

Document of
The World Bank
FOR OFFICIAL USE ONLY

Report No: 48549-TZ

ACCELERATED FOOD SECURITY PROGRAM
OF THE
UNITED REPUBLIC OF TANZANIA
UNDER THE GLOBAL FOOD CRISIS RESPONSE PROGRAM

EMERGENCY PROGRAM PAPER

FOR

A PROPOSED CREDIT
IN THE AMOUNT OF SDR 107.2 MILLION
(US\$160 MILLION EQUIVALENT)
FOR THE
ACCELERATED FOOD SECURITY PROJECT

A PROPOSED ADDITIONAL FINANCING CREDIT
IN THE AMOUNT OF SDR 20.2 MILLION
(US\$30 MILLION EQUIVALENT)
FOR THE
AGRICULTURAL SECTOR DEVELOPMENT PROJECT (ASDP)

AND

A PROPOSED ADDITIONAL FINANCING CREDIT
IN THE AMOUNT OF SDR 20.2 MILLION
(US\$30 MILLION EQUIVALENT)
FOR THE
TANZANIA SECOND SOCIAL ACTION FUND (TASAF II)

May 27, 2009

Agriculture and Rural Development
Human Development 1
Country Department 1
Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of April 30, 2009)

Currency Unit = Tanzania Shilling (Tsh)
Tsh 1,300 = US\$1
US\$ = SDR 0.67

TANZANIA GOVERNMENT FISCAL YEAR
July 1 – June 30

ABBREVIATIONS AND ACRONYMS

ACT	Agricultural Council of Tanzania
ADB	African Development Bank
AEZ	Agro-ecological zone
AF	Additional Financing
AFSP	Accelerated Food Security Project
AFTAR	Agricultural and Rural Development Unit, Africa Region, The World Bank
AFTH1	Human Development Unit 1, Africa Region, The World Bank
AgPER	Agriculture Sector Public Expenditure Review
AGRA	Alliance for a Green Revolution in Africa
AIS	Agricultural Inputs Section
APL	Adaptable Program Loan
ARI	Agriculture Research Institute
ASA	Agriculture Seed Agency
ASDP	Agricultural Sector Development Program
ASDS	Agricultural Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries
AWPB	Annual Work Plans and Budgets
BoP	Balance of Payments
BP	Bank Practice
CAG	Controller and Auditor General
CAS	Country Assistance Strategy
CB-CCT	Community-Based Conditional Cash Transfer
CCT	Conditional Cash Transfer
CDD	Community Driven Development
CE	Capacity Enhancement
CERF	United Nations Central Emergency Response Fund
CIA	Cumulative Impact Assessment
CNFA	Citizens Network for Foreign Affairs
COR	Client-Oriented Research
CPAR	Country Procurement Assessment Report
CSO	Civil Society Organization
CQS	Consultant's Qualifications
CORDEMA	Client Oriented Research and Development Management Approach
CPI	Consumer Price Index
DADP	District Agricultural Development Plan

DADG	District Agricultural Development Grant
DALDO	District Agriculture and Livestock Officer
DAP	Di-ammonium phosphate
DC	Direct Contracting
DED	District Executive Director
DCDG	District Capacity Development Grant
DEBG	District Extension Bloc Grant
DEC	Development Economics Vice Presidency, The World Bank
DFA	Development Financing Agreement
DfID	Department for International Development (UK)
DFT	District Facilitation Team
DIDF	District Irrigation Development Fund
DP	Development Partners
DRC	Democratic Republic of Congo
DRD	Department of Research and Development
DVC	District Voucher Committee
EA	Environmental Assessment
EAAPP	Eastern Africa Agricultural Productivity Project
EAC	East African Community
EAGC	East Africa Grain Council
EDTA	Ethylenediaminetetraacetic acid
EIA	Environment Impact Assessment
EMP	Environmental Management Plan
EPP	Emergency Project Paper
E-PRA	Extended Participatory Rural Assessment
ERL	Emergency Recovery Loan
ERR	Economic Rate of Return
ESMF	Environmental and Social Management Framework
ET	Evapotranspiration
EU	European Union
FA	Financing Agreement
FAO	Food and Agriculture Organization of the United Nations
FBS	Fixed Budget Selection
FEWSNET	Food Early Warning System Network
FI	Food Insecure
FM	Financial Management
FMR	Financial Monitoring Report
FOB	Free on Board
FSA	Farming Systems Approach
FSDT	Financial Sector Deepening Trust
FY	Financial Year
GDP	Gross Domestic Product
GFRP	Global Food Crisis Response Program
GoT	Government of Tanzania
ha	Hectare
HBS	Household Budget Survey
HIV–AIDS	Human Immunodeficiency Virus–Acquired Immune Deficiency Syndrome
IAS	International Accounting Standards
ICB	International Competitive Bidding
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFDC	International Fertilizer Development Center

IFMS	Integrated Financial Management System
IFPRI	International Food Policy Research Institute
IFR	Interim Financial Report
IMF	International Monetary Fund
INMP	Integrated Nutrient Management Plan
IO	Irrigator Organization
IPMP	Integrated Pest Management Plan
IPNM	Integrated plan nutrition management
IRR	Internal Rate of Return
ISFM	Integrated Soil Fertility Management
JAST	Joint Assistance Strategy for Tanzania
JIR	Joint Implementation Review
kg	Kilograms
LCS	Least Cost Selection
LGA	Local Government Authorities
LIA	Limited Impact Assessment
LSP	Local Service Provider
M&E	Monitoring and Evaluation
MAFC	Ministry of Agriculture, Food Security and Cooperatives
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania
MoFEA	Ministry of Finance and Economic Affairs
MoU	Memorandum of Understanding
MoWI	Ministry of Water and Irrigation
MRP	Minjingu rock phosphate
MSV	Maize streak virus
MTEF	Medium Term Expenditure Framework
MTR	Mid-Term Review
MU	Management Unit
NAIVS	National Agricultural Input Voucher Scheme
NAO	National Audit Office
NBS	National Bureau of Statistics
NCB	National Competitive Bidding
NFT	National Facilitation Team
NGOs	Nongovernmental organizations
NIDF	National Irrigation Development Fund
NMB	National Microfinance Bank
NPK	Nitrogen, Phosphorus, Potassium
NPV	Net Present Value
NSGRP	National Strategy for Growth and Reduction of Poverty
NVF	National Village Fund
NVSC	National Voucher Steering Committee
OP	Operational Policy
OPEC	Organization of Petroleum Exporting Countries
P4P	Purchase for Progress
PADEP	Participatory Agricultural Development and Empowerment Project
PCR	Project Completion Review
PER	Public Expenditure Review
PDO	Project Development Objective
PFM	Public Financial Management
PHS	Plant Health Services
PIM	Project Implementation Manual
PMO	Prime Minister's Office

PMUs	Procurement Management Units
PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
PPA	Public Procurement Act
PPAA	Public Procurement Appeals Authority
PPRA	Public Procurement Regulatory Authority
PRSC	Poverty Reduction Support Credit
PS	Permanent Secretary
PSIA	Poverty and Social Impact Assessment
PSO	Permanent Supplies Officer
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
RBMSIIP	River Basin Management and Smallholder Irrigation Improvement Project
RPF	Resettlement Policy Framework
RVC	Regional Voucher Committee
RYMV	Rice yellow mottle virus
SACCAs	Savings and Credit Associations
SACCOs	Savings and Credit Cooperatives
SBD	Standard Bidding Document
SESA	Strategic Environmental and Social Assessment
SLM	Soil and land management
SSS	Single Source Selection
SUA	Sokoine University of Agriculture
t	Metric ton
TACAD	Tanzania Agro-dealer Capacity Deepening Program
TASAF	Tanzania Social Action Fund
TASTA	Tanzania Seed Traders Association
TOSCI	Tanzania Official Seed Certification Institute
TPRI	Tropical Pesticides Research Institute
Tsh	Tanzanian Shillings
TSP	Triple superphosphate
UN	United Nations
USAID	United States Agency for International Development
US\$	United States Dollars
VVC	Village Voucher Committee
WFP	World Food Program
WFT	Ward Facilitation Team
ZARDEF	Zonal Agricultural Research Fund
ZARDI	Zonal Agricultural Research Institute
ZIELU	Zonal Information and Extension Liaison Unit
ZITSU	Zonal Irrigation Technical Service Units

Vice President:	Obiageli Katryn Ezekwesili
Country Director:	John Murray McIntire
Sector Manager:	Karen McConnell Brooks Christopher J. Thomas
Task Team Leader:	Madhur Gautam (Task Team Leader – AFSP) Sergiy Zorya (Co- Task Team Leader – AFSP) Zainab Z. Semgalawe (Task Team Leader – AF ASDP) Ida Manjolo (Task Team Leader – AF TASAF II)

UNITED REPUBLIC OF TANZANIA

ACCELERATED FOOD SECURITY PROGRAM

TABLE OF CONTENTS

A.	INTRODUCTION.....	1
B.	MACROECONOMIC CONTEXT	2
C.	SECTOR CONTEXT	9
D.	SECTOR STRATEGY	15
E.	RATIONALE FOR THE PROPOSED PROGRAM AND BANK STRATEGY	17
F.	THE ACCELERATED FOOD SECURITY PROGRAM	18
G.	FINANCING PLAN.....	21
H.	APPRAISAL OF PROJECT ACTIVITIES.....	22
I.	TECHNICAL ANALYSIS	27
J.	IMPLEMENTATION ARRANGEMENTS.....	27
K.	PROJECT RISKS AND MITIGATING MEASURES	27
L.	TERMS AND CONDITIONS FOR PROJECT FINANCING.....	32
	Annex 1: Trends in prices of food staples (white maize and rice) in Tanzania, 2002–09.....	33
	ATTACHMENT A: ACCELERATED FOOD SECURITY PROJECT.....	35
I.	Introduction.....	35
II.	Project Objective and Description	35
III.	Project Cost.....	48
IV.	Implementation Arrangements.....	48
V.	Appraisal of Project Activities.....	52
VI.	Benefits and Risks.....	61
VII.	Financial Terms and Conditions	65
	Annex A.1: Results Framework and Monitoring and Evaluation Arrangements.....	66
	Annex A.2: Lessons from Subsidizing Inputs in Tanzania and Malawi.....	71
	Annex A.3: Procurement Arrangements.....	76
	Annex A.4: Financial Management and Disbursement Arrangements	84
	Annex A.5: Safeguards	98
	Annex A.6: Economic and Financial Analysis	103
	Annex A.7: Institutional and Implementation Arrangements, Roles, and Responsibilities	111
	Annex A.8: Voucher Program Roll-Out	122
	Annex A.9: Detailed Project Costs	123

ATTACHMENT B: ADDITIONAL FINANCING FOR AGRICULTURAL SECTOR DEVELOPMENT PROJECT (ASDP) 125

I.	Introduction.....	125
II.	Background and Rationale for Additional Financing.....	125
III.	Proposed Approach and Changes.....	129
IV.	Consistency with CAS.....	130
V.	Appraisal of Scaled-up Activities.....	131
VI.	Expected Outcomes.....	135
VII.	Benefits and Risks.....	135
VIII.	Financial Terms and Conditions for the Additional Financing.....	136
	Annex B.1: Results Framework.....	137
	Annex B.2: Small-Scale Irrigation.....	139
	Annex B.3: Integrated Soil Fertility Management.....	146
	Annex B.4: Environmental and Social Safeguards.....	152
	Annex B.5: Financial Management Assessment.....	157
	Annex B.6: Procurement Capacity Assessment.....	159
	Annex B.7: Procurement Plan.....	162

ATTACHMENT C: ADDITIONAL FINANCING FOR TANZANIA SECOND SOCIAL ACTION FUND (TASAF II)..... 165

I.	Introduction.....	165
II.	Background and Rationale for Additional Financing.....	165
III.	Proposed Changes.....	170
IV.	Consistency with CAS.....	171
V.	Appraisal of Scaled-up Project Activities.....	172
VI.	Expected Outcomes.....	175
VII.	Benefits and Risks.....	175
VIII.	Financial Terms and Conditions for Additional Financing.....	176
	Annex C.1: Revised Results Framework and Monitoring.....	177
	Annex C.2: Support for the Food-Insecure Group of Beneficiaries.....	182
	Annex C.3: Support for Vulnerable Groups.....	187
	Annex C.4: TASAF NSC Composition, Original and Current.....	189
	Annex C.5: Procurement Capacity Assessment and Procurement Plan.....	190
	Annex C.6: Proposed Reallocation.....	194
	Annex C.7: TASAF II and Additional Financing Risk Assessment.....	196

Attachment D: Statement of Loans and Credits..... 197

Attachment E: Country at a Glance..... 198

Attachment F: Map of the United Republic of Tanzania..... 200

TABLES

Table 1: Tanzania: Key macroeconomic indicators, 2003–08.....	3
Table 2: Poverty indicators for Mainland Tanzania	4
Figure 2: Percent of population below the basic needs poverty line, by district 2001	5
Figure 4: Wholesale nominal prices of maize in Dar es Salaam, net consuming area	6
Figure 5: Wholesale nominal prices of maize in Mbeya, net producing area.....	6
Figure 8: Real agricultural GDP changes, 1999–2007	10
Table 3: Yields across agro-ecological zones in Tanzania, kg/ha	11
Figure 9: Per hectare fertilizer use by regions, 2006/07 (kg of active ingredients).....	12
Table 4: Percentage of maize and rice farmers using improved technologies across zones.....	12
Table 5: Transport charges at various stages of the maize supply chain in Tanzania	14
Table 6: Estimated Program costs (in US\$ million)	21
Table 7: Public expenditure for AFSP and fiscal sustainability, TSh billion	25
Table 8: Classification of rural households by quintile according to whether they are net food buyers and sellers in Kilimanjaro (Northern Highlands) and Ruvuma (Southern Highlands).....	27

FIGURES

Figure 1: CPI, food, and non-food inflation, Jan. 2002–Dec. 2008.....	4
Figure 2: Percent of population below the basic needs poverty line, by district 2001	5
Figure 3: Proportion of food insecure in rural areas of Tanzania	5
Figure 4: Wholesale nominal prices of maize in Dar es Salaam, net consuming area	6
Figure 5: Wholesale nominal prices of maize in Mbeya, net producing area.....	6
Figure 6: Wholesale maize prices in Dar es Salaam, Kampala, and Nairobi, US\$ per ton	8
Figure 7: International grain prices and price projections in constant 1990 US\$.....	8
Figure 8: Real agricultural GDP changes, 1999–2007	10
Figure 9: Per hectare fertilizer use by regions, 2006/07 (kg of active ingredients).....	12

<p>The Accelerated Food Security Program was prepared by an IDA team consisting of Madhur Gautam (TTL for AFSP, AFTAR), Sergiy Zorya (Co-TTL for AFSP, AFTAR), Zainab Semgalawe (TTL for ASDP, AFTAR), Ida Manjolo (TTL for TASAF II, AFTH1), Marjorie Mpundu (LEGAF), Luis Schwarz (LOA), Hermann Pfeiffer (FAO/TCIS), Tekola Dejene, Oleg Nivievskyi, Vincent Gwarazimba, A. Van Gastel (Consultants), Markus Moeller (AFTWR), James Monday (EASRE), Naima Hasci (AFTEN), Jane Kibbassa (AFTEN), Donald Mneney (AFRPC), Bella Diallo, Patrick Umah-Tete, Mercy Sabai (AFTFM), Vildan Verbeek-Demiraydin (AFTRL), Denis Biseko (AFTPR), Donald Mitchell (AFTAR), Meseret Kebede, Almaz Teklesenbet (AFTAR), Faith-Lucy Matumbo and Justina Kajange (AFCE1).</p>
--

**UNITED REPUBLIC OF TANZANIA
ACCELERATED FOOD SECURITY PROGRAM
EMERGENCY PROGRAM PAPER**

**A. ACCELERATED FOOD SECURITY PROJECT
AFTAR
AFRICA REGION**

Date: May 27, 2009	Team Leader: Madhur Gautam, Sergiy Zorya
Country Director: John Murray McIntire	Sectors: Crops (100%)
Sector Manager/Director: Karen McConnell Brooks	Themes: Global food crisis response (P)
Project ID: P114291	Environmental screening category: B-Partial Assessment
Lending Instrument: Emergency Recovery Loan	

Project Financing Data

[] Loan [X] Credit [] Grant [] Guarantee [] Other:
For Loans/Credits/Others:
Total Bank financing (US\$m): 160.00
Proposed terms: Standard

Financing Plan (US\$m)

Source	Local	Foreign	Total
BORROWER/RECIPIENT	136.00	3.00	139.00
International Development Association (IDA)	156.00	4.00	160.00
Total:	292.00	7.00	299.00

Borrower:

The United Republic of Tanzania

Responsible Agency:

Ministry of Agriculture Food Security and Co-operatives

Dar es Salaam, Tanzania

Tel: 255 (22) 2862064 Fax: 255 (22) 28620675/7

psk@kilimo.go.tz

Estimated disbursements (Bank FY/US\$m)

FY	10	11	12						
Annual	46.86	60.18	52.96						
Cumulative	46.86	107.03	160.00						

Project implementation period: Start June 9, 2009 End: June 30, 2012

Expected effectiveness date: July 1, 2009

Expected closing date: June 30, 2012

Does the Project require any exceptions from Bank policies? [] Yes [X] No

Have these been approved by Bank management? [] Yes [X] No

Does the Project include any critical risks rated "substantial" or "high"? [] Yes [X] No

Project Development Objective:

The objective of the Project is to contribute to higher food production and productivity in targeted areas by improving farmers' access to critical agricultural inputs

Project Description:

The proposed instrument for the Project is the Emergency Recovery Operation processed under the Global Food Crisis Response Program guidelines. In line with the Global Food Crisis Response Program (GFRP) and the OP 8.00, the proposed Project supports measures to mitigate or avert the potential effects of imminent or future emergencies in Tanzania.

The Project will have three components: (i) Improving access to agricultural inputs (fertilizer and seed) through the input voucher scheme; (ii) Strengthening input supply chains by expanding the network of trained private sector agro-dealers and strengthening national seed systems; and (iii) Project management and monitoring and evaluation (M&E)

Which safeguard policies are triggered, if any?

Environmental Assessment (Op/BP 4.01)

Pest Management (OP 4.09)

International Water Ways (OP/BP 7.50)

**UNITED REPUBLIC OF TANZANIA
ACCELERATED FOOD SECURITY PROGRAM
EMERGENCY PROGRAM PAPER**

**B. ADDITIONAL FINANCING FOR AGRICULTURAL SECTOR DEVELOPMENT
PROJECT (CREDIT 4192-TA)
AFTAR
AFRICA REGION**

Date: May 27, 2009	Team Leader: Zainab Z. Semgalawe
Country Director: John Murray McIntire	Sectors: Irrigation and drainage (60%); Crops (30%); Agricultural extension and research (10%)
Sector Manager/Director: Karen McConnell Brooks	Themes: Global food crisis response (P)
Project ID: P115873	Environmental screening category: B-Partial Assessment
Lending Instrument: Emergency Recovery Loan	

Project Financing Data

Loan Credit Grant Guarantee Other:

For Loans/Credits/Others:

Total Bank financing (US\$m.): 30.00

Proposed terms: Standard

Financing Plan (US\$m)

Source	Local	Foreign	Total
BORROWER/RECIPIENT	0.00	0.00	0.00
International Development Association (IDA)	25.00	5.00	30.00
Total:	25.00	5.00	30.00

Borrower:

The United Republic of Tanzania

Responsible Agency:

Ministry of Agriculture Food Security and Co-operatives (Lead Agency)

P. O. Box 9192

Dar es Salaam, Tanzania

Tel: 255 (22) 2862064 Fax: 255 (22) 28620675/7

Email: psk@kilimo.go.tz

Ministry of Water and Irrigation

P.O. Box 9153

Dar es Salaam, Tanzania

Tel: 255 (22) 2452175 Fax: 255 (22) 2450533

mow@maji.go.tz

Prime Minister's Office - Regional Administration and Local Government

P.O. Box 1923

Dodoma, Tanzania

Tel: 255 (26) 2321908/2322848 Fax: 255 (26) 2324966

Estimated disbursements (Bank FY/US\$m)									
FY	10	11	12						
Annual	12.00	12.00	6.00						
Cumulative	12.00	24.00	30.00						
Project implementation period: Start June 9, 2009 End: June 30, 2012 Expected effectiveness date: July 1, 2009 Expected closing date: June 30, 2012									
Does the Project require any exceptions from Bank policies?							[] Yes [X] No		
Have these been approved by Bank management?							[] Yes [X] No		
Does the Project include any critical risks rated “substantial” or “high”?							[] Yes [X] No		
Project Development Objective									
<p>The Project has two main objectives: (i) enable farmers to have better access to, and use of, agricultural knowledge, technologies, marketing systems and infrastructure, all of which contribute to higher productivity, profitability and farm incomes; and (ii) promote agricultural private investment based on an improved regulatory and policy environment.</p>									
Project Description									
<p>The proposed Additional Financing will complement the activities of the Accelerated Food Security Project (AFSP) by supporting the following:</p> <ol style="list-style-type: none"> 1) Small-scale Irrigation Development: Fill part of the financing gap for rehabilitating economically viable and environmentally sustainable small-scale irrigation schemes financed through the District Irrigation Development Fund (DIDF). 2) Integrated Soil Fertility Management: Support strategic soil fertility management research and extension, scaling-up integrated soil fertility management technologies/good practices, refine localized fertilizer use recommendations, improve advisory capacity of extension services to provide adapted soil fertility management practices/recommendations to farmers, and strengthen soil analysis capacity of zonal research institutes. These activities will be primarily targeted in areas where the National Agricultural Input Voucher Scheme is implemented. 									
Which safeguard policies are triggered, if any?									
<ul style="list-style-type: none"> (i) Environmental Assessment (OP/BP/GP 4.01) (ii) Pest Management (OP 4.09) (iii) Involuntary Resettlement (OP/BP 4.12) (iii) Safety of Dams (OP/BP 4.37) (iv) Projects on International Waterways (OP/BP/GP 7.50) 									

**UNITED REPUBLIC OF TANZANIA
ACCELERATED FOOD SECURITY PROGRAM
EMERGENCY PROGRAM PAPER**

**C. ADDITIONAL FINANCING FOR TANZANIA SECOND SOCIAL ACTION FUND
(CREDIT 4002-TA AND GRANT H134-TA)**

**AFTH1
AFRICA REGION**

Date: May 27, 2009	Team Leader: Ida Manjolo
Country Director: John Murray McIntire	Sectors: Other social services (100%)
Sector Manager/Director: Christopher J. Thomas	Themes: Global food crisis response (P); Social safety nets (S)
Project ID: P115952	Environmental screening category: B-Partial Assessment
Lending Instrument: Emergency Recovery Loan	

Project Financing Data

[] Loan [X] Credit [] Grant [] Guarantee [] Other:

For Loans/Credits/Others:

Total Bank financing (US\$m.): 30.00

Proposed terms: Standard

Financing Plan (US\$m)

Source	Local	Foreign	Total
BORROWER/RECIPIENT	0.00	0.00	0.00
International Development Association (IDA)	29.00	1.00	30.00
Total:	29.00	1.00	30.00

Borrower:

The United Republic of Tanzania

Responsible Agency:

TASAF Management Unit

Old Kilwa/Malindi Street

P.O.Box 9381

Dar es Salaam, Tanzania

Tel: 255-22-2123584/85 Fax: 255-22-2123582

info@tasaf.org

Estimated disbursements (Bank FY/US\$m)

FY	10	11	12						
Annual	9.00	13.00	8.00						
Cumulative	9.00	22.00	30.00						

Project implementation period: Start June 9, 2009 End: June 30, 2012

Expected effectiveness date: July 1, 2009

Expected closing date: June 30, 2012

Does the Project require any exceptions from Bank policies?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Have these been approved by Bank management?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the Project include any critical risks rated “substantial” or “high”?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Project Development Objective	
The development objective is to improve access of beneficiary households to enhanced socioeconomic services and income generating opportunities.	
Project Description	
The Project will have two components:	
<p>(1) The National Village Fund Component (US\$25.5 million) will support Able-Bodied Food-Insecure beneficiaries through subprojects to sustain livelihoods and reduce risk, including small-scale community subprojects. The menu of service packages to be financed remains identical to that in the original Project, but priority will be given to conserving and restoring natural resources essential to food production and local livelihoods, such as restoring water shade, reforesting degraded areas, establishing wind breaks, stabilizing gullies, building dykes in flood-prone areas and water retention structures such as earth dams, building ponds for fish breeding/farming, and establishing minor irrigation schemes. The Additional Financing will also support Vulnerable Groups through subprojects to enhance livelihoods and reduce risk by implementing small-scale community subprojects, sponsoring activities to restore livelihoods, income generating activities, and supporting a moderate expansion of the conditional cash transfers.</p> <p>(2) The Capacity Enhancement Component (US\$4.5 million) will support Project management and other activities, including development communication, technical assistance and capacity building at the Local Government Authority (LGA) and community level, participatory monitoring and evaluation (including a beneficiary tracer study), transparency, and accountability in the targeted districts on the Mainland (initially 40) and Zanzibar.</p>	
Which safeguard policies are triggered, if any?	
<p>(i) Environmental Assessment (OP/BP 4.01)</p> <p>(ii) Involuntary Resettlement (OP/BP 4.12)</p>	

UNITED REPUBLIC OF TANZANIA

ACCELERATED FOOD SECURITY PROGRAM

A. INTRODUCTION

1. **This Emergency Program Paper seeks approval of the Executive Directors to provide Credits in the total amount of SDR 148 million (US\$220 million equivalent) to the United Republic of Tanzania (Tanzania) in support of its Accelerated Food Security Program.** The program responds to an urgent request from the Government of Tanzania (GoT) to support its efforts to achieve greater food security by increasing food production and productivity and providing social protection for vulnerable groups and the rural poor. This request was spurred by rising domestic prices for food and farm inputs, which have persisted despite the recent moderation in global prices and are likely to remain significantly higher than historical levels.

2. **The urgency of the Program stems from wider concerns about Tanzania's food security.** Domestic and regional pressures have caused domestic food prices to remain high into 2009, even as world prices have fallen substantially. Although the national food balance (supply relative to demand) has been near or just over 100 percent in recent years, the prospect of serious weather shocks persists. The failure of the 2008/09 short rains in northern Tanzania evoked memories of the poor harvests and rising prices that followed similar conditions in 2004 and 2006 and vividly underscored the political risks inherent in a largely rainfed agricultural economy. The failure of the short rains—which normally account for about 20 percent of national food production—occurred when the pressure on prices was already high because of rising regional demand, exacerbated by poor harvests in Kenya. These factors will continue to affect Tanzanian prices, calling for a structural response to increase the supply of staples.

3. **The Government gives very high priority to stimulating a rapid supply response to deal with high food prices and avert a potential food crisis.** The short-term strategy to achieve this goal is to intensify food production by giving farmers better access to inputs under the National Agricultural Input Voucher Scheme (NAIVS). To ensure that the supply response is rapid and sufficient, the timing of this intervention is critical. The procurement and distribution of inputs must be tied to the *msimu* (long) rains in the unimodal production zones, because the *msimu* agricultural cycle accounts for more than 80 percent of the value of annual grain production in Tanzania. *The proposed Program needs to become effective by July 1, 2009, if input vouchers and inputs are to reach farmers in time for the 2009 planting season.*

4. **The proposed Program is a package of three operations.** The first is a new Emergency Recovery Loan (ERL) for the *Accelerated Food Security Project* (US\$160.0 million), the second is an Additional Financing Credit for the *Agricultural Sector Development Project* (US\$30.0 million), and the third is an Additional Financing Credit for the *Tanzania Second Social Action Fund Project* (US\$30.0 million). This document comprises an Overview, giving the context, rationale, and description of the Program, and three Attachments containing the Project Papers for the three proposed operations, which provide detailed descriptions and implementation arrangements for each one.

5. **The proposed Program is processed under OP/BP 8.00 Rapid Response to Crises and Emergencies and the Global Food Crisis Response Program (GFRP).** The Program's goal is to maintain and improve food security in Tanzania by increasing food production and productivity and averting a potential food crisis arising from persistently high food and input prices. To achieve this goal, the Program seeks to (i) support the intensification of food production by improving farmers' access to inputs in targeted areas and (ii) increase access to social protection measures for vulnerable groups and the rural poor, who are especially affected by high food prices and weather shocks.

6. **The proposed Program is aligned with the GFRP framework in** (i) enhancing domestic food production and marketing, (ii) supporting social protection to ensure that the poor and vulnerable can obtain food and limit the nutritional impact of food shortages, and (iii) implementing support, communications, and monitoring and evaluation (M&E).

7. **The proposed Program would finance investments to mitigate food security risks and promote more robust and sustained food security by raising agricultural productivity.** The short-term interventions are designed to protect the poor and vulnerable against high prices and ensure that production levels are maintained or increased through a rapid supply response in the coming planting seasons. These interventions are complemented by medium- and long-term interventions designed to promote sustainable growth in agricultural productivity and reduce household vulnerability to high and volatile food prices. The specific interventions proposed are:

- (a) **Enhancing access to critical agricultural inputs** by scaling up the national agricultural input voucher scheme, strengthening the private input supply chain, and increasing the efficiency of the Program through M&E.
- (b) **Strengthening the rural safety net and social protection** for food-insecure and vulnerable households in the most affected rural areas through labor-intensive public works and income-generating activities.
- (c) **Promoting agricultural productivity growth** by rehabilitating small-scale irrigation schemes and promoting integrated soil fertility management to complement and sustain the impact of agricultural inputs.

8. **The Program would be financed through International Development Association (IDA) resources** within the IDA15 envelope for Tanzania.

9. **Partnership arrangements:** The proposed program is not co-financed by other development partners.

B. MACROECONOMIC CONTEXT

Recent Developments

10. **Tanzania has made impressive economic gains in recent years and maintained good macroeconomic stability.** For the past six years, the economy has grown at a robust 7 percent per year (Table 1). Despite the evolving world financial crisis, economic growth was sustained in 2008, meeting the target gross domestic product (GDP) growth rate of 7 percent. The global

economic crisis is expected to reduce the growth rate to about 4–5 percent for 2009. The nation's external position is currently strong, with a comfortable level of foreign reserves. Government domestic revenue collection as a percentage of GDP (tax and nontax revenue) increased to 16 percent in 2008/09 from 11 percent in 2003/04. The overall budget deficit in 2008/09 is the lowest since 2003/04 at 1.2 percent of GDP (with grants).

Table 1: Tanzania: Key macroeconomic indicators, 2003–08

	2003	2004	2005	2006	2007	2008
Output and prices (%)						
GDP growth at constant prices	6.9	7.8	7.4	6.7	7.1	7.4
Consumer Price Index annual inflation	5.4	4.7	5.0	7.2	7.0	10.3
Government finances (FY, % GDP)						
Revenue	11.1	11.6	11.8	12.5	14.1	15.9
Expenditure	18.6	20.7	21.7	22.8	23.0	22.8
Overall deficit	-0.2	-2.8	-4.5	-5.1	-3.9	0.0
Deficit before grants	-4.6	-8.1	-9.3	-11.3	-8.9	-6.8
Money						
M2 to GDP, %	14.0	14.0	16.0	17.0	18.0	19.0
Balance of payments (%GDP)						
Export	18.5	20.5	20.8	22.8	21.9	24.1
Current account	-4.8	-3.8	-4.3	-7.7	-10.6	-11.2
Net reserves* as months of imports	6.6	5.9	5.1	3.9	3.6	4.7

* Net reserves are defined as gross foreign exchange reserves less short-term foreign liabilities.

Source: National Bureau of Statistics (NBS) 2008.

11. **Strong macroeconomic performance has not translated into a similarly strong reduction in poverty.** An assessment of income-poverty levels in Tanzania since 2001 shows that in Mainland Tanzania the reduction in basic-needs income poverty was moderate, decreasing from 35.6 percent of the population in 2000/01 to 33.4 percent in 2007 (Table 2). The reduction in headcount poverty has been more or less uniform in rural and urban areas. Trends in other welfare indicators are mixed. For example, with prices for consumer durables falling, their ownership has increased. Access to education and public health services has also increased. Yet ownership of agricultural assets and access to clean water show some deterioration.

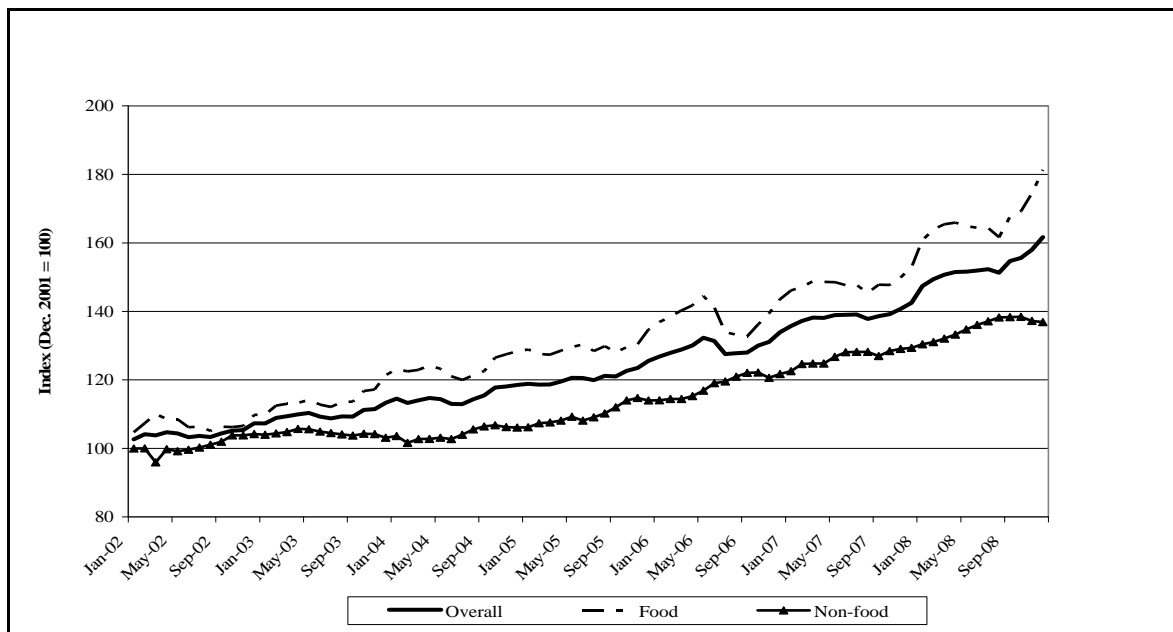
12. **In 2008, accelerating inflation put pressure on poor people and the economy.** The recently released Household Budget Survey indicates that price pressures experienced by families, as measured for a basket of food and non-food basic goods, appear to have been significantly higher than those indicated by market prices in the Consumer Price Index (CPI). The cumulative increase in prices measured by the Household Budget Survey between 2001 and 2007 is around 98 percent—that is, prices virtually doubled—whereas cumulative inflation for the same period was 51 percent according to the CPI. Cumulative food inflation was 50 percent higher than cumulative non-food inflation, driving up the overall CPI (in which the share of food inflation is 55.9 percent). Rising food inflation in 2008 thus contributed greatly to the 13.5 percent rise in the CPI by the end of 2008 (Figure 1).

Table 2: Poverty indicators for Mainland Tanzania

	Population share		Poverty headcount		Poverty gap		Poverty gap squared	
	2001	2007	2001	2007	2001	2007	2001	2007
Dar es Salaam	5.8	7.5	17.6	16.0	4.1	4.1	1.6	1.7
Other urban	13.8	17.7	25.8	24.2	7.7	7.5	3.4	3.4
Rural	80.4	74.5	38.6	37.4	11.5	11.0	4.9	4.7
Tanzania Mainland	100.0	100.0	35.6	33.4	10.6	9.9	4.5	4.3

Source: Household Budget Survey 2008.

Figure 1: CPI, food, and non-food inflation, Jan. 2002–Dec. 2008



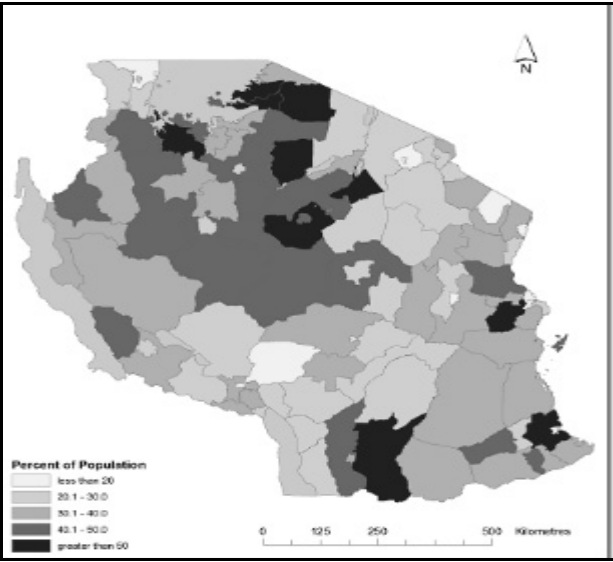
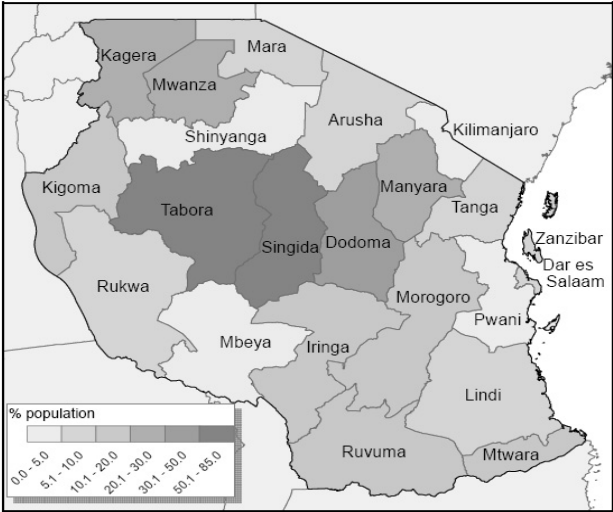
Source: NBS 2009.

13. **The social impact of higher food prices is estimated to be considerable.** As mentioned, prices of major cereals and pulses in many parts of Tanzania are significantly higher than the five-year average, despite the nation’s relatively stable food balance sheet.¹ The numerous sources of rising prices include slow growth in food production; rising food prices throughout East Africa, largely because of reduced production in Kenya (which is also the region’s major grain importer) and rising regional demand; the direct impact of global prices on imported grain (wheat and rice); high fuel prices and hence higher transport and marketing costs;

¹ The increase in food prices is more severe in major food consumption areas and in the North, which is strongly linked to the Kenyan market, and it is less severe in the net producing regions of the Southern Highlands. Annex 1 lists regional wholesale prices for white maize and rice from 2002 to 2008.

poor infrastructure connecting internal markets; and most likely greater food storage owing to fear or simply speculation.

14. **Consumers face significantly higher food prices in urban and rural areas. The welfare impacts of high prices are especially serious for poor and food-insecure people.** The central band of Tanzania has the highest proportion of poor and food-insecure households (Figure 2 and Figure 3). In regions such as Dodoma, Singida, and Tabora, about half of all households are food insecure. Even in areas traditionally considered to be food secure, a 2007 survey by the World Food Program (WFP) found a large proportion of the population (about 15 percent) to be food insecure, particularly in Ruvuma and Iringa. In Dar es Salaam and other regions, maize prices in 2008 were double the average for 2002–06 and 50 percent higher compared to 2007 (Figure 4).

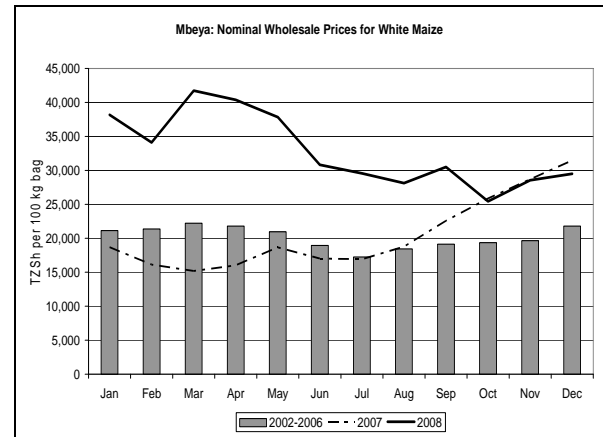
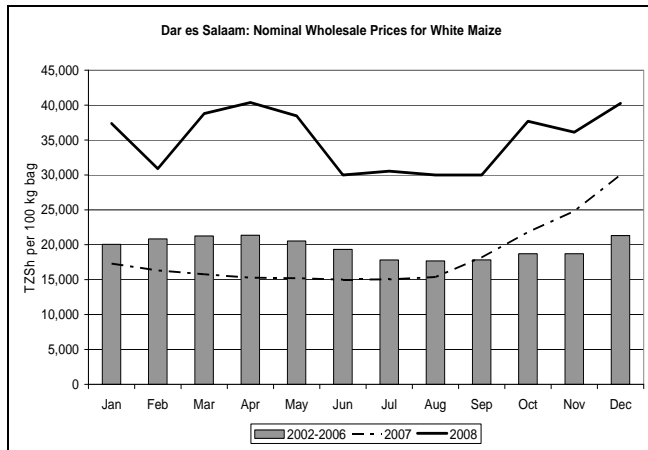
<p>Figure 2: Percent of population below the basic needs poverty line, by district 2001</p>	<p>Figure 3: Proportion of food insecure in rural areas of Tanzania</p>
	<p>Map - Proportion of food insecure people in Rural Tanzania</p> 
<p>Source: NBS 2008.</p>	<p>Source: WFP 2008.</p>

15. **Higher food prices paid by consumers do not necessarily translate into the higher farm-gate prices needed to motivate a supply response.** Nor do higher food prices benefit the many small-scale farmers who consume most of what they grow. In surplus-producing areas of the Southern Highlands, food prices have risen less dramatically (Figure 5). High transportation costs prevent farmers from fully benefiting from the higher prices paid by consumers and at the same time force farmers to pay more for farm inputs. The key constraints are the poor infrastructure and business environment for promoting trade and marketing (see the Program Document of PRSC 7, World Bank 2009). There is a growing consensus that a more operational shared-growth strategy must be adopted to address these problems. Accordingly the

Government’s emerging strategy is to focus on public investment and institutions to develop infrastructure (including rural roads), actions to improve the business climate, and scaled-up public investments in agriculture.

Figure 4: Wholesale nominal prices of maize in Dar es Salaam, net consuming area

Figure 5: Wholesale nominal prices of maize in Mbeya, net producing area



Source: FEWSNET.

16. **Agricultural production has been harmed by high fertilizer prices.** World fertilizer prices doubled in 2007 and reached all-time highs in April 2008. In Dar es Salaam (the port of entry), prices of di-ammonium phosphate (DAP), triple superphosphate (TSP), and nitrogen–phosphorous–potassium (NPK) fertilizers rose by 132 percent, 150 percent, and 72 percent respectively between July 2007 and July 2008. The rise in fertilizer prices has softened temporarily in recent months owing to declining international fertilizer prices,² yet local markets did not immediately reflect this decline because domestic fertilizer stocks remained high and the credit market for private importers was tight. During the course of the year, as fertilizer sales rose following the first round of NAIVS, competition among importers and suppliers caused a significant decline in retail fertilizer prices. This positive development notwithstanding, global prices for DAP, one of the two main fertilizers applied in Tanzania—the other is urea—have dropped below the peak 2008 prices but have remained above historical levels, even in the face of the global financial crisis. Although the urea price has fallen back to its 2005/06 level, it remains highly sensitive to crude oil prices, which over the long term are expected to return to levels significantly higher than the historical average.

² International urea prices recently declined owing to lower crude oil prices, and international DAP prices fell owing to the global economic crisis. Although the global economic slowdown is likely to keep both grain and fertilizer prices low in the immediate future, virtually all models predict output and input prices to rise over the medium to long term and settle at significantly higher levels than those observed in the last decade.

Impact of the Global Economic Crisis and Outlook

17. **Tanzania is expected to feel the effects of the global economic crisis mostly through export channels** (mainly tourism, regional manufacturing exports, cash crops, and natural resources) and lower capital flows from private and possibly official assistance. Because of the structure of its trade balance, which is heavily influenced by oil on the import side and gold on the export side, the net impact is likely to be lower in Tanzania than in other countries. The financial sector is mainly sound and not exposed to global toxic assets.

18. **Overall, these shocks are expected to reduce growth in GDP to around 4–5 percent in 2009.** Growth is projected to return to the pre-crisis level in about two years (see PRSC 7 Program Document).³ The Balance of Payments (BoP) deficit is likely to remain manageable given current reserves. Domestic revenues are expected to increase slightly in real terms but to be lower than previous projections, which were the basis of the Medium Term Expenditure Framework (MTEF) and expenditure projections, indicating a potentially larger budget deficit (between US\$250 and US\$450 million). This situation is manageable, however. Prudent fiscal policies in recent years provide scope for relaxing the limit of zero net domestic financing and allowing the budget deficit to widen.

19. **While the poorest subsistence farmers are not affected directly by the export slump, they might suffer from lower personal transfers and Government expenditures.** The slump will have more direct effects on the large number of small-scale producers of cash crops, such as coffee, cotton, and cashews, and skilled and unskilled wage earners. Virtually all farmers, particularly producers of food staples, are vulnerable to climatic shocks, as demonstrated by the failure of the 2009 short rains. Further rainfall deficits, especially during the long rains, could create major food shocks for most of the poor.

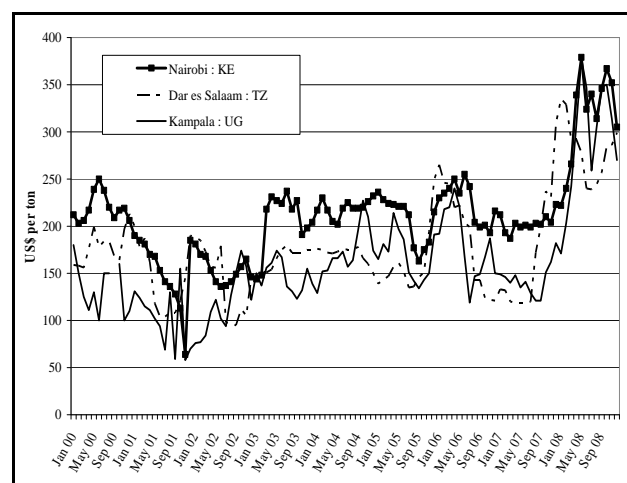
20. **The Government's emerging strategy to deal with the impact of the crisis and the prospect of a possible drought year is to:** (i) protect public investment, especially in infrastructure, to sustain medium-term prospects for shared growth; (ii) support employment by facilitating credit guarantees by commercial banks to firms in distress; (iii) support food security through extension and reform of the input voucher subsidy scheme and more strategic use of the National Grain Reserve stocks. To monitor the situation, the Government has established a task force which will also propose remedial measures to deal with potential impacts of the crisis. IDA will continue to engage with the Government to review the scope, modalities and costs of these interventions, inasmuch as they may require additional funding and would affect growth. To help finance the larger BoP and fiscal deficit, the Government has requested access to the International Monetary Fund (IMF) Exogenous Shock Facility under the Policy Support Instrument for an amount of around US\$330 million. The Government is also discussing with other development partners the possibility of extra funding to cushion the impact of the global economic crisis. The proposed Accelerated Food Security Program is part of this overall package and addresses the third element of this strategy.

³ Growth projections for 2009 are 5.2 percent under the base case scenario and 3.2 percent under the lower case scenario.

Outlook for Prices

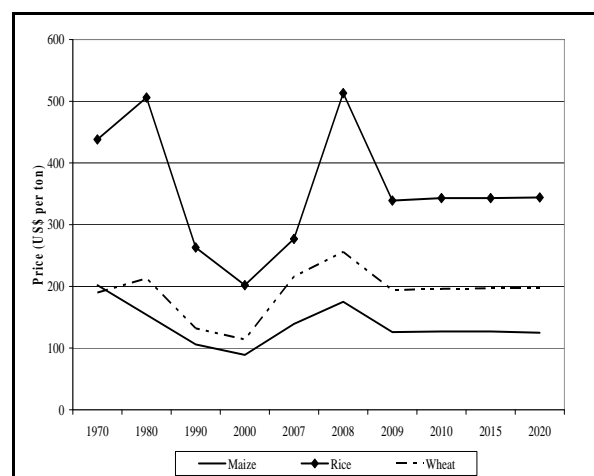
21. **Prices of major food staples are projected to remain above the average for the last six years.** Although higher maize and rice production induced by NAIVS will push prices down somewhat, food prices will remain high owing to the regional pressures discussed earlier and the direct impact of global prices on wheat and rice imports. Kenya's maize import requirement is projected to be a record 400,000 tons in 2008/09, compared to the average of 250,000 tons in previous years, and will drive maize prices higher throughout East Africa (see Figure 6). The latest international food price projections from the World Bank/DEC indicate that prices will be 50 percent higher in 2015 than in 2000 as a result of higher real energy prices and higher food crop production costs (based on higher fuel and fertilizer costs and greater production of biofuels) (Figure 7). Food prices in Tanzania are likely to follow this upward trend in the short and medium run, at least partially offsetting rising input prices.

Figure 6: Wholesale maize prices in Dar es Salaam, Kampala, and Nairobi, US\$ per ton



Source: www.ratin.net.

Figure 7: International grain prices and price projections in constant 1990 US\$



Source: World Bank, Development Prospects Group.

22. **Fertilizer prices are also expected to stay well above the average 2000 level.** Fertilizer supplies will remain tight at least into 2012, according to the International Fertilizer Development Center (IFDC). Difficulties persist for many countries trying to expand their capacity to produce fertilizer, particularly potassium but also nitrogen and phosphorus. Real fertilizer prices between 2009 and 2015 are projected to average about double the 2000 level for urea and triple the level for DAP, even with recent sharp declines in prices of both fertilizers.⁴ International fertilizer prices have grown significantly more volatile in recent years, making it difficult to predict future price developments, but as the global financial crisis recedes and fuel prices start to rise again, fertilizer prices are likely to rise as well.

⁴ The World Bank, Development Prospects Group.

Collaboration with Other Development Partners and the International Monetary Fund

23. **IDA has coordinated closely with other development partners during the development of this Program to devise a shared, harmonized response to the Government's request for support.** Most active development partners also participate in the Agricultural Sector Development Project (ASDP) Basket Fund and hence will be closely involved in oversight as this Program is implemented. With regard to additional funding, other partners lack fresh resources to commit at present.

- The Food and Agriculture Organization (FAO) and United Nations Central Emergency Response Fund (CERF) maintain a seed distribution program for the vulnerable in some parts of the country (US\$1 million). The WFP is preparing to pilot its Purchase for Progress (P4P) program, and IDA is exploring options to exploit the synergies between the input voucher scheme and the output marketing options WFP is considering. However, the scale of WFP's effort in the short run is relatively small and targeted at areas that are closer to WFP projects rather than to the regions where NAIVS is targeted.
- The European Union (EU) has recently approved an allocation of €32 million from its food facility for Tanzania, of which about €20 million is provided for budget support and €12 million for implementing activities through non-State actors.
- The preparation of this Program has been coordinated with the Alliance for a Green Revolution in Africa (AGRA) team in Tanzania and particularly with the Tanzania Agro-Dealer Capacity Deepening Program (TACAD), implemented by the Citizens Network for Foreign Affairs (CNFA) and the seed sector program. Because AGRA funding for TACAD is coming to an end, this Program will help to scale up agro-dealer training, a key component of NAIVS. AGRA also funds credit guarantees for agro-dealers, which will help to expand the agro-dealer network in support of NAIVS. The US Agency for International Development (USAID) is exploring the option of providing additional funds for agro-dealer credit guarantees in a parallel project with commercial banks.

24. **The IMF Executive Board approved a three-year Policy Support Instrument for Tanzania in February 2009, supporting the goal of achieving sustainable, broad-based, high levels of growth, while maintaining macroeconomic stability.** The core objectives of the program are to enhance the mobilization of public resources and the efficiency with which they are spent; increase the financial sector's contribution to growth and to the effectiveness of monetary policy; and improve the business and investment environment. IMF's periodic assessments of Tanzania's macroeconomic performance serve as a key input for dialogue and assessments on policies related to macroeconomic stability. IDA and IMF staff collaborate closely, notably on public expenditure management, financial sector, debt sustainability, and poverty reduction strategy assessments.

C. SECTOR CONTEXT

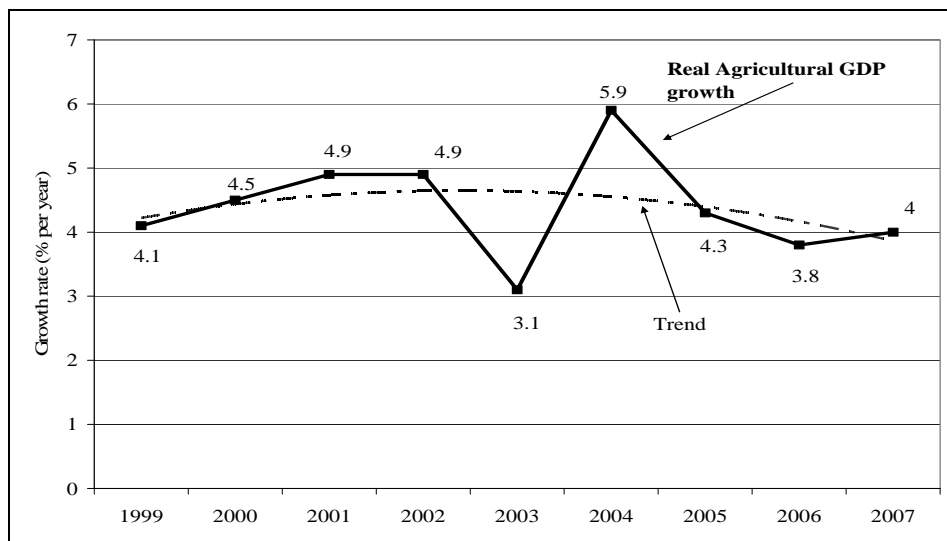
25. **Tanzania's agricultural sector makes major contributions to the economy and is central to food security, household income, and poverty reduction.** Any slowdown in agricultural growth will affect the country's overall GDP growth and drive up food prices.

Agriculture accounts for 26.5 percent of national GDP, 80 percent of employment, and 75 percent of rural household incomes. Agriculture also provides more than 95 percent of Tanzania’s annual food requirement.

26. **Tanzania is endowed with many resources for agricultural production, most of which have not been used optimally.** It has an abundance of good arable land, pasture land, and water resources; good rainfall in many areas; and high market potential for its food and other agricultural products both nationally and regionally. Of the estimated 43 million hectares of arable land in Tanzania, 23 percent is cultivated, and less than 3 percent is irrigated.

27. **Agricultural growth has remained below potential and below the target growth of 10 percent set in Tanzania’s National Strategy for Growth and Reduction of Poverty (known by its Kiswahili acronym, MKUKUTA).** Agricultural value-added grew by an average of 4.4 percent per year between 1999 and 2007, with growth declining in recent years (Figure 8). Agricultural growth has been only 1.5 percent higher than population growth (2.7 percent). Production of the major staple food crops (maize, rice, cassava, and beans) grew at an average rate of 3.5 percent, compared to 5.4 percent for cash crops. Levels of agricultural production have fluctuated considerably because of adverse weather as well as plant and animal pests and diseases.

Figure 8: Real agricultural GDP changes, 1999–2007



Source: NBS 2008.

28. **Crop yields remain well below potential.** Because agriculture in Tanzania depends almost entirely on rainfall, it is highly susceptible to climatic shocks, particularly in the semiarid areas of central and northern Tanzania. Farmers’ yields are only 20–30 percent of potential yields (Table 3). The low yields that farmers obtain for most crops result from (i) poor access to improved seed and fertilizer, (ii) weak extension services, (iii) poor access to roads and thus markets, and (iv) nontariff measures that increase transaction costs and reduce farm-gate prices. For high-value crops such as paddy, the low investment in irrigation also prevents yields from growing and production from stabilizing.

