studies, including a Public Expenditure Review of the agriculture sector, that has identified bottlenecks within systems implemented through the Ministry of Agriculture and related agencies.



Table 1: Summary of Climate Challenges, Bottlenecks, and Responses in Tanzania's Food System

Climate challenges to the food system	Bottlenecks that restrict progress toward addressing climate challenges.	ASDP II and GoT response to food system climate challenges	PforR response to bottlenecks
Water shocks (droughts)	Expanding irrigation infrastructure is necessary but not sufficient. Improvement in the operations and maintenance of irrigation is also required to maximize water efficiency and reduce the impact of future water shocks.	Expand access to irrigation.	Introduce performance-based contracts that are focused on improving the Operations Management and Maintenance of existing irrigation systems.
Increase in temperatures	Investment in national research institutions needs to be more predictable to build the capacity required for the adoption and development of appropriate CSA solutions. Furthermore, the budget and tools (including digital tools) assigned to support extension work need to be managed effectively to enable the farmers to have increased access to CSA-related knowledge and technology.	Improve the development of and access to climate-smart inputs and technologies.	Incentivize a) the establishment of predictable financing for national agricultural research institutions and b) the increased production of good quality climate-smart seed varieties.
Accelerated rise in pest and disease shocks		Increase investment in climate-smart focus research and increase access to technologies.	Enable increased access to CSA-relevant technologies and information (including early warning systems for climate-related shocks) using digital technologies.
Input price shocks	Current subsidies may not be sustainable nor they are focused on building the resilience of the natural resource base to reduce the impact of climate shocks.	Provide input subsidies to farmers.	Incentivize the repurposing of public support mechanisms to focus on a more holistic and resilient approach to soil management.
Food price shocks	Most post-harvest infrastructure is underutilized or poorly managed. New business models are required to maximize climate-smart approaches to enhance the capacity of the post-harvest system.	Strengthen the capacity of post-harvest infrastructure	Increase the utilization of existing post-harvest infrastructure while also integrating the use of climate-smart technologies into post-harvest management practices.



II. PROGRAM DESCRIPTION

A. Government Program

25. **Launched in 2018, ASDP II is a ten-year program that guides investments in the agriculture sector.** The Government will implement ASDP II in two phases, each divided into a five-year implementation period (2018/2019-2022/2023 and 2023/2024–2027/2028). It prioritizes enhanced: (i) agricultural productivity and profitability, (ii) commercialization and value addition, (iii) sustainable water and land use management, and (iv) strengthening sector enablers. In April 2022, the Government launched the Agenda 10/30 initiative, which targets a 10 percent growth for crops subsector by 2030 via the revitalization of the extension services program, rebranding the sector image, encouraging private sector investments and supporting youth and women in agriculture. Agriculture investments in Zanzibar are articulated in the Zanzibar Agriculture Sector Development Program (ZASDP, 2019-2028), contributing to the Zanzibar Strategy for Growth and Reduction of Poverty III (ZSGRP III, MKUZA III). ZASDP priority areas are similar to ASDP II.
26. **The ASDP II objective is to "transform the agricultural sector (crops, livestock, and fisheries) towards higher productivity, commercialization level, and smallholder farmer income** for improved livelihood, food security, and nutrition." ASDP II aims to ensure sustainable food availability, food accessibility, and proper food utilization to be achieved through food production, value addition and stock management, trade and markets, and adaptive measures against the negative effects of disasters. ASDP II also targets food insecurity and malnutrition through specific activities such as production monitoring and early warning systems, national food reserves, post-harvest management for reduced food loss, and nutrition campaigns. Rain dependence being a core constraint to food production in Tanzania and Zanzibar, both programs have an ambitious vision for irrigation development. They are detailed in the National Irrigation Master Plan (2018 to 2035) for Mainland and the Zanzibar Irrigation Master Plan.

B. Multiphase Programmatic Approach

27. **The Phase 2 of the Food Systems Resilience Program for Eastern and Southern Africa using a Multi-phase Programmatic Approach will support the United Republic of Tanzania with a total financing of US\$300 million equivalent.** Phase 1 of the MPA establishing the overall Program and a first set of Program activities was approved by the World Bank's Board of Executive Directors on June 21, 2022 (P178566). A total envelope of US\$2.3 billion equivalent in IDA financing was approved for the overall Program. Phase 1 provides support to the Federal Republic of Ethiopia, the Republic of Madagascar, the Intergovernmental Authority on Development (IGAD), and the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA). The Phase 2 - Tanzania Food Systems Resilience Program (TFSRP) - is being proposed with an increase of the overall MPA financing envelope from US\$2.3 billion to US\$2.75 billion equivalent. It is presented in parallel with Phase 3 of the MPA which will support the Union of the Comoros, the Republic of Kenya, the Republic of Malawi, the Federal Republic of Somalia, and the African Union, with a total IDA financing of US\$603 million equivalent, a co-financing from the Global Agriculture and Food Security Program (GAFSP) in the amount of US\$15 million to the Republic of Malawi, and a co-financing from the Global Program for the Blue Economy Multi-Donor Trust Fund in the amount of US\$3 million to the Union of the Comoros.
28. The MPA Program is expected to be implemented across a broad swathe of IDA-eligible countries in the AFE



region and include the participation of several regional organizations and other intergovernmental agencies. Phase 1 of the MPA is at the early stage of implementation. The lessons learned from Phase 1 and the FSRP MPA in West Africa (P172769) have been applied to the design of this PforR. These include integrating the use of regional indicators and ensuring strong alignment with the strategic agenda promoted by the African Union Commission and Regional Economic Communities.

29. The TFSRP result areas (RA) and disbursement-linked indicators (DLI) are well aligned with the MPA Pillars, as summarized in Table 2.

Table 2: Alignment between the MPA and the TFSRP (PforR)

TFSRP Results Areas	RA1 - Improving service delivery in research, extension, and seed	RA2 - Developing resilient rural infrastructure	RA3 – Strengthening fiscal performance to enable delivery on priority investment areas
MPA Pillars			
1. Responding to a Deteriorating Food Security Situation		DLI 4, DLI 5	
2. (Re-)Building Resilient Agricultural Production Capacity			
2.1: Developing National or Regional Agricultural Information Systems	DLI 2		
2.2 Developing and Delivering Resilience-Enhancing Technologies and Services	DLI 1, DLI 2, DLI 3	DLI 4	DLI 6, DLI 7
3. Supporting the Sustainable Development of Natural Resources for Resilient Agricultural Landscapes			
3.1: Identification and Validation of Interventions at the Local or Watershed Level			
3.2: Investments in Sustainable Natural Resources Management		DLI 4	DLI 7
4. Getting to Market			
4.1: Strengthening Agrifood Value Chains	DLI 2		
4.2: Upgrading Agrifood Marketing Infrastructure	DLI 3	DLI 5	
5. Promoting a Greater Focus on Food Systems Resilience in National and Regional Policymaking			
5.1: Making Food Systems Resilience a Priority in Public Policies and Spending			DLI 6, DLI 7
5.2: Building Institutional Capacity to Implement Resilience-Focused Policies	DLI 1, DLI 2, DLI 3		DLI 7
5.3: Supporting Regional Organizations to Build Food Systems Resilience Transnationally	DLI 1		



Table 3: MPA Program Framework Overview.

Phase	Country (Project Number)	Sequential or Simultaneous	IPF, or PforR	Estimated IDA Amount (US\$, millions)	Estimated Other Amount (US\$, millions)	Estimated Approval Date	Estimated Environmental and Social Risk Rating
1 (ongoing)	Ethiopia, Madagascar, IGAD, and CCARDESA (P178566)	Sequential	IPF	788.1	65.5	June 21, 2022	High
2	Tanzania (P179818)	Simultaneous	PforR	300	0	May 31, 2023	Substantial
3	Comoros, Kenya, Malawi, Somalia, and AU (P177816)	Simultaneous	IPF	603	18	May 31, 2023	Substantial
4	Mozambique (P181112)	Sequential	IPF	75		July 2023	Substantial
Phase 5+ ²³	Others			983.9	80.5		
Total Revised Overall IDA Financing Envelope: US\$2,750 million							
Original Board Approved Financing Envelope: US\$2,300 million							

Note: IPF = Investment Project Financing; PforR = Program-for-Results.

Table 4: Updated List of Countries and Organizations Expected to Participate in the MPA²⁴

Expected Participating Country/Organization	Estimated Financing (up to US\$, millions)	Expected Participating Country/Organization	Estimated Financing (up to US\$, millions)
Comoros	80	South Sudan	100
Democratic Republic of Congo	400	Tanzania ²⁵	300
Ethiopia	600	Zambia	100
Kenya ²⁶	150	Zimbabwe ²⁷	100
Lesotho	100	CCARDESA	5
Madagascar	190	IGAD	25
Malawi ²⁸	250	AU	13

²³ Order of phases will be determined by readiness.

²⁴ These figures are maximum estimates for each country. In light of the rapidly changing food security situation, these numbers will be adapted in consultation with borrowers/recipients during the preparation of their respective phases. Management will also ensure that the approval of future phases is consistent with the borrowing status of participating countries.

²⁵ Represents a US\$100 million increase under FSRP Phase 2 over the amount approved by the Board on June 21, 2022.

²⁶ Kenya added to the list of countries under FSRP Phase 3.

²⁷ Due to its nonaccrual status, Zimbabwe is currently ineligible to receive funding from IBRD/IDA. Zimbabwe's participation in future phases will be subject to the country becoming eligible for IBRD/IDA financing.

²⁸ Represents a US\$50 million increase under FSRP Phase 3 over the amount approved by the Board on June 21, 2022.



Expected Participating Country/Organization	Estimated Financing (up to US\$, millions)	Expected Participating Country/Organization	Estimated Financing (up to US\$, millions)
Mozambique	150	Other Regional organizations (future phases)	37
Somalia ²⁹	150		
Total (US\$, millions)	2,750		

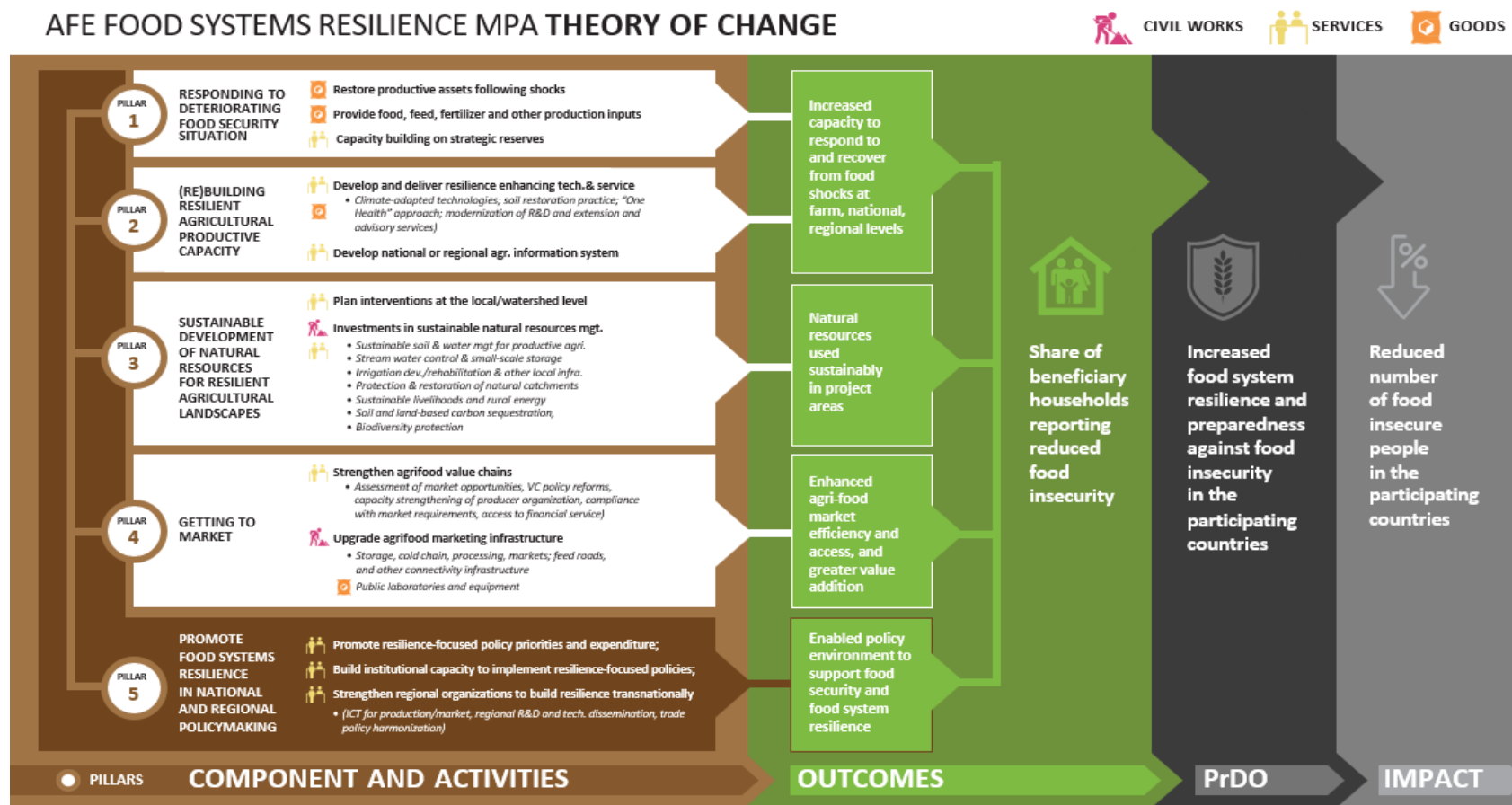
²⁹ Somalia added to the list of countries under FSRP Phase 3.



C. Theory of Change

30. Phase 2 uses the same Theory of Changes as the overall MPA and is shown below.

AFE FOOD SYSTEMS RESILIENCE MPA THEORY OF CHANGE





D. PforR Program Scope

31. **The Government's financing for the PforR Program (ASDP II limited to crops) is estimated at US\$2,093 million over 2023/2024 – 2027/2028.** The Program is expected to be financed at 85.6 percent by the Government and 14.4 percent by IDA (Table 5). IDA would finance US\$300 million equivalent. The PforR instrument will be used in Tanzania Mainland, and its preliminary time boundaries are expected to be FY2023/2024 – 2027/2028. Zanzibar will be covered by the IPF component of the TFSRP.

Table 5: Overall Program Financing

Source	Amount (US\$ million)	Share of Total (%)
Government budget	1,793	85.6
IDA	300	14.4
<i>Of which IDA National</i>	<i>120</i>	<i>5.7</i>
<i>Of which IDA Regional</i>	<i>180</i>	<i>8.6</i>
Total Program Financing	2,093	100

32. **Increasing the food systems resilience and strengthening Tanzania's ability to adapt to the challenges of climate change requires a transformation in institutional systems and ways of working.** In this context, the PforR design is focused on the strengthening of innovation and improved knowledge, ecosystems-specifically around the challenges of increasing access to climate-smart technologies, early warning systems, and drought resistance, introducing business models that will maximize the impact of the government's capital investment-specifically focused on reducing the potential impact of water shortages on existing irrigations systems and reducing post-harvest losses and improving efficiency and effectiveness of budgets and policy instruments. The specific RAs are: (i) improving service delivery in research, extension, and seeds systems, (ii) developing resilient rural infrastructure, and (iii) strengthening fiscal performance on priority investment areas.

Table 6: IDA Financing by PforR Result Areas

	Amount (US\$ million)	Share of total IDA PforR Financing (%)
Result Area 1: Improving service delivery in research, extension, and seed	95.0	33.9
Of which national IDA	23.8	25
Of which regional IDA	71.2	75
Result Area 2: Developing resilient rural infrastructure	112.0	40
Of which national IDA	56.0	50
Of which regional IDA	56.0	50
RA 3: Strengthening fiscal performance to enable delivery on priority investment areas	73.0	26.1
Of which national IDA	44.2	60
Of which regional IDA	28.8	40
Total (Overall IDA funding of DLIs)	280.0	
IPF component	20.0	



Of which national IDA	20.0	100
Total National IDA	120.0	40
Total Regional IDA	180.0	60

33. **The PforR will support a subset of Result Areas within the ASDP II program (outlined in Table 7).** The PforR will finance services and budget lines that will significantly impact building resilience and addressing climate change at scale. The PforR will not cover the expansion of irrigation schemes, mechanization, micro-finance, water sources development for livestock and fisheries, or improved market access for crops, livestock, and fisheries.
34. **Tangible resilience-building results along the results areas include:** (a) better production capacity based on the continuous release, increased production and wide adoption of improved (e.g., heat/drought-tolerant) priority seed varieties, (b) efficient on-farm water use to buffer against drought and reduced post-harvest losses associated GHG emissions through better storage and primary processing facilities and management practices, and (c) changing land management and production practices to conserve soil and build up soil organic carbon and nutrient reserves.
35. **The primary beneficiaries of the PforR are farmers operating in crop value chains. In addition, workers supporting improved knowledge systems (researchers and extension workers), seed value chain operators, and the GoT agencies' management staff are secondary beneficiaries of the operation.** Improved service delivery is expected to generate benefits beyond Tanzania by improving regional food security, accelerating knowledge sharing, and increasing exports. The PforR includes three key result areas aligned with the ASDP II four strategic directions: (a) Sustainable water and land use management, (b) Enhanced agricultural productivity and profitability, (c) Commercialization and value addition, and (d) Sector enablers, coordination, and monitoring and evaluation (M&E).



Table 7: Summary of Program Boundaries

		Government program – ASDP II	The PforR Program	
Objectives		Transform the agricultural sector (crops, livestock, and fisheries) towards higher productivity, commercialization level, and smallholder farmer income for improved livelihood, food, and nutrition security.	To support food systems resilience by strengthening agricultural service delivery, the adoption of climate resilient technologies and fiscal performance in the agricultural sector.	
Duration		2018-2028	2023-2028	
Geographic coverage		Nationwide	Nationwide	
Overall Financing		US\$4,230 million**	US\$300 million	
Priorities / sub-priorities		Included in PforR	Result Areas	
1	Sustainable water and land use management			
1.1	Land use planning and watershed management	No		
1.2	Irrigation infrastructure development	No		
1.3	Irrigation scheme management and operation	Yes	2	
1.4	Water sources development for livestock & fisheries	No		
1.5	Promote climate-smart agriculture technologies and practices	Yes	1	
2	Enhanced agricultural productivity and profitability			
2.1	Strengthen agricultural extension, training, and info services	Yes*	1	
2.2	Improve access to inputs and health services	Yes*	2	
2.3	Research and development	Yes*	1	
2.4	Strengthen and promote agricultural mechanization	No		
2.5	Improve food and nutrition security	Yes	2	
3	Commercialization and value addition			
3.1	Develop market access for all priority commodities.	No		
3.2	Develop market access for fisheries and livestock products.	No		
3.3	Development of processing and value addition	Yes*	2	
4	Sector enablers, coordination, and M&E			
4.1	Improve policy and regulatory framework and business environment	Yes	3	



4.2	Strengthen organizational and technical capacities of farmer organizations	Yes	2
4.3	Promote and strengthen gender inclusiveness	Yes	3
4.4	Improve and strengthen coordination between Agriculture Sector Lead Ministries (ASLMs) ASLMs.	Yes	3
4.5-4.8	Improved capacity in system management, data collection, M&E	Yes	3
4.9	Improvement of ICT for agricultural Information Services and Systems	Yes	3
4.10	Provide microfinance services	No	

**Original ASDP II figure for 2018-2022

36. **The scope of the PforR includes recurrent and operating costs, goods, civil works, and services.** In accordance with the World Bank's Policy and Directive on PforR Financing, it excludes high-risk and high-value activities, namely: (a) activities likely to have significant adverse impacts, which are sensitive, diverse, or unprecedented on the environment and affect the population; and (b) activities that involve procurement of goods, works, and services under high-value contracts. The PforR will not finance investments related to expanding irrigation. However, improvements to existing irrigation schemes' maintenance, management, and operations are covered.
37. **Potential co-financing.** Two other donors, International Fund for Agriculture and the Norwegian Agency for Development Cooperation have expressed interest in supporting the PforR Program. The donor co-financing is expected to be confirmed by conclusion of FY24. Additional financing procedures will be followed once commitments have been finalized.

E. Program Development Objective (PDO) and PDO Level Results Indicators

38. The development objective of TFSRP is to support food systems resilience by strengthening agricultural service delivery, the adoption of climate resilient technologies and fiscal performance in the agricultural sector.
39. Success toward the achievement of the PDO will be measured by indicators as follows:
- Number of farmers adopting climate resilience-enhancing technologies and practices, of which female farmers (number)
 - Area provided with new/improved irrigation or drainage services (hectares)
 - Number of farmer beneficiaries reached with assets and services; of which women (number); of which youth (number)
 - Tanzania's CAADP- BR score on "Intra-African Trade in Agriculture Commodities and services"
 - Number of policy products adopted with project support related to agriculture, natural resource management, and food/nutrition security.



F. Disbursement Linked Indicators and Verification Protocols

40. The DLIs are designed to improve food security and resilience of farming systems by making key national and local government services more accessible, timely, predictable, and relevant (Table 8). For instance, enhancing the management of budgets allows extension workers to plan and execute farmer field schools and demonstration trials on time, have access to operation and maintenance of motorcycles for reaching farmers, etc. Improved monitoring will provide greater accountability and management of public funds. The lessons generated through delivering these DLIs will be highly relevant to building resilience regionally and across nations. The Government of Tanzania could share these lessons through the Comprehensive Africa Agriculture Development Program (CAADP) and Region Economic Community (REC)-driven processes.

Table 8. Summary of Disbursement Linked Indicators

Key Results Area	Disbursement Linked Indicators	Responsible Entity	Disbursement Frequency	US\$, millions
RA1. Improving service delivery in research, extension, and seed	DLI 1. Sustainable financing for the development and dissemination of climate-resilient technologies in agriculture	Tanzania Agriculture Research Institute (TARI) MoA	Annual	37
	DLI 2. Extension outreach strengthened, including through ICT solutions for promoting climate-smart practices	MoA	Annual	32
	DLI 3. Improved functional linkages in the seed value chain	ASA TOSCI MoA	Annual	26
RA2. Developing resilient rural infrastructure	DLI 4. Performance-based Operations, Management, and Maintenance (OMM) contracts introduced and implemented	NIRC MoA	Annual	70
	DLI 5. Effective management of public warehouse facilities	MoA	Annual	42
RA3. Strengthening fiscal performance to enable the delivery on priority investment areas	DLI 6. Improved agricultural budget monitoring and predictability	MoA MoFP	Annual	41
	DLI 7. Scaling up soil health assessments and management	MoA	Annual	32
Total funding of DLIs by IDA				280
IPF				20



41. **The PforR activities are designed to make direct and indirect contributions to critical cross-cutting themes such as gender, nutrition, and climate change (see Tables 9 and 10 for a summary of contributions to these areas).** The following is a summary of the PforR Result Areas:

Result Area 1. Improving service delivery in research, extension, and seeds (MPA Pillar 2: (Re)Building Resilient Agricultural Productive Capacity).

42. The PforR seeks to support the delivery of ASDP II, build resilience, and increase the capacity of the Mainland to adapt to climate change by accelerating the ability of research institutions to develop and adapt technologies, expand the use of digital solutions to enable increased access to climate-smart technology and improve the supply to high-quality climate resilient seeds. A summary of the activities to be undertaken is as follows:
43. **DLI 1: Sustainable financing for the development and dissemination of climate resilient technologies in agriculture.** Delivering ASDP II requires improving productivity, building resilience, and responding to the challenges of climate change. Tanzania's agriculture research institutions have a critical role in this process. Building increased readiness for key institutions to adapt to the impacts of climate change (through investment technology, institutional agility, and human capacity) is critical. Furthermore, for the nationally driven research to adapt and respond to country-specific challenges, national centers of excellence would be linked to regional and international knowledge systems, creating an ecosystem of knowledge and solutions. For example, new drought-resistant seed varieties or the new systems of soil management to increase carbon sinks and productivity developed in Tanzania could be shared across the Region. This DLI and disbursement-linked results (DLR) will support: (i) the development of a five-year strategy for Tanzania Agriculture Research Institute (TARI) (including the strategic direction for climate-resilient and gender-sensitive research, and the approach for engaging and financing national and regional partnerships within each of the results areas), (ii) increased research into varietal development and registration of new climate-resilient seed varieties, including those adapted to climate change and those crops favored by women farmers³⁰, and (iii) a predictable budget for research institutions allowing institutions to invest in refurbishing critical infrastructure (greenhouses), developing new technologies, and building skills (including creating opportunities for young female scientists) required to accelerate the development of climate-smart technologies and knowledge. This DLI would increase the dissemination of climate-smart technologies and knowledge nationally and regionally.
44. **DLI 2: Extension outreach strengthened, including through ICT solutions for promoting climate-smart practices.** Under ASDP II, the Ministry of Agriculture (MoA) has identified the cost-effective expansion of agriculture extension services as a strategic priority. As part of this process, the MoA seeks to accelerate farmers' access to climate-smart technologies and weather-related services, including early warning information and predictive models for pest and disease outbreaks (expected to increase with climate change). Under this DLI, the newly established farmer registry would be combined with a mobile extension services platform (M-Kilimo) packed with, weather forecasting, rapid identification and monitoring of pest and disease (including new pathogens emerging as a result of climate change), market information, and access to finance, which would allow the MoA, Local Government Authorities (LGAs), private sector, and farmers to identify, understand, and better prepare for direct and indirect impacts of climate change. Developing approaches to

³⁰ The Women's Empowerment Index in Agriculture (WEAI) will be introduced to the Building Better Tomorrow Program. This is a government program focused on enabling women and youth increased access to agriculture)



exchange agriculture information on these digital data platforms would also play a critical role in strengthening the Region's resilience to shocks. In parallel, the DLI would support training to all MoA extension staff in data-driven planning and solutions and help deliver climate-smart solutions to farmers (e.g., use of drought-resistant seeds, agroforestry, and integrated soil fertility management). The successful implementation of the above actions will create information and knowledge ecosystems inside Tanzania. Furthermore, this DLI allows Tanzania to contribute to and benefit from investments in ICT solutions across the Region.

45. **DLI 3: Improved functional linkages in the seed value chain.** Limited access to certified improved seeds, including those adapted to climate change (e.g., drought tolerant, pest resistant, disease tolerant, and heat-resilient) or with high nutritional benefits (e.g., vegetables), is one of the main challenges to improving agricultural productivity and food security in Tanzania. Over the past five years, the country has built the institutional infrastructure and regulatory system to develop good quality seeds. However, inadequate public financial support in critical areas has created bottlenecks in the seed production system. At the same time, the nascent private sector still faces entry barriers such as high investment costs. This DLI will help: (i) improve farmers' access to certified seeds adapted to climate change and/or with high nutritional benefits; (ii) scale up certified seed production; (iii) develop small-scale water-efficient irrigations schemes for Tanzania Agricultural Seed Agency's (ASA) seed farms; (iv) develop public and private institutional capacity for seed production and marketing, including establishing private-public partnerships for seed multiplication; and (v) scale up TOSCI interventions to ensure seed quality verification and enforcement. Expanding farmers' access to good quality seeds addresses one of the critical bottlenecks to increased productivity and improved food security. As a result, value chains will be better positioned to maximize the opportunities created in regional trade.

Result Area 2: Developing resilient rural infrastructure (MPA Pillar 3: Sustainable Development of Natural Resources for Resilient Agricultural Landscapes, and MPA Pillar 4: Getting to Market).

46. The Government has made a significant capital investment in infrastructure such as irrigation and post-harvest storage, which is critical to improving productivity and strengthening resilience, including climate resilience. On the one hand, resource-efficient water management is crucial for climate change adaptation in the context of expected rises in temperature, heat waves, and extreme rainfall variability. On the other hand, optimized post-harvest storage will increase food supply, quality, and stability, all core elements of food security and resilience to climate shocks, as well as reduce food losses and related GHG (contributing to climate change mitigation). Result Area 2 includes the two DLIs summarized below.
47. **DLI 4: Performance-based Operations, Management, and Maintenance (OMM) contracts introduced and implemented.** ASDP II highlights the need for expanded investments in irrigation. The Government has responded by increasing budget allocations for the National Irrigation Commission (NIRC) by nearly eight times from FY21-22 (US\$20 million) to FY22-23 (US\$157 million), with increase in allocation of the Government's own resources and the support of foreign funding. A further increase of the budget is anticipated for FY23-24 and subsequent financial years. The key objective of the Government is to establish systems that ensure all irrigation schemes have climate-resilient design standards and energy-efficiency considerations to maximize climate change adaptation and mitigation. This DLI will incentivize the use of performance-based contracts for the operation, management, and maintenance of irrigation schemes that clarify and strengthen roles and responsibilities among stakeholders involved in irrigation OMM. The goal is



to move away from the prevailing ad-hoc OMM modalities, which leave the infrastructure poorly maintained and operated, towards a more systematic and explicit irrigation service provision on the scheme. Increasing the irrigation management's reliability will improve the farm system's resilience and ensure the infrastructure's operational integrity in the long term. The actions undertaken include rehabilitating existing schemes to reduce leakages, improve water availability, and improve energy efficiency. The DLI would apply to both existing and new schemes. The successful implementation of the above actions would create an institutional model for irrigation management that could be applied in countries across the East Africa region.

48. **DLI 5: Effective management of public warehouse facilities.** ASDP II highlights the strategic importance of post-harvest management (particularly value addition and post-harvest losses reduction). Tanzania has established a functioning Warehouse Receipt System (WRS). However, the majority of publicly owned warehouses (close to 60-70 percent) are not operating properly due to ownership and governance challenges. Efficient management of public warehouse facilities will increase the volume of crops passing through government warehouses, improve value chain commercialization, and contribute to climate change mitigation by reducing post-harvest losses and associated GHG emissions, which currently stand at 30–40 percent for cereals and as high as 60 percent for horticulture crops. This DLI will incentivize introducing efficient, hybrid (public-private), climate-resilient, and energy-efficient warehouse management models that will adapt to local conditions, using a private sector operation model and the WRS, where applicable, for existing public warehouses. Examples of warehouses that will be made climate-resilient and energy-efficient include investing in energy-efficient infrastructure and technology. The models will be drawn from successful private warehouse operational models with a defined incentive framework acceptable to farmers, with value addition and processing embedded in the agreements. Specific attention will be given to working closely with farmers organizations and building the capacity of organizations that support women farmers. The Government will pilot and roll out successful climate-informed models based on lessons learned. Delivering this DLI will increase the volume, quality, and stability of food available for domestic use and export, improving food security and resilience to production shocks (including those related to extreme weather events) across the Region.

Result Area 3: Strengthening fiscal performance to enable delivery on priority investment areas (MPA Pillar 5: Promote Food Systems Resilience in National and Regional Policymaking).

49. ASDP II highlights the need to improve overall institutional performance. Improved agriculture budgeting and repurposing public support mechanisms will enable services to be delivered more effectively and in an impactful way, ensure improved localized planning, and strengthen investment into natural resource management. As a result, farmers and other value chain actors will be less vulnerable to climate-related shocks. The key activities to be supported are summarized below:
50. **DLI 6: Improved agricultural budget monitoring and predictability.** Improved budget and fiscal performance in the agricultural sector would contribute to strengthening food security and resilience of farming systems by boosting the delivery of key agricultural services by national and local governments. In Tanzania, over 2018/2019-2021/2022, the tight budget allocation for ASDP II left little fiscal space for development expenditures. It led to insufficient support for critical public services needed to catalyze agriculture transformation. As a result, agricultural public service delivery critically deteriorated over the past decade in Tanzania (e.g., research, extension services, irrigation). Yet increasing budget allocation will only boost service delivery if it effectively translates into additional timely and relevant investments. Scaling-up budget



predictability and budget outturn are needed for agricultural plans and policies to materialize and deliver planned outcomes. In addition, improved monitoring will provide greater accountability and management of public funds. To support the improvement of budget management activities, this DLI will support the following: (i) improving budget outturn by the agriculture sector agencies, measured by timely release of monthly approved cash plans and end-of-year budget outturn; (ii) strengthening sectoral budget data collection and analysis to monitor budget management closely and supporting mainstreaming climate change into budgets and strengthen climate policy budgeting, and (iii) identifying and promoting at national and regional levels budgetary best practices such as CSA. This DLI will incentivize Ministry of Finance and Planning (MoFP) to honor the allocation approved for agricultural agencies (MoA, National Insurance Company (NIC), TARI, etc.). Improving the budget management performance will strengthen the impact of service delivery which will, in turn, increase productivity and create opportunities for value chains to export to the regional markets. In addition, the experience in improving budget performance will contribute to regional policy processes such as CAADP.

51. **DLI 7: Scaling up soil health assessments and management.** In a tight fiscal space, maximizing the value-for-money of public funds use is critical. Tanzania has reintroduced fertilizer subsidies in 2022/2023 (with funding from the African Development Bank) to protect farmers from global fertilizer price shock and maintain farm productivity. However, experience in Tanzania and neighboring countries shows that these policies come at a high fiscal cost and can only increase soil fertility with a holistic approach to soil health improvement. Scientifically based, targeted, and more effective farmer support would improve soil productivity and carbon content. This DLI is designed to support Tanzania in adopting a holistic soil health assessment and management framework that will increase productivity and long-term resilience of the sector and pave the way for future carbon financing opportunities. It will do so by: (i) scaling up and accelerating soil quality and carbon content testing and mapping; (ii) based on this knowledge, identifying priority farming areas for improved and better targeted soil health management actions; and (iii) supporting farmers to adopt appropriate soil health management practices. Governments across the Region are seeking ways to repurpose public support mechanisms that will enable sustainable improvements in soil health, maximize productive potential, and attract carbon financing—implementing the above actions positions Tanzania as a regional leader in this area. The lessons generated will inform regional and national policy processes.
52. **These DLIs reflect a challenging and transformative agenda for the MoA.** In several areas MoA will need to develop new guidelines and **systems** to support staff in the delivery of the DLIs. These guidelines have been summarized in the Program Action Plan (PAP) in Annex 6.
53. **The PforR DLIs will support ASDP II to address key strategic areas of mobilizing finance for development, nutrition and gender.** A summary of these contributions can be found in Table 9.



Table 9: Summary of PforR Program Contributions to Mobilizing Finance for Development, Nutrition, and Gender

Disbursement Linked Indicators	Mobilizing Finance for Develop (MFD)	Contribution to Improved Nutrition	Contribution to bridging the Gender Gap
1. Sustainable financing for the development and dissemination of climate-resilient technologies in agriculture	Predicable research financing will create a strong platform for partnerships with the private sector.	Research new varieties and practices that support the diversification of crop value chains.	Research new varieties and practices appropriate for women's needs and provide training opportunities for female researchers. This process will be informed by the introduction of the Women Empowerment in Agriculture Index (WEAI) into the Building Better Tomorrow program (WEAI is in the PAP, see Annex 6).
2. Extension outreach strengthened, including through ICT solutions for promoting climate-smart practices	Mainstreaming of digital solutions into the agriculture knowledge system increases the potential for private investment in a range of areas, including access to finance and service delivery.	Improve access to information and knowledge required to support introducing new or improved production practices. Improve the stable supply of diversified food.	Give special focus on outreach to women farmers' access to technologies.
3. Improved functional linkages in the seed value chain	Providing an opportunity for seed production by the private sector through leasing.	Increase access to improved seed varieties.	Increase access to improved seed varieties for women.
4. Performance-based Operations, Management, and Maintenance (OMM) contracts introduced and implemented		Enable an improved production environment by improving water management and access to water to support healthy diets.	Contracts will strengthen compliance with requirements for women's access and participation in irrigation investments and management.