Table 3: Yields across agro-ecological zones in Tanzania, kg/ha

Zone	Maize	Paddy	Sorghum	Cassava	Beans	Potato
Central	470.2	705.3	373.6	1,311.2	303.3	1,026.6
Eastern	587.4	641.4	504.8	1,018.0	369.8	1,280.6
Lake	886.8	1,383.3	714.1	1,784.5	417.4	1,668.1
Northern	1,127.8	2,245.0	735.6	905.5	384.1	2,099.4
Southern	452.7	451.9	331.3	744.2	228.8	1,726.9
Southern Highlands	1,210.8	1,354.7	749.5	1,597.5	410.2	1,828.6
Western	1,034.3	1,185.0	866.4	848.9	398.5	1,800.2
National average	881.9	994.3	513.1	1,080.1	397.2	1,552.6
Yield potential*	5,500	2,500	1,700	7,000	2,000	7,500

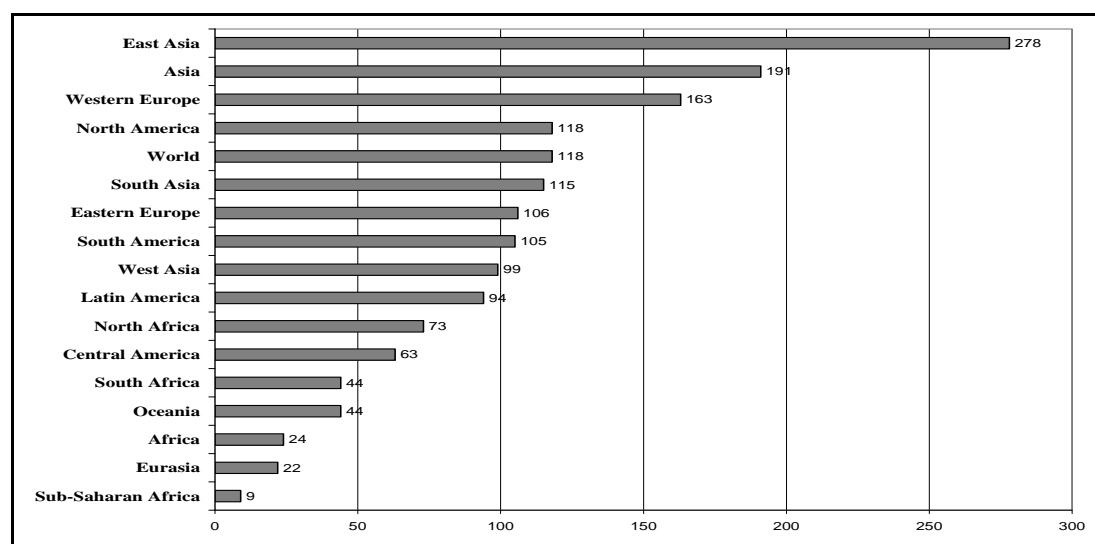
Note: * Yield potential is based on yields on research fields and on-farm trials

Source: International Food Policy Research Institute, based on the Agricultural Census 2002/03

29. **Improved agricultural technologies have been adopted at extremely low rates in Tanzania.** For example, farmers apply an average of about 8 kilograms per hectare of fertilizer nutrient. This rate of fertilizer use is slightly less than the average for Sub-Saharan Africa, which is the lowest in the world (Figure 9). Without fertilizer, soils increasingly lose nutrients, and yields fall. Only 5.7 percent of maize farmers and 0.7 percent of paddy farmers in Tanzania use improved crop varieties together with fertilizer (Table 4).⁵ Farmers who use improved seed without fertilizer or who apply fertilizer to unimproved varieties cannot realize the full potential of these technologies—hence the wide gap between potential yields and farmers’ yields.

⁵ According to the Agricultural Census (2002/03).

Figure 9: Per hectare fertilizer use by regions, 2006/07 (kg of active ingredients)



Source: International Fertilizer Development Center.

Table 4: Percentage of maize and rice farmers using improved technologies across zones

Zones	Improved seed		Fertilizer		Seed and fertilizer	
	Maize	Paddy	Maize	Paddy	Maize	Paddy
Central	23	10	2	0	0.5	0.1
Eastern	21	15	1	1	0.3	0.0
Lake	20	7	2	1	0.5	0.1
Northern	45	59	16	55	11.4	2.1
Southern	15	5	30	34	7.1	0.2
Southern Highlands	24	16	35	5	11.5	2.0
Western	20	8	34	3	9.6	0.5
National average	24	10	20	12	5.7	0.7

Source: International Food Policy Research Institute, based on the Agricultural Census 2002/03.

30. **Low yields constitute a significant challenge to the country’s food security and poverty reduction strategy, yet the potential for improving crop productivity through better access to fertilizer and improved varieties is enormous.** The few farmers who use improved maize and rice varieties with fertilizer obtain significantly higher yields than those who use unimproved varieties (Agricultural Census 2002/03). Among all countries of Sub-Saharan Africa, Tanzania has experienced some of the worst soil nutrient depletion, which is one reason why fertilizer use raises staple crop yields so dramatically. Some 40 percent of Tanzania’s land—which 40 percent of Tanzania’s population relies on for food—is degraded.⁶ The annual

⁶ Bai, Z., D. Dent, L. Olsson, and M. Schaepman (2008), “Global Assessment of Land Degradation and Improvement: Identification by Remote Sensing,” Report 2008/01, FAO/ISRIC, Rome/Wageningen.

depletion of soil nutrients (nitrogen, phosphorus, and potassium) is estimated at 61 kilograms per hectare. Given that farmers apply only 8 kilograms of fertilizer nutrients per hectare,⁷ the need to promote fertilizer use and other soil fertility management practices, as well as the use of improved seed, is fairly stark.

31. **Integrated soil fertility management (ISFM) is crucial to achieve sustainable productivity.** Owing to farmers' limited knowledge and awareness of soil fertility issues, demand for ISFM research and extension has been limited in Tanzania. It is critical to increase awareness among farmers, promote research on soil fertility management and conservation, and develop fertilizer use recommendations for specific areas and agro-ecological zones to ensure optimum economic levels of fertilizer application in Tanzania.

32. **The extension services have a critical role in transferring research results to farmers and promoting efficient use of improved technologies.** The provision of good extension services in Tanzania remains weak, so they have only a small impact on the productivity and commercialization of agriculture, with some differences by crop. The Agricultural Sector Development Program (ASDP) provides funds to strengthen extension services, but more training and other support are needed to ensure that farmers have access to professional advice on using improved seed and fertilizer, as well as on other technical and business issues.

33. **In the medium term, the efficiency of delivering extension services should be improved.** Pluralistic and demand-driven advisory services such as those currently used in Uganda and other African countries can improve the adoption of technologies and increase farm incomes. Along with improvements in secondary education of rural households, more efficient extension services and intensification of service reforms being undertaken through ASDP have prospects for encouraging greater agricultural productivity and commercialization in Tanzania.⁸

34. **The very limited development of irrigation also limits crop yields and supply response, in particular for paddy and other high-value crops.** The contribution of irrigated crop production to overall crop production remains quite small, but the potential for expansion is high. More public expenditure is required for irrigation, especially to rehabilitate the high-priority, economically viable, environmentally sustainable, and small-scale irrigation schemes identified within the District Irrigation Development Fund.

35. **Limited access to markets further constrains agricultural productivity.** Poor roads contribute to higher input prices and lower output prices. According to the International Food Policy Research Institute (IFPRI), better access to roads in Tanzania will significantly increase the adoption of agricultural technologies and commercialization of agriculture. Public expenditures on rural roads have a large impact on per capita incomes in Tanzania, with the

⁷ Nkonya, E., L. You, E. Kato, and Z. Guo (2009), "Determinants of Productivity and Commercialization of the Staple Food Crops and their Demand Trend in Tanzania: Evidence from the 2002/03 Agricultural Census Survey," report prepared by the International Food Policy Research Institute (IFPRI) for the World Bank, Washington DC.

⁸ Nkonya et al. (2009).

benefit ratio estimated at 9.13.⁹ Overall effects on poverty and growth are the most favorable in the Southern Highlands and Central and Western Zones. Road investments should focus on reducing transport costs on rural roads, because they account for the largest share of transport costs, despite the shorter distances covered. Transport costs are four times higher per ton-kilometer on rural roads than on tarmac roads (Table 5).¹⁰ Overall, total transport costs make up about 90 percent of the marketing costs between the farm gate and wholesale markets for food staples.

36. **Nontariff measures cause high transport costs to rise even higher.** Market integration has improved in Tanzania following investments in roads and communication (and particularly in cell phones), but internal market integration still remains weaker than in neighboring Kenya and Uganda. Price transmission between market pairs separated by 100 kilometers is found to be much slower in Tanzania than in Kenya or Uganda.¹¹ Delays at weighbridges, as well as local taxation, have a pronounced impact on market integration and development in the country.

Table 5: Transport charges at various stages of the maize supply chain in Tanzania

Stages of supply chain	Transport price, US\$/ton-km	Distance, km	Transport price, US\$/ton
Farm-gate to primary market	0.40	16	6.4
Primary to secondary market	0.27	100	27.0
Secondary to wholesale market	0.12	345	41.4

Source: World Bank (2009), East Africa: A Review of Regional Maize Market and Marketing Costs, draft report, AFTAR, Washington, DC.

37. **The export ban affects the smooth functioning of markets and discourages greater agricultural productivity.** The significant rise in domestic food prices, persistent food insecurity in parts of the country, and memories of the 2006 drought that sent domestic prices soaring above even 2008 levels, all prompted significant concern about food security. Faced with a potential regional grain shortage (exacerbated by political events in Kenya) and prospects of soaring global prices, the Government of Tanzania banned exports of food staples to control rising prices and protect domestic food supplies. In coming seasons, however, as NAIVS is scaled up and as regional maize prices rise—because of deficits in Kenya, Democratic Republic of Congo, and Southern Sudan—Tanzania will be positioned to increase maize production dramatically. If the export ban remains in effect, producer prices and hence potential output will decline, leading to economic losses for Tanzania. In the longer term, the ban can harm consumers by keeping maize production below potential and maize prices high. The Government regards the ban as a temporary measure. It recognizes the potential loss of welfare to producers

⁹ Fan, S., D. Nyange, and N. Rao (2005), “Public Investment and Poverty Reduction in Tanzania: Evidence from Household Survey Data,” DSGD Discussion Paper 18, International Food and Policy Research Institute (IFPRI), Washington, DC.

¹⁰ World Bank (2009), “East Africa: A Review of Regional Maize Market and Marketing Costs”, draft report, AFTAR, Washington, DC.

¹¹ World Bank (2009).

and consumers, and plans to lift the ban as NAIVS stimulates a supply response and the risk of a food crisis abates.

38. **Grain exports should become an integral part of Tanzania's agricultural development strategy.** With appropriate policies and investments, Tanzania could significantly increase grain production and gain a much larger market share in an environment of rising regional demand. Conservative estimates of growth in yields and area indicate that a regular harvest exceeding 4 million tons is possible. Better access to improved seed and fertilizer, given impetus by NAIVS, could raise maize production by at least 5 percent over the next decade. It is estimated that a 5 percent increase in maize output would translate into an additional 0.35 percent of overall GDP.¹² However, seizing this opportunity requires a shift in policies and corresponding increases in private and public investment.

D. SECTOR STRATEGY

39. **Tanzania's development strategy is guided by the Tanzania Development Vision 2025 and embodied in the MKUKUTA (as mentioned previously, the National Strategy for Growth and Reduction of Poverty).** The Government's commitment to addressing food security is clearly reflected in MKUKUTA goals and objectives. Tanzania's Agricultural Sector Development Strategy (ASDS), adopted in 2001, is being implemented through the Agricultural Support Development Program (ASDP), launched in June 2006. The ASDP is thus the primary Government instrument for improving agricultural growth, reducing poverty, and improving food security in line with MKUKUTA and the ASDS. The two major objectives of the ASDP are to: (i) enable farmers to have better access to, and use of, agricultural knowledge, technologies, marketing systems, and infrastructure, all of which contribute to higher productivity, profitability, and farm incomes; and (ii) promote agricultural private investment based on an improved regulatory and policy environment.

40. **ASDP has two major components—a local and a national one.** The local component provides grants to Local Government Authorities (LGAs) for community and farmer group investments in infrastructure (including irrigation) or productive activities, agricultural services (primarily public and private agricultural extension), and capacity building and empowerment for farmer groups, local Government, and the private sector. The national component finances agricultural research and extension, the development of irrigation policy and national irrigation infrastructure, policy development and planning, capacity building for food security interventions, market development, and program coordination.

41. **A Basket Fund supports national activities conducted under agreed expenditure programs of five Agricultural Sector Lead Ministries (ASLMs).** These include the Ministry of Agriculture Food Security, and Cooperatives (MAFC); Ministry of Livestock Development and Fisheries; Ministry of Industry, Trade, and Marketing; Ministry of Water and Irrigation

¹² The share of maize output in overall GDP is estimated at 4.75 percent. With the multiplier effect on the milling sector, its share is estimated at 7.1 percent, according to the Social Accounting Matrix of the IFPRI model for Tanzania.

(MoWI); and the Prime Minister's Office—Regional Administration and Local Government (PMO-RALG).

42. **At the local level, the Basket supports activities of districts** through performance-based grants channeled through District Agricultural Development Grants (DADGs), Capacity Development Grants (DCDGs) and Extension Bloc Grants (DEBGs). ASDP is currently supported by five development partners—IDA, the International Fund for Agricultural Development (IFAD), African Development Bank (ADB), Japan, and Irish Aid—and is now in its third year of implementation. Activities have mainly involved initiating implementation, setting up the financing framework for local investments through DADPs, capacity building, and fostering awareness.

43. **Despite these efforts, agricultural productivity and production remain low and food security tenuous.** The Government has thus formulated a short-term strategy to empower farmers to access improved agricultural inputs, irrigation infrastructure, extension services, and markets. For the medium term, the strategy is to promote public and private investment for growth in productivity and processing. The Accelerated Food Security Program is a part of these strategies, with a specific focus on shorter-term interventions that complement ASDP efforts in dealing with the food price crisis and looming food security concerns.

44. **The Government of Tanzania has responded to weather and price shocks by phasing out its old fertilizer subsidy scheme and allocating a greater share of the budget to helping small-scale farmers obtain improved seed and fertilizer.** In 2008, Tanzania phased out its program to subsidize transportation costs for fertilizer for private input suppliers, concluding that it was not cost-effective and failed to reach a large number of farmers or improve their access to fertilizer. In its stead, the NAIVS initiative uses vouchers to transfer resources directly to farmers, increasing their purchasing power, stimulating the development of input supply chains, and fostering competition among input suppliers and agro-dealers. This approach has been piloted in two districts over the past season and scaled up to 53 districts in the high-potential zones for maize and rice production in 2008/09. As part of this scheme, the Government is working with CNFA, AGRA, ACT, and the Finance Sector Deepening Trust (FSDT) to strengthen local agro-dealer networks through training and credit guarantees in an effort to promote and strengthen private sector participation in agricultural input markets. The Government has concluded a Memorandum of Understanding with the National Microfinance Bank (NMB) for the redemption of NAIVS vouchers, given that NMB is the only commercial bank with a branch in every district.

45. **Incremental resources to implement the new initiatives are limited.** The Government's input voucher scheme reaches only 30 percent of eligible farm households. The Government has thus urgently requested IDA and other development partners for support to scale up this effort as part of its response to rising food and input prices. External support would permit NAIVS to reach 2.5 million farmers, the estimated number of eligible farmers.

E. RATIONALE FOR THE PROPOSED PROGRAM AND BANK STRATEGY

Rationale

46. **There is an urgent need to improve food security.** In the short run, food security can be improved by ensuring sufficient resources to (i) improve farmers' access to improved seed and fertilizer through NAIVS, to increase the amount of food available, and (ii) support food-insecure and vulnerable households through TASAF II, by easing access to food. If the livelihoods of food-insecure and vulnerable households remain unprotected, and if farmers fail to obtain critical agricultural inputs and other support services, food prices will remain high and food security in Tanzania will continue to be at risk.

47. **Short-term interventions will be complemented by medium- and long-term interventions to sustain growth in agricultural productivity.** These interventions include the rehabilitation of small-scale irrigation facilities, promotion of integrated soil fertility management, and development of the seed sector. The interventions will also accelerate the implementation and broaden the scope of ASDP to ensure that complementary productivity-enhancing interventions support food security over the long term.

48. **Significant financial gaps prevent the food crisis from being addressed adequately.** TASAF resources for food-insecure and vulnerable people have been exhausted by competing needs to invest in social infrastructure in rural areas. The financing gap for rehabilitating small-scale irrigation has widened within ASDP. The limited resources for NAIVS have already been mentioned: supported entirely by Government resources in 2008/09, NAIVS reached only 30 percent of eligible households, and the faltering global economy will certainly present many competing demands for Government resources. Fertilizer application is seasonal, and resources must be provided on time for fertilizer to work efficiently and raise production sufficiently. The benefits of addressing Tanzania's financing requirements today, versus coping with reduced food supplies at higher prices six to nine months from now, are high, and the cost will be lower.

CAS Alignment

49. **The proposed Program is consistent with IDA's Country Assistance Strategy (CAS) presented to the Board of Executive Directors in March 2007.** The CAS consists of the Government's Joint Assistance Strategy for Tanzania (JAST) and a supplement with the details of the World Bank Group's strategy. TASAF and ASDP remain the core components of IDA strategy as articulated in the current JAST, which in turn is aligned to the MKUKUTA (2005–10). The MKUKUTA focuses on outcomes in three broad clusters: (i) growth and reduction of income poverty, (ii) improvement of quality of life and social well being, and (iii) governance and accountability. The ASDP Additional Financing is aligned with the first cluster and implements activities focusing on enhancing economic growth and reducing poverty through empowering and creating opportunities for people, increasing production, and increasing household income in rural areas. The TASAF Additional Financing is aligned with the second cluster through the extensive use of social protection initiatives, which empower communities to access opportunities to improve their livelihoods.

50. The proposed ERL for the Accelerated Food Security Project will contribute to achieving the outcomes of the first cluster of the JAST. The Project is an emergency response operation and thus was not anticipated in the lending program under JAST. Nevertheless it is consistent with the JAST, which clearly recognizes the risks Tanzania faces and states that the World Bank Group will build flexibility into its lending portfolio so that it is better able to respond to new developments in Government priorities and cope with external shocks. The current crisis arises from such a shock, and the proposed Project is the IDA's response to the Government's request for support in responding to it.

GFRP Alignment

51. The proposed operation is timely and well positioned under the GFRP framework. It is fully in line with GFRP objectives as it will (i) reduce the negative impact of high and volatile food prices on the lives of the poor in a timely manner, in addition to (ii) enhancing domestic food production and marketing response and (iii) supporting communications and M&E. As specified in the GFRP framework document, short-term measures must be balanced with medium-term measures such as those intended to improve the domestic supply response. This approach is fully incorporated into the proposed Program.

F. THE ACCELERATED FOOD SECURITY PROGRAM

Program Objectives

52. The Program seeks to improve food security in Tanzania and avert a potential food crisis, in light of recent and persistently high and fluctuating food and input prices. To that end, the Development Objective of the ERL for the Accelerated Food Security Project (AFSP) is *to contribute to higher food production and productivity in targeted areas by improving farmers' access to critical agricultural inputs*. Key indicators of success include production and yield response for maize and rice in targeted areas, the adoption of improved agricultural technologies, fertilizer use efficiency, and the expansion and improvement of the network of private agro-dealers. The Development Objective of the ASDP Additional Financing Project is *to enable farmers to have better access to, and use of, agricultural knowledge, technologies, marketing systems, and infrastructure, all of which contribute to higher productivity, profitability, and farm income and to promote agricultural private investment based on an improved regulatory and policy environment*. Key indicators of success include an increased area under irrigation and higher yields of irrigated products. The Development Objective of the TASAF Additional Financing Project is *to improve access of beneficiary households to enhanced socioeconomic services and income-generating opportunities*. Key indicators of success include the number of beneficiaries of public works and other programs covered under TASAF II.

Program Description

53. A detailed description of each operation is contained in the respective Emergency Project Papers (Attachments A, B, and C and their respective Annexes). A brief summary of each proposed operation is presented here.

A. Accelerated Food Security Project (US\$160 million)

54. **The proposed new ERL for Accelerated Food Security Project will support the Government's efforts to maintain and boost domestic food production and productivity.** It will provide partial financing to scale up the Government's NAIVS initiative. This Project is designed to promote a rapid supply response and avert a potential emergency provoked by food shortages, given the continued food and input price risk prevailing in Tanzania and globally. Thus the Project attempts to balance the risks inherent in working in an emergency situation, including the lost opportunities associated with a delayed response, with the need for speed and flexibility to ensure that it responds rapidly and effectively. It also builds on lessons from implementing NAIVS in 2008/09 and similar programs in other countries, such as Malawi. The Project design thus recognizes the critical importance of public awareness campaigns and other supporting activities within and outside the Project.

55. **The proposed Project has three main components:** (i) improved access to agricultural inputs (fertilizer and seed), (ii) strengthening input supply chains, and (iii) project management and M&E. The vouchers that NAIVS provides to maize and rice farmers subsidize half of the price of a package of improved seed and fertilizer (the package provides enough of these inputs for one acre of maize or rice). NAIVS was implemented in 56 districts in Tanzania's high-potential zones for maize and rice in 2008/09, and eventually it will be scaled up to reach 65 districts throughout the country. The input supply chains will be supported by capacity building to strengthen and widen the agro-dealer network and by strengthening national seed systems to improve the availability of quality seed for maize, rice, and other crops. The Project will also support program management, regular monitoring of its progress, and rigorous evaluation of outcomes.

B. ASDP Additional Financing (US\$30 million)

56. **Additional Financing for ASDP will complement the ASFP by initiating the longer-term foundation for growth in agricultural productivity.** Consistent with the original Project, the Additional Financing will enhance agricultural productivity by scaling up rehabilitation of small-scale irrigation schemes and promoting integrated soil fertility management. Because integrated soil fertility management is crucial to sustainable productivity growth, it complements efforts under AFSP. The Additional Financing will thus be used to strengthen integrated soil fertility management research and extension by building awareness of soil fertility issues through on-farm demonstrations, conducting strategic research, and conducting field trials to improve the effectiveness and outcomes of NAIVS and other productivity-enhancing interventions.

57. **Additional Financing will also help to fill part of the financing gap for rehabilitating small-scale irrigation schemes.** The financing gap is estimated at US\$65 million. Investments in small-scale irrigation at the district level are supported through the demand-driven and performance-based District Agricultural Development Grants for District Agricultural Development Plans and through competitive grants from the District Irrigation Development

Fund.¹³ Implementation of the irrigation subcomponent of ASDP has increased the number of irrigation schemes and expanded irrigated area by an annual rate of 4.8 percent. Yields of paddy have more than doubled under irrigation. Perhaps as a result, requests for funding small-scale irrigation investments have greatly increased and far exceed the budgetary capacity and other resources available under District Irrigation Development Fund.

58. Funds would be channeled as Additional Financing through the existing IDA-supported ASDP. Progress towards achieving the Project Development Objective (PDO) and progress in implementation have been rated *moderately satisfactory*. Given that the current Project is proceeding as desired, no changes are proposed in the Project's design and/or scope.

59. The Project objective, components, arrangements for implementation, procurement and financial management would remain unchanged. Disbursement frequency to the Basket Fund Holding Account will change from quarterly to annually. The Additional Financing will continue to support the Government of Tanzania's program to (i) improve farmers' access to and use of agricultural knowledge, technology, marketing systems, and infrastructure (all of which improve productivity, profitability, and farm incomes) and (ii) promote private investment in agriculture through a better regulatory and policy environment. Both efforts will help the Government achieve its objective of sustained agricultural growth and food security, primarily by enabling the private sector to encourage the transition from subsistence to commercial agriculture.

C. TASAF Additional Financing (US\$30 million)

60. Consistent with TASAF II, Additional Financing for TASAF will complement the AFSP by increasing social protection for food-insecure and vulnerable persons. Interventions under TASAF II will be scaled up in selected food-insecure districts in the Mainland (initially 40 districts) and Zanzibar (Unguja and Pemba). Under AFSP, the agricultural inputs voucher scheme will provide subsidized fertilizer to farmers only in targeted districts with high levels of agricultural potential in Mainland Tanzania. The proposed Additional Financing, on the other hand, would finance costs associated with scaling up (i) labor-intensive public works, so that able-bodied but food-insecure persons can earn a wage and buy food from the market and (ii) support to vulnerable persons in food-deficit districts, so that they can better manage and mitigate the risks arising from high food prices.

61. Funds would be channeled as Additional Financing through the existing TASAF II Project. Progress towards achieving the PDO and progress in implementation have been rated *satisfactory*. A Technical Audit conducted in October 2007 confirmed that the assets created are of good quality and delivered in a cost-effective manner. A Beneficiary Assessment Report (January 2008) indicated that 87 percent of communities sampled expressed satisfaction with the improved access to services because of the Project. Furthermore, preliminary findings of a recent Impact Evaluation study (September 2008) indicate that the Project has targeted the right

¹³ Given the need to respond rapidly to the food crisis, the Additional Financing for ASDP will not fund medium- and large-scale irrigation, which is supported through the National Irrigation Development Fund.

beneficiaries as per the Project design and selection criteria. Thus the current Project is proceeding as desired.

62. **The objectives of the proposed Additional Financing will remain consistent with those of the original Project.** The main change is that Additional Financing will be directed at food-insecure districts in the Mainland and Zanzibar rather than nationwide, as under the original Project, and interventions will be limited to food-insecure and vulnerable communities and exclude service-poor communities. A large number of food-insecure people in the targeted districts require either free food or food at subsidized prices (for those who can partly afford to buy food). The Additional Financing is aimed at reducing the size of the food intervention by engaging the food-insecure in public works programs for wages that enable them to purchase the food.

G. FINANCING PLAN

63. **Total IDA funding for the proposed Program amounts to US\$220 million.** The proposed Program finances the ASFP with a total cost of US\$160 million, of which about US\$144 million for NAIVS. The total cost of TASAF Additional Financing is US\$30 million and the total cost of ASDP Additional Financing is US\$30 million (Table 6).

Table 6: Estimated Program costs (in US\$ million)

	Total costs
A. Accelerated Food Security Project	160.0
<i>Component 1: Access to agricultural inputs (fertilizer and improved seed)</i>	144.3
<i>Component 2: Strengthening of the input supply chain</i>	12.2
<i>Component 3: Project management and M&E</i>	3.5
B. Additional Financing for ASDP	30.0
<i>Component 1: Small-scale irrigation expansion</i>	28.7
<i>Component 2: Soil fertility management</i>	1.3
C. Additional Financing for TASAF II	30.0
<i>Component 1: National village fund</i>	25.5
<i>Component 2: Capacity enhancement</i>	4.5
Total	220.0

64. **The proposed Program is partially funding the financing gap rather than an entire intervention.** The overall ASDP requirements for small-scale irrigation are estimated at US\$65 million. The Additional Financing provides US\$28 million for rehabilitating small-scale irrigation schemes, leaving a funding gap of about US\$37 million. The Additional Financing for TASAF also covers only part of the financing gap.

65. **The AFSP also covers only part of total budgetary needs over the next three years.** The total budget for AFSP between 2009/10 and 2011/12 is estimated at US\$299.0 million, with the Government covering US\$139.0 million. The resulting funding gap of US\$160.0 million is proposed to be covered under AFSP. These costs include some incremental operational costs associated with the NAIVS implementation and monitoring, but they do not include the imputed staff time and other indirect costs which will be incurred by MAFC, regional Governments, district Governments, and village Governments. Farmers will contribute to NAIVS costs by paying half of the price of the seed and fertilizer packages they obtain with the vouchers from private dealers at market prices.

H. APPRAISAL OF PROJECT ACTIVITIES

Economic Analysis

66. **The major economic benefits of the AFSP result from increased productivity and yields of maize and rice in the target areas** through better access to fertilizer and modern varieties. Since support is directed at high-potential areas for major food crops in the Southern and Northern Highlands as well as in Western Region, the projected higher yields in these areas will contribute to increases in national production and yield indicators as well as significant growth in overall GDP.

67. **Maize and rice contribute significantly to Tanzania's economy.** In 2007, maize accounted for about 4.75 percent of the national GDP, whereas rice accounted for 2.66 percent,¹⁴ equivalent to 25 percent of agricultural GDP for maize and 14 percent for rice. Improvements in the productivity of these crops should greatly contribute to overall economic growth and poverty reduction, especially because the current productivity of maize and rice farmers remains very low. For example, maize yields range from 0.8 tons per hectare in Singida Region to 2.0 tons per hectare in Mbeya, for an average national yield of only 1.3 tons per hectare in 2007/08. These yields are lower than those obtained in most neighboring countries and represent only 8–22 percent of potential yields.

68. **Project-supported investments will raise the productivity and yield of maize and paddy rice.** Financial and economic models compare results with and without proposed Project interventions. Without the Project, farmers continue their low input–low output mode of production. With the Project, targeted farmers on average will receive an input voucher package for three years at about half of the market price. Depending on the mix of fertilizers and improved varieties in the package, maize yields in target areas are projected to more than double, rising from 1,120 kilograms per hectare in the baseline year to 2,450–3,200 kilograms per hectare in three years. Rice yields are projected to rise from 1,735 kilograms per hectare in the baseline year to 2,800–3,300 kilograms per hectare by the end of the Project.

¹⁴ Based on the Social Accounting Matrix of the CGE model prepared by IFPRI.

69. **The Project will allow farmers to generate sufficient cash to purchase inputs after exiting NAIVS.** At current market prices, using fertilizer and seed does not generate sufficient cash for many resource-poor farmers to purchase inputs from one year to the next. The Project's three-year support for seed and fertilizer purchases should allow farmers to earn enough to continue purchasing inputs at market prices to sustain their gains in production and productivity.

70. **The Net Present Value (NPV) of the input voucher scheme over 10 years is expected to equal US\$67 million (at a 12 percent discount rate).** When public expenditure in activities that complement the input voucher scheme is taken into account (namely research on soil fertility, support to agro-dealers, seed production, and M&E), the NPV falls to US\$41 million but remains satisfactory. The Internal Rate of Return of the Project is projected to be 37 percent.

71. **Project-supported investments are expected to increase total GDP in the range of about 0.9 percent per year.** With maize production projected to grow at 7 percent per year on average and rice production at 2 percent, total GDP will grow and food inflation will decrease. It is also most likely that higher levels of maize and rice production will increase rural incomes and reduce the prices that upstream producers (maize millers, for instance) pay for inputs. Thus increased greater maize production has multiplier effect by increasing the demand for and supply of other commodities. For agriculture this multiplier effect is typically estimated at around 1.5. Together, yield increases and the multiplier effect will increase national GDP by 0.9 percent.

72. **These potential gains must be viewed against the potential risks associated with the application of fertilizer, which arise mainly from weather-induced shocks and price and yield risks.** Shocks that reduce production can result in negative returns to fertilizer use. A 25 percent reduction in maize prices would wipe out the NPV and, in the case of adverse weather, a much smaller price reduction would suffice to do so. While the risks are significant, most of the targeted farm population resides in the most reliable rainfall zones where most of the fertilizer is used. Details of the methodology used in the economic and financial analyses are presented in Annex A.6, along with the complete set of results.

73. **The economic benefits of the ASDP Additional Financing result from increased agricultural productivity and improved access to agricultural services.** The design of the original Project, which will be maintained under the Additional Financing, helps to ensure that the activities and investments to be scaled up are cost-effective. Evidence from estimates of farm-level returns to community investments and technology adoption generally exceed the minimum improvements required for a 12 percent Economic Rate of Return (ERR). For the small-scale irrigation rehabilitation investments, which would account for a major share of the Additional Financing, the ERR is achievable at around 25 percent, with a 15-year investment span and unit costs of about US\$1,800 per hectare.

74. **Implementation of small-scale irrigation schemes in the last two years shows an increase in the area that was developed or rehabilitated.** The area developed or rehabilitated grew from 595 hectares in 2006 to 679 hectares in 2008 (by 4.8 percent annually). Average paddy yields increased from 1.9 tons per hectare under traditional irrigation systems to 4.5 tons per hectare under improved irrigation systems, and average gross income per hectare increased from TSh 600,000 to TSh 1,700,000 per year. The average yield of rainfed maize is 1.1 tons per hectare, whereas it is 4.1 tons per hectare for irrigated maize.

75. **ASDP seeks to increase the number of farm households receiving agricultural services from 10 percent to 55 percent by 2010/11 and 60 percent by 2012/13.** Achieving this target would imply that 1.5 million additional farmers would access agricultural services by 2010/11 and about 3 million by 2012/13.¹⁵ With the implementation of NAIVS and with advisory services increasingly focused on recommendations for soil fertility management and efficient fertilizer use, it is safe to assume that not only will more farmers benefit from ASDP's agricultural service interventions, the quality of services will be much better than originally envisaged. Thus more beneficiaries are expected to access high-quality services for soil fertility management through direct service provision, through farmer-to-farmer links emerging from the program's participatory methods for disseminating technology, and through the immediate adoption of research outputs and recommendations.

76. **The economic benefits of TASAF Additional Financing result from the value of community assets created through public works projects and the provision of social services.** The Beneficiary Assessment Study for TASAF II (2008) indicates that significant benefits accrue to participants in Project interventions. A significant number of grassroots community assets have also been created to provide for social services. The demand-driven nature of the selected subprojects has ensured that TASAF funds flow to where they are most needed. The direct involvement of communities has generated significant cost savings compared to the cost of executing similar interventions through public agencies, especially interventions in education, health, and water supply. Thus these community investments have a high cost-benefit ratio and are financially sustainable. Although each grant provides a one-time infusion of support, the communities contribute to the cost of the investment and take full responsibility for operations and maintenance. The active role played by communities in deciding which interventions to select and implement instills a strong sense of ownership that helps to improve the quality of the investment and the likelihood that it will be sustained. The Additional Finance will use the current implementation strategy to ensure similar economic and financial benefits from the interventions. Moreover, the same resource allocation formula, which is based on population, physical size, and poverty indicators, will be used to broaden and deepen the poverty reduction objective of the Project in the targeted districts.

Fiscal Sustainability

77. **The scaling up of NAIVS under the proposed Project will increase the budgetary allocation for the agricultural sector, and MAFC in particular, but it is not expected to jeopardize fiscal sustainability.** With NAIVS, the total MAFC budget will increase from about TSh 114 billion in 2008/09 to TSh 236 billion in 2010/11, based on current Medium Term Expenditure Framework (MTEF) projections and the full cost of NAIVS (Table 7).¹⁶ As a share

¹⁵ Based on current estimates of the population that is economically active in agriculture—approximately 15 million in 2004 (FAOSTAT).

¹⁶ In addition to MAFC, the Government allocates funds to the agricultural sector through the Ministry of Livestock Development and Fisheries, Ministry of Industries Trade and Marketing, MoWI, PMO-RALG, Prime Minister's Office, and LGAs. In 2008/09, expenditure on agricultural was 4.2 percent of all public expenditure (AgPER 2009). Assuming the share of other Ministries and LGAs in the total budget remains constant, the budget for the agricultural sector with NAIVS is projected to be about 5 percent of the total budget in 2010/11.

of the total budget, this is an increase from 1.6 percent to 2.6 percent. However, a significant part of the NAIVS budget will be financed with new IDA resources. The share of MAFC budget, including only the Government contribution to NAIVS (in addition to the MAFC nonsubsidy budget), will remain at the 2008/09 level for two of the three Project years and increase marginally to 1.8 percent in 2010/11, at NAIVS' peak outreach. With IDA funding ending in 2012/13, and NAIVS phasing out by 2013/14, the fiscal impact will end as well. Even at its peak, the budgetary impact of NAIVS in terms of domestic sources will be lower than the subsidy scheme that was funded and implemented by the Government until 2007/08.

78. **A key issue concerning budgets is that of additionality—in other words, to ensure that funding for NAIVS is *additional* to the budget for core mandates and functions of MAFC (the nonsubsidy budget).** During 2006/07–2008/09, the core MAFC budget (without fertilizer and seed subsidies) averaged 1.6 percent of the total budget. In 2009/10, it is projected to equal 1 percent of total expenditure, as a result of the reduced budget ceiling imposed on all ministries in anticipation of the effects of the global financial crisis. Some of the recent decline in MAFC's core budget reflects changes in mandates and the transfer of functions to other ministries or LGAs. Nevertheless, a low and declining core MAFC budget runs contrary to the priority the Government gives to agriculture for shared growth and poverty reduction. To maintain the core public goods and functions that MAFC is mandated to produce and perform, it is critical to maintain MAFC's share of core budget. In 2010/11–2011/12, the share of core MAFC budget should be at least the same as in previous years to ensure that the medium- and long-term development agenda under ASDP is not compromised.

Table 7: Public expenditure for AFSP and fiscal sustainability, TSh billion

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
MAFC budget:								
With subsidy	106	132	159	190	237	232	186	161
Without subsidy	94	109	86	81	90	99	109	120
Total GoT budget	4,788	6,067	7,216	8,139	9,071	9,978	10,976	12,074
Share of MAFC in total budget:								
Without subsidy	2.0%	1.8%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%
With GoT subsidy	2.2%	2.2%	2.2%	1.6%	1.8%	1.6%	1.7%	1.3%
With GoT + IDA	2.2%	2.2%	2.2%	2.3%	2.6%	2.3%	1.7%	1.3%
NAIVS costs				109	147	133	77	42
IDA financing				61	78	69	0	0
GoT financing				48	69	64	77	72

Note: Total budget in 2012/13-2013/14 is assumed to grow by 10 percent as in the previous two years (current MTEF). Subsidy in 2006/07 and 2007/08 was the previous fertilizer subsidy scheme. Subsidy in 2008/09 is the first year of NAIVS fully financed by GoT.

Source: MTEF and Tanzania AgPER (2009).

Social and Poverty Impacts

79. **The Proposed Program is expected to have significant positive social and poverty impacts.** It targets large parts of the population that are believed to be vulnerable to high food and input prices (note that food-insecure and other vulnerable persons in the poorest districts of Tanzania are also targeted through TASAF Additional Financing).

80. **AFSP is expected to have a positive social impact** in the next three years as the scaled-up voucher program reaches an expected 75 percent of poor smallholder households in high-potential food production areas, especially the Southern and Northern Highlands. Potential beneficiaries will be selected through participatory approaches at the village level. Simple, transparent criteria for eligibility will be published in the local media and broadcast on the radio. To reduce the potential risk of elite capture, the criteria are gender-sensitive and exclude better-off farmers who cultivate more than one hectare. To minimize leakage and displacement of the resources provided through the Program, priority will be given to farmers who have purchased little or no fertilizer over the last five years. By reducing the number of bags of urea offered per voucher from two to one, this input will be easier for resource-poor farmers to afford. The Program's targeting system will be supported by regular monitoring and participatory impact evaluations, which will provide information to make any operational adjustments as needed.

81. **Possible adverse social impacts on smallholders in the target areas who do not participate will be mitigated through various measures.** Smallholders who do not participate in the scheme and are net sellers are likely to be negatively affected by lower output prices. Although the risk of negative social impacts is high for this specific group, it will be partially mitigated by one positive spillover of NAIVS in rural areas: Agricultural inputs will be available at lower prices because the network of private agro-dealers, expanded and strengthened by the Project, will be able to reach more farmers in general. The social impact of the Program extends beyond the immediate group of farmers who will be able to use fertilizer, because the majority of rural households are net purchasers of food, and the availability of more food at lower prices will benefit them regardless of whether they use fertilizer. As shown in Table 8, more than half of the rural poor are likely to be net food buyers.

82. **To enhance the Program's sustainability and promote informed policy reform, a Poverty and Social Impact Analysis (PSIA) will be conducted.** The PSIA will give key stakeholders a better understanding of the Program, build capacity, and generate information that is gender sensitive and relevant to policy formulation. The PSIA, led by the Government, will also benefit from the participation of key stakeholders and civil society. This broad participation will not only enhance ownership of the Program but ensure better decision-making, locally and centrally. IDA and other participating donors will provide technical support and share pertinent international experiences.

83. **The TASAF Additional Financing Project will help to ensure that the livelihoods of the poorest of the poor, who are not targeted by NAIVS, are not threatened by the funding gap created by the current high food prices.** Because of the funding gap, the safety net has become weaker just as beneficiaries are struggling to overcome this year's crisis. Under TASAF

Additional Financing, assistance will be directed to those districts with the least potential for maize and rice production and the highest poverty rates. In 2008, a Rapid Vulnerability Assessment identified three districts where nearly 4 percent of the population (about 250,000 individuals) is food insecure and likely to remain so in the coming crop year. These people require free food or food at subsidized prices (if they can afford partial payments). As emphasized earlier, the Additional Financing will be used to hire food-insecure people for public works programs so they can buy the food they need from the market (thus avoiding the need for a large food distribution program). It is estimated that about 220,000 individuals will benefit directly from the public works activities, while 13,420 will benefit from other activities to support the livelihoods of vulnerable groups. By ensuring that all of the eligible households continue to be covered adequately by the safety net, the Additional Funding will constitute a very important contribution to reducing poverty now and limiting destitution in the future.

Table 8: Classification of rural households by quintile according to whether they are net food buyers and sellers in Kilimanjaro (Northern Highlands) and Ruvuma (Southern Highlands)

Quintile of expenditure	Kilimanjaro		Ruvuma	
	Net food buyers (% of total)	Net food sellers (% of total)	Net food buyers (% of total)	Net food sellers (% of total)
Q1	88.9	11.1	47.2	52.8
Q2	80.9	19.1	61.2	38.8
Q3	71.6	28.4	52.8	47.2
Q4	75.7	24.3	60.7	39.3
Q5	72.5	27.5	68.0	32.0

Note: Q1 is the lowest consumption expenditure and Q5 the highest.

Source: Sarris, A., S. Savastano, and L. Christiaensen (2006), "Agriculture and Poverty in Commodity Dependent African Countries: A Rural Household Perspective from the United Republic of Tanzania," FAO Commodities and Trade Technical Paper 9, FAO, Rome.

I. TECHNICAL ANALYSIS

84. A detailed technical analysis for each Project is contained in the respective Attachments.

J. IMPLEMENTATION ARRANGEMENTS

85. Implementation arrangements for each Project are detailed in the respective Attachments.

K. PROJECT RISKS AND MITIGATING MEASURES

86. The benefits and risks of the proposed operation must be ascertained within the wider national context and the IDA's broad commitment to supporting the Government's efforts to achieve immediate and long-term food security and agricultural growth.

Benefits

87. **The provision of timely and flexible support to Tanzania will assist the Government in its immediate response to the food crisis.** More specifically, this financing will enable the

Government to (i) scale up NAIVS to increase the food supply; (ii) through TASAF, widen support for the most vulnerable and food-insecure households; and (iii) reduce the financing gap for rehabilitating small-scale irrigation systems. The provision of rapidly disbursing financing will also solve the Government's cash-flow problem and make funds for NAIVS available on time and in full for the coming agricultural production seasons. This rapid response will diminish the likelihood that current high food prices and food shortages will persist.

88. **The Program's impact—in terms of economic returns as well as social, poverty, and environmental benefits—is expected to be overwhelmingly positive.** Without timely access to affordable fertilizer and improved seed, many smallholders face lower food crop yields, lower incomes, and higher risks of food insecurity and malnutrition. The primary beneficiaries of the NAIVS are smallholder farmers; while they do not belong to the poorest stratum of society (which is supported under TASAF), they are nevertheless poor and, without access to affordable inputs, very likely to experience deeper poverty. Lower levels of food production will have an effect well beyond the farm gate. Inflated food prices will hurt all Tanzanians, especially the poor, who are net purchasers of food. The environment will not easily recover from lower rates of fertilizer application, because soils will become increasingly infertile over the long term.

89. **Similarly, the impact of Additional Financing is expected to be positive.** TASAF II is a well-established safety net program in its fifth year of implementation. Independent impact evaluations have shown that TASAF II is reaching its target population and having a demonstrable, significant effect on beneficiary households. Ensuring that all of the eligible households remain adequately covered by the Program will do much to limit poverty now and in the future.

90. **The AFSP's M&E component will increase the efficiency with which the Project is implemented by providing a better understanding of the economics, inefficiencies, and capacity limitations of the voucher system.** This information is critical. Past analyses have shown that the economic efficiency of fertilizer depends heavily on the quality of extension services, access to profitable markets on the output side, the capacity of agro-dealers, and the availability of complementary inputs such as credit.

91. **In terms of its macro-level and fiscal impact, the AFSP will work to reduce inflation and will be fiscally sustainable.** To the extent that this operation will increase national production in the short run, it is expected to immediately reduce food price inflation, which has been the major force raising overall inflation in 2008 and early 2009. In the medium run, the Program is expected to raise agricultural productivity by fostering the adoption of agricultural technologies, strengthening input supply chains, and rehabilitating small-scale irrigation infrastructure. With these additional interventions, more food is expected to be available at lower prices in Tanzania. AFSP will be also fiscally sustainable (see "Fiscal Sustainability," Section H).

92. **The program will help address recurrent food shortages and chronic food insecurity in East Africa by helping to strengthen food production in Tanzania over the coming seasons.** Decent harvests in areas with higher and more reliable rainfall will make it easier to supply the least food-secure areas in the region and reduce maize prices, mainly in central Tanzania, Kenya, and DRC, both through local market transactions and locally sourced food aid.

Risks and Mitigations

93. **The negative impact of the global financial crisis.** The global economic crisis could potentially have a significant impact on the fiscal situation of the Government of Tanzania, constraining its ability to provide the anticipated level of co-funding to the input voucher scheme. Current projections show that the impact is likely to be within manageable limits. In the event of an unforeseen and pronounced revenue shortfall, such that the Government is unable to meet its commitment of a 50 percent share in the voucher subsidy budget, there would be a need for the Government and IDA to jointly reassess the co-funding arrangements as well as the scope and design of the AFSP as the total amount of resources available for the Project would be affected. The situation would be monitored quarterly at the time of reviewing the Interim Financial Reports (IFRs), and actions discussed and agreed between the Government and IDA to ensure tangible and sustainable outcomes.

94. **Cash flow problems with printing and redeeming vouchers.** The Project is expected to become effective on July 1, 2009. For the first year, however, the input vouchers need to be printed and distributed before then, which poses a risk due to limited funds (especially as it is the end of the Tanzania Fiscal Year). To cover these and other necessary expenses that need to be incurred prior to effectiveness, the Project will provide for retroactive financing for these expenditures. An additional, and potentially more significant, risk stems from the need for considerable resources for the redemption of vouchers during the first quarter of each financial year, prior to the approval of the national the budget by the Parliament (typically in August–September). The vouchers are planned to be distributed in June–July with redemptions starting soon thereafter. To permit timely financing of redemptions and meet other essential expenditures for the scheme, the Government has provided assurances that it will make adequate arrangements to ensure that sufficient and timely funds are available to MAFC starting on July 1 of each year.

95. **Risk of the fiscal nonsustainability of NAIVS.** The scaling up of the input voucher scheme might become fiscally unsustainable, crowding out ASDP expenditures and putting pressure on the total budget. This risk is mitigated to some extent in that donor funding for ASDP is ring-fenced and subject to annual approval by the Basket Fund contributors. Further, there is a strong commitment from the Ministry of Finance and Economic Affairs (MoFEA) that the resources for NAIVS will be additional to the core budgets of the ASLMs for their mandated public expenditures. The overall fiscal burden of the NAIVS on the Government's own resources is expected to be marginal and well within the previous years' shares of input subsidies administered by MAFC. At full maturity, including IDA resources, the share of MAFC budget is projected not to exceed 2.6 percent of the total Government budget.

96. **Negative impact of export ban on farm prices.** With the projected food supply response, the continuation of the export ban and inefficiencies in domestic marketing channels for maize may lead to price declines and reduce the profitability of fertilizer use, and thus the efficiency of NAIVS public expenditure. The export ban is a temporary measure adopted by the Government of Tanzania to contain domestic food prices, which have remained high over the past 15 months, and to ensure an adequate level of food availability in the country, given the periodic weather shocks (including failure of the 2008/09 short rains in the North) and regional demand pressures. The Government of Tanzania will lift the export ban as the food security situation improves and the expected supply response from NAIVS improves the prospects for

regional exports. The Government and IDA teams will closely monitor the food price and marketing situation and update the market outlook on a regular basis. Food policy will continue to be a key feature of IDA's policy dialogue with the Government, during supervision and through analytical work.

97. **Risks caused by poor timing and inadequate communication.** The success of the voucher scheme depends on providing timely information to key stakeholders, including fertilizer and seed suppliers and distributors, about the scale and scope of NAIVS. Providing sufficient information to local and regional stakeholders is critical to ensure that NAIVS is implemented efficiently. Measures to mitigate the risk of inadequate and poorly timed communication are embedded in the Project design (in the subcomponent supporting the awareness and information campaign). Communication will be facilitated through a number of channels to ensure all stakeholders have access to relevant and timely information. The communication strategy and awareness campaign will also explicitly ensure that the exit strategy is clearly and unequivocally communicated to the beneficiaries to permit the sustainability of the benefits of the Project.

98. **Limited capacity of agro-dealers.** The limited technical and financial capacity of agro-dealers heightens the risk of delays and gaps in providing inputs to farmers, especially in remote areas. This risk is mitigated by training agro-dealers in technical and business skills. Training will be scaled up and improved through an adequately funded subcomponent of the Project.

99. **Economics of fertilizer use.** Prices for food crops and agricultural inputs have fluctuated rapidly from historic lows to historic highs. Domestic maize prices respond much more to regional pressures than world markets. Falling international fertilizer prices are expected to transmit, perhaps with a little delay owing to accumulated stocks and high transport costs (caused in turn by poor roads and possibly future rise in fuel prices). If food production increases in response to NAIVS, as expected, it is possible that domestic food prices may fall and reduce the profitability of fertilizer use. But given that food prices in East Africa are expected to remain high because of regional structural factors, even beyond the current financial crisis, this risk can be effectively mitigated through an active promotion of regional exports and lifting of the export ban on maize. Further measures include the promotion of warehouse receipts, local purchase programs like P4P, investments in rural roads, and the elimination of domestic barriers to trade (such as delays and costs associated with road blocks, weigh bridges, nontransparent subnational taxation, and other nontariff barriers). Subnational taxation of agriculture is being addressed explicitly in the Poverty Reduction Support Credit-8.

100. **Technical efficiency of fertilizer use.** Training for extension agents and agro-dealers will increase the chances that farmers obtain correct technical advice for using fertilizer and new seed. Because smallholders may be unwilling or unable to test and adopt improved technologies and/or sustainable soil fertility management practices on their own, the Additional Financing to ASDP will support a demand-driven, on-farm research and demonstration approach to promote integrated soil fertility management practices. The Project will also strengthen the feedback mechanisms being promoted under ASDP to ensure that the farmers have improved access to adapted technologies.

101. **Improper targeting.** In the scale up the voucher program, the Project seeks to reach more resource-poor farmers. The risk that vouchers may not reach the intended people will be mitigated by a carefully managed process for selecting the farmers who will participate in the Project. Regular information and awareness campaigns will ensure that beneficiaries are aware of entitlements. Beneficiaries will be selected at the village level through a participatory process managed by an elected group of six farmers comprising the Village Voucher Committee (VVC) and involving diverse members of the community through the Village Assembly. The eligibility criteria are simple and will be published in the local media. Input vouchers will be targeted using transparent allocation criteria to agro-ecologically suitable areas for maize and rice production to ensure an effective supply response. The targeting criteria are designed to encourage participation of smallholders and poor farmers. Regular participatory monitoring and rigorous impact evaluation, included in the Project, will inform necessary adjustments. A complaint mechanism will allow farmers to register complaints and to ensure that they are addressed.

102. The very poorest households may not be able to meet the 50 percent co-payment for inputs required in the voucher scheme. These households require support through other interventions, however, including through mechanisms such as the public safety nets being implemented through TASAF II Additional Financing in the food-insecure areas. The safety net programs can provide cash or food through public works and other programs.

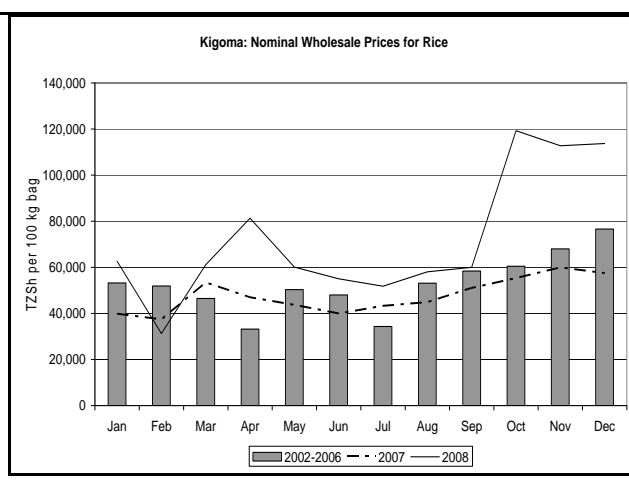
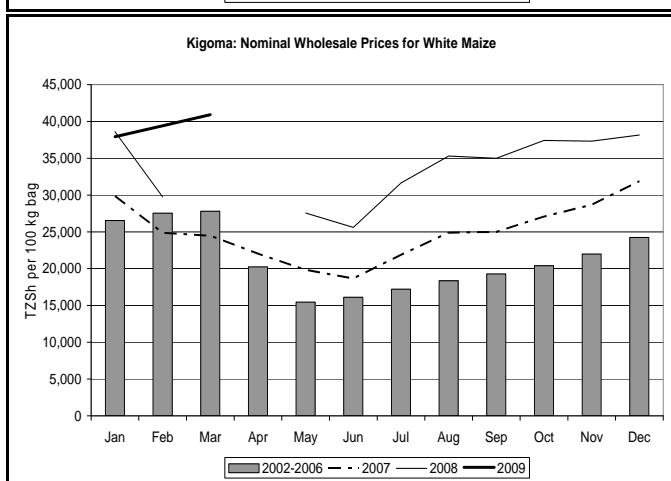
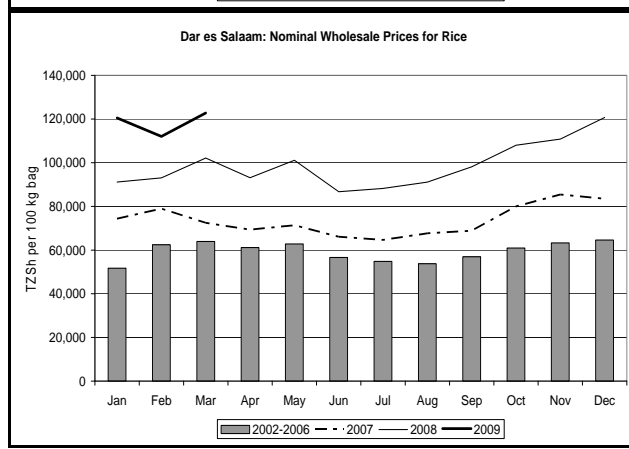
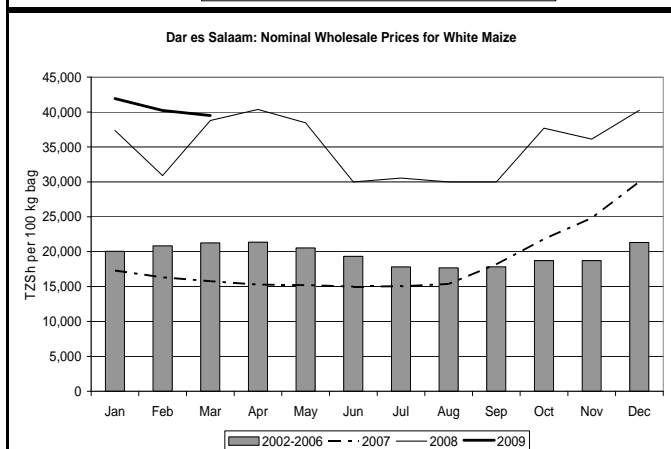
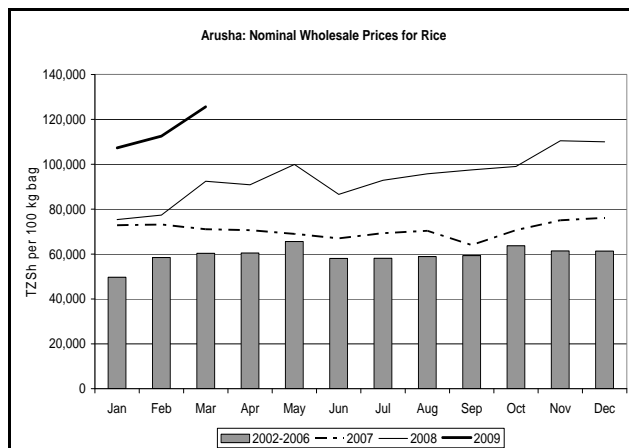
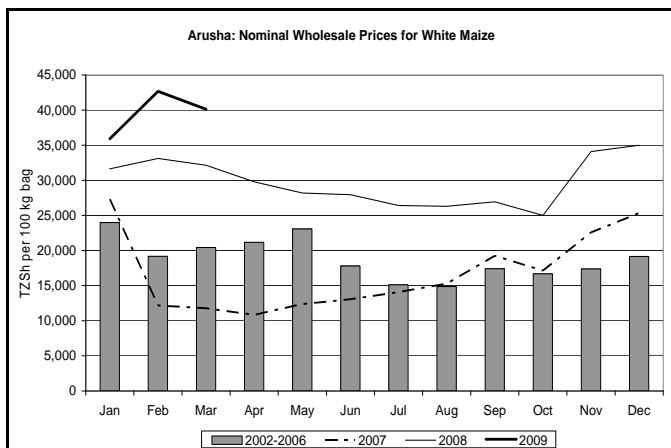
103. **Inadequate monitoring and evaluation system.** A strong M&E system not only ensures that the Project's impact will be assessed once it ends but ensures that policy and institutional adjustments can be made during 2010/11 and 2011/12 if needed. Other projects have suffered from M&E systems with insufficient scope, rigor, and independence. This risk was discussed for the present Project, and the Government is committed to allocating sufficient budget for regular monitoring and independent impact evaluation. The MAFC/ASDP M&E team will conduct regular monitoring, and the impact evaluation will be done by independent parties with support from the National Bureau of Statistics and IDA's Africa Region Impact Evaluation Group.

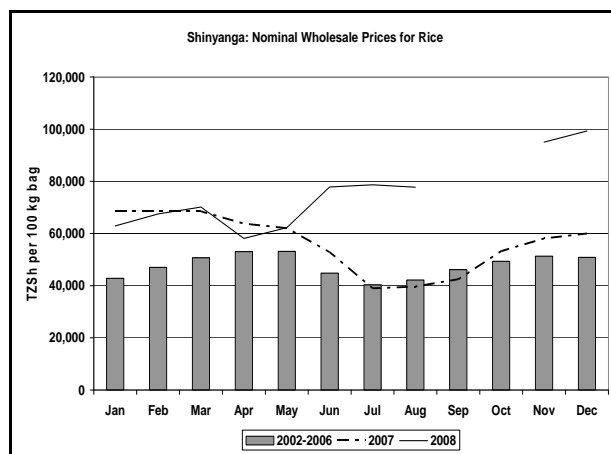
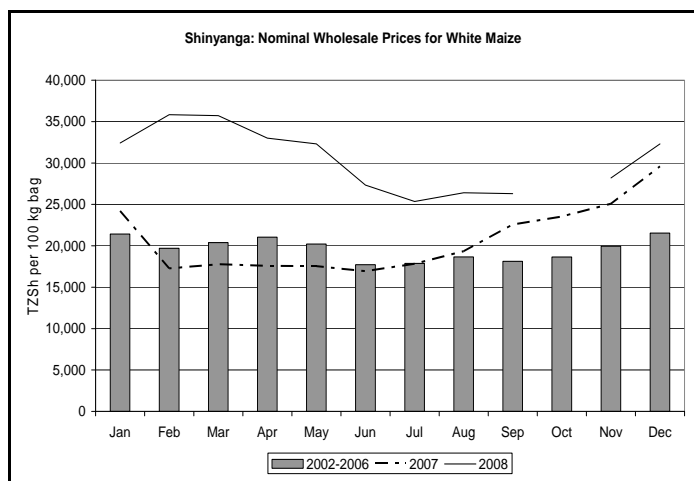
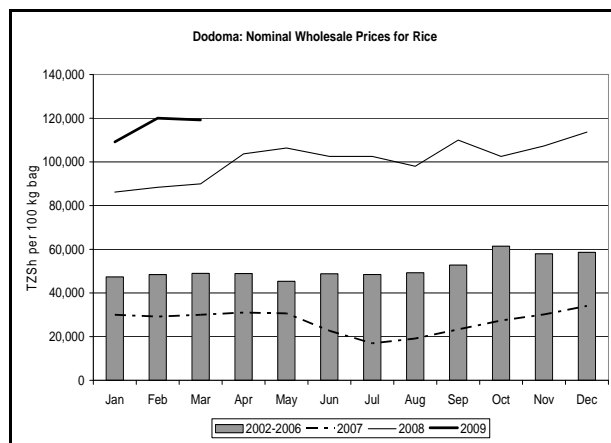
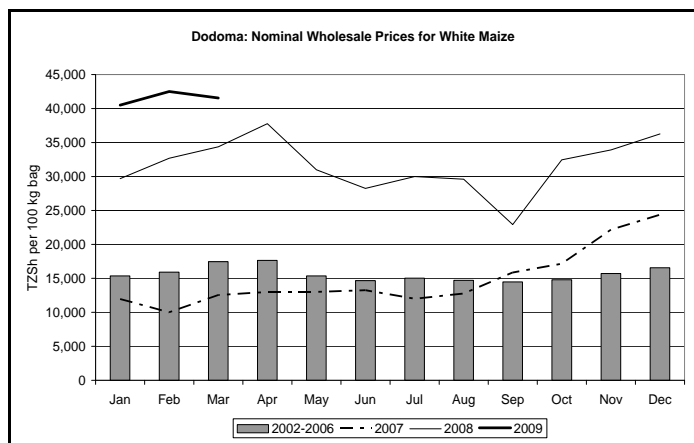
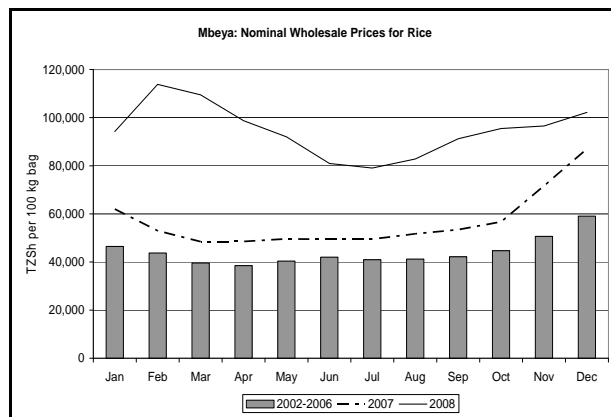
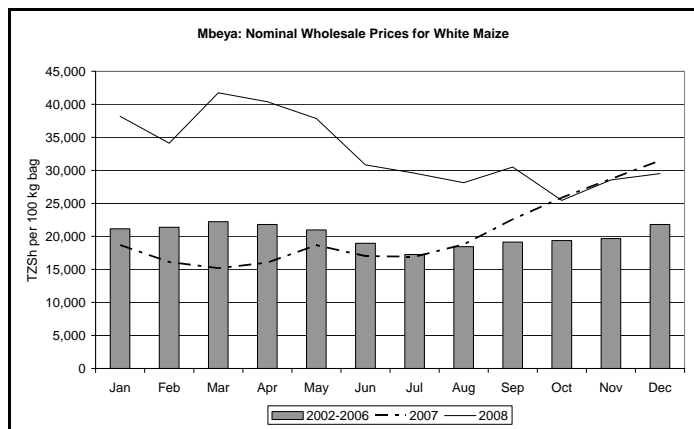
104. **Weather.** A drought would seriously affect crop response to fertilizer. Even without a severe drought, the variable rainfall in marginal areas can cause fertilizer to have little effect on production and negatively affect the welfare of those who purchase fertilizer. The impact of urea will largely be lost, although DAP, which remains in the soil for longer, will still have some positive impact in the following seasons. Farmers face weather risks every production season, although usually only parts of Tanzania are affected by serious drought. The risk that all of Tanzania and all farmers using fertilizer will be affected by drought is modest. The risks caused by weather, especially by variable rainfall, can be mitigated in a number of ways: by training extension officers and agro-dealers to provide suitable advice to farmers about the best times and ways of applying fertilizer and the choice of improved seed (such as drought-tolerant varieties); by promoting (under ASDP) conservation farming and integrated soil fertility management to mitigate the effects of drought; and by increasing the irrigated area as proposed under ASDP Additional Financing. For extreme drought conditions, a scaled-up response under TASAF would help mitigate adverse effects on the poor and vulnerable.

L. TERMS AND CONDITIONS FOR PROJECT FINANCING

105. All Credits will be provided on standard terms of 10 years' grace period and 40 years' maturity.

Annex 1: Trends in prices of food staples (white maize and rice) in Tanzania, 2002–09





Source: FEWSNET and the Ministry of Industries Trade and Marketing of Tanzania.

Note: Date not available for Shinyanga and Mbeya for 2009.

ATTACHMENT A: ACCELERATED FOOD SECURITY PROJECT

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an Emergency Recovery Loan (ERL) in the amount of SDR 107.2 million (US\$160 million equivalent) to the United Republic of Tanzania for the Accelerated Food Security Project (AFSP). The proposed Project is one of a package of three complementary operations that form IDA's response to the Government of Tanzania's request for urgent support for its Accelerated Food Security Program.¹⁷ The Program's goal is to enhance national food security and avert the food crisis that could arise because of persistently high, volatile prices for food and agricultural inputs. The Bank is using expedited procedures under its Global Food Price Response Program (GFRP) and Emergency Recovery Loan procedures (OP/BP 8.00) to respond to the Government's request.

2. As a short-term emergency response, the AFSP is a standalone Project that will finance urgent, time-bound interventions to supplement the Government's medium- and long-term agricultural development agenda, which is supported by IDA and four other development partners through a Basket Fund for the Agricultural Sector Development Program.¹⁸ The proposed Project will scale up Government efforts to boost domestic food production, make food more widely available, and increase the stability of food crop production. The Project will mostly finance activities that address the immediate concerns of maintaining and increasing food production through the National Agricultural Inputs Voucher Scheme (NAIVS). The Project will be implemented by the Ministry of Agriculture, Food Security, and Cooperatives (MAFC) in accordance with the Project Implementation Manual.

II. Project Objective and Description

3. **Project Objective.** The objective of the Project is to contribute to higher food production and productivity in targeted areas by improving farmers' access to critical agricultural inputs.

4. **Project Description.** The proposed instrument for the Project is an Emergency Recovery Operation processed under the GFRP guidelines and OP 8.00. In line with these procedures, the Project will support measures to mitigate or avert the potential effects of imminent or future emergencies as a result of price and production shocks.

¹⁷ The two complementary operations are Additional Financing for the Agricultural Sector Development Project (ASDP) and Additional Financing for the Second Tanzania Social Action Fund (TASAF II). The additional ASDP financing will expand the number of small-scale irrigation facilities and promote integrated soil fertility management practices as part of medium- to long-term efforts to increase agricultural productivity under ASDP. The additional TASAF II financing will scale up safety net mechanisms (such as public works projects and other kinds of support for vulnerable groups) currently implemented under TASAF II.

¹⁸ The other development partners contributing to the ASDP Basket are the International Fund for Agricultural Development, the Government of Japan, Irish Aid, and the African Development Bank.

5. The proposed Project will have three components: (i) Improving access to agricultural inputs (fertilizer and seed); (ii) Strengthening input supply chains; and (iii) Project management and monitoring and evaluation (M&E).

A. Component 1: Improving access to agricultural inputs (fertilizer and seed) (Total cost US\$283.4 million)

6. Component 1 will scale up NAIVS in ways that balance the Government's goal of reaching the maximum number of farmers against the present budget constraints and the need to place the voucher scheme on a more sustainable footing (fiscally and physically). This component was designed in recognition of the inherent risks of working in emergency situations, including the opportunities lost because of a delayed response and the critical importance of speed and flexibility in ensuring a rapid, effective response.

7. The design of this component incorporates important lessons from the implementation of NAIVS during 2008/09 as well as lessons from similar programs in other countries, such as Malawi (see Annex A.2). For this reason, the scaled-up voucher scheme will include critical complementary activities, such as a public awareness campaign, support to private agro-dealers to improve their capacity to deliver inputs, support to strengthen the national seed systems, the development and dissemination of integrated soil fertility management practices (including conservation farming), and rigorous M&E. Continuous M&E and the proposed Poverty and Social Impact Assessment (PSIA) of the Project during its first year of implementation will allow the design of NAIVS to be modified and improved in subsequent years.

Subcomponent 1.1: Scaling up NAIVS

8. **NAIVS as a “market-smart” subsidy.** The core of this subcomponent is the provision of input vouchers to a cumulative total of 2.5 million maize and rice farmers.¹⁹ The vouchers allow farmers to obtain a predetermined package of inputs from private suppliers. Each package provides sufficient inputs for half of a hectare of land at subsidized prices.²⁰ The subsidy consists of 50 percent of the prevailing market price for the input package. Each eligible farmer will receive vouchers for a maximum of three years.²¹ During the three years of Project implementation, the total expenditures on subsidies per se are estimated to be US\$278.2 million. Of this, half will be financed by the IDA Credit and half by the Government of Tanzania. In addition, for two years after the IDA Project ends, the Government will fully finance the subsidy for farmers remaining in the scheme (1 million in year 4 and 0.5 million in year 5; all farmers will exit the scheme after year 5). This subsidy is expected to require an additional US\$69 million from Government sources (US\$46 million in year 4 and US\$23 million in year 5).

¹⁹ The total number of agricultural/rural households in Tanzania is estimated to be about 5.5 million in 2009.

²⁰ Vouchers are designed as securities and thus protected by special features to avoid fraud.

²¹ One farmer per household is eligible for the voucher scheme. Thus the terms “farmers,” “beneficiaries,” and “households” are used interchangeably in this document.

9. The aim of NAIVS is to intensify food production in areas with high agro-ecological potential for producing maize and rice, two of the major staples grown and consumed in Tanzania. In these areas, the vouchers are targeted at all farmers cultivating maize or rice on less than one hectare. In addition, rice farmers with access to irrigation will be considered in all regions, not just in the high-potential areas. In subsequent years, based on the lessons emerging from implementation, other regions and other crops for which fertilizer and improved planting material can be used profitably may be considered, subject to the availability of budget resources.

10. Among the new entrants to the scheme, the two groups given highest priority for receiving vouchers are (i) resource-poor farmers who have not used fertilizer in the last five years and (ii) female-headed households. Farmers who have not used fertilizer for five years are targeted to minimize the displacement of commercial fertilizer sales. In line with the Government's broader strategy to assist resource-poor farmers, the voucher scheme supports longer-term development objectives by promoting the adoption and efficient use of these critical productivity-enhancing inputs. Because support will continue for three years, beneficiary incomes and assets can be built up so that households become capable of acquiring these inputs on a commercial, sustainable basis.

11. The private sector imports and distributes fertilizer and seed. The Government does not intervene in procuring, distributing, or setting prices of agricultural inputs. The Government actively promotes private participation in input and output markets. Its strategies for achieving this goal include the creation of an enabling environment and establishment of public-private partnerships (in areas where private participation is limited at present). In line with this approach, this Project will help to strengthen the capacities of private agro-dealers by offering training in the technical and business management skills needed to supply inputs (see Component 2.1).²² Complementary investments in integrated soil fertility management and conservation farming (through the Additional Financing Credit for the Agricultural Sector Development Project—ASDP) and sustainable seed systems (see Component 2.2) will help put NAIVS on a more sustainable footing.

12. An exit strategy is built into the Project, given that each farmer can obtain vouchers for a maximum of three years. IDA support through this Project will end after Year Three, though Government support will be needed for an additional two years to complete the three-year cycle for late entrants into the scheme (see below). The input voucher program will be monitored closely and its impact regularly evaluated (see Component 3) to identify and address weaknesses during implementation. Provisions have also been made for audits and penalties to prevent and deal with corruption and other governance issues that may emerge.

13. **Targeting.** The Project is geographically targeted to the most suitable areas for producing maize and paddy rice, taking into account the number of agricultural households with no more than one hectare of land planted with maize and rice. In 2008/09, NAIVS reached about

²² Credit constraints are expected to be eased through ongoing or planned partial credit guarantees provided to commercial banks for lending to agro-dealers by partner organizations, such as AGRA and USAID.

740,000 such beneficiaries in 56 districts²³ (11 regions). Under this Project, by 2012/13, NAIVS will expand to reach 2.5 million households in 65 districts (Annex A.8). The target areas are concentrated in the Southern Highlands, Northern Highlands, and Western Region, in agro-ecological zones suitable for the target crops. These zones account for about 70 percent of total maize production and 50 percent of total paddy production. In addition, NAIVS will also cover the major irrigated areas in other regions (for rice and maize production), both to increase the economic returns to irrigation investments and to reduce the risks of the voucher scheme. Decisions to expand the scheme's geographic coverage even further will be taken during implementation, based on emerging lessons, the economics of input intensification in new areas, and the availability of budgetary resources.

14. The planned rollout of NAIVS is summarized in Table A.1 (for details, see Annex A.8). The pace will depend on the resources available and, equally important, the pace of capacity building among agro-dealers. The presence of qualified agro-dealers is critical to ensure that farmers obtain the needed inputs. The geographical allocation of vouchers from MAFC to the regions, from regions to districts, and finally from districts to villages will be based on transparent criteria. The criteria will be applied by multistakeholder voucher committees established at each level of administration and validated at stakeholder fora at each level (see Annex A.7 for details on the allocation criteria and implementation arrangements).

Table A.1: Evolution of number of beneficiaries and districts covered

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Total
Farmers entering NAIVS	740,000	800,000	500,000	500,000			2,500,000
Participating farmers (annual aggregate)	740,000	1,540,000	2,040,000	1,800,000	1,000,000	500,000	
Number of regions	11	11	11	11			
Number of districts	56	61	65	65			

Note: This table shows the rollout and exit strategy beyond the lifetime of the Project (2009/10-2011/12). For the detailed expected distribution, see Annex A.8.

15. NAIVS is designed with particular attention to how beneficiaries are selected at the village level, the lowest level of implementation, to ensure proper targeting and transparency. At this level, the key institutions are the Village Assembly and the Village Voucher Committee (VVC). The VVC consists of six farmers (three men and three women) elected by the Village Assembly to administer the voucher scheme. Prospective beneficiaries are identified by the VVC in a participatory manner using established criteria. The list of selected farmers is then approved by the Village Assembly. The VVC is also responsible for distributing the vouchers and overseeing their use and redemption.²⁴

²³ As of March 2009, there are 132 districts in Tanzania.

²⁴ See details on voucher redemption in Annex A7.

16. For new farmers entering the scheme, the selection criteria include: (i) the person is a full-time farmer, residing in the village; (ii) the household does not cultivate more than one hectare of maize or rice; (iii) the household is willing to use the inputs provided on these crops while following the recommendations provided by extension; (iv) farmers agree to be diligent and serve as good examples to other farmers in how to use good agricultural practices; (v) farmers are willing and able to co-finance the purchase of the subsidized input package; (vi) female-headed households have priority for accessing vouchers; and (vii) priority for accessing vouchers will be also given to farming households that used little or no fertilizer and improved seed for maize or rice over the last five years. Farmers who fail to meet their obligations under the scheme, as assessed by the VVC and endorsed by the Village Assembly, will be replaced by other eligible farmers from the same village/community.

17. **Subsidized input package.** The input package will consist of three vouchers. One is for nitrogenous (N) fertilizer—one bag of urea. A second is for phosphorous (P) fertilizer—either one bag of DAP or two bags of Minjingu Rock Phosphate (MRP) with nitrogen supplement (also called *Minjingu mazao*), depending on the farmer’s choice.²⁵ A third voucher is for seed (10 kilograms of a hybrid or open-pollinated maize variety or 16 kilograms of a rice variety)²⁶ sufficient for half of a hectare of maize or rice (Table A.2). This package is designed to provide sufficient fertilizer to make it economically viable for farmers to invest in inputs. The levels of nutrients²⁷ supplied through the vouchers are 32 kilograms of N and 23.3 kilograms of P₂O₅ (for option 1) and 33 kilograms of N and 25 kilograms of P₂O₅ (option 2). Given the low levels of fertilizer currently applied (about 8 kilograms per hectare), significant yield increases can be achieved by using the proposed input package. Using economically optimal levels of inputs—that is, using inputs more efficiently—helps farmers realize maximum gain (net income) and reduces the weather-induced risks they face, making fertilizer use more attractive. Experience in the region shows that in the long run, overall production is higher when economically optimal levels of fertilizer are applied rather than technically optimal levels. Besides increasing the likelihood of the sustainability of outcomes for a given budget, this approach also allows an expansion in the coverage of farmers and total cropped area.

²⁵ DAP is the most commonly used basal fertilizer in Tanzania. MRP, manufactured in Northern Tanzania, is technically less efficient, because a certain amount of nitrogen is needed for plants to absorb phosphorus. MRP+N is a new product, technically equivalent to DAP, but currently produced in very limited quantities. Production is expected to expand considerably in the coming years.

²⁶ The seed provided in the package is sufficient to plant half of a hectare (100 percent) of maize and one-quarter of a hectare (50 percent) of direct-seeded rice. The lesser quantity of rice is proposed because rice is a self-pollinating crop, and good quality seed can easily be multiplied by farmers themselves, thus encouraging the spread of new rice varieties.

²⁷ This nutrient supply level corresponds to the optimal average recommendation (0.5 hectare) for maize across agro-ecological zones and soil types in Tanzania (see Samki and Harrop 1995, “General problems in preparing fertilizer use recommendations in Tanzania”, *Geoderma* 67, Issue 304, p. 159-164). The proposed average recommendation is easy for farmers to follow: they apply DAP or MRP+N at planting and top dress with urea when maize/rice is at the elongation stage. If more refined fertilizer recommendations are developed, it may be necessary to consider different kinds of fertilizer packaging (for example, smaller, 25-kilogram bags) in the future.

Table A.2: Maize and rice input packages proposed for NAIVS (for 0.5 ha)

Options	N source	P source	Seed
Maize farmer (Option 1)	1 bag urea	1 bag DAP	10 kg OPV or hybrid seed
(Option 2)	1 bag urea	2 bags MRP+10N	10 kg OPV or hybrid seed
Rice farmer (Option 1)	1 bag urea	1 bag DAP	16 kg seed
(Option 2)	1 bag urea	2 bags of MRP+10N	16 kg seed

18. The proposed input package is a considerable improvement over the one used in 2008/09. Significant changes include moving from technically to economically optimum input levels—the number of bags of urea per N voucher is reduced from two to one, which also reduces the topping-up (co-payment) requirement for the farmers. The associated reduction in the subsidy per farmer makes it possible to increase the number of beneficiaries without increasing the budget. The second change is the introduction of a flexible P voucher. In 2008/09, about 80 percent of the P vouchers were specifically for MRP and the remainder for DAP. The flexible P voucher lets farmers choose the type of fertilizer based on market prices and the location-specific technical efficiency of each one. This choice is expected to encourage more competition in the input market.

19. The Project does not finance any inputs for tobacco. Tobacco requires a different type of nitrogen source (mainly nitrates), much lower levels of P, and higher levels of K₂O. High doses of urea negatively affect the growth of tobacco seedlings, which require nitrogen supply in the form of nitrate (NO₃), not the ammonium (NH₄) applied to maize and rice. In tropical soils, intensive tobacco production also requires a balanced supply of micronutrients as well, including sulfur (S), magnesium (Mg), boron (Bo), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), and chlorine (Cl), generally in chelated EDTA (ethylenediaminetetraacetic acid) form. Fertilizer formulations available through NAIVS do not contain micronutrients, potassium, or the right type of nitrogen source.²⁸

20. **Proper timing for printing and distributing vouchers.** The timing for printing and distributing vouchers is sensitive to the agricultural cycle, farm households' cash income cycle, and the Government's budgeting cycle. The main planting season begins in October–November, depending on the agro-ecological zone. Vouchers must be printed in April–May to reach beneficiaries by July–August. Farmers who participated in NAIVS during 2008/09 reported that they would prefer to have the vouchers immediately after the June–July harvest, when most farmers have cash and find it easier to make the 50 percent co-payment for the voucher inputs.

21. The voucher scheme also requires MAFC to have sufficient budgetary resources to cover the substantial outlays involved from July to September (the first quarter of the Tanzanian Fiscal Year), when the vast majority of vouchers will be redeemed. The Government budget cycle

²⁸ Sanchez, P. (1976), *Properties and Management of Soils in the Tropics*, Wiley/North Carolina State University, Raleigh; Juo, A., and K. Franzluebbbers (2003), *Tropical Soils: Properties and Management for Sustainable Agriculture*, Oxford University Press; and Pearce, R., and G. Palmer (2005), "Selecting the Right Fertilizer for Tobacco Transplant Production in Float Systems," Agr-163 (Bulletin), University of Kentucky, Louisville.

poses a particular challenge in this respect, because Parliament approves the budget only in August or September. It is urgent that this issue be resolved by MoFEA and MAFC. The proposed Project is expected to become effective by July 1, 2009. For the first year of implementation, however, resources need to be expended beforehand to print vouchers in April–May and undertake other essential Project start-up activities. To facilitate these, the Project will retroactively finance eligible expenditures incurred on or after April 1, 2009, up to a maximum amount of US\$20 million equivalent.

22. **The face value of the vouchers.** Vouchers for each input are required to have a face value equivalent to 50 percent of the market price of the respective input, plus a “remoteness premium” that varies by the average distance of each district from the port (for urea and DAP) or point of production (for MRP and seed). The remoteness premium is incorporated in the voucher to compensate farmers in more remote locations for the added cost of transporting inputs. Because vouchers are printed before farmers buy their inputs, the level of subsidy reflected in the vouchers’ face value is only an approximation, based on projected input prices when the vouchers are printed. If market prices move higher than the projection, the level of subsidy to the farmer is less than 50 percent; if market prices move lower, the level of subsidy is higher.

23. In 2008/09, the face value of a voucher for a 50-kilogram bag of urea varied between TSh 24,000 for locations near Dar es Salaam and TSh 27,000 for more remote areas. For DAP, the face value ranged from TSh 45,000 to TSh 48,000. In 2009/10, the face value is expected to be lower to reflect lower input prices, and it is estimated that farmers will need to pay about TSh 65,000 of their own cash (the equivalent of about 250 kilograms of maize or 180 kilograms of paddy) to obtain the subsidized input package. Although seed prices are not expected to rise faster than inflation, fertilizer prices are projected to increase as the global economy revives and fuel prices rise. The face value of vouchers will be adjusted annually to reflect input prices projected in the upcoming season.²⁹ The public and private stakeholders in NAIVS will need to align the face value of vouchers and number of beneficiaries within the proposed total subsidy envelope.³⁰

24. **Voucher redemption.** The Project contains mechanisms to create a transparent process for awarding vouchers to farmers. Farmers who receive vouchers may redeem them with a registered agro-dealer of their choice. The agro-dealer redeems vouchers at the nearest branch of the National Microfinance Bank (NMB). The Government has contracted with NMB to redeem the vouchers for a service fee. As the only commercial bank in Tanzania with branches in each district, NMB is currently the only choice to participate in NAIVS.

25. **Fertilizer marketing.** As noted earlier, the fertilizer supply chain is entirely in the private sector. The public sector is not involved in importing, distributing or marketing fertilizer. Seven major private companies import and distribute urea, MRP, and DAP, using their own networks. MRP is mined and processed locally by Minjingu Mines and Fertilizers Ltd. and

²⁹ Average indicative fertilizer prices for the upcoming season are available in April, when most importers place their orders.

³⁰ Implementation arrangements are detailed in Annex A.7.

distributed by Tanzania Fertilizer Company. As mentioned, MRP+N competes effectively with imported DAP as a source of phosphorus and is likely to gain market share. The nitrogen and phosphorus content of 50 kilograms of DAP is equivalent to that of 100 kilograms of MRP+N, although the short-term efficiency of MRP appears to be slightly lower than that of DAP. Thus two bags of MRP+N can substitute for one bag of DAP. The competitive edge between the two products varies by geographical area and transport cost. MRP+N likely to be more cost-effective in the North (near its production site), whereas DAP is likely to be more competitive in the South.

26. Starting in 2009/10, all input suppliers can source MRP for the highly competitive Tanzanian market. At the beginning of the 2008/09 planting season, input suppliers imported fertilizer at very high international prices. The average landed price was US\$45 per bag of urea and US\$75 per bag of DAP. International prices dropped sharply in the second half of 2008, and input companies responded to the higher fertilizer demand induced by NAIVS by importing fertilizer at much lower prices, pushing overall national prices down to about US\$30 for urea and US\$42 for DAP. As a result, input suppliers who accumulated large stocks when prices were high incurred losses, while farmers benefited from the heightened competition.

27. **Supply of improved seed.** Like the fertilizer industry, the seed industry is dominated by private companies. Seed suppliers mainly import hybrid maize seed, although they also produce some certified improved maize and rice seed locally. Most companies are currently based in the Arusha area. Foundation (basic) seed for locally bred varieties is produced by the Agricultural Seed Agency (ASA), which also produces a limited quantity of commercial seed of open-pollinated varieties. Quality Declared Seeds (QDS) is a well-established system in which groups of farmers produce and market seed locally. Seed prices are determined competitively by supply and demand as well as marketing and transaction costs. The seed industry is growing rapidly in Tanzania but still relatively new. To ensure sufficient quality seed in the short run for NAIVS and to develop a vibrant, competitive seed industry over the medium and long term, this Project will strengthen national seed systems through subcomponent 2.2, discussed later.

28. **Alternative exit mechanisms.** Several input subsidy options were considered. These were assessed in terms of their likelihood to generate adequate cash-flow to enable farmers to accumulate sufficient assets to eventually participate in input markets without subsidies.³¹ The options included: (i) the same level of input subsidy for three consecutive cropping seasons; (ii) a declining share of subsidy in the second and the third years (for example, a 50 percent subsidy in Year One, 35 percent in Year Two, and 20 percent in Year Three); and (iii) reduced quantities of subsidized inputs for the second and third year, respectively.

29. The most pragmatic approach appears to be to provide a universal subsidy at a rate of about 50 percent over three consecutive years. Given current input and output prices and the

³¹ A full (100 percent) subsidy was not considered for several reasons. First, fewer farmers could be reached with the resources available to the Project. Second, the limited outreach would create difficulties with targeting and incidence of the subsidy. Third, the co-payment discourages moral hazard and inefficient fertilizer use. Finally, it would be more difficult to sustain input use once the subsidy ended.

expected gradual increase in farmers' capacity to use fertilizer efficiently, a 50 percent subsidy of farm inputs should allow farmers to generate enough supplementary net income to purchase the equivalent input package at full commercial prices after three cropping seasons.³² The higher profitability of irrigated agriculture could allow for shorter periods of support. As farmers' incomes and cash flow increase, their links with rural financial institutions, such as Savings and Credit Cooperatives (SACCOs) and Savings and Credit Associations (SACCAs), will become stronger.

30. Gradual reductions in subsidies and/or quantities of subsidized inputs, in line with farmers' increasing revenues, are conceptually appealing but difficult to implement. These approaches entail complicated institutional and administrative arrangements, because farmers have to be subdivided into three groups according to the time of their entry in the program, and each group must receive vouchers with different face values.³³ This arrangement places a significantly greater administrative burden on Local Government Authorities (LGAs), whose capacity is already limited, and increases monitoring costs significantly. Vouchers with different face values must be printed, or the packaging of inputs must be adapted.

31. **Complementary activities integrated into ASDP.** To place NAIVS on a more sustainable footing, the Additional Financing for ASDP will promote on-farm research on integrated soil fertility management practices, verification of fertilizer recommendations, analytical services related to plant nutrition, and enhanced extension activities that foster conservation farming practices including demonstrations and farmer field schools. Two key subcomponents that are extremely important for the success of NAIVS are (i) agricultural services (research and extension) and (ii) marketing and private sector development services. These core subcomponents of ASDP are already funded, and their implementation is being intensified in line with recommendations from the ASDP Mid-Term Review (MTR).

Subcomponent 1.2: Improving farmers' awareness, information, and participation

32. For NAIVS to be implemented well and operate efficiently, key participants and those responsible for implementing the scheme must have the required information at the time they need it. The eligible farmers require a full understanding of their entitlements, rights, and obligations under the scheme. A key risk to the sustainability of the outcomes of the Project is the expectation that the input subsidies will continue indefinitely. It is critical that the communication strategy unequivocally convey to the beneficiaries that the subsidy vouchers will be given to each farmer for a maximum of three years.

33. Those responsible for implementing the scheme at the national, regional, district, and village level must be informed about implementation arrangements, have a clear view of their responsibilities, and understand how they are accountable. Private sector participants,

³² See crop and farm models in Annex A.6.

³³ This option might be implemented through "smart cards," which were proposed in Malawi's voucher program but not implemented owing to high administrative costs and the high potential for leakage.

particularly in the fertilizer and seed supply chains (for example, importers, producers, distributors, and agro-dealers) must be fully aware of the scheme. Key decisions and actions regarding the design and scale of the scheme must reach them early to enable them to plan their operations to supply sufficient inputs to farmers at the right place and time. It is equally important for output traders and market participants to be fully informed of the scale of NAIVS so they can plan for likely outcomes. NMB requires complete information on the number of vouchers to expect for redemption and when to expect them.

34. The Project will develop an “immediate” communication campaign to inform farmers, implementing agencies, agro-dealers, other private sector participants, agricultural research agencies, extension services, and the general public about the input voucher scheme. The campaign will describe how the scheme works, how to participate, stakeholders’ rights and responsibilities, the scale and timing of operations, and the exit strategy. MAFC will design the media campaign with the support of consultants. The campaign will create awareness and share information on NAIVS at the regional, district, and local level in a number of ways, including stakeholder meetings (especially at the village level), pamphlets explaining the voucher scheme and how it works, and specific television and radio programs on the scheme. The campaign will be designed to strengthen feedback among stakeholders—for example, village focus groups can convey information to other stakeholders on which elements of the scheme are unclear and what additional information is required. The media campaign will be pretested with those who will implement and use the voucher scheme to ensure that appropriate information and communication technologies are used and that the messages are reaching their intended audiences.

35. Aside from the awareness campaign, the Project will fund annual training for Village Voucher Committees (VVCs) by district-based extension staff, assisted by nongovernmental organizations (NGOs) and civil society organizations (CSOs) where available. The VVC is a key player at the village level, and with this training, the committee members will be better placed to implement their tasks and responsibilities. At all levels, consultative meetings will be organized regularly with key private sector participants in the input and output markets to discuss NAIVS implementation plans and progress and provide ample time for private companies to respond to anticipated demands for inputs and increased levels of production.

B. Component 2: Strengthening the input supply chain (*Total cost US\$12.2 million*)

36. This component will facilitate the input voucher scheme by: (i) strengthening the agro-dealer network and (ii) strengthening national seed systems to improve the immediate and longer-term availability of quality seed for maize, rice, and other crops.

Subcomponent 2.1: Strengthening the agro-dealer network

37. This subcomponent improves the business and technical skills of private (independent) agro-dealers so that they can improve their provision of customer services, link to other input supply companies, gain better access to finance, and build smallholders’ demand for improved inputs. A key outcome of this subcomponent is an expanded network of well-informed, well-trained agro-dealers that are located significantly closer to the NAIVS target population than before.

38. The Government has proposed that training and capacity building be undertaken by the Citizens Network for Foreign Affairs (CNFA), a nongovernmental organization with specialized expertise in this area. Since June 2007, in conjunction with its local affiliate TAGMARK, CNFA has implemented the Tanzania Agro-dealer Strengthening Program (TASP), for building capacity among agro-dealers in partnership with AGRA. In 2008/09, the Government engaged CNFA (which used existing AGRA funds and 14 commercial trainers) to train about 1,000 agro-dealers in 53 districts to support the implementation of NAIVS. The CNFA training certificate is a precondition for agro-dealers to handle NAIVS vouchers (and is thus a means of ensuring minimum quality standards and safeguards). The certificate is also required for agro-dealers to obtain loans from participating banks under a credit guarantee scheme implemented by NMB. As NAIVS is scaled up under the Project, the Government proposes to also scale up training and capacity building for agro-dealers and thus ensure consistent quality and continuity. Now that the AGRA funds are depleted, the Government proposes to fund this activity from Project resources.

39. Overall, commercial trainers will work with about 3,000 agro-dealers in 65 districts over the next three years.³⁴ Once the training has ended, information will continue to flow to agro-dealers and agricultural extension through brochures, posters, and other reference material developed and distributed through the Project. Manuals for implementing the voucher scheme will be prepared and given to all certified agro-dealers. Agro-dealer associations will be promoted at the district and national levels to advocate policies and pursue other activities that improve access to input and output markets.³⁵

40. Activities in this subcomponent will begin immediately after the Project becomes effective. Considering the critical timing involved, the highly specialized services required, and the positive experience with CNFA's training program in Tanzania and neighboring countries, the Government proposes to engage CNFA to scale up the training of agro-dealers under this Project. The Government proposes to enter into a formal contract with CNFA through sole sourcing. IDA will consider this request, subject to adequate justification by the Government for sole-sourcing these services from CNFA.

Subcomponent 2.2: Strengthening national seed systems

41. This subcomponent will foster better and more sustainable access to a greater array of good seed of locally adapted varieties for a broad range of food crops, sold at competitive prices through the agro-dealer network supported through the Project. Activities within this subcomponent will ensure that high-quality seed is available in time to implement NAIVS and will also help develop a sustainable and efficient seed system in Tanzania. More specifically, the Project will: (i) support a review and updating of the national seed policy and the regulatory framework, and the formulation of a seed subsector strategy, all with the view to strengthening

³⁴ IFDC, under IFAD financing, is also working with CNFA to help strengthen the agro-dealer network in six districts and to update the technical modules of the proposed curriculum.

³⁵ Activities financed by this Project will be complemented by CNFA's other programs, which are financed by AGRA, USAID, and IFDC, including the partial credit guarantees for agro-dealers and matching grants for opening shops in rural areas.

the enabling environment for a vibrant, competitive seed system in which private companies can participate successfully; (ii) stimulate the development of business-oriented, farmer-based seed production and marketing units in all regions; and (iii) support Agricultural Research Institutes (ARIs) in producing pre-basic seed and the Agriculture Seed Agency (ASA) in producing basic (foundation) seed to enable private companies and the QDS system to supply high-quality seed to farmers. The Project will not finance any activity that uses prison labor. Complementary support to the seed systems subcomponent will be provided by the Eastern Africa Agricultural Productivity Project (EAAPP), a regional project supported by IDA.

42. Through a review coordinated by the MAFC seed unit, national and international consultants will examine Tanzania's seed industry, including seed requirements and availability, and provide advice on a seed policy and implementation framework, including regulations and other measures to foster an enabling environment and incentives for the private seed industry to develop. A workshop will be organized to consult stakeholders in the seed system as part of the effort to update the seed policy, strategy, and regulatory framework. The ultimate goal is to develop a competitive, efficient, and sustainable seed industry, in which the roles and functions of private and public partners are defined clearly.

43. Pre-basic seed production will be improved by providing support to three strategically located research stations (Selian–Arusha, for 5 hectares of seed production; Ilonga–Morogoro, 15 hectares, and Uyole–Mbeya, 5 hectares), including support for irrigation and field equipment, cold storage facilities for seed, and seed cleaning equipment. Parts of two ASA seed farms—about 50 hectares on Arusha Farm and 150 hectares on Msimba Farm³⁶—will be rehabilitated to increase the production of basic seed and contribute to certified seed production by private companies and QDS. The main investments include: (i) a complete processing line for basic seed, including a precleaner, fine cleaner, indented cylinders, grader, gravity table, seed treatment equipment, and bagger-scale; (ii) new and rehabilitated seed storage facilities; (iii) farm implements and transport equipment; (iv) irrigation equipment sufficient for 200 hectares; and (v) seed testing equipment for internal quality control. The irrigation equipment will thus cover a total of 225 hectares, spread over the three research stations and the two foundation seed farms. No other irrigation investments are financed under this component.

44. To ensure that high-quality seed is produced through QDS, about 18 farmer groups will receive support in the form of seed testing and treatment equipment as well as simple drying and storage structures. These QDS producing groups will also participate in field days, seed fairs, and training in seed production, business planning, and marketing.

45. The EAAPP will complement this Project's efforts through measures to strengthen public and private seed provision in three countries in East Africa (Ethiopia, Kenya, and Tanzania). To avoid overlapping with the seed subcomponent of this Project, EAAPP will focus on specific

³⁶ In the near term, about 8–10 hectares of basic seed of specific public varieties is required annually from the Dabaga Highland seed farm, which is too little to justify the large fixed costs of rehabilitating the farm. As an alternative, the short-term basic seed requirement could be met either by Uyole Research Station (which will receive support for breeder seed production) or contracted out to private seed producers.

crops (rice, wheat, and pasture crops) and strengthen local capacity to deal with such broad seed issues as regional regulatory and phytosanitary issues, seed certification (support to the Tanzania Official Seed Certification Institute—TOSCI), and strengthening the private seed sector (support to the Tanzania Seed Traders Association—TASTA). The training provided to agro-dealers (Component 2.1) will also strengthen the technical and business capacity of local agro-dealers to serve as seed stockists.

C. Component 3: Project management and monitoring and impact evaluation (*Total cost US\$3.5 million*)

Subcomponent 3.1: Project management

46. No independent Project Implementation Unit will be established to manage the proposed Project. Instead, Project management and implementation will use structures existing in MAFC. Given the scope of the work involved, however, the policy guidance, oversight, and coordination functions will be performed by a newly formed National Voucher Steering Committee (NVSC). The NVSC will be chaired by the Permanent Secretary, MAFC, and will consist of representatives from MoFEA, PMO-RALG, the directors of relevant MAFC departments, representatives of national farmer organizations, representatives of agribusinesses that produce and import inputs, and other representatives of the private sector, civil society organizations, and NMB. The NVSC will set the criteria and guidelines for allocating vouchers at all levels, review the integrity of the voucher system, approve annual work plans, and address all management and implementation issues. To further ensure transparency and legitimacy, all key decisions of the NVSC will be endorsed by a National NAIVS Stakeholder Forum, composed of all key stakeholders.

47. Day-to-day management of NAIVS will be the responsibility of the Agricultural Inputs Section (AIS) of the Crop Development Department of MAFC, and AIS will be the main counterpart for this Project. The Head of AIS will lead the team responsible for managing and implementing the Project and will also serve as the Secretary to the NVSC. The Ministry will assign key staff to AIS (full- or part-time, as needed) to ensure that AIS has adequate capacity to coordinate, implement and monitor NAIVS effectively. Staff assigned to AIS for this purpose would include a planning officer, fertilizer and soil nutrition management specialist, seed specialist, M&E officers, accounts officer, procurement officer, and a communications officer. Other skills will be added to the team as needed for effective implementation, follow-up with LGAs and partners (for example, CNFA and NMB), and M&E.

Subcomponent 3.2: Project monitoring and evaluation (M&E)

48. Monitoring and evaluation are distinct but interrelated activities. In this subcomponent, the M&E Unit of MAFC, in close collaboration with MAFC departments, LGAs, other Government agencies, and the private sector will regularly monitor Project activities and submit regular reports. The main objectives of regular performance monitoring are to: (i) facilitate Project implementation at all levels; (ii) provide factual, verifiable data to support decision-making by managers; and (iii) analyze and highlight the lessons learned at each level of Project operation. These activities will create the information infrastructure for tracking key process and activity indicators for all components financed by the Project. A well-designed and user-friendly

management information system (MIS) will be established to collect, organize, analyze, and manage input–output information for the Project.

49. The objective of impact evaluation in this subcomponent is to establish the Project’s net benefit or contribution to the target population as indicated in the PDO. The physical, economic, and social outcomes of interventions will be evaluated rigorously, using an appropriate evaluation design and strategy. This subcomponent supports the collection of baseline data in the first year of the Project, to be followed by additional rounds of data collection in subsequent years of Project implementation. The Head of AIS, in close consultation with the M&E Unit, will hire an independent consultant to conduct these evaluations. The independent consultant will conduct comprehensive, outcome-focused impact evaluations of Project activities at the end of each major agricultural season during the Project. In the first year of Project implementation, a PSIA will also be carried out. Project design and/or implementation arrangements will be reviewed regularly to further ensure that the Project meets its Development Objective.

III. Project Cost

50. **The total cost of the proposed Project is about US\$299 million.** IDA will provide US\$160 million towards this cost, and the Government of Tanzania will provide the remaining US\$139 million. The detailed breakdown, by component and source of financing (excluding farmers’ contribution), is given in Table A.3. The full costing of NAIVS, including the contributions of the Government and IDA by component, is given in Annex A.9. A graphical presentation of the shares of Project financing from the Government, IDA, and beneficiaries through the Project lifespan and beyond is also given in Annex A.9.

IV. Implementation Arrangements

51. As noted, overall responsibility for Project execution rests with MAFC. The Ministry, in collaboration with other relevant public agencies and private sector participants, will ensure the integrity and credibility of the voucher scheme and its successful implementation. The Project will be implemented in accordance with the Project Implementation Manual, which will be prepared by MAFC within thirty days of the date of effectiveness of this Project. The salient features of the main institutional and implementation arrangements, roles and responsibilities are summarized below and discussed in more detail in Annex A.7.

52. The AIS undertook an assessment of the implementation of NAIVS in its first year (2008/09), which covered about 740,000 farmers in 53 districts. The assessment concluded that Project preparation and implementation occurred late in the year, which adversely affected the availability of vouchers and input positioning. This finding points to the need to strengthen overall planning and budgeting, and it has been taken into account in designing the present Project. Another key finding of the assessment was that the redemption of vouchers was delayed in several branches of NMB due to lack of sufficient staff to deal with the redemption of a large volume of vouchers in a very short period of time. In mid-January redemptions were halted completely due to lack of funding. They were resumed in late February after the supplementary budget was approved by the Parliament and funding for the scheme was resumed. These implementation risks are addressed in the Project design, but they need to be monitored closely to ensure there are no implementation delays or risks to achieving Project objectives.

Table A.3: Project cost (US\$ millions)

	IDA financing	Government of Tanzania financing	Total cost
Component 1: Improving access to agricultural inputs	144.30	139.00	283.30
(i) Scaling up NAIVS	139.10	139.00	278.10
(ii) Improving farmers' awareness, information, and participation	5.20		5.20
Component 2: Strengthening input supply chain	12.18		12.18
(i) Strengthening the agro-dealer network	6.00		6.00
(ii) Strengthening the national seed system	6.18		6.18
Component 3: Project management and M&E	3.50		3.50
(i) Project management	1.96		1.96
(ii) M&E	1.55		1.55
Total Project costs	160.00	139.00	299.00

53. The financial management assessment done for this Project revealed some weaknesses that must be addressed to reduce the financial management risks. Risk areas, actions needed to mitigate these risks, and details of the financial management arrangements for the Project are given in Annex A.4. To ensure smooth implementation, MAFC will prepare a Financial and Accounting Manual for the Project within thirty days of its becoming effective. It will also make arrangements with the Accountant General's Office/MoFEA to ensure that Project accounting is included in its current computerized management information system (IFMIS).

54. In addition, the findings of the ongoing study on the procurement, financial management, and other issues with community driven development (CDD) projects in Tanzania will also be used during the implementation to strengthen the impact of AFSP at the local level.

55. **Project oversight.** As mentioned previously, a National Agricultural Input Voucher Scheme Forum (NAIVS–National Forum) will meet annually to review the performance of the previous year and discuss and endorse decisions affecting the implementation and effectiveness of NAIVS for the following year. These issues would include the criteria for geographical allocation of vouchers, the technical design of the vouchers (including the level of subsidy), assessments of progress in implementing NAIVS, and endorsement of the annual work plan and budget. The forum's broad membership is intended to encourage the participation of all concerned groups and to ensure transparency in implementing the voucher system. As stated, membership in the forum will include public sector representatives at the national, regional, and district level as well as representatives of the private sector, particularly fertilizer companies, seed companies, agro-dealer associations, farmer organizations, and civil society organizations.

56. A **National Voucher Steering Committee (NVSC)** will provide policy guidance and oversee project implementation. The NVSC will meet at least every quarter and be chaired by the Permanent Secretary of MAFC. It will include representatives of the Ministry of Finance and PMO-RALG, directors of relevant MAFC departments, and representations of national farmer organizations, agribusinesses that produce, import and market inputs, civil society, and NMB.

The NVSC will set the criteria for allocating vouchers and guidelines for implementation of NAIVS at all levels, review the integrity of the voucher system, approve annual work plans and budgets as well as quarterly Interim Financial Reports (IFRs), and address all implementation issues.

57. The AIS will coordinate day-to-day implementation of the Project and will be assigned qualified staff, including officers for planning (1), fertilizer and soil nutrition management (1), seed (1), M&E (2), accounts (1), procurement (1) and communications (1). These technical experts will work closely with the relevant departments/sections of MAFC on matters concerning the Project.

58. In addition to providing support to NVSC, the AIS is also responsible for: (i) reviewing the voucher policy and strategy to ensure that it remains aligned with the goals of the Project; (ii) assisting participating agencies in preparing annual action plans and estimating agricultural input demand and supply; (iii) monitoring progress in Project components, preparing annual work plans and budgets, quarterly progress reports, evaluating performance, and providing feedback to the NVSC; (iv) coordinating and liaising with participating agencies such as NMB, CNFA, IDA, NGOs, farmer/producer groups, and the private sector; (v) ensuring that financial reports are available, audited, and submitted to IDA at the agreed time; (vi) hiring and retaining experts, NGOs, and consultants for Project implementation, training, monitoring, and evaluation, and (viii) commissioning studies as needed.

59. **Project implementation.**³⁷ This Project is implemented at the LGA level, with the involvement and participation of numerous institutions at all stages. The principal institutions are:

- A *Regional Voucher Committee* (RVC), which supports districts and monitors the implementation of the voucher scheme in the region. The RVC will be responsible for: (i) allocating vouchers to districts based on established criteria; (ii) estimating demand for agricultural inputs, based on historical input-use data, and providing this information to AIS; (iii) reviewing information collected from each district, including data on production, cropped area, input use, prices and marketable surplus; (iv) informing districts about their voucher allocations and initiating further allocation of vouchers to Wards and Villages by the LGAs; (v) helping to monitor implementation of the voucher scheme; and (vi) compiling NAIVS progress reports from the districts to submit to the NVSC Secretariat.
- A *District Voucher Committee* (DVC), made up of representatives of farmer groups, agro-dealers, and civil society, will be established under the chairmanship of the District Commissioner by LGAs in each participating district. In close collaboration with the respective district NAIVS Forum, the DVC will implement and evaluate the voucher scheme in its respective district. In addition to allocating vouchers to Wards and Villages based on established criteria, the DVC will inform Village

³⁷ Membership of the proposed committees as well as their roles and responsibilities are discussed in Annex A.7 and the PIM.

Governments about their respective voucher allocation, monitor implementation at the village level, and prepare and submit implementation progress reports to the RVC for transmittal to AIS at the national level.

- The *Village Council* in consultation with the Village Assembly organizes the election of the *Village Voucher Committee (VVC)*. The VVC consists of three men and three women who are charged with identifying beneficiary farmers and submitting the list to the Village Assembly for approval. After approval, VVC issues vouchers to the approved farmers and also monitors the use of inputs by voucher recipients. It reports regularly to the Village Council and Village Assembly.

60. **Partnerships with the private sector.** After vouchers are issued to farmers, it is the responsibility of each farmer to link with an agro-dealer who can supply the desired input at an agreed time and place. As noted, the farmer pays the difference between the voucher face value and the prevailing market price, which is expected to be about half the market price. Agro-dealers redeem vouchers by depositing them with the NMB. Thus the private actors in this Project are:

- *Agro-dealers.* Agro-dealers will be informed of the scale and types of vouchers to be issued to farmers and encouraged to make inputs available at strategic locations (that is, locations where farmers can obtain them without much difficulty). The Project is expected to train 3,000 agro-dealers and register them to provide inputs. Agro-dealers obtain inputs from wholesalers or importers through their established commercial channels. Agro-dealer associations are expected to identify the key obstacles to the smooth flow of inputs from the sources to the users and to engage with key stakeholders in addressing these obstacles.
- *National Microfinance Bank.* NMB's local branches credit agro-dealers' accounts at the face value of the vouchers they redeem, using funds transferred from MAFC to NMB for this purpose. NMB verifies the authenticity of the voucher, records the transaction, and informs MAFC that the transaction has been completed. NMB maintains adequate staffing levels to ensure timely redemption of vouchers at all its branches. After redemption, NMB transfers the redeemed vouchers to the Ministry responsible for agriculture for safe custody for a period of at least five years. NMB also retains all records and documents related to the voucher scheme for a period of at least five years.
- *Private fertilizer companies.* Input suppliers import fertilizer according to projected demand and their assessment of the market, including the additional demand induced by NAIVS, and then distribute inputs through their own regional networks and independent agro-dealers.
- *The private seed industry.* Seed companies are fully involved in supplying the certified seed included in the input package that farmers purchase with their vouchers, including seed produced and marketed by business-oriented QDS farmer groups.

V. Appraisal of Project Activities

A. Economic and Financial Analysis

61. The major economic benefits of this Project accrue from increased production of maize and rice in high-potential areas for growing food crops (the Southern and Northern Highlands and Western Region). Farmers' improved access to fertilizer and improved seed and consequent higher yields will raise national production indicators and spur significant growth in GDP.

62. Financial and economic models compared outcomes with and without the Project. Without the Project, farmers continue using a low input–low output production mode. With the voucher package of improved seed and fertilizer subsidized through the Project, and depending on the mix of fertilizers and improved varieties used, maize yields for participating farmers are projected to more than double over three years, from 1,120 kilograms per hectare in the baseline year to 2,450–3,200 kilograms per hectare after three years, when farmers exit the voucher scheme. Rice yields are projected to rise from 1,735 kilograms per hectare in the baseline year to 2,800–3,300 kilograms per hectare after three years.

63. The Project enables farmers to increase production sufficiently to generate cash to purchase inputs after the voucher scheme ends. At current market prices, the use of fertilizer and improved seed does not generate enough cash for many resource-poor farmers to keep using these inputs. With the three-year voucher scheme, however, farmers should be able to accumulate sufficient start-up cash to continue purchasing inputs at market prices and sustaining their gains in productivity (Annex A.6).

64. The NPV of the input voucher scheme over 10 years is expected to equal US\$67 million (at a discount rate of 12 percent). When additional public expenditures on activities that complement the voucher scheme are taken into account (for example, soil fertility research, support to agro-dealers, seed production, and M&E), the NPV falls to US\$41 million, which is still satisfactory. The Project's IRR is expected to be 37 percent.

65. Project-supported investments are expected to increase total GDP by about 0.9 percent per year. With maize production projected to grow at 7 percent per year and rice production at 2 percent per year, total GDP will grow, and food price inflation will decline. It is also very likely that higher levels of maize and rice production will raise rural incomes and lower the prices that upstream producers (such as maize millers) pay for inputs. In this way, higher levels of crop production can increase demand and supply for other commodities. For agriculture, this multiplier effect is typically estimated at around 1.5.

66. The risks associated with using fertilizer must not be overlooked, however. Such risks arise mainly from weather-induced shocks as well as from price and yield risks. As shown in Annex A.6, these factors reduce production and can result in negative returns to fertilizer use. A 25 percent reduction in maize prices would negate the NPV. If adverse weather occurs, a much smaller reduction in prices would be sufficient to negate the NPV. Low yield increases also have an important effect on the economics of input use, especially in the case of adverse weather. While the risks are significant, most of the farming population resides in reliable rainfall zones,

where most fertilizer is used. Details of the methodology for the economic and financial analysis are presented in Annex A.6, along with the complete results.

B. Fiscal Sustainability

67. The expansion of NAIVS under the proposed Project will increase the budgetary allocation for the agriculture sector, and for MAFC in particular, but is not expected to jeopardize fiscal sustainability. With NAIVS, the total MAFC budget is projected to increase from about TSh 159 billion in 2008/09 to TSh 237 billion in 2010/11, based on current Medium Term Expenditure Framework (MTEF) projections and the full cost of NAIVS (Table A.4).³⁸ As a share of the total budget, this implies an increase from 2.2 percent to 2.6 percent. However, a significant part of the NAIVS budget will be financed with new IDA resources. The share of MAFC budget, including only the Government contribution to NAIVS (in addition to the MAFC nonsubsidy budget), will remain at the same level as 2008/09 for two of the three Project years, increasing marginally to 1.8 percent in 2010/11, when the Project's outreach peaks. When IDA funding ends (2012/13) and NAIVS phases out (2013/14), the Project will cease to have a fiscal impact. Even at its peak, the budgetary impact of NAIVS, in terms of its use of Government resources, is lower than that of the subsidy scheme that the Government funded until 2007/08. The additional economic growth generated through Project expenditures is likely to have a positive impact on the budget.

68. Additionality is a key budgetary issue—specifically, ensuring that NAIVS funding is *additional* to the budget allocated for MAFC's core mandates and functions (the nonsubsidy budget). During 2006/07–2008/09, the core MAFC budget (without fertilizer and seed subsidies) averaged 1.6 percent of the national budget (Table A.4). For 2009/10, budget discussions are still ongoing, though according to the budget call circular, it is projected to equal 1.0 percent of total expenditure. Some of the recent decline in MAFC's core budget reflects its changed mandate and the transfer of functions to other Ministries or LGAs. Nevertheless, a low and declining core MAFC budget runs contrary to the priority that the Government places on agriculture as a means of fostering shared growth and reducing poverty. To maintain the core public goods and functions that MAFC is mandated to deliver and perform, it is critical for MAFC to maintain its share of the national budget. In 2010/11–2011/12, therefore, the core MAFC budget should remain at least at the level of previous years, or the medium- and longer-term development agenda under ASDP will be compromised.

³⁸ In addition to allocating funds to MAFC, the Government of Tanzania allocates funds for agriculture to the Ministry of Livestock Development and Fisheries, Ministry of Industry and Trade, Ministry of Water and Irrigation, PMO-RALG, Prime Minister's Office, and LGAs. In 2008/09, expenditures on the agriculture sector constituted 4.2 percent of total public expenditure (AgPER 2009). If the share of other ministries and LGAs in the total budget remains constant, the budget for agriculture, including NAIVS, is projected to be about 5 percent of the national budget in 2010/11.