5. Effective management of public warehouse facilities	The government will be introducing new partnership models, including leveraging public capital investment to bring in increased private sector investment into post-harvest management.	Increase nutritious food availability (quality and quantity).	Create opportunities for women to participate in commercialization.
6. Improved agricultural budget monitoring and predictability		Improve access to key knowledge services (e.g., extension required for crop diversification and promotion of healthy and nutritious diets.	
7. Scaling up soil health assessments and management	Leveraging carbon financing.		

G. IPF: Project Activities in Zanzibar

54. **There is an urgent need to strengthen Zanzibar's ability to adapt and respond to the increasing challenges of climate and to build increased resilience into the island's food systems.** As in Tanzania Mainland, climate change models project significant increases in average temperature for Zanzibar (+ 1.5 to 2°C by 2050, +2 to 4°C by 2090), weather event and rainfall variability (intensification of heavy rainfall during the rainy season and of dry spells during the dry season), and thus greater flood risks³¹. Water management thus stands out as key for climate change adaptation. Climate variability has already caused prolonged dry periods and unpredictable rainfall patterns, making crop cultivation less productive. Freshwater resources are also in limited supply, mainly dependent on seasonal rains that store water in inefficient groundwater aquifers consisting of freshwater lenses floating on the underlying seawater. Coupled with low utilization of improved technologies, agricultural production and productivity is below the island's potential, with significant implications for the food security situation in both Unguja and Pemba.
55. **In this context, TFSRP includes an IPF component to finance capacity building and technical assistance for Zanzibar and Tanzania Mainland.** The activities for Zanzibar are aligned with Result Areas 1 and 2 of the PforR, and where feasible, links to the Mainland activities have been integrated into the design.
56. **Zanzibar would benefit significantly from closer integration into regional agri-food knowledge ecosystems.** However, current levels of institutional capacity are a barrier to absorbing and contributing to these systems. In this context, the focus of the IPF activities for Zanzibar is on strengthening existing capacity. A summary of these activities under TFSRP is as follows:

³¹ http://www.economics-of-cc-in-zanzibar.org/images/Climate_Change_Projections_for_Zanzibar_vs_3.pdf



Component 1 (Zanzibar): Improving service delivery in research, seed, and extension

57. **Research capacity.** The operation will expand Zanzibar's research capacity to build resilient food systems, adapt to climate change, and benefit from and engage with regional knowledge ecosystems. Activities will focus on strengthening the research capacity of Zanzibar Agricultural Research Institute (ZARI) at Kizimbani. Specifically, the activities will include: (a) rehabilitating ZARI's research infrastructure and upgrading relevant tools and technology; (b) carrying out on-station and field trials to evaluate the efficacy of alternate wetting and drying method in rice production; (c) diversification of upland rice growing areas in Zanzibar with integrated soil-crop system management for climate change mitigation, adaption, and higher productivity; adoption of high-yielding and abiotic stresses-tolerant (temperature, drought, salinity), and resistance cultivars using different new breeding, genetic engineering, and genomic tools; (e) development and dissemination/adoption of integrated soil fertility management and agroecology practices to increase productivity and resilience; and (f) financing four master's degrees and two Ph.D. on agriculture subjects (benefitting equally numbers of female and male students). Accelerating access to CSA technologies will be the focus areas of the master's and doctoral degrees. This would lead to additional climate change adaptation and climate change mitigation based on the focus of the degree programs. For example, some of the programs could research increasing climate resilience of the agriculture sector, research on reducing GHG emissions of the agriculture sector.
58. **Seed production capacity:** The operation will rehabilitate the RGoZ's seed farm infrastructure at Bambi, Kibonde-Mzungu, and Ole to increase efficiency in production and multiplication of climate-resilient seeds. This will include the installation of a new water pump at Bambi seed farm; renovation of the seed processing unit at Bambi seed farm; installation of drip irrigation systems in 10 ha in seed farms; and renovation of farm offices at Kibonde-Mzungu seed farm. This action will increase farmers' access to seeds adapted to changing climatic conditions. With support from the lessons learned on the Mainland, the operation will support establishing a seed certification system to improve services for quality control and marketing seeds, and repairing storehouses and drying grounds in the field sites at Kizimbani, Ole, Mwera, and Kibonde-Mzungu for seed production, multiplication, and distribution.
59. **Improved access to extension:** The operation will finance training of all government extension workers in climate-smart seed and other productivity-enhancing technologies; expansion of use of digital tools and platforms to promote climate-smart seeds adoption (including establishing the Kilimo app to facilitate knowledge transfers) and good agricultural practices uptake by farmers; provision of operational budget and facilities to extension officers to increase outreach to farmers; farmer field schools with at least 50 percent inclusion of women and field days; and training trainers-of-trainers and farmers on contract farming, farmer's business schools and good post harvesting handling practices. The operation will also finance rehabilitation of four Farmer Service Centers with stores (at Bumbwisudi2, Mtwango1 and Kibokwa1).

Component 2 (Zanzibar): Rehabilitation of rural infrastructure to enhance climate resilience

60. **Irrigation:** The operation will support rehabilitation of agriculture sector infrastructure, enabling farmers to build resilience and reduce their vulnerability to climate-related shocks. Specifically, it will finance rehabilitation of irrigation canals (30,945 meters) at eight irrigation schemes Bumbwisudi, Mtwango, Kibokwa, Mwera, Makombeni, Weni, Saninga, and Kinyakuzi; rehabilitation of four diversion structures at Mwera, Kinyakuzi, Makombeni, and Weni; and rehabilitation of drainage canals (about 5,000 meters) in Bumbwisudi,



Mtwango, Kibokwa, Mwera, Makombeni, Weni and Kinyakuzi. In addition, related Irrigator Organization members will receive training on financial and management skills. The operation will also finance the drilling of four boreholes and rehabilitation of another four boreholes, including the purchase of a complete set of pumps and the introduction of clean energy technologies. It will also finance the rehabilitation of farm roads Mtwango and Bumbwisudi (about 10 km).

61. **Farmers' service centers.** The operation will support construction of government-owned farm level stores at Kibokwa and Mtwango, and construction of three drying areas in farmers' service centers (Bumbwisudi, Mtwango, Kibokwa). This will help farmers in the respective irrigation schemes to dry their paddy soon after harvesting. The operation will also facilitate the Government Agency for Tractors and Farm Machinery Services to promote the adoption of labor-saving technologies in farming (minitractors, mini-combine harvesters, power tillers, transplanters, seed drillers, and weeders), especially among youth and women. Likewise, it will facilitate the preparation of bankable business plans and loan/grant applications for youth and women for sourcing funds for investment in small farm machines/implements. It will also support training of targeted youth and women on operation, repair, maintenance, and management of farm machines/implements, and business skills. This activity will promote more youth and women's involvement in agriculture production as service providers.
62. **Financial management and disbursements:** The itemized Annual Work Plan and Budget will be prepared and submitted it to the World Bank for deliberation by March of each year. Project activities and cost estimates will be established on an annual basis. The World Bank will disburse funds to the designated bank account maintained at the Bank of Tanzania (BoT) for project purposes. After that, funds will be transferred to a designated bank account at People's Bank of Zanzibar (PBZ) for project expenditure. Bank signatories to the Designated Account at PBZ will operate under the existing ministry procedures. A subsidiary financing agreement to be executed prior to effectiveness will guide the disbursement and accountability of funds from the World Bank to the RGoZ.
63. **Procurement:** The World Bank's fiduciary procedures will apply for the IPF component. Procurement under the IPF component will be carried out in accordance with: (a) the World Bank Procurement Regulations for IPF Borrowers, dated November 2020; (b) Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016; and (c) other provisions stipulated in the Financing Agreement and Project Agreement.
64. **A Project Procurement Strategy for Development for the IPF component has been developed,** based on which Procurement Plans (PP) for the first 18 months was prepared by the Ministry of Agriculture, Irrigation, Natural Resource, and Livestock Zanzibar (MAINRL) and the Tanzania Mainland setting out the activities and selection methods to be followed by the recipient in the procurement of goods, works, non-consulting and consulting services financed by the World Bank. The PPs will be updated at least every 12 months, or as required, to reflect actual project implementation needs. Each update of the PP will require World Bank approval. All PPs will be publicly disclosed in accordance with the World Bank Access to Information Policy 2010 (details are included in Annex 8).



H. IPF: Technical Assistance for Tanzania Mainland and Zanzibar

65. Assessments of the Tanzania Mainland and Zanzibar identified areas where additional support could strengthen the delivery of results. In response, the operation will finance, through the IPF, a series of activities. A summary of these activities includes:

Tanzania Mainland (US\$5 million)

66. The technical assistance will focus on the following areas³²:

- **Monitoring and Evaluation capacity (M&E).** The overall M&E capacity at the MoA needs to be strengthened. The operation will strengthen MoA's systems for data gathering, monitoring and evaluation through: (i) designing new sectoral monitoring systems, (ii) procurement of hardware and software to ensure the M&E system is efficient, (iii) design and implementation of the Women's Empowerment Index for Agriculture, and (iv) staff training on procurement, environmental and social risks, and contract management. The above activities will be coordinated with other donor-funded activities related to M&E.
- **Maximizing investment in irrigation infrastructure.** To anchor OMM, the operation will support: (i) preparation of Guidelines on Irrigation Design Innovations for Improved Water Productivity, including a Performance-based OMM Contract Template with legal provisions defining the roles and responsibilities of the parties to the contract, and related performance measures, (ii) development of a Monitoring and Information System for public irrigation schemes, allowing data collection and storage for critical performance indicators, and (iii) building awareness among the NIRC staff, district engineers, and scheme-level staff, and strengthening the NIRC's institutional capacity required, for the implementation of new irrigation operation and maintenance models. The above activities will be coordinated with other donor-funded activities related to irrigation investment.
- **Responding to green growth and carbon financing opportunities.** Through soil health management practices, the carbon sequestered in agricultural soils can be monetarized on the international carbon offset market, which is rapidly expanding. The countries' most significant challenge in accessing these markets is setting up a Monitoring, Verification, and Reporting (MRV) system. The operation will support development of MoA's and MoFP's human resource capacity and expertise to prepare and deliver a roadmap for carbon-financing, including: (i) map out pathways for MoA to be certified as recipients of climate financing, (ii) support the establishment of partnerships with venture capital investment facilities focused on resilience, and (iii) support the GoT in promoting opportunities for resilience-related investment. This will include providing an estimated amount of US\$250,000 equivalent, required to develop such capacity at MoFP.
- **The IPF components will also build institutional fiduciary capacity** through the provision of local experts who will provide necessary support in project management and monitoring and evaluation. Specialized trainings will be provided to existing staff of the MoA and implementing entities, and relevant financial management and procurement software will be supported to enhance fiduciary due

³² Analysis of these areas can be found in the Program Action Plan in Annex 6.



diligence to mitigate fiduciary risks. Training programs in environmental and social risk management will also be provided to build environmental and social risk management capacity.

Zanzibar (US\$1.77 million): project implementation and supervision

67. In Zanzibar, the operation will support costs related to coordination and management activities by RGoZ, including specific technical assistance in project management, financial management, and procurement, social and environmental, monitoring and evaluation, and reporting requirement, including the preparation and approval of annual work plans, the project operation manual, environmental and social instruments, and other related documents. Under the environmental and social management-related activities, the support will enable the MAINRL in Zanzibar to coordinate, monitor, and report on implementing the relevant environmental and social management processes.
68. Activities supported through both the PforR RAs and the IPF component will make significant contributions to climate mitigation and adaption. The contributions are summarized in Table 10.

Table 10: Contributions the Result Areas and DLIs to Climate Change Mitigation and Adaption

Disbursement-Linked Indicator/ IPF Component	Climate Co-Benefits	
	Mitigation	Adaptation
DLI 1: Sustainable financing for the development and dissemination of climate-resilient technologies in agriculture	This DLI would directly contribute to net GHG emission reduction through improved energy use efficiency in traction; improved soil management and restoration of degraded soils; adoption of energy-efficient equipment in irrigation and renewable energy generation and use; improved storage to reduce food waste-related emissions.	The activity would finance development of climate smart technology and knowledge. This DLI would expand the knowledge for promoting technologies that: (1) improve water management efficiency and/ or access to irrigation; (2) use crop patterns more suited to climate variability (drought, heat, pest, and disease resistant).
DL 2: Extension outreach strengthened, including through ICT solutions for promoting climate-smart practices	E-advisory systems would facilitate effective access to climate change mitigation knowledge and technologies. Digitalized services would provide information on practices that improve carbon pools, reduce land use change, and promote energy-efficient equipment in irrigation and traction, and renewable energy generation and use, improve energy use efficiency in irrigation and traction, enhance carbon storage in soils, and improve storage efficiency.	This area would contribute to the adaptation through support using data-driven solutions for building climate resilience. Specifically, the DLI would support: (i) integrated weather monitoring and GIS information systems to enable early warning systems for the detection and monitoring of droughts, pests; (ii) land use digital mapping tool to provide information on soils; (iii) climate smart advice dissemination on crops cultivation reduced land use change, soils management, sustainable use of water resources, and strategies for enhanced preparedness to climate-related



Disbursement-Linked Indicator/ IPF Component	Climate Co-Benefits	
	Mitigation	Adaptation
		disasters.
DL 3: Improved functional linkages in the seed value chain		The DLI would improve access to diversified, heat, drought and pest resilient seeds and reduce damage and loss following increased frequency of natural hazards through research and testing of new climate resilient varieties.
DLI 4. Performance-based Operations, Management, and Maintenance (OMM) contracts introduced and implemented	The DLI would contribute to climate change mitigation by promoting water and energy efficient irrigation.	The goal is to move away from the prevailing ad-hoc modalities, which leave the infrastructure poorly maintained and operated. Improved irrigation services would improve water use efficiency and diversify the agricultural production for building climate resilience of rural communities by generating additional source of income.
DLI 5. Effective management of public warehouse facilities	This DLI would incentivize reducing post-harvest losses (and associated GHG emissions) through improved warehouses management.	This DLI would empower smallholders, particularly women, who are especially vulnerable to climate change impacts (due to limited business integration opportunities into the agri-food value chain) through improved public warehouse facilities which will increase food stability and supply, particularly when production shocks occur due to climate shocks.
DLI 6. Improved agricultural budget monitoring and predictability		The DLI would monitor delivery of key climate smart agricultural services (extension services, research, irrigation, storage, mechanization) by national and local governments. Services include extension services, research, irrigation, storage, mechanization, etc.
DLI 7. Scaling up soil health assessments and management	This DLI would incentivize carbon sequestration in agricultural soils thanks to improved agricultural practices, and pave the way for future access to carbon financing.	This DLI would improve agricultural soil health, which reduces the impacts of the year-to-year or season-to-season weather variability on productivity.
Zanzibar Component		



Disbursement-Linked Indicator/ IPF Component	Climate Co-Benefits	
	Mitigation	Adaptation
Research Capacity	This activity would directly contribute to net GHG emission reduction through improved energy use efficiency in traction; improved soil management and restoration of degraded soils; and adoption of energy-efficient equipment in irrigation and renewable energy generation and use.	<p>The activity would finance development of climate smart technology and knowledge.</p> <p>This activity would expand the knowledge for promoting technologies that: (1) improve water management efficiency and/or access to irrigation; (2) use crop mixes more suited to climate variability (drought, heat, increased salinity and pest and disease resistance).</p>
Seed Production Capacity		This activity will improve access to diversified, heat, drought and pest resilient seeds and reduce damage and loss following increased frequency of natural hazards through research and testing of new climate resilient varieties
Improved access to extension	<p>Advisory service would facilitate effective access to climate change mitigation knowledge and technologies.</p> <p>Digitalized services would provide information on practices that improve carbon pools, reduce land use change, and promote energy-efficient equipment in irrigation and traction, and renewable energy generation and use, improve energy use efficiency in irrigation and traction, enhance carbon storage in soils, and improve storage efficiency</p>	This activity would contribute to the adaptation through support using data-driven solutions for building climate resilience. Specifically, the activity will support: (i) integrated weather monitoring and GIS information systems to enable early warning systems for the detection and monitoring of droughts, pests; (ii) land use digital mapping tool to provide information on soils; (iii) climate smart advice dissemination on crops cultivation reduced land use change, soils management, sustainable use of water resources, and strategies for enhanced preparedness to climate-related disasters.
Irrigation		Improved irrigation services would improve water use management, efficiency and diversify the agricultural production for building climate resilience of rural communities by generating additional source of income.



III. PROGRAM IMPLEMENTATION

A. Institutional and Implementation Arrangements

69. **The PforR Program in Tanzania Mainland will be implemented under the existing institutional arrangements to ensure alignment with national systems and efficient coordination with complementary programs (Figure 2).** The MoA will oversee the implementation of the PforR operation, supported by President's Office, Regional Administration and Local Government Tanzania PO-RALG, in line with their respective mandates. The MoA, as the steward of the agriculture sector, is responsible for developing agriculture policies, strategies, regulations, and coordination and oversight of the sector's programs, including the development of the Medium-Term Expenditure Framework (MTEF). The MoA also provides oversight over autonomous and semi-autonomous national institutions responsible for key agriculture sectors functions, such as the Tanzania Agriculture Research Institute, Agriculture Seed Agency, Tanzania Official Seed Agency Institute, and the National Irrigation Commission. PO-RALG is responsible for providing administrative support, and coordinating LGAs in delivering agriculture services, mainly extension services. PO-RALG will oversee the coordination of extension services and capacity building of extension officers by LGAs, strengthening communication channels between national and sub-national bodies.
70. **The MoA will appoint/assign a team of full-time staff to oversee the day-to-day management of the PforR operation prior to TFSRP effectiveness – the Program Management Team (PMT).** The PMT will comprise of a coordinator, an administrator, an M&E officer, an accountant, a procurement officer, and environmental and social development focal persons. The coordinator is expected to be a senior officer able to engage with senior levels of government and other implementing partners. In addition, focal persons from the relevant divisions/Institutions of the MoA will be assigned to work with the PMT. The focal persons will include a team from the Crop Development Division (DCD - Extension section and Agriculture Inputs section), Agricultural Mechanization and Value Addition Division, Agricultural Land Use Planning and Management Division, Information and Communication Technology Unit (ICT), TARI, ASA, TOSCI and NIRC and PO-RALG Sector Coordination Unit responsible for agriculture. Consultants financed by the operation may be recruited to support the PMT where necessary.
71. **A Joint Steering Committee (JSC) will provide strategic oversight and promote coordination between the entities and between the Tanzania Mainland and Zanzibar in implementing the operation's activities.** The composition of the JSC to be established not later than one month after TFSRP effectiveness will include Permanent Secretary of the Ministry of Finance and Planning (PS MoFP), the Principal Secretary President's Office Finance and Planning, the Permanent Secretary MoA, and the Permanent Secretary MAINRL. JSC will meet at least once a year to review lessons derived from TFSRP implementation and advise on any significant changes in budgets or implementation plans. It will enhance the participation of all relevant ministries in critical decision-making, promoting coordination, program performance, and overall service delivery. Its leadership will alternate between Tanzania Mainland and Zanzibar. When the Joint Steering Committee meeting is held in the Mainland, the JSC will be chaired by the Permanent Secretary of MoA and Co-chaired by the Principal Secretary of MAINRL Zanzibar. When held in Zanzibar, the Permanent Secretary (PS) of MAINRL will chair the JSC and PS MoA will co-chair. In addition to the JSC, two Steering Committees will be formed not later than one month after TFSRP effectiveness, one for Tanzania Mainland and one for Zanzibar.
72. **The Steering Committee (SC) in the Mainland will be led by the Permanent Secretary of MoA as Chair and**

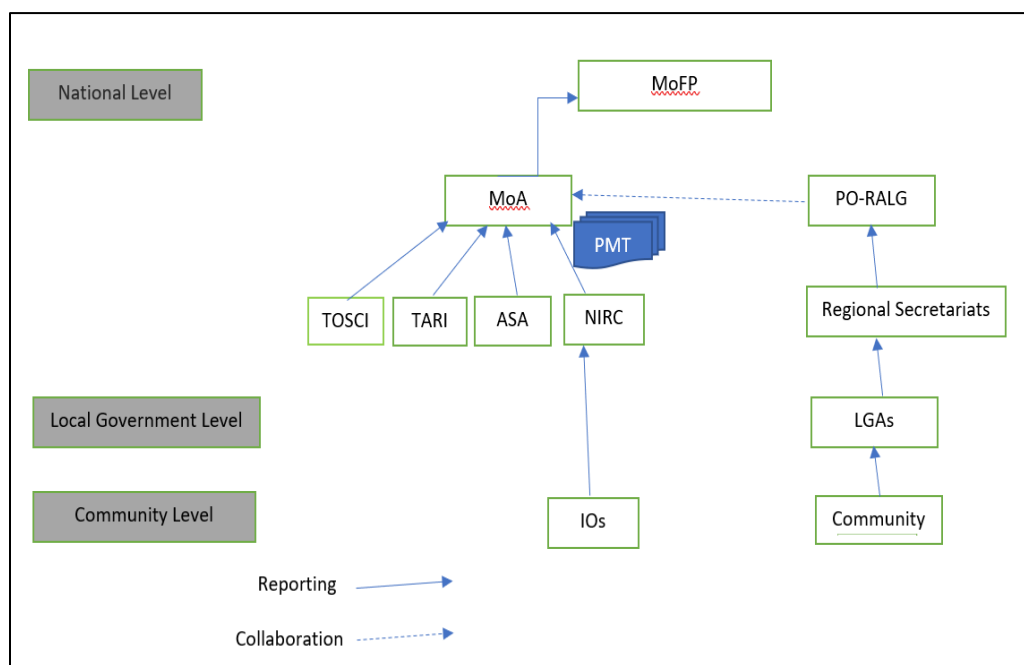


will include as members: the Permanent Secretary of the Ministry of Finance and Planning (PS MoFP), the Permanent Secretary of the President's Office Regional Administration and Local Governments (PS PO-RALG), and the Permanent Secretary of the Prime Minister's Office. The mandates of the SC will be to review and assess the progress and performance of TFSRP and approve fund releases, specifically: (i) approve the annual PforR work plan and budget for the following year, (ii) approve bi-annual fund release requests, (iii) approve annual reports, (iv) review progress in achieving Disbursement Linked Indicators, (v) review and endorse reports substantiating and validating the performance assessment including the Independent Verification Reports, (vi) approve annual work plan and budgets for the technical assistance activities, and (vii) approve Operation Manual and its amendments. The Director of Policy Planning (DPP) of the MoA will be the Secretary of the SC and the SC will meet semiannually. Detailed composition of the SC and terms of reference (ToRs) will be elaborated in the Operation Manual to be prepared and adopted prior to TFSRP effectiveness.

73. **The Mainland will also have a Technical Committee (TC) composed of directors and heads of institutions involved in TFSRP implementation.** The TC will be led by the DPP in the MoA and will include the following members: the director generals from NIRC, TOSCI, TARI, and ASA; directors of Crop Development Division, Agricultural Mechanization and Value Addition Division (DMV), Agricultural Land Use Planning and Management Division, Director of Procurement Unit, Chief Accountant (CA) Director for Regional Administration (PO-RALG), Information and Communication Technology Unit (ICT) and Director of Legal Services. The TC will meet quarterly. The mandate of the TC will be to: (i) review and scrutinize implementation progress of TFSRP interventions, and (ii) provide technical guidance to the implementing institutions for the implementation of their respective activities, including procurement and financial management performance, and achievement of DLIs. The TC will be set up not later than one month after TFSRP effectiveness. Detailed composition of the technical committee and ToRs will be elaborated in the Operation Manual.
74. **The MoFP Mainland and President's Office – Finance and Planning, Zanzibar, are expected to play a supervisory and coordination role in the operation.** Among others, they will follow up on the implementation of FM-related issues arising from verification and implementation support missions, ensure timely submission of the FM reports from the implementing entities, and ensure timely and smooth disbursement of funds to the implementing entities.
75. **According to the decentralization strategy, local governments carry out extension services in collaboration with the MoA.** The District Agriculture, Livestock, and Fisheries Officers (DALFO) working under the LGAs are responsible for coordinating the delivery of agriculture services and will oversee the implementation of agriculture activities at the LGAs, through their District Agriculture Development Plans (DADPs). The DALFOs report to the Council of Directors. They will oversee implementation progress, including preparing the annual work plans, budgets, and authorization of payments.
76. **The MoA will carry out procurement and FM functions under TFSRP for activities for which it is respectively responsible.** TARI, ASA, TOSCI and NIRC may carry out their procurement activities and FM functions as approved in their MTEF approved and coordinated and supervised by the MoA. LGAs will also carry out procurement per their respective mandates and activities. The Internal Auditor General (IAG) will serve as the independent Verification Agent (VA) for the Program. MoA will provide technical and backstopping support for the implementation of the TFSRP. PO-RALG will provide coordination support to LGAs, identify capacity-building needs, provide training, and monitor supervision.



Figure 2: Institutional Arrangement – Tanzania Mainland



77. **The MAINRL will oversee implementation of Zanzibar-specific IPF activities.** The project implementation will be mainstreamed into the existing institutional arrangements of the MAINRL. The MAINRL will appoint/assign a team of full-time staff to oversee the day-to-day management of the project (PMT – Zanzibar). The team will comprise a project coordinator/manager, project administrator, project M&E officer, project accountant, procurement officer, irrigation engineer, and environmental and social officers/focal persons. The team will prepare the project's budgets and procurement plans, progress reports, and statements of expenditure, conduct routine monitoring of project progress and results, knowledge management, and manage grievances, if any. Roles and responsibilities for the team will be detailed in ToRs to be included in the project operation manual. Where necessary, the teams will be supported by consultants financed by the project. It is expected that the respective units within MAINRL, including two members from the Zanzibar Agriculture Research Institute involved in project implementation, will appoint focal persons who will serve as the link with the team. The Policy and Planning Division, as the key technical unit, will provide technical support and oversight for implementation of project activities.

B. Results Monitoring and Evaluation

78. **The TFSRP M&E framework will rely on the Government's data, with most of the data for the indicators generated through the MoA's Agriculture Routine Data System (ARDS).** The ARDS will be upgraded during the first year of implementation. Some indicators will be derived from other government administrative information databases, while a few will be monitored through established information management systems. Using the Government's systems will ensure that the TFSRP M&E arrangements are aligned with the Government's overall M&E framework as outlined in the MoA structures and consistent with the M&E platforms created for the ASDP.



79. **The respective M&E units in the MoA will coordinate M&E activities under this operation. The PMT will recruit/assign a dedicated M&E officer to handle the operation's day-to-day activities.** The TFSRP results framework includes five outcome indicators and 25 intermediate results indicators (including DLIs). These, however, are only some of the indicators that the TFSRP will track or that will be needed to demonstrate successful achievement of the intended results. As such, the Government will track an additional set of indicators. The implementation of the M&E framework will be tracked during the biannual implementation support missions by the World Bank and during verification. The midterm review will also provide an opportunity to assess fundamental M&E design issues and for adjustments where necessary. The M&E officer will be responsible for providing periodic reports on the progress of M&E implementation and usage, as well as any design changes that may be proposed.
80. **To strengthen M&E capacity, the MoA has established an Agriculture Delivery Unit (ADU), facilitating the delivery of the Presidential Food and Agriculture Delivery Council (PFADC).** The ADU will be responsible for tracking activities' implementation and strengthening the Ministry's capacity to deliver on MoA's commitments. The ADU is designed to serve all the Ministry's departments across all activities, programs, and projects implemented by the Ministry and its institutions. The ADU will help monitor TFSRP DLIs and the results framework to facilitate problem-solving and monitoring during implementation. The TFSRP will support some of the main M&E activities of the MoA and the ADU in particular, including strengthening M&E capacity at the MoA level and scaling up the use of digital platforms for electronic agriculture reports in the agriculture sector.
81. **While Zanzibar will use the IPF instrument, it will use the TFSRP results framework, with a separate set of targets used to track the implementation of the activities in Zanzibar.** The detailed description of the result framework is in Annex 1, while the specific targets for Zanzibar are included in Annex 8.

C. Disbursement Arrangements

82. **Disbursement of the IDA credit proceeds would be made at the Recipient's request upon achievement of DLIs.** Disbursements for scalable DLIs will be proportional to the progress toward achieving the targeted DLI value. Disbursements under non-scalable DLIs will relate to whether the respective actions have been implemented. For results not achieved or partially achieved, the allocated amount outstanding would be carried over to subsequent years by the due date in a given year. The specific amounts to be disbursed against achieved and verified results are determined in accordance with the formulas provided in Annex 3.
83. **Advances and prior results financing.** The Recipient may withdraw up to US\$60 million of the total PforR financing (representing up to 20 percent of the credit amount) as an advance once the credit becomes effective. The advance would be necessary to enable the achievement of the DLI results; achieve the agreed PAP and legal covenants related to the DLIs; recruit the third-party VA, etc. When the DLI against which an advance has been disbursed is achieved, the amount of the advance will be deducted from the total amount due to be disbursed under such DLI. The World Bank will record an amount of the advance as disbursed for an achieved Disbursement Linked Result after it has notified the Recipient of its acceptance of the evidence of achievement of the result for which the advance was provided. The amount so reclassified will become available for further advances in accordance with the preceding paragraph. In addition, an amount up to US\$13.25 million may be provided for results achieved prior to the signing date of the Financing Agreement, but on or after October 26, 2022, under DLIs 1 and 3, until the GoT has furnished evidence in accordance with the provisions of the verification protocols and acceptable to the World Bank showing that such prior results



have been achieved. The GoT has indicated its intention to avail itself of the full advance upon effectiveness.

84. The MoA will be responsible for verifying achievement of the DLIs under its purview, through an independent third-party Verification Agency, based on the agreed verification protocols. The office of the Internal Auditor General has been identified as the VA. The World Bank will review and issue the No-Objection on the VA TORs.
85. **Verification protocols.** The progress toward the achievement of the TFSRP objectives will be verified per verification protocols and associated detailed guidance notes and criteria (see Annex 2). The verification will be done to the extent possible through country systems and by the third-party VA where applicable. The verification will be carried out at least annually in accordance with the protocols agreed with the World Bank. The verification of achievement of DLIs will be supported by the responsible institutions TARI (RA1:DLI1), MoA (RA1:DLI2), ASA/TOSCI (RA1:DLI3), NIRC (RA2:DLI4), MoA (RA2:DLI5), MoFP (RA3:DLI6) and MoA (RA3:DLI7), who will compile and make available the documentation required for verification. Based on its validation, the Permanent Secretary in the Ministry of Agriculture will notify the World Bank of DLI achievement, supported by the relevant evidence and documentation.
86. **Disbursement requests.** The Permanent Secretary in the Ministry of Agriculture will collect the reports from each implementing department/agency involved in the PforR Program and respective independent verifications and periodically submit a consolidated report to the MoFP. The MoFP will submit to the World Bank the relevant evidence of the total or partial achievement of DLIs. After analyzing that evidence, the World Bank will communicate to the MoFP and the MoA the results of its analysis regarding the fulfillment of DLIs and the corresponding level of disbursement for each DLI. On that basis, the MoFP will prepare disbursement applications and submit them to the World Bank. A copy of the World Bank's official communications confirming DLI achievements will be attached to the disbursement requests.

IV. ASSESSMENT SUMMARY

A. Technical (including program economic evaluation)

87. **Strategic Relevance.** The Government of Tanzania, like other countries in the Region, recognizes the agri-food sector as one of its core sources of inclusive economic growth and rural poverty reduction. Agriculture accounts for about 26.9 percent of GDP, 30 percent of exports, 65 percent of inputs to the industrial sector, 61 percent of the workforce, and 90-95 percent of the food requirements for the country. Its stable supply has been instrumental in maintaining the country's low inflation rates.
88. **Tanzania is among the most vulnerable countries to the impacts of climate change.** It is prone to risks from extreme weather events, such as increased seasonal variation in rainfall and temperature and frequent and prolonged droughts and floods. Droughts frequently occur in Tanzania, devastatingly impacting the economy, agricultural output, and hydropower generation, undermining efforts to alleviate poverty and food insecurity. Rapid urbanization can also exacerbate the effects of climate change in densely populated areas.
89. **In the wake of the continued crisis reducing fiscal space, increasing public resource allocation and utilization efficiency is paramount.** As Tanzania recovers from the COVID-19 pandemic, strives to withstand the effects of surges in energy and fertilizers prices, addresses the impact of the prolonged drought in 2021/2022, which will affect food production, and needs to complete its flagship projects, available public spending may tighten, prompting the Government to allocate resources more carefully to ensure the best possible returns. The



achievement of TDV 2025 will increasingly depend on improving the efficiency and effectiveness of public spending and mobilizing private investments.

90. **The TFSRP is focused on mutually reinforcing solutions to building resilience, improving the response to climate change, addressing food and nutrition security, and creating an inclusive food system for the future.** It contributes to maximizing public investment's efficiency, effectiveness, and impact. Results Areas are centered on providing predictable budgets, maximizing the use of digital solutions, introducing performance-based contracts, strengthening the management and execution of budgets, and enhancing public investment in risk management. The TFSRP is designed to deliver results at scale across the country.
91. The TFSRP strategic focus and objectives are addressing the challenges of climate change, building resilience, and improving public resources' efficiency. In this context, the PforR Program is strategically relevant.
92. **Expenditure Framework.** The Expenditure Framework Assessment (EFA) was conducted based on information from the MoA, the MoFP, International Monetary Fund, Tanzania Agricultural Public Expenditure Review 2022, and a literature review in comparable countries. The EFA included the following dimensions: (i) fiscal sustainability and resource predictability; (ii) budget allocation and execution; and (iii) incentives for efficient service delivery and value for money. Data for past budgets comes from the MoFP's Budget Books. Projections for 2022/2023-2024/2025 come from the MoA's MTEFs. Projections for 2025/2026-2027/2028 are based on MoA assumptions, which reflect the Government's current strategy for the sector.
93. **The PforR Program will be implemented from World Bank FY2023/2024 to FY2027/2028.** The expenditure framework of the PforR Program (including the IPF component) accounts for a total of US\$2,093 million (TZS 5,147 billion) for the 2023/2024-2027/2028 period, of which 85.6 percent will be financed by the Government and 14.4 percent by the IDA credit (8.6 percent regional and 5.7 percent national IDA). The government funds account for US\$1,793 million (TZS 4,336 billion), whereas the IDA credit accounts for US\$300 million equivalent (TZS 766 billion). In terms of expenditures outlays, about 42 percent, or US\$879 million, will support improving service delivery in research, extension, and seeds; 46 percent (US\$956 million) will strengthen resilient rural infrastructure, and 11 percent (US\$238 million) will strengthen institutional performance (the remaining 1 percent supports the IPF component).
94. **The expenditure framework presents an adequate basis for this PforR Program in Tanzania Mainland.** Budget appears adequate. Fiscal sustainability issues were not identified as a core concern associated with the expenditures. However, the budget's implementation's efficiency is low and will require strengthening.
95. **Rationale for public sector financing.** There is a strong rationale for public intervention because TFSRP will supply public goods (food security and nutrition; development and dissemination of agricultural research; climate change adaptation; climate change mitigation; soil health) and improve the performance of the Government's action in core public sector functions. The PforR Program will scale up agricultural public service delivery and increase value-for-money of public spending in agriculture.
96. **World Bank's value added.** The World Bank's value added to support TFSRP is grounded on: (i) its knowledge in supporting Tanzania's agricultural sector both with financial operations and knowledge products; (ii) its experience in supporting the GoT's transformational programs using a PforR instrument in other sectors; (iii) its regional outreach, TFSRP being part of the second phase of the Food Systems Resilience Program for Eastern and Southern Africa - (P178566), a Multiphase Programmatic Approach (MPA); and (iv) its convening power, critical to raise additional funds that will ensure TFSRP's success.
97. **Economic analysis.** A cost-benefit model is used to assess the ex-ante efficiency of TFSRP over the 2023-2040 period. Costs include the entire Program costs, as all budget items are considered necessary to obtain the



target impact. Incremental net benefits are estimated in terms of value of agricultural production for six major crops. They are calculated as the difference in benefits between a counterfactual scenario without Program, and a scenario with Program. Climate change is accounted for in both scenarios. The Program's Net Present Value is estimated at US\$4.01 billion with an Internal Rate of Return (IRR) of 14.7 percent and a Benefit/Cost Ratio of 2.1. The payback period is six years.