Table A.4: Public expenditure for AFSP and fiscal sustainability (TSh billions)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
MAFC budget:								
With subsidy	106	132	159	190	237	232	186	161
Without subsidy	94	109	86	81	90	99	109	120
Total Government of Tanzania budget	4,788	6,067	7,216	8,139	9,071	9,978	10,976	12,074
Share of MAFC in total budget:								
Without subsidy	2.0%	1.8%	1.2%	1.0%	1.0%	1.0%	1.0%	1.0%
With Government of Tanzania subsidy	2.2%	2.2%	2.2%	1.6%	1.8%	1.6%	1.7%	1.3%
With Government of Tanzania + IDA	2.2%	2.2%	2.2%	2.3%	2.6%	2.3%	1.7%	1.3%
NAIVS costs				109	147	133	77	42
Financing from IDA				60	78	69	0	0
Financing from Government of Tanzania				49	69	64	77	72

Note: Total budget in 2012/13–2013/14 is assumed to grow by 10 percent as in the previous two years (current MTEF). Subsidy in 2006/07 and 2007/08 was the previous fertilizer subsidy scheme. Subsidy in 2008/09 is the first year of NAIVS fully financed by the Government of Tanzania.

Source: MTEF and Tanzania Agricultural Public Expenditure Review, 2009.

69. It is likely that Government expenditure, and especially the MAFC budget, will experience additional pressure owing to rising contingent liabilities. These liabilities include Government guarantees to commercial banks for extending credits for warehouse receipts and cooperatives through some of the Boards for cash crops. With international crop prices declining, commercial banks are likely to face high default rates, necessitating payments against the Government guarantees. The potential magnitude of this problem remains unclear, but developments must be watched closely to ensure that essential public expenditures on agriculture are not crowded out.

C. Technical

70. The Project's design reflects lessons learned through NAIVS in its first year and through similar programs in the region, such as the voucher program in Malawi (see Annex A.2). Alternative approaches for the voucher scheme were considered, and extensive consultations were held with the Government and key stakeholders to improve the technical integrity of the design. As a result, several design features and complementary interventions proposed under this Project and under Additional Financing for ASDP are expected to put this scheme on a more sustainable footing. The changes include clear, rules-based geographical allocation of vouchers; participatory targeting to select farmers at the village level; building capacity of agro-dealers and

expanding the network of dealers; support from agricultural research and extension to improve the technical efficiency of input use and integrated soil fertility management practices; and a clear exit strategy.

71. For an average of one-half of a hectare planted to maize or rice per household, the proposed input package for each beneficiary will include one voucher for nitrogenous fertilizer, one for phosphorous fertilizer,³⁹ and one for improved seed (see Table A.2).⁴⁰ Although the use of more fertilizer than recommended in the voucher package will further increase crops yields, farmers' net incomes and returns to labor per hectare will be highest at the economically optimal levels of application reflected in the voucher package. Considering farmers' technical skills, on average, farmers' efficiency in using fertilizer is expected to increase through practice and extension advice, from 65 percent of the optimum in Year One to about 85 percent after three years. Given the low level of fertilizer they currently apply (about 8 kilograms per hectare), farmers can obtain significant yield increases by applying the economically optimal levels determined through research.

72. On average, farmers produce maize and rice on about half of a hectare—the area that the voucher inputs are expected to cover. For practical reasons, vouchers must correspond to current commercial selling units (for fertilizer, the unit is 50 kilograms). The proposed formula—one bag of urea plus one bag of DAP or two bags of MRP+N (equal to about 32 kilograms of nitrogen and 23 kilograms of phosphorus)—would also: (i) allow for a simple recommendation, in which DAP/MRP+N is applied at planting, as a basal dressing, and urea is applied as topdressing at elongation; and (ii) the use of relatively higher rates of phosphorus and nitrogen, as recommended by research, to prevent nitrogen losses and mining of soil phosphorus.

73. Aside from encouraging farmers to improve their use of inputs, the promotion of integrated soil nutrient and water management practices (such as those used in conservation farming) would reduce the risks of adverse weather on the farm as well as globally.

D. Fiduciary Analysis

74. **Financial management.** As part of the preparation of this Project, a full financial management assessment was done in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board of the World Bank on November 3, 2005. The main objectives of the assessment were to determine whether: (i) MAFC has adequate financial management arrangements to ensure that Project funds will be used efficiently and economically for their intended purposes; (ii) Project financial reports, including the unaudited

³⁹ The nitrogen and phosphorus content of 50 kilograms of DAP and 100 kilograms of MRP+N are equivalent, although the short-term efficiency of MRP appears slightly lower (by about 5 percent) compared to that of DAP.

⁴⁰ The seed voucher provides enough seed to plant half of a hectare of maize and one-quarter of a hectare of direct-seeded rice. The lesser quantity of rice is proposed because rice is a self-pollinating crop and it is much easier for farmers to multiply and share improved rice seed, which, unlike improved maize seed, breeds true and generally offers more consistent yields over a number of years.

IFRs, will be prepared in an accurate, reliable, and timely manner; and (iii) Project assets will be safeguarded.

75. The assessment concluded that financial management arrangements have an overall moderate risk rating. The financial management arrangements satisfy the Bank's minimum requirement under OP/BP 10.02, and the current system is adequate to provide, with reasonable assurance, accurate and timely information on the status of the Project as required by IDA. The Project will be executed under the Bank's Financial Management arrangement OP/BP 8.00, "Rapid Response to Crises and Emergency Operations." In that regard, financial management arrangements will be streamlined and simplified during preparation and rely more on ex-post requirements during execution, particularly early in Project implementation.

76. The Finance and Accounts Department of MAFC will be responsible for overall coordination and consolidation of financial management and disbursement information. Staffing within that unit will consist of a core management team, including the NAIVS Coordinator, a Chief Accountant, and one Senior Accountant. It is suggested that one accountant be appointed to be in charge of vouchers.

77. As per the Public Finance Act, 2001, the National Audit Office (NAO) is responsible for auditing all Government organizations, including local authorities, public corporations, and donor funds. The Controller and Auditor General (CAG) has the power to authorize any person registered as an auditor under the Auditors and Accountants Act of 1972 and approved by the Controller and Auditor General (CAG) to conduct an audit on his/her behalf. MAFC's annual external audit will be done by NAO or another registered auditor approved by the CAG. The auditors will provide a single audit report on Project financial statements (which includes the Designated Account). A review of recent external audit reports conducted by NAO for IDA-financed projects (ASDP, Credit 4192-TA, and Participatory Agricultural Development and Empowerment Project, Credit 3770-TA) in MAFC found them to be satisfactory.

78. **Disbursement and flow of funds.** The disbursements for this Project will be based on unaudited IFRs, in which six-month forecasts of cash flow, based on work plans, are submitted quarterly to IDA to replenish the Designated Account. In compliance with the Report guidelines, the Project will: (i) achieve and sustain a satisfactory financial management rating during Project supervision; (ii) submit IFRs consistent with the agreed form and content within 45 days of the end of every calendar quarterly period; and (iii) submit a Project audit report by the due date. Other methods of disbursement include direct payments to suppliers and special commitments (details will be provided in the Disbursement Letter).

79. After effectiveness, MAFC is expected to submit to IDA a six-month cash-flow forecast based on the Project's approved work plan and budget, using the report-based disbursement method. IDA will then deposit funds into the Designated (Special) Account, and these funds will be used by the Borrower to finance IDA's share of Project expenditures under the proposed Credit. Designated Account funds will be replenished upon receipt of the withdrawal application, the unaudited quarterly IFR that indicates how the advanced funds will be used, and a six-month cash-flow forecast for the subsequent period, based on approved work plans and budget for the Project.

80. Annex A.4 presents additional details about the financial management assessment, including disbursement arrangements for this Project.

E. Procurement

81. Procurement under the Project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" (May 2004; revised October 2006) (referred to here as "Procurement Guidelines"); "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" (May 2004; revised October 2006) (referred to here as "Consultant Guidelines"); and the provisions of the Financing Agreement.

82. In Tanzania, a new Public Procurement Act 2004 (PPA 2004) became operational in May 2005 when the associated regulations were issued. The Act is based on recommendations of the 2003 Country Procurement Assessment Report (CPAR). The new Act is intended to improve the overall Government procurement system with the establishment of Public Procurement Regulatory Authority (PPRA) as an oversight body for public procurement. The Procurement Management Unit (PMU) of MAFC is established in accordance with the PPA 2004. The PMU will be responsible for procurements for AFSP in addition to the Ministry's ongoing procurement activities. A procurement capacity assessment of the Ministry revealed some key issues and risks for AFSP implementation. These are discussed in Annex A.3, along with corresponding mitigating measures. The overall Project risk for procurement was rated *high*, mainly due to the inadequate experience of PMU staff in the procurement of works and goods through ICB procedures as well as in the selection of large-value consultancy contracts. An action plan to mitigate these risks has been agreed upon and includes training of procurement staff to strengthen their capacity for the procurement of works and goods under ICB procedures and selection of large-value consultancy contracts. Other actions include hiring of a procurement consultant for at least the first year (to handle the additional workload associated with the start-up of AFSP) and training staff in procurement data management. The residual risk after the implementation of these actions is expected to be moderate.

F. Environmental and Social Analysis

83. **Environmental.** Overall the Project is rated as environmental **Category B**. Given that the Project subsidizes purchases of seed and fertilizer, the potential impacts from increased use of fertilizer, and the likely increase in pesticide use, will be local and widespread. "Local" impacts imply that these substances may directly affect soil ecosystems in the immediate vicinity where they are used, and "widespread" impacts refer to potential non-point source pollution effects on ground and surface water resources. The increased demand for chemicals may also encourage the use of banned substances and/or the inappropriate use of approved substances, which presents a potentially serious public health risk for human and animal populations alike.

84. The Project primarily finances vouchers for purchasing seed and fertilizer and no other investments or physical activities by farmers. Some investments are included under Component 2.2, including the provision for irrigation equipment for about 225 hectares on three ARIs and two Foundation Seed Farms owned by the semiautonomous ASA. To address the issues noted earlier concerning inputs that the Project may promote directly or indirectly, the Government of Tanzania will develop and implement an Integrated Nutrient Management Plan (INMP). The

INMP will be finalized after Project approval, as per OP/BP 8.0, but within three months of the date of approval. Additionally, the Government wants to adopt and mainstream the Integrated Pest Management Plan (IPMP), prepared in August 2004 for ASDP (the sectorwide program for agriculture), more generally in Tanzania and in particular for activities covered under this operation. This approach has been agreed with the Bank, which has:

- Reviewed the overall comprehensiveness of the original IPMP. The Government has also updated it to ensure that it captures all activities funded in this Project, thereby ensuring compliance with OP4.09 and the Government's own requirements.
- Reviewed and drawn lessons from the Government's performance in implementing the original IPMP in the ASDP, which has been effective since 2006.
- During the review, the task team identified capacity gaps in the institutional and regulatory framework. In response, the Government has prepared a stand-alone Integrated Pest Management Capacity Building Plan to ensure effective implementation of the IPMP beyond the life of the Project.

85. To manage the potential environmental issues associated with investments financed under Component 2.2, the Government will use the Environmental and Social Management Framework (ESMF) currently used for ASDP. The current Project will be implemented through the same Ministry, MAFC, and because ASDP is a sectorwide program, using the existing ESMF is an efficient way to proceed. Upon reviewing the ESMF, the Bank has confirmed that it is adequate to cover the issues associated with the investments proposed in Component 2.2. The ESMF requires preparation of Environmental Management Plans (EMPs) for the investments proposed in Component 2.2. These EMPs will be prepared during implementation when the engineering designs are being prepared for the specific works.

86. In summary, in compliance with the World Bank's Environmental Assessment OP4.01 and the Government's national requirements, the Environmental Assessment will consist of a package of stand-alone documents, namely: (i) the ESMF developed and used for the ASDP (which will be used to manage investments in Component 2.2); (ii) the INMP, to be developed within three months of Project approval to manage use of the voucher inputs (fertilizer and seed); and (iii) the revised and updated IPMP of ASDP to manage the use of pesticides.

87. With regard to the Government's capacity to plan and implement these measures, substantial progress has been made over the years in a number of Bank-funded operations in this sector, such as Participatory Agricultural Development and Empowerment Project (PADEP) and ASDP. Notwithstanding this progress, institutional and technical capacity for environmental management must still be strengthened at the district and lower levels. This need will be addressed in detail in the INMP review, and budgets will be provided under the Project to implement the recommended capacity improvement measures.

88. **Social.** The proposed Project is expected to have significant positive social and poverty impacts. It targets large segments of the population adversely affected by high food and input prices. Aside from these groups, the most vulnerable and food-insecure persons in Tanzania's poorest districts are targeted through TASAF Additional Financing.

89. The overall social impacts are expected to be positive. As the voucher program is scaled up over the next three years, the Project should reach about 75 percent of poor rural households in high-potential food production areas, particularly in the Southern and Northern Highlands. The selection of beneficiaries involves diverse members of the community through participatory approaches at the village level. The criteria for eligibility are simple and transparent. They will be published in the local media and broadcast on the radio. To exclude the potential diversion of resources to local elites, the Project has established gender-sensitive selection criteria that exclude better-off farmers who grow more than one hectare of maize or rice. To minimize leakage and displacement, priority will be given to farmers who purchased little or no fertilizer over the last five years. Another positive impact on the poor will occur by reducing the number of bags of urea available with the voucher from two to one, making this input more affordable for resource-poor farmers. This targeting system will be supported by regular monitoring and participatory impact evaluations, which will enable operational adjustments to be made if needed.

90. The possible adverse social impact on the nonparticipating smallholders in the targeted areas will be mitigated in various ways. Some smallholders will not participate in the scheme, and being net sellers, they are likely to be affected negatively by lower output prices. While the risk for this specific group is high, the negative social impact will be partially mitigated by the positive spillovers of NAIVS in rural areas—specifically, the increased availability of agricultural inputs at lower prices, given that the Project will expand and strengthen the network of private agro-dealers, bringing them closer to farmers. Moreover, because most rural households are net purchasers of food, the social impact of limited supplies of fertilizer at high prices in 2009 and subsequent production seasons would extend beyond those farmers who actually use fertilizer. Limited agricultural production throughout the country affects everyone through food shortages, inflated food prices, and the widening regional food imbalance. This threat is particularly serious for the poor, more than half of whom are likely to be net purchasers of food (Table A.5).

91. To enhance the sustainability of Project initiatives and promote informed policy reform, a PSIA will be conducted. The PSIA will help key stakeholders gain a better understanding of the Project, build capacity, and generate gender-sensitive and other relevant information for developing policy. The process will be led by the Government with the participation of key stakeholders and civil society to enhance ownership and ensure better decision-making at the local and central levels. The Bank and other donors involved will provide technical support and share pertinent international experiences.

Table A.5: Rural households classified by quintile as net food buyers and sellers in Kilimanjaro (Northern Highlands) and Ruvuma (Southern Highlands)

Quintile of expenditure	Kilimanjaro		Ruvuma	
	Net food buyers (% of total)	Net food sellers (% of total)	Net food buyers (% of total)	Net food sellers (% of total)
Q1	88.9	11.1	47.2	52.8
Q2	80.9	19.1	61.2	38.8
Q3	71.6	28.4	52.8	47.2
Q4	75.7	24.3	60.7	39.3
Q5	72.5	27.5	68.0	32.0

Note: Q1 is the lowest consumption expenditure and Q5 the highest.

Source: Sarris, A., S. Savastano, and L. Christiaensen (2006), "Agriculture and Poverty in Commodity Dependent African Countries: A Rural Household Perspective from the United Republic of Tanzania," FAO Commodities and Trade Technical Paper 9, Rome.

92. **Gender mainstreaming.** All Project activities are designed to be gender-sensitive. They give attention to the complementarity of roles played by men and women within the household and in productive activities outside the household, including farming. They also ensure women's successful participation. In particular, the VVCs are responsible for ensuring that women benefit from the Project in terms of opportunities, control of assets, use of gender-sensitive technologies, and decision-making, including participatory M&E. Half of the six VVC members are women. Female-headed households have priority for accessing input vouchers. An assessment will be conducted at mid-term to determine the gender structure of beneficiaries and VVC members and to target supplementary awareness and information campaigns. The collection of data on human resources, participants, and beneficiaries will be disaggregated by gender, age, and household income to monitor the Project's progress and impacts. Project indicators to assess poverty and gender impacts will be designed to enable gender-disaggregated data to contribute to successful Project outcomes.

Sustainability⁴¹

93. Sustainability is explicitly built into the Project's design, implementation arrangements, and complementary activities. Although farmers are expected to be able to obtain inputs through the market after they have participated for three years in the subsidy scheme, complementary activities will be carried out to promote more sustainable outcomes.⁴² These activities include: (i) efforts to strengthen the agro-dealer network so that inputs of the required quality are available at the right places and at competitive prices; (ii) the provision of technical services so that farmers can use agricultural inputs efficiently, at economically and technically optimal levels; (iii) efforts

⁴¹ If the Project is successful and the decision is made that it should continue (to reach more people), the option of merging the program into the ASDP could be considered, especially if other crops are to be included.

⁴² To ensure its sustainability, NAIVS is planned for five years. Annex A.8 shows the roll-out strategy and Annex A.9 shows the sources of funding beyond this three-year Project.

to strengthen research services so that recommendations for fertilizer management can be tailored to specific agro-ecological zones, regions, and crop combinations; (iv) promoting integrated soil nutrient and water management practices suited for different agro-ecological zones and farming systems, including conservation farming and minimum tillage techniques;⁴³ and (v) the development and diffusion of appropriate, adapted varieties that tolerate drought and reduce the weather-related risk of crop losses.

94. Sustained, long-term growth in the productivity of small-scale agriculture depends to a large extent on smallholders' adoption of sustainable practices for soil, land, and rainwater management (SLM), especially conservation farming practices. Yet it remains notoriously difficult for smallholders to adopt many SLM practices. Often farmers are required to make a substantial, immediate investment in additional inputs, although those investments raise productivity only gradually, over several years. The Additional Financing for ASDP, processed with AFSP but separately, proposes specific SLM incentives to help farmers change their current practices (such as burning crop residues, hoe-tillage, and ridging) for conservation farming practices (retaining crop residues as mulch and practicing reduced or zero tillage). Farmers practicing conservation farming also reduce the risk of total crop failure from drought.

G. Project Supervision

95. The Bank's Project Task Team, consisting of a Task Team Leader and financial management and procurement staff based in Tanzania, will supervise the Project on a continuous basis. Experts on fertilizer and/or M&E will be employed as required. Five supervision missions (one every six months) are planned for mid-2010, 2011, and 2012 to assess progress with implementation.

H. Project Closing Date

96. The proposed Closing Date of this Accelerated Food Security Project is June 30, 2012. This time frame will give the Project sufficient time to fully disburse the funds and monitor and evaluate the distribution and application of fertilizer and complementary inputs throughout the country.

VI. Benefits and Risks

97. **Benefits.** This input support program will bring economic benefits to society in several ways. It will increase the production and supply of domestically grown staple foods and decrease food prices for net food purchasers. The resulting decline in food price inflation is critical for Tanzania's macroeconomic outlook. NAIVS will also encourage the diffusion and adoption of improved technologies by reducing the initial risks and costs of learning about and using new technologies, and it will thus lead to lasting agricultural productivity increases.⁴⁴ Project-

⁴³ Support for strengthening agricultural research and extension over the medium to long term is provided within the Additional Financing for ASDP as proposed in Attachment B.

⁴⁴ After three years participating in the program, farmers will be able to generate sufficient cash flow to purchase inputs at market prices (see Economic and Financial Analysis).

supported activities will also improve the efficiency of the input supply chain by bringing agro-dealers closer to farmers. A stronger presence of input suppliers will increase competition among agro-dealers; expand the variety of fertilizer, seed, and other inputs available to farmers; and increase the likelihood that these inputs will be available at the right times, places, and at competitive prices. Furthermore, NAIVS will generate positive environmental externalities associated with increased soil fertility and soil conservation, such as reduced soil erosion and carbon emissions. The latter benefits will be increased through the Additional Financing to ASDP that complements this Project (the promotion of integrated soil nutrient and water management practices, combined with stronger support for research and extension to fine-tune fertilizer recommendations by agro-ecological zone, region, and farming system).

98. **The negative impact of the global financial crisis.** The global economic crisis could potentially have a significant impact on the fiscal situation of the Government of Tanzania, constraining its ability to provide the anticipated level of co-funding to the input voucher scheme. Current projections show that the impact is likely to be within manageable limits. In the event of an unforeseen and pronounced revenue shortfall, such that the Government is unable to meet its commitment of a 50 percent share in the voucher subsidy budget, there would be a need for the Government and IDA to jointly reassess the co-funding arrangements as well as the scope and design of the program as the total amount of resources available for the Project would be affected. This situation will be monitored quarterly at the time of reviewing IFRs, and actions will be discussed and agreed between the Government and IDA to ensure tangible and sustainable outcomes.

99. **Cash flow problems with printing and redeeming vouchers.** The Project is expected to become effective on July 1, 2009. For the first year, however, the input vouchers need to be printed and distributed before then, which poses a risk due to limited funds (especially as it is the end of the Tanzania Fiscal Year). To cover these and other necessary expenses that will be incurred prior to effectiveness, the Project will provide for retroactive financing for these expenditures. An additional, and potentially more significant, risk stems from the need for considerable resources for the redemption of vouchers during the first quarter of each financial year, prior to the approval of the national budget by Parliament (typically in August–September). The vouchers are planned to be distributed in June–July, with redemptions starting soon thereafter. To permit timely financing of redemptions and meet other essential expenditures for the voucher scheme, the Government has provided assurances that it will make adequate arrangements to ensure that sufficient and timely funds are available to MAFC starting July 1 of each year.

100. **Risk of the fiscal nonsustainability of NAIVS.** The scaling up of the input voucher scheme might become fiscally unsustainable, crowding out ASDP expenditures and putting pressure on the total budget. This risk is mitigated to some extent in that donor funding for ASDP is ring-fenced and subject to annual approval by the Basket Fund contributors. Further, there is a strong commitment from the Ministry of Finance that the resources for NAIVS will be additional to the core budgets of the ASLMs for their mandated public expenditures. The overall fiscal burden of the program on the Government's own resources is expected to be marginal and well within the previous years' shares of input subsidies administered by MAFC. At full maturity, including IDA resources, the share of MAFC budget is projected not to exceed 2.6 percent of the total Government budget.

101. **Negative impact of export ban on farm prices.** With the projected food supply response, the continuation of the export ban and inefficiencies in domestic marketing channels may cause prices of staples to decline, reduce the profitability of fertilizer use, and thus reduce the efficiency of the public expenditure on NAIVS. The export ban is a temporary measure adopted by the Government of Tanzania to contain domestic food prices, which have remained high over the past 15 months, and to ensure an adequate level of food availability in the country, given the periodic weather shocks (including the failure of the 2008/09 short rains in the North) and regional demand pressures. The Government of Tanzania will lift the export ban as the food security situation improves and the expected supply response from this program improves the prospects for regional exports. The Government and Bank teams will closely monitor the food price and marketing situation and update the market outlook on a regular basis. Food policy will continue to be a key feature of the Bank's policy dialogue with the Government, during supervision and through analytical work.

102. **Risks caused by poor timing and inadequate communication.** The success of the voucher scheme depends on providing timely information to key stakeholders, including fertilizer and seed suppliers and distributors, about the scale and scope of NAIVS. Providing sufficient information to local and regional stakeholders is critical to ensure that NAIVS is implemented efficiently. Measures to mitigate the risk of inadequate and poorly timed communication are embedded in the Project design (specifically the subcomponent supporting the awareness and information campaign). Communication will be facilitated through a number of channels to ensure all key stakeholders have access to relevant and timely information. The communication strategy and awareness campaign will also explicitly ensure that the exit strategy is clearly and unequivocally communicated to the beneficiaries to permit the sustainability of the benefits of the Project.

103. **Limited capacity of agro-dealers.** The limited technical and financial capacity of agro-dealers heightens the risk of delays and gaps in providing inputs to farmers, especially in remote areas. This risk is mitigated by training agro-dealers in technical and business skills through the CNFA. Training will be scaled up and improved through an adequately funded subcomponent of the Project.

104. **Economics of fertilizer use.** Prices for food crops and agricultural inputs have fluctuated rapidly from historic lows to historic highs. Domestic maize prices respond much more to regional pressures than to world markets. Falling international fertilizer prices are expected to transmit, perhaps with a little delay due to accumulated stocks and high transport costs (due to poor road conditions and possibly a future rise in fuel prices). If food production increases in response to NAIVS, as expected, it is possible that domestic food prices may fall and reduce the profitability of fertilizer use. But given that food prices in East Africa are expected to remain high because of regional structural factors, even beyond the current financial crisis, this risk can be effectively mitigated through an active promotion of regional exports and lifting of the export ban on maize. Further measures include the promotion of warehouse receipts, local purchase programs like the P4P (Purchase for Progress) of the World Food Program, investments in rural roads, and the elimination of domestic barriers to trade (such as delays and costs associated with road blocks, weigh bridges, nontransparent subnational taxation, and other nontariff barriers). Subnational taxation of agriculture is being addressed explicitly in the Poverty Reduction Support Credit-8.

105. **Technical efficiency of fertilizer use.** Training for extension agents and agro-dealers will increase the chances that farmers obtain correct technical advice for using fertilizer and new seed. Because smallholders may be unwilling or unable to test and adopt improved technologies and/or sustainable soil fertility management practices on their own, the Additional Financing to ASDP will support a demand-driven, on-farm research and demonstration approach to promote integrated soil fertility management practices. The Project will also strengthen the feedback mechanisms being promoted under ASDP to ensure that the farmers have improved access to adapted technologies.

106. **Improper targeting.** By scaling up the voucher program, the Project seeks to reach more resource-poor farmers. The risk that vouchers may not reach the people for whom they are intended will be mitigated by a carefully managed process for selecting the farmers who will participate in the Project. Regular information and awareness campaigns will ensure that beneficiaries are aware of entitlements. The selection of beneficiaries at the village level will be through a participatory process managed by an elected group of six farmers comprising the VVC and involving diverse members of the community through the Village Assembly. The criteria for eligibility are simple and they will be published in the local media. Input vouchers will be targeted using transparent allocation criteria to agro-ecologically suitable areas for maize and rice production to ensure effective supply response. The targeting criteria are designed to encourage participation of smallholders and poor farmers. Regular participatory monitoring and rigorous impact evaluation, included in the Project, will inform necessary adjustments. A complaint mechanism will allow farmers to register complaints and to ensure they are addressed.

107. The very poorest households may not be able to meet the 50 percent co-payment for inputs required in the voucher scheme. These households require support through other interventions, however, including through mechanisms such as the public safety nets being implemented through TASAF II Additional Financing in the food-insecure areas. The safety net programs can provide cash or food through public works and other programs.

108. **Inadequate monitoring and evaluation system.** A strong M&E system not only ensures that the Project's impact will be assessed once it ends but ensures that policy and institutional adjustments can be made during 2010/11 and 2011/12 if needed. Other projects have suffered from M&E systems with insufficient scope, rigor, and independence. This risk was discussed for the present Project, and the Government is committed to allocating sufficient budget for regular monitoring and independent impact evaluation. The MAFC/ASDP M&E team will conduct regular monitoring, and the impact evaluation will be done by independent parties with support from the National Bureau of Statistics and the AFTQK Impact Evaluation Group.

109. **Weather.** A drought would seriously affect crop response to fertilizer. Even in the absence of severe drought, the variable rainfall common in marginal areas can cause fertilizer to have little effect on production and negatively affect the welfare of those who purchase fertilizer. The impact of urea will largely be lost, although DAP, which remains in the soil for longer, will still have some positive impacts in the following seasons. Farmers face weather risks every production season, although usually only parts of Tanzania are affected by serious drought. The risk that all of Tanzania and all farmers using fertilizer will be affected by drought is modest. The risks caused by weather, especially by variable rainfall, can be mitigated in a number of ways: by training extension officers and agro-dealers to provide suitable advice to farmers about

the best times and ways of applying fertilizer and the choice of improved seed (such as drought-tolerant varieties); by promoting (under ASDP) conservation farming and integrated soil fertility management to mitigate the effects of drought; and by increasing the irrigated area as proposed under ASDP Additional Financing. For extreme drought conditions, a scaled-up response under TASAF would help mitigate adverse effects on the poor and vulnerable.

VII. Financial Terms and Conditions

110. The loan will take the form of IDA Credit on standard terms (10 years' grace period and 40 years' maturity).

Annex A.1: Results Framework and Monitoring and Evaluation Arrangements

I. (a) Results Framework for Emergency Accelerated Food Security Project

Project Development Objective	Project Outcome Indicators	Use of Project Outcome Information
To contribute to higher food production and productivity in targeted areas by improving farmers' access to critical agricultural inputs		
Production of maize and rice in target areas	1. Maize production (t) 2. Rice production (t) 3. Average maize yields (t/ha) 4. Average rice yields (t/ha)	To inform policy makers on progress on achieving PDO To monitor food availability
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
Component 1: Access to agricultural inputs (fertilizer and seed)		
Access of smallholder farmers to agricultural inputs in target areas	5. Percentage of farmers using improved seed and fertilizer	To validate the number of farmers using the vouchers/adopting the technology in target area
Fertilizer use efficiency in targeted areas	6. Average level of N-use efficiency for maize (kg maize grain/kg N) 7. Average level of N-use efficiency for paddy rice (kg paddy/kg N)	To document the potential supply response for smallholders using fertilizer and improved seed
Component 2: Strengthening the input supply chain		
Expansion of agro-dealer network strengthened	8. Trained agro-dealers who remain active in agricultural input distribution (number) 9. Fertilizer and seed sold by agro-dealers to farmers in the target area (t and value)	To inform policy makers on progress and challenges in facilitating the supply of inputs to farmers
Availability of good quality seed of maize, rice, and other crops	10. National seed policy and regulatory framework reviewed and updated, and seed subsector strategy developed and endorsed 11. Pre-basic/breeder seed produced in target research stations (t) 12. Basic seed produced by the private sector and ASA (t)	To monitor progress in improving the enabling environment for the seed sector To provide information on the availability of seed for the input voucher scheme
Component 3: Project management, monitoring, and impact evaluation		
Effectiveness of the program through regular M&E	13. Percentage of recommendations in the annual evaluations implemented 14. Satisfactory semiannual M&E report produced.	

(b) Data Collecting and Reporting

Project outcome indicators	Baseline	Year 1	Year 2	Year 3	Frequency and reports	Data collection instrument	Responsibility for data collection
1. Maize production in target areas (in 000 t)/c,b	2.31	2.60	2.87	3.04	Annually	Statistical report	MAFC/NBS
2. Rice production in target areas (in 000 t) /b	0.87	0.90	0.94	0.96	Annually	Statistical report	MAFC/NBS
3. Maize yield in target areas (t/ha)	1.12	1.9	2.1	2.3	Annually	Survey	MAFC
4. Rice yield in target areas (t/ha)	1.73	2.3	2.5	2.7	Annually	Survey	MAFC
Intermediate Outcome Indicators							
Component 1 – Access to agricultural inputs (fertilizer and seed)							
<i>Intermediate outcomes</i>							
5. Percentage of farmers using improved seed and fertilizer in target areas /a,b	650,000	1,500,000	2,000,000	2,260,000	Annually	Survey	DALDO/MAFC
6. Average level of N use efficiency for maize (kg grain/kg N)	12	14-18	17-21	19-24	Annually	Survey	DALDO/MAFC
7. Average level of N use efficiency for paddy rice (kg maize/kg N)	10	12	14	16	Annually	Survey	DALDO/MAFC
Component 2: Strengthening input supply chain							
8. Trained agro-dealers who remain active in the agricultural input distribution (number)	500	1,250	2,000	2,500	Annually	Survey	CNEA/DALDO
9. Fertilizer and seed sold by agro-dealers to farmers (000 t) /b	85	185	250	285	Annually		CNEA/DALDO
10. Seed sector policy (P) and implementation framework (IF) developed and endorsed		P developed	P endorsed and IF developed	IF implemented	Annually		MAFC
11. Production of pre-basic/breeder seed of maize and rice OPVs in target research stations (t)	Maize: 0.7 Rice: 1.2	Maize:0.8 Rice: 1.4	Maize:0.9 Rice: 1.6	Maize:1.0 Rice: 1.8	Annually	Survey	Research
12. Production of basic seed of maize and rice OPVs by private sector and ASA (t)	Maize: 41 Rice: 46	Maize: 53 Rice: 60	Maize: 65 Rice: 80	Maize:80 Rice: 100	Annually	Survey	MAFC Seed Unit/TASTA/ASA
Component 3: Project management, monitoring, and impact evaluation							
13. Percentage of recommendations in the annual evaluations implemented.	0%	75%	85%	95%	Annually	Review	Review team
14. Satisfactory semiannual M&E report produced	No	Yes	Yes	Yes	Annually	Review	Review team

Note/a: Disaggregated data by gender

/b: Mandatory for GFRP

/c: Based on MAFC statistics. The baseline and annual targets to be adjusted based on the data subset of the NBS Agricultural Panel Survey. Target areas include Iringa, Mbeya, Ruvuma, Rukwa, Kilimanjaro, Arusha, Manyara, Kigoma, Tabora, Mara, and Morogoro.

(c) Proposed Output Indicators

Project output indicators	Baseline	Year 1	Year 2	Year 3	Frequency and reports	Data collection instrument	Responsibility for data collection
Component 1: Access to agricultural inputs (fertilizer and seed)							
Area cultivated with improved seed (000 ha) /b	298	1,275	1,700	1,913	Semiannually		
Maize							
Rice	45	191	255	287	Semiannually		
Area cultivated with sufficient fertilizer (ha) /b	343,000	690,000	918,000	810,000	Semiannually		
Area cultivated with improved seed and sufficient fertilizer (ha)	343,000	690,000	918,000	810,000	Semiannually		
Producers receiving fertilizer voucher (number) /b	740,000	1,540,000	2,040,000	1,800,000	Annually	DALDO	MAFC/DALDO on the base of extension workers and agro-dealers reports
Producers receiving improved seed voucher (number) /b (maize, rice, and other species)	740,000	1,540,000	2,040,000	1,800,000	Annually		
Fertilizer sold by agro-dealers to farmers (t) by private sector /a, /b	175,000	300,000	400,000	360,000			
Seed sold by agro-dealers to farmers (t) /a,b	7,500	15,000	20,000	18,000			
Percentage of target audience of awareness campaigns recalling messages correctly	0	50%	66%	75%	Annually	Survey	
Component 2: Strengthening input supply chain							
Agro-dealers participating in technical and business skill training (number)	1,300	850	600	400	Quarterly	Report	CNFA/MAFC
Agro-dealer association membership (district and national level)	0	250	500	1,000	Annually	Report	CNFA/MAFC
Number of active commercial trainers	14	34	54	50	Annually	Report	CNFA/MAFC
Quantity of pre-basic/breeder seed used by ASA and others (t) (maize, rice, and other species)	4	6	9	13.5	Annually	Report	MAFC Seed Unit
Quantity of basic/foundation seed used by private sector and QDS (t) (maize, rice, and other species)	50	75	115	175	Annually	Report	
Quantity of QDS seed produced (t) (maize, rice, and other species)	150	250	850	1600	Annually	Report	
Private sector access to breeder seed of varieties bred through public research (number of hybrid and OPV varieties)	None	None	5	10	Annually	Report	TASTA

/a: Through the voucher scheme.

/b: Mandatory (GFRP).

/c: Values to be provided by CNFA for baseline and future programming

II. Monitoring and Evaluation

1. The M&E Unit of MAFC, working closely with implementing departments, agencies, and LGAs, will regularly monitor Project performance and report on the physical and financial inputs and outputs. The main objectives of monitoring performance regularly are to (i) facilitate Project implementation at all levels; (ii) help managers to take decisions based on factual, verifiable data; and (iii) analyze and highlight lessons learned at each level of Project operation. Monitoring creates the information infrastructure to track key process and activity indicators of all components financed by the Project. A well-designed, user-friendly MIS that collects, organizes, analyzes, and manages the Project's input-output information will be established. The M&E mechanisms used in the Project will emphasize stakeholder participation. They will be designed to identify problems rapidly and make corresponding corrections in Project design and implementation to make it more likely that the Development Objective is achieved.

2. The objective of impact evaluation is to establish the Project's net contribution to its intended beneficiaries as highlighted in the Project Development Objective (PDO). Socioeconomic outcomes of the interventions will be compared using baseline data "Project" and "Control" areas. The NVSC Secretariat, in close consultation with the M&E Unit of MAFC, will hire an independent consultant to evaluate impact. The consultant will conduct comprehensive, outcome-focused impact evaluations after each major agricultural season ends.

3. Responsibility for M&E rests with the NVSC, AIS, and M&E Unit. The duties and responsibilities of these entities will be clearly defined. The AIS will have one senior officer responsible for overseeing this activity and liaising with the M&E Unit. The M&E Unit will use computerized project management techniques to monitor progress and link with monitoring activities within the Ministry, at the regional and local level, and with NMB. The M&E Unit will be assisted by DALDO and staff trained for this purpose at the district level to monitor and report on local activities. An independent consultant will be retained to undertake M&E work, which will include concurrent monitoring as well as periodic impact assessments based on independent surveys. The M&E consultancy will also support the design and implementation of the monitoring system to be operated by the Secretariat with input from other agencies.

4. Project M&E and performance indicators: Information generated by the agencies implementing the Project will be collated by the M&E Unit (primarily information on inputs and outputs) and M&E consultant (primarily information on outcomes), consolidated by AIS, and used to update key Project performance indicators (Annex A.1). The indicators will be developed during the baseline study and refined as needed by the Secretariat. In consultation with AIS, Project implementation will be monitored independently at the field level by the M&E consultant by (i) selecting two to three villages per district (depending on the number of villages in each district) for intensive visits and monitoring and (ii) rotating monthly visits to the other participating villages in each district. As part of the work plan, the M&E consultant will also prepare impact evaluation studies, including beneficiary assessments, at agreed intervals. NGOs helping to implement the Project will also be involved in monitoring and evaluating the implementation of the voucher scheme.

5. **Data collection and management.** LGAs, through their district offices, have primary responsibility for collecting data on input/output indicators, to be consolidated and managed by the M&E Unit. The M&E consultant will help the Secretariat develop a computerized plan and MIS for the Project. The M&E consultant will also have primary responsibility for collecting data via independent surveys for the concurrent monitoring and impact evaluation studies and preparing the reports. The evaluation studies would be prepared in a continuous process, culminating in one major interim review of the Project just prior to the Mid-Term Review (MTR) and a Project Completion Review (PCR). The baseline survey will be done by the M&E consultant in coordination with the LGAs. The survey will be completed and a draft report prepared within six months of Project effectiveness. Questionnaires and formats for this survey should be prepared within one month after the M&E contract is awarded, pretested in the field, and cleared with AIS prior to data collection. A decision on representative sample size of wards, villages, and farmers will be taken between AIS and the M&E consultant.

6. **Reviews.** The Project will undergo two major reviews, conducted jointly by the Government of Tanzania and IDA. The first will be the MTR (occurring about 18 months after Project effectiveness) and the second will be the PCR around Project completion. The first review will assess the Project's impact to date and focus as well on implementation processes. It will recommend adjustments in procedures or implementation arrangements to overcome any weaknesses and bottlenecks that are identified. The assessment will also include an analysis of the exit strategy and the voucher system's sustainability. The second major review will consist of a comprehensive impact assessment, including a quantitative and qualitative assessment of progress towards the PDO.

7. **Reporting arrangements.** The AIS will submit six-monthly progress reports to the Bank, which will include: (i) current physical and financial expenditure data compared to annual and end-of-Project targets; (ii) updated indicators of Project performance compared to annual and end-of-Project targets; (iii) successes and problems encountered during the reporting period, with suggested remedial actions; and (iv) the socioeconomic and environmental impacts of the Project. In addition, the Annual Work Program to be financed under the Project will be prepared and submitted for Bank review and comments by May 15 each year for the upcoming fiscal year. The M&E consultant will submit: (i) six-monthly reports summarizing Project M&E during the preceding six months, cross-cutting issues, recommendations, and updated Project indicators, as well as (ii) three comprehensive reports (that is, the baseline survey and the two main impact evaluation assessments at MTR and Project completion).

Annex A.2: Lessons from Subsidizing Inputs in Tanzania and Malawi

I. Agricultural Input Subsidy Interventions in Tanzania

1. Over the years, the Government of Tanzania has sought in various ways to improve farmers' access to inputs, especially chemical fertilizer and improved seed. Its last program, which operated from 2003 to 2007, subsidized transport costs to enable input suppliers to deliver an agreed quantity of fertilizer to farmers at fixed prices. The subsidized fertilizer was sold to farmers by designated agro-dealers in the districts.

2. Several lessons emerged from the transport subsidy program. Inputs did not reach many smallholders. Agro-dealers lacked skill in trading agricultural inputs and the financial capacity to buy the allocated inputs, and it was easy for them to sell the subsidized inputs at the market price.

3. Given the low efficiency of this public expenditure and the limited benefits to smallholders, the Government of Tanzania decided to design a "market-smart" subsidy, calling it the National Agricultural Input Voucher Scheme (NAIVS). Tanzania had compelling reasons to initiate the scheme. Vouchers have proven more effective and less apt to distort the market than methods used commonly in the past, such as direct subsidies and centralized control of fertilizer procurement and distribution. The benefits of a "smart" subsidy include increased farmer output, stronger private input markets, and increased adoption of new technologies by poor farmers. These benefits ultimately result in sustained poverty reduction, but achieving these benefits depends greatly on how the subsidy program is designed and implemented.

4. In 2007/08, the Government of Tanzania decided to pilot NAIVS, which provided vouchers to eligible farmers to obtain inputs in the market. Agro-dealers were trained in business skills in collaboration with CNFA/AGRA, and financial institutions provided loans to trained agro-dealers so that they could purchase the inputs.⁴⁵ The NAIVS pilot, implemented in Kilombero (Morogoro) and Mbarali (Mbeya) Districts, yielded a number of lessons. The most important was that the number of farmers who benefited from subsidized inputs rose quite substantially, from 15–20 households (over four years under the previous program) to 250 (during the NAIVS pilot). Farmers raised crop yields significantly compared to yields under traditional practices without mineral fertilizer. Because inputs were available in the villages on time, farmers' input-use efficiency improved, and the ultimate unit cost of the inputs was lower. When the communities themselves used a participatory, transparent process to select the farmers who could receive vouchers, there were few complaints from those left out of the voucher scheme. Field demonstrations of the benefits of fertilizer and improved seed raised local demand for these inputs. However, the co-payment that farmers had to make to obtain the voucher inputs—about US\$100 for two bags of urea, one bag of DAP, and improved seed for maize (20 kilograms) or rice (40 kilograms)—appeared high, even for average farmers. There was a need to involve SACCOs to facilitate farmers' access to microcredit.

⁴⁵ Preliminary lessons after the Kilombero field visit. A full evaluation of the account of the pilot input subsidy scheme and lessons learned remains to be provided by CNFA.

5. Having made a significant impact in delivering inputs to farmers at affordable prices in two districts, the Government extended the voucher program in 2008/09 to 11 regions (53 districts). The program targeted high-potential cereal production areas to achieve the highest impact on crop yields and the food supply, given the limited budget, numbers of agro-dealers, and their access to financial institutions (see Table A.2.1). The expanded program reached about 700,000 farmers in 2008/09, of about 2.5 million farmers who probably were eligible. Like the pilot, the expanded program was designed to achieve several related objectives:

- Counter escalating fertilizer prices by making fertilizer more affordable for farmers.
- Give rural agro-dealers the financial and technical wherewithal to form an effective input supply network at the local level.
- Through this network, provide farmers with fertilizer and improved seed of maize and rice.

6. The areas targeted by the expanded program are indicated in Table A.2.1.

Table A.2.1: Agro-ecological zones, regions, and districts targeted by NAIVS

Agro-ecological zone	Regions	Districts
Southern Highlands	Iringa, Mbeya, Rukwa, Ruvuma, Morogoro	Iringa Rural, Iringa Municipal, Ludewa, Kilolo, Mufindi, Makete, Njombe, Njombe Rural, Mbeya Municipal, Mbeya Rural, Mbozi Rungwe, Kyela, Ileje, Chunya, Mbarali, Sumbawanga, Sumbawanga Urban, Nkasi, Mpanda, Songea, Songea Rural, Tnduru, Mbinga, Namtumbo, Morogoro Rural, Morogoro Urban, Kilosa, Ulanga, Mvomero, and Kilombero
Northern Highlands	Arusha, Manyara and Kilimanjaro	Arusha Rural, Arusha Urban, Karatu, Babati Urban, Babati, Moshi Kiteto, Mbulu, Monduli, Hanang, Simanjiro, Longido, Ngorongoro, Meru, Same, Siha, Hai, and Rombo
Western Zone	Tabora and Kigoma	Sikonge Kigoma Rural, Kigoma Ujiji, Kibondo and, Kasulu districts.

6. A rapid impact assessment carried out together with the Agricultural Council of Tanzania (ACT) and CNFA in the districts of Njombe (Iringa Region), Songea Urban and Rural (Ruvuma Region), Mbozi (Mbeya Region), Sumbawanga Urban and Rural (Rukwa Region), and Babati Urban and Rural (Manyara Region) elucidated the main lessons and challenges to consider for the proposed Accelerated Food Security Project (Table A.2.2).

Table A.2.2: Benefits and challenges of implementing NAIVS in 2008/09

Benefits	Challenges
At the regional and district level	
Possible to know the number of farmers who received subsidies and quantities of fertilizer and seed subsidized per district	Very close follow-up of implementation at district level, which requires additional human and financial resources
Monitoring impacts is easier than for the voucher scheme than for previous subsidy programs	Sufficient agricultural extension staff needed at local level to provide effective technical support for farmers
At the farmer level	
The voucher scheme improved input access for a large number of households (an average of 200 households per village, compared to 15–20 households under the previous system)	Not all eligible farmers could get obtain vouchers, mainly due to financial constraints
Input shops are now present at the village level, whereas before farmers had to travel to district headquarters to get inputs	The lack of extension staff limits the technical backstopping and supervision required to increase farmers' fertilizer use efficiency
With the high fertilizer prices in 2008/09, many farmers could not have afforded any inputs without the subsidy	Vouchers reached farmers either too near or even after the onset of the rains; proper timing of voucher distribution is critical
	Few farmers had used Minjingu rock phosphate, initial uptake was low, and the powder form of Minjingu was less acceptable, but these attitudes started to change after farmers saw the crop response in the field
For the National Microfinance Bank	
NMB is happy to be a key player in agricultural development	The number of vouchers received from agro-dealers was quite large but NMB did not hire additional staff, so payments to agro-dealers were delayed
More clients use NMB services, which is an economic gain for the bank	During the initial months of the voucher redemption process, the branches could not extend work hours for making entries, but after decentralization of critical functions the pace of redemptions increased
	There was no joint discussion at the district level with all key implementers to enhance teamwork
	The Government's intermittent release of funds to NMB sometimes stopped the redemption process, frustrating the agro-dealers
For agro-dealers	
Agro-dealers profited from selling inputs Agro-dealers realized that they had an important role to play in promoting agricultural activities	Agro-dealers lacked sufficient initial capital to purchase sufficient supplies of inputs Because the AGRA loan guarantee covered only 11 of 56 districts, loan arrangements with NMB were quite difficult
While implementing the voucher scheme, a much closer working relationship was formed between agro-dealers and input supply companies (as compared to the previous subsidy arrangements)	The redemption process was lengthy, so it was difficult for agro-dealers to repay input supply companies and properly serve farmers The lack of funds at NMB caused stoppages in redemption arrangements and affected NMB's service to farmers

II. Lessons from Malawi's Input Subsidy Scheme

7. Malawi's Agricultural Input Subsidy Program, financed by the Government with support from development partners (Norway and DfID, mainly for targeting and logistics) was introduced in 2005, following an extreme drought that seriously reduced agricultural productivity. The program's immediate objectives were to improve smallholders' agricultural productivity, increase food and cash crop production, and reduce vulnerability to food insecurity and hunger. Ultimately the program sought to promote food self-sufficiency, develop private input markets, and encourage wider growth and development in Malawi. The program's key element was vouchers, supplied to farm households to buy seed and fertilizer for maize and tobacco at subsidized prices. Approximately 130,000 tons of fertilizer—about half of Malawi's fertilizer supply—were distributed to maize and tobacco farmers through the voucher program, benefiting more than 1.3 million farm households in 2005/06. The following year, approximately 1.5 million farm households received vouchers to buy 150,000 tons of fertilizer, and 2 million farmers received vouchers for free maize seed. In 2007/08, more than 1.7 million farm households were expected to receive vouchers for 170,000 tons of fertilizer, and almost 3 million farmers were expected to receive vouchers for seed.

8. This program has been quite costly for the Government. In 2006/07, the subsidy on a 50-kilogram bag of fertilizer was US\$17.4 (MK 950). Farmers paid only US\$6.8 (28 percent) of the retail fertilizer price of US\$24.2. The subsidy program accounted for 51 percent of the Ministry of Agriculture and Food Security budget and 6.2 percent of the national budget in 2007/08. On top of that, donor funds covered some administrative costs and much of the cost of the seed subsidy.

9. Despite its cost, the program yielded a number of benefits, although the magnitude of some benefits remains unclear. The most obvious benefit was higher maize production in 2006 and 2007. In 2007, Malawi reportedly produced 3.4 million tons of maize, 1.2 million tons above national requirements, partly because of favorable rains. Approximately 320,000 tons of maize were exported to Zimbabwe and about 10,000 tons to Swaziland and Lesotho. But Malawi's recent maize shortage and rising maize prices have called those harvest estimates into question. The very large maize production increases reported for 2006/07 do not seem credible when compared with the already large increases reported for 2005/06. Nor are they consistent with the maize price increases observed from September 2007 onwards.

10. The second reported benefit of Malawi's subsidy program is improved food security. Rural households' own subjective ranking of their economic well-being was 8 percent higher in May/June 2007 than in 2004, and the share of households reporting a major shock from high food prices fell from 79 percent in 2004 to 20 percent in May/June 2007. However, high maize prices in 2008 probably had a negative impact on the food security of households that were net food purchasers.

11. A third major benefit was that the private sector increasingly participated in the fertilizer program. In 2006/07, private firms procured 100,000 tons of fertilizer and six companies sold a further 50,000 tons of subsidized fertilizer through their own retail outlets. When commercial sales unrelated to the subsidy program are included, the private sector provided 180,000 tons of fertilizer altogether, 11 percent more than in 2005/06.

12. Have these benefits exceeded the costs of the subsidy program? The answer is not yet clear. Estimated benefit/cost ratios have ranged from 0.76 to 1.36. This large range results from uncertainty over the extent to which commercial sales were displaced and uncertainty over the yield response to incremental additions of fertilizer. It is also uncertain whether the fertilizer program spurred sufficient growth in private input markets and agricultural productivity among poor farmers to sustain high levels of input use once the program ends.

13. Regardless of these uncertainties, it is clear that Malawi's subsidy program can and should be improved to heighten its effectiveness and control its costs. As reflected in the large range of estimated benefit/cost ratios, the program could have a negative impact if it is not implemented in a way that reduces displacement, fails to increase the productivity of subsidized inputs, and fails to control public expenditures.

14. What are the main lessons for Tanzania? Briefly, the displacement of commercial input sales can be as high as 30–40 percent, subsidies can be better targeted to the poor to achieve larger development gains and a larger reduction in poverty, directing subsidies to different groups or types of people is a sensitive issue that is very difficult to resolve, and it is vital to consider fiscal sustainability and an exit strategy. More specifically, the Malawian experience offers practical guidance for devising an input subsidy program that meets important objectives such as improving food security, alleviating hunger, and fostering equitable economic development:

- A subsidy program should target households with little ability to buy fertilizer. A high proportion of non-poor farmers can buy fertilizer. If scarce public resources are used to supply fertilizer to these farmers at subsidized prices through public distribution channels, commercial suppliers will suffer, and overall fertilizer use and crop output are likely to increase very little.
- A subsidy program should target areas where yields will actually rise if fertilizer is used. Some agricultural zones are so marginal that fertilizer has little impact and its use is not economic. If non-universal targeting is difficult and sensitive, however, an alternative is to provide a smaller subsidy to all households (sometimes referred to as “starter packs” of inputs).
- Stronger participation by the private sector leverages higher returns to a subsidy program by strengthening input markets. For this reason, it is essential to involve a wide range of fertilizer importers, wholesalers, and retailers in an input voucher scheme, even if the logistical cost is higher. Farmers should be able to redeem vouchers with any independent agro-dealer and thus promote additional investment in remote rural areas, where it is most needed. Improvements in the logistics for storing and distributing inputs should reduce costs throughout the supply chain.
- A subsidy program should be part of a comprehensive strategy to improve agricultural productivity and should be linked with social safety nets.
- An exit strategy reduces the chances that the program will become financially unmanageable and politically difficult to adjust.

Annex A.3: Procurement Arrangements

I. General

1. Procurement for AFSP will be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" (May 2004; revised October 2006) (referred to here as "Procurement Guidelines"); and World Bank "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" (May 2004, revised October 2006) (referred to here as "Consultant Guidelines"); and the provisions stipulated in the Financing Agreement (FA). The proposed procurement actions under different expenditure categories are described in general below. For each contract financed under the Project, the procurement or consultant selection method, the need for prequalification, estimated costs, prior review requirements, and time frame are included in the Procurement Plan agreed to between the Government and IDA. The Procurement Plan will be updated at least annually or as needed to reflect actual implementation needs and improvements in institutional capacity.

II. Legal Framework

2. Tanzania's new procurement law, the Public Procurement Act 2004 (PPA, 2004) has been in force since May 2005, when the associated regulations were issued. The new law followed a 2003 Country Procurement Assessment Report (CPAR), which recommended decentralizing procurement functions to ministries, departments, and Government agencies (MDAs) and establishing a Public Procurement Regulatory Authority (PPRA) to oversee public procurement. The PPRA was established in May 2005 and is now fully staffed. It has developed a system for checking and monitoring procurement in Government entities. Aside from its oversight function, PPRA also builds capacity in public procuring entities and, in collaboration with professional organizations, in the private sector.

3. In accordance with CPAR recommendations, a three-level complaint mechanism was also established, beginning with the accounting officer of a procuring entity and continuing on to the PPRA and the Public Procurement Appeals Authority (PPAA). In operation since July 2005, the PPAA is composed of public and private sector representatives.

III. Institutional and Implementation Arrangements

4. Implementation of this Project will be mainstreamed within MAFC. The Ministry's Procurement Management Unit (PMU) will be responsible for procuring works and goods and selecting consultants, in close consultation with the AIS of MAFC.

IV. Procurement Arrangements for Works, Goods, and Consultancy Services

5. **Procurement of works.** Works procured under this Project will include the rehabilitation of irrigation schemes, offices, warehouses, and other facilities. Procurement for all International Competitive Bidding (ICB) will be carried out using the Bank's current Standard Bidding Document (SBD) and Standard Bid Evaluation Forms. The Government has already prepared Standard Bidding Documents for National Competitive Bidding (NCB) procedures for procuring works. These Standard Bidding Documents are acceptable to the Bank, except for a provision that gives preference to domestic suppliers or contractors, which

is inconsistent with Bank guidelines. Thus the Government may use these documents when procuring works through NCB with the exception of the provision of Domestic Preference. In accordance with para.1.14(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (i) the bidders, suppliers, contractors, and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the association; and (ii) the deliberate and material violation by the bidder, supplier, contractor or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.14(a)(v) of the Procurement Guidelines. Civil works estimated to cost more than US\$5,000,000 equivalent per contract will be procured through ICB. Civil works estimated to cost less than US\$5,000,000 equivalent per contract will be procured through NCB. Minor works contracts estimated at under US\$50,000 per contract will be procured using the Shopping method. Direct contracting is acceptable (i) when the disadvantages of competitive selection can be justified and (ii) when, after consultation with the Bank, direct contracting meets the requirements of paragraph 3.6 of the Procurement Guidelines. The prior review threshold for works contracts is US\$5,000,000 equivalent per contract, but every year the Procurement Plan will identify a specified number of NCB contracts that must be prior reviewed. Prequalification of contractors, if any, will be invoked only for large contracts exceeding US\$10 million or in cases in which special expertise is required.

6. **Procurement of goods.** Goods procured under this Project will include farm machinery, motor vehicles, motorcycles, laboratory equipment, safe deposit boxes/containers, seed equipment, and office equipment (desktop and laptop computers, printers, photocopiers, and so on). Procurement for all ICB will be carried out using the Bank's current SBDs and Standard Bid Evaluation Forms. The Government has already prepared Standard Bidding Documents for National Competitive Bidding (NCB) procedures for procuring works. These Standard Bidding Documents are acceptable to the Bank, except for a provision that gives preference to domestic suppliers or contractors, which is inconsistent with Bank guidelines. Thus the Government may use these documents when carrying out procurement of goods through NCB procedures with the exception of the provision of Domestic Preference. In accordance with para.1.14(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (i) the bidders, suppliers, contractors and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the association; and (ii) the deliberate and material violation by the bidder, supplier, contractor or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.14(a)(v) of the Procurement Guidelines. Goods estimated to cost more than US\$500,000 equivalent per contract will be procured through ICB. Goods estimated to cost less than US\$500,000 equivalent per contract will be procured through NCB procedures. Goods contracts estimated to cost less than US\$50,000 per contract will be procured using the Shopping method. Direct contracting is acceptable (i) when the disadvantages of competitive selection can be justified and (ii) when, after consultation with the Bank, direct contracting meets the requirements of paragraph 3.6 of the Procurement Guidelines. In particular, direct contracting for printing of vouchers under nonconsulting services specified below, may be considered upon justification only for the first year only, while competitive method(s) will be applied in subsequent years. The prior review threshold for goods contracts

will be US\$500,000 equivalent per contract, but every year the Procurement Plan will identify a specified number of NCB contracts that must be prior reviewed.

7. **Procurement of nonconsulting services:** Nonconsulting services are services that are not intellectual or advisory in nature. For example, nonconsulting services under this Project will include printing of vouchers. The procurement of nonconsulting services shall be as per provisions specified above for procurement of goods.

8. **Selection of consultants.** Examples of consulting services sought under this Project include services to develop a communications strategy; design a seed policy and a seed industry development strategy; design and supervise rehabilitation works; train agro-dealers; and strengthen the agro-dealer network. Consulting services will be provided by consulting firms and individual consultants. As far as possible, consulting contracts will be awarded under Quality and Cost Based Selection (QCBS) procedures. Other selection methods will be determined for each assignment, depending on the type of assignment and the provisions of the Consultant Guidelines, and will be indicated in the Procurement Plan. Quality-Based Selection (QBS) will be followed for assignments that meet the requirements of paragraph 3.2 of the Consultant Guidelines. Fixed Budget Selection (FBS) will be followed for assignments which meet the requirements of paragraph 3.5 of the Consultant Guidelines. Consulting firms required for standard or routine assignments, such as audits, will be selected through Least Cost Selection (LCS), in accordance with of paragraph 3.6 of the Consultant Guidelines. Single-Source Selection (SSS) will be used for assignments meeting the requirements of paragraphs 3.9–3.12 of the Consultant Guidelines and will always require the Bank’s prior review, regardless of the amount of the contract. In particular, Single-Source Selection of a consultant to train agro-dealers and strengthen the agro-dealer network may be considered upon justification only for the first year of the Project, while competitive method(s) will apply in subsequent years. Consulting services estimated to cost less than US\$200,000 equivalent per contract will be procured following the procedures of Selection Based on Consultants’ Qualifications (CQS) in accordance with paragraphs 3.7 and 3.8 of the Consultant Guidelines. Individual consultants will be selected on the basis of their qualifications in accordance with Section V of the Consultant Guidelines. Under the circumstances described in paragraph 5.4 of Section V of the Consultant Guidelines, such contracts may be awarded to individual consultants on a sole-source basis. Shortlists for consultants’ services for contracts estimated to be less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with paragraph 2.7 of the Consultant Guidelines. Prior review by the Bank is required for consultancy services estimated to exceed US\$200,000 equivalent per contract for firms and when Single Source Selection of consultants occurs. The selection of individual consultants will normally be subject to post review. Prior review of the evaluation process for contracts above US\$100,000 will be invoked only in exceptional cases—for example, when hiring consultants for long-term technical assistance or advisory services for the duration of the Project. These prior review contracts will be identified in the Procurement Plan.

9. **Training and workshops.** Detailed training plans and workshop activities will be developed by the Ministry during Project implementation and included in the Project’s annual work plan and budget for Bank review and approval.

10. **Operating costs.** Operating costs for implementing this Project will consist of hiring venues for workshops and training, servicing office machines and equipment, purchasing

materials for workshops, operating and maintaining vehicles, purchasing office supplies, communication charges, per diem and travel costs for staff on duty travel and external auditors but excluding salaries of civil/ public servants, bank charges, and advertising costs.

V. Assessment of the Agency's Capacity to Implement Procurement

11. According to the PPA 2004, every procuring entity is required to establish a PMU to manage all procurement and disposal activities except adjudication and award of contracts. Procurement activities for this Project will be carried out by the PMU of MAFC, which has been established in accordance with the PPA 2004 and is headed by a Principal Supplies Officer (PSO), assisted by seven supplies officers and support staff, including secretaries. PMU personnel are also involved in procurement for the ongoing ASDP, financed by the Government of Tanzania and development partners, including IDA. Procurement activities for another operation currently under preparation (Eastern Africa Agricultural Productivity Program, EAAPP) will be undertaken by the same team, in addition to Ministry's procurements financed by the Government.

12. MAFC's capacity to implement procurement for this Project was assessed in March 2009. The assessment included evaluations of organizational structure, functions, staff skills and experience, and adequacy for implementing the program. Key issues and risks concerning procurement for this Project were identified and mitigation measures proposed. The assessment found that the staff responsible for procurement was mostly experienced in procuring goods through NCB procedures. However, they have inadequate experience in procuring works and goods through ICB procedures, as well as in selecting the recipients of large-value consultancy contracts. It was also noted that staff from the user departments have taken unnecessarily long to prepare Technical Specifications and Terms of Reference for various packages procured under the current ASDP.

13. The assessment conducted for this Project rated the overall risk for procurement as high. IDA discussed the key issues with the Government and agreed on an action plan to mitigate these risks. The proposed actions are summarized in Table A.3.1. The residual risk after the implementation of these actions is expected to be moderate.

Table A.3.1: Proposed actions to mitigate procurement risks in the Accelerated Food Security Project

Risk	Action	Time frame	Responsibility
Inadequate experience in procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts, especially after revising the thresholds for ICB/NCB and for prior review upwards	Key procurement staff identified for training on procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts. Selected NCB contracts to be prior reviewed	During implementation of the Project	Borrower and IDA
Procurement staff overwhelmed with ongoing procurements under donor funding and procurements under Government own financing	Ministry to hire a procurement consultant for at least 12 months to manage the loads of the first year (start-up) procurement contracts and provide training to MAFC supply/ procurement staff	Six months after effectiveness	Borrower
Delays from user departments in preparing technical specifications and terms of reference	Use competent authorities and consultants. Build capacity of staff in the user departments	During implementation of the Project	Borrower
Inadequate procurement planning	Prepare a draft procurement plan	By negotiations (completed) and annually thereafter	Borrower
Inadequate procurement filing and record keeping	Train staff in data management and establish acceptable procurement filing and record keeping	Within six months of implementation of the Project	Borrower and IDA

VI. Procurement Plan

14. The Borrower has prepared a Procurement Plan providing procurement methods, selection methods, and prior review thresholds. The Plan has been reviewed and agreed upon between the Borrower and IDA during negotiations. The final Plan will be available at MAFC, in the Project database, and on the Bank's external website. The Procurement Plan will be updated annually in agreement with IDA or as required to reflect Project implementation needs and improvements in institutional capacity.

A. Procurement Arrangements Involving International Competition and Other Methods

1. Goods, Works, and Nonconsulting Services

1	2	3	4	5	6	7	8	9
Ref. no.	Contract (description)	Estimated cost (US\$)	Procurement method	P-Q	Domestic preference (yes/no)	Review by IDA (prior/post)	Expected bid-opening date	Comments/ implementing agency
1	Store and threshing drying floor	135,000	NCB	NA	No	Post	21 Jan. 2010	MAFC
2	Irrigation rehabilitation	31,500	S	NA	No	Post	30 Jan. 2010	MAFC
3	Office rehabilitation and warehouse construction	54,000	NCB	NA	No	Post	21 Jan. 2010	MAFC
4	Rehabilitation for ASA farms' irrigation system	810,000	NCB	NA	No	Selected for prior review	21 Jan. 2010	MAFC
5	Office equipment	253,500	NCB	NA	No	Selected for prior review	15 Aug. 2009	MAFC
6	Seed machinery and equipment	160,000	NCB	NA	No	Post	30 Aug. 2009	MAFC
7	Research equipment	128,000	NCB	NA	No	Post	15 Aug. 2009	MAFC
8	Farm machinery	734,000	ICB	NA	No	Prior	15 Sept. 2009	MAFC
9	Laboratory equipment	50,000	NCB	NA	No	Post	30 Aug. 2009	MAFC
10	Seed treatment equipment	320,000	NCB	NA	No	Post	30 Aug. 2009	MAFC
11	Vehicles and motorbike	329,000	NCB	NA	No	Post	15 Sept. 2009	MAFC
12	Containers	18,000	S	NA	No	Post	15 June 2009	MAFC
13	Printing of input vouchers	1,540,000	DC*	NA	No	Prior	10 June 2009	MAFC
14	Production of TV, radio programs and newspaper articles	105,000	NCB	NA	No	Post	30 July 2009	MAFC

* Proposed Direct Contracting (DC) to be adopted subject to clearance by the Bank.

ICB contracts for works estimated at above US\$5,000,000 equivalent per contract, for goods estimated at above US\$500,000 equivalent per contract, and all direct contracting will be subject to prior review by IDA. However, a specified number of NCB contracts will be identified in the Procurement Plan to be prior reviewed.

2. Consulting Services

(a) List of consulting assignments with shortlist of international firms and other selection methods.

1	2	3	4	5	6	7
Ref. no.	Description of assignment	Estimated cost (US\$)	Selection method	Review by IDA (prior/post)	Expected proposals submission date	Comments/ implementing agency
1	Communications Strategy Technical Assistance 1	37,500	IC	Post	30 July 2009	MAFC
2	Communications Strategy Technical Assistance 2	22,500	IC	Post	16 July 2009	MAFC
3	Seed Strategy, Incentives, Policy, and Regulatory Framework	100,000	IC	Post	16 Aug. 2009	MAFC
4	Seed – Technical Assistance	30,000	IC	Post	16 July 2009	MAFC
5	Technical Assistance – Support of Business Plan	12,500	IC	Post	15 July 2009	MAFC
6	Technical Assistance 1 Monitoring and Evaluation of NAIVS	250,000	IC	Prior	20 Apr. 2010	MAFC
7	Technical Assistance 1 Monitoring and Evaluation of NAIVS	125,000	IC	Post	20 Apr. 2010	MAFC
8	MIS Consultant	75,000	IC	Post	20 Apr. 2010	MAFC
9	Training of Agro dealers	3,000,000	SSS*	Prior	15 July 2009	MAFC
10	Seed Enterprises Development	120,000	IC	Post	30 Aug. 2009	MAFC
11	Consultancy Services for Designing of Civil Works	114,500	CQS	Post	15 Aug. 2009	MAFC
12	Procurement Consultant	48,000	IC	Post	15 July 2009	MAFC

* Proposed Single Source Selection (SSS) to be adopted subject to clearance by the Bank.

(b) Consultancy services estimated to cost above US\$200,000 equivalent per contract for firms and Single-Source Selection of consultants will be subject to prior review by the Bank. Prior review of the evaluation process for individual consultant contracts above US\$100,000 will be done in exceptional cases only, e.g., when hiring consultants for long-term technical assistance or advisory services for the duration of the Project.

(c) Shortlists composed entirely of national consultants: Shortlists of consultants for services estimated to cost less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

B. Thresholds for Procurement Methods and Prior Review

Expenditure category	Contract value threshold (US\$)	Procurement/selection method	Contracts subject to prior review
Works	>5,000,000	ICB	All
	<5,000,000	NCB	None (post review) unless specified in the Procurement Plan
	<50,000	Shopping	None (post review)
	All values	Direct Contracting	All
Goods	>500,000	ICB	All
	<500,000	NCB	None (post review) unless specified in the Procurement Plan
	<50,000	Shopping	None (post review)
	All values	Direct Contracting	All
Consulting services – Firms¹	> 200,000	QCBS/ Other ² (QBS/FBS/LCS)	All
	< 200,000	CQS/ Other ² (QBS/FBS/LCS)	None (post review)
	All values	SSS	All
Consulting Services – Individuals (IC)	>100,000	IC - Qualification	None (post review) unless specified in the Procurement Plan ³
	<100,000	IC - Qualification	None (post review)
	All values	IC – SSS	All

Note: Terms of reference for all contracts shall be cleared by the IDA.

- 1 Shortlists for consultancy services for contracts estimated to be less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.
- 2 QBS, FBS, and LCS for assignments meeting requirements of paragraphs 3.2, 3.5, and 3.6, respectively, of the Consultant Guidelines.
- 3 The selection of Individual Consultants will normally be subject to post review. Prior review will be done in exceptional cases only, e.g., when hiring consultants for long-term technical assistance or advisory services for the duration of the Project and prior review of these contracts will be identified in the Procurement Plan.

VII. Frequency of Procurement Supervision

15. In addition to the prior review supervision to be carried out from IDA offices, the capacity assessment of the implementing agency recommends one supervision mission every six months to visit the field to carry out post review of procurement actions

Annex A.4: Financial Management and Disbursement Arrangements

I. Introduction

1. This annex present results of the assessment of financial management arrangements for the Project to support NAIVS that will be implemented by MAFC's Agricultural Services Department in coordination with the NVSC, using established procedures. The objective of the assessment was to determine: (i) whether MAFC's financial management arrangements suffice to ensure that Project funds will be used for the intended purposes in an efficient and economical way; (ii) Project financial reports will be prepared in an accurate, reliable, and timely manner; and (iii) Project assets will be safeguarded. The financial management (FM) assessment was carried out in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board on November 3, 2005.

II. Country Issues

2. The various Public Financial Management (PFM) assessments conducted over the last six years reveal that the Government of Tanzania has taken significant steps to improve its public financial management system and is now recognized as having one of the best public financial management systems in Africa. Improvement of Public Financial Management (PFM) systems has been a major Government priority for the past 10 years. The Government has implemented measures to reduce fiduciary risks, including the approval and application of new public finance, audit, and procurement acts, the full operationalization of the Integrated Financial Management System, recruitment of qualified accountants and internal and external auditors, strengthening of the National Audit Office, and reform of the public procurement system. Owing to these measures, the quality and timeliness of financial reporting have improved, providing more accurate, timely information on financial flows. All MDAs and LGAs now submit their annual financial statements within the statutory period. As mentioned, based on the findings and recommendations of the 2003 Country Procurement Assessment Review, a new public procurement law and its associated regulations are in place. The Public Procurement Regularity Authority (PPRA) was established and is now functional.

3. The newly enacted Public Audit Act (June 2008) supports the independence of NAO and reinforces its capacity to use current auditing techniques and focus more on value for money. New audit manuals and procedures have been developed, and value-for-money audits are conducted. As a result, in fiscal years 2005, 2006, and 2007 NAO submitted the Government of Tanzania audit reports within the statutory period. Despite the efforts to reform Government PFM, however, challenges remain to ensure effectiveness, transparency, and accountability in the use of public funds.

III. Strengths and Weaknesses of the Project Management Unit

4. Project financial management is strengthened by:

- MAFC's capacity to prepare the Project budget and track record in managing IDA and other externally financed projects.
- Qualified, experienced accountants within MAFC's accounts section to account for Project funds.

- MAFC's internal audit department, which has eight staff, will designate one of its staff members to work specifically on this Project.

5. Project financial management is weakened by:

- Late project preparation and implementation, late availability of vouchers, and late positioning of inputs under the current voucher system. MAFC needs to strengthen overall planning and budgeting to mitigate these risks.
- The lack of formats for the Project's IFRs. To develop a reporting mechanism to be used during Project implementation, MAFC prepared and presented an acceptable format during Negotiations.
- MAFC's current computerized system (IFMIS) excludes projects from the chart of accounts. MAFC may have to request the Accountant General's Office/MoFEA, to improve on the IFMIS and include project accounting, or allow the Project to acquire an accounting package that can be interfaced with IFMIS.
- Delays in redeeming vouchers due to insufficient funds. Redemptions were stopped in mid-January last year for a few weeks due to insufficient budget. The MoFEA has committed to finding a workable arrangement for the release of funds to MAFC to ensure timely and adequate cash flow for Project needs.
- Delays in voucher redemption due to inadequate staffing at NMB branches. The inability of NMB to process redemption payments to agro-dealers will also undermine the credibility of NAIVS. MAFC will revise its MOU with NMB to ensure adequate staffing at NMB branches and other weaknesses witnessed in the first year of NAIVS.
- MAFC lacks an accounting and financial manual for this specific Project. The NVSC will issue broad guidelines for managing vouchers (top and down).

6. Table A.4.1 identifies the key risks related to the Project's financial management and suggests how they may be mitigated.

Table A.4.1: Key financial management risks and mitigation measures

<i>Type of risk</i>	<i>Risk rating</i>	<i>Risk mitigating measures</i>	<i>Residual risk rating</i>
INHERENT RISKS (risk that arises from environment in which Project is situated)			
Country Level Takes into account overall country weak internal controls, internal audit and oversight bodies.	M	(1) Issues are being addressed at the country level through the country's PFM strategic plan, under implementation, which aims to strengthen the public financial management system and is supported by the Bank and other development partners through the Public Financial Management Reform Project (PFMRP). Monitored thorough the Poverty Reduction Support Credit-6 supervision and annual PEFA Review.	L
Entity Level MAFC has sufficient track record in managing IDA-financed projects. While legal and institutional framework is in place, monitoring and enforcement remain areas for improvement.	M	(1) MAFC in coordination with the NVSC will be in charge of overall Project financial management and disbursement. (2) Project fiduciary staff are adequately qualified and experienced, and will be maintained throughout the life of the Project. (3) The Project staff will be trained continuously during the life of the Project. Project software and procedures manuals are in place and will be updated or upgraded as necessary.	L
Project Level Project implementation arrangement involves different actors (including regions, districts, villages). The voucher scheme has not been well understood by all beneficiaries.	M	(1) All staff involved in fiduciary aspects will be trained in the use of Project tools (software, procedures manual) and Bank fiduciary procedures. (2) A simplified manual of procedures for the voucher scheme will be developed and disseminated through regional seminars. (3) Agro-dealers will continue to be trained throughout the execution of the Project.	L
OVERALL INHERENT RISK	M		L
CONTROL RISKS (risk that the Project's financial management system is inadequate to ensure funds used economically and efficiently for intended purpose)			
Budgeting Budget preparation is a relatively strong part of the MoFEA budget process, but more consistency is needed in the Projections made by different ministries and agencies, such as the MAFC. Given the current budget cycle, late MTEF preparation could delay Project budget preparation and release of funds. The assessment of voucher implementation last year found preparation and implementation was late, with late availability of vouchers and input positioning.	S	(1) MoFEA has committed to ensuring Project activities are fully reflected in the MTEF. (2) The Bank team and Project staff will work closely to establish comprehensive Project cost tables, detailed work program, and quarterly budgeting for the first 12 months of the Project. (3) The budget will provide funding for additional training of Project staff in preparing budgets consistent with disbursement plans. (4) Training, mentoring, and hands-on experience will be provided to fiduciary staff in financial planning and budget preparation by the Bank team. (5) Regular review /monitoring of Project budget performance, including timely release of Project funds, will be part of the quarterly IFRs to be reviewed by the IDA and Project Steering Committee at all levels. (6) MAFC needs to strengthen the overall planning and budgeting system including the overall management of vouchers.	M

Continued...

Table A.4.1 (cont'd.)

Type of risk	Risk rating	Risk mitigating measures	Residual risk rating
CONTROL RISKS (risk that the Project's financial management system is inadequate to ensure funds used economically and efficiently for intended purpose)			
<p>Accounting The existing software (IFMIS) does not capture project accounts. Financial management and accounting procedures may not be well understood by all involved in implementation.</p>	M	<p>(1) IFMIS may need to be updated to be used for Project accounting, or the Project must negotiate with MoFEA to acquire an accounting package that can be interfaced with IFMIS.</p> <p>(2) The Project Financial and Accounting Manual will be prepared by MAFC in coordination with NVSC.</p> <p>(3) An additional accountant will be recruited to manage voucher redemption.</p> <p>(4) All redeemed vouchers will be transferred from NMB to MAFC for safe custody for a period of at least five years.</p> <p>(5) Records: NMB will also retain all records and documents related to the voucher scheme for a minimum period of five years.</p> <p>(6) The Memorandum of Understanding will be updated accordingly to reflect these requirements.</p>	L
<p>Internal Control MAFC has its own internal control department headed by an experienced chief internal auditor. However, the Project requires significant and focused attention given its size and nature. At the NMB level, risks involve the presentation of fake vouchers for redemption, multi-posting of vouchers, and unauthorized debiting of the Ministry account.</p>	S	<p>(1) The internal audit unit comprises 8 persons, which is adequate. One internal auditor will be designated to work specifically on this Project. This person will be provided with the required internal audit guidelines.</p> <p>(2) Vouchers have security features that are difficult to copy. All NMB branches were issued with ultraviolet lights to detect forged vouchers. The vouchers posted are cross-checked by supervisors.</p>	M
<p>Fund Flow The fund flow arrangement is described in the Project FM manual. Voucher redemptions are delayed by several weeks by the banking system. Redemptions ceased in mid-January because of lack of budget.</p>	S	<p>(1) MoFEA has provided assurances on finding a workable solution to ensure adequate and timely availability of funds for NAIVS in the first quarter of the fiscal year.</p> <p>(2) Arrangements for the flow of funds that are acceptable to the Bank will be detailed in the Project FA manual.</p> <p>(3) The report-based disbursement method is being recommended. This method allows up to six months of funding to be available in the Designated Account.</p> <p>(4) Disbursements will be based on six month budget forecasts and submission of accountabilities of advanced funds to the NMB.</p>	M

Continued...

Table A.4.1 (cont'd.)

Type of risk	Risk rating	Risk mitigating measures	Residual risk rating
CONTROL RISKS (risk that the Project's financial management system is inadequate to ensure funds used economically and efficiently for intended purpose)			
Financial Reporting The Project team has good experience in producing interim un-audited financial reports.	M	(1) The IFR guidelines will be used by the Project management team over the life of the Project. (2) Training will be provided to financial, accounting, and M&E staff in the use of IFR Guidelines. (3) The format, content, and periodicity of FMR were discussed and agreed upon during negotiations.	L
Auditing NAO needs to be strengthened. There is a risk of all Project units' audit reports not being reviewed by the audit committee.	S	(1) There are ongoing efforts to strengthen NAO by making it more independent and building capacity under the newly enacted Public Audit Act approved in June 2008. (2) The Audit Committee will provide an oversight role on Project funds and follow up on implementation of internal and external audit findings.	M
OVERALL RISK	S		M

Note: H = High; S = Substantial; M = Moderate; and L = Low.

7. With the mitigation measures in place, the residual risk will be reduced to moderate and thus ensure that the financial management arrangements are acceptable to the Bank.

IV. Institutional and Implementation Arrangement

8. MAFC will be responsible for overall implementation of the Project and will constitute the operational link between IDA and the Government of Tanzania on matters related to Project implementation.

9. During Project execution, MAFC will coordinate Project implementation and manage (i) procurement, including purchases of goods, works, and consulting services; (ii) Project monitoring, reporting, and evaluation; (iii) contractual relationships with IDA and other co-financiers; and (iv) financial management and record keeping, accounts, and disbursements.

10. The institutional arrangements with respect to the Project, particularly NAIVS, apply at all levels of Government—national, regional, district, and village levels. MAFC, as the implementing agency, is responsible for setting up, running, and monitoring NAIVS. The Head of the Agricultural Inputs Section of MAFC will be responsible for the management and coordination of Project activities. This person will be assisted by the Chief Accountant of MAFC, who will assume overall responsibility for accounting for Project funds. The Permanent Secretary will chair the NVSC, which will comprise the directors of relevant MAFC departments as well as representatives of MoFEA, PMO-RALG, national farmer organizations, agribusiness, civil society organizations, and NMB.

V. Budgeting Arrangement

11. The overall Project budget and disbursement schedule are included in the Emergency Program Paper and MAFC's annual budget. The Annual Work Plans and Budgets (AWPB) will be prepared and approved based on the policy guidelines, strategy planning, and

budgetary manual issued by the Ministry of Finance in 2005 in accordance with the three-year Intermediate Term Expenditure Framework. It is suggested that funds be released by tranche, biannually. Detailed cost tables for the Project were discussed during negotiations and agreed upon (see Annex 8).

12. The AWPBs will be prepared in a participatory way. For the villages, the AWPB will specifically consider that the Project is implemented at the village level. The budget will be reviewed at all levels, including the Village Voucher Committee, the District Voucher Committee, the Regional Voucher Committee, and the National Voucher Committee. Budgets need to be approved before the new financial year begins and monitored during Project implementation using unaudited IFRs. MAFC has qualified staff to proceed with the review, consolidation, and approval of the annual work program.

VI. Accounting Arrangement

13. **Books of accounts.** MAFC will maintain books of accounts similar to those for other IDA-funded projects. Books of accounts specifically for this Project will be set up and will include a cash book, ledgers, journal vouchers, a fixed asset register, and a contracts register. All NMB branches that will receive funds for voucher redemption will maintain a cash book that will be reconciled to the main bank account for the Project, which will receive funds disbursed by MAFC. A chart of accounts will be drawn up for the Project, in which the account codes will match the classification of expenditures and sources and application of funds indicated in the Financing Agreement. The chart of accounts will be developed in a way that will allow Project costs to be directly related to specific Project activities and outputs. The Project will therefore update the existing IFMIS/Epicor software or acquire a new interface with IFMIS, considering that the current system is not customized to handle individual Project accounts.

14. MAFC and IDA have agreed that all redeemed vouchers will be transferred from NMB branches to MAFC for safe custody and kept for a minimum period of five years. In addition, NMB will also retain all records and documents related to the voucher scheme for a minimum of five years. The MoU with NBM will be updated to reflect these agreements.

15. **Staffing arrangement.** MAFC's Head of AIS will be responsible for overall Project management and coordination. The Ministry's Chief Accountant will be responsible for preparing the accounts for this Project, assisted by a Senior Accountant.

16. All MAFC accounting staff dealing working with this Project require training in recent World Bank Financial Management and Disbursement Guidelines, which will be arranged in consultation with the Country Financial Management Specialist.

17. All of the key staff in MAFC's accounting section, who are responsible for ensuring the accountability of Project funds, are experienced and qualified (Table A.4.2).

Table A.4.2: Key accounting staff for Project

Designation	Working experience	Qualifications
Project Coordinator	30 years	PhD, Copenhagen University
Chief Accountant	More than 10 years	CPA and MBA
Assistant Chief Accountant	20 years in public accounting	Saint Augustine University, Tanzania
Accountant	10 years in accounting	Institute of Finance and Management, Dar es Salaam

18. To ensure that MAFC can review all vouchers sent from more than 1,600 agro-dealers through NMB and follow up on any queries, MAFC will strengthen its accounting unit by recruiting one additional qualified, experienced accountant. In addition, appropriate staffing arrangements will have to be maintained throughout the life of the Project.

19. **Information system.** The books of accounts need to be maintained on a computerized accounting system. Although MAFC uses IFMS, its chart of accounts excludes projects. As noted, the alternative is to acquire an accounting software package that would be interfaced with IFMIS. The Government accounts are prepared on the Government's computerized system (Epicor). The Project accounting arrangements will comply with the IDA Financing Agreement and Government financial laws and regulations, specifically with Regulation 53 Sub-Section (1) of the Public Finance Regulations of 2001.

VII. Internal Control and Internal Auditing

20. **Internal control.** MAFC's internal control systems have satisfactory levels of segregation of duties and controls. The Government's regular financial rules and procedures that apply to ministry operations, stated in Public Financial Act 2001, article 6, will be used in this Project. These procedures include regular post audits by MAFC's Internal Audit Unit on a regular basis. The internal control environment revolves around the internal audit function, which reviews day-to-day operations of Ministry and donor funds, including the adequacy and effectiveness of internal controls. The Ministry's Audit Committee will provide oversight over financial matters affecting the Project. Its major role includes following up on implementation of internal and external audit queries.

21. The Project Financial and Accounting Manual (FAM) will be developed by the MAFC within thirty days after the Project effectiveness and disseminated at all levels of Project implementation. The FAM will include guidelines for managing the voucher scheme from the village level to the national level. The FAM will describe the accounting system, including the Project's major transaction cycles, fund flow processes, accounting records, supporting documents, computer files, specific accounts in the financial statements involved in processing transactions, the list of accounting codes used to group transactions (chart of accounts), the accounting processes from the initiation of a transaction to its inclusion in the financial statements, authorization procedures for transactions, the financial reporting process used to prepare the financial statements and interim financial reports (including significant accounting estimates and disclosures), financial and accounting policies for the Project, budgeting procedures, financial forecasting procedures, procurement and contract administration monitoring procedures, procedures undertaken for replenishing the Designated Account, and auditing arrangements.

22. **Internal auditing.** The Internal Audit Unit is an independent unit headed by the Chief Internal Auditor, who reports directly to the Permanent Secretary (Table A.4.3). The Unit has an audit strategy and plan based on a risk assessment of the Ministry. The Internal Audit Unit is guided by the Internal Audit Manual issued by the Government of Tanzania and emphasizing risk-based auditing. Staff members have been trained in using these guidelines. Internal audit committees review the internal audit report and internal control issues, and they also follow up on recommendations from the audit reports. However, the composition of the internal audit committee must be reviewed to make it more independent. The internal auditor's work related to MAFC will be monitored and reviewed by Ministry's Audit Committee to support implementation by ensuring that internal control systems are functioning adequately and that management addresses issues raised in the internal auditor's report. The Internal Audit Unit comprises nine persons with acceptable qualifications, of which one staff member will be designated to work exclusively on this Project within one month after effectiveness. The Unit issues reports each quarter, based on its review of MAFC's internal control system, and management at the Ministry takes action on the report. The Project will also rely on the local Government internal auditors to undertake audits at the district level.

23. Across Government agencies, Tanzania is strengthening the internal audit function. It is building the capacity of internal auditors to use modern auditing techniques and instituting new, independent Internal Audit departments, based on international practices in internal auditing.

Table A.4.3: Auditing staff for the Project

Designation	Working Experience	Qualification
Chief Internal Auditor	20 years in auditing and accounting	Mzumbe University of Tanzania
Internal Auditor	3 years in auditing and accounting	Saint Augustine University, Tanzania

VIII. Fund flow arrangement

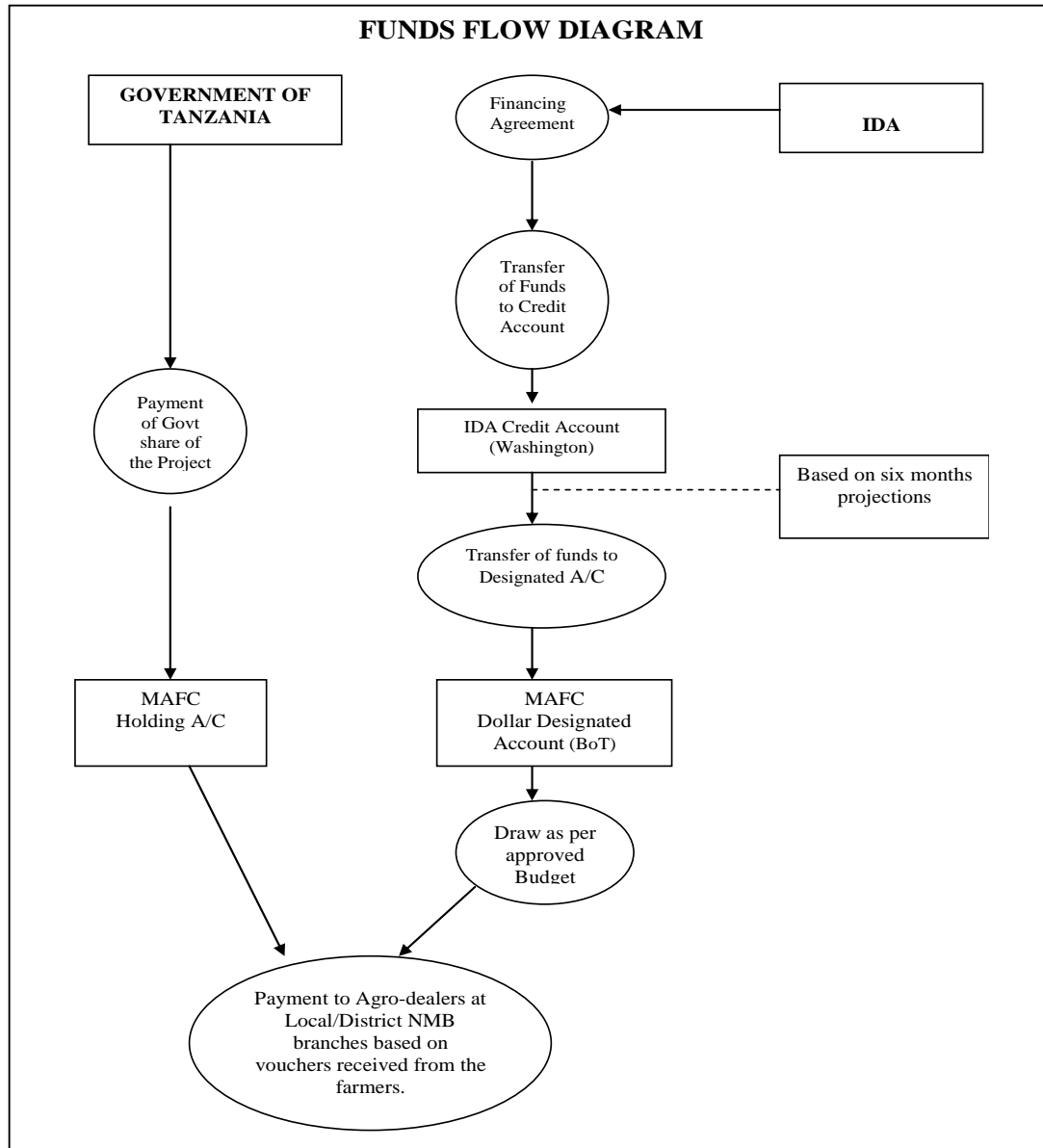
24. **Bank accounts.** The following bank accounts will be maintained in the Bank of Tanzania to implement the Project:

- **Designated (Special) Account:** Denominated in US dollars, disbursements from the IDA Credit will be deposited in this account.
- **MAFC Holding Account:** This account will be denominated in local currency, used to transfer funds to NMB, and pay for Project expenditures for redeeming vouchers in local currency. Funds will be transferred periodically from the Designated Account to the Project Account to ensure that funds are sufficient to make payments in local currency in accordance with the Project's objectives. The MAFC will also open another local currency account to receive the Government of Tanzania's counterpart contribution.

25. Signatories for all Project accounts will be documented in the Project Financial Management Manual.

26. **Fund flow.** Upon effectiveness, MAFC will prepare a six-month cash-flow forecast for the Project, based on an approved work plan and budget, and thereafter submit the withdrawal application to IDA (Figure A.4.1). IDA will process the withdrawal application and deposit an advance on the Project’s Designated (Special) Account. Subsequent withdrawal applications will be made quarterly, following approval of progress and accountability reports, work plans, and budgets. Funds from the Designated Accounts can be used to pay Project expenditures if denominated in foreign currency.

Figure A.4.1: Funds Flow for Accelerated Food Security Project



27. Project funds from the Designated Account will be transferred into the MAFC Holding Account, from which payments will be made in local currency for Project expenditures and NMB. MAFC will also open another Account for Government contributions towards Project expenditures. The funds will then be disbursed from the MAFC Accounts to NMB for voucher redemptions.

IX. Disbursement Arrangement

28. MAFC's financial management and accounting systems will facilitate report-based disbursement, in which six-monthly cash-flow forecasts, based on work plans and the Project budget, will be submitted quarterly to withdraw funds. These systems will also produce an unaudited IFR within 45 days after the end of the calendar year quarterly period. In compliance with report-based guidelines, the Project is expected to (i) achieve and sustain a satisfactory financial management rating during Project supervision; (ii) submit IFRs with the agreed form and content within 45 days of the end of every calendar quarterly period; and (iii) submit a Project audit report by the due date. Other methods of disbursement include the use of direct payments to suppliers and special commitments. Details will be spelled out in the Disbursement Letter.

29. After effectiveness, for disbursement MAFC will submit to IDA a six-monthly cash-flow forecast based on the Project's approved work plan and budget, using the report-based method of disbursement. IDA will then deposit funds into the Designated (Special) Account. The Borrower will use these funds to finance IDA's share of Project expenditures under the proposed Credit. The Designated Account will be replenished by IDA funds upon receipt of the withdrawal application, the unaudited quarterly IFR showing the accountability of funds advanced, and the six-month cash-flow forecast for the subsequent period, based on the approved work plans and budget for the Project.

30. If ineligible expenditures are made from the Designated Account, the Borrower is obligated to refund the same. If the Designated Account remains inactive for more than six months, the Borrower may be requested to refund to IDA the amounts advanced to the Designated Account.

31. IDA has the right, reflected in the Financing Agreement, to suspend disbursement of funds if reporting requirements are not met.

X. Financial Reporting Arrangement

32. MAFC will provide a quarterly Interim Financial Report (IFR) and annual Financial Report to IDA within 45 days after the end of the period to monitor the use of Project funds. Formats for these reports should be generated from the MAFC financial management system. The information in these reports will be clearly linked with the chart of accounts for the Project.

33. The following quarterly IFRs and annual Financial Report will be produced by MAFC for the Project:

- A statement of sources and uses of funds for the reported quarter and cumulative period from Project inception, reconciled to opening and closing bank balances.

- A statement of uses of funds (expenditures) by Project activity/component, comparing actual expenditures against budget, with explanations for significant variances for both the quarter and cumulative period.
- A voucher tracking report from NMB, showing the agro-dealers paid in relation to farmers and voucher numbers redeemed.

34. In addition to the above IFRs and annual Financial Reports, MAFC will also submit additional information to the Bank to support report-based disbursement:

- Designated US\$ Account Activity Statement.
- Designated US\$ Account Bank Statements.
- Summary Statement of Designated US\$ Account Expenditures for Contracts subject to Prior Review.
- Summary Statement of Designated US\$ Account Expenditures not subject to Prior Review.
- Projected cash flow forecast requirements for the next two reporting quarters (six-month period).

35. The financial statements should be prepared in accordance with International Public Sector Accounting Standards (which inter alia includes the application of the cash basis of recognition of transactions). The IDA Financing Agreement will require the submission of audited financial statements to the Bank within six months after the end of the financial year.

36. These Financial Statements will comprise:

- A **Statement of Sources and Uses of Funds / Cash Receipts and Payments**, which recognizes all cash receipts, cash payments, and cash balances controlled by the entity and separately identifies payments by third parties on behalf of the entity.
- A **Statement of Affairs / Balance Sheet** as at the end of the financial year, showing all the assets and liabilities of the Project.
- The **Accounting Policies Adopted and Explanatory Notes**. The explanatory notes should be presented in a systematic manner with items on the Statement of Cash Receipts and Payments being cross-referenced to any related information in the notes. Examples of this information include a summary of fixed assets by category of assets and a summary of SOE Withdrawal Schedule, listing individual withdrawal applications.
- A **Management Assertion** that Bank funds have been expended in accordance with the intended purposes as specified in the relevant World Bank legal agreement.

37. Indicative formats of these statements will be developed in accordance with IDA requirements and agreed with the Country Financial Management Specialist.

XI. External Audit Arrangement

38. As per the Public Finance Act, 2001, NAO is responsible for auditing all Government organizations, including local authorities and public corporations and donor funds. The Controller and Auditor General (CAG) has the power to authorize any person registered as an

auditor under the Auditors and Accountants Act of 1972 and approved by the CAG to conduct an audit on his/her behalf.

39. NAO or a registered auditor approved by the CAG will conduct an annual external audit of MAFC. The auditors will provide a single audit report on the Project financial statements (which includes the Designated Account). A review of external audits conducted by NAO for IDA-financed Projects (ASDP, PADEP) within MAFC in recent years found them to be satisfactory.

40. The audit will adhere to International Standards on Auditing (IFAC/INTOSAI pronouncements) and the report will be submitted within six months after the end of the financial year (Table A.4.4). In addition, the auditors will provide a detailed management letter containing their assessment of the internal controls, accounting system, and compliance with financial covenants in the Financing Agreement. Terms of reference for the audit were agreed upon during negotiations. The audit terms of reference include visiting a sample of farmers and agro-dealers to confirm that funds were spent for the intended purposes. The selection of the sample will be based on a risk-based approach.

XII. Financial Management Action Plan

41. The action plan in Table A.4.5 indicates the actions to be taken for the Project to strengthen its financial management system and the dates that they must be completed.

Table A.4.4: Audit report due date for Accelerated Food Security Project

Audit report opinion	Due date
Project's annual financial statements audit opinion	By December 31 each year (within six months after end of the FY, which is June 30 every year during Project implementation)

Table A.4.5: Action plan to strengthen financial management in Accelerated Food Security Project

	Action	Date due by	Responsible
1.	Prepare formats of unaudited IFRs that will be used for the Project and make them consistent with IDA formats	Before negotiations (completed)	MAFC
2	Agree on terms of reference for external auditors	Before negotiations (completed)	MAFC and IDA
3	Develop FM manual for the Project that includes guidelines for voucher scheme management from village to national level	One month after Project effectiveness	MAFC/NVSC
4	Designate an internal auditor among the internal audit unit staff to work exclusively on this Project	One month after Project effectiveness	MAFC
5	Update software to accommodate Project needs or acquire new accounting software for the Project	Three months after Credit effectiveness	MAFC/NVSC

XIII. Effectiveness Conditions and Financial Covenants

42. **Effectiveness conditions** are not required, because the Project will be executed under the Bank’s Financial Management arrangement OP/BP 8.00, “Rapid Response to Crises and Emergency Operations.”

43. As stated in the Financing Agreement, the **financial covenants** are the standard ones for Financial Management, Financial Reports, and Audits and Section 4.09 of the General Conditions.

XIV. Financial Management Supervision Plan

44. A supervision mission will be conducted at least twice a year based on the risk assessment of the Project. Some supervision missions will be done jointly with MAFC and will involve going to at least 30 percent of the regions and districts that have redeemed vouchers to confirm that funds have been used for their intended purposes. The sample will be selected based on a risk-based approach. The supervision mission objective is to ensure that strong financial management systems are maintained throughout the life of the Project. Regular reviews will also be carried out through the IFRs to ensure that expenditures incurred by the Project remain eligible for IDA funding. The Implementation Status and Results Report (ISR) will include a financial management rating for the components, which will be produced by the Bank’s Country Financial Management Specialist after an appropriate review.

45. An implementation support plan is proposed, based on the outcome of the financial management risk assessment (Table A.4.6).

Table A.4.6: Implementation support plan for Accelerated Food Security Project

FM activity	Frequency
Desk reviews	
Interim financial reports review (IFRs)	Quarterly
Project audit report review	Annually
Review of other relevant information such as systems audit reports	As these become available
On site visits	
Review of overall operation of the FM system	Semiannually, based on the substantial risk rating
Monitoring of actions taken on issues highlighted in audit reports, auditors’ management letters, systems audit report, and other reviews	As needed
Transaction reviews (if needed)	Semiannually, based on the substantial risk rating, but can be done as needed in case of any issue arising
Capacity-building support	
FM training sessions	Before Project start and thereafter as needed.

XV. Conclusion of the Assessment

46. As noted, a review of the Ministry's financial management arrangements assessed the financial management risk to be substantial, but after mitigation measures are undertaken the risk will be reduced to moderate, which satisfies the Bank's minimum requirements under OP/BP10.02. With the mitigation measures, the financial management arrangements should be adequate to provide, with reasonable assurance, accurate and timely information on the status of the Project as required by the Bank. The recommended improvements/mitigation measures are detailed in the Financial Management Action Plan.

47. The Financial Management Assessment Report for MAFC for the proposed Accelerated Food Security Project has been shared and agreed with MAFC staff.

Annex A.5: Safeguards

I. Potential Environmental Issues

1. The Project's potential environmental impacts are associated with use of the subsidized agricultural inputs (fertilizer and seed) promoted and provided through the voucher scheme that this Project will finance under Component 1. These impacts will continue as farmers reap the benefits of higher productivity and sustain increased input use over the long term.

2. With increased production resulting from the increased use of fertilizer and seed as a result of the promotional subsidies provided by this Project, it is possible that some farmers will also increase the use of other agricultural inputs such as pesticides. The promotion of rice, a water-intensive crop, may also encourage the demand for more water and stimulate an increase in irrigation investments. The potential impacts from the collective use of these inputs are both local and widespread and will extend over the short, medium, and long term. Impacts are local in the sense that these substances have a direct impact on the soil ecosystems in the immediate vicinity of their use. Impacts are also widespread because of non-point source pollution effects on ground and surface water resources. Increased use of chemical fertilizer, improved seed, and irrigation facilities are also likely to cause an increase in pest pressure (through an upsurge of historically minor pests and/or an increased incidence of new pests), which may lead to an increase in the use of synthetic pesticides, with associated potential human and environmental hazards.

3. The vouchers will be targeted to farmers in areas of Tanzania where agro-ecological zones, soil fertility conditions, and irrigation services, among other factors, will enhance the productivity gains from using these inputs. The vouchers may stimulate an increased demand for water, which is likely to be met from existing irrigation facilities or the development of new irrigation facilities and services. As stated, this Project will not finance any investments in irrigation services (either for rehabilitating or building) or other types of investments at the farm/household level. Investments in irrigation and for other agricultural needs of farmers will be met by the existing and Additional Financing request for ASDP.

4. However, Component 2.2 will finance the rehabilitation of irrigation facilities on two ASA foundation seed farms to irrigate 200 hectares where foundation (basic) seed will be produced, and on three ARIs to irrigate a total of 25 hectares where breeder (pre-basic) seed will be produced.

5. The Government of Tanzania and IDA have agreed on a package of measures to effectively and sustainably manage these environmental concerns to satisfy both the national environmental laws and requirements and IDA's safeguard policies.

6. The Project triggers the following IDA Safeguard Policies:

- Environmental Assessment (OP4.01)
- Pest Management (OP4.09)
- Projects on International Waterways (OP7.50)

II. Environmental Assessment (OP4.01)

7. The Accelerated Food Security Project is classified as **Category B**.

8. **The Environmental and Social Management Framework (ESMF) of the ASDP.** To manage any potential environmental issues associated with Component 2.2, the Government of Tanzania and IDA have agreed to use the ESMF document currently used for the existing ASDP. IDA has reviewed this ESMF and confirmed that it is adequate to cover issues associated this project. The ESMF is needed only for Project Component 2.2.

9. This ESMF was approved and disclosed when the existing ASDP was processed. Under the ESMF, EMPs are required for the investments in Component 2.2, and they will be prepared during implementation, when the engineering designs for these works are prepared.

10. **Integrated Nutrient Management Plan (INMP).** The Government of Tanzania has agreed to prepare an Integrated Nutrient Management Plan (INMP) to manage the use of fertilizer nutrients and seed financed by the Project. The INMP will address institutional, regulatory and budgetary issues to ensure that approved substances are procured, transported, stored, handled, and used and that any remnants are discarded appropriately. The INMP will also ensure that the use of these substances is monitored effectively and that a responsive change management process is in place if any changes in their use are required. (Note that the Integrated Pest Management Plan—IPMP; see section C—will also include training and capacity building to support sustainable use of these nutrients.) The implementation of the INMP will be financed by the Project. Because the Project is processed under OP/BP 8.0, the INMP will be completed after the approval of AFSP by IDA’s Board of Executive Directors, but within three months of the date of effectiveness. Terms of reference for preparing the INMP will be cleared with IDA before the Government begins to select the consultant. The completed INMP will be disclosed in Tanzania and at the World Bank INFOSHOP.

11. **The Strategic Environmental and Social Assessment for ASDP.** As emphasized previously, this Project will not finance any irrigation investments except for rehabilitating facilities to irrigate 225 hectares for seed production under Component 2.2. It is likely that the Project will heighten demand for irrigation water, however, and irrigation services will be financed through ASDP. The Government requested Additional Financing from the IDA for ASDP to increase the area under small-scale irrigation, and that request is being prepared in conjunction with the present Project. About 95 percent of the Additional Financing will be earmarked for district irrigation schemes in ASDP.

12. The Government is preparing a Strategic Environmental and Social Assessment (SESA) for the current ASDP which will cover the irrigation issues related to this Project as well as the agricultural sector more broadly in Tanzania. The SESA will examine Tanzania’s national irrigation policy and national irrigation master plan, and it will provide specific guidance for preparing Environmental Assessments (EAs) for individual national irrigation projects. The SESA will also deliver an action plan recommending specific ministerial actions to strengthen irrigation management through an integrated national and regional water management approach. A contract with a private consulting firm to prepare the SESA is expected to be signed by the Government of Tanzania by June 2009.

13. **Cumulative Impact Assessment Report.** During the third year of Project implementation and no later than three months before its closing date, the Government will

complete an environmental Cumulative Impact Assessment (CIA) to determine the Project's cumulative impacts. This report will convey a better idea of any environmental issues that may emerge, assess the effectiveness of the Project's environmental plans (such as the SESA, IPMP, INMP, and ESMF), and describe how any environmental issues are to be addressed. The terms of reference for preparing the CIA will be cleared by IDA, and the final approved report will be disclosed locally in Tanzania and at the World Bank's INFOSHOP.

14. In compliance with Tanzania's national requirements and IDA's Environmental Assessment OP4.01, the Environmental Assessment will therefore consist of a package of three separate documents: (i) the ESMF developed and used for the existing ASDP, to manage investments in Component 2.2; (ii) the INMP, to be developed within three months of the Project approval date to manage the use of inputs (fertilizer and seed) purchased under the voucher scheme; and (iii) the revised and updated IPMP of the ASDP, to manage the use of pesticides as described in section C of this Annex.

III. Pest Management (OP4.09)

15. For general use in Tanzania and, more specifically, for the activities covered under this Project, the Government has proposed to adopt and mainstream the original Integrated Pest Management Plan (IPMP) prepared under the ASDP in August 2004. IDA has agreed with this proposal and has:

- Reviewed the overall comprehensiveness of the original IPMP. The Government has also updated the IPMP to capture all of the activities funded in this Project and thus comply with OP4.09 and national requirements.
- Reviewed and identified lessons from the Government's implementation of the original IPMP in the ASDP, which has been effective since 2006. The Task Team identified capacity gaps in the institutional and regulatory framework. In response, the Government prepared a stand-alone Integrated Pest Management Capacity Building Plan to ensure sustainable, effective implementation of the IPMP beyond the life of the Project.

16. Given the Project's focus on high-potential areas for growing maize and paddy rice, the revised IPMP contains pre- and postharvest measures for managing these and other cereal crops. The major insect pests limiting maize production in Tanzania during the growing season include the African maize stalkborer (*Buseolla fusca*), pink stalkborer (*Sesamia calamistis*), spotted stalkborer (*Chilo partellus*), and African armyworm (*Spodoptera exempta*). The major postharvest insect pest is the larger grain borer (*Prostephanus truncates*). Major diseases include the leaf rusts (*Puccinia sorghi* and *P. polysora*), leaf blights (*Helminthosporium turcicum* and *H. maydis*), maize streak virus (MSV; vector *Cicadulina mbila*), grey leaf spot (*Cerospora zea-maydis*), and Gibberella ear rots. Pest problems and management options, before and after harvest, vary by agro-ecological zone.

17. For rice the most devastating pest in Tanzania is rice yellow mottle virus (RYMV). Although indigenous to Africa, RYMV was not reported in Tanzania until the 1980s but has now spread to all major growing areas, especially Morogoro, Mbeya, and Mwanza (Banwo et

al. 2001)⁴⁶. The virus can cause yield losses as high as 92 percent in “Super,” the most popular rice variety in Tanzania (Banwo 2003).⁴⁷ The only viable control option is to grow resistant varieties, but very few local varieties in the SSD-1, SSD-3, SSD-5, SSD-7, and SSD-35 series have some level of resistance.

18. The IPMP provides clear, detailed guidelines for treating pests and diseases by agro-ecological zone, pre- and postharvest. It offers suggested treatment methodologies for maize and rice as well as other major crops.

19. Successful IPM requires effective knowledge management across the rural, farmer, extension, and research communities as well as among supporting institutions and policy makers. The IPMP capacity development plan describes training, support services, and communications activities that will be funded and implemented in the short and medium term during Project implementation. These measures were developed based on an assessment of the training needed for various institutions and stakeholders to meet national pest management requirements and World Bank OP4.09.

20. In addition to the farmer and extension communities, key institutions targeted for capacity building include Plant Health Services (PHS) of MAFC and the Tropical Pesticides Research Institute (TPRI), which are the two main regulatory bodies for pest management. The capacity building plan also funds the development of standard operating procedures and a manual for different crops; the training and provision of inspectors, equipped with inspection kits, at key entry points; and improvements in quarantine facilities.

21. Current versions of the IPMP and capacity building plan are under review. Final versions will be disclosed in Tanzania and the World Bank’s INFOSHOP.

IV. Projects on International Waterways (OP7.50)

22. As discussed previously, the Government’s request for Additional Financing for ASDP to increase the area under small-scale irrigation is being processed simultaneously with this Project. About 95 percent of the Additional Financing will be earmarked for district irrigation schemes in the ASDP. In addition, Component 2.2 of this Project will finance irrigation for 225 hectares on three ARIs and two of ASA’s foundation seed farms.

23. The increased water use will mostly affect surface water availability from Tanzania’s many lakes and rivers, mostly through small (less than 500 acres) district irrigation schemes. Many of these rivers and lakes are riparian sources with cyclical water stress issues expected over the medium term. The increased agricultural use of these surface water sources raises concerns over water quantity and quality. These concerns will be addressed in the SESA that is being developed as part of the ASDP, as stated above.

⁴⁶ Banwo, O.O., Makundi, R.H., Abdallah, R.S., and Mbapila, J.C. (2001). First report of *Dactylispa lenta* Weise (Coleoptera:Chrysomelidae) as a vector of rice yellow mottle virus. *Acta Phytopathologica et Entomologica Hungarica* 36(12) 189-192.

⁴⁷ Banwo, O.O. (2003). Rice Yellow Mottle Virus (RYMV): A National Problem in Tanzania. *Acta Phytopathologica et Entomologica Hungarica* 38(1-2) 99-107.

24. The anticipated increased demand for water from riparian sources require the Government to send new Riparian Notification Letters describing the proposed additional/new areas and the water abstraction quantities that exceed those in the original notification letters sent by the World Bank on behalf of the Government of Tanzania on April 4, 2006. In a letter dated April 2, 2009, the Government of Tanzania has requested the World Bank to send the new Riparian Notification Letters on its behalf. The letters were sent on April 21, 2009, with a request to the riparian countries to respond to the proposed irrigation investments by May 21, 2009. No objections were received as of c.o.b. May 21, 2009.

Annex A.6: Economic and Financial Analysis

I. Introduction

1. Activities financed through ASFP are expected to generate substantial financial and economic benefits. The Project seeks to increase maize and rice production and productivity by expanding poor farmers' access to subsidized fertilizer and seed through a voucher scheme directed at areas with high potential for food crop production, particularly the Southern and Northern Highlands and Western Region. Among other effects, it is expected that greater supplies of staple foods in the target areas will contribute to significant increases in national production and yields and promote significant growth in overall GDP.

2. Over the last 15 years, maize production more than doubled in Tanzania, rising from 1.5 million tons to 3.5 million tons. The Southern Highlands is Tanzania's largest maize production zone. Of the 21 regions in Tanzania, 4 regions in the Southern Highlands (Mbeya, Rukwa, Ruvuma, and Iringa) account for more than 40 percent of national maize production. The Northern Highlands—Arusha and Kilimanjaro—have a bimodal rainfall pattern and other good conditions for growing maize, but agricultural area is limited, so they contribute only 9 percent of national maize production.

3. Annual rice production rose from 0.2 to about 0.9 million tons in Tanzania over the last 15 years. Unlike maize, rice is grown throughout Tanzania, where the leading production areas are Tabora, Mbeya, Shinyanga, and Morogoro Regions. Each of these regions accounts for more than 10 percent of national production.

4. Maize and rice make a large contribution to the economy. In 2007, maize contributed about 4.75 percent of national GDP and rice contributed 2.66 percent,⁴⁸ equivalent to 25 percent and 14 percent of agricultural GDP for maize and rice, respectively. Presently the productivity of these two crops is very low, however, implying that improvements in productivity would add significantly to overall economic growth and poverty reduction. In 2007/08, for example, the average national maize yield was only 1.3 tons per hectare. Yields ranged from a low of 0.8 tons per hectare in Singida Region to a high of only 2.0 tons per hectare in Mbeya Region. These yields are lower than those attained of most neighboring countries and represent only 8–22 percent of the yields that could be achieved in Tanzania.⁴⁹

5. Tanzania's low maize yields are attributed primarily to farmers' very limited use of improved seed and fertilizer. In 2005/06, farmers were reported to apply an average of 8 kilograms of fertilizer per hectare, whereas soil nutrients were being depleted by about 61 kilograms per hectare. Most maize seed planted by farmers has been saved from one season to the next. Based on the 2002/03 agricultural census, the International Food Policy Research Institute estimated that only 24 percent of farmers use improved maize varieties, ranging from 15 percent in the South to 45 percent in the North. The share of farmers applying fertilizer varies from as little as 1–2 percent in Eastern, Central, and Lake Regions to 35

⁴⁸ Based on the Social Accounting Matrix of the CGE model prepared by IFPRI.