B. Fiduciary

98. **The operation in Tanzania Mainland will use the PforR financing instrument, while Zanzibar will use the IPF financing instrument** guided by respective World Bank policies. This section summarizes the main conclusions of Tanzania Mainland's Fiduciary Systems Assessment (FSA). The FSA was carried out to determine whether the PforR Program's fiduciary systems provide reasonable assurance that the financing proceeds will be used for the intended purposes, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability. The assessment was carried out in line with the World Bank Directive and Policy on PforR Financing.
99. The existing systems are adequate to handle financial management, procurement, complaints, fraud, and corruption. The systems provide reasonable assurance that the financing proceeds will be used for the intended purposes, with due attention to the economy, efficiency, effectiveness, transparency, and accountability.
100. **The overall fiduciary risk rating is Substantial.** The mitigation measures aim to strengthen the fiduciary system's capacity and performance to adequately provide reasonable assurance that the funds will be used for the intended purposes with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.
101. **The financial management risk is Substantial.** Key financial management risks identified are as follows: (i) low budget ceilings provided for the sector resulting resource constraints; (ii) agriculture sector governance structures and responsibilities at LGAs which may impact accountability on the use of funds whereas agriculture budget consolidates fisheries, livestock, agriculture and co-operatives operations as they fall in one department within the structure of LGAs, and warehouses and irrigation schemes are owned by villages and irrigation organizations; (iii) limitations in MUSE to generate required financial reports resulting in manual interventions in reports preparation; (iv) delays in release of funds to the implementing entities; (v) investments not delivering additional value for money, for example construction and rehabilitation of warehouses which are not in use, acquisition of equipment which is not fit for purpose and hence abandoned and vandalized, irrigation infrastructure works not performing as expected; (vi) limited knowledge of IFMIS in use, MUSE, by accountants and auditors; (vii) internal audit departments at LGAs are resource constrained both by headcount and finance; and (viii) poor implementation of internal and external audit recommendations.
102. **To mitigate the risk, the PforR Program will be identified as a development program within the government budget framework:** (i) The budget will identify program activities for each implementing agency and identify beneficiary LGAs. Activities to be financed will be established in the program's annual budget under the development budget and recorded in budget systems PLANREP and CBMS; (ii) The program will have two program bank accounts maintained at BOT, for the Ministry of Agriculture and for NIRC structured as separate budget votes in government system. Disbursement from the World Bank will be made upon achievement of results and rolling advance allowed. The allocation of advance to these two bank accounts will be provided by



the MoFP. The program will be registered in the D-fund system and follow DFUND disbursement policies and procedures; (iii) MoA will disburse funds to other program implementing agencies including LGAs. The recipient implementing agencies will produce financial reports on the progress of the execution of program activities and submit them to MoA; (iv) Funds disbursed to NIRC will solely be used for NIRC activities; (v) MoA and NIRC will produce annual financial reports for the program. MUSE needs to be defined to generate required program financial reports. Capacity building of accountants and auditors will continue to be offered by MOFP as needed; and (vi) Audited program financial statements will be submitted to the World Bank within nine months after the end of the fiscal year. Therefore, two separate audit reports will be submitted to the World Bank.

103. **The procurement risk is Substantial.** Key risks identified on the capacity of the implementing entities are: (i) MoA staff have inadequate knowledge of procurement planning, preparation of bidding and request for proposals documents, evaluation of bids/proposals, customization of draft contract documents and contract management; (ii) frequent transfer of procurement staff, making newly appointed/recruited staffs taking time to get acquainted with issues related to sector's procurement activities and procedures; (iii) inefficiencies in processing procurement activities in terms of preparation of terms of references (ToRs), specifications, bidding documents, request for proposals, bids/proposals evaluations and lack of adequate internal monitoring in some of the LGAs; (iv) inadequate records keeping and management system at the ministries and LGAs levels; (v) inadequate knowledge and skills in contract managements; (vi) limited guidelines for hiring skilled workforce to execute works under force account arrangement; and (vii) delays in paying vendors on time per the terms of the contracts.
104. **Mitigation measures include:** (i) the need for additional staff in MoA and Internal Audit units; (ii) training in contract planning and management; (iii) training of Tender Board members, user department, and PMUs officials; (iv) provision of more space for staff and record keeping; (v) liaise with Public Procurement Regulatory Authority (PPRA) to provide necessary training and simplified guidelines to govern outsourcing skilled manpower for carrying out works using force account; and (vi) provision of office working tools and equipment. Details of the mitigation measures to address the identified deficiencies and action plan are presented in Annex 4.
105. **Excluded activities.** The PforR will not involve the procurement of contracts valued at or above Operational Procurement Review Committee (OPRC) thresholds (US\$115 million for works, US\$75 million for goods and non-consulting services, and US\$30 million for consulting services per contract). Based on sampled procurement activities data from six LGAs and four agencies under MoA, the highest contract price is around TZS 15 billion (US\$6.5 million approximately) and is not expected to increase substantially based on the Program. High-value contracts under the Program will be monitored during supervision to ensure that the Program conforms with the World Bank's policy on PforR financing.
106. **Review and resolution of complaints.** A two-tier system for handling procurement complaints is provided under the Public Procurement Act (PPA), Cap 410 (as amended in 2016), and the Public Procurement Regulations, 2013 GN No. 446 of 2013 (as amended in 2016). The two levels for the handling of procurement complaints are: (a) the head of Public Entity (PE); and (b) PPRA. PPRA is no longer involved in reviewing complaints by bidders to limit PPRA's function to advisory and monitoring procurement activities and eliminate conflict of interest when it was handling both functions, advisory and complaints reviewing. However, for monitoring purposes, an aggrieved bidder must serve a copy of the complaint to PPRA, and the AO must submit a copy of the decision to PPRA within seven days from its delivery date. Removing PPRA from the complaints handling process has led to a considerable reduction in the number of days to handle complaints from an average of 105 to 59 days. The Public Procurement Act provides a provision for judicial



review in case the second level fails to decide within the prescribed time limit. To make the review process more robust, the head of the PE is mandated to establish a review panel based on their expertise and experience on the subject matter of the tender. Normally, the rulings of the PPRA are published on the PPRA website, and a summary of the cases and rulings is published in the Tanzania Procurement Journal.

107. **Debarment and block listing of vendors.** PPA and its Regulations have provisions to debar vendors from participating in public procurement or disposal proceedings if: fraud or corrupt practices are established against the tenderer; the tenderer fails to abide by a bid securing declaration; the tenderer breaches a procurement contract; the tenderer makes a false representation about his qualifications during tender proceedings. Furthermore, the law vests powers to PPRA to blacklist and debar a foreign bidder who has been debarred by international organizations such as the World Bank in cases related or unrelated to fraud and corruption. MoA, PO-RALG, and LGAs will use the World Bank's List of Debarred and Cross-Debarred firms and individuals to check eligibility to ensure that persons or entities debarred or suspended by the World Bank are not awarded contracts under the Program during the period of such debarment or suspension. The list can be accessed on the World Bank's website (www.worldbank.org/debarr). Compliance with this requirement would be checked by the World Bank and Program auditor.
108. **Contract management for any procurement of goods, services, or works contracts will be the responsibility of PEs as mandated under PPA and its Regulations.** As per the provisions of the PPA and its Regulations, PEs are required to ensure that the contracts are implemented in accordance with the terms and conditions governing those contracts and to take or initiate steps to correct or discipline deviations from the observance of contract conditions. PPA 2011 and its Regulations set out the responsibilities of the PEs and procedures during contract implementation, including technical or scientific tests and issuance of good acceptance certificates. PPRA Procurement and value-for-money audits have observed that contract management in some of the implementing agencies is weak due to the limited human resources capacity, knowledge, and experience in managing contracts.
109. **The Public Audit Act no. 11 of 2008 grants the Controller and Auditor General (CAG) exclusive powers to audit public funds, including this Program's funds.** CAG has sole responsibility for the statutory audit of all ministries, departments, agencies (MDA) and LGAs. CAG discharges this responsibility either directly or through private auditors contracted as agents. Outsourcing the audits partly solves the challenge of staff constraints at the CAG office. The CAG has regularly conducted audits for World Bank-financed projects and issued reports within the required time in Financing Agreements. CAG will conduct the audit in accordance with the International Standards of Supreme on Auditing Institutions (ISSAI). The audit approach will consider sampling techniques and risk-based approaches to address time constraints and financial resources.
110. **There will be two audit reports submitted for the TFSRP:** (i) an audit report of funds disbursed to MoA and its agencies; and (ii) an audit report of funds disbursed to NIRC. Alongside the audit opinions on financial statements, management letters will be issued reporting gaps in the internal control's environment of the Program. The audit report will be submitted to the World Bank within nine months after the end of the fiscal year, that is, by 31 March each year. The World Bank will make TFSRP audited financial statements available to the public in accordance with the World Bank Policy on Access to Information.
111. **Risks and mitigation measures.** The review of the systems and staffing has revealed risks that may affect the smooth implementation of the procurement activities under the TFSRP. To strengthen the existing systems of the Implementing Agencies (IA) and to mitigate fiduciary risk, specific actions are included in the Program Action Plan (PAP) (see Annex 6).



112. **Implementation support.** An annual fiduciary assessment will be conducted for the TFSRP, supported by mainly the Internal Audit Departments and PPRA. An adequate budget will be allocated for this assessment. This assessment will be supplemented by on-site visits by the World Bank's fiduciary staff at least twice a year. It will also rely on the annual audit reports produced by the Controller and Auditor General. In addition, desk reviews will be done for interim financial and procurement reports received during the financial year. In-depth reviews may also be commissioned by the World Bank whenever deemed necessary. Implementation support will also involve capacity strengthening in procurement, financial management, governance, and anti-corruption as deemed necessary.
113. **The current legal and governance frameworks in Tanzania are adequate to support preventing, combating and dealing with fraud and corruption practices.** In Tanzania MAINRL and, the Preventing and Combating Corruption Bureau (PCCB) is responsible for taking the necessary measures for prevention and combating of corruption in the public, parastatals, and the private sector at large. Other supportive frameworks include Prevention and Combating of Corruption Act 2007, Anti-money Laundering Act of 2007, Economic and Organized Crimes Act Cap. 200 of 2002, Public Services Act of 2002, Public Services Regulation of 2003, Public Services Guidelines of August 2015, Public Leadership Code of Ethics Act No. 13 of 1995, and Public Procurement Regulatory Authority Guidelines together with the Government Accounts Guidelines/Manual.
114. **To address fraud and corruption issues associated with fiduciary risks highlighted in the assessments,** as well as to ensure the World Bank's "Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing," dated February 1, 2012, and revised July 10, 2015 (Anti-Corruption Guidelines) are complied with, the government has agreed to: (i) share information on corruption allegations with the World Bank immediately (and a bi-annual report even if cases are not arising), while at the same time conducting its own internal investigations; (ii) use the World Bank's debarment list to ensure that persons or entities debarred or suspended by the World Bank are not awarded a contract under the PforR during the period of such debarment or suspension; and (iii) preserve the World Bank's right to investigate fraud and corruption allegations.
115. Disbursements under the IPF component TFSRP implemented by Ministry of Agriculture Mainland and Ministry of Agriculture, Irrigation, Natural Resources and Livestock Zanzibar will be based on quarterly unaudited interim financial reports submitted to World Bank not later than 45 days after the end of the quarterly reporting period. Audited financial statements for the same will be submitted to World Bank within six months after the end of fiscal year.

C. Environmental and Social

Environmental Social Systems Assessment

116. The Environmental Social Systems Assessment (ESSA) identifies key environmental and social risks (E&S) that may affect the achievement of the development outcomes of the PforR operation, assesses the Recipient's ability to manage those risks, and recommends additional measures as needed. The assessment focused on policy and legal frameworks, operational structures, experience in implementing World Bank-financed and other donor-funded projects, availability of unit/department/team for the E&S and the staffing capacity, conflict resolution, E&S mainstreaming and performance, Grievance Redress Mechanism (GRM), budgeting for E&S activities, gender inclusions, handling of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA), interactions with the public, private sector and other stakeholders. The ESSA and Environmental and Social Commitment Plan (ESCP) (for the IPF component and shared with Zanzibar) were prepared. The



ESSA was disclosed on March 26, 2023 on the World Bank's external website and on April 7, 2023 on the MoA's website. The ESCP was disclosed on April 7, 2023 on the MAINRL's website and on April 15, 2023 on the World Bank's external website.

117. **The ESSA noted that the country and the MoA have adequate policies and legal frameworks, and operational structures.** Tanzania has rich policy and legal framework addressing various challenges facing community livelihoods. The assessment of the environment, social and agriculture policy, legal and institutional framework has indicated that the country is well equipped with the necessary policies and laws in the respective areas for the implementation of the PforR. There are several environmental, social and agriculture policies, laws and guidelines which will be key to ensure that the PDO is achieved. The MoA also has experience in implementing and working with World Bank-funded and other donor-funded projects.
118. **There is an adequate national regulatory framework, and technical guidelines exist for environmental and social due diligence concerning the potential impacts of the TFSRP.** Environmental and social procedures also in place under existing World Bank-funded programs have been deemed satisfactory. However, implementation has not been up to standards. The assessed weaknesses are systemic, related to insufficient resources – both financial and manpower - for overseeing and monitoring the implementation of environmental and social measures, timely procurement of consumables, weak coordination, and inadequate attention to environmental concerns. Additionally, there is a need to strengthen and update some of the technical guidelines for asbestos management, incinerator usage, and management and environmental enhancements related to sanitation and water.
119. The ESSA concludes that the policy, regulatory, administrative context and the social and environmental systems in place in Tanzania are consistent with the six core principles of the World Bank's Policy on Program-for-Results financing.
120. **Management responsibilities for these systems rest upon different functionaries, located in a semi-hierarchical structure but with considerable decentralized mandates and responsibilities, from the national level to grassroots structures at the Mtaa and village levels.** These responsibilities are provided by the Environmental Management Act (2004), which also guides the implementation of environmental management activities in Tanzania. A detailed implementation structure is provided in the ESSA and will be included in the Operation Manual.
121. **The overall environmental and social risk is Substantial.** It is expected that the implementation of the Program activities might have negative environmental impacts. The predicted environmental impacts include but are not limited to the following: (i) water source contamination, due to spillage of agrochemicals or wastewater from processing facilities, (ii) possible soil erosion, land degradation, and increased loss of soil fertility and other issues from inappropriate use of agricultural inputs, (iii) spread of diseases (such as HIV/AIDS), especially during construction phase of sub-projects as well as construction workers and community exposure to COVID-19, (iv) noise and air pollution, (v) construction wastes and other related solid wastes, (vi) possible soil and groundwater contamination owing to the generated wastes, (vii) traffic congestion and possible road accident resulting from the transportation of materials from source to site, (viii) occupational safety and health risks linked to construction workers, (ix) health hazard from agrochemicals, rodent or pest infestation including malaria, schistosomiasis, trypanosomiasis etc., (x) biodiversity impacts, (xi) visual landscape deterioration, (xii) possible flooding, (xiii) GBV (SEA/SH), and (xiv) community health and safety during construction.
122. **The TFSRP does not anticipate resettlement activities.** However, the proposed changes to irrigation and post-harvest infrastructure may result in potential social impacts that need to be mitigated. Changes to irrigation



infrastructure may lead to degradation of river catchments and ecosystems/biodiversity, soil salinization, loss of forests and other vegetation diversity, reduction of environmental flows, degradation of ecologically sensitive areas in the wetlands, increased water-borne diseases, and water contamination due to non-appropriate use of agrochemicals.

123. Potential negative social impact. The potential social impacts include but are not limited to the following:

- There might be possible land-related impacts, particularly if irrigation schemes and post-harvest facilities are constructed.
- Possible exclusion of female organizations and farmers in farming technologies and practices due to high illiterate levels among women.
- Long-standing gender gaps in agriculture productivity could impose challenges and exclusion of disabled women and girls because of social stigmatization.
- Possible spread of infectious diseases.
- Traffic accident risks; traffic congestion/road accidents during construction of irrigation schemes and post-harvest facilities.
- Community health and safety risks due to construction activities.
- Visual deterioration due to dust and other impacts caused by the construction of irrigation schemes and post-harvest facilities.
- The construction activities might give access to workers, contractors, or local funds, thus imposing risks of GBV and sexual exploitation on the young girls and local communities.
- Possible conflict over land ownership and use caused by improved irrigation schemes might attract more users.

124. The PforR Program will exclude activities that might have significant adverse impacts, that are sensitive, diverse or unprecedented on the environment and/or affected people.

125. While the policy and institutions are in place, institution capacity gaps exist. The human and financial capacity to effectively enforce certain environmental and social regulations and guidelines are inadequate. Some of implementing institutions have limited number of available staff for environmental and social service delivery. The MoA agencies such as TARI and ASA have no dedicated units or staff to oversee E&S issues. The situation is complicated by inadequate coordination between the MoA including its institutions and local government authorities on environmental and social issues. While the latter has some E&S capacity and personnel, their participation in decision making on E&S issues during joint implementation of agricultural projects in collaborations with the institutions under the Ministry of Agriculture, namely TARI, ASA and NIRC, was inadequate. Similarly, the National Environment Management Council (NEMC) has inadequate staffing and funding which limit the agency's capacity to supervise all ongoing projects scattered over a large geographical area and enforce compliance with license obligations and regulations through on-site monitoring. Occupational Safety and Health Authority (OSHA) limited capacity affects monitoring and enforcement in the ongoing projects, with many active construction sites not being registered or visited by an officer as required by the national framework on safety.

126. Other shortcomings to be improved to enhance environmental and social system include: (i) collaboration between MoA and its institutions and LGAs, and (ii) inadequate knowledge and skills among the environmental and social risk management staff.

127. The following actions will be carried out for capacity building: (i) conduct training for each district team in all participating LGAs on Environmental and Social Framework (ESF) to enable them to understand the



requirements of the new ESS, which will cover the IPF component; (ii) conduct at least one training on ESF for the MoA management team, and (iii) conduct follow-up training for district E&S officers at least once a year (see Annex 6: Program Action Plan).

128. **Grievance redress mechanisms.** Under the Environment Management Act, there is a procedure related to grievances with respect to decisions about granting the Environmental Impact Assessment certificate. Grievance redress mechanisms are in place and will be strengthened to ensure that stakeholders have an effective platform to seek redress or resolve any dispute that may arise during the implementation of the TFSRP. The institutional structure and capacity for implementing the relevant laws and regulations, including information on the relevant record of accomplishment, is sufficient.
129. The consultative process followed in the formulation of the assessment, including how information from consultations has influenced the PforR Program design and has been used in the PforR Program design.

V. GRIEVANCE REDRESS SERVICE

130. **Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance mechanism or the Bank's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>.

VI. KEY RISKS

131. **The overall risk of the TFSRP is rated Substantial.** This risk level stems from the technical design of the operation, institutional capacity for implementation and sustainability, fiduciary, and environment and social risks.
132. **Technical design of the Program.** The risk rating is Substantial due to issues with the quality of work and poor value for money. Mitigation measures include ensuring appropriate irrigation infrastructure designs and hiring qualified independent consultants to supervise the works. Technical assistance for agencies will improve guidelines for infrastructure design and strengthen contract management capacities for implementing agencies.
133. **Institutional capacity for Implementation and Sustainability:** The risk rating is Substantial due to limited capacity and underinvestment in capacity building/soft investments and poor budget management by the client. Mitigation measures are focused on placing greater weight on DLIs focused on capacity building and the Program Action Plan, including a review of rules and procedures that govern the budget allocation and the flow of funds for MoA and individual LGA allocation.



134. **The Fiduciary risk rating is Substantial.** The fiduciary system's capacity and performance provide reasonable assurance that the funds will be used for the intended purposes with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability. Both financial management and procurement risks are rated Substantial. While Tanzania Mainland has made progress in improving capacity for financial management, key risks remain as identified during the FSA, including: (i) delays in release of funds to the implementing entities; (ii) poor financial reports; (iii) weak internal controls and internal audit; and (iv) poor implementation of audit recommendations. On procurement, while Tanzania Mainland has made significant progress in the management and processing of procurements, the FSA highlighted persistent weaknesses at the MoA, LGA, and PO-RALG in terms of staffing, inadequate record-keeping, compliance with procurement regulations, delays in procurement, inadequate monitoring of procurement performance and reporting. In Zanzibar, the fiduciary assessment highlighted major gaps, including inadequate procurement staff, inefficiency in processing procurement activities, and limited knowledge and experience with World Bank procurement procedures. To mitigate these risks, the staff in Zanzibar will be offered specific training on World Bank financial management and procurement procedures and provided the necessary support during implementation. Zanzibar will be supported in recruiting procurement consultants to support the respective units in the MAINRL.
135. **Environment and Social:** The risk rating is substantial due to the rehabilitation of irrigation infrastructure, rural infrastructure, and marketing infrastructure in Zanzibar are likely to be associated with health and safety hazards, accidents and emergencies, dust, and air pollution. The presence of workers in construction sites in Zanzibar may spread, HIV/AIDS, other STDs, GBV, and SEA. There also needs to be more dedicated E&S units and personnel for some implementing institutions. Mitigation measures will include the MAINRL preparing a site-specific environmental management plan (ESMP) to guide construction activities and observing MoH Covid-19 code of conduct guidelines during construction activities to limit virus spread. The relevant Ministries will develop a Code of Conduct on GBV to avoid the project escalating GBV and sexual harassment, and all construction workers and stakeholders will be trained on GBV and sexual harassment. In addition, awareness will be raised within the local community and labor force on sexual exploitation and abuse and avenues to report such cases if they arise by establishing and operationalizing a GRM approach sensitive to GBV and SEA issues. All implementing institutions for this operation will have a dedicated E&S team in place with the appropriate staff before the commencement of the implementation of works.



ANNEX 1. RESULTS FRAMEWORK MATRIX

Results Framework

COUNTRY: Eastern and Southern Africa
Tanzania Food Systems Resilience Program

Program Development Objective(s)

To support food systems resilience by strengthening agricultural service delivery, the adoption of climate resilient technologies and fiscal performance in the agricultural sector.

Program Development Objective Indicators by Objectives/Outcomes

Indicator Name	DLI	Baseline	End Target
Improved resilience enhancing production capacity			
# of farmers adopting resilience enhancing technologies and practices (Number)		0.00	300,000.00
Of which female farmers (Number)		0.00	120,000.00
Sustainable use of natural resources			
Area provided with new/improved irrigation or drainage services (CRI, Hectare(Ha))		0.00	37,000.00
Outreach			
Number of farmer beneficiaries reached with assets and services		0.00	1,800,000.00



Indicator Name	DLI	Baseline	End Target
of which women, % - Youth, % (Number)			
Of which female (Number)		0.00	72,000.00
Of which youth (Number)		0.00	36,000.00
Marketing and ability to leverage regional trade opportunities			
Tanzania's CAADP BR score on "Intra-African Trade in Agriculture Commodities and services" (Number)		4.21	8.50
Policy improvements			
- Number of policy products adopted with project support related to agriculture, natural resource management, and food/nutrition security (Number)		0.00	5.00
•			



Intermediate Results Indicator by Results Areas

Indicator Name	DLI	Baseline	End Target
RA 1: Improving service delivery in research, extension and seed			
TARI research strategic plan 2025-2030 approved, including mid-term expenditure framework (Yes/No)		No	Yes
Ratio of TARI's budget received to budget committed in its medium-term expenditure framework (in %) (Percentage)		30.00	75.00
# of climate resilient crop varieties released (total since 2022) (Number)		0.00	25.00
# of technologies developed, transferred to and absorbed by extension services since 2022 (Number)		0.00	50.00
Of which gender-sensitive technologies (Number)		0.00	10.00
Of which biofortified varieties (e.g., orange flesh sweet potato, beans) (Number)		0.00	5.00
# of extension staff trained on climate smart practices and e-agric solutions (Number)		0.00	4,000.00
Of which females (Number)		0.00	1,200.00
Total # of Farmer reached with e-extension services (Number)		50,000.00	1,500,000.00
Of which female (Number)		10,000.00	600,000.00
Share of farmers accessing e-agriculture platform that are satisfied with the advice received (%) (Percentage)		0.00	70.00
of which female (Percentage)		0.00	40.00
Increase in score of Women's Empowerment in Agriculture Index (WEAI) (Percentage)		0.00	20.00
Amount of pre-basic seed distributed (in tons) by TARI (Number)		200.00	300.00



Indicator Name	DLI	Baseline	End Target
Amount of certified seeds produced (in tons) by ASA (Number)		3,000.00	20,000.00
Number of TOSCI authorized seed inspectors (Number)		90.00	187.00
Of which female (Number)		10.00	37.00
RA 2: Developing resilient rural infrastructure			
# of performance-based OMM contracts signed (Number)		0.00	23.00
Area (ha) operated under performance-based OMM contracts/constitutions (Number)		0.00	37,000.00
Share of farmers satisfied (% women) with water accessibility as per agreed times (Percentage)		0.00	80.00
Of which female (Percentage)		0.00	32.00
Number of warehouses leased by the private sector, operated by cooperatives and SOEs/NFRA in compliance with guidelines (for new management model) (Number)		0.00	79.00
Total annual turnover of commodities stored in warehouses managed using new management model (Metric ton)		0.00	56,000.00
RA 3: Improved fiscal performance to enable delivery on priority investment areas			
% change in budget outturn of MoA and its line agencies (Percentage)		60.00	80.00
Soil Map established and published (Yes/No)		No	Yes
Number of farmers reached with tailored soil management advice (Number)		0.00	40,000.00
IPF Component 1: Support to Zanzibar			
Number of ZARI Labs rehabilitated (soil, tissue culture and entomology etc) (Number)		0.00	3.00
Number of additional professional staff with a post-graduate degree (Master's and PhD) at ZARI (Number)		0.00	8.00



Indicator Name	DLI	Baseline	End Target
of which female (Number)		0.00	4.00
Number of climate resilience enhancing technologies developed and released in Zanzibar (Number)		0.00	5.00
Seed certification system established (Yes/No)		No	Yes
Number of extension staff trained by the project in climate smart practices and e-agric solutions (Number)		0.00	29.00
Of which female (Number)		0.00	14.00
Number of farmers that completed a farmer field school program supported by the project (Number)		0.00	5,000.00
Women (Number)		0.00	2,000.00
Youth (Number)		0.00	1,000.00
Area provided with new/improved irrigation or drainage services ()		0.00	800.00
Number of women vegetable producing/marketing groups established or strengthen (Number)		0.00	30.00
# of Farmer's Service Centers rehabilitated (incl. drying area) (Number)		0.00	4.00
# of boreholes for irrigation rehabilitated (Number)		0.00	4.00
farm roads rehabilitated within irrigation schemes (in km) (Number)		0.00	10.00
IPF Component 2: Institutional capacity at MoA Tanzania Mainland and Zanzibar improved			
ASDP II M&E system in place and fully operational (Yes/No)		No	Yes
MoA budget documents and data are open, transparent and accessible (Yes/No)		No	Yes
Curriculum for the training of extensionists on (i) CSA and (ii) E-agriculture solutions prepared and rolled out (Number)		0.00	2.00



Indicator Name	DLI	Baseline	End Target
Number of NIRC staff, district engineers and scheme level staff trained on the new Guidelines on Irrigation Design Innovations for Improved Water Productivity (Number)		0.00	100.00
Performance recording system for public irrigation schemes in place. (Yes/No)		No	Yes
Percentage of project-related grievances received that have been addressed and communicated within 30 days (Percentage)		0.00	95.00



Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
# of farmers adopting resilience enhancing technologies and practices	Measures the total number of program beneficiaries who have adopted technologies/practices that lead to improved resilience that address drivers of food insecurity, including climate. Adopting refers to change of practice or change in the use of a technology promoted or introduced by the program.	Year 4 and 5	Surveys	Sample survey to estimate the sum of the total beneficiaries who have adopted CSA technologies/practices after receiving advisory services or/and trainings through the program.	Director of Policy & Planning Division at MoA.
Of which female farmers	Measures the total number of female program beneficiaries who have adopted technologies/practices that lead to improved resilience that address drivers of food insecurity, including climate. Adopting refers to change of practice or change in the use of a technology promoted or introduced by the program	Annual	Survey	Subset of survey for main indicator	Director of Policy & Planning Division at MoA
Area provided with new/improved irrigation or drainage services	This indicator measures the total area of land provided	Annual	8 Zonal Irrigation	NIRC Annual Report Progress report on the	NIRC's Planning, Monitoring & Evaluation



	with irrigation and drainage services under the project, including in (i) the area provided with new irrigation and drainage services, and (ii) the area provided with improved irrigation and drainage services, expressed in hectare (ha).		Development Plans and corresponding progress Reports by the Regional Irrigation Office	National Irrigation Master Plan 2018	Department
Number of farmer beneficiaries reached with assets and services of which women, % - Youth, %	This indicator measures the number of farmers who were provided with agricultural assets or services (following the corporate results indicator definition for assets and services) as a results of ASDP II program financing.	Annual	MoA and LGA extension records, farmer registry.	Calculation of total number by compilation of (i) LGA extension records and (ii) records in farmer registry.	MoA M&E Team
Of which female					
Of which youth					
Tanzania's CAADP BR score on "Intra-African Trade in Agriculture Commodities and services"	The score is composed of two measures: (i) increase the value of trade in agricultural commodities and services in Africa, (ii) to create an enabling environment for intra-African trade in agricultural commodities and services	Biennial	CAADP Biennial Review Report for 2024 and 2026	Document review	MoA



- Number of policy products adopted with project support related to agriculture, natural resource management, and food/nutrition security	Measures the number of completed and adopted policies, policy studies, strategies, laws, regulations, and sector plans, and instruments that were agreed in the PAP or as DLIs while enhancing the program's development outcomes to support food system resilience.	Annual	MoA Progress report; PAP reports.	National Project Implementation Team (PIT); PAP progress reports	Director of Policy & Planning Division at MoA
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
TARI research strategic plan 2025-2030 approved, including mid-term expenditure framework	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Ratio of TARI's budget received to budget committed in its medium-term expenditure framework (in %)	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
# of climate resilient crop varieties released (total since 2022)	This indicator counts the new seed types (i.e., varieties) discharged for commercial multiplication, production or sale of seed or plant varieties in compliance with the Tanzania Seed Regulation, "Climate resilient" refers to a sub-group of releases where the variety has explicit traits responding to abiotic stresses including drought, heat, salinity, flooding, changing rainfall patterns (e.g., early maturity).	Annual	ToSCI release certificate	Review of annual TOSCI publication on new releases	TOSCI
# of technologies developed, transferred to and absorbed by extension services since 2022	Measures the number of climate resilient enhancing technologies that TARI developed, released, transferred to public	Annual	Records on technical extension packages for use in RS	Annual TARI variety release reports Review of extension catalogue	MoA Agriculture Training, Extension Services and Research Division (Extension Service and Research



	<p>extension and that has been formally absorbed by the public extension system. Measures the number of climate resilient enhancing technologies that TARI developed, released, transferred to public extension and that has been formally absorbed by the public extension system.</p> <p>“Climate resilience” – see above</p> <p>“Developed” refers to the technology that was obtained at the end of a research process led by TARI and documented (e.g., research papers and peer-reviewed publications).</p> <p>“Released” refers to the completion of the crop varietal release process (i.e., certification of release) or an equivalent process for non-varietal technologies (e.g., by technology release</p>		and LGAs		Section)
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	<p>committee)</p> <p>“Transferred” refers to a formal communication by TARI to MoA Agriculture Training, Extension Services and Research Division, that (i) announces the release of the technology, (ii) provides technical specification document, including description of its climate resilience enhancing trait and qualities</p> <p>“Absorbed” by MoA public extension services refers to (i) documentation of proceedings of technology transfer events, followed by (ii) the listing of the technology in the MoA catalogue of technology packages promoted for use in RS and LGAs.</p>				
Of which gender-sensitive technologies	Refers to technologies that have a particular relevance to women during the production and post-harvest management				



	process (e.g., time and labor saving, nutritional, empowerment)				
Of which biofortified varieties (e.g., orange flesh sweet potato, beans)	Biofortified varieties have an increased density of micronutrients (iron, zinc, and vitamin A) in widely-consumed staple crops achieved through conventional breeding techniques, agronomic practices, or genetic modification.				
# of extension staff trained on climate smart practices and e-agric solutions	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Of which females					
Total # of Farmer reached with e-extension services	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Of which female					
Share of farmers accessing e-agriculture platform that are satisfied with the advice received (%)	Measures farmers satisfaction with extension services	Annual	Survey Report	Online survey of all registered farmers	MoA
of which female					
Increase in score of Women's Empowerment in Agriculture Index (WEAI)	Aggregate index based on individual-level data collected from both men and women within the same household, offering an innovative method to measuring women's	Year 1 Year 4	Survey Report	Online survey of all registered farmers	MoA



	empowerment. WEAI has five domains of empowerment with ten indicators organized thematically. Conducted for targeted projects (to be identified) financed by the MoA under ASDP II				
Amount of pre-basic seed distributed (in tons) by TARI	Measures the total amount of pre-basic seed produced and made available for seed multiplication (i.e., to ASA) in a given year.	Annual	TARI reports	Compilation of data from TARI seed section	MoA M&E Team
Amount of certified seeds produced (in tons) by ASA	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Number of TOSCI authorized seed inspectors	Measures the number of full-time equivalent technical staff directly employed by TOSCI during the last 6 month	Annual	Employment and salary payment records	Annual report of TOSCI	MoA M&E Team
Of which female					
# of performance-based OMM contracts signed	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Area (ha) operated under performance-based OMM contracts/constitutions	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Share of farmers satisfied (% women) with water accessibility as per agreed times	Measures farmer satisfaction with reliability and adequacy of irrigation water supply in schemes managed using OMM contract	Annual	Water user surveys in OMM-based schemes	Sample survey of IO members to be commissioned by IO	MoA M&E Team