⁴⁹ Nkonya, E., L. You, E. Kato, and Z. Guo (2009), "Determinants of Productivity and Commercialization of the Staple Food Crops and their Demand Trend in Tanzania: Evidence from the 2002/03 Agricultural Census Survey," report prepared by the International Food Policy Research Institute (IFPRI) for the World Bank, Washington DC.

percent in the Southern Highlands. Very few farmers use improved seed and fertilizer in combination—only 0.5 percent in Eastern, Central, and Lake Regions and about 11.5 percent in the Southern Highlands.⁵⁰

6. One reason that farmers use little fertilizer or improved seed is that these inputs are hard to obtain. The marketing and supply chain infrastructure for agricultural inputs remains weak and inefficient and discourages many farmers from investing in inputs to increase crop production. Tanzanian farmers are thought to receive only about half of the wholesale value of their crops, mainly because of poor roads between the farm gate and primary and secondary markets. Inflated margins from local taxation and other nontariff measures between the farm gate and urban markets also contribute to lower farm-gate prices.

II. Increased Production and Productivity of Major Food Crops

7. Project-supported investments will raise maize and paddy rice yields. Currently maize and rice yields vary considerably by farm and region (Figure A.5.1). The baseline crop model for the targeted regions assumes that average maize yields are 1,120 kilograms per hectare and paddy rice yields are 1,735 kilograms per hectare. These baseline yields are the most frequently observed maize or rice yield in each target region, weighted by that region's share in production across all of the target regions. The choice of planted area (0.5 hectare per farm) is also reasonable, given that the most frequently observed planted maize area is about 1 acre (Figure A.6.2).

8. The financial and economic models compare outcomes with and without the Project. Without the Project, farmers are expected to continue following a low input–low output mode of production. With the Project, farmers will use vouchers to obtain one bag of urea along with one bag of DAP or two bags of MRP, along with improved seed, for three years at a subsidized rate of about 50 percent of the market price.⁵¹

9. Depending on the mix of fertilizers and improved varieties, maize yields in the target areas are projected to more than double, from 1,120 kilograms per hectare in the baseline year to about 2,700–3,000 kilograms per hectare in three years. Rice yields are projected to rise from 1,735 kilograms per hectare in the baseline year to about 3,100 kilograms per hectare in the last year of the Project. This assumed yield response is based on yields from the most productive farms in Tanzania, taking into account the time needed for farmers to learn how to use the new technology. In the first year, farmers are assumed to achieve on average about 60 percent of potential maize yields; in the second year, 70 percent; and in the third year, 80 percent (after which yields are expected to stabilize).

10. For rainfed rice, farmers are assumed to achieve about 40 percent of potential yields in the first year, with an annual increase of 10 percent over 3 years (see the estimates of immediate yield responses in Table A.6.1).

11. In the Project's first year, farmers are expected to produce about 300,000 additional tons of maize and about 30,000 additional tons of rice. Given that total maize production in

⁵⁰ According to the Agricultural Census 2002/03.

⁵¹ The face value of vouchers is adjusted to reflect market prices every year but will remain at about half of the market price.

2008/09 is projected at 3.7 million tons, the additional maize obtained by using the new inputs translates into 8 percent growth in production. For rice, growth in production is projected at 3 percent. In the second and the third years of the Project, production will grow by about 5 percent for maize and 2 percent for maize.⁵²

Figure A.6.1: Maize yield distributions across agro-ecological zones in Tanzania

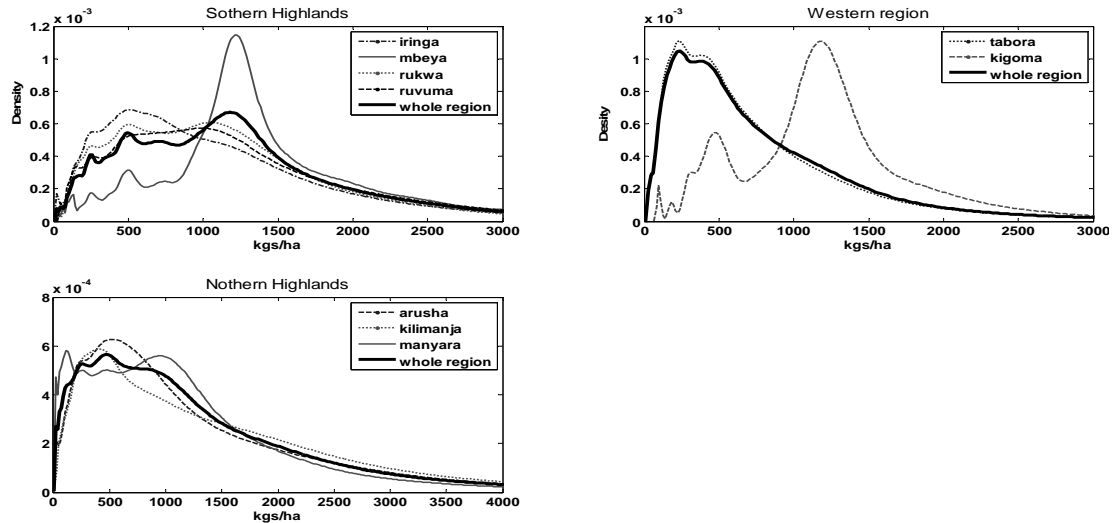
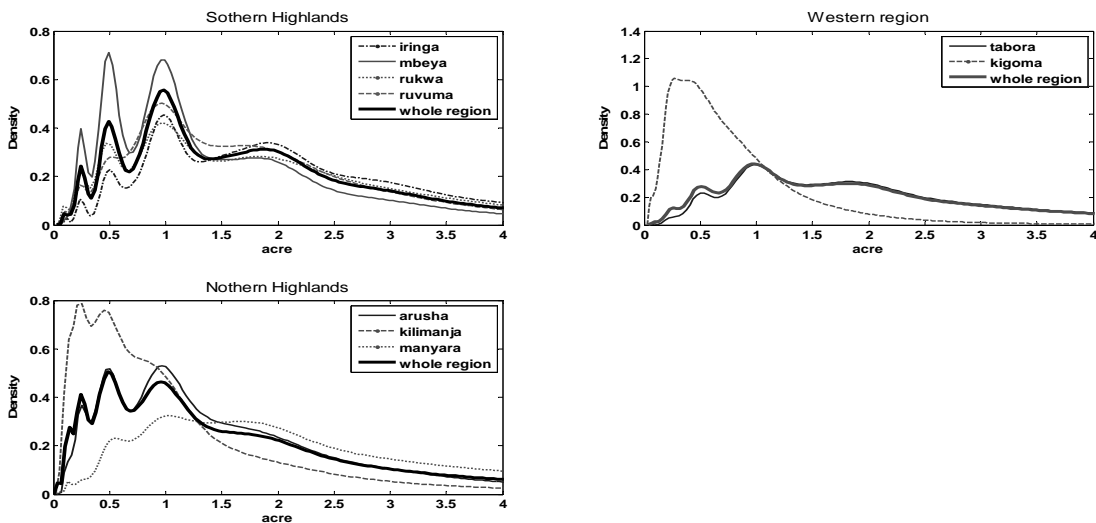


Figure A.6.2: Per farm maize planted area distributions across agro-ecological zones



Source: Agriculture Census 2002/03.

⁵² Average postharvest losses are assumed to be 10 percent of the harvest, based on estimates by the Eastern Africa Grain Council and World Bank. These losses occur irrespective of weather, and on some smallholder farms may reach 15–20 percent. The model for estimating economic benefits also incorporates potential losses caused by adverse weather.

Table A.6.1: Determinants of maize and rice yields in Tanzania (OLS regression)

	Maize elasticity	Rice elasticity
<i>Explanatory variable: Ln(yield/acre)</i>		
Improved seed (dummy)	0.086**	-0.02
Inorganic fertilizer (dummy)	0.39***	0.30***
Inorganic fertilizer × improved seed (dummy)	0.10*	0.02
Irrigation (dummy)	0.07*	0.42***

Note: Significance levels: 0% ‘***’; 5% ‘**’; 10% ‘*’. Other variables excluded from the presentation variables control for planted area, region, and pesticide application.

Source: Own estimations based on Agricultural Census 2002/03.

III. Recent Price Developments and Future Outlook

12. Farm-gate prices are not collected in Tanzania. They were estimated for this analysis based on wholesale prices and estimated marketing costs.⁵³ Farm-gate prices in the target areas are assumed to be TSh 220,000 per ton for maize and TSh 350,000 per ton for paddy.⁵⁴ Financial and economic prices are generally the same, so only the economic analysis was undertaken. On the input side, fertilizer is imported to Tanzania at zero import tariffs. On the output side, Tanzania has regularly banned maize exports. Unfortunately the magnitude of the export ban’s effect is not possible to quantify, although there is evidence that wholesale prices have fallen when the ban is in effect.⁵⁵ The potential impact of the export ban on farm-gate prices and farmers’ net revenues is discussed later in the sensitivity analysis.

13. The increase in food crop production induced by Project investments will put downward pressure on output prices in Tanzania. In the short run, surplus production will need to be absorbed largely by the domestic market, but there is high potential for increased cross-border trade. Tanzania is a small net exporter, having sold about 150,000 tons of maize in recent years.⁵⁶ Kenya is the dominant destination for maize from the Northern Highlands, but the Southern Highlands also trades with Zambia, Malawi, and DRC. With maize demand currently surging in the region, Tanzanian traders will find outlets for exports, assuming that the export ban is lifted. In the first year of the program, maize prices are expected to decline by 10 percent, but it is also likely that rising maize prices throughout East Africa will partially offset that decline. Considering recent developments in East Africa and world markets, regional maize and rice prices are projected to rise by about 9 percent per year.

14. Fertilizer prices are also linked to trends in international markets, since fertilizer is imported into Tanzania. International fertilizer prices fluctuated dramatically in 2008. In mid-2008, for example, FOB prices for urea and DAP were a record US\$800 per ton and US\$1,200 per ton, respectively, but since then, prices have fallen to as little as US\$300 per

⁵³ This estimate of marketing costs is based on a survey in Tanzania by the East Africa Grain Council (EAGC) for the World Bank.

⁵⁴ Farm prices in the Northern Highlands are higher than those assumed here, which are the averages for Southern Highlands. The transformation coefficient from paddy to rice is assumed to be 1.5.

⁵⁵ Von Cramon-Taubadel et al. (2009), “Price transmission in the East Africa Maize Market,” report prepared for the World Bank.

⁵⁶ EAGC, www.ratin.net.

ton for urea and US\$500 per for DAP. Thus the baseline scenario assumes that farm-gate landed prices for a 50-kilogram bag of fertilizer are TSh 39,000 for urea and TSh 55,000 for DAP, given the costs arising along the value chain (Table A.6.2).

Table A.6.2: Transformation of FOB prices for fertilizer to prices at the farm gate, Tanzania

	Urea		DAP	
	(US\$/t)	(TSh/50-kg bag)	(US\$/t)	(TSh/50-kg bag)
FOB	300	19,500	500	32,500
Maritime freight	80	5,200	80	5,200
Bagging	30	1,950	30	1,950
Port charges	30	1,950	30	1,950
Local handling	10	650	10	650
Loss (1%)	4.5	293	6.5	423
Subtotal	454.5	29,543	656.5	42,673
Financial cost (8%)	36.4	2,363	52.5	3,414
Administrative cost (5%)	22.7	1,477	32.8	2,134
Total	513.6	33,383	741.8	48,220
Local transport (avg.)	60.0	3,900	60.0	3,900
Profit (6%)	30.8	2,003	44.5	2,893
Price at farm gate	604	39,286	846	55,013

IV. Financial Benefits to Farmers: Farm Cash-Flow Analysis

15. Project investments will introduce fertilizer to many farmers in addition to fostering a wider network of trained agro-dealers within rural areas. Providing the input voucher package to farmers over the three consecutive years should help them generate sufficient cash flow to purchase inputs at the full market price and no longer require the subsidized vouchers. Table A.6.3 indicates that if a farmer plants hybrid maize varieties and applies the recommended fertilizers, he/she can generate a positive cash flow in the third year. Without the voucher scheme, many farmers will not be able to generate sufficient cash to purchase inputs on their own.

16. The Project's target area for rice is about 15 percent of national rice-growing area. Although rice is more profitable than maize, it requires irrigation, and irrigation remains limited in Tanzania (see the Emergency Project Paper for Additional Financing for ASDP). With irrigation systems in place, the support provided through the input vouchers will raise rice production and farm incomes in the target areas.

Table A.6.3: Maize farmer cash flow with hybrid seed planted on 0.5 hectare

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Subsidy timing	50% input subsidy			No subsidy		
Fertilizer use efficiency	60%	75%	85%	85%	85%	85%
Option 1: Hybrid maize (US\$/0.5 ha)						
Annual cash flow without subsidy	-65	-45	-25	-6	16	41
Cumulative cash flow without subsidy	-65	-110	-135	-141	-125	-84
Annual cash flow with subsidy	-17	5	29	-6	16	41
Cumulative cash flow with subsidy	-17	-12	17	11	27	68
2: Rice (US\$/0.5 ha)						
Annual cash flow without subsidy	37	78	119	155	196	242
Cumulative cash flow without subsidy	37	115	234	389	585	827
Annual cash flow with subsidy	79	122	166	155	196	242
Cumulative cash flow with subsidy	79	201	367	523	719	961

V. Net Present Value and Economic Rate of Return of the Project

17. A cost-benefit analysis over 10 years was done to assess the Project's economic viability. The activities included in the analysis represent all Project investments, including the input voucher subsidy, integrated soil fertility management, M&E, management, seed sector strengthening, and support of agro-dealers. The key assumptions were:

- i. An exchange rate of TSh 1,300 : US\$1.
- ii. In the baseline scenario, farm-gate prices were estimated at TSh 220 per ton for maize and TSh 350 per ton for paddy.
- iii. Demand elasticity of maize was assumed to be -0.6 but adjusted to -0.8 to reflect additional maize demand from neighboring countries.
- iv. Regional price pressures were projected to induce a 9 percent increase in domestic prices for maize and rice.
- v. Urea, DAP, and MRP+N farm-gate prices were TSh 35,000, TSh 55,000, and TSh 30,000 per 50-kilogram bag, respectively.
- vi. Input prices rise by 6 percent per year.
- vii. Depending on the mix of fertilizer applied and type of seed used, maize yields increase by 95–155 percent and rice yields by 60–90 percent.
- viii. Fertilizer use efficiency increase from 65 percent to 85 percent in the fourth year for maize and for rice.
- ix. Postharvest losses are 10 percent.
- x. Potential harvest losses from adverse weather follow the cycle of 15 percent, 25 percent, and 5 percent.

18. Under these assumptions, Project-supported investments are projected to generate substantial economic benefits. The NPV of the input voucher scheme over 10 years is expected to equal US\$67 million, at a 12 percent discount rate. When public expenditures on activities that complement the voucher scheme are taken into account (soil fertility research, extension, M&E, and seed production), the NPV is US\$41 million. The IRR is 37 percent.

19. As noted, higher agricultural production is expected to increase total GDP by about 0.9 percent per year on average over the next three years. Given that the maize and rice together constitute about 4.75 and 2.6 percent of national GDP, the increased agricultural production will contribute directly to growth in national GDP. However, it is most likely that additional maize production would increase rural incomes and reduce the prices that upstream producers (such as maize millers) pay for their inputs. In this way, increased maize production will increase the demand and supply for other commodities, creating a multiplier effect. For agriculture, this multiplier effect is typically estimated at around 1.5. Given the production increases and the multiplier effect, the contribution to national GDP is estimated at about 0.9 percent.

VI. Sensitivity Analysis of Economic Benefits

20. A sensitivity analysis of the expected economic benefits from the Project was done for two sets of key variables: (i) output and input farm-gate prices and (ii) yield improvements. Economic benefits are highly sensitive to the yield response to fertilizer and seed (Table A.6.4). A yield response that is only 5.7 percent less than the anticipated response is sufficient to nullify the NPV of the voucher scheme. The Project's economic benefits are also highly sensitive to changes in maize prices, although they are less sensitive to changes in input prices and production losses. Changes in rice prices and yields are less important than those for maize, given that only 15–20 percent of vouchers will be allocated for rice production. Note that the model conservatively assumes production losses of 15–20 percent from adverse weather. The increasing unpredictability of weather patterns that occurs with climate change heightens the sensitivity of output prices and yields to even small changes. When production losses from adverse weather are not included, a price decline of 24 percent and a yield decline of 14 percent will erase the benefits from input use.

21. These results illustrate the complementary measures and investments required to ensure the Project's success. Improvements in farmers' access to inputs through vouchers are necessary but insufficient to ensure sustainable growth in agricultural production and productivity in Tanzania. For growth to endure, the use of seed and fertilizer has to produce the expected yield increases, and there must be market outlets for the additional production.

Table A.6.4: Switching values for economic benefits

	Switching values without adverse weather effects	Switching values with adverse weather effects
Maize prices	-23.5%	-5.8%
Rice prices	-107.0%	-24.5%
Fertilizer prices	52.1%	10.3%
Yield of maize and rice	-13.5%	-5.7%

22. With NAIVS, Tanzania will significantly increase its grain production and be well positioned to gain a larger share of the regional market. Farmers will not be able to seize this opportunity, however, without a shift in policies and corresponding increases in private and public investment. In the near term, removal of the export ban will do much to encourage the development of the agricultural sector. As long as export restrictions remain in place and seem likely to be extended into another year, farmers and traders will invest less than they could, and regional trade relations with Eastern Africa Community neighbors could be negatively affected.

23. Now and into the future, agricultural research and extension services should be strengthened to play their unique role in raising agricultural productivity. Additional investments in research and extension will ensure that farmers use seed and fertilizer in the most efficient and sustainable way over the long term. Investments in research on soil fertility management and irrigation are needed to understand which practices enable farmers to obtain higher and more stable yields. Sound advice from extension services is critical for farmers to use such practices. Even if farmers apply relatively high levels of fertilizer, they might not achieve high yields because they lack the technical knowledge.

24. In the longer term, more investments should also be directed at improving rural roads. Transport charges per ton-kilometer on rural roads are four to five times larger than they are on tarmac roads. Public investments in roads should be complemented by policy and institutional measures that reduce the costs of doing business in rural areas and the regulatory burden at the local level. The management of public food stocks should be given more attention to ensure that food is available in emergencies and reaches vulnerable population, mainly in Central and Eastern Regions.

25. Rising food prices present challenges as well as opportunities for Tanzania. The solution to the challenges lies in adequate public spending in transport infrastructure, appropriate management of public stocks, and targeted social support—not interventions in food markets. Measures to protect the poor and vulnerable from rising food prices need to be separated from agricultural market policy, so that Tanzania can seize the emerging opportunities.

Annex A.7: Institutional and Implementation Arrangements, Roles, and Responsibilities

I. Key Actors

1. The key actors in the implementing component are MAFC, MoFEA, PMO–RALG, the LGAs, village Governments and council, NMB and its branches at the district level, and agro-dealers. This Annex outlines the composition of the bodies created to assist in implementation together with their respective roles and responsibilities.

II. National Bodies, Roles, and Responsibilities

2. **Ministry of Finance and Economic Affairs (MoFEA).** MoFEA will ensure that the Project, particularly the voucher scheme and the subsidy under the scheme, remains consistent and aligned with Government policy and long-term objectives to improve national food security. Because the subsidy under the voucher scheme has significant short- and long-term budgetary implication, MoFEA will review its sustainability and exit strategies together with the concerned Ministries and agencies. Concurrent with these strategic and policy issues, MoFEA will also (i) recommend and seek Parliamentary approval of the subsidy amount for each fiscal year; (ii) include the approved amount in the annual MAFC budget; and (iii) release the budget on an agreed schedule to allow MAFC to deposit the funds that NMB will need to draw upon to pay agro-dealers who redeem vouchers.⁵⁷

3. **Prime Minister’s Office–Regional Authority for Local Government (PMO–RALG).** PMO–RALG is the main link between the national and local agencies implementing the Project. Although the Project is implemented at the village level, Governments at all levels are involved, with PMO–RALG’s coordination of the Regional Secretariats and the LGAs is critical for success. PMO–RALG will guide LGAs on setting up committees to formulate the criteria for allocating vouchers, selecting beneficiaries in a transparent manner, monitoring Project implementation, and reporting back to concerned bodies.

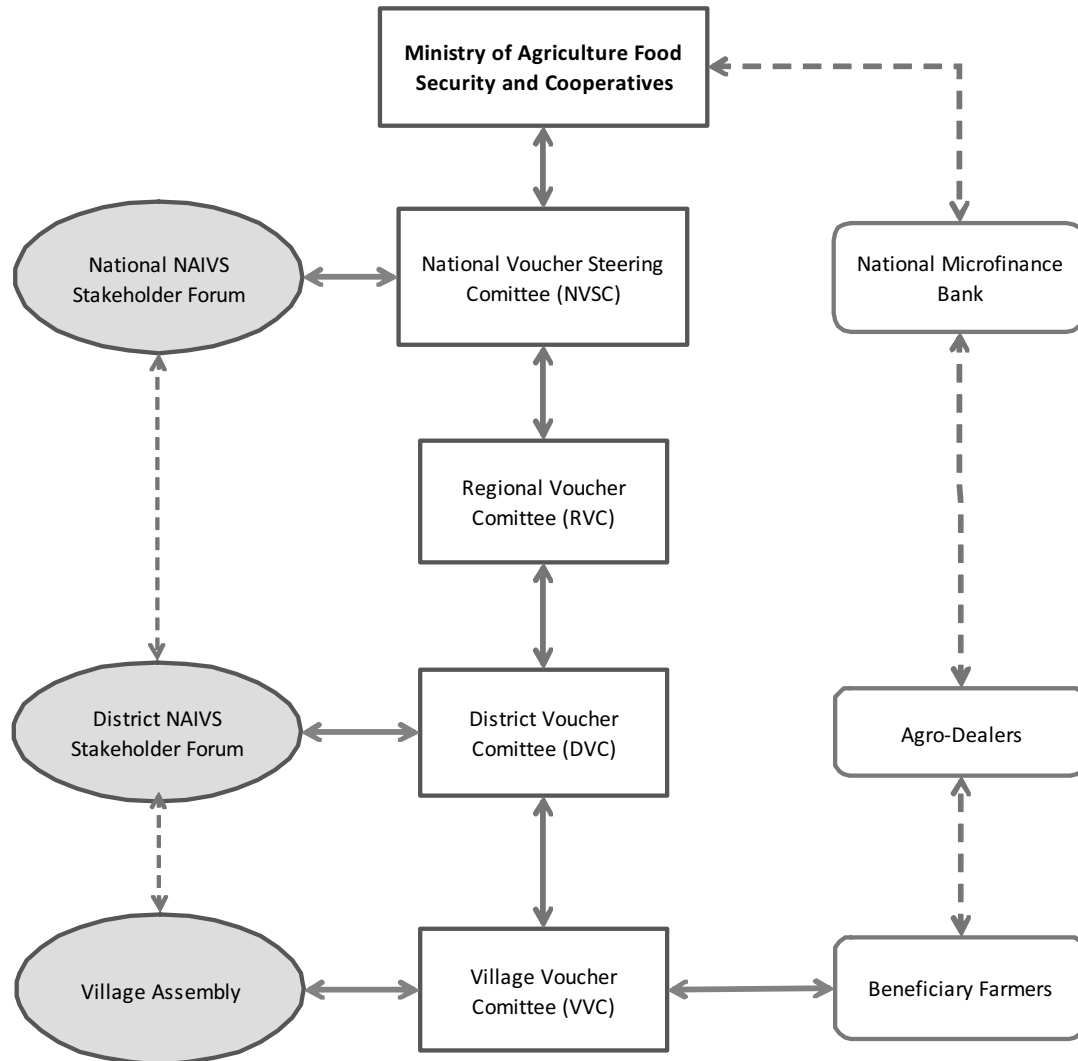
4. **Ministry of Agriculture, Food Security, and Cooperatives (MAFC).** As the executing agency for the Project, MAFC will mobilize all of its departments and collaborate with other key Government agencies to implement the scheme. In particular, MAFC will coordinate with PMO–RALG and LGAs in implementing the Project, especially in setting up implementation bodies. Details of the proposed coordination mechanism with PMO–RALG and LGAs are discussed later in this Annex.

5. MAFC will also enhance partnerships with the private sector. One of the Project’s aims is to strengthen and expand agricultural input markets by creating and strengthening partnership between the public and private sector. Agricultural input producers, importers, and distributors will play an important role under this Project, and MAFC will create a favorable environment for private sector involvement in the Project implementation. Regular dialogue between the Ministry and the private sector regarding Project implementation will provide opportunities to exchange information and build capacity as needed to strengthen the private sector’s role.

⁵⁷ If NMB cannot pay agro-dealers on sight, NAIVS’ credibility will be seriously undermined, so a workable fund release formula is essential.

6. MAFC will ensure the integrity and credibility of NAIVS. Transparency and accountability are vital for implementing NAIVS, and MAFC will ensure that a transparent and participatory governance structure drives all stakeholders to achieve the Project objective. In collaboration with PMO-RALG, a number of implementation structures will be formed at the national and local level, as illustrated in Figure A.7.1 and described next.

Figure A.7.1: Implementation arrangement



7. **National Agricultural Input Voucher Scheme Forum (NAIVS-National Forum).** The NAIVS-National Forum will meet annually to review the performance of the previous year and discuss and endorse the decisions affecting the implementation and effectiveness of NAIVS for the following year. These would include the criteria for geographical allocation of vouchers, the technical design of the vouchers (including the level of subsidy), and assessments of progress in implementing NAIVS. Forum members will include representatives of:

- National Public services (5).
- Regional Authorities (1 per targeted region).

- Districts (1 district representative/targeted region).
- Private sector: Fertilizer companies (3), seed companies (3), and agro-dealer associations (3).
- Farmer organizations and community-based organizations (CBOs) (15).
- NGOs (5).

8. **The roles and responsibilities of the NAIVS-Forum** will be to:

- Endorse criteria for allocating vouchers to regions and districts.
- Endorse the voucher shares allocated to targeted regions and districts based on the guidelines adopted and the selection criteria developed for NAIVS.
- Discuss and endorse the proposed NAIVS annual work plan and budget.
- Review the implementation progress report and recommend any changes or improvements to NVSC.

9. A **National Voucher Steering Committee (NVSC)** will be set up by MAFC and meet every quarter, chaired by the Permanent Secretary of MAFC. Its members will be:

- Permanent Secretary, MAFC Chairperson
- MoFEA Representative Member
- PMO-RALG Representative Member
- Farmer Group Representatives Members
- Agribusiness Representative (fertilizers and seeds) Members
- NMB Representative Member
- MAFC Directors (relevant departments) Members
- Civil Society Organizations Members
- MAFC Agricultural Inputs Section Head Member/Secretary

10. The role and responsibilities of NVSC will be to:

- Develop policies, guidelines, and procedures for implementing the Project, particularly the agricultural input vouchers.
- Develop and apply criteria and a formula for allocating vouchers to regions.
- Develop broad guidelines that LGAs will use to distribute vouchers to villages.
- Ensure that the voucher scheme is fully financed and funds are released on time.
- Review progress reports and take corrective measures as needed.
- Ensure that the voucher system is transparent and that the governance structure operates as intended.
- Approve the annual work program and associated budget that will be submitted to MoFEA.
- Approve quarterly IFRs before submission to IDA

11. One of the NVSC’s main functions is to allocate vouchers to target regions. The criteria for distributing vouchers to regions will be developed and approved by the Committee, which will present the proposed distribution in a transparent way to the National NAIVS Forum for endorsement. The criteria and methodology for calculating the allocation of vouchers to regions should be reviewed and endorsed annually by the National Forum. On the other hand, NVSC should also develop broad guidelines to help regions and districts allocate their vouchers to villages. Subject to NVSC refinement and finalization, the

following points will serve as building blocks for developing criteria and a formula to determine how many vouchers go to regions and districts:

- Districts with soils and rainfall patterns (that is, low drought risk) suited for maize and rice.
- Total number of households with not more than one hectare planted to maize or rice .
- Total area under maize and rice cultivation.
- Total maize and rice production.
- Area under irrigation (for rice and maize production, under single and double cropping).

12. **The Agricultural Inputs Section (AIS) of the Directorate of Crop Development** of MAFC will be responsible for day-to-day management of the Project and coordination of activities. **The Head, AIS** will serve as NVSC Secretary. The Head will be assisted by staff assigned from other departments and sections of MAFC, which will include a planning officer, fertilizer and soil nutrition management specialist, monitoring and evaluation officer, accounting officer, procurement officer, and communication specialist.

13. The AIS, under the leadership of the Head, will carry out the following functions:

a) Function as the secretary of NVSC:

- Support the NVSC Chairman in preparing and organizing the committee meetings.
- Prepare in writing the minutes of each NVSC meeting and ensure all attendees sign the minutes.
- Prepare, as needed, subsequent communications to other governmental and nongovernmental institutions.

b) Take charge of overall Project M&E activities:

- Establish the MIS/M&E system for the Project in the M&E Unit of MAFC, based on M&E arrangements proposed for the Project.
- Finalize terms of reference, tender, and contract for independent consultants to conduct baseline surveys and evaluations at mid-term and the end of the Project.
- Consolidate information concerning key performance indicators from the different components of AFSP in close collaboration with the M&E Unit.
- Monitor and evaluate Project activities, Project outputs, and expected impacts to achieve key performance indicator targets.
- Periodically evaluate the implementation status of AFSP and make recommendations to improve activities (in particular, incorporate findings of M&E in subsequent years to improve Project functioning and impact).
- Prepare quarterly progress reports in accordance with the format agreed upon by the Project and IDA.

c) Conduct Project planning, implementation, and coordination, including Project awareness and communications campaigns in close consultation with concerned sections and units of the Ministry:

- Prepare annual work plans and budgets for the voucher scheme and other components and subcomponents.
- Assist and coordinate the participating agencies in preparing and implementing annual action plans, estimating agricultural input demands and supplies, and developing reporting formats for regions, districts, and villages.
- Complete terms of reference, tender, and bidding documents to procure goods, services, and consultants on time.
- Ensure that the awareness campaign is launched by the communications and public relations units of the Ministry.
- Hire and retain experts, NGOs, and consultants for Project implementation, training, monitoring, and evaluation, and commission relevant studies.

d) Facilitate implementation by LGAs and other agencies by providing technical support, providing information for operations, transmitting directives issued by NVSC on a timely basis, and providing clarifications.

e) Review the voucher policy and strategy in line with Project goals.

f) Coordinate and liaise with participating agencies (NMB, AGRA, CNFA, IFDC, IDA, NGOs, farmer/producer groups, and the private sector).

g) Ensure that financial reports are available, audited, and submitted to the IDA within the agreed period.

h) Undertake a voucher scheme awareness program in collaboration with the Ministry, national or regional media services, and/or other mass media.

III. Regional Level

14. A **Regional Voucher Committee (RVC)** will be formed and chaired by the Regional Commissioner (RC). Its membership will be:

- RC..... Chairperson
- Regional Agricultural Advisor Members/Secretary
- Farmer Group Representatives Members
- Agribusiness Representative (fertilizers and seeds)..... Members
- NMB Representative Member
- Civil Society Organizations..... Members

15. The **main role** of the RVC is to allocate vouchers to districts based on established criteria. The RVC will also support districts and monitor the implementation of the voucher scheme in its region. **The RVC will have the following responsibilities:**

- Estimate demand for agricultural inputs based on historical levels of input use (fertilizer and improved maize and rice seed). Provide this information to the NVSC Secretariat so that it will be considered when allocating vouchers to regions.

- Review information collected from districts, including maize and rice production data generated by surveys, censuses, and other qualitative methods; obtain estimates on area planted to maize and rice and the number of farmers producing these staples on one hectare or less; obtain estimates on irrigated rice area for each district.
- Inform districts of their voucher allocation and initiate further allocation of vouchers to villages by the LGAs.
- Help monitor and implement the voucher scheme.
- Compile progress reports from the districts on implementation of the voucher scheme and submit them to AIS.

IV. District Level

16. A **District Agricultural Input Voucher Scheme Forum (NAIVS-District Forum)** in each participating district will meet twice a year, prior to the national forum, to discuss and endorse the annual work plan and budget, and to hear progress report of the implementation of scheme in the district. The membership of the District Forum will include LGA representatives, regional representative, private sector representatives (fertilizer companies, seed companies, agro-dealer association representatives, farmer organizations and CBOs, and NGOs. Each participating district will: (i) endorse the voucher share between targeted villages on the basis of adopted guidelines and selection criteria for NAIVS implementation; (ii) discuss and endorse proposed NAIVS annual work plan and budgets at the district level; and (iii) review the implementation progress report and recommend changes or improvements to NVSC.

17. A **District Voucher Committee (DVC)** will be established by LGAs in each participating districts that are identified to receive vouchers by the NAIVS-Forum, with the following membership:

- District Commissioner..... Chairperson
- District Member of Parliament..... Members
- District Council Chairperson..... Member
- Farmer Groups Representatives Members
- Agro-dealer Representatives Members
- Civil society and community-based organizations..... Members
- NMB representative Member
- District Agriculture and Livestock Officer (DALDO)..... Secretary

18. The DVC will have the following **roles and responsibilities**:

- Collect and review information about maize and rice production, input use, and other related information for each village and ward.
- Select wards and villages that will be included in the voucher scheme (those with high potential in terms of soils, low drought risk, and so on).
- Estimate the number of farmers who grow maize and rice and the average holding size per farmer.
- Adopt and use the criteria and formula to estimate how many vouchers will be allocated to target villages.

- Inform Village Governments about their respective voucher allocations and provide guidelines on setting up VCC, criteria for selecting committee members, and the code of conduct for VCC members.
- Organize seminars for Village Governments and VCC members to create awareness and explain their role in NAIVS implementation.
- Diffuse criteria for selecting the farmers who will qualify for the voucher/subsidy and support VCC in their use.
- Assess the availability of inputs in the market and hold discussions with agro-dealers to resolve constraints that they may face in supplying inputs.
- Encourage agro-dealers to position their supply points near farmers so that farmers' transport constraint can be minimized.
- Work closely with CSOs, microfinance institutions, and farmers' savings and credit institutions (such as SACCOS) so farmers can access short-term credit to finance their share of the input price.
- Monitor implementation and evaluate the performance of the voucher scheme.
- Compile progress reports from wards and villages on the implementation of the voucher scheme and submit them to RVC and NVSC.

V. Village Level

19. Villages are where the voucher scheme is actually implemented. Beneficiaries in each village will be selected based on clear criteria and a transparent selection process. The Village Council, in consultation with the Village Assembly, will organize the election of the **Village Voucher Committee** (three men and three women). **The role and responsibility of the VVC** is to identify beneficiary farmers to receive vouchers and submit the list to the Village Assembly for approval. After approval, the VVC will issue the vouchers to the approved farmers and also monitors the use of inputs by voucher recipients.

20. The **criteria that the VVC will use to select farmers to receive vouchers** will include:

- She/he is a full-time farmer residing in the village for at least five years.
- She/he heads a household cultivating not more than one hectare of maize and rice (2.4 acres).⁵⁸
- She/he grows maize and/or rice and is willing to use the voucher inputs on those crops while following recommendations provided by extension.
- She/he is diligent and will be a good example for other farmers in the use of good agricultural practices.
- She/he is willing and able to co-finance the inputs purchased with vouchers.
- Priority for accessing vouchers will be given to the female-headed households.
- Priority for accessing vouchers will be given to farming households have used little or no fertilizer and improved seed with maize or rice over the last five years.
- He/she has not been indicted of fraud, theft, or crime.
- He/she has led or participated in development activities in the village and is well regarded.

⁵⁸ The land ownership can be higher than a hectare, but average cultivated area should not be more than one hectare.

- He/she is able to read and write.
- He/she is able and willing to monitor and verify that the vouchers and inputs are used on his/her farm for their intended purpose.

21. The Village Government will inform the community about: (i) the names of the elected VVC members and their role and responsibilities; (ii) the objectives of the voucher scheme; (iii) the process and procedures used to select participants; and (iv) the implementation rules. The **roles and responsibilities of the VVC** are to:

- Inform village farmers about the selection criteria and the procedures for selecting beneficiaries (with the help of the Village Extension Officer).
- Prepare a list of farmers who cultivate not more than one hectare and who grow maize and/or rice.
- Identify farmers who are diligent, operate their fields full-time, and meet the other criteria listed previously.
- Select beneficiary farmers from the list to receive the total number of vouchers allocated to the village. Include a waiting list that is equivalent to 10 percent of the total number of vouchers.
- Submit names of beneficiary farmers to the Village Assembly for approval.
- Once the list is approved, inform farmers and request them to submit application forms.
- Distribute vouchers to selected farmers who have completed the application form.
- Monitor the use of inputs by voucher recipients.
- Submit reports to the Village Assembly.

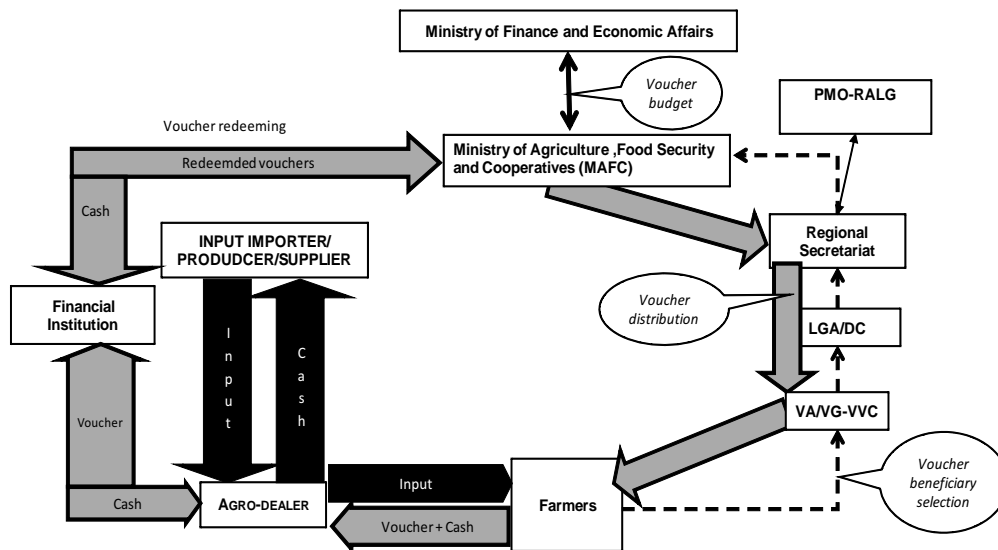
VI. Complaint and Response Mechanism

22. Farmers who have a complaint about how the VVC has handled their case or any other matter regarding the selection of beneficiaries in the village can register their complaint with the District Government. Each District Government will specify a location where complaints can be registered and designate a person to register the complaints. Farmers in the village will be informed of this arrangement at the start of the process, when the voucher scheme and members of the VVC are announced. The designated individual will record the reason for the complaint, the date, and the name of the petitioner. When the VVC submits its list of farmers who will receive the vouchers to the District Assembly, the District Government will submit the names of petitioners to the Assembly. The Assembly will invite the petitioners to present their cases and approve a final list of farmers who will receive vouchers.

VII. Voucher Release Process

23. Figure A.7.2 illustrates the processes involved in getting vouchers to farmers.

Figure A.7.2: The input voucher scheme process



24. **Voucher release process.** Once the VVC identifies beneficiary farmers, the next step is to ensure that vouchers are released and used in a secure manner. Therefore, the voucher release process has to be designed and implemented to minimize the risk of fraud and corruption. The voucher release process, illustrated in Figure A.7.3, will be as follows:

a) Beneficiary list. The Chairperson of the VCC sends the list of selected farmers, including basic information about each farmer (land holding, area under maize, and so on) to the Village Government and Council. The signature of all the VCC members will be included in the letter of transmittal and the list.

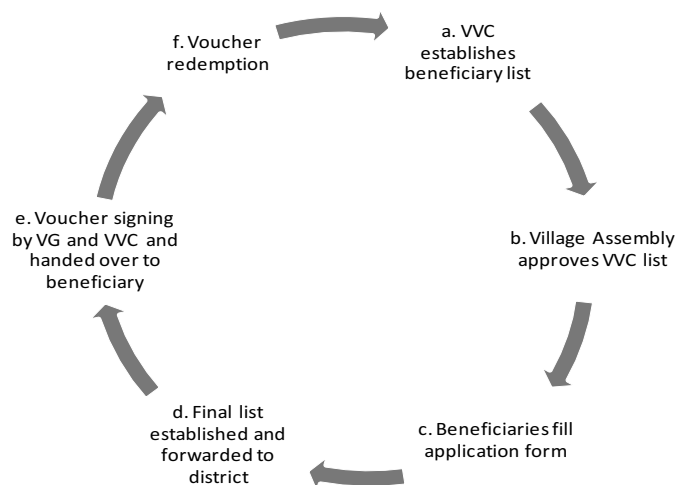
b) List approval by Village Assembly. The Village Assembly approves the recommended list. Observations or comments by members of the Village Council will be discussed in a joint meeting in the presence of the VVC, and a final list will be unanimously agreed upon, including the names of farmers on the waiting list. The Village Assembly will announce to the village residents the name of the selected farmers and those on the waiting list. The Village Assembly will also post the list in a public place so that all villagers know who is selected.

c) Application form. The VVC Chairperson will invite selected farmers to complete and submit a one-page application (see the sample application form in the Project Implementation Manual). Farmers must meet this requirement before they can receive vouchers. The main purposes of the application form are to: (i) gather basic information about the farmer (for example, the farmer's name, household size, age, land ownership, estimated production of maize in previous years, percent of produce marketed, past use of inputs, source of inputs); (ii) seek the farmer's commitment to finance the cost of the inputs beyond the voucher value; and (iii) notify the farmer of other terms and conditions to ensure that the vouchers and inputs are used for their intended purpose.

d) The final beneficiary list. After the application is received and verified by the VVC, a final list will be prepared and, along with the completed application forms, sent to the Village Government. Any selected farmers who fail to provide an application form or are not interested in participating in the scheme will be replaced by farmers from the waiting list. This list will be forwarded to the district by the Village Government and is the final list to be used in issuing vouchers.

e) Voucher distribution. The vouchers will have two signatories⁵⁹: the Chairperson of the Village Government and the Chairperson of the concerned VVC. Based on the final list, the two signatories will together sign all the vouchers, register the voucher numbers against the names of the farmers, and each farmer will sign the registry for reception. The signing of the vouchers by the two signatories certifies that that the person in whose name the voucher is issued is the undisputed owner of the voucher.

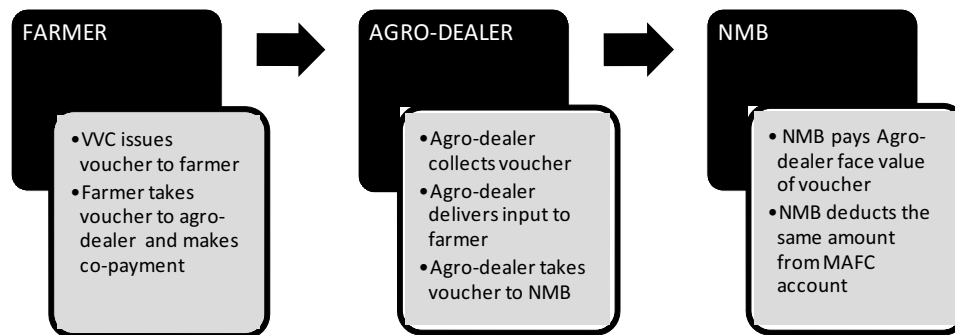
Figure A.7.3: Voucher release process



VIII. Voucher Redemption Process

25. The voucher redemption process will have two stages. First, farmers redeem vouchers for agricultural inputs with agro-dealers. Second, the agro-dealers redeem the vouchers for cash with NMB (Figure A.7.4).

⁵⁹ The current voucher system requires three signatories, for no clear reason.

Figure A.7.4: The voucher redemption process

26. **Voucher redemption by farmers for agricultural inputs.** A farmer who receives a voucher from the VCC can go to any registered agro-dealer, redeem the voucher, pay the difference between the voucher face value and the commercial price of the inputs, and collect the inputs. Prior to handling vouchers, all agro-dealers that wish to participate in the scheme as registered dealers must complete the CNFA training and receive their certificate. Once the agro-dealer is certified, the local Government cannot restrict his/her participation in the voucher scheme. Farmers are advised to go to the agro-dealers who accept vouchers and have a record of supplying inputs that meet recommended quality standards. If an agro-dealer doubts the authenticity of the vouchers, the farmer can refer the dealer to the VVC or to the Village Chairperson, who will have the names of farmers with voucher numbers issued under each name. The agro-dealer has the right to ask for identification from the person who presents the voucher to ensure that he or she is the owner of the voucher. The agro-dealer will register the voucher number and get the signature of the person who has presented the voucher before selling the inputs. This record has to be kept by the agro-dealer. Moreover, upon sale of the inputs and receipt of the voucher, the agro-dealer must check its authenticity with district authorities before redeeming it.

27. **Voucher redemption by agro-dealers for cash.** The agro-dealer may cash the voucher at any NMB branch where he/she has an account. NMB requires agro-dealers who deal with vouchers and who have to redeem vouchers to open an account in one of its branches so that payment for redeemed vouchers is made directly to the account of the agro-dealer. The agro-dealer can withdraw the money from the account as and when needed. The vouchers have security features⁶⁰ known to NMB, which can be checked on site when vouchers are submitted for redemption. Moreover, each voucher number is centrally registered. When a voucher is submitted for redemption, the number will be reconciled with the number at the central registry to ensure that no duplicate voucher or unregistered number is redeemed.

⁶⁰ The main security features include a hologram, invisible watermarks, antiscanning and photocopy features, thermo-chromic ink, invisible UV features, microtext, visible UV numbering, and solvent-sensitive ink.

Annex A.8: Voucher Program Roll-Out

Table A8.1: Voucher program roll-out

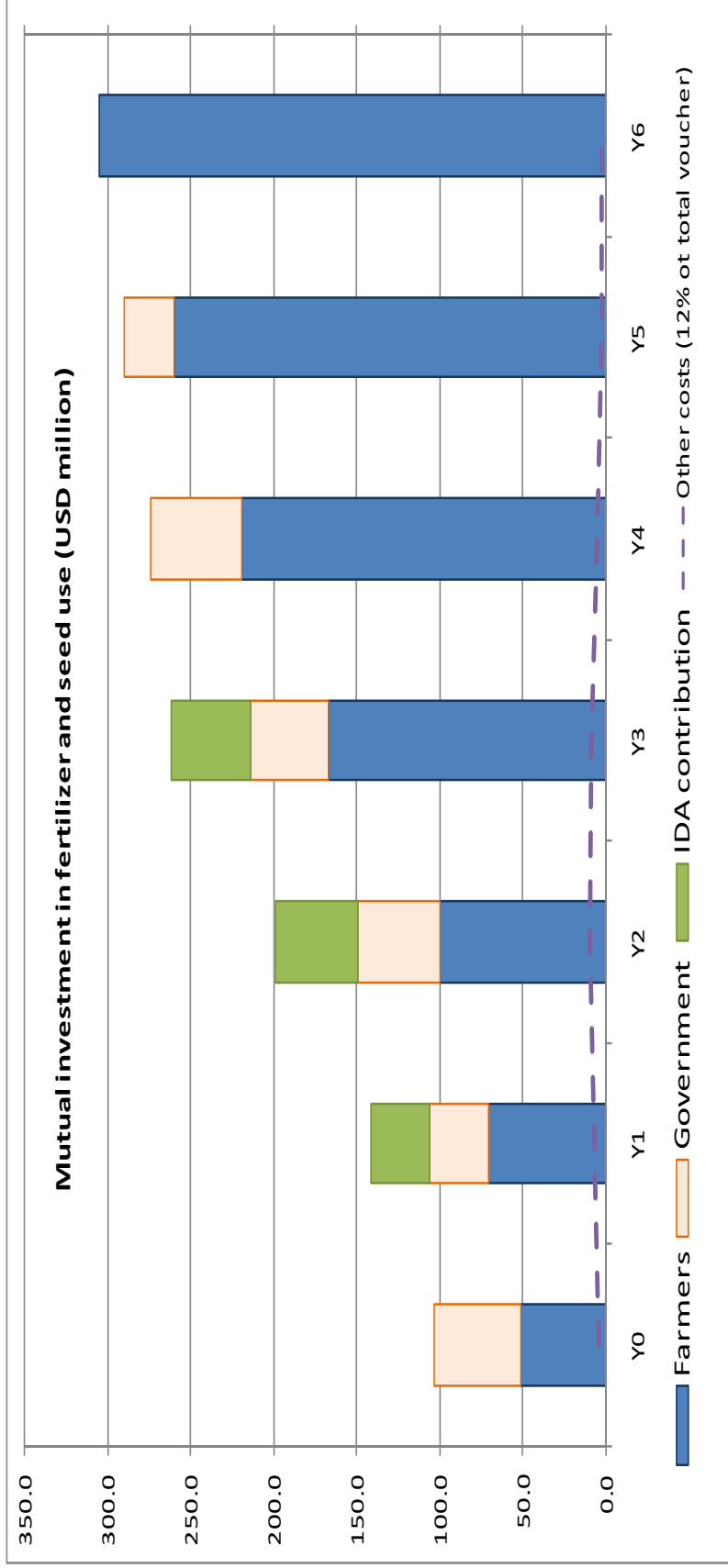
Summary Region	Total rural households /d	Fertilizer use (2003)/a		(ha /farmer) /f	Irrigated area (ha)/g	Agro-dealers	Beneficiaries					
		Maize	Rice				Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Southern Highland /b												
Iringa	310 000	28.0%	4.0%	0.9	7760	298	136,000	170,500	204,600	96,500	62,000	27,900
Mbeya	415 000	28.0%	3.5%	0.7	38445	326	136,000	228,250	273,900	175,250	83,000	37,350
Ruvuma	215 000	39.0%	30.9%	0.8	10466	141	85,000	118,250	141,900	76,250	43,000	19,350
Rukwa	195 000	6.0%	1.0%	0.9	4427	72	76,000	107,250	128,700	70,250	39,000	17,550
Subtotal	1 135 000					837	433,000	624,250	749,100	418,250	227,000	102,150
Northern Highland /b												
Kilimanjaro	240 000	41.0%	53.8%	0.5	9729	116	70,000	132,000	158,400	110,000	48,000	21,600
Arusha	175 000	8.0%	59.6%	0.7	7697	83	47,000	96,250	115,500	84,250	35,000	15,750
Manyara	175 000	0.1%	10.7%	1.3	2253	63	63,000	96,250	115,500	68,250	35,000	15,750
Kigoma	220 000	13.2%	0.0%	0.3	1921	53	40,000	121,000	145,200	125,000	44,000	19,800
Tabora	265 000	13.0%	1.9%	1.0	7121	10	10,000	145,750	174,900	188,750	53,000	23,850
Mara	210 000	2.0%	1.0%	0.6	290	15	17,000	115,500	138,600	140,500	42,000	18,900
Other potential areas												
Morogoro	290 000	2.0%	4.7%	0.8	16897	106	60,000	159,500	191,400	157,500	58,000	26,100
Subtotal	1 575 000					446	307,000	866,250	1,039,500	874,250	315,000	141,750
Other regions /c												
MTWARA	260 000	4.0%	0.6%	0.4	510	/e						
LINDI	170 000	0.3%	0.5%	0.6	/e	/e						
TANGA	300 000	0.6%	0.0%	0.9	9808	/e						
DODOMA	360 000	0.3%	0.0%	1.3	5455	/e						
PWANI	160 000	1.4%	4.7%	0.8	/e	/e						
MWANZA	380 000	3.4%	1.0%	0.7	2365	/e						
SHINJANGA	425 000	1.3%	0.6%	1.1	3479	/e						
SINGIDA	200 000	1.3%	0.0%	1.0	2497	/e						
KAGERA	395 000	0.2%	0.0%	0.3	/e	/e						
Sub-total	2 650 000					1 283	740,000	1,540,000	2,040,000	1,800,000	1,000,000	500,000
TOTAL	5 360 000						740,000	1,540,000	2,040,000	1,800,000	1,000,000	500,000
/a: % of farmers that use mostly inorganic fertilizers (Adapted from Census 2003)												
/b: 55% and 70% of rural households in Year 1 and Y2 respectively												
/c: to be shared between other regions, priority on irrigated rice schemes												
/d: Adapted from Census 2003 using regional population growth projections												
/e: Agrodealer training to be started in June 09												
/f: Average area planted in Maize per household (Agricultural Census 2002/03)												
/g: Source Ministry of Water and Irrigation												

Annex A.9: Detailed Project Costs

Table A.9.1: Accelerated Food Security Project – Detailed Project Costs (US\$)

Component	Description	Source of funds	2009/10	2010/11	2011/12	Total
Comp.1	Improving access to agricultural inputs		75,678,080	108,030,074	99,687,503	283,395,657
1.1a	NAIVS subsidy cost	IDA	34,515,000	49,756,824	46,388,160	130,659,984
		GoT	34,515,000	49,756,824	46,388,160	130,659,984
	Subcomponent total		69,030,000	99,513,648	92,776,320	261,319,968
1.1b	NAIVS other costs (printing, distributing and redeeming)	IDA	2,289,600	3,214,273	2,935,526	8,439,399
		GoT	2,289,600	3,214,273	2,935,526	8,439,399
	Subcomponent total		4,579,200	6,428,546	5,871,053	16,878,399
1.2	Awareness campaign and participation	IDA	2,068,880	2,087,880	1,040,130	5,196,890
Comp. 2	Strengthening input supply chain		6,317,000	4,081,000	1,781,000	12,179,000
2.1	Strengthening agro-dealer network	IDA	3,000,000	2,000,000	1,000,000	6,000,000
2.2	Strengthening national seed system	IDA	3,317,000	2,081,000	781,000	6,179,000
Comp.3	Project management and M&E		1,668,075	1,034,875	799,875	3,502,825
3.1	Project management	IDA	712,575	669,875	574,875	1,957,325
3.2.	M&E	IDA	955,500	365,000	225,000	1,545,500
	TOTAL Project costs – Grant total		83,663,155	113,145,949	102,263,378	299,077,482
	TOTAL by source of funds					
		IDA	46,858,555	60,174,852	52,944,691	159,978,098
		GoT	36,804,600	52,971,097	49,323,686	139,099,383

Figure A.9.1: Total investment of beneficiaries, Government, and IDA into the National Input Voucher Scheme over the whole time frame



ATTACHMENT B: ADDITIONAL FINANCING FOR AGRICULTURAL SECTOR DEVELOPMENT PROJECT (ASDP)

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an Additional Financing Credit in an amount of SDR 20.2 million (US\$30 million equivalent) to the United Republic of Tanzania for the Agricultural Sector Development Project (ASDP, Credit 41920). ASDP was approved by the Board on June 15, 2006, declared effective on October 10, 2006, for a total amount of SDR 61.6 million (US\$90 million equivalent), and is scheduled to close on December 31, 2011. As of April 14, 2009, 53 percent of the original Credit had been disbursed, slightly higher than the appraisal projection.

2. The proposed Additional Financing is one of three proposed operations under the Accelerated Food Security Program requested by the Government of Tanzania. It complements the short-term interventions by the National Agricultural Input Voucher Scheme (NAIVS) supported by the Accelerated Food Security Project (AFSP) in two ways:

- (i) It fills part of the financing gap for rehabilitating economically viable and environmentally sustainable small-scale irrigation schemes at the district level. These schemes are identified and submitted by the beneficiaries for top-up financing from the District Irrigation Development Fund (DIDF), which was established for the district level to finance irrigation schemes on a competitive basis.
- (ii) It supports strategic soil fertility management research; scaling up integrated soil fertility management technologies and good practices, including conservation farming; providing localized fertilizer use recommendations through on-farm verification trials; improving the capacity of extension services and other stakeholders to provide adapted soil fertility management practices and recommendations to farmers; and strengthening the soil analysis capacity of zonal research institutes. These activities will be concentrated primarily in districts where NAIVS is implemented.

II. Background and Rationale for Additional Financing

3. **Original Project Design.** Tanzania's Agricultural Sector Development Strategy (ASDS), finalized in 2001, seeks sustained agricultural growth of 5 percent per year, primarily through private-sector-led transformation from subsistence to commercial agriculture. The strategy's core elements are to strengthen public-private partnerships across all levels of the sector and to implement District Agricultural Development Plans (DADPs) as a comprehensive tool for agricultural development at the district level. The strategy's priorities are to create an environment favoring commercial activities; improve the delivery of support services, with a delineation of public/private roles; improve the functioning of output and input markets; and strengthen the institutional framework governing the sector.