Of which female					
Number of warehouses leased by the private sector, operated by cooperatives and SOEs/NFRA in compliance with guidelines (for new management model)	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Total annual turnover of commodities stored in warehouses managed using new management model	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
% change in budget outturn of MoA and its line agencies	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Soil Map established and published	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Number of farmers reached with tailored soil management advice	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol	see DLI protocol
Number of ZARI Labs rehabilitated (soil, tissue culture and entomology etc)	Measure the number of labs rehabilitated as per agreed type and location	Annual	Contractor Rehabilitation Completion reports	ZARI Progress reports	ZARI M&E Team
Number of additional professional staff with a post-graduate degree (Master's and PhD) at ZARI	Measure the increase of full-time equivalent research staffing with Master or PhD degrees	Annual	HR reports	ZARI progress reports	ZARI M&E Team
of which female					
Number of climate resilience enhancing technologies developed and released in Zanzibar	This indicator counts the new seed types (i.e., varieties) discharged for commercial multiplication, production or sale of seed or plant varieties in compliance with the	Annual	Formal variety release records	Compilation of Varietal Release announcements	ZARI M&E Team



	Zanzibar Seed Regulation				
Seed certification system established	Assesses whether Zanzibar (i) has formally established a seed certification agency (ii) issues certification of seeds produced in Zanzibar	Year 3 onwards	- Legal documents /provisions - Certification records	Compilation of monthly statement of seed amounts certification through certification body in Zanzibar	MoA M&E Team Zanzibar
Number of extension staff trained by the project in climate smart practices and e-agric solutions	# of extension staff trained by the project in climate smart practices and e-agric solutions measures the increase of awareness and understanding by extension staff about the use of data-driven solutions and climate-smart solutions in agriculture by measuring the number of extension officers that graduated from a training program on climate smart practices and e-agric solutions with a minimum duration of three days	Annual	Capacity Development records of extension services Program agenda List of participants with names and contacts	Review of supporting evidence; extension works will only be counted once and should have attended both CSA and e-extension solutions training	MoA M&E Team Zanzibar
Of which female					
Number of farmers that completed a farmer field school program supported by the project	Measures the total number of farmers that formally graduated from FFS supported by the project	Annual	Extension records on FFS	Compilation of graduation records through master trainers	MoA M&E Team Zanzibar
Women					



Youth					
Area provided with new/improved irrigation or drainage services	Measures the total number of farmers that formally graduated from FFS supported by the project	Annual	Contractor Rehabilitation Completion reports; bulk water supply reports by Irrigation Department	Reports by the Department of Irrigation	MoA M&E Team Zanzibar
Number of women vegetable producing/marketing groups established or strengthen	Measures the women's groups mobilized and trained to jointly market horticulture products	Annual	Implementation reports, registration of women groups	Progress reports	MoA M&E Team Zanzibar
# of Farmer's Service Centers rehabilitated (incl. drying area)	Measures the total number of completed rehabilitation of Farmer Service Centers (including drying areas) as per planned number	Annual	Contractor Rehabilitation Completion reports	Progress reports	MoA M&E Team Zanzibar
# of boreholes for irrigation rehabilitated	Measures the total number of completed rehabilitation of boreholes for irrigation as per planned number	Annual	Contractor Rehabilitation Completion reports	Progress reports	MoA M&E Team Zanzibar
farm roads rehabilitated within irrigation schemes (in km)	Measures length of farm roads rehabilitated within irrigation schemes supported by the project	Annual	Contractor Rehabilitation Completion reports	Progress reports	MoA M&E Team Zanzibar
ASDP II M&E system in place and fully operational	Measure the technical ability of MoA to monitor progress and results of investments financed	Annual	M&E Manual, indicators reports, technical	Progress report	MoA M&E Team



	under the ADSP II program		specification of data system; PAP report		
MoA budget documents and data are open, transparent and accessible	Measures transparency of the budgeting process by assessing public access to key budget documents (e.g. MTEF, annual financial reports of vote 43 and 5) on the MoA public website	Annual	MoA webpage; link to MoA mid-term expenditure framework, annual financial reports	Review of MoA webpage	MoA M&E Team
Curriculum for the training of extensionists on (i) CSA and (ii) E-agriculture solutions prepared and rolled out	Measures the finalization and launching of an improved training curriculum for agricultural extensionist on (i) CSA (ii) e-agricultural solutions	Annual	Final Training material developed by MoA extension section	Collection of all relevant sets of training material	MoA M&E Team
Number of NIRC staff, district engineers and scheme level staff trained on the new Guidelines on Irrigation Design Innovations for Improved Water Productivity	Measures the total number of staff in NIRC, RIO, district executive officers and IO that completed a training on the new 'Guidelines on Irrigation Design Innovations for Improved Water Productivity'	Annual	Training delivery records, participants lists	Collection of evidence for training delivery (announcements, agenda, completion reports), including sign-in sheets with contacts of trainees	MoA M&E Team
Performance recording system for public irrigation schemes in place.	Assesses the installation of a performance recording system for public irrigation schemes. The system	Annual	NIRC zonal scheme data management records with	Performance reports of public irrigation schemes	MoA M&E Team



	would record for all public irrigation system basic performance measures, including total scheme area, assets, monthly supply of bulk water, conveyance efficiency of distribution network, O&M cost, revenues, operational staff etc.		scheme KPIs		
Percentage of project-related grievances received that have been addressed and communicated within 30 days	Measures the percentage of all claims addressed by the Grievances redress mechanism during program implementation	Semi-annual	Paper trail in response to grievances filed with MoA	GRM system at MoA	MoA M&E Team



ANNEX 2. DISBURSEMENT LINKED INDICATORS, DISBURSEMENT ARRANGEMENTS AND VERIFICATION PROTOCOLS

Disbursement Linked Indicators Matrix

DLI 1	Sustainable financing for the development and dissemination of climate resilient technologies in agriculture for Tanzania and the Region			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	37,000,000.00	13.20
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		8,700,000.00	DLI1.1 + DLI 1.2
FY2023/24	0.00		5,700,000.00	DLI1.1 + DLI 1.2
FY2024/25	0.00		13,900,000.00	DLI1.1 + DLI 1.2
FY2025/26	0.00		2,900,000.00	DLI1.1 + DLI 1.2
FY2026/27	0.00		2,900,000.00	DLI1.1 + DLI 1.2
FY2027/28	0.00		2,900,000.00	DLI1.1 + DLI 1.2



DLI 1.1	TARI's annual budget outturn			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Process	Yes	Percentage	26,000,000.00	9.30
Period	Value		Allocated Amount (USD)	Formula
Baseline	30.00			
Prior Results	45.00		8,660,000.00	\$577,800 per 1% budget outturn increase compared to previous year
FY2023/24	55.00		5,780,000.00	\$577,800 per 1% budget outturn increase compared to previous year
FY2024/25	60.00		2,890,000.00	\$577,800 per 1% budget outturn increase compared to previous year
FY2025/26	65.00		2,890,000.00	\$577,800 per 1% budget outturn increase compared to previous year
FY2026/27	70.00		2,890,000.00	\$577,800 per 1% budget outturn increase compared to previous year
FY2027/28	75.00		2,890,000.00	\$577,800 per 1% budget outturn increase compared to previous year



DLI 1.2	TARI strategic plan 2025-2030 approved, including mid-term expenditure framework			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Yes/No	11,000,000.00	3.90
Period	Value		Allocated Amount (USD)	Formula
Baseline	No			
Prior Results	Yes		0.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework
FY2023/24	No		0.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework
FY2024/25	Yes		11,000,000.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework
FY2025/26	Yes		0.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework
FY2026/27	Yes		0.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework
FY2027/28	Yes		0.00	Disbursement if TARI strategic plan 2024-2028 is approved, including mid-term expenditure framework



DLI 2	Extension outreach strengthened, including through ICT solutions for promoting climate smart practices			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	32,000,000.00	11.40
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	DLI 2.1+ DLI 2.2+ DLI 2.3
FY2023/24	0.00		0.00	DLI 2.1+ DLI 2.2+ DLI 2.3
FY2024/25	0.00		12,750,000.00	DLI 2.1+ DLI 2.2+ DLI 2.3
FY2025/26	0.00		4,670,000.00	DLI 2.1+ DLI 2.2+ DLI 2.3
FY2026/27	0.00		8,080,000.00	DLI 2.1+ DLI 2.2+ DLI 2.3
FY2027/28	0.00		6,500,000.00	DLI 2.1+ DLI 2.2+ DLI 2.3
DLI 2.1	Number of new service functions rolled out with m-kilimo			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Process	Yes	Number	9,000,000.00	1.67
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$1.8 million per new function that have been integrated and rolled out



			into the m-kilomo platform (up to 5)	
FY2023/24	0.00	0.00	\$1.8 million per new function that have been integrated and rolled out into the m-kilomo platform (up to 5)	
FY2024/25	5.00	9,000,000.00	\$1.8 million per new function that have been integrated and rolled out into the m-kilomo platform (up to 5)	
FY2025/26	5.00	0.00	\$1.8 million per new function that have been integrated and rolled out into the m-kilomo platform (up to 5)	
FY2026/27	5.00	0.00	\$1.8 million per new function that have been integrated and rolled out into the m-kilomo platform (up to 5)	
FY2027/28	5.00	0.00	\$1.8 million per new function that have been integrated and rolled out into the m-kilomo platform (up to 5)	
DLI 2.2	Number of extension staff (% women) trained on (i) climate smart practices and (ii) e-agriculture solutions			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	Yes	Number	10,000,000.00	3.60
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$25000 per 10 extension officer (at least 30% being female) trained on



			climate smart practices and e-agricultural solutions
FY2023/24	0.00	0.00	\$25000 per 10 extension officer (at least 30% being female) trained on climate smart practices and e-agricultural solutions
FY2024/25	1,500.00	3,750,000.00	\$25000 per 10 extension officer (at least 30% being female) trained on climate smart practices and e-agricultural solutions
FY2025/26	2,500.00	2,500,000.00	\$25000 per 10 extension officer (at least 30% being female) trained on climate smart practices and e-agricultural solutions
FY2026/27	4,000.00	3,750,000.00	\$25000 per 10 extension officer (at least 30% being female) trained on climate smart practices and e-agricultural solutions
FY2027/28	4,000.00	0.00	\$25000 per 10 extension officer (at least 30% being female) trained on climate smart practices and e-agricultural solutions



DLI 2.3		Delivery outreach of e-agriculture solutions: Total # of Farmer (% women) reached with e-extension services		
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	Yes	Number	13,000,000.00	4.60
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries through the M-Kilimo
FY2023/24	0.00		0.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries through the M-Kilimo
FY2024/25	0.00		0.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries through the M-Kilimo
FY2025/26	500,000.00		2,200,000.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries through the M-Kilimo
FY2026/27	1,000,000.00		4,300,000.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries



				through the M-Kilimo
FY2027/28	1,500,000.00		6,500,000.00	\$43 per 10 farmers (3 being female) that have received early warning messages and/or submitted queries through the M-Kilimo
DLI 3	Improved functional linkages in the Seed value chain: Amount of certified seeds production by ASA (tons)			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Tons/year	26,000,000.00	9.30
Period	Value		Allocated Amount (USD)	Formula
Baseline	3,000.00			
Prior Results	6,000.00		4,590,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI
FY2023/24	9,000.00		4,590,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI
FY2024/25	12,000.00		4,590,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI
FY2025/26	15,000.00		4,590,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI
FY2026/27	17,500.00		3,820,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI
FY2027/28	20,000.00		3,820,000.00	\$ 1530 per ton of seeds produced by ASA and certified by ToSCI



DLI 4	Performance-based Operations, Management and Maintenance (OMM) contracts introduced and implemented			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	70,000,000.00	25.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	DLI 4.1+DLI 4.2
FY2023/24	0.00		13,000,000.00	DLI 4.1+DLI 4.2
FY2024/25	0.00		17,000,000.00	DLI 4.1+DLI 4.2
FY2025/26	0.00		5,800,000.00	DLI 4.1+DLI 4.2
FY2026/27	0.00		12,800,000.00	DLI 4.1+DLI 4.2
FY2027/28	0.00		21,400,000.00	DLI 4.1+DLI 4.2
DLI 4.1	Number of performance-based OMM contracts signed (disaggregated by region)			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	30,000,000.00	10.70
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation



			Authority governing the opera
FY2023/24	10.00	13,000,000.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation Authority governing the opera
FY2024/25	23.00	17,000,000.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation Authority governing the opera
FY2025/26	23.00	0.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation Authority governing the opera
FY2026/27	23.00	0.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation Authority governing the opera
FY2027/28	23.00	0.00	\$1.3 million per legally signed contract between NIRC and IOs and witnessed by the District Irrigation Authority governing the opera



DLI 4.2	Area (ha) operated under performance-based OMM contracts			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Hectare(Ha)	40,000,000.00	14.30
Period	Value	Allocated Amount (USD)		Formula
Baseline	0.00			
Prior Results	0.00	0.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts
FY2023/24	0.00	0.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts
FY2024/25	0.00	0.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts
FY2025/26	10,000.00	5,800,000.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts
FY2026/27	22,000.00	12,800,000.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts
FY2027/28	37,000.00	21,400,000.00		\$580 per area irrigated (ha) operated under performance-based OMM contracts



DLI 5	Effective management of public warehouse facilities			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Number	42,000,000.00	15.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	DLI 5.1+ DLI 5.2+ DLI 5.3
FY2023/24	0.00		8,000,000.00	DLI 5.1+ DLI 5.2+ DLI 5.3
FY2024/25	0.00		6,200,000.00	DLI 5.1+ DLI 5.2+ DLI 5.3
FY2025/26	0.00		7,800,000.00	DLI 5.1+ DLI 5.2+ DLI 5.3
FY2026/27	0.00		7,700,000.00	DLI 5.1+ DLI 5.2+ DLI 5.3
FY2027/28	0.00		12,300,000.00	DLI 5.1+ DLI 5.2+ DLI 5.3
DLI 5.1	New Warehouse Utilization Guidelines issued specifying improved management model (yes/no)			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Yes/No	8,000,000.00	2.90
Period	Value		Allocated Amount (USD)	Formula
Baseline	No			
Prior Results	No		0.00	disbursement when new "Warehouse Utilization Guideline"



			developed and formally issued	
FY2023/24	Yes	8,000,000.00	disbursement when new “Warehouse Utilization Guideline” developed and formally issued	
FY2024/25	Yes	0.00	disbursement when new “Warehouse Utilization Guideline” developed and formally issued	
FY2025/26	Yes	0.00	disbursement when new “Warehouse Utilization Guideline” developed and formally issued	
FY2026/27	Yes	0.00	disbursement when new “Warehouse Utilization Guideline” developed and formally issued	
FY2027/28	Yes	0.00	disbursement when new “Warehouse Utilization Guideline” developed and formally issued	
DLI 5.2	Number of MoUs signed by relevant central/local government agencies and private sector entities adopting new guideline on improved management model.			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	14,000,000.00	2.67
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			



Prior Results	0.00	0.00	\$177,200 per Memorandum of Understanding (MOU) signed by the MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect
FY2023/24	0.00	0.00	\$177,200 per Memorandum of Understanding (MOU) signed by the MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect
FY2024/25	35.00	6,200,000.00	\$177,200 per Memorandum of Understanding (MOU) signed by the MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect
FY2025/26	79.00	7,800,000.00	\$177,200 per Memorandum of Understanding (MOU) signed by the MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect
FY2026/27	79.00	0.00	\$177,200 per Memorandum of Understanding (MOU) signed by the MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect
FY2027/28	79.00	0.00	\$177,200 per Memorandum of Understanding (MOU) signed by the



			MoA, LGA, Warehouse Owner (Village Government/FBO) and the Private Sect	
DLI 5.3	Total annual turnover of commodities stored in warehouses managed using new model (in tons)			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	Yes	Metric ton	20,000,000.00	7.10
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model
FY2023/24	0.00		0.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model
FY2024/25	0.00		0.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model
FY2025/26	35,000.00		7,700,000.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model



FY2026/27	56,000.00		12,300,000.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model
FY2027/28	56,000.00		0.00	\$220 per total annual turnover (in metric tons) of commodities stored in warehouses managed using new model
DLI 6	Improved agricultural budget predictability: End of year budget outturn			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	41,000,000.00	15.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	45.00			
Prior Results	0.00		0.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released by the Ministry of Finance to ag
FY2023/24	60.00		17,570,000.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released by the Ministry of Finance to ag
FY2024/25	65.00		5,860,000.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released



			by the Ministry of Finance to ag	
FY2025/26	70.00	5,860,000.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released by the Ministry of Finance to ag	
FY2026/27	75.00	5,860,000.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released by the Ministry of Finance to ag	
FY2027/28	80.00	5,850,000.00	\$1.17 million per 1% of budget outturn increase compared to the baseline (outturn is funds released by the Ministry of Finance to ag	
DLI 7	Scaling up soil health management			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	32,000,000.00	11.40
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	0.00
FY2023/24	0.00		0.00	DLI 7.1+DLI 7.2
FY2024/25	0.00		0.00	DLI 7.1+DLI 7.2
FY2025/26	0.00		16,000,000.00	DLI 7.1+DLI 7.2



FY2026/27	0.00		8,000,000.00	DLI 7.1+DLI 7.2
FY2027/28	0.00		8,000,000.00	DLI 7.1+DLI 7.2
DLI 7.1	Soil Mapping and assessment: Soil Map established and published			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Yes/No	16,000,000.00	5.90
Period	Value		Allocated Amount (USD)	Formula
Baseline	No			
Prior Results	No		0.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)
FY2023/24	No		0.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)
FY2024/25	No		0.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)
FY2025/26	Yes		16,000,000.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)



FY2026/27	Yes		0.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)
FY2027/28	Yes		0.00	disbursement when nation-wide digital soil map is prepared and published (priority area for policy action identified internally)
DLI 7.2	Number of farmers reached with tailored soil management advice			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	Yes	Number	16,000,000.00	5.90
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
Prior Results	0.00		0.00	\$400 per farmer trained on improved soil management practices
FY2023/24	0.00		0.00	\$400 per farmer trained on improved soil management practices
FY2024/25	0.00		0.00	\$400 per farmer trained on improved soil management practices
FY2025/26	20,000.00		8,000,000.00	\$400 per farmer trained on



			improved soil management practices
FY2026/27	40,000.00	8,000,000.00	\$400 per farmer trained on improved soil management practices
FY2027/28	40,000.00	0.00	\$400 per farmer trained on improved soil management practices



Verification Protocol Table: Disbursement Linked Indicators

DLI 1	Sustainable financing for the development and dissemination of climate resilient technologies in agriculture for Tanzania and the Region
Description	DLI 1 measures the predictability and effectiveness of agricultural research financing of climate resilient technologies
Data source/ Agency	TARI records, audited financial statements /TARI
Verification Entity	Third-party Verification Agency
Procedure	
DLI 1.1	TARI's annual budget outturn
Description	Annual budget outturn refers to the percentage of funds released to TARI in a given FY over the funds that have been committed through the approval of the mid-term expenditure framework presented to the MoA
Data source/ Agency	TARI audited financial statements, MoA Mid-Term Expenditure Framework – Budget code for TARI
Verification Entity	Internal Auditor General
Procedure	<ol style="list-style-type: none"> 1. MoA provides <ul style="list-style-type: none"> ○ Latest approved Mid Term Expenditure Framework (MTEF) for TARI ○ TARI's annual external audited financial statement ○ TARI self-report of annual budget outturn 2. VE inspects whether (i) accreditation and validity of the independent assurance presented for TARI's financial statement is adequate (i.e., either Controller and Auditor General or external auditing firm is recognized by CAG) (ii) the reported budget outturn is supported by the TARI externally audited financial statement.
DLI 1.2	TARI strategic plan 2025-2030 approved, including mid-term expenditure framework
Description	The sub-DLI measures the delivery of a fully budgeted and approved TARI Strategic Plan for 2025-2030 The SP should outline the strategic direction of the Institute for the next five years. It will present (i) a Theory of Change with the strategic research areas that will drive the Institute's efforts meet its mission*, also highlighting the strategic direction for climate smart, nutrition and gender-sensitive research (ii) the approach for engaging and financing national and regional



	<p>partnerships within each of the results areas (i.e., with national extension services, TOSCI, academia, other country NARIs, the CGIAR, private sector, farmer organizations (iii) the approach for data and knowledge management (iv) the approach for effectively disseminating knowledge and technologies for impact in farmers fields (v) a results framework and an Monitoring, Evaluation and Learning (MEL) plan (vi) a Mid-Term Expenditure Framework (MTEF). *TARI mission is "to generate and promote application of knowledge, innovation and agricultural technologies as catalyst of change in achieving agricultural productivity, food and nutrition security, sustainable agriculture and economic growth involving stakeholders in the country and global community" The development of the strategic plan shall be based on the following supporting documents: (a) review of results (as per original results framework), critical success factors, and lessons learned from the latest SP 2019/20-2024/25, (b) proceedings of a systematic internal and external consultation process, (c) updated assessment of capacity needs and organizational improvement (including consolidation) opportunities (d) a stock-taking review of climate resilience enhancing technologies already developed by TARI and its partners that are ready for dissemination.</p>
Data source/ Agency	TARI publications / Board proceedings
Verification Entity	Internal Auditor General
Procedure	<p>(1) TARI provides the following supporting evidence for DLI 1.1</p> <ol style="list-style-type: none"> 1. Copy of the approved and published TARI Strategic Plan 2025-2030 2. Letter of TARI's Board Chair confirming approval of the Strategic Plan 3. Supporting documents for the preparation of the Strategic Plan (as listed in the description section above) <p>(2) VE audits evidence for compliance with DLI 1.1 and provides opinion.</p>
DLI 2	Extension outreach strengthened, including through ICT solutions for promoting climate smart practices
Description	<p>This DL 2 would measure improvement to the performance of the extension system, in particular the introduction and mainstreaming of an e-extension system. The newly established farmer register would be combined with other data platforms (e.g., weather forecasting, pest and disease identification and monitoring, market pricing, and access to finance). In parallel, the DLI would measure the delivery training of selected LGA extension staff in using data-driven solutions and help deliver climate-smart solutions to farmers.</p>
Data source/ Agency	M&E Unit at MoA



Verification Entity	Third-party Verification Agency
Procedure	DLI 2 Sub-measures; <ol style="list-style-type: none"> 1. Technical Integration of farmer registry with m-kilimo: # of new service function rolled out 2. Training: # of extension staff trained on (i) climate smart practices and (ii) e-agric solutions 3. Outreach: # of farmers receiving early warning messages about (i) pest & diseases (ii) weather and (iii) market 4. Learning: Mid-term review of guideline implementation published
DLI 2.1	Number of new service functions rolled out with m-kilimo
Description	Description The sub-DLI measures the number of new functions that have been integrated and rolled out into the m-kilimo platform. Targeted service functions include: (1) seasonal production and management advice (2) digital recognition of pests, (3) early warning on pest, diseases, (4) weather information, (5) market prices and marketing opportunities, (6) any other services to improve targeting of farmers
Data source/ Agency	m-kilimo application reports, m-kilimo unit at MoA
Verification Entity	Independent Verification Agency
Procedure	MoA will provide the following information and supporting evidence <ol style="list-style-type: none"> i. M-kilimo architecture/design document, the Manual and access information to application to browse functionality ii. Application Performance Reports for each 'function': monthly user activity reports, m-kilimo deployment performance measures (e.g., # of users by function, messages sent, relevant transaction logs) iii. Other documents as demanded by VE VE will (i) review documentation and test functionality of applications (ii) provide opinion on the reported functionality
DLI 2.2	Number of extension staff (% women) trained on (i) climate smart practices and (ii) e-agriculture solutions
Description	This sub-DLI measures the increase of awareness and understanding by extension staff about the use of data-driven solutions and climate-smart solutions in agriculture by measuring the number of extension officers that graduated from a training program on climate smart practices and e-agric solutions Target: 4,000 extensionist (30% women) on CSA and e-agricultures solutions; this is a floating DLI, whereby disbursement are only made if at least 30% of the claimed reported figure are female extension workers.



Data source/ Agency	Capacity Development records, Division of Research and Development at MoA
Verification Entity	Internal Auditor General
Procedure	<p>MoA will provide</p> <ul style="list-style-type: none"> i. Overview table with: number of extensionist, % women, name of training program, duration and date delivered ii. detailed list of extensionist that completed training on CSA and e-agriculture (with full names, gender, contact e-mail and phone, date and type of training program completed) iii. copy of agenda of training programs on CSA and e-agriculture solutions (showing minimum of 3 days of technical training), corresponding material distributed to participants and sign-in sheets <p>VE will review reported figures and supporting evidence and conduct verification calls to a representative sample of extensionist listed under (ii) above.</p> <p>VE will provide opinion on the validity of the reported indicator measure.</p>
DLI 2.3	Delivery outreach of e-agriculture solutions: Total # of Farmer (% women) reached with e-extension services
Description	This sub-DLI aims to measure changes in the overall coverage of e-extension services as an indicator of improved performance of extension service delivery. As such it tracks changes in the total number of farmers reached with e-extension tools offered on the m-kilimo platform and through the farmer registry. A farmer is recognized and counted if he/she is an active subscriber to the platform and received regular information (at least 5 messages annually covering at least 4 out of the 6 platform function described in DLI 2.1) and/or sent in queries during the past 12 month.
Data source/ Agency	e-kilimo operational records, MoA
Verification Entity	Internal Auditor General
Procedure	<p>MoA will report on the total figure as per definition above, and provide the following supporting evidence</p> <ul style="list-style-type: none"> i. Integrated Platform (including registry) Performance Reports (e.g., # of users by function, messages sent, relevant transaction logs) ii. Overview table listing: text of each text message (by type, i.e., pest/disease, weather, market) sent, date message was sent, total number of cell numbers sent to <u>successfully</u>, number of bounce backs iii. Excerpts from program code and application transaction logs reflecting mass sending of message



	<ul style="list-style-type: none"> iv. Access to digital contact information and activity logs of subscribed farmers if requested by VE v. Access information to application transaction log - if requested by VE <p>VE will assess information provided, conduct sample verification (as needed) and provide opinion on reliability of DLI measure reported</p>
DLI 3	Improved functional linkages in the Seed value chain: Amount of certified seeds production by ASA (tons)
Description	The DLI measures the total production of certified seeds by ASA (and its sub-contractors) AND subsequently certified by ToSCI in accordance with the most current seed regulation. This measure only includes seeds of cereal crops, grain legumes and pulses, vegetable crops, fruit crops (see table 19 of seed regulation 2007) and oil seeds; not included are grass forage and green manure crops, fiber crops “Certified” refers to the seeds available on the market to farmers that have been declared and officially tagged as “Tanzania Certified Seeds” by TOSCI.
Data source/ Agency	ASA and TOSCI records
Verification Entity	Internal Auditor General
Procedure	<p>TOSCI provides as evidence copies of (i) quarterly statement of seed amounts certified for each ASA farm (and sub-contractors) – disaggregated by type of seed (e.g., maize, wheat etc.), (ii) data file with the corresponding seed lot numbers and the corresponding electronic certification label code.</p> <p>VE validates reported figures against submitted monthly statements and conducts random sample checks of seed producers’ documentation of certification (and in some cases the physical tagging).</p>
DLI 4	Performance-based Operations, Management and Maintenance (OMM) contracts introduced and implemented
Description	This DLI measures the formal establishment and the coverage area of contractual agreement between NIRC and Irrigation organizations for the operation, management and maintenance of targeted irrigation schemes with a defined number or service recipients. “Operations” refers to the hydraulic control, including water withdrawal, conveyance, transport/delivery and drainage of irrigation water. “Management” refers to (i) scheduling and delivery of agreed-on quality, quantity, reliability, flexibility and equity to enable specific uses of water in the scheme (ii) the evacuation of excess water to avoid salinization and production losses after extreme events. “Maintenance” refers to technical upholding and safeguarding of the irrigation infrastructure installed (i.e., canals, pumps, other hydraulic control equipment).
Data source/ Agency	NIRC records



Verification Entity	Internal Auditor General
Procedure	This DLI measures two sub-DLIs; 1. Number of performance-based OMM contracts signed (disaggregated by region) 2. Area (ha) operated under performance-based OMM contracts
DLI 4.1	Number of performance-based OMM contracts signed (disaggregated by region)
Description	This sub-DLI measures the number of formally signed contracts between NIRC, Irrigation Organizations (IOs) and the District Executive Office governing the operation, management and maintenance of targeted irrigation schemes in six irrigation regions The contract would stipulate (i) roles and responsibilities between NIRC/District Executive Office/the District Irrigation Engineer/IO for the operation, management and maintenance of the scheme, (ii) an operational plan (iii) irrigation service fees to be paid by the IO to the NIRC for services provided, (iv) process for measuring water delivered to IOs and fees to be paid to Basin Water Authority/Board (v) minimum standards for IO bye-laws (vi) provisions for key-performance indicators (vii) other - as per NIRC guidelines and template for the establishment of OMM contracts
Data source/ Agency	NIRC records
Verification Entity	Internal Auditor General
Procedure	NIRC will provide as evidence copies of (i) the signed contracts and (ii) corresponding design of the irrigation scheme (iii) registration certificate of the signatory IO (iv) proof of IO member training conducted by the NIRC, signed by the official IO signatories (vi) relevant technical guidelines and templates issued by NIRC VE validates reported figure on number of performance-based contracts signed against the supporting evidence provided (see above)
DLI 4.2	Area (ha) operated under performance-based OMM contracts
Description	This sub-DLI assesses the implementation of performance-based OMM contracts by measuring the change in total area (ha) operated under performance-based OMM contracts. 'Operated' refers to the agreed and then implemented management of water resources by the operator, i.e., supply and drainage of water at the wider scheme perimeters down to the plot level during the past cropping season Disbursements are scalable and will be made against the area under operation for the year under assessment 'Operated' refers to the agreed and then implemented management of water resources by the operator, i.e., supply and drainage of water at the wider scheme perimeters down to the plot level. Disbursements are scalable and will be made against the area under operation for the year under assessment



Data source/ Agency	Operational reports, OMM contractor
Verification Entity	Internal Auditor General
Procedure	<p>NIRC provide the following</p> <ul style="list-style-type: none"> i. Table with area operated under performance-based OMM contracts (disaggregated by region and scheme) ii. Scheme lay-out plans included in the agreements defining the total irrigation area operated under the signed OMM contracts iii. 6 monthly reports by OMM IO contractor to NIRC for each scheme that is included in the measurement of DLI (incl. IO payment statement for bulk water supplied by NIRC); iv. Any performance monitoring reports that were agreed in the OMM contract (e.g., quarterly report from the irrigation regional focal point on IO performance) addressed to scheme operators about their service performance and the payments issued, if any (in line with para 49 of the National Irrigation Act requiring the Monitoring and Evaluation of performance of irrigation schemes) <p>VE will review report and evidence and provide opinion on the validity of reported DLI measure</p>
DLI 5	Effective management of public warehouse facilities
Description	DLI 5 measures the effective use of public warehouses and their efficient management
Data source/ Agency	Institutional guidelines, legal agreements / Tanzania Warehouse Licensing Board/MoA
Verification Entity	Verification Entity (VE) Internal Auditor General
Procedure	<p>The DLI measures 3 sub-DLIs</p> <ol style="list-style-type: none"> 1 New Warehouse Utilization Guidelines issued specifying improved management model (yes/no) 2. Number of MoUs with relevant central/local government agencies signed adopting new guideline on improved management model. 3. Total annual turnover of commodities stored in warehouses managed using new model (in metric tons)
DLI 5.1	New Warehouse Utilization Guidelines issued specifying improved management model (yes/no)
Description	This sub-DLI measures whether a new “Warehouse Utilization Guideline” was developed and formally issued by MoA in consultation with Tanzania Warehouse Licensing Board that specifies the management criteria, regulatory and legal



	provisions in a reformed management model of publicly-owned warehouses. It will address (i) licensing regulation of warehouses under new management model, (ii) the operational model , i.e., type of warehouse agreement with warehouse operator (private sector/cooperative/ other service provider including state-owned enterprises) e.g., service agreement, lease agreement, property management agreement (iii) the legal provisions and process for signing of MoU between /LGA/Operator/Owner specifying clear roles and responsibilities (iv) process for issuing of warehouse receipts to depositors, if any (v) system of storage and handling charges procedures (vi) payment terms, warranties, liabilities, termination rules (vi) provisions for warehouse inspections, including fee structure and the development of an inspection manual, and (vii) provisions for depositor rights and responsibilities, and process for their sensitization
Data source/ Agency	Records of Warehouse Management Guideline / Tanzania Warehouse Licensing Board, Department of National Food Security and Nutrition at MoA
Verification Entity	Internal Auditor General
Procedure	MoA provides as evidence copy of (i) new “Warehouse Utilization Guideline” specifying improved management model (ii) public link to MoA website disseminating the new guideline VE reviews evidence and provides opinion on the achievement of DLI 5.1
DLI 5.2	Number of MoUs signed by relevant central/local government agencies and private sector entities adopting new guideline on improved management model.
Description	This sub-DLI measures the number of Memorandum of Understanding (MoU) signed by the MoA, LGA, the National Food Reserve Agency (if applicable), Warehouse Owner (Village Government/FBO) and the Private Sector/Cooperative, where at least 50 percent of the of the number of MoU will be operated by the private sector. State-owned enterprises (SoE) can also be engaged if (i) no private sector entity or cooperative is ready to engage and (ii) the SoE management is clearly separated from its ownership (i.e., SoE management is safeguarded through their legal and regulatory framework against political interference and is autonomous in their commercial decision-making); The MoU will govern the partnerships and clarify the roles and responsibilities of each party, in a new warehouse management agreement. Disbursements are scalable and will be made against the number of signed MOUs with valid supporting documents.
Data source/ Agency	Official records, MoA
Verification Entity	Internal Auditor General
Procedure	MoA will provide as evidence copies of (i) all MoUs signed by district (ii) list of district warehouse facilities governed by new



	<p>management model (iii) copies of warehouse licenses (where the WRS is applicable) (iv) copy of registration of warehouse operator signing agreement (where the WRS is applicable),) (v) corporate governance documents describing separation of SOE management from its state ownership (where SoE takes up warehouse management, (vi) other (at the request of the VE).</p> <p>VE will review evidence to validate (i) reported total number of signed MoUs (ii) list of district warehouse facilities governed by new management model (see DLI 5.1), (iii) At least 50 percent of the of the number of MoU are operated by the private sector and provide opinion on DLI achievement.</p>
DLI 5.3	Total annual turnover of commodities stored in warehouses managed using new model (in tons)
Description	This sub-DLI assesses utilization of public warehouses (of which at least 50 percent are operated by the private sector), by measuring total annual turnover (in tons) of commodities stored in warehouses managed using new model (i.e., with MoU adopting new guidelines) Disbursements will be made against the total turnover, in metric tons, of all warehouses adopting the new management model for a given FY.
Data source/ Agency	annual/quarterly warehouse inspector reports, Audit reports, Tanzania Warehouse Licensing Board (TWLB)
Verification Entity	Internal Auditor General
Procedure	<p>MoA will provide detailed calculation of the total turn-over of commodities stored in warehouses recognized under DLI 5.2 with supporting evidence, including copies of annual warehouse inspector reports of all recognized warehouses as per the guideline.</p> <p>VE will validate reported turn-over figures using warehouse inspector reports and financial reports of facility operation. VE may decide or at the request of the World Bank conduct field surveys for additional verification.</p>
DLI 6	Improved agricultural budget predictability: End of year budget outturn
Description	Budget outturn is here defined as the percentage of funds released by the Ministry of Finance to agricultural agencies over funds that have been committed to the sector (approved budget books by parliament). This sub-DLI measures the annual budget outturn of local funds for vote 43 and 5. Disbursements will me made against increases in annual budget outturn for the local funds of vote 43 and 5.
Data source/ Agency	Accountant General's Department at MoFP



Verification Entity	Internal Auditor General
Procedure	<p>The Accountant General's Department at MoFP will provide copies of the following documentation to the VE :</p> <ul style="list-style-type: none"> • Annual MoA Financial statements audited by Chief Auditor General (CAG) of past fiscal year • MoA Budget Book of past fiscal year • MoF self-assessment of MoA Budget Outturn <p>VE will review documentation received and verify MoF self-assessment using the supporting documentation.</p>
DLI 7	Scaling up soil health management
Description	This DLI measures improvement to the knowledge base about soil health to make evidence-based policy decisions and subsequently measure their implementation.
Data source/ Agency	MoA
Verification Entity	Internal Auditor General
Procedure	<p>The DLI will measure 2 sub-DLIs</p> <ol style="list-style-type: none"> 1. Soil Map established and published 2. Number of farmers reached with tailored soil management advice
DLI 7.1	Soil Mapping and assessment: Soil Map established and published
Description	<p>This sub-DLI establishes the actual preparation and publication of a nation-wide digital soil map, as well as its interpretation and use for improved targeting of agricultural public support. Soil maps are geographic information products generated by soil surveys, which in turn refer to the systematic study of the soil of an area including classification and mapping of the physical, chemical, and/or biological properties and the distribution of various soil units. The soil classifications and properties expected to be mapped are as following - Classifications should follow the World Reference Base for Soil Resources (WRB) - Soil properties mapped should be informed by requirements identified in the 'Roadmap for Soil Carbon Financing' (see PAP action) Minimum scale of maps expected is 1: 50,000 (subject to user requirements and purpose). The soil map will be published online. In addition, the soil map will need to lead to the identification and documentation of priority areas (granularity is expected to be no smaller than LGA level) for support for soil health management, based on state of soil health and agricultural activity.</p>



Data source/ Agency	MoA
Verification Entity	Internal Auditor General
Procedure	<p>MoA will provide (i) a public link to the digital soil maps and documents (either public or internal) identifying priority areas for support for soil health management (i) copy of 'Roadmap for Soil Carbon Financing' (see PAP action).</p> <p>VE will review and provide opinion about the achievement of the DLI, i.e. (i) in terms of its national coverage (ii) whether the agreed soil classifications and properties have been mapped (including as established in the 'Roadmap for Soil Carbon Financing- see PAP action) (iii) map was formally published (iv) map led to the identification of priority areas for support.</p>
DLI 7.2	Number of farmers reached with tailored soil management advice
Description	This sub-DLI measures the number of farmers trained on improved soil management practices
Data source/ Agency	Training records, MoA
Verification Entity	Internal Auditor General
Procedure	<p>MoA provides copies of</p> <ul style="list-style-type: none"> • Training manual on improved soil management practices addressing geographic differences in soil health • Records about the delivery of farmer training on improved soil management practices in the districts identified for priority action (see DLI 8.1) • List of names of farmers with contract information that have participated in soil management training program (including demos, FFS) <p>VE will review evidence, verify participation of farmers on a sample basis and provide opinion on the validity and reliability of reported figure.</p>



ANNEX 3. SUMMARY TECHNICAL ASSESSMENT

A. INTRODUCTION

1. This technical assessment covers four areas: (i) strategic relevance, (ii) technical soundness, (iii) institutional arrangements, and (iv) expenditure framework.