4. The Government prepared the Agricultural Sector Development Program (ASDP) as the operational instrument to implement the ASDS, with the intention of reorienting and reinvigorating agriculture and the wider economy. The ASDP is founded on policies to foster (i) poverty reduction; (ii) the decentralization of many public sector responsibilities to Local Government Authorities (LGAs); (iii) increased participation of communities in decision-making and (iv) a shift towards private participation in production, marketing, processing, and service delivery. As the centerpiece of Tanzania's long-term effort to coordinate and monitor agricultural development and implement nationwide reforms, ASDP ensures that national and local priorities receive adequate financial support from central and local Government and Tanzania's Development Partners. Local investment in ASDP is supported through a mixture of funding and financial mechanisms, including funds from the Government and development partners available through a Basket Fund; donor funds outside the Basket; general budget support; and LGA, community, and private sector funding sources.

5. The ASDP has two main objectives: (i) enable farmers to have better access to, and use of, agricultural knowledge, technologies, marketing systems and infrastructure, all of which contribute to higher productivity, profitability and farm incomes and (ii) promote agricultural private investment based on an improved regulatory and policy environment. ASDP has two main components, aligned to the Government's national and local budget, planning, and prioritization processes:

- **Component 1: Local Level Support.** This component primarily fosters the first Project objective by improving LGAs' capacity to plan, support, and coordinate agricultural services and investments in a more efficient, participatory, and sustainable manner. Support is provided to develop and implement community-driven DADPs, increase farmers' influence on decisions to allocate resources for services and investments, reforming agricultural services, and improving the quality of public expenditure. This component of ASDP also finances advisory services, training, and infrastructure development, including small-scale irrigation development at the district level through the demand-driven; performance-based District Agricultural Development Grants (DADGs). LGAs' access to resources is linked to their performance in local planning and implementation, agricultural services reform, the quality of local investments, and the local policy and regulatory environment. A competitive funding mechanism, the District Irrigation Development Fund (DIDF), provides supplemental resources for small-scale irrigation.
- **Component 2: National Level Support:** This component fosters the achievement of both Project objectives. The first objective is supported by improvements in the relevance and responsiveness of the agricultural research system, including better linkages with extension, through the Client Oriented Research and Development Management Approach (CORDEMA). The second objective is supported by improvements in the national policy environment and by the development of mechanisms for greater public-private partnerships. Support is provided to reform agricultural services, primarily research and extension; to improve the overall sector policy framework; to carry out preparatory work and investment in national irrigation facilities through public-private partnerships; to stimulate market development; and to improve food security and sector coordination. Support to irrigation is provided through the National Irrigation Development Fund (NIDF). Soil fertility management

research is supported through the Zonal Agricultural Research Institutes (ZARDIs) under CORDEMA and through a competitive Zonal Agricultural Research Fund (ZARDEF), as well as through nationally determined research of national and international importance.

6. **Partnership arrangement.** A major share of ASDP is financed through the Basket Fund supported by the Government and several development partners, whose contributions are shown in Table B.1.

Table B.1: Estimated contributions of development partners supporting the ASDP Basket Fund as of November 2008

Development partners	Revised indicative contribution to Basket Fund (US\$ m)
European Union (EU)	8.5*
Danish International Development Agency (DANIDA)	5.0*
Government of Japan	3.0
World Bank	90.0
International Fund for Agricultural Development (IFAD)	36.0
African Development Bank (ADB)	60.0
Irish Aid	17.7
Total	220.2

* EU and DANIDA pulled out of the Basket in 2007/08. EU disbursed fully while DANIDA did not.

7. **Project performance.** The overall rating of ASDP's progress against its Project Development Objective is *moderately satisfactory*. A Mid-Term Review (MTR) of ASDP by the Government of Tanzania and development partners in October 2008 concluded that after an initial slow start, implementation had gained momentum and the Project was registering positive outcomes and outputs (Annex B.1).

8. **Project achievement.** There have been notable achievements in most of the subcomponents of ASDP, at the local and national level, in particular irrigation development. Across all seven irrigation zones, irrigation development has surpassed projections (Annex B.2). In FY 2007/08, 15,300 hectares of irrigated land were developed or rehabilitated—75 percent of the end-of-Project target. Four small-scale irrigation dams were completed and two new ones are under construction. Feasibility studies have been completed for 116 irrigation schemes covering 85,179 hectares. Total irrigated area has increased by 4.8 percent per year. Yields of irrigated paddy and maize have risen by more than 100 percent. Other ASDP achievements include improved local capacity for planning and implementation, higher quality DADPs, increased investments in local infrastructure, enhanced capacity for rolling out service reforms in research organizations and extension networks at all levels, wider adoption of improved technologies, increased proportion of LGAs that qualify for top-up grants (from 41 percent to 96 percent), farmer empowerment through farmer organizations, a greater number of Farmer Field Schools, increased efforts on capacity building for extension staff, stronger financial management systems, and a more comprehensive M&E framework.

9. ASDP faces a number of challenges, however. The level of planning skills and quality of DADPs (which are central to local implementation of ASDP) still vary considerably. The implementation of agricultural service reforms remains limited and requires more effort. Although procurement is satisfactory at the local level, at the national level it suffers from delays in implementing the Procurement Plan, especially in preparing technical specifications for goods/equipment, preparing bidding documents, and evaluating bids. The delayed flow of funds to LGAs and reporting by LGAs pose additional challenges. A substantial financing gap in the DIDF frustrates the development of small-scale irrigation. The Government has taken action to address these challenge, based on recommendations from the MTR, and they will be assessed in the next joint review mission (October 2009).

10. **Reason for Additional Financing.** The proposed Additional financing will complement the short-term NAIVS interventions by supporting investments to sustain further growth in agricultural productivity, specifically the rehabilitation of small-scale irrigation and soil fertility management technologies.

11. The substantial financing gap in the DIDF will be partially met through the proposed Additional Financing. In 2008/09, the DIDF budget covered only 10 percent of the funding requested for approved district irrigation proposals (Table B.2). Ultimately, partial financing was provided for 32 percent of the approved proposals. The significant remaining demand for funds for small-scale irrigation calls for a substantial injection of ASDP resources to DIDF. With Project disbursements ahead of schedule, and the remaining resources already committed to other priorities within ASDP, there is a need for new funding.

Table B.2: DIDF proposals received from districts and approved allocations, 2008/09 (TSh)

		Amount requested	Budget allocation for DIDF	Financing gap
Number of proposals received	190	76,663,413,200	4,634,795,000	72,028,618,200
Proposals qualified for DIDF Financing	129	46,435,901,110	4,634,795,000	41,801,106,110
Number of approved proposals allocated DIDF funds	41	11,513,235,800	4,634,795,000	6,878,440,800

12. The integrated soil fertility management research and extension interventions supported through the Additional Funding will complement client-oriented research conducted through CORDEMA and ZARDEF in the districts where NAIVS is implemented. Farmers' demand for soil fertility management research and extension has been limited because they are not aware of the extent of soil fertility management issues and technical interventions. The Additional Financing will foster farmers' awareness of integrated soil fertility management through research and extension—especially on-farm demonstrations, strategic research, and field trials. Fertilizer recommendations will be refined to improve the outcomes of NAIVS and other productivity-enhancing interventions on about 30 sites. The soil analysis capacity of selected laboratories in the ZARDIs will also be enhanced.

III. Proposed Approach and Changes

13. The ASDP objective, components, arrangements for implementation, procurement and financial management will remain unchanged. Disbursement frequency to the Basket Fund Holding Account will change from quarterly to annually to meet the increasing quarterly disbursements demands by Project implementing entities. The Additional Financing (Table B.3) will accelerate the implementation and expansion of ASDP components by supporting specific activities in selected subcomponents.

- **Small-scale Irrigation Development (US\$28.7 million).** One of the main subcomponents of ASDP is the development of large- (more than 2000 hectares), medium- (500–2,000 hectares) and small-scale (less than 500 hectares) irrigation schemes. The Additional Financing Credit will be used to improve, modernize, and rehabilitate small-scale, traditional irrigation schemes through competitive grants from the District Irrigation Development Fund (DIDF); supplementing the support through DADGs. The Additional Financing will help to meet some of the pending DIDF requests for resources from the districts. At the observed average rehabilitation cost of US\$1,800 per hectare, about 16,000 hectares should be rehabilitated with the Additional Financing.
- **Soil Fertility Management (US\$1.3 million).** A research program on soil fertility management and conservation has been integrated in the zonal research agenda to develop locally specific technologies for enhancing and conserving soil fertility. Strategic soil research for generating knowledge and addressing issues of national interest, including soil mapping and fertilizer recommendations, is done by the Agricultural Research Institute at Mlingano (ARI–Mlingano) and Sokoine University of Agriculture (SUA). The Additional Financing will support the dissemination of soil fertility management technologies that are already available on-shelf and will scale up good practices in districts where NAIVS is active, using the current client-oriented research approaches. The Additional Financing will also support strategic research, verification of fertilizer recommendations, improve the advisory capacity of district extension, and improve the soil analysis capacity of zonal research institutes. A detailed work plan for these activities has been developed and submitted to IDA.

Table B.3: Allocation of Additional Financing to the Original Project (US\$ million)

Component	Original amount	Additional financing	Total
Local level support	55.9	28.7	84.6
National level support	34.1	1.3	35.4
Total	90.0	30.0	120.0

14. **Implementation arrangements.** Implementation arrangements under the Additional Financing remain the same as for the Original Project, which have worked well. Primary responsibility for implementation of the local component rests with the Prime Minister’s Office, Regional Administration (PMO-RALG) and LGAs, while implementation of the national component is the responsibility of other Agricultural Sector Lead Ministries (ASLMs), including

MAFC; the Ministry of Livestock Development and Fisheries (MLDF); the Ministry of Industries, Trade, and Marketing (MITM); and the Ministry of Water and Irrigation (MoWI). The DIDF Committee is responsible for appraising and selecting district proposals for small-scale irrigation schemes. In doing so, the Committee applies the “Guidelines for Operationalizing District Irrigation Development Fund,” which were prepared and adopted by the Government in the first year of ASDP. Proposals for DIDF grants are appraised and recipients selected on a competitive basis in accordance with the guidelines, including the fulfillment of criteria for the environmental, social, technical, and economic soundness of the investments. The DIDF Committee is co-chaired by PMO-RALG and MoWI (Division of Irrigation and Technical Services) and comprises, among others, representatives of Basin Water Authorities and ASLMs. As additional resources are made available for small-scale irrigation development at the LGA level, the districts’ capacity to prepare proposals will be enhanced, and the DIDF Committee will be strengthened to handle the increasing number of applications for DIDF grants. The Zonal Irrigation and Technical Service Units (ZITSUs) will provide technical backstopping to districts on the design, construction, and implementation of approved DIDF investments.

15. **Credit Closing Date.** The Credit Closing Date of the Additional Financing would be June 30, 2012, which will also be the new Credit Closing Date for the Original Project.

16. The integrated soil fertility management interventions will be part of the national support component of ASDP and will be implemented by the ZARDIs. The soil fertility management activities will be coordinated by the ARI–Mlingano, which is responsible for soil research. The Zonal Information and Extension Liaison Unit (ZIELU) will be involved in assembling, assimilating, and disseminating soil fertility management knowledge and information. The ZIELU is a core unit, linking on the one hand with LGAs, farmer groups, and networks, and on the other hand with national organizations and institutions.

IV. Consistency with CAS

17. The ASDP for which the Additional Financing is proposed is fully consistent with IDA’s current Country Assistance Strategy (CAS). The CAS consists of the Government’s Joint Assistance Strategy for Tanzania (JAST), which in turn is aligned to the Government’s National Strategy for Growth and Reduction of Poverty (2005-2010), known by its acronym in Swahili, MKUKUTA. Three broad outcome clusters are envisaged in the MKUKUTA are: (i) economic growth and the reduction of income poverty, (ii) improved quality of life and social well-being, and (iii) governance and accountability. The ASDP and Additional Financing are aligned to the first cluster. They focus on enhancing economic growth and reducing poverty by empowering people and creating opportunities for them to increase agricultural production and household income. The ASDP supports Government efforts to strengthen the links between MKUKUTA outcomes and the national budget by improving sector- and cluster-based strategic planning and budgeting so that each cluster translates into activities that can be financed and implemented. In this way public resources can be used more effectively to implement MKUKUTA strategies.

V. Appraisal of Scaled-up Activities

A. Economic and Financial Analyses

18. The Original Project design, which will be maintained under the Additional Financing, helps ensure that the activities and investments to be scaled up are cost-effective. The number of small-scale irrigation schemes that were developed or rehabilitated rose from 595 in 2006 to 679 in 2008. As noted, area developed under irrigation grew by 4.8 percent per year, the average yields of paddy rose from 1.9 tons per hectare under traditional irrigation to 4.5 tons per hectare under improved irrigation. Average gross income per hectare rose from TSh 600,000 to TSh 1,700,000 per year. Rainfed maize yields an average of 1.1 tons per hectare, but under irrigation farmers achieved an average of 4.1 tons per hectare. Based on observed farm-level experiences, ERR to irrigation rehabilitation investments are higher than the minimum required of 12 percent (Annex B.2, Table B.2.4). Economic analysis also shows that investment in irrigation rehabilitation for Additional Financing can be justified for both paddy and maize (Annex B.2, Table B.2.5).

19. The Additional Funding will permit research and advisory services to focus additional attention on soil fertility management and efficient fertilizer use recommendations. In the short term, these activities and recommendations will improve the efficiency of investments in inputs made through NAIVS. In the longer term, they will lead to sustainable improved production outcomes. The efforts of research and extension services in integrated soil fertility management should improve the quality of these services—even more than originally envisaged under ADSP—and help more farmers benefit from direct service provision, from farmer-to-farmer linkages resulting from ASDP’s participatory technology dissemination methodologies, and from immediately adopting research outputs and recommendations.

B. Technical Analysis

20. The design of ASDP reflects lessons learned from projects in Tanzania and elsewhere in the region. Tanzania’s experience in design and implementation of small-scale schemes is extensive, and the significant increase in the number of viable proposals for DIFD funding is a good indicator of the skills and capabilities that are developing at various levels. Progress has been made in establishing Irrigator Organizations (IOs), providing training in irrigation scheme management, and operating and maintaining irrigation schemes. Although much remains to be done to ensure that irrigation schemes are operated and maintained sustainably, the new National Irrigation Policy is expected to contribute to fully sustainable irrigation development, rehabilitation, operation, and maintenance. Recently amended guidelines for operating and maintaining small-scale irrigation schemes include provisions for determining a realistic operations and maintenance budget, based on full-cost recovery by beneficiaries to prevent maintenance from being deferred and reduce the need for rehabilitation. At present most of the technical support is provided by ZITSUs, but district staff must be sufficiently trained to fulfill this function in the future.

21. Previous research on soil fertility management focused on developing blanket chemical fertilizer recommendations. Blanket recommendations could not adequately reflect the

socioeconomic environment of smallholder farmers or variations in agro-ecological conditions. Organic amendments and land husbandry practices received less attention than chemical fertilizer. Drawing on lessons from research that excluded alternatives to chemical fertilizer, integrated plant nutrition management (IPNM) research was initiated. This research uses a holistic, client-oriented research approach for developing low-cost technologies. The IPNM approach is based on locally available inputs, used in combination with economic optimum levels of purchased fertilizer and appropriate land and crop husbandry practices. The land husbandry practices are aligned with farmers' circumstances and can include reduced tillage, moisture management, crop rotations, nutrient cycling, and improved fallows. This approach provides scope for reinterpreting results of past fertilizer trials in light of the prevailing economic context to derive locally suitable, cost-effective fertilizer recommendations.

C. Fiduciary Analysis

22. **Financial management and disbursement.** In preparing this Additional Financing request, a financial management assessment was done in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board on November 3, 2005. The assessment sought to ensure that MAFC's financial management arrangements are adequate to ensure that (i) ASDP funds are used for the purposes intended in an efficient and economic way and (ii) ASDP financial reports will continue to be prepared in an accurate, reliable, and timely manner; and (iii) that the assets of all entities will be safeguarded.

23. The assessment concluded that positive actions have been taken to address most of the financial management matters arising from previous supervision missions and audit reports. Additionally, to strengthen capacity, a one-day seminar on financial reporting was organized and attended by ASDP staff, and a Working Group was established to implement recommendations arising from the assessment (specifically, recommendations related to the flow of funds and reporting from local and national levels). A clean audit was also issued during ASDP implementation, and no significant matters were raised in the management letter. All unaudited Interim Financial Reports have been received on time, reviewed by the Bank, and found satisfactory. Also, in the Original Project, IDA and other development partners deposit funds on a quarterly basis in a US dollar designated ASDP Basket Fund Holding Bank Account operated by the Accountant General and maintained at the Bank of Tanzania. Based on the assessment of the flow of funds carried out by IDA in June 2008, and considering the forecast of LGA absorption capacity, the Government and Basket Fund donors have agreed to adopt annual disbursements to the Basket Fund Holding Bank Account to ensure that sufficient funds are available to meet quarterly disbursement levels to implementing agencies (132 LGAs and 5 ASLMs).

24. Overall, the Project's financial management arrangement satisfies the Bank's minimum requirement under OP/BP 10.02, and the existing system is adequate to provide, with reasonable assurance, accurate and timely information on the status of the Project as required by IDA. The financial management is assessed to be satisfactory.

25. **Procurement.** Procurement for the Additional Financing for ASDP will be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA

Credits” (May 2004, revised October 2006); “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” (May 2004, revised October 2006); and the provisions stipulated in the Financing Agreement. Procurement for all ICB will be carried out using Bank’s current SBDs and Standard Bid Evaluation Forms. The Government SBDs for NCB procedures have been found acceptable to the Bank, except for the provision that preference be given to domestic suppliers/contractors, which is not as per the Bank’s guidelines. In accordance with para.1.14(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (i) the bidders, suppliers, contractors and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the association; and (ii) the deliberate and material violation by the bidder, supplier, contractor or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.14 (a)(v) of the Procurement Guidelines. For each contract to be financed under the Financing Agreement, the various procurement or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame have been agreed between the Borrower and the Bank in the Procurement Plan (Annex B.7). The Procurement Plan will be updated at least annually or as required to reflect actual Project implementation needs and improvements in institutional capacity.

26. Procurement activities under ASDP are carried out at the national and local (district) levels. At the national level, MAFC coordinates procurement activities for the ASLMs. District Executive Directors (DED) are responsible for procurements at the local level. The overall performance of the procurement function was rated *unsatisfactory* during the MTR in September–October 2008, mainly due to delays in the implementation of the Procurement Plan at the national level (see Annex B.6). The Government is implementing the recommendations provided during the MTR to address the weaknesses identified.

27. ASDP’s procurement capacity was assessed for Additional Financing (Annex B.6). The overall Project risk for procurement was rated as high. Several weaknesses and risks were identified:

- Staff in the Procurement Management Unit (PMU) of MAFC are already overwhelmed with multiple procurement responsibilities for various projects as well as ASDP.
- Procurement staff lack experience in procuring works and goods through ICB procedures as well as in selecting large-value consultancy contracts.
- The inadequate expertise/capacity in user departments in preparing documentation, such as technical specifications and terms of reference, causes delays in procurement processes.

28. Actions to mitigate these risks include: (i) MAFC to provide capacity-building support to PMU by a short-term consultant for at least 12 months to provide hands-on training on various procurement aspects, including procurement of works and goods through ICB procedures as well as in selecting large-value consultancy contracts, and procurement data management/record keeping; (ii) PMU staff to attend short-term training on procurement to improve their skills in specific areas; (iii) incorporating a procurement module in the national training package for

ASDP; (iv) training of trainers at LGA level; and (v) user departments to engage competent consultants to help in preparing specifications and terms of reference.

29. To enhance community ownership of investments, IDA and other Basket Fund donors have agreed to include Community Participation in Procurement as one of the procurement methods. The ASDP implementation team has prepared a procurement manual containing procedures for carrying out procurement at the community level. The manual will be translated into *Kiswahili* and distributed to LGAs for dissemination to communities.

30. Based on the procurement capacity assessment and the mitigation measures proposed, the residual procurement risk is expected to be moderate. The findings of the study to review fiduciary and safeguard issues in decentralized projects will be used during implementation of the Project to strengthen ASDP's procurement and financial management functions at the local level.

D. Environment and Social Safeguards

31. **Environment.** Potential environmental and social impacts are associated with national investments in integrated soil fertility management and with the implementation of subprojects at the district level, through the agricultural development plans (DADPs) financed by agricultural development grants (DADGs) and the irrigation fund (DIDF). Many adverse environmental impacts from the DADPs will remain low-intensity, minor, site-specific impacts that are relatively straight forward for farmers to manage, with assistance and monitoring from local institutions. Such adverse impacts could be associated with unsustainable abstraction of water (affecting water quantity and quality), point and non-point pollution of water sources, soil erosion, increased loss of soil fertility, the cultivation of marginal lands, and water and land-use conflicts.

32. To address the risks of adverse environmental and social impacts under the Original Project, the Government prepared and disclosed an Environmental and Social Management Framework (ESMF), including a Resettlement Policy Framework (RPF). The ESMF and RPF were reviewed during preparation of this Additional Financing and both were found to be adequate in scope and content to capture the issues associated with the proposed activities.

33. To strengthen and improve implementation of the ESMF and other safeguard processes, several actions were agreed with the Government: (i) ESMF processes will be incorporated into the DADP guidelines issued by PMO-RALG, and ESMF and RPF documents will be sent to all districts; (ii) the original Integrated Pest Management Plan (IPMP) will be reviewed to ensure that it captures all of the activities funded in this Project and complies with OP4.09 and Tanzania's national requirements; (iii) the government's performance in implementing the original IPMP in ASDP will also be reviewed and a capacity building plan prepared; and (iv) another Riparian Notification Letter will be sent by IDA, on behalf of the Government, given that "the notified areas and water abstraction amounts" from riparian sources covered by the original letter (dated April 3, 2006) have already been exceeded by the Original Project. These actions have been completed and the status of their implementation is discussed in detail in Annex B.4. The new Riparian Notification Letters were sent by IDA, on the behalf of the

government, on April 21, 2009. As of May 21, 2009, the date by which responses were requested from the riparian countries, no objections to the proposed irrigation investments had been received.

34. **Social.** Social impacts of the proposed activities are expected to be positive. The successful achievement of the PDO will lead to positive social development outcomes for both the agricultural and nonagricultural sector, for several reasons. For example, the Project focuses strongly on empowering farmer and community groups by expanding their participation in local planning and enabling them to have more control over decisions to allocate resources for services and investments. To ensure greater participation and thus more benefits for the rural community, ASDP was prepared with broad stakeholder consultation and involvement, which will continue throughout the life of the ASDP. Greater participation by poorer farmers and women's groups is especially emphasized. Additionally, as part of its efforts to build capacity within institutions and at the local level, and to foster better delivery of services, the Project promotes better governance, based on principles of social accountability and demand.

35. Notwithstanding these efforts, there is some risk that the expected social impacts for all Project stakeholders or persons affected by the Project may not be achieved. Measures for mitigating these risks are articulated in the ESMF.

VI. Expected Outcomes

36. During the MTR it was agreed to align the Results Frameworks of Basket Fund donors with the Government's new comprehensive M&E Framework. A revised Results Framework for the Original Project was therefore agreed to in October 2009 and is proposed to be formalized within the Bank through this Project Paper. The Additional Financing will continue to track the PDO and intermediate outcomes specified in the revised Results Framework of the Original Program, and the Key Performance Indicators will not change. However, the categories of technologies for the indicator "percentage of households using improved technologies" have been expanded to include the improved soil fertility management practices. In addition, the PDO outcome indicator target for "area under irrigated agriculture," and the intermediate outcome indicator targets for "number of infrastructure constructed or rehabilitated (irrigation)," "percentage of farmers having visits from public and private extension staff," and "percentage of operational research budget flowing through ZARDEF," were revised upward to include what will be achieved by the Additional Financing. The updated Results Framework is presented in Annex B.1.

VII. Benefits and Risks

37. It is estimated that about 6,700 households will benefit directly from investments in rehabilitating irrigation schemes. The exact number depends on the number of such investments approved by the DIDF committee.

38. Evidence from the River Basin Management and Smallholder Irrigation Improvement Project (RBMSIIP) shows that investments in rehabilitating irrigation schemes generate positive returns. RBMSIIP rehabilitated 15 smallholder irrigation schemes in the Pangani and Rufiji Basins. As a result, average paddy yields increased by 166 percent and average maize yields by

276 percent. The rehabilitated schemes doubled their irrigation efficiency and thus improved overall water availability in the Basins. Average family incomes nearly tripled (from US\$425 to US\$1,250 per year). Moreover, RBMSIIP demonstrated that conflicts among water users declined significantly when irrigation efficiency and crop production improved at the same time.

39. For newly developed and rehabilitated irrigation schemes, per hectare gross income is expected to reach TSh 3.6 million (US\$2,770). This estimate is based on an average yield of 4.5 tons of paddy per hectare and average selling price of TSh 800 per kilogram. The rehabilitation and development of irrigation also indirectly reduce income poverty, because they increase rural employment and foster growth in the rural nonfarm economy. A recent study⁶¹ estimates that in Sub-Saharan Africa, even moderately performing investments in agricultural water development provide additional wage employment of approximately 45 person-days per hectare. The study also observed that for every dollar of income generated by agricultural water investments, indirect downstream income benefits of US\$0.40–0.50 are realized.

40. The soil fertility management interventions, including conservation farming, will help to develop soil fertility management options and fertilizer recommendations that are adapted to farmers' conditions. At the same time, they will improve the advisory capacity of district extension personnel on fertilizer application rates and other soil management recommendations through on-farm technology demonstrations and verification trials of soil fertility practices at 30 sites where the input voucher scheme (NAIVS) is implemented. The verification trials will generate updated information on crop response to fertilizer. Fertilizer response curves will be plotted for crop yields against the tested fertilizer rates. Partial budgets will be drawn up to determine economically optimal fertilizer rates. Soil analysis capacity of selected zonal soil laboratories will be strengthened as well.

VIII. Financial Terms and Conditions for the Additional Financing

41. The Additional Financing will take the form of an IDA Credit on standard terms of 10 years' grace and 40 years' maturity.

⁶¹ "Investment in Agricultural Water for Poverty Reduction and Economic Growth in Sub-Saharan Africa" (2007), draft synthesis report of a collaborative program of the African Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, International Water Management Institute, and World Bank. Available at <http://siteresources.worldbank.org/RPDLPROGRAM/Resources/459596-1170984095733/synthesisreport.pdf>.

Annex B.1: Results Framework

Table B.1.1: Updated Results Framework

Key performance indicators	Baseline		Progress to-date		Revised targets (June, 2012)
	Value	Date	Value	Date	Number or text
PDO Indicators					
(1) Percentage of farm households using:				09/30/2008	
(i) Improved seed	18	06/30/2004	23	09/30/2008	35
(ii) Fertilizer	12	06/30/2004	12	09/30/2008	25
(iii) Improved livestock breeds	2	06/30/2004	NA	09/30/2008	5
(iv) Soil fertility management practices	10	06/30/2003	NA		15
(2) Proportion of smallholders using mechanization:					
(i) Oxen	24	06/30/2003	24	10/30/2007	30
(ii) Tractor	3	06/30/2003	8	10/30/2007	5
(3) Irrigated area (hectares)	249,992	11/30/2005	289,245	06/30/2008	500,000
(4) Flow of private funds into agriculture (Tsh million)	167,000	03/31/2002	177,542	10/30/2007	463,649
(5) Ratio of processed exported agricultural products to total exported agricultural products	18	11/29/2002	21	12/28/2006	23
Intermediate Outcome Indicators					
(1) Number of agricultural infrastructure constructed or rehabilitated					
(i) Irrigation	0	05/19/2006	350	10/30/2007	600
(ii) Dip tanks	0	05/19/2006	214	10/30/2007	640
(iii) Markets	0	05/19/2006	401	10/30/2007	1185

Continued...

Table B.1.1 (cont'd.)

Key performance indicators	Baseline		Progress to-date		Revised targets (June, 2012)
	Value	Date	Value	Date	Number of text
Intermediate Outcome Indicators					
(2) Percentage of farmers receiving visits from private and public extension staff	10	05/19/2006	16	10/30/2007	55
(3) Number of private agricultural service providers in LGAs contracted for service delivery	0	05/19/2006	30	06/30/2008	528
(4) Proportion of LGAs that qualify to receive performance bonus	0	05/19/2006	61%	12/31/2007	100
(5) Percentage of operational research budget flowing through ZARDEFs	0	05/19/2006	72	10/30/2007	90-
(6) Number of smallholder households participating in contract farming and marketing outgrower schemes	140,695	06/30/2006	229,433	06/30/2007	468,660
(7) Number of agricultural marketing regulations and legislations in place	7	06/30/2003	15	06/30/2008	21

Annex B.2: Small-Scale Irrigation

I. Background

1. Under ASDP, the subcomponent for irrigation development aims to contribute to agricultural productivity, profitability, and farm incomes by supporting small (≤ 500 hectares), medium (500–2000 hectares), and large (≥ 2000 hectares) irrigation infrastructure through public and private investments. The small-scale irrigation investments at the district level are supported through the demand-driven, performance-based DADGs, which supports implementation of DADPs, and competitive grants through DIDF. The National Irrigation Development Fund (NIDF) supports irrigation schemes of national interest, such as medium- and large-scale irrigation schemes, schemes with complex designs and implementation, and schemes that extend beyond district boundaries and have comparatively high investment costs.

2. In 2007/08, 15,300 hectares of land were developed for irrigation (75 percent of the target area) across all seven irrigation zones. Four new, small-scale irrigation dams were constructed and two additional dams are under construction. Feasibility studies were completed for 116 irrigation schemes of 85,179 hectares. The implementation of the ASDP irrigation subcomponent increased total irrigated area by 4.8 percent per year between 2006 and 2008 (Table B.2.1). Yields of paddy and maize increased by more than 100 percent under improved irrigation.

Table B.2.1. Area developed for irrigation from 2004/05 to 2007/08

Financial year	Cumulative area developed (ha)	Increment (ha)
2004/05	249,992	22,506
2005/06	264,388	14,396
2006/07	273,945	9,557
2007/08	289,245	15,300

II. Justification for Additional Financing

3. Since ASDP began, the requests/proposals submitted by Districts for top-up funding through DIDF have increased substantially (Table B.2.2). Approximately 67 percent of the proposals received met DIDF eligibility criteria, indicating that the planning and funding processes for small-scale irrigation development are increasingly well understood and demanded by farmers. The sums requested for irrigation scheme development and rehabilitation significantly exceed the capacity of DIDF financing, and consequently only a fraction of requests have been funded over the last two years. This mismatch between demand and supply of funds allocated to DIDF has caused these scarce resources to be spread thinly, with the result that some schemes were not completed as per design.

4. The recent MTR of ASDP concluded that inadequate financial resources for irrigation pose a key challenge and risk to achieving the PDO. Therefore, there is a need to increase the resource allocation for DIDF for the remainder of the ASDP, which is currently scheduled to close on December 31, 2011. Even the proposed Additional Financing will meet only a fraction

of the demand. More resources will be needed to meet a good proportion of the demand (Table B.2.3).

Table B.2.2: Districts' Requests for Funds from DIDF and approved allocations, 2008/09 (Tsh)

		Amount requested	Budget allocation for DIDF	Financing gap
Number of requests received	190	76,663,413,200	4,634,795,000	72,028,618,200
Requests qualify for DIDF financing	129	46,435,901,110	4,634,795,000	41,801,106,110
Number of approved requests allocated DIDF funds	41	11,513,235,800	4,634,795,000	6,878,440,800

Table B.2.3: Estimated budget allocation for small-scale irrigation by FY (Tsh)

Total additional DIDF funds	2009/10	2010/11	2011/12	Remarks
37,712,000,000	13,140,000,000	13,140,000,000	11,432,000,000	For 2009/10, Tsh. 9,578,053,980 will fund gaps and Tsh. 3,561,946,020 will fund new requests

III. Technical Analysis and Institutions Involved

5. The Original Project reflects lessons learned from other projects in Tanzania and the region. Tanzania's experience in the survey, design, and implementation of small-scale irrigation schemes is extensive, and the significant increase in the number of viable proposals for funding is a good indicator of the skills and capabilities that are developing at various levels. Significant progress has been made in establishing IOs and training participants to manage and maintain irrigation schemes, although much remains to be done to ensure more sustainable operation and maintenance.

6. In this context, the new National Irrigation Policy should contribute to fully sustainable rehabilitation and operation and maintenance of irrigation schemes. The recently amended guidelines for operating and maintaining small-scale irrigation schemes now include provisions for determining a realistic operation and maintenance budget, based on the principle of full-cost recovery from beneficiaries, to avoid the deferred maintenance and continuous need for rehabilitation that often render irrigation schemes inoperable in subsequent years. Currently this technical and social knowledge is provided mostly by Zonal Irrigation and Technical Service Units (ZITSUs), but given the human resource constraints, district staff must be sufficiently trained to fulfill this function in the future.

IV Implementation Arrangement and Financial Management

7. The DIDF Committee appraises and selects proposals from districts for additional resources for small-scale irrigation. In doing so, it uses the “Guidelines for Operationalizing District Irrigation Development Fund and National Irrigation Development Fund,” which were prepared and adopted by the Government in the first year of ASDP. Proposals for a DIDF grant are selected on a competitive basis in accordance with these guidelines, including the fulfillment of criteria for the environmental, social, technical, and economic soundness of the investments. The DIDF Committee is co-chaired by PMO-RALG and MoWI (Division of Irrigation and Technical Services), and comprises, among others, representatives of Basin Water Authorities and ASLMs. As under the Original Project, implementation of the DIDF investments for Additional Financing will be identified, prepared, procured, and supervised at the local (that is, district and village) level. Given current capacity constraints, substantive technical backstopping from the ZITSUs will be required. Under ASDP, provision of these services has worked well for districts that have actively sought this expertise.

V. Expected Outcomes

8. The two expected outcomes of the Additional Financing, which will fund small-scale irrigation rehabilitation and development at the district level, will be tracked: (i) increases in farmers’ use of improved technologies, infrastructure, and marketing systems and (ii) enhanced private investment in agriculture. As per the Government’s National Irrigation Master Plan, small-scale irrigation schemes are those with command areas of up to 500 hectares.

9. The total investment of US\$28.7 million would, at a cost of US\$1,800 per hectare, improve and modernize 16,000 hectares of traditional irrigation schemes.

10. In the last two years in which the irrigation development subcomponent of ASDP has been implemented, the number of irrigation schemes developed or rehabilitated nationwide rose from 595 in 2006 to 679 in 2008. As mentioned, irrigated area grew by 4.8 percent annually. In targeted irrigation schemes, the average productivity of paddy rose from 1.9 tons per hectare under traditional irrigation practices to 4.5 tons per hectare under improved irrigation, and average gross income per hectare increased from TSh 600,000 to TSh 1,700,000 per year. Average yields for rainfed maize are 1.1 tons per hectare, compared to the average of 4.1 tons per hectare obtained with irrigation.

VI. Economic and Financial Analysis

11. The design of the Original Project will be maintained under the Additional Financing to ensure that the activities to be scaled up and the corresponding investments are cost-effective and mainstreamed into ASDP processes. Observed farm-level returns to community investments in the rehabilitation and adoption of irrigation technology exceed the minimum increases required for a 12 percent ERR (Table B.2.4). Under the base scenario, a 15 percent increase in agricultural productivity is needed for a 12 percent rate of return, which is achievable with the interventions supported under the Additional Financing. The required productivity increase is substantially higher, around 94 percent, for newly developed irrigation schemes that mostly produce maize;

these schemes will account for a still-unknown portion of the investments under this Additional Financing (Table B.2.4). Based on the cost of US\$1,800 per hectare, the investment in rehabilitating traditional irrigation schemes using the Additional Financing is economically feasible for both maize and rice (Table B.2.5).

Table B.2.4: Minimum productivity increase required for 12% Economic Rate of Return

Interventions	Base case	Beneficiaries decreased by 50%	Project benefits delayed by 2 years	Project costs increased by 20%
Irrigation scheme rehabilitation (paddy)	15%	30%	19%	18%
Development of new irrigation schemes (maize)	94%	188%	123%	114%

Table B.2.5: Summary of economic analysis for proposed small-scale irrigation rehabilitation investments

	Area (ha)	Unit cost (US\$/ha)	NPV (US\$ m)	ERR (%)
Rehabilitation	16,000	1,800		
Paddy			12.8	24
Maize*			13.8	25

Note: NPV discount rate is 12%; horizon is 15 years.

* Assumes maize produced twice a year under irrigation.

12. The limited economic analysis described here indicates that the Additional Financing can be expected to yield positive returns and contribute to real agricultural growth. Care will be necessary, however, to ensure that only economically viable irrigation investments are selected by the DIFD Committee, particularly when new schemes are being developed. Care will also be needed to assess the viability of proposed schemes in relation to the crop mix that is anticipated and the market outlets for new or additional produce.

VII. Benefits and Risks

13. **Benefits.** An estimated 16,700 households will benefit directly from the rehabilitation of irrigation schemes. The exact number is not known at present and depends largely on the ratio between new and rehabilitated schemes selected for funding by the DIFD committee. Most subprojects funded from this Additional Financing are expected to rehabilitate and modernize irrigation schemes already in use, in addition to strengthening IOs within those schemes.

14. As noted in Section V of Attachment B, RBMSIIP, which supported rehabilitation of 15 smallholder irrigation schemes in the Pangani and Rufiji Basins, found that the rehabilitation of irrigation schemes was a beneficial investment. The rehabilitated schemes doubled their irrigation efficiency, improved overall water availability in the Basins, increased average paddy and maize yields, and nearly tripled average family incomes. At the same time, conflicts among water users diminished when irrigation efficiency and crop production improved.

15. By stimulating growth in the rural nonfarm economy, the rehabilitation and development of irrigation schemes indirectly reduce poverty. A recent study (2007) estimated that in Sub-Saharan Africa, even moderately performing investments in agricultural water development provide additional wage employment of approximately 45 person-days per hectare.⁶² The study further noted that for every dollar generated in agricultural water investments, indirect downstream income benefits of US\$0.40–0.50 were realized.

16. **Risks.** There is a certain risk that the combined potential benefits of irrigation development and rehabilitation and the scaled-up provision of farm inputs may not be realized fully. The full production potential of irrigation investments can be harnessed only if they are accompanied by greater use of fertilizer, improved seed, and improved crop husbandry practices. Nor will fertilizer contribute fully to crop productivity in the absence of optimal water levels.

VIII. Sustainability

17. To ensure the sustainability of irrigation investments, project proposals must be screened effectively against economic, technical, environmental, and social criteria. It is also essential to have clarity on who owns the investment and who is responsible for operating and maintaining the infrastructure. These screening mechanisms have been developed during the first two years of ASDP and are now in use. Guiding figures and procedures for drawing up realistic operations and maintenance budgets and determining farmers' contributions to operations and maintenance were recently included in the guidelines for operation and maintenance of small-scale irrigation schemes. The need for full-cost recovery for operation and maintenance has also been included in the new National Irrigation Policy. Additional agricultural extension officers are being recruited by MAFC at the moment (2,500 by December 2010). Those who receive specialized training in agricultural water management are expected to play an important role in applying operation and maintenance guidelines for small-scale irrigation and thus to contribute substantially to the economic and technical viability of these irrigation investments.

18. As part of these subprojects, the capacity of IOs will be increased by creating greater awareness of how water-use fees and payments for operating and maintaining irrigation schemes will ensure the sustainability of those schemes. Furthermore, IOs will be trained in determining general operation and maintenance requirements over the short and long term, bookkeeping, establishing long-term maintenance funds, and enforcing by-laws.

19. **Quality of Investments.** Some districts and communities might not seek or be able to access technical advice from the ZITSUs. In addition, certain challenging design situations might exceed the current capacity of the ZITSUs. The resulting substandard system designs and

⁶² "Investment in Agricultural Water for Poverty Reduction and Economic Growth in Sub-Saharan Africa" (2007), draft synthesis report of a collaborative program of the African Development Bank, Food and Agriculture Organization, International Fund for Agricultural Development, International Water Management Institute, and World Bank. Available at <http://siteresources.worldbank.org/RPDLPROGRAM/Resources/459596-1170984095733/synthesisreport.pdf>.

implementation arrangements would ultimately lead to poor irrigation systems and infrastructure. This risk can be mitigated by providing tailor-made, short-term training to existing staff, recruiting more professionals and technical staff and/or engaging an independent third party during the four critical steps in the Project cycle—feasibility studies, design, implementation, and completion—which would improve the quality and thus the long-term sustainability of new and rehabilitated irrigation schemes. All schemes should be subject to a detailed technical audit after certification.

VIII. Capacity at the District and Zonal Levels

20. Most districts are still understaffed (especially technician-level-engineering) and underequipped (especially with computing, surveying, and transport equipment) to fulfill their role in irrigation development to a high standard. ZITSUs have better human, financial, and physical resources than the districts, but these resources are insufficient and spread too thinly for them to fulfill their core mandate effectively. These risks can be addressed by hiring and training the required staff at both levels.

IX. Environmental and Social Safeguards

21. **Environment.** The Original Project has an Environmental **Category B** classification, with demand-driven community subprojects subjected to screening and impact assessment criteria as detailed in the ESMF. The ESMF will ensure that environmental and social issues associated with this Project and specific subprojects are analyzed and understood adequately; that all associated adverse impacts are captured through screening, effectively mitigated, and monitored; and that the institutional capacity to ensure that this happens is maintained and supported financially through the Project. The ESMF discusses the mechanism through which all investments, when they become known, will be managed.

22. **Social.** Social impacts that occur through subprojects support by the Additional Financing are expected to be positive. The successful achievement of the PDO will create positive social development outcomes in the agricultural and nonagricultural sector. Positive social development outcomes are especially likely because of the Project's strong focus on empowering farmer and community groups (especially poorer farmers and women) through greater participation in local planning and control of resource allocation decisions related to services and investments. To ensure greater participations and consequently benefits for the rural community, the Project was prepared through broad consultations and involvement with stakeholders, including farmer and community groups, LGAs, private service providers, zonal research institutes, national level ministries, and staff from local universities. Several multistakeholder task forces were established to oversee the preparation of various elements of the Project. Throughout the life of the ASDP, consultations will continue. Despite these efforts, some risk remains that these outcomes may not be achieved for all Project stakeholders or persons affected by the Project, and measures to mitigate such risks are articulated in the ESMF.

23. Groundwater is increasingly recognized as a key resource for developing irrigation if it is economically feasible and viable. Detailed information on the characteristics of aquifers that could be used for groundwater irrigation is currently not available on a national scale. The same

applies to the quantity and quality of Tanzania's groundwater resources. However, through previous Project interventions, MoWI acquired some localized hydrogeological knowledge, in particular in the Internal Drainage Basin. This information should guide future groundwater development. A comprehensive assessment of all water resources, including groundwater, will be carried out as part of the preparation of Integrated Water Resources Management and Development Plans, which will be done for all nine Water Basins in the country. This activity is funded as part of the water resources development component of the Water Sector Development Program. Under the close coordination of the directorates of water resources and irrigation, this crucial and comprehensive assessment will have to be mainstreamed into the revision of the National Irrigation Master Plan, which will begin in 2009/10 as part of ASDP.

Annex B.3: Integrated Soil Fertility Management

I. Environment and Natural Resources

1. Tanzania is divided into seven major agro-ecological zones (AEZs), based on temperature, moisture, soils, and topographic characteristics. The potential and constraints of the AEZs to sustain crop production vary widely. The main factor limiting crop production is the lack of moisture, caused by high evapotranspiration (ET) and low rainfall. Over 50 percent of the country receives less than 750 mm of rainfall every year, and only 20 percent receives more than 1,000 mm. AEZs IV, V, and VI have the highest agricultural potential and contribute to the bulk of domestic crop production. These areas have generally good soils and reliable and adequate rainfall. Not surprisingly, these are also generally the areas with the highest rural population pressure.

2. The coastal and semiarid zones (I and III) are moderately suitable for annual cropping, but because they have less and more variable rainfall, good dryland farming techniques are required to produce drought-tolerant crops. The arid zone (II) has a typically low population density and annual crop production is risky, owing to the perpetual risk of drought. These are the areas with higher potential for pastoral livestock production. The alluvial plains (AEZ VII), characterized by good drainage and water management, can be used for rainfed and irrigated agriculture.

3. Tanzania's dominant soils are Cambisols (40 percent), Ferralsols (13 percent), and Acrisols (10 percent). The most fertile soils, apart from the volcanic soils (Andosols) in the North, are the Vertisols (Mbuga soils), which occupy 6 percent of the country. Only 25 percent of Tanzania's soils are estimated to be free of major constraints. Forty-seven percent exhibit moderate human-induced degradation. It is estimated that 29 percent of the land is at risk from erosion, 30 percent is affected by aluminum toxicity, and some 2 percent by salinity.

4. Smallholder farming is the backbone of the economy but is burdened by poor returns to land and labor. Much of the land is prevented from realizing its productive potential because inappropriate land-use systems and practices are leading to low, variable yields and declining productivity. The low productivity of smallholder farming is a major constraint to growth in the agricultural sector. A fundamental challenge is to improve the profitability and sustainability of farm production. In reality, the greatest scope for increasing food crop production lies in improving rainfed farming, which represents some 96 percent of the annual cultivated area.

II. Indicators of Low Land Productivity

5. The most important factors affecting the productivity of crops on well-drained soils are vegetative cover, soil organic matter content, nutrient availability, soil moisture availability, and root development. Soil fertility problems arise when one or more of these interrelated attributes are inadequate. Continuous land degradation and inadequate plant nutrition are the main causes of low land productivity in Tanzania. Research by the Department of Research and Development (DRD) in the major farming systems of the eastern zone showed negative balances of all major nutrients in all farm household categories. In Tanzania, the rate of nutrient mining is estimated to be -27 kilograms per hectare per year for nitrogen, -4 for phosphorus, and -18 for potassium.

Throughout much of the country, however, lack of soil moisture is considered the primary factor that limits crop yields.

III. Causes and Factors of Low Land Productivity

6. Improper land use and inappropriate management practices are direct causes of land degradation. The major factors related to land degradation are crop rotations that lack legumes, the reduction or elimination of fallows (especially in highly populated areas), insufficient use of manure and fertilizer, removal of crop residues for fodder, use of dung for fuel, and regular bush fires. Other factors that spur land degradation include agricultural encroachment on marginal land and the absence or poor maintenance of erosion control measures. The specific land degradation processes unleashed by these factors include soil erosion, soil compaction, loss of organic matter and soil nutrients, and water pollution. The high concentration of cereal crop production (maize, sorghum, and millet) across large areas of Tanzania has exacerbated the loss of soil fertility, because these crops have a high demand for nutrients, particularly nitrogen, whose availability is strongly linked to soil organic matter.

IV. Soil Fertility Studies by the Department of Research and Development

7. **Past research in soil fertility.** Research on soil fertility focused primarily on developing recommendations for applying chemical fertilizer on commodity crops. These recommendations were based on subsidized prices of the main cash crops (coffee, cotton, sisal, tobacco, and cashew). Research on fertilizer for food crops covered maize, rice, wheat, and sorghum. The research process was managed entirely by researchers, who derived their conclusions from monocropping systems that did not represent the conditions encountered by most farmers. The recommendations were not adopted widely, especially for food crops, because subsidies on agricultural inputs were lifted, crop prices were low, and credit facilities had collapsed. Subsequent research continued to develop blanket fertilizer recommendations that gave little consideration to smallholders' socioeconomic environment and variations in Tanzania's agro-ecological conditions. Organic amendments and land husbandry practices received less attention than chemical fertilizer.

8. **Farming systems approach (FSA) and client-oriented research (COR).** The advent of a farming systems approach and client-oriented research in the 1990s enhanced farmers' involvement in the research agenda and in identifying and testing potential technologies. The importance of identifying farmers' different socioeconomic circumstances and providing a broader range of integrated soil fertility management options for them to choose from, depending on their specific circumstances, is now recognised and applied in day-to-day soil fertility management activities. Client-oriented research was reinforced through the establishment of National and Zonal Agricultural Research Funds, which require clients to participate in determining how the funds will be allocated. Researchers recognized the need for distinguishing among socioeconomic categories of farmers and for providing a broader range of soil management options, from which farmers could select their preferred option.

9. **Integrated plant nutrition management.** Drawing on the lessons from its previous narrow focus on chemical fertilizer, DRD initiated research on integrated plant nutrition management practices. This holistic, participatory research seeks to develop low-cost

technologies based on locally available inputs, which are used in combination with economically optimal levels of purchased fertilizer and appropriate land and crop husbandry practices (such as minimum tillage, moisture management, timely weeding, crop rotations, nutrient cycling, and improved fallows). Research on integrated plant nutrient management provided scope to reinterpret the results of earlier fertilizer trials in light of the prevailing economic context and develop locally appropriate, cost-effective fertilizer recommendations.

V. Research Activities by the Agricultural Research Institute, Mlingano

10. The role of ARI–Mlingano is to enhance agricultural production and alleviate poverty in Tanzania by generating and contributing knowledge and creative solutions developed in a participatory, client-oriented way. More specifically, the Institute develops appropriate soil and water management technologies that will sustain these natural resources. ARI-Mlingano develop inventories and maps of land resources in Tanzania, maintains and manages a database on prior plant nutrition research on all major crops, identifies soil fertility constraints, develops fertilizer technology (focused on refining current fertilizer recommendations), and provides laboratory services.

VI. Purpose and Justification for Integrated Soil Fertility Management

11. Despite continued soil fertility management research and development, land degradation has intensified, and the productivity of smallholder farming remains low. Unless steps are taken to combat present levels of land degradation, most people will face greater food insecurity, poverty, and social instability due to deteriorating environmental quality.

12. A growing number of successful activities within Tanzania are enabling resource-poor farmers to restore, maintain, and enhance the productivity of their soils. The principal gap is the absence of a coherent framework to integrate the wide array of activities and projects. A more coherent framework would begin by building on the many localized, time-bound interventions in soil fertility management (past and present) in Tanzania, to lend impetus to a national effort to improve soil productivity. This national effort would rely on consistent policies; on consolidating and supporting on-farm research and development that is client- and results-oriented; and on scaling up the dissemination and extension of successful experiences and good practices.

13. The Government of Tanzania has responded to this need in several ways. One of its major efforts is NAIVS, the new input voucher scheme, designed to increase poor farmers' access to and use of fertilizer and improved seed at initially subsidized prices. This approach, which started with 2 districts, is now being scaled up to 53 districts in high-potential zones for maize and rice production. For NAIVS to yield the expected results, a number of complementary activities must be carried out in the districts where the voucher scheme is implemented.

14. **Objectives of integrated soil fertility management in support of the voucher scheme.** The *broad objective* of integrated soil fertility management (ISFM) is to improve the advisory capacity of extension services by providing adapted soil fertility management recommendations to farmers. *Specific objectives* are to: (i) develop soil fertility management options and fertilizer recommendations adapted to farmers' conditions and (ii) increase the capacity of zonal soil laboratories to analyze soil samples.

15. **Proposed activities to achieve these objectives.** Two primary sets of activities are envisioned.

- **Developing and identifying ISFM technologies.** These activities (which will also reinforce the achievement of ASDP objectives) will yield ISFM technologies that are socially, economically, and agronomically suitable for major AEZs in some of the districts where the voucher system operates. The first step is to conduct a detailed characterization of soils (morphological, physical, chemical, and mineralogical), socioeconomic circumstances, and climate (rainfall, evaporation, temperature, and solar radiation). Based on these detailed analyses, prospective best practices for ISFM can be identified and developed for crop(s) in major AEZs. To verify and demonstrate best-bet technologies, experiments will be established and monitored in farmer's fields in 30 selected districts. The selection of the most suitable management practices and crop varieties will take the profitability of the enterprise into account, based on a thorough understanding of local and external markets, including value addition and cost-benefit analysis.
- In a complementary effort, the Project will develop the capacity of farmers, extension agents, researchers, and other key players, including the District Facilitation Teams (DFTs), to implement and promote the best-bet technologies. Capacity building will also involve training ensure that ISFM activities are integrated into the district planning process.
- **Strengthening soil laboratory analytical services.** Tanzania's soil laboratories risk losing their capability to analyze soil and plant samples to the required standards. Analytical methods and equipment have advanced significantly in recent years, and Tanzania lacks qualified personnel who are trained to use them. The training supported under the Project aims to enhance the knowledge and practical expertise of analysts from four major laboratories in Tanzania. The analysts will be given an introductory overview of soil science and learn the fundamentals of analytical chemistry; specific procedures for obtaining the most commonly required soil and plant analytical data, including the physical and chemical processes underlying those procedures; principles of instrumental analysis; and the general interpretation of results. After the course, participants are expected to be able to take soil and plant samples from the field, prepare them for analysis, prepare the required reagents, analyze the samples, and interpret the results. The efficiency of the laboratories themselves will be improved by providing new equipment for the most frequently demanded analysis (a list of equipment is included in Table B.3.2).

VII. Additional Financing Support

16. Additional Financing for ISFM will be allocated as follows among the activities described above:

- Soil fertility research, verification trials, and introduction of ISFM technologies (US\$1.2 million).
- Strengthening soil laboratory analytical services (US\$0.1 million).

VIII. Dissemination of Results

17. A communications and knowledge-sharing strategy will be implemented throughout the Project to ensure two-way flow of information between stakeholders and researchers. Research outputs will be disseminated in one or more of the following ways: (i) through media that target distinct groups of stakeholders, including policy makers, researchers, development planners, extension, and farmers (women, men, youths); such media could include newsletters, bulletins, leaflets, and manuals as appropriate; (ii) field days at the division level for all farmers, local leaders, and opinion leaders; (iii) district workshops to sensitize district heads and policy makers on Project progress and findings; and (iv) regional/international conferences to share findings with the international scientific community.

18. Estimated costs of ISFM activities are shown in Table B.3.1.

Table B.3.1: Cost estimates, integrated soil fertility management activities (US\$)

Category	2009/10	2010/11	2011/12	Total
Demand-driven Technology Generation	381,388.2	333,530.8	4615.4	719,534.4
Capacity Building: Farmers and Extension		201,246.2	215,802.3	417,048.5
Information Dissemination	24,092.3	9,431.5	29,883.2	63,407.0
Training in Laboratory Technicians	35,639.0			35,639.0
Laboratory Goods		41,515		41,515.0
Subtotal	441,119.5	585,723.5	250,300.9	1,277,145.2
Contingency	22,055.9	29,286.2	12,515.0	63,857.3
Total	463,175.5	615,009.7	262,817.7	1,341,002.4

Table B.3.2: Budget for laboratory capital items (Tsh)

Description	Unit	Cost/unit	Units required	Total cost
pH meter	Pc	2,100,000	2	4,200,000
Electrodes for pH meter	Pc	500,000	10	5,000,000
Electroconductivity meter	Pc	1,300,000	1	1,300,000
Conductivity cells	Pc	195,000	6	1,170,000
Electronic balance	Pc	1,900,000	4	7,600,000
Hot plate magnetic stirrer	Pc	520,000	4	2,080,000
High-pressure vacuum pump	Pc	4,160,000	2	8,320,000
Soil crusher/grinder	Pc	2,400,000	2	4,800,000
Pressure plate–1 bar	Pc	250,000	10	2,500,000
Pressure plate–3 bar	Pc	300,000	20	6,000,000
Pressure plate–5 bar	Pc	500,000	10	5,000,000
Pressure plate–15 bar	Pc	600,000	10	6,000,000
Total cost				53,970,000

Note: Exchange rate US\$1 = Tsh 1,300.

IX. Benefits and Risks

19. The proposed intervention targets smallholder farmers, who will be involved in all Project activities at the farming system level, from planning through implementation, monitoring, and evaluation. Extension staff and district planners will also participate actively in planning, executing, monitoring, and evaluating activities. Tanzania's emphasis on decentralization has placed powers and responsibilities for implementing policy at the district level. To sustain the Project's accomplishments, district authorities will be trained and assisted in including ISFM activities into their annual environmental, agricultural and other development plans. Institutions, both Governmental and nongovernmental, with mandates for supporting soil management and land use will also be involved in planning and implementation process.

20. District personnel will be trained to conduct trials addressing soil-related constraints in selected sites, obtain data on crop response to fertilizer and other technologies, and determine economically optimal rates of fertilizer application. By the end of the Project, adapted fertilizer recommendations will be produced.

21. There is little risk associated with implementing this intervention. One moderate risk is that information generated through the Project will not be disseminated. It is hoped to mitigate this risk by involving extension staff and district planners directly in planning and executing activities from the start, giving them full responsibility for implementation. Adequate training and orientation programs will be planned and implemented.