A.1 Strategic Relevance

2. The Government of Tanzania, like other countries in the region, recognizes the agri-food sector as one of its core sources of inclusive economic growth and rural poverty reduction. Agriculture accounts for about 26.9 percent of GDP, 30 percent of exports, 65 percent of inputs to the industrial sector, 61 percent of the workforce, and 90-95 percent of the food requirements for the country. Its stable supply has been instrumental in maintaining the country's low inflation rates.
3. Tanzania is among the most vulnerable countries to the impacts of climate change. It is prone to risks from extreme weather events, such as increased seasonal variation in rainfall and temperature, as well as frequent and prolonged droughts and floods. Droughts frequently occur in Tanzania, with devastating impacts on the economy, agricultural output, and hydropower generation, undermining efforts to alleviate poverty and food insecurity. Rapid urbanization can also exacerbate the effects of climate change in densely populated areas.
4. In the wake of the continued crisis reducing fiscal space, increasing public resource allocation and utilization efficiency is paramount. As Tanzania recovers from the Covid-19 pandemic, strives to withstand the effects of surges in energy and fertilizers prices, addresses the impact of the prolonged drought in 2021/2022, which will affect food production, and needs to complete its flagship projects, available public spending may tighten, prompting the Government to allocate resources more carefully to ensure the best possible returns. The achievement of Tanzania's Development Vision 2025 will increasingly depend on improving the efficiency and effectiveness of public spending and mobilizing private investments.
5. The TFSRP strategic focus and objectives are addressing the challenges of climate change, building resilience, and improving public resources' efficiency. In this context, the TFSRP is strategically relevant.

A.2 Technical Soundness

6. The Program is focused on mutually reinforcing solutions to building resilience, improving the response to climate change, addressing food and nutrition security, and creating an inclusive food system for the future. The Program contributes to maximizing public investment's efficiency, effectiveness, and impact. Results Areas are centered on providing predictable budgets, maximizing the use of digital solutions, introducing performance-based contracts, strengthening the management and execution of budgets, and enhancing public investment in risk management. The Program is designed to deliver results at scale across the country.
7. Investing in country-led research and development is central to improving productivity and generating solutions to the challenges of resilience and climate change. Unpredictable, fragmented, and volatile financing



of agriculture research has been a challenge for the past decade. As a result, public funding for agricultural research shrank to rank among the four lowest in Africa. Public varietal development is crucially underfunded, as witnessed by the drop in public variety released since 2020. (World Bank, PER 2022). A predictable budget allocation would allow research institutions to refurbish essential infrastructure (greenhouses), invest in new technology, and strengthen systems for human capital development (including attracting young women into agri-food sciences). Research has indicated that one dollar invested in agricultural research generated, on average, over the past three decades in mid to low-income countries, a stream of future benefits equivalent to US\$10 (in net present value terms)³³.

8. **Digital technologies can raise on-farm productivity and climate resilience through increased resource use efficiency (e.g., water, energy, fertilizers, and pesticides),** e.g., E-government can improve the transparency and efficiency of public services by digitizing land tenure mapping, registration, public support distribution, weather forecasting, and digitalized extension services. E-extension services can help overcome the constraints of traditional extension and provide cost-effective ways of reaching more farmers at lower costs and promoting the inclusion of marginalized rural producers in markets which is particularly relevant to Tanzania as extension services are constrained by: (i) a low number of extensionists, (ii) a lack of specialized training, and (iii) inadequate resourcing. Additionally, various ICT technologies can improve value chain transparency and traceability, delivering safer and better quality agri-food products to local and export markets.
9. **ASPP II program aims to increase productivity and profitability by establishing more effective functional links in the seed value chain. Limited access to certified improved seeds, including those adapted to climate change (e.g., drought and heat-resilient) or with high nutritional benefits (e.g., vegetables) is one of the main challenges to improving agricultural productivity and food security in Tanzania.** Over the past five years, the country has built the institutional infrastructure and regulatory system needed to develop good-quality seeds. However, a lack of public financial support in key areas has created bottlenecks in the seed production system, while the nascent private sector still faces entry barriers such as high investment costs. The PforR DLIs will incentivize scaling up certified seed production in the country, which will be enabled by: (i) improved linkages within the value chain and, in particular, increased public-private partnerships; (ii) capitalizing on regional knowledge on seed production and training of public and private seed chain actors (PAP); and (iii) improved seed research and extension services (via by DLI 1 and DLI 2).
10. **The development of water-efficient irrigation is a key bottleneck of agricultural growth in Tanzania. Under ASDP II, irrigation is identified as the main sector driver for modernization.** TFSRP will support significant performance improvement in the management of irrigation. The Program will introduce performance-based Operations, Management, and Maintenance (OMM) contracts. These contracts will enable farmers to support the sustainable use and maintenance of infrastructure, increasing water management efficiency, food productivity, and overall resilience (including a more stable food supply).
11. **ASDP II also highlights the strategic importance of post-harvest management (particularly value addition).** While Tanzania has invested in warehousing infrastructure and established a functioning Warehouse Receipt System, the majority (close to 60-70 percent) of publicly owned warehouses are not operating due to ownership and governance challenges. Many of these investments have not achieved intended outcomes.

³³ Alston, J. M., Pardey, P. G., Rao, X. "Rekindling the Slow Magic of Agricultural R&D." Issues in Science and Technology (May 3, 2021).



The core capacity gap in value chains is not the physical hardware of warehouse storage capacity, but rather the critical software of establishing effective market linkages to create production incentives for smallholder farmers. Various challenges limit farmer's use of public warehouses. Main challenges relate to governance and software part of the system, like lack of price signaling and demand pull, rather than physical warehouse capacity.

12. **The Program will support efficient management of public warehouse facilities which will contribute to increasing food supply, first step processing (and thus value addition) and reducing food losses (which currently stand at 30–40 percent for cereals and as high as 60 percent for horticulture crops) and lead to an overall improvement in value chain commercialization and a more resilient food system.** The Program entails: (i) establishing new by-laws that improve the governance of warehouses; and (ii) rolling out new practices for the management and operation of public warehouses, including greater participation of the private sector through leasing arrangements.
13. **Agricultural public service delivery deteriorated over the past decade in Tanzania.** According to the National Sample Census of Agriculture, irrigated areas cropped by farmers went down from a low 3 percent to 2 percent of all farmed areas between 2008 and 2020. Meanwhile, access to extension services collapsed from 67 to 7 percent over the period, with women being the most affected. Funding for agricultural research shrank to rank among the four lowest in Africa, bringing the knowledge system to the verge of collapse. Adaptation to climate change has not progressed, and ambitious and relevant policy plans remain largely unimplemented. Improved budget and fiscal performance in the agricultural sector can have an impact at scale to strengthen food security and resilience of farming systems by improving the delivery of key agricultural services by national and local governments. Extension services, research, irrigation, storage, and mechanization need to be accessible, timely, predictable, and relevant. Predictable, sufficient, and timely funding is a cornerstone to do so. For instance, enhancing the management of budgets allows extension workers to plan and execute farmer field schools and demonstration trials, have access to operation and maintenance of motorcycles for reaching farmers, etc. Improved monitoring will provide greater accountability and management of public funds.
14. **A stronger alignment of agricultural expenditures and policies with climate change adaptation and mitigation and natural resources protection (soil, water) is critical to ensure mid and long-term productivity and resilience to shocks.** Strong budget execution is needed for agricultural plans and policies to materialize and deliver planned outcomes. There is a strong need to rebuild public agricultural expenditures monitoring and evaluation capacity in agriculture-related ministries.
15. **In summary, the Program is technically sound, and the design considers the respective mandates of the key entities involved in its execution.** The Program is adequately structured with clear linkages between Program activities and the results. It focuses on key challenges facing the food systems. The design of the Program draws on global best practices.

A.3 Institutional Arrangements

16. The implementation of TFSRP is guided by the Government institutional arrangements organized for sector dialogue, strategic leadership, and program implementation at national and LGA levels.
17. **Joint Steering Committee:** The Program will have a Joint Steering Committee (JSC) bringing together the



Permanent Secretaries of MoA and MoFP Mainland and Principal Secretary MAINRL and President's Office Finance and Planning (POFP) Zanzibar. It will meet at least once a year to review lessons derived from Program implementation and advise on any significant changes in budgets or implementation plans. It will enhance the participation of all relevant ministries in critical decision-making, promoting coordination, program performance, and overall service delivery. When the Joint Steering Committee (JSC) meeting is held in the Mainland, it will be chaired by the Permanent Secretary of MoA and co-chaired by the Principal Secretary of MAINRL Zanzibar. When held in Zanzibar the Principal Secretary of MAINRL will chair the JSC and Permanent Secretary of MoA will co-chair.

18. **Steering Committees:** In the Mainland, a Steering Committee (SC) led by the Permanent Secretary of MoA as Chair will include as members: the Permanent Secretary of the Ministry of Finance and Planning (PS MoFP), the Permanent Secretary of the President's Office in charge of Regional Administration and Local Governments (PS PO-RALG), and the Permanent Secretary of the Prime Minister's Office. The composition of the Steering Committee will be detailed in the Operation Manual. The SC will oversight the Program in the Mainland. The Director of Policy Planning of the MoA will be the Secretary of the SC. The SC will meet twice a year.
19. **The mandates of the SC will be to review and assess the progress and performance of TFSRP and approve fund releases, specifically:** (i) approve the annual PforR work plan and budget for the following year, (ii) approve bi-annual fund release requests, (iii) approve annual reports, (iv) review progress in achieving Disbursement Linked Indicators (DLIs), (v) review and endorse reports substantiating and validating the performance assessment including the Independent Verification Reports, (vi) approve annual work plan and budgets for the PforR technical assistance program, and (vii) approve Operation Manual and its amendments.
20. **The Mainland will also have a Technical Committee (TC) composed of directors and heads of institutions involved in Program implementation.** The TC will be led by the DPP in the MoA and will include the following members: the director generals from NIRC, TOSCI, TARI, and ASA; directors of Crop Development Division (DCD), Agricultural Mechanization and Value Addition Division (DMV), Agricultural Land Use Planning and Management Division (DLUP), Director of Procurement Unit (DPMU), Chief Accountant (CA) Director for Regional Administration (PO-RALG), Information and Communication Technology Unit (ICT) and Director of Legal Services. The TC will meet quarterly. The mandate of the TC will be to: (i) review and scrutinize implementation of Program interventions, and (ii) provide technical guidance to the implementing institutions, including on procurement and financial management performance, and achievement of DLIs. The TC will be responsible for ensuring DLIs are achieved on time by relevant departments/institutions of MoA: TARI (RA1:DLI1), DCD (RA1:DLI2), ASA/TOSCI (RA1:DLI3), NIRC (RA2:DLI4), DMV (RA2:DLI5), MoFP (RA3:DLI6), and DLUP (RA3:DLI7) and Local Government Authorities to ensure Program planning and implementation as needed. Detailed composition of the technical committee and Terms of Reference (ToRs) will be detailed in the Operation Manual to be prepared and adopted before effectiveness.
21. A Program Management Team (PMT) will be established in MoA, led by its Director of Policy and Planning, assisted by senior management from Tanzania Agricultural Research Institute (TARI), Tanzania Agricultural Seed Agency (ASA), the Tanzania Official Seed Certification Institute (TOSCI), the National Irrigation Commission (NIRC) and PO-RALG, and comprised of specialists in financial management (accountant), procurement, environment and social (one environmental and one social with Gender-Based Violence knowledge), monitoring and evaluation, inclusion and diversity. The PMT will also comprise one technical staff



from the Crop Development Division (DCD - Extension section and Agriculture Inputs section), Agricultural Mechanization and Value Addition Division (DMV), Agricultural Land Use Planning and Management Division (DLUP), Information and Communication Technology Unit (ICT). The PMT will manage and coordinate the TFSRP.

22. These arrangements draw upon lessons learned from the implementation of earlier operations and are sufficiently robust to support the implementation of the PforR Program.

A.4 Expenditure Framework.

23. The Expenditure Framework Assessment (EFA) was conducted based on information provided by the MoA, the MoFP, IMF, Tanzania Agricultural Public Expenditure Review 2022, and a literature review in comparable countries. The EFA included the following dimensions: (i) fiscal sustainability and resource predictability; (ii) budget allocation and execution; and (iii) incentives for efficient service delivery and value for money. Data for past budgets comes from the MoFP's Budget Books. Projections for 2022/2023-2024/2025 come from the MoA's Mid-Term Expenditure Frameworks (MTEFs). Projections for 2025/2026-2027/2028 are based on their assumptions, which reflect the Government's current strategy for the sector.
24. The PforR Program will be implemented from World Bank FY2023/2024 to FY2027/2028. The expenditure framework of the PforR Program (IPF component included) accounts for a total of US\$2,093 million³⁴ (TZS 5,148 billion) for the 2023/2024-2027/2028 period, of which the Government will finance 85.6 percent and IDA credit account for 14.4 percent. The Government funds will account for US\$1,793 million (TZS4,336 billion). IDA financing amounts to US\$300 million equivalent over FY 2023/2024 - FY 2027/2028, including a US\$20 million IPF component for Zanzibar and technical assistance.
25. In terms of expenditures outlays, about 42 percent, or US\$879 million, will support improving service delivery in research, extension, and seeds; 46 percent (US\$956 million) will strengthen resilient rural infrastructure, and 11 percent (US\$238 million) will strengthen institutional performance (the remaining 1 percent supports the IPF component). Table A3.1 below provides an overview of the main elements in the expenditure framework of the PforR Program.

Table A3.1: Program Expenditure Framework by Result Areas

	2018/2019-2022/2023			2023/2024-2027/2028		
	Amount (billion TZS)	Amount (million US\$)	Share (%)	Amount (billion TZS)	Amount (million US\$)	Share (%)
Program Total with IPF	1,529	666	100	5,148	2,093	100
Result Area 1: Improved service delivery in research, extension, and seeds	844	368	55	2,129	879	42.0

³⁴ TZS/US\$ conversion rate comes from IMF World Economic Outlook database (retrieved December 13, 2022).



	2018/2019-2022/2023			2023/2024-2027/2028		
	Amount (billion TZS)	Amount (million US\$)	Share (%)	Amount (billion TZS)	Amount (million US\$)	Share (%)
Result Area 2: Developing resilient rural infrastructure	542	236	35	2,360	956	45.7
Result Area 3: Strengthening fiscal performance to enable delivery on priority investment areas	143	62	9	571	238	11.3
IPF component					20	1

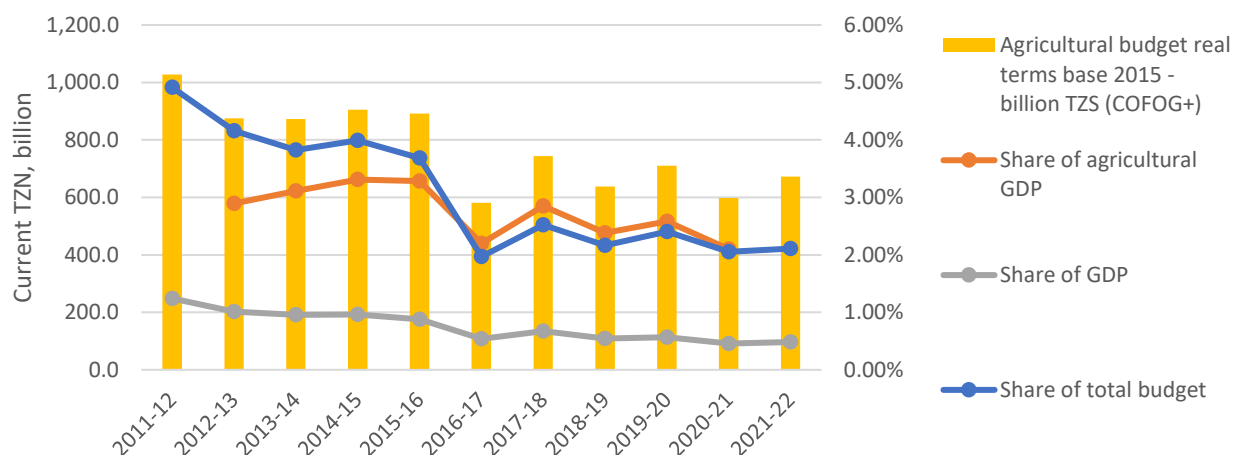
26. The expenditure framework presents an adequate basis for this PforR Program. The budget appears adequate. Fiscal sustainability issues were not identified as a core concern associated with the expenditures. However, the program implementation's efficiency is low and will require strengthening.

B. BUDGET STRUCTURE AND CLASSIFICATION

27. **The Government program expenditure framework is based on the Program boundaries.** Reflecting the selected boundaries, ASDP II expenditures related to livestock and fisheries, land use planning and watershed management, irrigation development, agricultural mechanization, market access and microfinance have been excluded. ASDP II does not have dedicated budget lines, and its structure does not directly align with the agriculture budget framework. However, existing budget lines have been identified for all TFSRP activities. The agencies included in the expenditure framework are the Ministry of Agriculture (vote 43), the National Irrigation Commission (vote 5), the Tanzania Cooperative Development Commission (vote 24), and transfers to LGAs related to agriculture.
28. **The early implementation of the ASDP II budget was very low and volatile, hampering its implementation; 2022/23 marked a turning point in national strategy, with investment in the sector being geared up.** As a share of GDP, Tanzania's budget for the whole agriculture sector (including forestry fisheries and livestock) sharply declined between 2011/2012 and 2016/2017, stabilizing until 2021/2022 at a low 0.5 percent of GDP (Figure A3.1) (World and FAO 2022). After a fast decrease in the decade's first half, the decline slowed over the second half: the budget for the agriculture sector represented 1.24 percent of GDP in 2011/12, 0.54 percent in 2016/2017, and 0.46 percent in 2020/2021. The tight agricultural budget left little fiscal space for development expenditures. As a result, the implementation of ASDP II was hampered, slowing the agricultural transformation and deteriorating key aspects of public service delivery. Acknowledging the need for additional resources, the Government increased budget commitments to the Ministry of Agriculture (vote 43) by 13 percent in 2021/2022 and by 155 percent for 2022/2023.



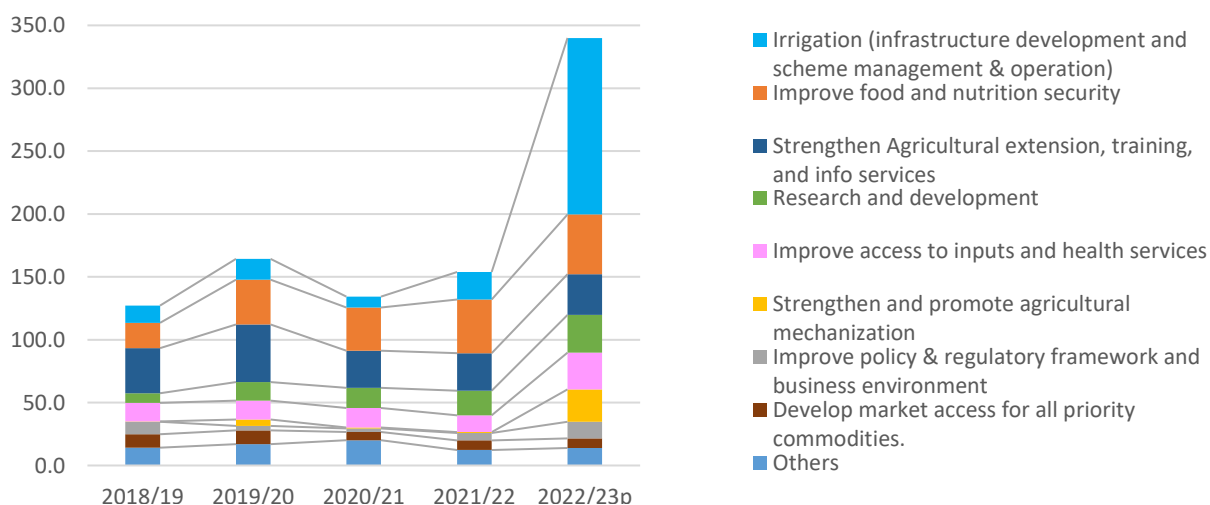
Figure A3.1. - Agricultural budget (including livestock, fishery, and forestry) in nominal and real terms (left axis) and shares of GDP, agricultural GDP, and national budget (right axis) from FY 2011/2012 to FY 2021/2022



Source: World Bank and FAO (2022) based on FAO (2018) for FY2011/12-2016/17 and own data. GDP and ag. GDP: Bank of Tanzania 2010-2020; IMF estimates for 2021-2022. National Budget: Budget Books and MOFP.

29. **The Government program expenditure framework is relatively focused on good public provision, despite the reintroduction of distortive input subsidies (on foreign financing).** Over 2018/2019-2022/2023, the Government program mostly targeted food crisis management tools (24.8 percent), irrigation (20.8 percent), extension services (17.6 percent), research services (8.9 percent), and seed development and multiplication (8.9 percent), among others. However, the 2022 Agricultural Public Expenditure Review shows that the levels of public funding were too low for service delivery to materialize.

Figure A3.2. Government program budgeted expenditure over 2017/2018-2022/2023



Source: Budget Books, reclassified as per ASDP II activities



30. **Over 2017/2018-2021/2022, three-quarters of the agriculture budget was allocated at the central level, contrary to Tanzania's "decentralization-by-devolution" policy.** Local Government Authorities play a critical role in delivering agriculture services, including extension services, and were supposed to receive 75 percent of the sector allocation budget to support service provision. However, LGAs' development expenditure collapsed over the period (World Bank and FAO 2022).
31. **Hereinafter, the public expenditures considered as those limited to the PforR boundaries.** Budget lines pertaining to irrigation development, market access and mechanization are thus excluded. Figure A3.3 and Table A3.2 detail the projected outlays of the program expenditure framework in 2023/2024-2027/2028 and compares it with that of the Government over 2018/2019-2022/2023 (subset of ASDP II limited to PforR boundaries). Budget projections are based on MTEFS until 2024/2025. The DLI allocations are based on a set of assumptions that build on: (i) GoT's key priorities as detailed in ASDP II; (ii) MoA's priorities as per technical assessment; and (iii) international guidelines and best practices (CAADP framework; Khartoum target for Research and Development; Pernechele et al. 2021; 2022 Agricultural Public Expenditure Review).

Figure A3.3. Government program expenditure framework and its distribution over 2018/2019-2022/2023 and 2023/2024-2027/2028 as per ASDP II's classification of activities (USD million)

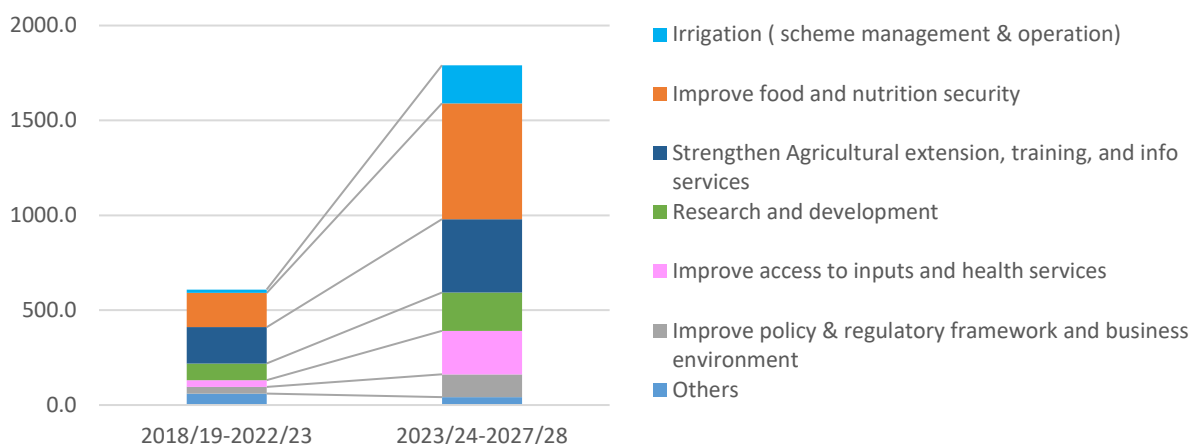




Figure A3.4: Government program expenditure framework as per activity

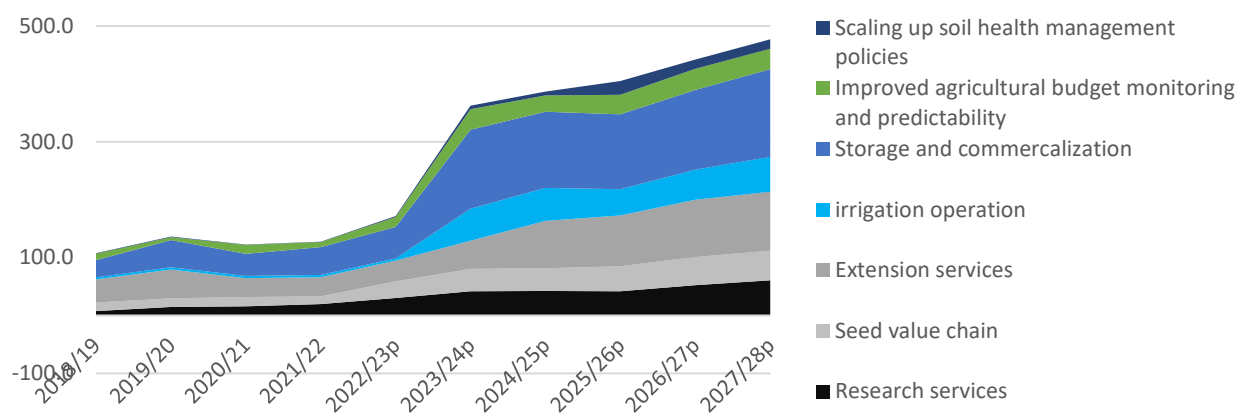


Table A3.2: Expected distribution of budget over 2018/2019-2022/2023 and 2023/2024-2027/2028

PforR Result Areas	Mainland 2022/23	Program 2018/19-		TFSRP PforR 2023/24-2027/28		
	TZS billion	US\$ million	Share (%)	TZS billion	US\$ million	Share (%)
RA 1: Improved service delivery in research, extension, and seeds	844	368	55	2129	879	42.0
Research services	202	88	13	579	239	11
Seed value chain	202	88	13	532	221	11
Extension services	440	192	29	1018	419	20
RA 2: Developing resilient rural infrastructure	542	236	35	2360	956	45.7
Irrigation operation	42	18	3%	704	271	13
Storage and commercialization	500	218	33	1655	685	33
RA 3: Strengthening fiscal performance to enable delivery on priority investment areas	143	62	9	571	238	11.4
Improved agricultural budget monitoring and predictability	131	57	9	410	170	8
Scaling up soil health management policies	12	5	1	161	68	3
IPF Component				46	20	1
Total	1,529	666	100	5,102	2,093	100

32. Agencies in charge of the Program are technical departments and separate agencies under the MoA. Table A3.3 details the Program budget allocation per implementing agency. The MoA Department of Policy and



Planning will be the main implementing agency budget-wise. 69 percent of the budget will be recurrent expenditures, encompassing operational costs, wages and salaries, and subsidies. Wages and salaries make up an important share of the Program budget due to the large capacity and system-building components of the Program.

Table A3.3: Budget allocation and economic classification of the Program budget over 2023/2024-2027/2028

Agency	Main economic classification	Activity	Amount (TZS billion)
	Recurrent (subsidies / operational costs / wages and salaries) /Development		
056 – PO-RALG / 056.2003 - Sector Coordination Division	Recurrent (wages and salaries)	4486 - Agricultural Sector Development Programme (ASDP)	2
005 - National Irrigation Commission	Recurrent (wages and salaries)	Irrigation operation and maintenance	243
043 - Ministry of agriculture	Recurrent (all)	Agricultural policies; extension services	1,125
	Development	Policies, food reserve, subsidies, risk management tools, ICT, coordination	637
<i>including TARI</i>	Recurrent (wages and salaries)	Agricultural Research	94
	Development	Agricultural research infrastructure development	141
<i>including ASA</i>	Recurrent (operational costs / wages and salaries)	Seed development, production, dissemination	131
	Development	Seed production infrastructure	87
024 - The Tanzania Cooperative Development Commission	Recurrent (operational costs / wages and salaries)	Cooperatives	33
<i>total Recurrent</i>			1,435
<i>total Capital</i>			637
Total			2,073

C. PROGRAM'S FINANCIAL SUSTAINABILITY AND FUNDING PREDICTABILITY

C.1 Source of financing

33. **The expenditure framework of the Program over the 2023/2024-2027/2028 period accounts for a total of US\$2,093 million (TZS 5,148 billion), which the Government of Tanzania will finance at 85.6 percent and IDA credit at 14.4 percent.** Aggregate public spending on the Government program over fiscal years 2018/2019 to 2022/2023 averaged US\$133 million a year, and according to MTEFs, is expected to average US\$359 million a year over 2023/2024-2027/2028. The IDA credit will fund US\$280 million, or about US\$56 million per year, assuming equal disbursements, plus US\$20 million for the IPF component for Zanzibar and technical



assistance.

34. **Donors partly support the Government's large increase in ASDP II financing on activities that are excluded from the PforR Program (irrigation expansion and fertilizer subsidies).** In particular, on-budget support is provided by the Kuwait Fund³⁵ to construct the Luiche irrigation scheme. Foreign financing represents 4 percent of development expenditures for irrigation in 2022/2023, 71 percent in 2023/2024, and 4 percent in 2024/2025. Similarly, a loan from the African Development Bank supports reintroducing fertilizer subsidies, which amount to US\$65.1 million in 2022/2023. According to the MTEFs of the Ministry of Agriculture (i.e., vote 43, which does not figure fertilizer subsidies and is independent of vote 3 of the Irrigation commission), planned development expenditures are expected to come from foreign financing at 30.8 percent in 2022/2023, 46.2 percent in 2023/2024, and 40.3 percent in 2024/25.

Table A3.4: Program Financing, 2023/24-2027/28

Source	Amount (US\$ million)	Share of Total (%)
Government budget	1,793	85.6
IDA	300	14.4
<i>Of which IDA National</i>	<i>120</i>	<i>5.73</i>
<i>Of which IDA Regional</i>	<i>180</i>	<i>8.60</i>
Total Program Financing	2,093	100

C.2 Adequacy and Sustainability

35. The budget for the upcoming period appears adequate to support the desired activities to achieve the PDO. The Government's commitment to investing in agriculture to gear up the sector growth is strong, as witnessed by the 2021/2022 and 2022/2023 large budget increases and the 2022/2023-2024/2025 MTEFs of the MoA and the Irrigation Commission. In addition, several strategic documents attest to this commitment, such as budget speeches and the recently launched Agenda 10/30 initiative. Under the latter, Tanzania aims to push the growth of its agriculture sector up to 10 percent by 2030. For instance, the country targets to increase its food crops exports from US\$500 million in 2022 to US\$3 billion in 2030.
36. **Nonetheless, sector dependence on donor funding remains high and indicates a lack of fiscal sustainability as there is uncertainty about the duration and timing of donor funding commitments.** Financial sustainability has increased since 2017/2018, but agriculture funding remains dependent on donors. According to MTEFs, development partners are expected to support 39.1 percent of the agricultural budget over 2022/2023-2024/2025. In addition, foreign "off-budget" expenditures over 2017/2018-2019/2020 were estimated (World Bank and FAO 2022) to account for about half of the public agricultural funding. Donors have tended to take increasingly longer-term views of support, but there are still time limits on donor funding commitments. The timing of donor funding is sometimes less predictable, leading to periods of funding gaps that can add to the uncertainty. As an example, several plans (Climate Smart Agriculture Plan, Irrigation Master Plan) had counted in part on donor funding that did not materialize, to the detriment of the implementation of some planned activities. Finally, on the research side, high dependence on foreign financing has increased resource unpredictability and hampered the capacity to have a coherent, government-driven national research strategy.

³⁵ <https://www.africa-press.net/tanzania/community/33-9bn-kuwait-loan-to-facilitate-irrigation>.



37. **The delivery of extension services depends on agricultural financing at the local level and is currently unsustainable.** Extension services are under the responsibility of LGAs. LGAs' overwhelming budget to deliver this service comes from central allocation, which covers wages and salaries, with no fiscal space for operational costs. LGAs also raise their revenues through local agricultural taxes (produce cess). Produce cess became the largest source of local revenue after 2003. Nyange et al. (2014) show that produce cess revenue is mostly used to finance administrative functions, such as payment of allowances to councilors and committees, and to support development in other sectors, such as education or health. Insufficient capital allocation to extension services prevents the efficient delivery of this service, calling for improved sustainability of local financing for agriculture.

C.3 Budget Predictability

38. **Budget predictability is expected to be weak.** Over 2017/2018-2021/2022, insufficient fund releases (low outturn) affected budget predictability and compromised the credibility of the budget (World Bank and FAO, 2022). With only 33 percent of the budget development budget executed, the difference was attributed to unrealistic government budget allocations. Budget revisions have also been common in Tanzania to reallocate funds within sectors over the past years. The original budget might not have focused on the major priorities, hence a need for reallocation to ensure that priority sectors receive adequate funds. This mismatch between budgeted and actual amounts released makes it difficult to plan and predict future policies.
39. **Delays in fund releases remain a concern, with significant portions of development funds for MDAs usually released in the final month of the fiscal year.** This is a serious problem in agriculture, given the seasonal nature of agricultural activities.
40. **Several reforms were introduced to improve overall budget credibility, including a new Treasury Single Account.** This includes an amendment to the Public Finance Act, the Local Government Finance Act, and the Bank of Tanzania Act to establish a Treasury Single Account (TSA) for collecting and paying public funds. This reform aims to speed fund disbursements to spending units and reduce commercial bank accounts' use for government transactions. This comes on top of recent progress in speeding the disbursement of government funds to spending units electronically connected to the Bank of Tanzania. All Crop Board's fees and levies are now deposited into the Paymaster General account starting from 2018/2019 since all Crop Boards are fully dependent on government subventions.
41. **Budget predictability is thus an area that will require strengthening during PforR Program implementation.** Recent progress provides a solid ground for faster improvements over the upcoming years.

D. EXPENDITURE PERFORMANCE

42. **The overall expenditures on the Program were low over 2017/2018-2021/2022, but it targeted public goods and had high value for money** (World Bank and FAO, 2022). Tanzania moved away from general agriculture input subsidies in 2017/2018 until it reintroduced fertilizer subsidies in 2022/2023. It also moved away from other market distortive policies such as agricultural export bans. Over 2017/2018-2021/2022, only 5 percent of budgetary transfers directly supported producers.
43. **However, the tight budget allocation for ASDP II left little fiscal space for development expenditures and**



led to insufficient support for critical public services needed to catalyze agriculture transformation. Whereas the budget targeted public goods over the past five years, it was beneath the critical levels needed to materialize. Two-thirds of central-level agricultural expenditures were recurrent, not supporting the sector's growth. For instance, tight capital expenditures limited the delivery of extension services over 2017/2018-2019/2020 (World Bank and FAO 2022). The extension budget represented 18 percent of the agricultural budget, but almost two-thirds of the allocation was absorbed by personal emoluments, with this share increasing over time.

44. **As a result, agricultural public service delivery deteriorated over the past decade in Tanzania, except for access to improved seed.** According to the National Sample Census of Agriculture, irrigated areas cropped by farmers went down from a low 3 percent to 2 percent of all farmed areas between 2008 and 2020. Meanwhile, access to extension services collapsed from 67 to 7 percent over the period, with women being the most affected. Funding for agricultural research shrank to rank among the four lowest in Africa, bringing the knowledge system to the verge of collapse. Adaptation to climate change has not progressed, and ambitious and relevant policy plans remain largely unimplemented. On the bright side, the number of farms that use improved seeds more than doubled between 2008 and 2020, driven by strong public institutions and a dynamic private sector that benefited from an improved regulatory environment. 2022/2023 marked a turning point with significant budget increases for agricultural services such as irrigation.
45. **In addition, low outturns and execution rates compromise the credibility of the budgeting and planning process and prevent needed policy implementation.** The declared overall budget outturn for the sector was 57 percent from 2017 to 2020. However, agriculture budget execution is on an upward trend from 52 percent in 2016/2017 to 83 percent in 2019/2020, which remained below the overall budget execution level. At the LGA level, insufficient agricultural allocations resulted in full budget execution.
46. **However, the remaining public investments in seed systems, irrigation, and extension services have yielded high returns, calling for increased funding. Yet large efficiency gains could also be realized** (World Bank and FAO, 2022). While public services collapsed due to a lack of funding and inefficiencies, the remaining demonstrated high value for public money. High benefit-to-cost values of good public investments have been found: one dollar invested in extension services, seed systems, and irrigation has yielded benefits of respectively US\$9, US\$17, and US\$16. These ratios are in the range of past SSA results, with the estimated returns of public spending being 22–55 percent for research, 8–49 for extension, and 11–22 percent for irrigation (Goyal and Nash, 2017). Still, large efficiency gains could be achieved in extension services, where the number of extension officers appears disconnected from service accession, and in irrigation, where World Bank and FAO (2022) and the Tanzania RISE Irrigation ASA (2022) observe a widening gap between the area equipped for irrigation and the one used.
47. **Increasing expenditures to resilience-building public good investments and enhancing their efficiency and effectiveness through policy and institutional systems improvement could bring major food security and poverty reduction gains in Tanzania and the AFE region.** There is a strong international consensus on the benefits of such investments. Research has indicated that one dollar invested in agricultural research generated, on average, over the past three decades in mid to low-income countries, a stream of future benefits equivalent to US\$10 (in net present value terms)³⁶. Returns on irrigation in Sub-Saharan Africa range

³⁶ Alston, J. M., Pardey, P. G., Rao, X. "Rekindling the Slow Magic of Agricultural R&D." Issues in Science and Technology (May 3, 2021).



from 17 percent on large-scale schemes to 43 percent for small-scale schemes. On average, one dollar spent on high-impact nutrition interventions can generate US\$18 worth of economic return.³⁷

48. **Further investments in climate change adaptation and mitigation, supported by related institutional and policy enhancement, appear crucial for agriculture to yield its promises.** World Bank-FAO 2022 estimates at US\$1.41 billion the cost of climate change inaction in agriculture in Tanzania by 2040. Based on the adaptation trajectories of key crops (maize, rice, cassava, beans, sorghum, and banana), this figure is very conservative, as it does not account for extreme events (or negative effects on the livestock sector). And yet, the yearly cost of public investments in climate change adaptation would be largely offset, with an average yearly gain of US\$47.6 million. In addition, climate change resilience underpins the performance of other public investments, such as irrigation and improved seeds.

E. IMPLICATIONS FOR THE PforR PROGRAM

49. **The analysis of the expenditure framework highlights several key points central for the Program to be successfully implemented:**
- a. several weaknesses need to be addressed during Program implementation in particular: (1) budget predictability, and (2) budget outturn rates;
 - b. increasing the efficiency and effectiveness of public spending for key services (such as irrigation and extensions services) is central in the context of scarce fiscal space;
 - c. the level of funding for some services, in particular research and climate change adaptation, was insufficient for the services to materialize; and
 - d. increasing the sustainability and predictability of local agricultural financing is central to improving the delivery of extension services.

³⁷ You, L. et al. "What is the irrigation potential for Africa? A combined biophysical and socioeconomic approach." Food Policy 36.6 (2011): 770-782.



ANNEX 4. SUMMARY FIDUCIARY SYSTEMS ASSESSMENT

A. INTRODUCTION

1. The operation in Tanzania Mainland will use the PforR financing instrument, while Zanzibar will use the IPF financing instrument guided by respective World Bank policies. This is a summary of the full report of the Fiduciary Systems Assessment (FSA) in Tanzania Mainland.

B. FIDUCIARY SYSTEMS ASSESSMENT OF THE PforR OPERATION IN TANZANIA MAINLAND

2. **The FSA was carried out with the objective of determining whether the Program's fiduciary systems provide reasonable assurance that the financing proceeds will be used for the intended purposes**, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability. The assessment was carried out in line with the World Bank Policy and Directive on Program-for-Results Financing.
3. **The overall fiduciary risk rating is Substantial.** The mitigation measures aim to strengthen fiduciary system's capacity and performance to adequately provide reasonable assurance that the funds will be used for the intended purposes with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.
4. **The financial management risk is Substantial.** Key financial management risks identified are as follows: (i) low budget ceilings provided for the sector resulting resource constraints; (ii) agriculture sector governance structures and responsibilities at LGAs which may impact accountability on the use of funds whereas agriculture budget consolidates fisheries, livestock, agriculture and co-operatives operations as they fall in one department within the structure of LGAs, and warehouses and irrigation schemes are owned by villages and irrigation organizations; (iii) limitations in MUSE to generate required project financial reports resulting manual interventions in reports preparation; (iv) delays in release of funds to the implementing entities; (v) project investments not delivery additional value for money, for example construction and rehabilitation of warehouses which are not in use, acquisition of equipment which are not fit for purpose and hence abandoned and vandalized, irrigation infrastructure works not performing as expected; (vi) limited knowledge of IFMIS in use, MUSE, by accountants and auditors; (vii) internal audit departments at LGAs are resource constrained both by headcount and finance; and (viii) poor implementation of internal and external audit recommendations.
5. **The following mitigation measures will be addressed by the Program.** PforR Program will be identified as a development program within the government budget framework: (i) The program will clearly identify activities for each implementing agency and identify beneficiary LGAs. Activities to be financed will be established in program annual budget under development budget and recorded in budget systems PLANREP and CBMS; (ii) There will be two program bank accounts maintained at BOT for Ministry of Agriculture and for NIRC as are structured as separate budget votes in government system. Disbursements from World Bank will be made to these bank accounts upon achievement of results and rolling advance is allowed. The allocation of advance to these two bank accounts will be provided by the MoFP. The program will be registered in D-fund system and follow DFUND disbursement policies and procedures; (iii) MoA will disburse funds to other implementing agencies and identified LGAs. The recipient implementing agencies will produce financial



reports on the progress of execution of program activities and submit to MoA for disbursement and financial reporting purposes; (iv) Funds disbursed to NIRC will solely be used for NIRC activities; (v) MoA and NIRC will be responsible to produce annual financial reports for the program. MUSE needs to be defined to generate required program financial reports. Capacity building of accountants and auditors continue to be offered by MOFP; and (vi) Audited program financial statements will be submitted to World Bank within nine months after the end of fiscal year. Therefore, two separate audit reports will be submitted to the World Bank.

6. **The procurement risk is Substantial.** Key risks identified on the capacity of the implementing entities are: (i) MoA staff have inadequate knowledge of procurement planning, preparation of bidding & request for proposals documents, evaluation of bids/proposals, customization of draft contract documents and contract managements; (ii) frequent transfer of the procurement staffs, making newly appointed/recruited staffs taking time to get acquainted with issues related to sector's procurement activities and procedures; (iii) inefficiencies in processing procurement activities in terms of preparation of terms of references (ToRs), specifications, bidding documents, request for proposals, bids/proposals evaluations and lack of adequate internal monitoring in some of the LGAs; (iv) inadequate records keeping and management system at the ministries and LGAs levels; (v) limited guidelines for hiring skilled workforce to execute works under force account arrangement; and (vi) delays in paying vendors on time per the terms of the contracts. Mitigation measures include: (i) need for additional staff in PMUs and Internal Audit units; (ii) training in procurement process and contract management; (iii) training of Tender Board members, user department and PMUs officials; (iv) provision of more space for staff and record keeping; (v) liaising with PPRA to provide necessary training and simplified guidelines to govern outsourcing skilled manpower for carrying out works using force account; and (vi) provision of office working tools and equipment.
7. **Excluded activities.** The Program will not include any contracts³⁸ valued at or above Operational Procurement Review Committee (OPRC) thresholds (US\$115 million for works, US\$75 million for goods and non-consulting services, and US\$30 million for consulting services). Based on sampled procurement activities data from six LGAs and four agencies under MOA, the highest contract price is around TZS 15 billion (US\$6.5 million approximately) and is not expected to increase substantially based on the Program. High value contracts under the Program will be monitored during supervision to ensure that the Program is in conformity with the World Bank's policy on PforR Financing.

Scope

8. **The assessment covered the MoA, PO-RALG, TARI, ASA, NIRC, TOSCI and selected six LGAs.** Selected LGAs were Mkalama District Council, Hanang District Council, Meru District Council, Kilosa District Council, Kilolo District Council and Mbarali District Council. TARI headoffice, Tengeru, Selieani, Ilonga, Uyole, ASA headoffice and Tengeru center. A sample of existing warehouses and irrigation schemes operating in these LGAs were visited. This program being the first PforR Program for MoA, fiduciary systems were assessed at all levels including Program's institutional and implementation arrangements, fiduciary management capacity, and implementation performance along with desk reviews the Tanzania PEFA Report 2022, CAG's Report for the Local Government Authorities (LGAs) and Central Government, Annual Performance Evaluation Report of the Public Procurement Regulatory Authority (PPRA), Internal Audit Reports, the Procurement and Value for Money Audits Reports of the implementing entities and selected districts. The assessment also considered

³⁸ High Value means contracts with estimated values exceeding the monetary amounts that require mandatory review by the Bank's Operations Procurement Review Committee (OPRC)



how existing systems handle the fraud and corruption risks. Legal and regulatory framework for this Program's fiduciary systems was found to be comprehensive and in line with international principles and standards for public procurement and financial management.

9. The implementation of TFSRP is guided by the Government institutional arrangements organized for sector dialogue, strategic leadership, and program implementation at national and LGA levels. Two sector-lead ministries, Ministry of Agriculture (MoA) in the Mainland and Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL) in Zanzibar will jointly lead implementation and coordination of the Program at all levels. Other implementing agencies for the program will include the Ministry of Finance and Planning, the Local Government Authorities (LGAs), the National Irrigation Commission (NIRC), Tanzania Agricultural Research Institute (TARI), Tanzania Agricultural Seed Agency (ASA) and Tanzania Official Seed Certification Institute (TOSCI). A national Program Management Team (PMT) will be established in MoA Mainland, led by its Director of Policy and Planning, assisted by senior management from TARI, ASA, TOSCI, NIRC and PO-RALG, and comprise of specialists in financial management (accountant), procurement, environment and social (one environmental and one social with Gender-Based Violence knowledge), monitoring and evaluation, inclusion and diversity, one staff from the Directorate of National Food Security (DNFS), one from Directorate of Management Information Systems (DMIS) responsible for ICT and two technical staff from Directorate of Crop Development (DCD) and Directorate of Training and Research (DTR) responsible for extension and training. The PMT will be responsible for the management and coordination of TFSRP. The legal status and roles of the various agencies are specified below.

Table A4.1: Institutional Responsibilities

Institution	Legal Status	Responsibilities
Ministry of Finance and Planning	Created by an act of Parliament	Approving disbursement of funds to MOA and PO-RALG/ LGAs. Policy and institutional reforms relating to intergovernmental fiscal relations, issuing the treasury circulars.
Ministry of Agriculture	Created by an act of Parliament	Supervision and monitoring role on the four Agencies under the Ministry (TARI, ASA, TOSCI, NIRC). Overall Program management, procurement of consultancy services, training, record keeping, guidelines, capacity building requirements, maintenance of facilities. Request for disbursement through MOFP, receiving funds from World Bank and disburse to TARI, ASA, TOSCI and NIRC. Maintain records of funds received in Dfund system of MOFP. Produce financial reports on the use of funds received and submitting audit reports to the World Bank
President's office Regional Administration and Local Government Authority	Created by an act of Parliament	Supervision and monitoring role on the LGAs (City, Municipality, Town, District) level. They will be responsible for program management, procurement of consultancy services, training, record keeping, guidelines, capacity building requirements, request for disbursement through MOFP and transfer of funds to the LGAs.



Institution	Legal Status	Responsibilities
		Maintain records of funds received in Dfund system of MOFP. Produce financial reports on the use of funds received and submitting audit reports to World Bank
Local Government Authorities (185 across Tanzania Mainland)	Created by an act of Parliament	Responsible for procurement of good/work and service, supervision of project activities, implementation of program and reporting on progress for activities under its jurisdiction. Day to day responsibilities for implementing various activities of the PforR (DLI7) under the coordination of LGA Agricultural Livestock and Fisheries Offices (DALFO)
The National Irrigation Commission (NIRC)	An agency under the MOA. Established in 1986 and become operational since May 1987	Mandated to provide irrigation services to the agricultural sector. Responsible for day to day implementing various irrigation infrastructure activities of the PforR (DLI4).
Tanzania Agricultural Research Institute (TARI)	Established by the Parliamentary Act No. 10 of 2016	Mandated to conduct, regulate, promote and coordinate all agricultural research activities conducted by public and private research institutes or organisations in Tanzania. Currently TARI has 17 centres across Tanzania Mainland. Responsible for day to day implementing various agriculture research tasks under the PforR (DLI-1).
Tanzania Agricultural Seed Agency (ASA) and Tanzania Official Seed Certification Institute (TOSCI)	Established under the executive Agencies act [Cap.245 R.E. 2002] of June 2006	Mandated to produce, process and market sufficient high quality agricultural seeds. Currently ASA has nine seeds farm/ horticulture sites across Tanzania Mainland. Responsible for day to day implementing various tasks under the PforR (DLI-3).
Internal Auditor General		Carrying out the internal audit of the Program. Providing assurance to management of the entity regarding the management of key risks and to provide independent and objective advice and counsel to management to assist them in discharging their duties and responsibilities.
Office of the Auditor General		Carrying out Performance or Value-for-Money Audit for the purposes of establishing the economy, efficiency and effectiveness of any expenditure or use of public resources by Ministries, Departments and Agencies (MDAs), Local Government Authorities (LGAs) and Public Authorities and other Bodies. Audit annual financial statements of project PforR activities of MOA, PO-RALG and LGAs component.



Review of Public Financial Management Cycle

Planning and Budgeting

10. **The PforR Program will be identified as a program under development budget.** ASDP II is mainstreamed into the existing government coordination structures and financial reporting. Planning and budgeting will be guided by public financial management legal framework including: (i) Budget Act of 2015; (ii) Public Finance Act of 2001 (revised 2004) and its regulations; (iii) Local Government Finance Act no 9 of 1982 (CAP 290); and (iv) other regulations and circulars issued by the MoFP.
11. **Tanzania uses three years MTEF for planning purposes, and this will also apply for the Program.** Budget is documented in the centralized budget management system (CBMS) which the Ministry of Agriculture, National Irrigation Commission (NIRC), President's Office Regional Administration and Local Governments (PORALG) and Regional Secretariats use to plan and monitor budgets. CBMS is on activity-based budget. NIRC is semi-autonomous institution under MoA with independent budget vote and therefore responsible to account independently for its allocated budget, while TARI and ASA directly report to MoA. TARI, ASA and LGAs uses PlanRep for budget documentation which is also an activity-based budget. PO-RALG offers technical backstopping on PlanRep for LGAs.
12. **There are two categories of revenue budgets for the agriculture sector, from own source and from central government.** Budget reports generated by PlanRep can be identified by cost centre. Funds from central government are used for recurrent expenditure and for development expenditure. Funds from external sources/ projects funded by development partners are recognised under development budget. The program would be required to clearly identify activities to be funded by each LGA under development budget and allocated budget line.
13. **Budgets for agriculture at LGA level is made up of agriculture, fisheries, livestock and co-operatives operations as its structured as one department.** Recurrent administration expenditure for the department of Agriculture, livestock and fisheries cannot be separated as they fall within one cost center. Budget for development expenditure can be further analyzed by activities of each cost centers above. Agriculture budget is mainly composed of recurrent personnel emoluments travel costs. Budget categories at LGAs PlanRep are recognised by cost centre code 506 and is split into 5 categories: (i) 506A-Agriculture, Livestock and fisheries administration, (ii) 506B-Agriculture operations (iii) 506C-Cooperatives Operations; (iv) 506D-Livestock operations; and (v) Fisheries operations.
14. **Budget ceilings issued by MoFP are low, and budget released by MoFP to the sector and LGAs is low, hence the sector is generally resource constrained.** Agriculture sector received an average of 2.25 percent of national budget over 5 years from 2017/2018 to 2021/2022 (*Tanzania Agriculture Public Expenditure Review -World Bank 2022*). For the same period, 2017/2018 to 2021/2022, about three-quarters for the agriculture budget was allocated at the central government level and one-quarter at the local government level. Budget outturn (actual funds as percentage of budgeted funds) both in revenue and expenditure is low. The program will incentivise budget release by having a disbursement linked indicator on budget outturn.



Procurement Planning

15. **The PPA and its regulations require all procuring entities to prepare Annual Procurement Plans (APPs) as part of the annual work plans and budget.** To maximize economy and efficiency in procurement, all PEs are required to aggregate their requirements within the departments of the institution. In compiling such plans, PEs are required to establish appropriate methods of procurement and timescale for each package to be calculated based on the standard processing times prescribed in the regulations. The APPs are prepared based on the annual work plans of different departments of the implementing entities and LGAs and are linked with the budget. Assessment made at MoA, PO-RALG, TARI, ASA, TOSCI, NIRC and the six selected LGAs of Mkalama District Council, Hanang District Council, Meru District Council, Kilosa District Council, Kilolo District Council and Mbarali District Council revealed that all LGAs published their General Procurement Notices and APPs in the procurement portal and TANEPS. However, some of the packages in the APPs were not processed as per the timelines indicated in the plans, and procurement plans are not used to monitor progress of implementation of procurement activities but rather compliance with the law. Some of the LGAs are not using procurement plan templates issued by the PPRA.
16. **Procurement Profile of the Program:** The procurements under the Program will be governed by the Legal and Regulatory Framework i.e., the PPA, Cap 410 (Revised 2022) and the Public Procurement Regulations, 2013 GN No. 446 of 2013 (as amended in 2016). These are supplemented by the districts' (Establishment and Proceeding of the Tender Boards) Government Notice No. 330 of 2014 for procurements under the LGAs. Based on the Program expenditures framework, anticipated procurement of goods, works, non-consulting services and consulting services will include modest value contracts below the OPRC thresholds. Procurements under the Program will mainly be for development and maintenance of infrastructure for agriculture warehouses, irrigation channel/dams, basin improvement, bore holes, ICT tools and facilities, rehabilitation of seed storage facilities and cold rooms and other supplies for the agencies. The Table A4.2 below provides the broad list of procurable activities.

Table A4.2. Procurable Activities by DLI

DLI	Broad list of procurable activities	DLI allocation (US\$ million)
DLI 1 Sustainable financing for the development and dissemination of climate resilient technologies in agriculture	Research tools and facilities (TARI, MOA)	37.0
DLI 2 Extension outreach strengthened, including through ICT solutions for promoting climate smart practices	e-agriculture, extension staffs training, ICT tools and facilities (MOA)	32.0
DLI 3 Improved functional linkages in the seed value chain	Seeds production and facilities (ASA, TOSCI, MOA)	26.0
DLI 4 Performance-based Operations, Management and Maintenance (OMM) contracts introduced and implemented	Works: repair/ rehabilitations and performance based OMM (NIRC, MOA)	70.0
DLI 5 Effective management of public warehouse facilities	Warehouse management model, development and maintenance (DNFS, MOA)	42.0
DLI 6 Improved agricultural budget monitoring and predictability		41.0



DLI 7 Scaling up soil health assessments and management

32.0

17. **Performance of procurement system.** PPRA has been conducting Procurement Performance and Value for Money Audits (VfM) since FY2006/2007 on a sample basis using seven indicators to assess compliance of Public Expenditures with the Act and Regulations. VfM audits assesses achievement of the value for money in the selected contracts. The overall VfM compliance³⁹ of PO-RALG, MOA, TARI, Hanang DC and Mkalama DC was assessed at 90.83 percent, 79.2 percent, 63.2 percent, 66.59 percent, and 72.7 percent, respectively which is a fair performance for procurements carried out during FY2020/2021. Also, PPRA uses Red Flags Checklist to detect symptoms of corruption in the procurements carried out by the above IAs in the three phases of procurement; pre-bid phase; evaluation and award phase and contract management phase. For contracts which scores 20 percent or above on a red-flag⁴⁰ scale signify corruption likelihood and requires further investigations by the competent authority. Procurement performance indicators calculated based on sample procurement activities are presented in Table A4.3 below:

Table A4.3: Procurement Data Extracted Based on Sample Procurement Activities

Description	PORALG (Total FY 2019-2022)		MOA (Total FY 2019-2022)		MERU DC (Total FY 2019-2022)		Mkalama DC (Total FY 2019-2022)		Hanang DC (Total FY 2019-2022)		Kilosa DC (Total FY 2019-2022)		Kilolo DC (Total FY 2019-2022)		Mbarali DC (Total FY 2019-2022)		TARI (Total FY 2019-2022)		ASA (Total FY 2019-2022)	
	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million	NO.	Amount (TZS) million
Goods	1524	127,282.38	1015	8,425.31	80	5,091.61	193	2,746.00	34	5,136.99	249	1,212.31	72	1,568.89	87	7,005.88	16	2,950.80	58	4,262.38
Works	6	20,304.45	19	68,081.39	33	2,525.37	0	-	65	16,034.68	2	5,600.00	2	0.24	56	5,800.00	7	9,885.68	1	33.42
Consulting Services	26	31,922.26	8	3,132.57	42	2,389.33	0	-	0	-	0	0.00	0	0.00	0	0.00	2	695.96	0	-
Non-Consulting Services	356	2,525.79	114	1,585.65	21	52.10	29	364.60	42	4,644.49	40	219.02	32	256.51	27	1,821.73	13	3.90	3	157.98
Total	1912	182,034.88	1156	81,224.92	176	10,058.41	222	3,110.60	141	25,816.16	291	7,031.33	106	1,825.64	170	14,627.61	38	13,536.34	18	2,354.10
Performance indicator	PORALG		MOA		MERU		MKALAMA		HANANG		KILOSA		KILOLO		MBARALI		TARI		ASA	
Average number of bids received	7		5		3.5		3		4.2		3		4		3		4		4	
Average Tender preparation time (days)	14		12		15		14		8.5		7		24.6		12		10		11	
Average time for Payment (days)	45		45		60		32		35		30		30		30		60		30	
Average lead time [publication till award]	100		90		90		70		75		63.5		29.5		32.5		130		64	

18. Based on procurement data extracted and summarized in above table, few inferences are:

- Number of bids received ranges from 3-7 bids per opportunity [45 transactions].
- Tender preparation time ranges from 7–30 days per opportunity [45 transactions].
- Average contract amount for works contracts TZS 3.38 billion (PO-RALG), TZS 3.58 billion (MOA), TZS 2.8 billion (Kilosa) while other IAs average below TZS 1 billion.

³⁹ Scores based on VfM indicators established by PPRA in each stage of procurement: Planning needs assessment and Tender Documentation; Procurement Stage; Contract Implementation Stage; Quality and Quantity of Supplied Goods Stage; and Project Completion and Closure Stage.

⁴⁰ As per PPRA's annual performance evaluation report FY2020-21, the assessment in 85 entities revealed that three contracts/projects, worth TZS 616.5 million which is 0.5 percent of the total value of TZS 123.3 billion of all contracts, had high corruption red flags (<https://www.ppra.go.tz/about-joomla/annual-reports/annual-performance-evaluation-reports>).



- (d) Time for processing payments varies from 30–62 day per opportunity [32 transactions].
- (e) Procurement lead time (publication until award) varies from 30 days to 120 days [32 transactions].
- (f) Procurement e-portal: Use of TANEPS e-portal mandatory since August 30, 2020. However, some IAs were observed not fully utilizing the portal especially for small contracts (force account).
- (g) PP for IAs in place. However, some IAs not implementing PP as planned, thresholds not observed, use of different method of procurement from the one indicated in PP.
- (h) Contract Management: There was no Contract Management tool for the monitoring of physical and financial progress and no contract management database.

19. **Framework Agreements (FAs) for Common Use Items and Services (CUIS) under the Government Procurement Services Agency (GPSA) and Minor Value Procurement:** Most of the goods/services at Pes are procured through CUIS under Force Accounts (FAs) introduced by the Government in February 2011. CUIS are managed by the GPSA, an Executive Agency of the MoFP, established under the Executive Agencies Act No. 30 of 1997 and responsible for overseeing the implementation of the CUIS in the country. GPSA prequalifies vendors for the CUIS and Pes are required to invite mini competition among prequalified vendors and to contract vendors offering the lowest prices. This shift of paradigm has resulted in the MoA, PO-RALG, and LGAs preparing the APPs which include mainly CUIS and a few goods and services packages which are not covered under CUIS. Works' contracts are not subjected to this system. The preselection of the vendors by GPSA and management of the mini competitions by the MoA, PO-RALG, TARI, ASA, NIRC and LGAs are processed through TANEPS. The use of Force Account has replaced the conventional shopping method. The FAs approach and processing through TANEPS will minimize the scale of F&C practices that were entrenched in the shopping procedures. While using Force Account in construction and maintenance of facilities and Pes procure construction materials from the suppliers who have been preselected by GPSA, unless the required materials are not in the catalog of preselected vendors. However, some of the IAs were not procuring from the preselected vendors which has led to some of the PEs to procure materials at higher prices than prevailing market prices as observed by CAG in the report of March 2021 – VFM audit of projects implemented through Force Account in the education sector.

Budget Execution

Treasury Management and Funds Flow

20. **The program funds will be disbursed by the World Bank to the program bank accounts in Bank of Tanzania (BOT).** Two bank accounts for MoA and NIRC will be maintained in USD currency at the Bank of Tanzania. Program funds will be disbursed to recipients upon World Bank acceptance of results achieved. Program will use D-Fund system for receiving and transferring of funds to implementing agencies. The D-fund system is the management information system hosted by the MOFP to capture inflow of funds to the country by development partners. Funds from USD bank accounts in BOT will be transferred to commercial bank accounts maintained in local currency by these ministries. MoA will be responsible to disburse funds to respective development accounts of implementing agencies under its jurisdiction and to the Regional Secretariats and selected LGAs as per workplan and cash forecast of respective institution.



21. **Most of projects have experienced delays in disbursement of the project funds to the implementing entities even when funds are earmarked for a specific project. All government funds are maintained at BOT and disbursement requests are made regularly on need basis.** Delays for receiving funds for development projects has continually impacted implementation progress. Some institutions such as TARI does not have bank accounts at centre level. TARI has centralized its bank activities at Head office level while maintaining imprest accounts at centers. LGAs have bank accounts for development projects in commercial banks which funds will be transferred directly from BOT to respective LGA bank account. NIRC uses regional sub-treasury offices for regional offices and commercial bank accounts at head office.
22. **World Bank client connection system will be used for withdrawal applications and documentation of results achievement as the basis for disbursement. There will be an option for rolling advance for program.** Identified Project Accountants will be registered as users in client connection and will be responsible to process disbursement requests and financial reporting.

Accounting and Financial Reporting

23. **Financial records for the operation will be maintained using the integrated financial management system – MUSE (Mfumo wa Ulipaji Serikalini).** Central Government (MoA, PO-RALG, NIRC, TARI, ASA) has fully migrated to MUSE and LGAs migrated in 2021/2022. MUSE is linked with CBMS using GFS codes based on GFSM 2014 and the international standard (GFS and COFOG) Classification. This structure facilitates monitoring of the budget against expenditure. Budgeted activities can be executed within the limits identified in the budget. Budget revisions are requested once per annum in December.
24. **The two sets of annual financial statements by MoA and NIRC will be prepared.** Funds transferred to other implementing agencies under their jurisdiction, will be reported as transfers and usage of funds will be accounted for by the respective institutions receiving funds. All supporting accounting records and documents will be maintained by the respective institution responsible for implementation of the operation. These institutions will be producing financial reports on the progress of execution of activities and frequently submit to MoA for purpose of requesting disbursements.
25. **MUSE IFMIS will be tailored to generate financial reports for the program to facilitate analysis of program financial performance.** Financial reports will be generated by respective institution implementing the program. Currently, MUSE at LGAs can generate itemized commitment and expenditure report, however the reports are not interfaced with PlanRep for budget comparison. Budget from PlanRep is imported to MUSE by PO RALG central IFMIS unit. Itemised expenditure report from MUSE will include budget commitments and actual expenditure, which is useful to track available budget balance.
26. **MoA and NIRC use the International Public Sector Accounting Standards (IPSAS) Accrual Basis of accounting** as adopted by the Government of Tanzania (GoT) since 2016. Financial reports are manually prepared as assets management modules and other cash flow reports cannot be directly generated by MUSE.
27. **MoA and NIRC have adequate number of qualified and experienced Accountants, however, LGAs limited number of accountants.** Chief Accountants of respective ministries will appoint dedicated accountants who will be responsible for TFSRP activities. TARI has 32 accountants and NIRC has 12 accountants. The responsible accountants will have capacity and experience in managing TFSRP activities. There are shortages of



accountants at district levels to support agriculture sector. Available Accountants have limited knowledge of MUSE however capacity building trainings are in progress.

The Procurement Legal and Regulatory Framework

28. **The Procurement Legal and Regulatory Framework for this Program's procurement activities will be governed by the PPA, CAP 410 (Revised 2022) and its Regulations (GN 446 of 2013) (as amended in 2016).** These are supplemented by the districts' (Establishment and Proceeding of the Tender Boards) Government Notice No. 330 of 2014 for procurements under the LGAs. Under the amended Act, procurement functions remain decentralized to PEs with the Public Procurement Regulatory Authority (PPRA) continuing to provide oversight functions in public procurement. In addition, the amended Act has maintained the definitions of fraud and corruption about coercive practices, collusive practices, and obstructive practices. The reasons for the amendments were long duration of procurement processes, issues with integrity and professionalism, constraints to commercially oriented Government companies/institutions, lack of and failure to apply approved standards for common items and services required by Government, and differences between procurement procedures used by LGAs and those used by other Pes. The need for approval of exceeded budget, previously required from approving authority, has also been amended. The amendments also emphasize submitting details, and not just a list of procurement contracts awarded and the use of Procurement Management Information Systems (PMIS). In line with the issued Regulations, various documents were issued as working tools in line with PPA including Standard Bidding Guidelines on the Technical & Financial Proposals Evaluation and Report Preparation, Guidelines for Preparing Responsive Proposals, Procedural Forms, Guidelines for Community Participation in Public Procurement and Guidelines for Carrying out Works under Force Account at all levels. All these documents are accessible on the PPRA's website free of charge.
29. **The PPA complies with applicable obligations derived from national and international requirements.** The procurement policies are based on the need to make the best possible use of public funds, while conducting all procurement with integrity and fairness. All public officers and members of tender boards undertaking or approving procurement are required to be guided by the basic considerations of the public procurement policy including the need for economy and efficiency in the use of public funds; give all eligible bidders/consultants equal opportunities to compete in providing goods or executing works or providing services; and encourage national manufacturing, contracting, and service industries and the importance of integrity, accountability, fairness, and transparency in the procurement process.
30. **The Act also promotes local content and firms.** Furthermore, the amended Regulations stipulate that, contracts exceeding TZS 1 billion will need vetting by the Attorney General's Office prior to signing. This is an improvement from the previous threshold of TZS 50 million (US\$20,000). The Act has also reduced the cool-off period from 14 to 7 days during which an intention to award the contract is communicated to all bidders, giving them the opportunity to submit a complaint, if any, on the proposed award. Furthermore, the procurement complaint review process was changed to two tiers system, with PPRA no longer being involved in the review of complaints. Thus, a substantial reduction in the overall time for handling complaints. The legal framework is quite robust and internationally acceptable.
31. **Use of the Tanzania National e-Procurement System (TANePS) for all PEs in Tanzania Mainland.** The GoT developed TANePS which was piloted in 2018 and rolled out to all public bodies. The Paymaster General on



December 23, 2019, issued Circular No. 4 of 2019, which directed all PEs using public funds to use TANEPS in all procurement transactions. Consequently, in June 2020, the World Bank assessed the TANEPS, and the assessment concluded that the TANEPS is compliant with the Multilateral Development Banks (MDBs) e-Government Procurement Guidelines. In the Program, the TANEPS will be used at the central and LGAs levels. Pursuant to PPRA's Annual Performance Evaluation Report (APER) for FY 2020-2021, a total of 718 entities (531 PEs and 187 delegated entities) had been connected to TANEPS and 21,194 suppliers had been registered. It was noted that MoA, PO-RALG, and LGAs are processing procurement activities through TANEPS.

32. **Standard Bidding Documents:** In line with the issued regulations, PPRA has issued various documents as working tools, including Standard Bidding Documents for Works, Goods, and Non-consulting Services; Standard Request for Proposals; Guidelines on the Tenders Evaluation (Works, Goods and Non-consulting Services); Guidelines on the Technical and Financial Proposals Evaluation and Report Preparation; Guidelines for Preparing Responsive Proposal; Guidelines for Preparing Responsive Bids; Procedural Forms, Guideline for Community Participation in Public Procurement and Guideline for Carrying out Works under Force Account at all levels. All these documents are accessible on the PPRA's website. With the support from the Bank, PPRA has revised the Standard Bidding Documents to be in line with the amended Act and Regulations as well as to be used when using TANEPS. In May 2020, PPRA issued the Guidelines for Carrying out Works under Force Account which includes dedicated section for the Application of Force Account at the Lower Government Level. However, templates like simplified procurement plan format, invitation for quotations; comparison of quotations; standard contracts, records management, handling of complaints and contract management are missing in the guidelines.
33. **Generally, MOA, PO-RALG, TARI, ASA, NIRC and all LGAs use the standard bidding documents issued by the PPRA in the procurement of contracts.** The standard bidding documents contain the evaluation criteria relating to eligibility of the bidders, qualification of the bidders and it is mandatory to disclose evaluation criteria to be used in determining the successful bid in the solicitation documents. The standard bidding documents issued by PPRA have been reviewed and found to be acceptable to the Bank with some exception on NCB procedures. The challenge has been to customize the bidding documents to suit the requirements of specific procurement. The review of the sample bidding documents during assessment revealed that information provided in the Data Sheet and Special Conditions of Contract was adequate although improvement is required in the evaluation/qualification criteria. The assessment carried out for the sample LGAs reveals that there are legally established TBs and PMUs to manage the procurement functions.
34. **Bids and proposals evaluation:** Bids evaluations at MoA, PO-RALG, TARI, NIRC and all LGAs are carried out by evaluation committees constituted according to the PPA and its regulations. Normally, evaluation committees comprise a minimum of three members for works, goods, non-consulting services, and financial proposals and a minimum of five for technical proposals. Evaluation committees comprise members from the user departments, technical staff, and sometimes from outside the PE where expertise is lacking internally. Evaluations follow the evaluation/qualification criteria specified in the bidding documents although it has been noted that at times no reasons are recorded as to why particular bidders are disqualified. Evaluations are done in three stages: preliminary examination, detailed evaluation, and post-qualification analysis, and these stages are adhered to in most of the evaluation reports reviewed by the World Bank. Sometimes, however, the provisions in the PPA and its regulations have not been abided by the evaluation committees as well as the Tender Board.



35. **There are inefficiencies in preparing and approving procurement transactions.** Significant delays have been noted in preparing specifications and bidding documents, bid evaluations including adjudication of the evaluation reports and awards recommendations. Delays in getting necessary approvals lead to tenders being awarded after expiration of bids' validity period. Unsuccessful bidders are informed on the award decisions and publications of awards in the TANePS.

Review and Resolution of Complaints

36. **A two-tier system for handling procurement complaints provided under the PPA, Cap 410 (as amended in 2016) and the Public Procurement Regulations, 2013 GN No. 446 of 2013 (as amended in 2016)** include two levels for handling of procurement complaints: (a) the head of PE; and (b) PPAA. PPRA is no longer involved in reviewing complaints by bidders with the aim of limiting PPRA's function to advisory and monitoring procurement activities as well as eliminating conflict of interest when it was handling both functions; advisory and complaints reviewing. However, for monitoring purposes, an aggrieved bidder is required to serve a copy of the complaint to PPRA and the AO is required to submit a copy of the decision to PPRA within seven days from the date of its delivery. Removing PPRA from the complaints handling process has led to considerable reduction in the number of days used to handle complaints from an average of 105 to 59 days. The Act provides a provision of judicial review in case the second level fails to decide within the prescribed time limit. To make review process more robust, the head of the PE is mandated to establish a review panel based on their expertise and experience on the subject matter of the tender. Normally, the rulings of PPRA are published in the PPRA website and summary of the cases and ruling are published in the Tanzania Procurement Journal.
37. **Debarment and blacklisting of vendors.** PPA and its Regulations have provisions to debar vendors from participating in public procurement or disposal proceedings if; fraud or corrupt practices is established against the tenderer; the tenderer who fails to abide with a bid securing declaration; the tenderer breaches a procurement contract; the tenderer makes false representation about his qualifications during tender proceedings. Furthermore, the law vests powers to PPRA to blacklist and debar a bidder who has been debarred by a foreign country, international organizations such as the World Bank in cases related or unrelated to fraud and corruption. MoA, PO-RALG, and LGAs will use the Bank's List of Debarred and Cross-Debarred firms and individuals to check eligibility to ensure that persons or entities debarred or suspended by the Bank are not awarded contracts under the Program during the period of such debarment or suspension. The list can be accessed on the World Bank's website (www.worldbank.org/debarr). The compliance with this requirement would be checked by the Bank and Program auditor.
38. **Contract management for any procurement of goods, services or works contracts is the responsibility of Pes as mandated under PPA and its Regulations.** As per the provisions of the PPA and its Regulations, Pes are required to ensure that the contracts are implemented in accordance with terms and conditions governing those contracts, and to take or initiate steps to correct or discipline deviations from observance of contract conditions. PPA 2011 and its Regulations set out the responsibilities of the PEs and procedures during contracts implementation including technical or scientific test and issuance of good acceptance certificate. PPRA Procurement and VFM audits have observed that contract management in some of the IAs is weak due to limited capacity of human resources, knowledge, and experience in managing contracts.

Records Keeping



39. **PPA and its Regulations prescribe procurement records to be maintained and archived by Pes in the procurement proceedings including decisions taken.** The records range from planning to contract closure and to be kept for five years after contract closure. There are inadequate records filing and management system in the MoA, PO-RALG, TARI, ASA, NIRC and LGAs – records are scattered and incomplete in the procurement files. As a result, it is difficult to trace complete records of a particular tender in one file. The inadequate records management system is partly attributed to the lack of office space for PMUs and a system for record keeping. With the existing working environment and infrastructure, it is difficult for procurement staff to archive and maintain complete procurement records for the periods specified in the procurement law.
40. **Procurement oversight in PO-RALG, MOA, LGAs and IAs are done by their respectively Internal Auditors.** In addition, PPRA and Controller and Auditor General (CAG) have the mandate of carrying out procurement and financial audits respectively for the programs implemented by LGAs. The results of procurement and Value for Money (VFM) audits are published in the local newspapers and PPRA's website. Non-performing procuring entities (Accounting Officer) are summoned by PPRA's Board of Directors to discuss the findings and corrective measures to improve compliance in their entities. The procurement and VFM audits carried out by PPRA feeds in the CAG annual report as a procurement chapter.
41. **In the PPRA's Performance and VFM Audits and IAUs Reports FY2019/2020 and FY2020/2021, the following recurring weaknesses were observed in the contract management:** (i) failure to demand vendors to furnish securities and insurances as per the terms of the contract, (ii) operating with expired contracts – contracts not extended before expiry; (iii) failure to impose liquidated damages and forfeiture of performance securities in cases of poor performance by vendors; (iv) contracts are not completed on time as scheduled; (v) delays in paying vendors as per the contracts; (vi) delayed decision making to contract variations; (vii) professional indemnities were not submitted by consultants and no action taken by the procuring entities; (viii) delays in commencement of contracts; (ix) extension of time were granted without justifiable grounds; and (x) quality assurance plans not prepared. Training will be required for both procurement and technical staff in contract management to ensure that they are knowledgeable of the requirements of contract management.
42. **According to PPRA Audit Reports,** the challenge has been to customize the bidding documents to suit the requirements of specific procurement. The review of the sample bidding documents during assessment revealed that information provided in the data sheet and special conditions of contract was adequate although improvement is required in the evaluation/qualification criteria. In terms of specifications, especially for works contract, the district relies on the specification issued by the Ministry of Works with minor modifications depending on the circumstance. The Guidelines for carrying out works under the Force Account at the lower levels spell out the procedures to be followed but do not have simplified tools: request for quotations; evaluation guidelines; and sample contracts to be signed by the parties. PO-RALG through PPRA are required to prepare the simplified working documents in English and Swahili for the effective use of the guidelines.
43. **Publication of Contracts:** Transparency is among the fundamental pillars of public procurement, and disclosure of information is one of the elements of transparency. PPA and Regulations require the Accounting Officer (AO), within 3 days upon receipt of the notification of award decision from the Tender Board, to issue a notice of intention to award the contract to all bidders who participated in the tender. At MoA, PO-RALG, all LGAs and Agencies issued notices through TAnEps and published in the PPRA's website.



Procurement Institutional and Implementation Arrangements

44. **The MoA, PO-RALG, LGAs, TARI, ASA and NIRC will be responsible for the procurement and accountability of goods, works and services required for their operations.** The Program will be implemented under the existing legal framework operating in the las. Thus, the proper functioning of the procurement organs (TBs, PIUs, User Departments, Evaluation Committees, Inspection and Acceptance Teams established by the PPA and its Regulations to process and adjudicate procurement activities) is extremely critical for the effective undertaking of the procurement activities of the program because other sectors will also be relying on the same organs. The assessment carried out for the MoA, PO-RALG, LGAs, TARI, ASA and NIRC reveals that there are legally established TBs and PMUs to manage the procurement functions. However, deficiencies were that in some of the LGAs, the PMUs are not adequately staffed. Some of the TBs' members and PMUs staff have not attended trainings on the PPA and its Regulations.
45. **The MoA, PO-RALG, LGAs, TARI, ASA and NIRC will have the responsibility to oversee project implementation** and the implementation of the project will be mainstreamed to their existing institutional arrangements of the MoA, PO-RALG, LGAs and Agencies. The TFSRP will provide technical support during the implementation of the operation. Procurement and financial management related activities will be carried out by the relevant departments in the MoA and PO-RALG. Besides, the MoA and PO-RALG will appoint/assign a team of full-time staff to oversee day-to-day management of the operation comprising of a coordinator, an administrator, a monitoring and evaluation officer, an accountant, a procurement officer, civil engineer and environmental and social development officers. In addition, focal persons from the relevant departments/units of the MoA and PO-RALG will be assigned to work with the teams.

Internal controls

46. **The GoT internal control framework is based on the Public Finance Act (2001) and several other related regulations and guidelines issued by MoFP. LGAs are guided by the LAAM of 2009 and the LAFM of 2010.** Some guidelines issued include Guidelines for Enhancing Internal Control Frameworks in Public Sector Organizations (2014), Guidelines for Developing and Implementing Fraud Risk Management Framework in the Public Sector (2015), Guidelines for Developing and Implementing Institutional Risk Management Framework in Public Sector (2012). These documents set out detailed processes to be followed and documentation necessary for comprehensive accounting system, segregation of duties, approval hierarchies and filing of documents.
47. **There are governing boards, finance committees and audit committees in place.** NIRC has appropriate structure and offices at regional level in 25 regions, TARI has 17 centers country-wide. ASA and TARI produce quarterly financial reports and submits to the Ministry. All these institutions have key operational and financial departments in place with adequate number of accounting staff at head offices but have limited accountants at the zone offices. District Council meetings are held on quarterly basis whereas financial reports for development projects are presented.
48. **Governance structures and responsibilities at which may impact accountability on the use of funds.** The structure at LGAs level, agriculture, livestock and fisheries fall in one department. Warehouses and irrigation schemes are owned and managed by villages and irrigation organizations respectively. The role of agriculture officers at LGAs is to provide technical support to farmers organized in different associations. LGAs collect



cess/ levy from farmers for sale of their produce which to some LGAs is the main source of own source revenue. Own source revenues are used for recurrent activities at LGA level. Although collections are banked at BOT, own source funds are earmarked and spent by respective LGA. NIRC charges Irrigation organizations (Ios) irrigation service fees (ISFs) for partial investment recovery of rehabilitation and construction works.

49. **Sustainability and accountability of development projects investments is weak.** Several cases of not having value for money were observed, for example construction and rehabilitation of warehouses which are not in use, acquisition of equipment which are not fit-for the purpose and hence abandoned and vandalized; irrigation infrastructure works not completed and abandoned by contractors.
50. **In addition, regular observations made in audit queries relate to noncompliance to the procedures.** Matters raised in audit reports related to funds spent for unintended activities, collection not timely banked, imprest not retired, weaknesses in maintenance and record keeping of assets, inadequately supported expenditures, noncompliance to procurement regulations and weaknesses in contract management. In addition, PEFA assessments have raised concern over commitment controls and building up of expenditure arrears which are off the IFMIS.

Internal audit

51. **The MoA and its agencies have adequate and qualified internal auditors.** MoA internal auditors performs audits of expenditure, procurement compliance, assets management, payroll audits and audits selected agencies and projects within the annual internal audit plan. In addition, NIRC has 5 internal auditors, TARI has 3 internal auditors and ASA has 1 internal auditor. Main challenge is on keeping internal auditors abreast with new information systems adopted by the government.
52. **There are shortages of internal auditors at district level.** Order 13 of the LGFM, 2009 requires LGAs to hire internal auditors who will be performing independent appraisals of internal controls by examining and evaluating effectiveness and adequacy of such controls. Numbers of internal auditors continue to slim down with some LGAs having one or two internal auditors. Although audit reports are issued on quarterly basis, but ability to perform routine audit of health sector will be limited. The CAG audit report for 2020/21 has indicated the following gaps in internal audit function at LGAs: (i) internal audit reviews were transactional and not risk-based; (ii) LGAs do not train auditors on the IT systems including Government Accounting Consolidation System, Procurement electronic system (TANePS) and Accounting System (MUSE); (iii) staff shortage of 219 Internal Auditors in 87 LGAs; (iv) 79 LGAs did not provide internal audit units with adequate funds as per budgets set; (v) Internal Auditors in 49 LGAs had shortage of working tools and equipment such as motor vehicles, laptops and furniture; and (vi) Internal Audit Units in 78 LGAs did not finalize audit works as per annual internal audit plans. All these factors contribute to lack of appropriate assurance on control environment and slow implementation of audit recommendations resulting into recurrence of audit findings.
53. **The function of Audit Committee is vital for efficient program implementation.** Audit committees are formed under Order 12 of LGFM, 2009 and Paragraph 3.5 of the Audit Committee Guideline of June 2019. Audit committees are comprised of internal and external members and meets on a quarterly basis. The audit committee is responsible for reviewing financial statements, establishing an effective risk management framework, internal controls, and monitoring of internal audit activities in line with the Audit Committee Guidelines issued by the Internal Auditor General. In addition, there are Finance committees at LGAs which



reviews budgets and financial reports on quarterly basis. These committees report to the respective Accounting Officer. Areas of improvement noted by Controller and Auditor General Audit Report of 2020/2021 are on inefficiencies in functioning of LGAs Audit committees in following up implementation of audit recommendations and addressing risks and root causes of recurring audit findings. Internal audits will be supplemented by the program audit conducted by external auditors and independent verification of results framework.

Governance and Anticorruption

54. **Combating and preventing fraud and corruption practices in Tanzania is governed by The Prevention and Combating of Corruption Act 2007 among others.** The objective of this Act is to provide for promotion and enhancement of good governance and eradication of corruption. The act provides for institutional and legal framework necessary for prevention and combating corruption. Other supportive frameworks include the Anti-money Laundering Act of 2007, the Economic and Organized Crimes Act Cap. 200 of 2002, the Public Services Act of 2002, the Public Services Regulation of 2003, the Public Services Guidelines of August 2015, the Public Leadership Code of Ethics Act No. 13 of 1995, and the Public Procurement Regulatory Authority Guidelines together with the Government Accounts Guidelines/Manual.
55. **The Code of ethics and conduct for public service made under Section 34 of the Public Service Act, 2002 and Regulations 65(1) of the Public Service Regulations, 2003 further requires public servants to conduct and observe ethical behavior.** Public servants shall not offer improper favors, solicit, force or accept bribes from any person whom they have served, they are serving or likely to serve either by doing so personally or through another person. Public servants or members of their families on their behalf, shall not solicit, receive, or give gifts to persons, which might compromise or might be seen to compromise their integrity.
56. **The National Anti-Corruption Strategy and Action Plan-NACSAP III (2017 -2022) takes the fight against fraud and corruption to a further level as a mechanism for institutionalizing good governance across all sectors and institutions.** Specifically, the strategy aims at strengthening accountability in services delivery, combating and preventing fraud and corruption practices, and enhancing institutional capacity to deal with fraud and corruption. All public instructions are required to cascade this NACSAP to their respective institutions which include formation of the integrity committee responsible to coordinate and keep inquiry to all issues related to staff ethics and discipline and advise the accounting officers on institutional integrity issues. The assessment conducted recently by the Bank team confirmed that, there are fully functional Integrity Committees at the Ministry of Agriculture and all implementing institutions relevant for this program. These committees meet once in every quarter to discuss any related reported cases and prepare reports which are reviewed and approved by the Permanent Secretary or accounting officer within respective entities and submitted to the Chief Secretary. The committees also play an important role in translating and cascading national anti-corruption strategies and guidelines to the institutional level for easy implementation. At the Ministry of Agriculture, there are also desk officers in each of the directorates and units, which act as champions and first points of contact for staff on issues related to fraud and corruption.
57. **In Tanzania Mainland, the Preventing and Combating Corruption Bureau (PCCB) is responsible for taking the necessary measures for prevention and combating of corruption in the public, parastatals, and the private sector at large.** The bureau was established under the Prevention and Combating of Corruption Act Number. 11 of 2007 (PCCA 11/2007) that came into force on July 1, 2007. PCCB has offices in all regions and all local



government authorities in Tanzania Mainland, with a national workforce of more than 1,700 staff of which approximately half are involved in investigation. The bureau has powers to arrest, enter premises, search, detain suspects and seize property where there is a reasonable cause to believe that, and offence involving corruption has been or is about to be committed by the suspect in the premises or in relation to the property. The Bureau investigates any alleged or suspected fraud and corruption, and, subject to the directions of the Director of Public Prosecutions, prosecute offences relating to corruption. PCCB has a program to monitor expenditures on development programs to verify that expenditures are incurred for the objectives intended. Where PCCB finds out that, funds have been diverted for unintended purpose, they launch an investigation to determine whether it is a fraud or corruption incidence warranting prosecution. Where PCCB investigations reveal that a given case is primarily one of fraud rather than corruption, the PCCB refers it to the police for further investigation and prosecution. In this context, fraud and corruption allegations made in respect of Program funds will be referred by the associated implementing agencies to the closest district office of the Police and PCCB, respectively. District PCCB offices report monthly to the Regional Offices on corruption cases and action taken. The PCCB headquarters gets monthly reports from the Regional Offices on corruption and other relevant activities.

Alignment with Anti-Corruption Guidelines for PforR Operations

58. **Sharing of Debarment list of firms and individuals: The Government of Tanzania commits to use the Bank's debarment list to ensure that persons or entities debarred or suspended by the Bank are not awarded a contract under the Program during the period of such debarment or suspension.** Companies and individuals debarred by the World Bank and the PPA will be posted and updated regularly on the MoW website (<https://www.kilimo.go.tz/>), and official websites for all implementing institutions. Both entities would take responsibility in ensuring that their websites are updated regularly with information on the list of debarred firms and individuals and share this information with all procuring entities in the Program, instructing them to comply by appending the debarment list to the annual transfer of Grant notification which will be made public – and go to all Health Facilities in the Program. The Bank's List of Debarred and Cross-Debarred firms and individuals can be accessed on the World Bank's website (www.worldbank.org/debarr). In addition, the government will also include some disclosure measures in bidding documents for works, goods and services to be financed under the Program, including insisting that the firms and/or individuals declare they have not been debarred or suspended and/or have any links with a debarred entity or individual.
59. **In order to implement the Bank's Anti-corruption guidelines for PforR operations, the Government of Tanzania will immediately inform the Bank of any complaint or claim related to fraud and corruption which the Government through implementing agencies either receives or becomes aware.** Unless otherwise agreed by the World Bank, the Government of Tanzania will take timely and appropriate action to investigate such allegations and indications; reports to the Bank on the actions taken in any such investigation, and, promptly upon the completion of any such investigation, reports to the Bank the findings thereof. The Government of Tanzania (through PCCB) will provide the Bank with all the records, documentation, and information that the Bank may request with respect to such issues. If the Bank decides to conduct its own investigation, the Bank may request the government (through relevant implementing ministries and agencies) to exercise its legal rights and remedies (under the relevant contract/s) to obtain all information, records, and documentation that the Bank may request, and provide these to the Bank. This process does not limit the rights of the Bank to also make direct requests for information from individuals or firm who are recipients of Bank financing either directly or indirectly. In line with the obligations arising under the Anticorruption



Guidelines, the government and all relevant implementing ministries and agencies will ensure that individuals or contractors who are recipients of Bank financing are aware that the Bank may decide to exercise this option.

60. **To further ensure the World Bank's Anti-Corruption Guidelines applicable to PforR operations are complied with**, the Government has agreed to: (i) share information on corruption allegations with the World Bank immediately (and a bi-annual report even if cases are not arising), while at the same time conducting its own internal investigations. At a minimum, the report will cover: Location of the incidence, Date allegation received, Complainant, Alleged Perpetrator, Description of the allegation, Stage of handling the allegation, Progress status in the investigation, Outcome of the investigation, and Source of finance for the case; (ii) use the World Bank's debarment list to ensure that persons or entities debarred or suspended by the World Bank are not awarded a contract under the PforR during the period of such debarment or suspension; and (iii) preserve the World Bank's right to investigate fraud and corruption allegations.
61. **Furthermore, the Government will ensure that all individuals and entities participating in the Program observe the highest standard of ethics.** Specifically, the Government will ensure that, all persons and entities involved in the program will take all appropriate measures to prevent and combat fraud and corruption, and refrain from engaging in fraud and corruption, in connection with the Program. If the Government of Tanzania or the World Bank determines that any person or entity has engaged in Fraud and Corruption in connection with the Program, the Government of Tanzania will take timely and appropriate action, satisfactory to the Bank, to remedy or otherwise address the situation and prevent its recurrence, provided that the action taken will not be in direct contradiction of the applicable law of the country.

Program Audit

62. **The Public Audit Act no. 11 of 2008 grants the Controller and Auditor General (CAG) exclusive powers to audit public funds, including this Program's funds.** CAG has sole responsibility for statutory audit of all MDAs and LGAs. CAG discharges this responsibility either directly or through private auditors contracted as agents. Outsourcing of the audits partly solves the challenge of staff constraints at the CAG office. The CAG has regularly carried out World Bank project audits and issued reports within the required time in Financing Agreements. CAG will conduct the audit in accordance with International Standards of Supreme on Auditing Institutions (ISSAI). Audit approach will consider sampling techniques and risk-based approach to address the constraints of time and financial resources.
63. **There will be two audit reports submitted for the operation: (i) audit report of funds disbursed to MoA and disbursed to other implementing agencies; and (ii) audit report of funds disbursed solely to NIRC.** Alongside the audit opinions on financial statements, management letters will be issued reporting gaps in internal controls environment of the program. The audit report will be submitted to World Bank within nine months after the end of fiscal year, that is by 31 March each year. The World Bank will make program audited financial statements available to the public in accordance with the World Bank Policy on Access to Information.

Risks and Mitigation measures

64. The review of the systems and staffing for implementation of procurement activities under the Program has revealed risks which may affect the smooth implementation of the procurement activities under the Program. Measure to address the risks have been proposed for MOA to address during the implementation of the



Program. To strengthen the existing systems of the Implementing Agencies (IA) and to mitigate fiduciary risk, various action items are recommended in the Program Action Plan (PAP).

65. **Implementation support.** An annual fiduciary assessment will be conducted for the program supported by the Internal Audit Department and PPRA. Adequate budget will need to be allocated for this assessment. This assessment will be supplemented by on-site visits done by the World Bank's fiduciary staff at least twice a year. Reliance will also be placed on the annual audit reports produced by the Controller and Auditor General. In addition, desk reviews will be done for interim financial reports and procurement reports received during the financial year. In-depth reviews may also be commissioned by the Bank whenever deemed necessary. Implementation support will also involve provision of capacity strengthening in procurement, financial management and governance and anti-corruption as deemed necessary.



ANNEX 5. SUMMARY ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

A. Introduction

1. **This section presents a summary of the Environmental and Social Systems Assessment (ESSA).** The ESSA was conducted as per the World Bank Guidance on Assessing Borrower Capacity for Addressing Environmental and Social Issues Associated with Investment Projects supported by the World Bank and the World Bank Guidance Program-for-Results Financing Environmental and Social Systems Assessment, issued in September 18, 2020. The ESSA identifies the key environmental and social risks (E&S) that may affect the achievement of the development outcomes of a PforR operation, assesses the borrower's ability to manage those risks, and recommends additional measures if needed. Under ESSA, the World Bank assesses—at the Program level—the potential E&S effects of the PforR Program (including direct, indirect, induced, and cumulative effects as relevant); the recipient's capacity (legal framework, regulatory authority, organizational capacity, and performance) to manage those effects; and the likelihood that the proposed operation achieves its E&S objectives.
2. **The ESSA was conducted consistent with the six core principles of the World Bank's Policy on Program-for-Results financing.** It covered the environmental and social considerations of the PforR Program, as relevant, within the overall principles of avoiding, minimizing, or mitigating adverse impacts; and promoting environmental and social sustainability in the PforR Program design as well as promoting informed decision-making relating to the PforR Program's environmental and social effects. OP 7.50 (Projects on International Waterways and OP 7.60 (Projects in Disputed Areas) do not apply to the PforR Program.
3. **The ESSA covered the Ministry of Agriculture (MoA) and its institutions namely Tanzania Agriculture Research Institute (TARI), Agriculture Seed Agency (ASA), and the National Irrigation Commission (NIRC).** It also covered the President's Office-Regional Administration and Local Government (PO-RALG) and the six selected Local Government Authorities (LGAs), namely: Meru in Arusha region, Hanang in Manyara region, Mkalama in Singida region, Kilosa in Morogoro region, Kilolo in Iringa region, and Mbalali in Mbeya region. The assessment focused on Policy and legal frameworks, operational structures, experience in implementing World Bank and other donor-funded projects, availability of unit/department/team for the E&S and the staffing capacity, conflict resolution, E&S mainstreaming and performance, Grievance Redress Mechanism (GRM), budgeting for E&S activities, gender inclusions, handling of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA), interactions with the public, private sector and other stakeholders.

B. Nature and significance of Environmental and Social Risks

4. **It is expected that the implementation of the Program activities will have negative environmental impacts.** The predicted environmental impacts include but are not limited to the following: (i) Water-source contamination due to the spillage of agrochemicals or wastewater from processing facilities, (ii) Possible soil erosion, land degradation, increased loss of soil fertility, and other issues from inappropriate use of agricultural inputs, (iii) Noise and air pollution during the construction of irrigation schemes, (iv) Impact caused by the generation of construction wastes and other related solid wastes, (v) Occupational safety and health risks linked to construction workers, (vi) Possible soil and groundwater contamination owing to the generated wastes, (vii) Health hazards from agrochemicals, rodent or pest infestation, including malaria, schistosomiasis, trypanosomiasis, etc, (viii) Natural habitats and biodiversity impacts, (xi) Possible flooding and landslides. The



operation does not anticipate resettlement activities.

5. **Changes to Irrigation infrastructure appear to have most critical environmental impacts** as it could lead to the degradation of river catchments and ecosystems/biodiversity, soil salinization, loss of forests and other vegetation diversity, reduction of environmental flows, degradation of ecologically sensitive areas in the wetlands, increased water-borne diseases, and water contamination due to non-appropriate use of agrochemicals. The proposed construction of irrigation and post-harvest infrastructure may also result in potential negative social impacts that will be mitigated.
6. **The predicted social impacts include but are not limited to the following:**
- There might be possible land-related impacts, particularly if irrigation schemes and post-harvest facilities are constructed.
 - Possible exclusion of female organizations and farmers in farming technologies and practices due to high illiterate levels among women.
 - Long-standing gender gaps in agriculture productivity could impose challenges and exclusion of disabled women and girls because of social stigmatization.
 - Possible spread of communicable diseases.
 - Traffic accident risks; traffic congestion/road accidents during construction of irrigation schemes and post-harvest facilities.
 - Community health and safety risks due to construction activities.
 - Visual deterioration due to dust and other impacts caused by the construction of irrigation schemes and post-harvest facilities.
 - The construction activities might give access to workers, contractors, or local funds, thus imposing risks of GBV and sexual exploitation on the young girls and local communities.
 - Possible conflict over land ownership and use caused by improved irrigation schemes might attract more users.

C. Exclusion Criteria

7. **The PforR will exclude activities that are likely to involve:**
- Significant conversion or degradation of critical natural habitats or cultural heritage sites.
 - Air, water, or soil contamination leading to significant adverse impacts on the health or safety of individuals, communities, or ecosystems.
 - Workplace conditions that expose workers to significant health and personal safety risks.
 - Activities that warrant land acquisition and/or resettlement of a scale or nature that will have significant adverse impacts on affected people, or the use of forced evictions without demonstration of mechanism to mitigate it.
 - Large-scale changes in land use or access to land and/or natural resources.
 - Adverse environmental and social impacts covering large geographical areas, including transboundary impacts, or global impacts such as greenhouse gas (GHG) emissions.
 - Significant cumulative, induced, or indirect impacts.
 - Activities that involve the use of forced or child labour.
 - The marginalization of, or conflict within or among, social groups; or



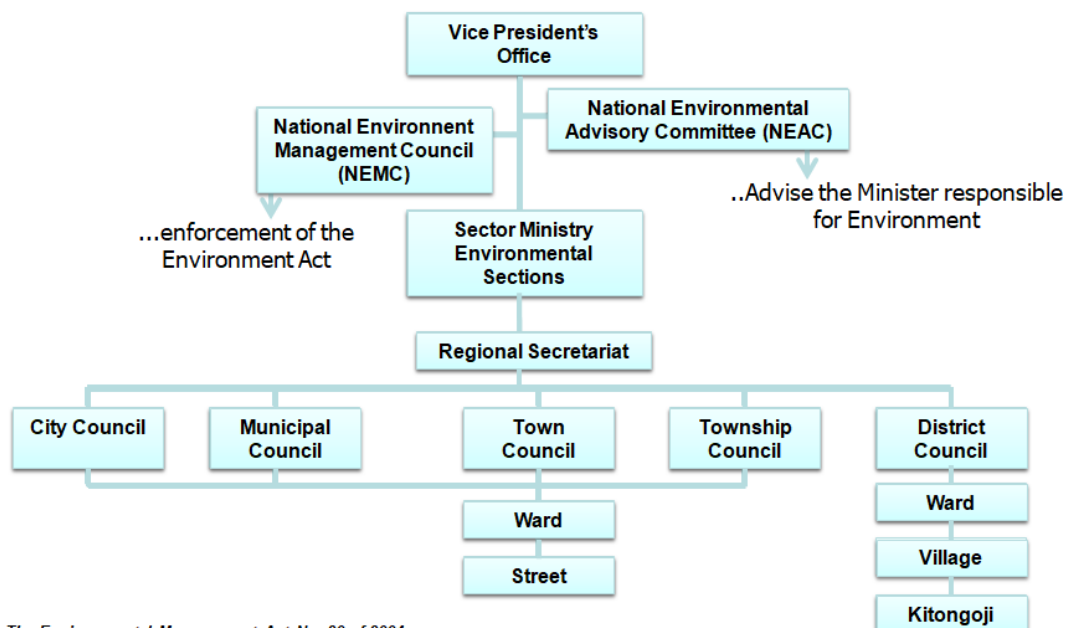
- Activities with high risk of GBV and SEA.
- Activities that would: (a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation; (b) cause the relocation of VMGs from land and natural resources that are subject to traditional ownership or under customary use or occupation; or (c) have significant impacts on cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected communities.

D. Adequacy of Legal and institutional framework applicable to the PforR Program

8. **The ESSA concludes that the policy and administrative context and the social and environmental systems in place in Tanzania are consistent with the six core principles of the World Bank's Policy on Program-for-Results financing.** Tanzania and the MoA in particular have adequate policies and legal frameworks, operational structures. These span from agriculture, environmental and social policies. The legal framework is also in place for agriculture (seed, irrigation and fertilizer), the environment (water and land resource management) and social (e.g., HIV/AIDs, gender, employment and labour relations, Workers Compensation, Occupational Health and Safety).
9. **Tanzania is among countries in East Africa with an Act for environmental management legislation.** The legislation, Environmental Management Act (EMA) (2004), provides a legal and institution framework that guides the implementation of the environmental management activities. The framework provides a prerequisite for effective implementation of Environment Policy at all levels (National, Region, Council, and Village/Mtaa/Hamlet). According to the Environmental Management Act (EMA) (2004), there is the Environmental Management Committee established at the Hamlet/Village/Mtaa, Ward, Council and at National level with the responsibility for the proper management of the environment in respect of the area in which they are established. The functions and responsibility of these committees are well explained in the Act. Moreover, section 36 (1), (2) of EMA stipulates that each City, Municipal, District and Town councils will designate or appoint an Environmental Management Officer (EMO) who will perform all relevant functions. The institutional set up as presented in the Figure A5.1 explains the layers of decision making from national to Village/Mtaa/Hamlet levels.



Figure A5.1: Institutional Set Up for Environmental Management in Tanzania Mainland



Source: The Environmental Management Act No. 20 of 2004

10. **On the social side, there is a national mechanism for addressing social issues including gender-based violence/sexual exploitation and abuse.** The Ministry of Community Development, Gender, Elderly and Children (MCDGEC) is a newly established ministry responsible for overseeing and coordinating the implementation of five policies and two laws which foster social protection and addressing vulnerability issues, including: Community Development Policy (1996); Women and Gender Development Policy (2000); National Non-Governmental Organization Policy (2001); National Aging Policy (2003); and Child Development Policy (2008). While laws include Non-Governmental Organization Act No.24 (2002) and Law of the Child Act No.21 (2009).

E. Institutional structure and capacity for implementing the relevant laws and regulations

11. **The government has well-developed and robust legislation, regulations, and systems to manage environmental, health, and safety risks.** The national EIA system has well-defined guidelines covering project registration and screening, the EIA process (scoping, alternative analysis, impact assessment, mitigation measures, management plan, and consultation), monitoring and auditing, and decommissioning.
12. **MOA and its institutions have adequate policy, legal frameworks, operational structures, established conflict resolution mechanisms, guidelines, and manuals for implementing the projects.** LGAs have bylaws guiding E&S aspects where MoA frameworks, guidelines, and bylaws are inadequate. However, the assessment found areas where capacity needs to be further strengthened. These are as follows:
 - **Institutional Coordination:** There is a need to strengthen collaboration between MoA and its institutions and LGAs during mainstreaming of E&S in agriculture activities. Although the LGAs are responsible and have access to the communities, their E&S and other teams are considered stakeholders and not partners, lacking decision-making power and ownership of the agriculture



programs, such as those implemented by TARI, ASA, and NIRC. The collaboration between the MoA, its institutions, and the LGAs needs to be strengthened, and the roles and responsibilities of each actor will be clear during the implementation of the project.

- **Number of available staff for Environmental and Social Service Delivery:** The MoA and the NIRC have a unit responsible for E&S and appropriate staff capacity. However, its institutions have no unit or staff dedicated to E&S issues. Following this assessment, the implementing institutions will have a dedicated E&S team in place with the appropriate staff before the commencement of the operation. For PO-RALG and LGAs, the assessment found that the systems are in place for implementing the E&S under PforR operation, but they will need strengthening, especially on the IPF component.

13. **The MOA has experience in implementing and working with World Bank-financed and other donor-funded projects.** A case in point is the Agriculture Support Development Program (ASDP) and Expansion of Rice Production Project (ERPP) which were funded by the World Bank. It has GRMs and established conflict resolution mechanisms. MoA and NIRC have units responsible for E&S and appropriate staff capacity. However, some of its institutions such as TARI, and ASA have no dedicated units or staff to oversee E&S issues. This ESSA recommends all implementing institutions for this operation to have E&S teams with the appropriate staff before its commencement.
14. **At the local level (PO-RALG and LGAs), the ESSA found that the systems are in place for implementing the E&S under PforR Programs, but they will need strengthening in some areas.** Generally, LGAs have experience in implementing E&S issues under PforR Programs in education and health and the Investment Projects Financing (IPF) for projects like Secondary Education Quality Improvement Project (SEQUIP) and Boosting Primary Education Project (BOOST) financed by the World Bank. Some of the LGAs, such as Kilosa, Kilolo, and Mbalali, had implemented World Bank-financed agriculture and natural resources projects, namely Expansion of Rice Production Project (ERPP) and Resilient Natural Resource Management for Tourism and Growth Project (REGROW), respectively. LGAs also have systems for Grievance Redress Mechanism (GRM), budgeting for E&S activities, gender inclusions, handling of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA), interactions with the public, private sector and other stakeholders. However, it was noted that need to strengthen collaboration between MoA, its institutions (TARI, ASA and NIRC) and LGAs during mainstreaming of E&S in agriculture activities.
15. **Although the LGAs are responsible for E&S matters in their areas and have access to the communities, E&S personnel from LGAs are considered as participants and not partners in the implementation of agriculture projects by NIRC, TARI and ASA.** This situation deprives them the decision-making power on environment and social issues during implementation of agricultural program. It is important for the collaboration between the MoA, its institutions and the LGAs will be strengthened and each actor's roles and responsibilities will be clarified during the implementation of the PforR.
16. **The ESSA identified actions that will ensure satisfactory performance of environmental and social due diligence in the program (TFSRP).** These measures are linked closely with the Disbursement-linked Indicators (DLIs) for the PforR operation. The measures are defined in Table A5.1. Key actions from the table are embedded in the Program Action Plan for the TFSRP.



Table A5.1: Measures to Strengthen System Performance for Environmental and Social Management

Target Objective	Measures to be taken
Ensure effective implementation of the Tanzanian environmental and social management system for the PforR Program	<p>Strengthen capacity for monitoring, supervision and enforcement of Health, Safety, Security, and Environmental (HSSE) management measures by deploying Environmental and Socials Officers in all participating institutions.</p> <p>To ensure that ESIA's approved for irrigation infrastructure development, rural infrastructure, construction of marketing infrastructure, including construction of feeder roads adequately address Health and Safety issues, hydrology, stream ecology, and downstream use/users, pollution and soil and land degradation.</p> <p>MoA and other implementing agencies (TARI, ASA, NIRC and LGAs) will consult with the World Bank during the review. Implementing institutions will monitor ESMP implementation and E&S impacts and ensure ESMP compliance accordingly.</p> <p>All implementing institution to deploy E&S personnel to oversee environment and social issues.</p>
Enhance collaboration between MoA and its institutions and LGAs on E&S matters	MoA and PO-RALG to ensure that there is effective collaboration between MoA and its institutions and LGAs on E&S matters.
Protect workers and local communities against exploitation of labour, communicable diseases, GBV and SEA	MoA, ARI, ASA, NIRC and LGAs will maintain effective collaboration with OSHA and PMO-LEYPD on health, safety, and labor management issues.
	Operationalize the workers' code of conduct including GBV/SEA prevention and response.
	All FSRP projects registered with OSHA to enable them obtain statutory inspections.
	Mainstream Ministry of Health COVID-19 Management Protocol in all civil works and public consultation and engagement
	Train contractors on basics of the Employment and Labour Relations Act, No. 6 of 2004. Ensure employment contracts are consistent with the Act
	Ensure the operation's GRM is publicized to all affected people and contract workers.
Ensure land and way leave acquisitions proceed in accordance with Tanzania law and Regulations	<ul style="list-style-type: none"> Conduct due diligence on all proposed sites where construction of irrigation infrastructure, rural infrastructure, marketing infrastructure, and feeder roads is planned.



Promote sensitivity to environment and social issues among all implementing institutions.	<ul style="list-style-type: none"> • Provide environment and social training to all implementing teams, including top management to widen their understanding on E&S and PforR financing.
Strengthen procedures to promote equitable allocation of benefits and impacts of TFSRP	<ul style="list-style-type: none"> • Provide guidance for screening to detect the presence of vulnerable or disadvantaged groups, and measures for their consultation and participation so that that operation plans and designs take into consideration their needs, priorities, and preferences; • define mechanisms whereby vulnerable and disadvantaged groups will be provided with relevant information in local languages and in form and manner socially acceptable to them;

F. Consultations Process followed in the formulation of the ESSA

17. The ESSA process involved extensive consultations, field work, and discussions with project implementing institutions and other relevant partners, including: MoA and the National Irrigation Commission (NIRC); the Tanzania Agriculture Research Institute (TARI); and the Agriculture Seed Agency (ASA). The assessment also covered PO-RALG and the six selected Local Government Authorities (LGAs) specified in paragraph 3 above.
18. In total, the ESSA team met with 74 professionals working in agricultural sector and local government authorities including: Environmental and Social Officers at the MoA, Agricultural Researchers, Agricultural Engineers, Procurement and Accountants. Others were, District Executive Directors, District Agriculture and Irrigation Officers, District Community Development Officers, District Livestock Officers, District Human Resource Officers, Social Welfare, Gender Focal Point, Environmental Experts, Economists, District Planning and Coordination Officers, District Legal Officer, District Natural Resource Officer, District Treasurers, Land Surveyors, Agriculture Field Officer- Dabaga, Community Groups Representatives, and Politian (Member of Parliament- Kilolo). The lists of stakeholders met and their profile are included in annex I of the main ESSA report. The field work and consultations were conducted in October 2022 and further consultations were conducted between January and March 2023.
19. The consultation process noted several shortcomings in TFSRP implementing institutions at national and local level, in terms of meeting E&S requirements, which need to be improved to enhance environmental and social system. These informed the design of the TFSRP, including activities in the technical assistance. These shortcoming and proposed actions are explained below:
 - **Training to ensure adequate knowledge and skills among the environmental and social risk management staff:** E&S staff at the MOA and its institutions and the PO-RALG and LGAs will be trained on ESF and PforR equipped with the requirement of PforR for since this will be the first time for the MoA to implement the project under PforR financing. The training will be conducted periodically to bring them up to speed on the requirements of each ESS.



- **Changing perception of top management on environmental and issues:** Although top management is aware of E&S issues as described by the MoA officers, it is still important to train them, especially on the ESF (IPF component) and PforR financing, to widen their understanding and win more support. Given their time limit, a half-day training on ESF requirements will be helpful.
- **Ensuring availability of equipment for environmental and social risk management activities:** MOA is using a computer system to store its information, including those on E&S. Staff, including those for E&S at the LGA level, do not have equipment such as computers and GPS. GPS will be important for locating agriculture project areas sensitive to E&S issues. A few computers, handheld GPS, and other minor equipment will be bought to facilitate E&S staff at the LGA (district) level.
- **Effective implementation of environmental and social management documents at the lower level:** The MoA has prepared several ESF documents to guide the implementation of the ongoing Agriculture Support Development Program (ASDP) and Expansion of Rice Production Project (ERPP). Apart from ESMF and RPF, the MOA has also prepared environment and social documents, such as the Environmental and Social Management Plan (ESMP) and Integrated Pest Management Plan (IPMP). For the operation-supported activities, the MoA will prepare E&S risk management documents using government policies, laws, and guidelines. The following are recommended to ensure the effective implementation of the documents mentioned above at the lower level:
 - Guidelines for E&S risk management will be prepared in a language that is easily understandable even to low cadre community members in LGAs.
 - They will not be bulky or confusing and will be user-friendly for local users, especially using Kiswahili where possible and necessary.
 - Pictures and Images will be used to replace the text where possible and appropriate for easy understanding.

20. Actions required for capacity building:

- Conduct ESF training for each district team in all participating LGAs to enable them to understand the requirements of the ESF, which will apply to the IPF component.
- Conduct at least one training on ESF for the MOA management team.
- Follow-up training for district E&S officers will be conducted at least once a year

21. As a necessary measure to ensure transparency and wider stakeholders consultation ESSA report was disclosed on March 26, and April 7, 2023 on the World Bank and MoA websites respectively.

G. Grievance Redress Mechanism

22. **Under the Environment Management Act**, there is a procedure related to grievances with respect to decisions about granting the Environmental Impact Assessment certificate. Grievance Redress Mechanisms are in place and will be strengthened to ensure that stakeholders have an effective platform to seek redress or resolve any dispute that may arise during the implementation of the Program sub-projects. The institutional structure and capacity for implementing the relevant laws and regulations, including information on the relevant record of accomplishment.



H. Conclusion

23. **The ESSA confirms that, with strengthening the identified shortcomings Tanzania’s environmental and social management system is adequate to effectively address the environmental, health, safety, and social risks associated with the TFSRP.** The MoA and its key implementing institutions (TARI, ASA, NIRC and LGAs) have experience in working with the World Bank. There are also opportunities to further strengthen environmental and social management capacity and enhance performance at the program level and further defined during the consultation process and during implementation, as required. The analysis identified the following main areas for action in order to ensure that the TFSRP interventions are aligned with the core principles of the World Bank Policy on Program-for-Results Financing. A detailed list of measures to strengthen system performance for environmental and social management for the Program are included in Table 8 of the ESSA report.



ANNEX 6. PROGRAM ACTION PLAN

Action Description	Source	DLI#	Responsibility	Timing		Completion Measurement
Develop Digital Agriculture Guidelines	Technical	DLI 2	MoA	Other	Guidelines Completed and Approved by MoA Management by December 31, 2023	Guidelines Completed and Approved by MoA Management
Develop Warehouse Guidelines	Technical	DLI 4	MoA	Other	Guidelines Completed and Approved by MoA Management	Guidelines Completed and Approved by MoA Management
Develop and implement an action plan to strengthen the MoA's Monitoring and Evaluation System, including a program specific Management Information System (MIS) for irrigation.	Technical		MoA	Other	System designed and approved by Senior Management by the end of Year 1 Action Plan Implemented years 2-5	Action Plan Developed Progress Report
Design and Implement the Women's Empowerment in Agriculture Index (WEAI) – in three crop value chains	Technical		MoA	Other	The design is developed and approved by Senior Management by the end of Year 1 Action Plan Implemented years 2-5	WEAI designed and measured
Develop and Implement Guidelines to	Technical	DLI 4	MoA/NIRC	Other	Systems to be in place in one year	Guidelines Completed and Approved by MoA Management



support the implementation of Improved OMM Systems (see verification protocols for specifications of the guidelines).					of Program effectiveness Implementation is to be tracked every six months	
Develop a Roadmap for Soil Carbon financing (including a costed proposal for MRV design).	Technical		MoA and MoFP	Other	Guidelines for subsidy program developed by the end of Year 2 Roadmap for carbon financing developed by the end of year 4.	Annual Progress Reports
Strengthen environmental and social management system by ensuring E&S personnel are in place and training is given to the E&S staff to all implementing institutions (MoA, TARI, ASA, NIRC, and LGAs)	Environmental and Social Systems		MoA, TARI, ASA, NIRC and LGAs	Other	Within six months of effectiveness	Sign Collaborative MoU between the MoA, its institutions (TARI, ASA, NIRC) and PORALG (LGAs). The MoU to clarify each actor's roles and responsibilities during the project implementation
Measure Fiduciary Key Performance Indicators (procurement lead time, competition, % contract award publication, % re-tender, % contracts with cost / time overrun, audit with no material deviations, timeliness of audit, timeliness of fund release).	Fiduciary Systems		MoA and PORALG	Recurrent	Yearly	Procurement and VFM audit reports
Conduct annual independent procurement audits of the program as well as value for money (VFM)	Fiduciary Systems		MOA and PORALG	Other	Procurement audits - after year 1 of implementation and	Procurement and VFM audit reports



audits by IAG and CAG					after that annually, and (ii) VFM audit at mid-term and end of the program	
Share information on corruption allegations with the World Bank immediately and at least a semi-annual report on reported fraud and corruption cases pertaining to the program and actions taken	Fiduciary Systems		MOA	Recurrent	Semi-Annually	Promptly – Notification on Fraud allegation when received and Semi-Annually – For report on reported allegations and actions taken
Ensure that persons or firms debarred or suspended by the Bank are not awarded a contract under the Program during the debarment or suspension period. Annual procurement audit includes requirement for the eligibility verification on a random basis	Fiduciary Systems		MOA, PO-RALG, LGAs, IAs	Recurrent	Semi-Annually	List of contracts awarded to be submitted to the Bank every six month clearly indicating eligibility check was done before awarding the contracts. Procurement audits carried out once every year



ANNEX 7. IMPLEMENTATION SUPPORT PLAN

Main focus of Implementation Support

1. The World Bank will provide routine implementation support to the operation using a team of technical specialists from the health practice, fiduciary, environmental and social management, and operations. The team will require additional support towards M&E and civil works activities and will recruit short-term consultants. The World Bank team will undertake a minimum of two field missions annually throughout the implementation of the operation. In addition, the country-based team members will provide regular hands-on support to the government team as necessary. Further, an annual fiduciary review will be conducted for the Program supported by the CAG and IAG. An adequate budget will need to be allocated for this review. This review will be supplemented by on-site visits by the World Bank's fiduciary staff at least twice a year and the annual audit reports produced by the CAG. In addition, desk reviews will be conducted for audit, financial, procurement and any other reports received during the financial year. In-depth reviews may also be commissioned by the World Bank whenever deemed necessary. The World Bank will work in close coordination with other development partners to leverage their expertise and resources.

Time	Focus	Skills Needed	Resources Estimate	Partner Role
First twelve months	Institutional capacity enhancement at the national level to strengthen country systems in the Mainland and Zanzibar. Technical advice to support Program implementation.	Technical, fiduciary, environment and social.	Two implementation support visits by technical specialists focused on capacity building, technical assistance, and monitoring. Two implementation support visits by fiduciary specialists focused on capacity building. One implementation support visit by E&S specialists focused on monitoring compliance and capacity building.	Provision of reports, audits, verification reports and technical skills as required.
12-48 months	Institutional capacity enhancement at the local and regional levels to strengthen implementation capacity both Mainland and Zanzibar. Implementation monitoring.	Technical (including M&E), fiduciary, environment, and social.	Two implementation support visits (Zanzibar and Mainland) by technical and fiduciary specialists focused on fiduciary support and implementation support. One implementation support visit (Zanzibar and Mainland) by social and environmental specialists focused on strengthening local	Provision of reports, audits, verification reports and technical skills as required.



	Technical advice to support program implementation.		capacity and implementation support.	
Other				

Task Team Skills Mix Requirements for Implementation Support

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Irrigation	3	2	
M&E	3	2	
Seed Sector Reform	3	2	
ICT	4	2	
Carbon Finance	2	1	



ANNEX 8. FIDUCIARY ASPECTS OF THE INVESTMENT PROJECT FINANCING COMPONENT

A. Financial Management and Disbursement

2. The financial management assessment was conducted for the Ministry of Agriculture, Irrigation, Natural Resources and Livestock of the Revolutionary Government of Zanzibar in accordance with the World Bank Policy on Investment Project Financing.
3. **Financial management risk assessment is rated as substantial.** The following risks are identified: (i) there is no process for budget revisions during the year; (ii) funds released is generally lower than planned affecting reliability of the budget; (iii) limited number and frequent rotation of accounting staff of the ministry; (iv) the accounting records are maintained in excel worksheet hence prone to limitations in audit trail; (v) limited number of internal auditors to conduct regular reviews; (vi) delays in conducting external audit reviews. Mitigation measures include: (i) preparation of detailed project budget which will provide guidance in defining project expenditure classification. The World Bank will provide the financial reporting template for maintenance and reporting of project records basing on identified budget categories; (ii) annual work plan and budget will be submitted to the World Bank by March each year to meet ministerial budget timeframe; (iii) project budget performance will be reported to the World Bank on quarterly basis through IFRs. The same report will be used to request for funds disbursement; (iv) the project will hire a project accountant as condition for disbursement. Terms of reference for the accountant will be submitted to the World Bank for clearance. (v) capacity building training on World bank procedures will be conducted for the project team including internal audit staff; (vi) internal audit for the project will be conducted at least twice per annum; and (vii) project will maintain fixed asset register to track assets procured by the project. The details of financial management structure and systems are further explained below.
4. **The project will prepare itemized Annual Work Plan and Budget and submit to World Bank for deliberation by March each year.** Project activities and cost estimates will be established on annual basis. The ministry prepares budgets for its departments and share with President's Office Finance and Planning (POFP) in April each year. Budget is prepared in form of a three-year Medium-Term Expenditure Framework (MTEF) which is an activity-based budget. Budget is documented in excel worksheets. Budget is submitted to House of Representative in May each year for approval. Development budget funded by donors incorporated in government budget system. There is no process for budget revisions during the fiscal year.
5. **On a monthly basis, ceiling committee will approve funds release basing on cashflow forecast.** Project budget performance (plan against actual expenditure) will be reported to the World Bank on quarterly basis through unaudited interim financial reports. Funds released will vary from the budget affecting reliability of the budget. Significant variations in budget execution will be explained in the report.
6. **Funds for project activities will be disbursed by the World Bank to the designated bank account maintained at Bank of Tanzania (BoT) for project purpose.** There will be two separate designated bank accounts maintained for IPF component, for Mainland and for Zanzibar. BOT is the central bank to both Tanzania Mainland and the Revolutionary Government of Zanzibar (RGOZ) for receiving external finance. Thereafter, funds will be transferred to designated bank account at Peoples Bank of Zanzibar (PBZ) for project expenditure purpose. Bank signatories to the Designated Account at PBZ will operate under the existing ministry procedures. In addition, disbursement and accountability of funds from World Bank to RGOZ will be guided



by a subsidiary financing agreement. The subsidiary agreement will be acceptable to World Bank as a condition for effectiveness.

7. **On a quarterly basis, the project will prepare six months rolling cash forecast and include in the unaudited interim financial reports as a basis for disbursements.** IFRs reports on funds received and expenditure incurred for the quarter along with forecast of six months cash requirements for the project. IFRs will be submitted to World Bank within 45 days after the end of the quarter. Other disbursement methods (reimbursement, direct payments and special commitments) will be applicable when needed. IFR template will be provided and further explained in Disbursement and Financial Information Letter.
8. **Project financial records will be maintained manually in excel worksheet** as the ministry does not have an accounting software to maintain project records. Project will use the existing chart of accounts (GFS codes) for classification of project financial transactions. Project documents and reports will be filed in specific project files to facilitate audit trail.
9. **The project will require a dedicated Project Accountant to be allocated to facilitate project activities.** The ministry has limited number of accounting staff (a total of 5 Accountants) to manage project financial affairs. Project Accountant will report technically to Chief Accountant of the Ministry and where necessary segregate some tasks to other Accountants for control purpose. All government accountants are employees of POFP and would regularly rotate to different government institutions. World Bank will train staff on World Bank disbursement and reporting procedures including the use of client connection.
10. **The project will prepare its annual financial statements on IPSAS cash basis of accounting.** The project will adopt ministry reporting template used for IPSAS cash basis for preparation of project annual financial statements. Annual financial statements will be submitted to CAG for audit.
11. **Internal control systems of the ministry will guide authorization of project expenditure.** Financial management systems are guided by the Zanzibar Public Finance Management Act No. 12 of 2016 and the Public Procurement and Disposal of Public Assets Act, No. 11 of 2016. The Principal Secretary of the Ministry would be the overall Accounting Officer of the Project. Project Accountant will be responsible for processing project transactions and reports to Chief Accountant. The current practice, assets are procured and managed by the project and information will be provided to the ministry when project is closing. Assets to be disposed are reported to POFP who will provide indicative prices for auction and receive sales proceeds. Project will maintain fixed assets register and regularly reporting in the financial statements.
12. **Internal audit of the project will be conducted at least twice per annum and reports made available to World Bank upon request.** The Internal audit unit of the ministry is manned with 3 internal auditors. Although the unit conducts quarterly audit reviews, the likelihood of the project to be reviewed will be a maximum of twice per annum. Audit plan identifies quarterly activities and audited entity (department or project). The unit reports to the Audit Committee of the ministry and to the Internal Auditor General of Zanzibar. Audit Committee has 5 members who are selected amongst the heads of departments within the ministry and one external from POFP. Other challenges faced by internal audit unit include: (i) delays in responding by auditees to internal audit findings; (ii) inaccurate progress implementation status reported by the auditees; and (iii) lack of adequate budget to finance audit activities.



13. **External audit of the project annual financial statements will be performed by the Controller and Auditor General of Zanzibar on an annual basis.** Articles 112 and 113 of the 1984 Constitution of ROGZ establish the position, appointment and removal, and basic mandate of the CAG. The establishment of the Office of Controller and Auditor General Act, No.11 of 2003 has elaborated the duties of the CAG and established the Audit Service Board to manage audit personnel. Project audit will be in accordance with International Standards of Auditing. As observed in PEFA 2019 report, the capacity of CAG is assessed as it requires capacity building in technical knowledge to comply with international standards and timeliness in reporting of audit results. Audit report and management letter on project internal control environment will be submitted to the World Bank within 6 months after the end of fiscal year, that is, by 31st December each year. While the project management letter will remain confidential, audited financial statements will be made public in accordance with World Bank Policy on Access to Information.

Table A8.1: Financial Management Action Plan

	<i>Required action</i>	<i>Due date</i>	<i>Responsible party</i>
1.	Subsidiary financing agreement between MOFP and RGOZ.	Condition for effectiveness	MOFP and POFP Zanzibar
2.	Hiring of Project Accountant in accordance with Terms of Reference agreed with the Bank.	Condition for disbursement	Ministry of Agriculture, Irrigation, Natural Resources and Livestock
3.	Development of interim financial reporting template	Before project effectiveness	World Bank and Ministry

B. Institutional and Implementation Arrangements

14. **Project Management Team will be established in the MAINRL**, led by the Director of Policy and Planning, assisted by focal persons from Irrigation Department, ZARI, and Seed Unit, Department of Agriculture and specialists in financial management (one accountant), procurement, environment and social (one environmental and one social with Gender-Based Violence knowledge), monitoring and evaluation, inclusion and diversity, and ICT. The Directors of Policy and Planning Zanzibar will be responsible for assuring the coordinated delivery of financial and technical progress reports for both areas. The Team will also facilitate the Joint Steering Committee meetings and work closely with the MoA, development partners and technical assistance consultants.

C. Procurement Arrangements – MAINRL Zanzibar

15. **Procurement activities under the IPF component will be carried out in accordance with the following World Bank procedures:** (a) the World Bank Procurement Regulations for IPF Borrowers, dated November 2020; (b) Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016; and (c) other provisions stipulated in the Financing Agreements.
16. **As required by the Procurement Regulations, a Project Procurement Strategy for Development (PPSD) for IPF component has been developed**, based on which a Procurement Plan (PP) covering activities in IPF component for a least the first 18 months will be prepared setting out the selection methods to be followed



by the Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL) in the procurement of goods, works, non-consulting and consulting services financed by the World Bank. The PP will be updated at least every 12 months, or as required, to reflect the actual project implementation needs. Each update of the PP will require World Bank approval. All PPs will be publicly disclosed in accordance with the World Bank disclosure policy.

17. **Systematic Tracking of Exchanges in Procurement (STEP).** The World Bank's STEP system will be used to prepare, clear, and update PPs and to conduct all procurement transactions of the project. Previously MAINRL has implemented the Tanzania Expanding Rice Production (P144497) which was closed January 31, 2021, however none of the involved procurement staffs are still working with the Ministry. MAINRL PMU staff will be trained in STEP, as necessary, by the World Bank.
18. **Procurement Documents.** The World Bank's standard procurement documents (SPDs) will be used for procurement of goods, works, and non-consulting services under the Open International Competitive Procurement. Similarly, selection of consultant firms will use the World Bank's SPDs, in line with procedures described in the Procurement Regulations. While approaching the national market using National Procurement Procedures, the national standard bidding documents may be used with appropriate modifications acceptable to the World Bank and additional annexes to incorporate the World Bank's Anti-Corruption Guidelines, universal eligibility, and the World Bank's right to inspection and audit. Procurement procedures will be consistent with the Bank's Core Procurement Principles and contractual remedies set out in its Financing Agreement apply.
19. **National Open Competitive Procedures (NOCP).** NOCP may also be used, provided that such procedures are consistent with the following requirements as provided in paragraph 5.4 of the Procurement Regulations: (a) there is open advertising of the procurement opportunity at the national level; (b) the procurement is open to eligible firms from any country; (c) procurement documents include provisions, as agreed with the World Bank, intended to adequately mitigate against environmental, social (including SEA and GBV), health, and safety ('ESHS') risks and impacts; (d) contracts have an appropriate allocation of responsibilities, risks, and liabilities; (e) contract award information is published; (f) the World Bank has rights to review procurement documentation and activities; (g) there is an effective complaints handling mechanism; and (i) records of the procurement process are maintained. Standard bidding documents based on the Legal Framework in Zanzibar, with required adjustments as required and cleared by the World Bank, may be used for NOCP. If necessary, the implementing agencies may use the World Bank's SPDs for NOCP, in agreement with the World Bank.
20. **Other national procurement arrangements (other than NOCP)** that may be applied by the borrower (such as limited/restricted competitive bidding, request for quotation/shopping, or direct contracting) will be consistent with the World Bank's core procurement principles set out in paragraph 5.3 of the Procurement Regulations and ensure that the World Bank's Anti-Corruption Guidelines and Sanctions Framework and contractual remedies set out in its Financing Agreement apply.
21. **Publication (advertising).** The borrower is required to prepare and submit to the World Bank a General Procurement Notice. The World Bank will arrange for its publication in United Nations Development Business online (UNDB online) and on the World Bank's external website. Specific Procurement Notices for all procurement under International Competitive Procurement procedures and Requests for Expressions of Interest for all consulting services estimated to equivalent to US\$300,000 and above will be published in UNDB



online and the World Bank's external website and at least one newspaper of national circulation in the borrower's country or in the official gazette or on a widely used website or electronic portal with free national and international access.

22. **Public procurement activities in Zanzibar are governed by the Public Procurement and Disposal of Public Assets (ZPPDPA) Act No. 11 of 2016 and its Procurement Regulations of 2021.** The act repealed the Public Procurement and Disposal of Public Assets Act, No. 9 of 2005. The Zanzibar Public Procurement and Disposal Authority (ZPPDA) issued some of the standard bidding documents in July 2021 which are in line with the Act and Regulations. All these documents are accessible on the ZPPDA's websites free of charge.
23. **Zanzibar has established an e-Procurement System, E-Procurement Zanzibar (e-ProZ).** From July 2022, all procurement activities which are funded by the government through the e-ProZ. For the e-ProZ to be used for procurement activities under World Bank-funded projects, the Bank will assess and validated the system on its compliance with the MDB's e-Tendering Guidelines. At present, the Bank is carrying out the assessment of the system and once the assessment is completed the Bank will share the report the government and its decision whether the system can be used on procurement activities under the World Bank funded projects.
24. **Procurement implementation arrangements.** Procurement activities under the Project will be carried out by the MAINRL. MAINRL will establish a PMT to oversee general project coordination, procurement, financial management, monitoring and evaluation and E&S supervision. The PMT will be responsible for the day-to-day management of the procurement activities of the project. The PMT will work closely with the MAINRL's Procurement Management and Disposal Unit (PMDU) to carry out procurement activities of the project as per requirements of the ZPPDPA Act and its Regulations especially in processing the internal clearances. PMT will work closely with the user departments which will be involved in the project implementation. The user departments will be responsible for consolidating the needs and requirements, preparing specifications, terms of references, involved in evaluations, inspecting delivered medicines and managing the resulting contracts.
25. **A procurement capacity assessment of the MAINRL was carried out in November 2022.** The assessment included a review of the organizational structure, functions, staff skills and experience, and adequacy for implementation of the project and the interaction with the relevant departments within the ministries involved in procurement process. MAINRL has established all the necessary organs for adjudicating and managing procurement activities in accordance with the ZPPDPA Act and its Regulations. The assessment revealed that MAINRL has the experience of implementing World Bank funded project based on previous Tanzania Expanding Rice Production (P144497) which was closed December 31, 2021, although none of the involved procurement staffs are still working with the Ministry, they have either retired or transferred to other institutions. Currently, PMDU has four staff with limited experience in managing procurement of large and complex works, goods, and consulting services, in accordance with World Bank Procurement Regulations including use of STEP. Further, the assessment revealed that: (i) staffing level is inadequate to cope with volume of procurement transactions; (ii) frequent transfer of the procurement and PMDU staffs - newly appointed/recruited staffs take time to understand issues related sector's procurement activities and procedures; (iii) PDMUs and User Departments staff have inadequate knowledge and skills/experience in contract and claims management i.e. performance securities not submitted by the contractors; contracts are not completed on time and delays in paying vendor; (iv) inefficiencies in processing procurement activities in terms of preparation of Terms of References (ToRs), specifications, bidding documents, request for proposals,



and bids/proposals evaluations; (v) lack of awareness and low capacity of the ministry staff and local construction industry to comply with ESHS requirements; and (vi) inadequate office space and office facilities and (vii) inadequate records filing , storage space and management system.

26. **The overall procurement risk was assessed to be High.** The residual risk after implementation of the mitigation measures is **Moderate**. Details of the mitigation measures to address the identified risks and action plan are proposed in Table A8.2 below.

Table A8.2: Procurement Risks and Mitigation Measures

Risk	Mitigation Measure	Timeframe	Responsibility
PDMU staff have inadequate experience in managing procurement of complex works, goods and consulting services; in accordance with World Bank Procurement Regulations and procedures, including use of STEP;	Provide training on the World Bank Procurement Regulations and procedures, including use of STEP. For sustainability reasons, MAINRL will prepare a capacity-building plan for the TBs, PDMUs, and technical departments.	Throughout project implementation	MAINRL
Staffing level is inadequate to cope with volume of procurement transactions and frequent staff transfers	Deploy two additional staffs and recruit a Procurement Specialist to support and build capacity of the MAINRL apart from assisting in processing procurement activities. The strategy would be to build capacity of the PDMU and users departments and not staffs implementing project's activities.	Withdrawal condition	MAINRL
Inefficiencies in processing, approving, and managing procurement activities	Ensure procurements are processed as per the timelines in the procurement plans, including timely Tender Board approvals, preparation of ToRs and specifications by user and technical departments	Throughout project implementation	MAINRL
PDMUs and User Departments staff have inadequate knowledge and skills/experience in contract and claims management	Conduct training tailored toward addressing weaknesses in contract management for PDMU staff and technical departments of the Ministry.	Throughout project implementation project	MAINRL
Inadequate records keeping system and storage space and lack of working facilities	Establish a sound filling and records management system. Provide storage and working facilities	Throughout project implementation	MAINRL
Delays in paying contractors, consultants, and suppliers on time per the terms of the contracts.	MAINRL to expedite approving processes to ensure funds are released timely to the projects.	Throughout project implementation	MAINRL/ MOFP
Lack of awareness and low capacity of the MAINRL staff and local construction industry to comply with ESF requirements	Create awareness and conduct a training on ESHS for the project staff, potential contractors, and consulting firms. Further, contracts will have	Throughout project implementation	MAINRL



Risk	Mitigation Measure	Timeframe	Responsibility
	adequate provisions of ESFF requirements and effective contract management.		

27. **Procurement oversight and monitoring arrangements.** The World Bank exercises its procurement oversight through a risk-based approach comprising prior and post reviews as appropriate. The World Bank sets mandatory thresholds for prior review based on the procurement risk rating of the project. The requirement for a prior or post review will be specified in the PP. The World Bank will carry out post reviews of procurement activities undertaken by the borrower to determine whether they comply with the requirements of the Legal Agreement. The World Bank may also use the services of the ZPPDA for carrying out post reviews for the project.
28. **Since the assessed procurement risk rating is ‘High’,** MAINRL will seek the World Bank’s prior review for contracts of value equivalent to the thresholds, as detailed in Table A8.3 below.

Table A8.3: Thresholds for procurement approaches and methods

Thresholds for Procurement Approaches and Methods (US\$ millions)–Goods, Works, and Non-Consulting Services				
Category	Prior Review (US\$ millions)	Open International	Open National	Request for Quotation (RfQ)
Works	≥ 5	≥ 15.0	< 15	≤ 0.2
Goods, IT, and non-consulting services	≥ 1.5	≥ 5	< 5	≤ 0.1
Thresholds for Procurement Approaches and Methods (US\$, millions) – Consulting Services				
Category	Prior (US\$, millions)	Revie	Short List of National Consultants	
			Consulting Services	Engineering and Construction Supervision
Consultants (Firms)	≥ 0.5		≤ 0.3	≤ 0.3
Individual Consultants	≥ 0.2		n.a.	n.a.

29. **Frequency of procurement supervision.** In addition to the prior review supervision to be carried out by the World Bank, the capacity assessment of the IAs recommends one supervision mission every six months to visit the field to carry out post review of procurement actions.



30. **Training and workshops.** The project will finance training and workshops, if required, based on an annual training plan and budget, which will be submitted to the World Bank for its prior review and approval. The annual training plan will identify, among other things: (a) the training envisaged; (b) the justification for the training; (c) the personnel to be trained, including staff in regional offices; (d) the duration for such training; and (e) the estimated cost of the training. At the time of the actual training, the request will be submitted to the World Bank for review and approval. Upon completion of the training, the trainees will be required to prepare and submit a report on the training received.