Annex B.4: Environmental and Social Safeguards

I. Potential Environmental and Social Safeguards

1. The Original Project is being implemented in 132 districts throughout Mainland Tanzania. A significant share of funding under the Original Project and the Additional Financing will support activities planned through the DADPs, which include subprojects to rehabilitate small-scale irrigation, funded through grants (DADGs) and the district fund (DIDF) (a competitive funding window under ASDP). The proposed Additional Financing will fill part of the DIDF financing gap for small-scale irrigation and hasten implementation through existing arrangements. The Additional Funding will also support research and extension for ISFM.

2. For these reasons, the Environmental Assessment classification of **Category B** and the World Bank Safeguards policies triggered under the Original ASDP will continue to be triggered under the Additional Financing:

- Environmental Assessment (OP4.01)
- Pest Management (OP4.09)
- Involuntary Resettlement (OP4.12)
- Safety of Dams (OP4.37)
- Projects on International Waterways (OP7.50)

3. The environmental and social impacts of the Project are associated with the implementation of subprojects contained in the DADPs and from national irrigation schemes funded by the National Irrigation Development Fund (NIDF).

4. As investments in irrigation increase in larger districts, the potential impacts may become more significant, intense, and widespread. Even so, most adverse impacts associated with the DADPs and DIDF investments can be managed by the beneficiaries, with some training and monitoring by district and zonal institutions.

5. These impacts may be associated with the unsustainable abstraction of water (affecting water quantity and quality), point and non-point pollution of water sources, soil erosion, and increased loss of soil fertility, all of which would increase the pressure to extend agriculture into marginal lands. Water and land use conflicts may ensue. A further consideration is that irrigation schemes can serve as breeding grounds for disease vectors such as mosquitoes. It is critical to public health for these schemes to be managed properly.

6. The Additional Financing will support ISFM activities that are expected to contribute positively to the environment by addressing one of the key environmental issues affecting agriculture and general land use in Tanzania.

II. Review of Implementation of Agreed Safeguards in the Original ASDP

7. Under the Original ASDP, the Government prepared and disclosed an Environmental and Social Management Framework (ESMF). The ESMF was reviewed by the Task Team and found to be adequate to capture issues associated with this Additional Financing.

8. Based on the reviews, supervisions, and lessons learned from the Original ASDP, several recommendations/activities were proposed during appraisal to strengthen the performance of environmental and social safeguards:

- The ESMF and Resettlement Policy Framework (RPF) were to be distributed to the districts and ASLMs, and integrated in the ASDP monitoring system by April 30, 2009.
- The ESMF and RPF processes were to be incorporated into the DADP guidelines, and issued by PMO-RALG, by April 30, 2009.
- Training on use of the ESMF were to be held in September 2009 based on a training-the-trainers approach, whereby the National Facilitation Team (NFT, 22 members in total) would be trained. The NFT would in turn train the District and Ward Facilitation Teams (DFTs and WFTs). The NFT members as part of their training will be provided with training guidelines, manuals, and modules to ensure that the same standard of training is given to the DFT and WFT members. Training of NFT, DFT, and WFT members were to be completed by September 2009.
- Appropriate staffing will be provided at the district level to ensure that environmental and social safeguard issues are addressed with due diligence. This effort includes enhancing technical skills in managing agro-chemicals at the community level.
- The DFTs and WFTs are required, when planning DADP subprojects, to exercise due diligence with respect to water and soil conservation, especially in areas with steep slopes and thus high erosion risk.
- An important instrument that will inform Project implementation is the Strategic Environmental and Social Assessments (SESA). It was agreed that the Government will carry out the SESA by June 2010.

III. Status of Implementation of the Recommendations

9. A letter dated March 25, 2009 from MAFC to IDA confirmed that the Government of Tanzania had dispatched 132 copies of the ESMF and RPF to PMO-RALG for onward distribution to all 132 LGAs.

10. The Government has also confirmed that (i) the ESMF management measures have been integrated into the official DADP Guidelines; (ii) the training of the NFT and DFTs would be carried out by September 2009; (iii) capacity building needs assessments of Regional Secretariats is planned to be completed before formal DFT training on the ESMF in September 2009; and (iv) training on proper use and management of agro-chemicals for farming communities will also be done by September 2009.

IV. Environment Assessment (OP4.01)

11. The Additional Credit for ASDP will maintain the Original Project's Environmental Assessment classification of **Category B**, and the original ESMF will continue to apply, as discussed earlier.

12. Environmental management for increased water use associated with irrigation. About 96 percent of the Additional Financing will be earmarked for small-scale irrigation

schemes through the District Irrigation Development Fund (DIDF). There are two main issues for the management of additional investments in irrigation:

- i) **The riparian issue** (covered under Section H on OP7.50).
- ii) **The environmental and social management of irrigation.** Two levels of management have been agreed, similar to what was agreed in the Original ASDP:
 - *The subproject level.* At the subproject level, environmental and social management will be undertaken through use of the ESMF in all districts.
 - *National strategic environmental and social management of irrigation.* The SESA being prepared under the Original ASDP adequately covers the irrigation issues in this Project and the agricultural sector in Tanzania, since the SESA covers national irrigation policy and the national irrigation master plan and will provide specific guidance for the preparation of Environmental and Social Assessments (ESAs) for individual national irrigation projects. The Government of Tanzania will award a contract to conduct the SESA by June 2009. The assessment is expected to be completed by June 2010. The SESA will contain an action plan with specific recommendations for ministerial action to strengthen irrigation management through an integrated national and regional water management approach. IDA will closely review the findings and recommendations as part of its overall decision-making process to determine if it will finance larger-scale irrigation in Tanzania in subsequent programs.

13. **Cumulative impacts.** During the final year of implementation and no later than three months before Project close, the Government has agreed to complete a Cumulative Impact Assessment (CIA) report. The assessment will ensure that the Government determines the cumulative environmental and social impacts of ASDP and the concomitant additional management measures that may be required. The CIA will be done jointly with the ERL operation.

V. Pest Management (OP4.09)

14. The Government has proposed to IDA that it wants to adopt and mainstream the Integrated Pest Management Plan (IPMP), prepared under the Original ASDP in August 2004, for general use in Tanzania and particularly for use in activities covered under this operation. This is the same document that the Emergency Recovery Loan for the Accelerated Food Security Project proposes to use. IDA has agreed to this approach and has:

- Reviewed the overall comprehensiveness of the original IPMP. The Government has also updated the IPMP to ensure that it captures all of the activities funded in this Project, thereby ensuring compliance with OP4.09 and the Government's own requirements.
- Reviewed the Government's performance in implementing the original IPMP in the ASDP, which has been effective since 2006, to draw lessons from that experience.

- Identified capacity gaps in the institutional and regulatory framework. In response the Government has prepared a standalone Integrated Pest Management Capacity Building Plan to ensure that effective implementation of the IPMP is sustainable beyond the life of the Project.

14. The IPMP provides clear, detailed guidelines in a matrix based on agro-ecological zones, pre- and postharvest periods, pests, diseases, and suggested treatment methodologies associated with maize, rice, and many other major crops.

15. An intrinsic part of any successful integrated pest management approach is strong and effective knowledge management across the rural, farmer, extension, and research communities, other supporting institutions, and policy makers. For this reason, the IPMP Capacity Development Plan provides details on measures related to training, support services, and information dissemination that will be funded and implemented in the short- and medium-term under the Project. These measures were developed based on an assessment of the capacity building requirements that must be met for various institutions and stakeholders to fulfill local requirements and the World Bank's own OP4.09.

16. In addition to the farmer and extension communities, key institutions targeted include MAFC's Plant Health Services (PHS) and the Tropical Pesticides Research Institute (TPRI), which are the two main regulatory bodies for pest management.

17. Additionally, the Capacity Building Plan funds the development of tangible standard operating procedures and a manual for different crops; training in those procedures; the provision of inspectors and inspection kits at key entry points; and the upgrading of quarantine facilities.

18. The current versions of the IPMP and Capacity Building Plan are under review. Final versions will be disclosed in Tanzania and at the World Bank's INFOSHOP.

VI. Involuntary Resettlement (OP4.12)

19. The Original ASDP prepared an RPF, and to date OP 4.12 has not been triggered by the specific investments financed by ASDP. During the implementation of this Additional Financing in the districts, the Project requires that subproject conduct ESIA's. These studies will be conducted to obtain more detailed, site-specific information about Project activities and impacts and determine whether they would trigger OP 4.12, especially in districts, where the development and rehabilitation of irrigation schemes may be intensified. In the event of any significant impacts resulting from Project activities, a resettlement action plan will be prepared and executed in line with World Bank and Government policies. In addition, the results of the SESA, capacity assessment, and district and zonal training will ensure that safeguard issues are addressed in a timely fashion and with due diligence.

VII. Safety of Dams (OP4.37)

20. Irrigation infrastructure will include small dams and dykes. To comply with Safety of Dams OP4.37, the Government of Tanzania has integrated the dam safety requirements into the ESMF for situations where it may apply.

VIII. Projects on International Waterways (OP7.50)

21. The Original ASDP triggered OP7.50, and on April 3, 2006 the World Bank, at the request of the Government, sent Riparian Notification Letters to concerned countries. The World Bank has confirmed that the “notified areas and water abstraction amounts” from riparian sources covered by these original letters will be exceeded by the additional irrigation to be financed by the Additional Financing for the ASDP. The World Bank and the Government determined: the additional amounts of water required in terms of irrigation areas and water abstraction rates under the Additional Financing, and agreed that new Notification Letters would be sent to the same riparian countries. In a letter to the World Bank dated April 2, 2009, the Government of Tanzania has requested the World Bank to send the new Riparian Notification Letters on its behalf. The letters were sent on April 21, 2009, with a request to riparian countries to respond to the proposed irrigation investments by May 21, 2009. As of c.o.b. May 21, 2009, no objections to the proposed irrigation investments had been received.

IX. Social, Gender, and Poverty Impacts

22. **The Project has strong social accountability and demand-governance design elements.** The successful achievement of the PDO will lead to positive social development outcomes within and outside the agricultural sector. The Project focuses strongly on empowering farmer and community groups (especially groups of poorer farmers and women) through greater participation in local planning and greater control over resource allocation decisions for services and investments. The Project is designed to promote social accountability and demand governance by building capacity within institutions and at the local level to enhance the efficiency of service delivery. More specifically, the Project will offer training in participatory monitoring and impact evaluation through community score cards that measure service delivery. To ensure greater participation and thus more benefits for the rural community, the Project was prepared with, and informed by, broad stakeholder consultations and involvement, including farmer and community groups, LGAs, private service providers, zonal research institutes, national ministries, and staff from local universities. Several multistakeholder task forces were established to oversee preparation of various elements of the Project.

23. **Community Score cards will serve as a public tool for improving service delivery.** To assess Project impacts, community cards will be used to collect information from beneficiaries about the quality and efficiency of agricultural extension services. It is anticipated that with robust, gender-sensitive data, farmers will be able to assess public services and demand improvements. The score cards will serve to raise public awareness, empower farmers, and promote transparency and accountability.

Annex B.5: Financial Management Assessment

I. Status of Matters Arising from Previous Mid-Term Review Held in September 2008

1. At the MTR, the financial management (FM) rating was **marginally satisfactory** and the key issues arising were included in the FM action plan. These issues are summarized in Table B.5.1.

Table B.5.1: Key financial management issues arising from the Mid-Term Review

	Issue	Current status
1.	Recommendations of the Review of financial management, flow of funds, and reporting should be implemented to improve the flow of funds to both local and national levels.	The Steering Committee recommended the establishment of a Thematic Working Group to address this matter. The Group has held two meetings to date and hence this matter is receiving attention.
2.	Training in financial reporting and disbursements for Accountant and Internal Auditors should be undertaken urgently.	IDA has run a one-day seminar on financial reporting, and ASDP (MAFC) staffs were in attendance.
3.	Ministry of Agriculture, Food Security and Cooperatives (MAFC) and Prime Minister's Office–Regional Administration and Local Government (PMO-RALG) finance units need to agree on coordination of and supervision mechanism for financial aspects, including quarterly financial reports by Local Government Authorities (LGAs).	This matter is also being addressed by the Thematic Working Group.
4.	Internal Auditors at Agricultural Sector Lead Ministries (ASLMs), PMO-RALG, and LGAs trained to undertake risk-based audits and improve report writing skills.	This matter is being handled at the national level by the Accountant General. During recent supervision missions for other projects, it has been noted that the Internal Auditors are increasingly making reference to risk assessment.
5.	Options for biannual disbursements to LGAs should be discussed with Ministry of Finance and Economic Affairs (MOFEC) to ensure timely availability of adequate resources at local levels.	(i) Where development partners' disbursements are concerned, the Government has already requested changes in the Memorandum of Understanding and financing agreements for funds to be disbursed on an annual basis. (ii) In relation to changes in the timing of the release of funds from the Basket Fund Holding Account to LGAs, this matter is also part of the terms of reference for the Thematic Working Group.

II. Matters Arising from the External Audit Reports

2. **External Audit reports issues:** As per the Public Finance Act, 2001, the National Audit Office is responsible for auditing all Government organizations including Donors funds. The audit reports of both ASLM 2006/2007 and ASDP 2007/2008 were submitted to the Bank within the acceptable time period; the audits were conducted in accordance with the International Standards of Auditing and procedures that are consistent with those recommended by the World Bank Guidelines. The auditor issued an unqualified audit opinion on the Project financial statement.

III. Financial Monitoring Reports (FMRs):

3. The Project uses report based disbursement method to replenish the Basket Fund Holding Account. The Financial Management Reports (FMRs) have been submitted to the Bank quarterly during the last years. They were reviewed by the Financial Management Specialist and found to be satisfactory.

IV. Recommendation

4. Although the key issues raised in the last supervision mission are yet to be fully resolved, the establishment of the Financial Management Thematic Working Group is a positive step in the resolution of these issues. The Financial Management team should continue to monitor the progress of this working group closely. Overall Financial Management is assessed to be satisfactory.

Annex B.6: Procurement Capacity Assessment

I. Mid-Term Review Findings and Recommendations

A. National or Central Level

1. The Ministry of Agriculture, Food Security and Cooperatives (MAFC) is the focal point for coordinating ASDP procurement activities for the Agricultural Sector Lead Ministries (ASLMs) at the national level or central level (the ASLMs include MAFC, MLDF, MITM, MoWI, and PMO-RALG). MAFC consolidates the annual Procurement Plan (PP) and the ASLMs process procurement through their respective Procurement Management Units (PMUs).

2. Implementation of the planned activities at this level was found to be unsatisfactory during the September/October 2008 MTR of ASDP. The review noted delays in preparation of technical specifications for goods/equipment, terms of reference for consultancy services, bidding documents, and evaluation reports. Furthermore, the PMUs were found to encounter a challenge in implementing some activities in the Procurement Plan, as the Plan seems to be ambitious. It was recommended that preparation of the annual Procurement Plan be integrated into the process of preparing the annual work plans for realistic output.

3. The MTR also noted inadequate coordination between the PMU of MAFC and PMUs of the other ASLMs in planning and implementing ASDP procurement activities. The mission recommended that heads of PMUs should be fully involved in the ASDP activities and be aware of relevant documents (in particular sections dealing with procurement) such as the Government Program Document (Annex 18 of Project Appraisal Document), Memorandum of Understanding (MOU) between the Government of Tanzania (GOT) and the Development Partners (DPs), the Financial Mechanism Document, and bilateral agreements with participating development partners. It was further recommended that heads of PMUs participate as observers in meetings of thematic working groups such as the Planning and Implementation group, so that they are exposed to implementation issues and challenges and provide guidance on procurement issues. The MTR mission also recommended that procurement staff in ASLMs attend short courses on procurement conducted by the Eastern and Southern African Management Institute (ESAMI) to improve their capacity.

4. In response to some of the weaknesses identified during that review, a procurement and financial management thematic working group consisting of staff from procurement and finance units of the ASLMs has been established to enhance coordination, communication, and interaction with other ASDP technical groups. In addition, a short-term consultant was engaged to provide hands-on procurement capacity building to PMUs to improve their skills in planning and preparing bidding documents, requests for proposals, and evaluation reports.

B. Local Level

4. Implementation of the ASDP at the local level is under the leadership of the District Executive Directors (DED). District Facilitation Teams (DFTs) consists of technical experts (planning officer, community development officer, and cooperative and marketing officer,

among others) at the district level. They have skills in participatory preparation and appraisal of schemes /subprojects.

C. Community Participation in Procurement

5. To enhance community ownership of investments, during the third MTR it was recommended that procurement activities for subprojects at the local level should be solely managed and implemented by communities, with District Authorities responsible for oversight.

II. Assessment for Additional Financing

6. An assessment of the procurement capacity of ASDP has been carried out for the Additional Financing to ASDP, and key issues and risks identified. The assessment found that (i) staff in the MAFC PMU were overwhelmed with ongoing procurements under donor funding and procurements under Government own financing; (ii) procurement staff have inadequate experience in procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts; (iii) inadequate expertise and delays from user departments in preparing technical specifications and terms of reference; and (iv) there is a lack of procurement knowledge and record keeping at the community level. The overall Project risk for procurement was rated as high and corrective measures identified. The actions to mitigate the risk include: (i) use the services of short-term consultants to provide hands-on capacity building to procurement staff (ii) procurement staff to attend training on procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts; (iii) training staff in data management and procurement filing; (iv) departments to engage competent authorities and consultants in preparation of specifications and terms of reference; (v) training of trainers at the LGA level; and (vi) disseminating the procurement manual to communities through LGAs. Implementation of the proposed actions is given in Table B.6.1.

7. IDA and other Basket Fund donors have agreed to include Community Participation in Procurement as one of the procurement methods. The Project implementation team has prepared a procurement manual containing procedures for carrying out procurement at the community level. The procurement manual includes sample community procurement documents, such as quotations and agreements. The manual will be translated into Kiswahili and distributed to the LGAs for dissemination to communities

8. Based on the procurement capacity assessment and the adoption of the proposed mitigation measures, the residual procurement risk is expected to be moderate.

Table B.6.1: Implementation plan for the proposed actions

Risk	Action	Time frame	Responsibility
Procurement staff in the Procurement Management Unit overwhelmed with ongoing procurements under donor funding and procurements under Government own financing.	Use services of short-term consultants to be hired under AFSP to build capacity of PMU through “learning by doing”	During implementation of the ASDP	Borrower
Inadequate experience in procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts especially after revising thresholds for ICB/NCB and for prior review upwards	Key procurement staff identified for training in procurement of works and goods through ICB procedures as well as in selection of large-value consultancy contracts. Selected NCB contracts to be prior reviewed.	During implementation of the ASDP	Borrower and IDA
Inadequate procurement filing and record-keeping.	Train staff in data management and establish acceptable procurement filing and record-keeping.	Within six months of the date of effectiveness of the Additional Financing Credit	Borrower and IDA
Delays from user departments in preparing technical specifications and terms of reference.	Use competent authorities and consultants. Build capacity of staff in the user departments.	During implementation of the ASDP	Borrower
Inadequate procurement planning	Prepare a draft procurement plan.	Presented and agreed to at negotiations	Borrower
Inadequate procurement knowledge and record-keeping at community level	Training of trainers at LGA level and dissemination of the procurement manual through the LGAs.	During implementation of the ASDP	Borrower

Annex B.7: Procurement Plan

I. Details of the Procurement Arrangements Involving International Competition and Other Methods

A. Goods, Works, and Nonconsulting Services

1	2	3	4	5	6	7	8	9
Ref. no.	Contract (description)	Estimated cost (US\$)	Procurement method	P-Q	Domestic preference (yes/no)	Review by IDA (prior/post)	Expected bid-opening date	Comments
1	Laboratory equipment	42,000	S	NA	NO	Post	Sept 15, 2009	
2	Rehabilitation of irrigation schemes Package 1—(<i>Designs ready</i>)	4,000,000	NCB	NA	NO	Selected for Prior Review	Aug 15, 2009	
3	Rehabilitation of irrigation schemes Package 2—(<i>Designs ready</i>)	3,290,000	NCB	NA	NO	Post	Oct 15, 2009	
4	Rehabilitation of irrigation schemes (Package A – 4 Lots)	2,710,000	NCB	NA	NO	Selected for Prior Review	Jul 15, 2010	
5	Rehabilitation of irrigation schemes (Package B – 4 Lots)	2,400,000	NCB	NA	NO	Post	Aug 15, 2010	
6	Rehabilitation of irrigation schemes (Package C – 4 Lots)	2,400,000	NCB	NA	NO	Post	Sept 15, 2010	
7	Rehabilitation of irrigation schemes (Package D – 4 Lots)	2,400,000	NCB	NA	NO	Post	Oct 15, 2010	

ICB contracts for works estimated to cost above US\$5,000,000 equivalent per contract, for goods estimated to cost above US\$500,000 equivalent per contract, and all direct contracting will be subject to prior review by the Bank. However, a specified number of NCB contracts will be identified in the Procurement Plan to be prior reviewed

B. Consulting Services

(a) List of consulting assignments with short-list of international firms and other selection methods.

1	2	3	4	5	6	7
Ref. no.	Description of assignment	Estimated cost (US\$)	Selection method	Review by IDA (prior / post)	Expected proposals submission date	Comments
1	Design and Supervision Services (Package A – 4 Lots)	240,000.00	QCBS	Prior	15th Dec 2009	
2	Design and Supervision Services (Package B – 4 Lots)	240,000.00	QCBS	Prior	15th Dec 2009	
3	Design and Supervision Services (Package C – 4 Lots)	240,000.00	QCBS	Prior	15th Dec 2009	
4	Design and Supervision Services (Package D – 4 Lots)	240,000.00	QCBS	Prior	15th Dec 2009	

(b) Consultancy services estimated to cost above US\$200,000 equivalent per contract for firms and single source selection of consultants will be subject to prior review by the Bank. Prior review of the evaluation process for individual consultant contracts above US\$100,000 will be done in exceptional cases only, e.g., when hiring consultants for long-term technical assistance or advisory services for the duration of the Project.

(c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

II. Thresholds for Procurement Methods and Prior Review

Expenditure category	Contract value threshold(US\$)	Procurement/selection method	Contracts subject to prior review
Works	>5,000,000	ICB	All
	<5,000,000	NCB	None (Post review) unless specified in the PP
	<50,000	Shopping	None (Post review)
	All values	Direct Contracting	All
Goods	>500,000	ICB	All
	<500,000	NCB	None (Post review) unless specified in the PP
	<50,000	Shopping	None (Post review)
	All values	Direct Contracting	All
Consulting Services - Firms¹	> 200,000	QCBS/ Other ² (QBS/FBS/LCS)	All
	< 200,000	CQS/ Other ² (QBS/FBS/LCS)	None (Post Review)
	All values	SSS	All
Consulting Services Individuals (IC)	>100,000	IC - Qualification	None (Post review) unless specified in the PP ³
	<100,000	IC - Qualification	None (Post review)
	All Values	IC - SSS	All
Subprojects⁴	>50,000	Community Participation	All

Note: Terms of reference (TOR) for all contracts shall be cleared by IDA.

- Shortlists for consultancy services for contracts estimated to be less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.
- QBS, FBS, and LCS for assignments meeting requirements of paragraphs 3.2, 3.5, and 3.6, respectively, of the Consultant Guidelines.
- The selection of Individual Consultants will normally be subject to post review. Prior review will be done in exceptional cases only—for example, when hiring consultants for long-term technical assistance or advisory services for the duration of the Project, and prior review of these contracts will be identified in the Procurement Plan.
- Proposed Procedures for Community Driven Development (CDD) Components – Subprojects as per paragraph 3.17 of the Procurement Guidelines.

ATTACHMENT C: ADDITIONAL FINANCING FOR TANZANIA SECOND SOCIAL ACTION FUND (TASAF II)

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an Additional Financing in an amount of SDR20.2 million (US\$30 million equivalent) to the United Republic of Tanzania, for the Tanzania Second Social Action Fund (TASAF II), Credit No.4002 TA and Grant No. H134TA.

2. The proposed Additional Financing will complement the National Agricultural Input Voucher Scheme (NAIVS) funded under the Accelerated Food Security Project (AFSP) by increasing social protection to food-insecure and vulnerable persons. This goal will be achieved by scaling up interventions under TASAF II in selected food-insecure districts in the Mainland (initially 40 districts) and Zanzibar (Unguja and Pemba). Under the AFSP, the agricultural inputs voucher scheme will provide subsidized fertilizer to farmers only in high-potential agricultural areas of the Mainland. The proposed Additional Financing described here would (i) finance costs associated with scaling up labor-intensive public works, so that able-bodied but food-insecure persons can earn a wage and buy food from the market and (ii) provide support to vulnerable persons in food-deficit districts so that they can better manage and mitigate risks arising from the food crisis.

II. Background and Rationale for Additional Financing

3. **Background.** The Tanzania Social Action Fund is a community-driven development (CDD) operation launched by the Government of the United Republic of Tanzania in 2000, as one of the instruments for fighting poverty. TASAF delivers critical infrastructure services and social assistance to the urban and rural poor while addressing institutional, organizational, and capacity-building needs at village and district levels. After successful implementation of the first TASAF from December 2000 to June 2005, a second phase of TASAF was prepared. TASAF II was approved by the Board on November 30, 2004 and became effective on May 11, 2005. IDA support for TASAF II consists of a Credit of SDR 87.9 million (US\$129 million equivalent) and a Grant in the amount of SDR14.4 million (US\$21 million equivalent) (Table C.1). The Project is funded by IDA, the participating communities, and the United Republic of Tanzania, and its coverage is nationwide, operating through the Local Government Authorities (LGAs) in the Mainland and Zanzibar (Unguja and Pemba). TASAF II has three beneficiary groups: Service Poor Communities (which lack health, education, and other social infrastructure services), Able-Bodied but Food Insecure Individuals, and Vulnerable Groups (which include orphans, widows and widowers, people affected and infected by HIV/AIDS, unemployed youths, and the elderly).

4. The current Project Development Objective (PDO) of TASAF II is: To empower communities to access opportunities so that they can request, implement, and monitor the delivery of services through subprojects that contribute to improved livelihoods and are linked to the attainment of the associated Millennium Development Goals indicators specified in the Tanzania National Strategy for Growth and Poverty Reduction. During the MTR, the Bank and the Government jointly decided to rephrase the Development Objective, without changing its

spirit, to make it clarify its focus (discussed in section III below). It was also decided to bring the key performance indicators into line with the rephrased PDO. The proposed indicators are more Project specific and improve the results framework (see Annex C.1).

Table C.1: Key Project data and performance of TASAF II, March, 2009

Key data	Project performance
Total Grant and Credit amount: US\$150m (Credit: US\$129m; Grant: US\$21m)	Development Objective: Satisfactory
Effectiveness date: May 11, 2005	Implementation Progress: Satisfactory
Closing date: June 30, 2010	Financial management: Satisfactory
Current disbursement: Credit: US\$108.7m; Grant: US\$19m	Procurement: Satisfactory
Remaining balance: * Credit: US\$22m; Grant: US\$2.8m	Environmental Safeguards: Satisfactory
Legal covenants: Complied with	

* The figures do not add up to the original figures because of exchange rate gains.

5. TASAF II (also referred to as the “Original Project”) has two components. The first is the National Village Fund (NVF) (US\$120 million), which enables communities to: (i) access resources that can stimulate economic activity and enable poor households to increase their incomes; (ii) reduce their vulnerability by becoming empowered with more instruments to protect against the risks they face; and (iii) improve their access to and use of social services. The second component is Capacity Enhancement (CE) (US\$30 million), which builds the capacity of sector staff at the ward, district, and community level to undertake activities that help realize the PDO.

6. **Performance.** The Original Project is making satisfactory progress towards meeting the PDO, and its Implementation Progress has been satisfactory. A Technical Audit in October 2007 confirmed that the Original Project has created assets of good quality, which are delivered cost-effectively. A Beneficiary Assessment Report in January 2008 indicated that 87 percent of sample communities expressed satisfaction with improved access to services because of the Original Project. As of September 2008, preliminary findings from the baseline data collected for the ongoing TASAF II Impact Evaluation indicate that the Original Project has targeted the right beneficiaries in accordance with the Project’s design and selection criteria. The second round of data collection for the Impact Evaluation will be in 2009 and will allow a rigorous assessment of the impact of the project. The Evaluation will conclude in April 2010.

7. To date, the NVF has supported 6,130 community subprojects, valued at US\$112 million, leading to substantial increases in the number of people with improved access to socioeconomic service facilities (Annex C.1). Of these subprojects, 66 percent supported Service-Poor communities 28 percent supported Vulnerable Groups, and 6 percent supported Food-Insecure people. Of the committed resources, 79 percent support subprojects for Service-Poor communities, 12 percent support Vulnerable Groups, and 9 percent support Food-Insecure individuals. These figures indicate that more needs to be done for the food insecure and the

vulnerable, particularly at a time when food price shocks and the recent localized droughts are having a major negative impact on food security across Tanzania.

8. TASAF has developed a robust outreach capacity over the years, and both the organizational infrastructure that has been developed and the management and monitoring approach that it uses are much in demand for reaching more communities. The Government has channeled part of the proceeds from other sources, including IDA-funded Projects, through TASAF to use its implementation infrastructure to support community interventions⁶³. The ring-fenced funds under TASAF II total US\$33.55 million, providing support to over 762 communities for interventions that have been particularly requested, such as community forestry management, HIV/AIDS education, protection of marine and coastal environments, and construction of community assets. The Additional Financing will be similarly easily absorbed through the current implementation structure, and thousands more households and communities will be reached in a cost-efficient way.

9. The Capacity Enhancement component of TASAF II continues to provide support for building capacity among communities as well as district and national stakeholders in implementing NVF. A total of 70,030 community implementers and 3,030 district-level facilitators have been trained since TASAF II began. Transparency and upward and downward accountability have been promoted at all levels through messages communicated by print and electronic media and through the use of Community Score Cards. In addition, 21,909 individuals are active in the savings and investment initiative aimed at improving household income levels.

10. Through TASAF, the Government is implementing a four-year Community-Based Conditional Cash Transfer (CB-CCT) Pilot Project, funded by the Japanese Social Development Fund (JSDF) in the amount of US\$1,879,915. The pilot project seeks to test how community capacity can be leveraged for delivering CCT services and identify which incentives may be required to achieve results. Because of its potential to channel resources to needy households in an emergency, CCT is an instrument for reaching vulnerable households. During the MTR of TASAF II, the Borrower requested and obtained agreement that supervision of CB-CCT should be done simultaneously with supervision of TASAF II to reduce transaction costs. The CCT pilot has laid the foundation for an elaborate impact evaluation of its efforts. Currently, the baseline data are being collected. The effectiveness of the pilot project's delivery systems will be assessed by November 30, 2009. The results will be used in planning the scaled-up CCT initiative envisioned under the Additional Financing.

11. **Rationale for Additional Financing.** The Additional Financing is intended to respond to the Government's request to move Tanzania towards greater food security in light of the recent food and fuel price shocks that threaten the livelihoods of thousands of people. Food prices remain higher than the five-year average and higher than 2008 prices. High prices continue to

⁶³ These include the Tanzania Multi-Sectoral AIDS Project, the Tanzania Forestry Community Management Project, the Marine and Coastal Environmental Management Project as well as the Organization of Petroleum Exporting Countries (OPEC) Fund.

constrain households' access to food, especially if they rely heavily on food purchased from the market. As food prices begin to rise again between September and January—which is the typical pattern in Tanzania—poor, market-dependent populations in rural and urban areas will face increasing pressure, especially as prices are driven up by high transportation costs and inflation in general (USAID/Famine Early Warning Systems Network, August 2008 Food Security Update). The Government has so far responded to rising prices and household food insecurity by allocating a significantly greater share of the budget to providing small-scale farmers with fertilizers and improved seeds to raise food crop yields and take some pressure off of food prices. This initiative is implemented under the NAIVS, mentioned earlier, in districts that are high producers of food grain.

12. The Bank has responded to the Government's request to support its efforts to curb rising food insecurity and provide greater social protection for vulnerable groups through a mix of instruments, including: (i) a standalone Emergency Recovery Loan to finance the immediate need to scale up famers' access to inputs through NAIVS; (ii) Additional financing for ASDP to implement critical activities to complement NAIVS; and (iii) Additional financing for TASAF II to scale up its public works component as the primary social protection intervention.

13. Additional Financing through TASAF II will scale up its activities in vulnerable districts in the Mainland (currently totaling 40) and in Zanzibar (Unguja and Pemba). The Additional Financing fills part of the financing gap arising from the additional demand for social protection resulting from the food crisis. TASAF has received 65,511 Subproject Interest Forms (SPIFs) from communities seeking support for public works and vulnerable groups (Table C.2).⁶⁴ The 50 percent of these SPIFs that meet the eligibility criteria represent a demand for funding that exceeds US\$500 million.⁶⁵ To date, TASAF II has been able to finance 378 subprojects for the food insecure and 1,648 for vulnerable groups, at a total value of US\$23.4 million, nationwide. The Additional Financing is needed to support the unmet needs and new demands. The proposed amount of US\$30 million from the IDA is expected to finance only a fraction of the demand, estimated to be about 1,000 subprojects at current subproject threshold levels in target districts in the Mainland and in Zanzibar. The Additional Financing will also permit 45 vulnerable households in each of 60 villages to participate in the moderately scaled-up CCT Pilot Project. The inter-district resource allocation criteria for the Original Project will be applied to the Additional Financing, but they will be adjusted to reflect the severity of food insecurity and poverty in target districts. The allocation formula and subproject selection criteria are described in detail in the Project Operation Manual.

⁶⁴ Not all SPIFs become eligible subprojects for support. An analysis of these requests indicates that some do not conform to sector norms and standards, are poorly prepared, are being addressed by other development partners, or do not otherwise meet the criteria for eligibility.

⁶⁵ A significant part of the TASAF II Credit is disbursed for a National Village Fund component that caters for the Service Poor communities by providing support for social and economic infrastructure such as schools, health centers and bridges.

Table C.2: Demand for support for Food-Insecure and Vulnerable Group subprojects

SN	Subproject Interest Forms (SPIFs) generated by the communities	Food Insecure beneficiaries	Vulnerable Group beneficiaries	Total
	Proposed additional funding to the NVF Resources (Food Insecure 65%, Vulnerable Groups 17.5, and CCT 17.5)	US\$16.5 m	US\$9.0 m	US\$25.5 m
1	Total SPIFs received at TASAF Management Unit	31,645	33,866	65,511
2	Number subprojects approved by LGAs and funded to date	378	1,648	2,026
3	Value of subprojects funded to date (US\$)	9,557,948	13,834,945	23,392,893
4	Number of SPIFs not processed	31,267	32,218	63,485
5	Number of SPIFs that represent current demand (50% of row 4)	15,633	16,109	31,742
6	Number of SPIFs possibly to be processed and funded under Additional Financing for TASAF II	550	450	1,000
7	Number of potential beneficiaries of Additional Financing	220,000	13,420	233,420
8	Number of indirect beneficiaries (row 7, multiplied by 5, the average household size)	1,100,000	22,500	1,122,500

Note: Vulnerable Group Support US\$9.0 million (Vulnerable Group US\$4.5 million and CCT US\$4.5 million).

14. The number of projects to be supported by the Additional Financing is estimated to be about 1,000 (550 for Food-Insecure and 450 for Vulnerable Groups). (Note, however, that this number may increase during implementation, as communities are sensitized to implement more of the environmental enhancement subprojects, which generally require fewer resources compared to subprojects for building or rehabilitating roads and other infrastructure.) The number of beneficiaries in each target beneficiary group will be as follows:

- ***Five hundred and fifty subprojects for the Food Insecure*** (US\$16.5 million). Each subproject will have an average cost of US\$30,000 and employ about 400 individuals; thus the 550 subprojects will reach 220,000 beneficiaries directly. The total number of indirect beneficiaries will be 1,100,000 (the 220,000 employed x 5, which is the average household size in Tanzania).
- ***Four hundred and fifty subprojects for Vulnerable Groups*** (US\$4.5 million). Each subproject has an average cost of US\$10,000 and supports 10 individuals for a total of 4,500 direct beneficiaries. The number of indirect beneficiaries will thus be 22,500 (4,500 x 5, the average household size).
- ***Vulnerable Groups will also be reached through CCTs*** (US\$4.5 million). The CCTs will support 8,920 direct beneficiaries in 60 villages, with 45 households per village.

III. Proposed Changes

15. The proposed Additional Financing, as the Original Project, will continue to support the Government in developing effective, efficient financing and institutional arrangements to empower the poor and the most vulnerable. As noted, during the MTR in March 2008, the Government and the Bank agreed to rephrase the Development Objective to clarify its focus. It is thus proposed to reword the PDO and the results framework to reflect the realities on the ground without changing its spirit. The objective of the proposed Additional Financing will thus be the same as the rephrased objective of the original project as discussed below. The Additional Financing will target the communities in vulnerable districts.

- (i) *Clarify the focus of PDO.* As a result of the MTR, it was agreed with the Government that TASAF II needed to be restructured, its PDO rephrased, and its key performance indicators better aligned to realities on the ground. The original PDO was unclear and focused more on high-level processes than substantive outcomes. The reworded PDO is “to improve access of beneficiary households to enhanced socioeconomic services and income-generating opportunities.” The rewording does not change the purpose of the Project; rather it becomes more realistic and measurable. Of the 12 performance indicators in Schedule 5 of the Development Financing Agreement (DFA), 6 high-level outcome indicators were dropped, 2 modified, and 4 retained. The original table listing key performance indicators has been revised and replaced (see Table C.1(a), Annex C.1, for details). Table C 1(b) also lists additional indicators for the safety nets results chain under the Additional Financing. The indicators have also been aligned with the IDA 15 indicators.
- (ii) The Additional Financing will support the activities under the existing two components of the Original Project. However, unlike the Original Project, which has a nationwide coverage, the Additional Financing will be directed only to food-insecure districts in the Mainland (initially 40 districts) and in Zanzibar (Unguja and Pemba). The Original Project is also targeted at three beneficiary groups, as described earlier, but the Additional Financing proceeds will focus on interventions for the Food-Insecure and Vulnerable Groups and not the Service-Poor Communities. The specific activities to be supported are:
 - The *National Village Fund Component (US\$25.5 million)*: The Additional Financing will support the Able-Bodied Food-Insecure *beneficiaries* through financing livelihood and risk reduction subprojects, including implementation of small-scale community subprojects. The menu of service packages to be financed will remain the same as the Original Project, but priority will be given to conservation and restoration of natural resources they depend on for their food or livelihood like water shade restoration, reforestation of degraded areas, setting wind breaks, gullies stabilization, construction of dykes in flood-prone areas, water retention structures like earth dams, fish ponds for fish breeding/farming and small-scale irrigation schemes. The additional finance will also support the *Vulnerable Groups* through livelihood and risk reduction subprojects by financing the implementation of small-scale community subprojects, livelihood restoration and income-generating activities, as well as a moderate scaling up of the CCT pilot.

- The *Capacity Enhancement Component (US\$4.5 million)*; The Additional Financing will support Project management and other activities such as: development communication; technical assistance, and capacity building at the LGA and community level; community participatory M&E, including a beneficiary tracer study; and transparency and accountability in targeted districts in the Mainland (initially 40) and Zanzibar.
- (iii) *Formally incorporate the CB–CCT Pilot in TASAF II* under Vulnerable Group support of the NVF component, as agreed during the MTR.
- (v) *Update National Steering Committee (NSC) Membership.* The role of the TASAF National Steering Committee (NSC) has not changed, but its composition has changed following the Government’s reorganization of ministries over time, affecting Schedule 4, Part A, and 2(a) of the Development Financing Agreement (DFA) (see Annex C.4).
- (vi) *Adjustments in financing arrangements for the Original Project.* The disbursement categories and resource requirements of the Project components were carefully reviewed and discussed with the Borrower. It is proposed to reallocate resources between all the expenditure categories through an amendment to Schedule 1 of the DFA as per Annex C.6. The reallocation involves 8 percent of the total Credit and 0.005 percent of the Grant. The reallocation of resources from the Unallocated Category will permit Project implementation to proceed smoothly. The bulk of the reallocation is centered on increasing the initial amounts to the Operating Costs which reflects the correction of under-funding of the Capacity Enhancement component; and the need for the TASAF to provide effective technical backstopping to the LGAs. With the proposed reallocation, the Operating Cost Category increases from 3.8 percent to 8 percent of the total Credit. The reallocation is to support effective delivery of community subprojects required in view of inadequate capacity at the LGA level.
- (vii) *The closing date of the Additional Credit will be June 30 2012.* Closing date for the Original Project will be extended by two years to the same date.

IV. Consistency with CAS

16. The current JAST (2007–2010) Report No. 38625 of March 2007 is aligned to the National Strategy for Growth and Poverty Reduction (MKUKUTA) of the Government of Tanzania, which mainstreams the Millennium Development Goals. The MKUKUTA has three clusters: Cluster I, Growth of the Economy and Reduction in Income Poverty; Cluster II, Improvement of Quality of Life and Social Wellbeing; and Cluster III, Governance and Accountability. The Social Protection Objective under Cluster II focuses particularly on reaching the poorest and most vulnerable groups and reducing inequalities across geographic, income, age, gender, and other strata. The JAST also supports the five goals of Cluster II through its support for extensive social protection initiatives to empower communities to access opportunities and improve their livelihoods. Consistent with the JAST goals, the Original Project and the Additional Financing are thus aligned to the MKUKUTA and the JAST.

V. Appraisal of Scaled-up Project Activities

A. Economic and Financial Analyses

17. The Beneficiary Assessment Study of TASAF II (2008) indicated that benefits ensue to participants in Project interventions. A Significant number of grassroots community assets have also been created to provide social services. The demand-driven nature of the selected subprojects has ensured that TASAF funds allocated for such interventions flow to where they are most needed, and the direct involvement of communities has generated significant cost-savings when compared to the cost of similar interventions executed by other public sector agencies. This finding is especially true for interventions in the education, health, and water sectors. Thus the cost-benefit ratio of these community investments is found to be high. Also, the investments are financially sustainable. While the grant is a one-time support, the communities contribute towards the investment cost and take full responsibility for operation and maintenance afterward. Communities' active role in selecting and implementing subprojects instills a strong sense of ownership that helps to improve the quality of the investment and the likelihood that it will be sustainable. Communities also have increased their production and incomes through income-generating activities in crop and livestock farming.

18. To secure the economic and financial benefits from the interventions, the Additional Financing will use the Original Project's implementation strategy. It will also use the Original Project's resource allocation formula with minor adjustments, based on population, physical size, and poverty indicators, to broaden and deepen the poverty reduction objective of this Project in the target districts.

B. Technical

19. The design of TASAF II benefited from the experience of implementing phase I. Major lessons related to the technical viability of community interventions were tested and integrated in the design of TASAF II. To further ensure the technical viability of their efforts, communities are advised to embark on schemes that are simple, small in size, labor intensive, and economically and socially viable. Subprojects are also expected to be of the type that the communities can maintain and operate in a sustained way, comply with the resettlement policy framework, and comply with the environmental and social management framework approved for TASAF II. The communities also receive technical assistance from the concerned departments of LGAs or service providers to ensure conformity with sector norms and standards in executing subprojects. To further ensure compliance, all subprojects are first screened against sector norms and standards and approved at the LGA level and finally at the national level, by Sector Expert Teams (SETs), before funding is approved by the NSC.

20. To assess the relevance and usefulness of the frameworks and the procedures developed under TASAF II, a Technical Audit was conducted at mid-term. The audit examined: whether the allocated resources were used cost-effectively and for their intended purpose; the physical and financial progress of randomly selected subprojects and the quality of works; the conformity of construction works to the designs; the appropriateness of the contract prices; implementation of environmental mitigation measures against the potential negative impacts that were identified; the effectiveness of supervision by the communities; the performance of local service providers;

and the relevance of the selected interventions. The audit report found that subprojects implemented by communities are technically sound and the works are also done to an acceptable standard. According to the audit report, communities have demonstrated the capacity to manage large sums of development funds on their own, illustrating the high level and depth of community participation and ownership under the Project. Therefore the interventions supported by the Additional Financing will use the existing technical guidelines and procedures.

C. Fiduciary Analysis

21. **Financial management.** In the course of implementing TASAF II, the financial management system has been strengthened and streamlined. The most recent supervision mission reviewed all aspects of financial management, including budgeting, staffing, account systems, internal and external audit arrangements, and flow of funds and banking arrangements. Overall implementation was rated as *satisfactory*. Annual audited financial statements have been received on a timely basis. Audit observations included in the management letter have been followed up, and no outstanding audit issues are pending from previous years. The format, content, and periodicity of Financial Monitoring Reports (FMRs) have been agreed and are in use. Financial covenants with regard to submission of audit reports and FMRs are adhered to. Taking these factors into account, *the FM has been rated as modest*, and the same system will be used for the Additional Financing.

22. To handle the additional funds that will flow to target districts, the TASAF Management Unit will assess the absorptive capacity of the additional allocation to the districts and make provisions to strengthen the capacity of the LGAs to deal with the additional demands. Adequate provision is made under the capacity enhancement component to cover capacity building expenditures arising from new demand. In addition, since the Project involves community based implementation mechanisms, the findings and recommendations of the ongoing review of Decentralized Investments will be taken on board in order to strengthen impact on the ground.

23. **Disbursement and flow of funds.** The Original Project has two Special Accounts at the Bank of Tanzania managed by the TASAF Management Unit. One account is for disbursing the Credit component and the Second is for disbursing the Grant component. The Additional Financing will be channeled to the first Special Account, which is currently used for disbursing the Credit component. This arrangement has been working well and will be maintained. Disbursement to the LGAs will continue as in the Original Project, in which LGAs that are compliant with the assessment criteria of the Local Government Capital Development Grant receive the funds from TASAF Management Unit for onward disbursement to subproject bank accounts. For noncompliant LGAs, the Management Unit will continue to disburse directly to the communities' subproject bank accounts. Current disbursement arrangements are based on Statement of Expenditure (SOE), and this will also continue. The most recent supervision mission recommended, however, that TASAF II migrate to report-based disbursement, subject to satisfactory implementation of a few agreed actions. If this arrangement is adopted, it will also be applied to the Additional Financing.

D. Procurement

24. Procurement for both the Original and the Additional Financing will be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" (May 2004, revised October 2006) (Procurement Guidelines); "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" (May 2004, revised October 2006) (Consultant Guidelines); and the provisions stipulated in the Financing Agreement. Procurement for all International Competitive Bidding will be carried out using the Bank's current Standard Bidding Documents (SBDs) and Standard Evaluation Forms. The Government's SBDs for National Competitive Bidding procedures have been found acceptable to the Bank except for the provision of domestic preference to domestic suppliers/contractors, which is not as per the Bank's Guidelines. In accordance with para.1.14(e) of the Procurement Guidelines, each bidding document and contract financed out of the proceeds of the Financing shall provide that: (i) the bidders, suppliers, contractors, and subcontractors shall permit the Association, at its request, to inspect their accounts and records relating to the bid submission and performance of the contract, and to have said accounts and records audited by auditors appointed by the association; and (ii) the deliberate and material violation by the bidder, supplier, contractor, or subcontractor of such provision may amount to an obstructive practice as defined in paragraph 1.14(a)(v) of the Procurement Guidelines. For each contract to be financed under the project, the various procurement methods or consultant selection methods, the need for pre-qualification, the estimated costs, prior review requirements, and time frames have been agreed between the Borrower and the Bank, and are presented in the Procurement Plan (Annex C.5). The Procurement Plan will be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

25. Procurement capacity assessment of the implementing agencies is also given in Annex C.5. The performance and results of procurement management under TASAF have been rated *satisfactory* by the Bank's implementation support missions in 2008. Consequently, procurement for Additional Financing will continue under the current arrangement. Most of the procurement under the Additional Financing will be carried out through Community Participation as under the ongoing Project. To strengthen implementation and impact on the ground, the Project will derive benefits from past experience, mitigation measures proposed in Annex 5 below, including the findings and recommendations of the ongoing study on Decentralized investments projects discussed in paragraph 22 above.

26. Given the demand-driven nature of the subprojects, community-level procurement cannot be planned up-front. However, elaborate procedures and process steps for community-level procurement are incorporated in the Project Operational Manual. For both the Original Project and the Additional Financing subprojects, thresholds are as currently detailed in the Procurement Plan (Annex C.5) and in the Project Operational Manual.

E. Environmental and Social

27. **Environment.** The Original Project has an Environmental **Category B** classification and this remains the same for the Additional Financing. An Environmental and Social Management Framework (ESMF) is in place which will also be used for the Additional Financing. At the community planning stage, where Extended Participatory Rural Appraisal (E-PRA) takes place,

potential environmental impacts are identified and a Limited Impact Assessment (LIA) will be conducted by LGA staff trained in environmental issues. Where no negative environmental impacts are identified, the LGA officer will sign off at appraisal and confirm that the LIA has been conducted for subprojects. Projects that require an Environmental Impact Assessment (EIA) are sent to the NSC for evaluation by Sector Expert Team, which will assign environmental specialists to conduct the EIA. As discussed earlier, the Additional Financing allocated for public works will target subprojects to enhance communities' natural resource management and mitigate the negative impacts of environmental degradation on food security and vulnerability, leading to a sustainable impact on the environment. In implementing subprojects under public works, an attempt will be made to improve the income-earning potential of the environment of the food-insecure population while at the same time protecting the resource base of the community.

28. **Social.** Social impacts are expected to be positive, with Project activities gradually leading to improved quality of life for food-insecure and vulnerable groups by enhancing their access to social and economic opportunities. In addition to the benefits accruing to the target beneficiaries, there will be increased economic activity in the area surrounding the subproject and in the rural economy more widely. Beneficiaries will be selected through community-based methods as in the Original Project, which (as mentioned earlier) have been found to reach the intended beneficiaries. As in the Original Project, OP 4.12 is triggered. An Environmental and Social Management Framework and Resettlement Policy Framework are already in place, and these instruments facilitate the mainstreaming of community involvement at the appropriate subproject level. These operational tools contain detailed environmental and social safeguard policies and procedural guidance. These arrangements will continue to apply to under the Additional Financing as needed.

VI. Expected Outcomes

29. The Additional Financing will reinforce the PDO of the Original Project as it has been recast (“to improve access of beneficiary households to enhanced socioeconomic services and income generating opportunities”). It will enable communities to attain intermediate outcomes and ultimately achieve the expected outcomes, which are: (i) improved access to basic socioeconomic services; (ii) increased access to income-generating opportunities in targeted districts; and (iii) improved quality of basic services. The social protection interventions will focus on natural resource management to restore the environment and on physical assets such as roads and small-scale irrigation schemes. These interventions will significantly contribute to improving the livelihoods of the participants and the wider communities.

VII. Benefits and Risks

30. The proposed Additional Financing is expected to benefit about 233,420 people directly and 1,122,500 indirectly, among vulnerable groups of urban and rural poor in the target areas. These benefits will arise from the rehabilitation of physical and natural assets and livelihood sources, and from empowering vulnerable groups through the wages they earn, the skills they attain, and the social institutions they build within their communities. These interventions will create employment, raise incomes, and reduce food insecurity. They will open opportunities to people of different social, cultural, and economic standing to participate in decisions about their

own development, increasing harmony and social capital among the community members. Finally, they will also improve the provision of social services and heighten communities' ability to overcome local problems and challenges.

31. Project implementation reviews conducted in 2008 observed that financial management, procurement management and technical supervision are inadequate at the district level to support communities effectively and on time as they implement their subprojects. To address this operational challenge, TASAF is deploying staff from the national and cluster levels to augment capacities in the districts and is also urging LGAs to engage local service providers.

32. The risks from interventions supported by Additional Financing are similar to those identified for the Original Project (see Annex 7 for details): the limited capacity of LGAs and inadequate organizational and technical capacity in communities where intervention will be scaled up. In the past, these limitations were mitigated through capacity-building interventions and close technical support from the TASAF Management Unit. The same mitigating measures will be used in this instance, although they will focus on the districts supported through the Additional Financing. Additionally, strong links will be fostered among communities, public agencies, civil society, and private agencies working in natural resource management. The TASAF Management Unit will provide technical backstopping and ensure that simplified handbooks and copies of the Operational Manual are available to communities. These books are already available in Kiswahili, the local language.

VIII. Financial Terms and Conditions for Additional Financing

33. The Additional Financing will take the form of IDA Credit on standard terms of 10 years' grace period and 40 years' maturity. In view of the Additional Financing, the life of the Original Project will be extended to June 2012.

Annex C.1: Revised Results Framework and Monitoring for Tanzania Second Social Action Fund

Table C.1.(a): Revised resulted framework and monitoring, TASAF II

Key performance indicators	Baseline (from TASAF I, Dec. 31, 2005)	Progress over baseline (as of Jan.2009) ⁶⁶	End-of-Project targets agreed at MTR ⁶⁷	Revised EOP targets with Additional Financing (June 2012)	Data collection
Project Development Objective: To improve access of beneficiary households to enhanced socioeconomic services and income generating opportunities					
1. Number of people with access to improved social economic services:					MIS, LGA Reports, Studies
(i) Health facilities	6,146,533	395,038	Increased by 10%	NA	
(ii) Safe drinking water	350,000	30,750	Increased by 10%	NA	
(iii) Sanitation	0	430,000	Increased by 10%	NA	
(iv) Roads	612,000	12,000	Increased by 15%	Increased by 20%	
(v) Irrigation	33,000	489,000	Increased by 10%	Increased by 15%	
(vi) Markets	48,000	33,000	Increased by 60%	Increased by 5%	
2. Student classroom ratio (in targeted areas)	70:1	45:1	45:1	45:1	MIS, LGA Reports, Studies
3. Increase in income of targeted vulnerable beneficiary (%)	N/A		Increased by 5%		IE survey, MIS, LGA Reports. Impact Evaluation is ongoing for both baseline and second round data collection
4. Person-days provided in labor intensive public works program (number)*	5,431,992	4,000,000	Increase by 2.5%	14,300,000	MIS, LGA Reports
5. Citizens satisfied with the delivery of basic social services (%)	78%	85%	85%	85%	Beneficiary Assessment, Community Score Card, Citizen Report Card

⁶⁶ The absolute numbers are for the incremental progress of TASAF II over TASAF I; whereas the ratios or percentage changes are accumulative.

⁶⁷ There were no targets given in the original PAD. The targets proposed were agreed to at the MTR.

Table C.1.1 (cont'd.)

Key performance indicators		Baseline (from TASAF I, Dec. 31, 2005)	Progress over baseline (as of Jan.2009)	End-of-Project targets agreed at MTR	EOP targets with Additional Financing	Data collection
Project Development Objective: To improve access of beneficiary households to enhanced socioeconomic services and income generating opportunities						
Component 1: The National Village Fund						
1.1	Communities receiving subproject grants (number)	1,483	6,130	5,950	6,500	MIS, LGA Reports
1.2	Community Management Committees for Service Poor and Food Insecure beneficiaries who have at least 50% of elected women (number)	1,940	5,753	6000	6,500	MIS, LGA Reports
1.3	Subprojects with permanent maintenance mechanism in place (%)	90%	100%	Maintained at 90%	NA	MIS, LGA Reports
1.4	Health Centers built and/or rehabilitated (IDA15) (number)****	312	77	Increased by 10%	NA	MIS, LGA Reports MIS
1.5	Classrooms built and/or rehabilitated (IDA15) (number)****	2,586	1,515	Increased by 10%	NA	MIS, LGA Reports MIS
1.6	Other facilities built and/or rehabilitated for improved learning environment (IDA15) (number)****			Increased by 10%	NA	MIS, LGA Reports MIS
	(i) Hostel/dormitory	13	30			
	(ii) Laboratory	18	6			
	(iii) Library	0	9			
	(iv) Administration block	26	40			
	(v) Staff office;	468	463			
	(vi) Teachers' house	335	285			
1.7	Markets rehabilitated/constructed (number) **	16	49	Increased by 10%	5%	MIS, LGA Reports
1.8	Roads rehabilitated/constructed (km)**	2,174	1,069	Was Not determined	1650	MIS, LGA Reports
1.9	Irrigation systems constructed (number)**	11	23	Increased by 10%	110	MIS, LGA Reports
1.10	Hectares of land conserved in target areas**	0	0	N/A	4,000	MIS, LGA Reports Baseline data to be collected as the Additional Financing starts

Continued...

Table C.1.1 (cont'd.)

Key performance indicators	Baseline (from TASAF I, Dec. 31, 2005)	Progress over baseline (as of Jan.2009)	End-of- Project targets agreed at MTR	EOP targets with Additional Financing	Data collection
Project Development Objective: To improve access of beneficiary households to enhanced socioeconomic services and income generating opportunities					
Component 1: The National Village Fund					
1.12 Vulnerable individual getting support (number)	2,736	459,075	N/A	Increase by 5%	MIS, LGA Reports
1.13 Share of PWP wage bill/total subproject cost (%)	40%	48%	40	50%	MIS, LGA Reports
1.14 Beneficiaries of public works program (number) Men Women	60,000 53,414	121,423 126,379	50% increase	90% increase	MIS, LGA Reports
1.15 Beneficiaries of Conditional Cash Transfer (CCT) (number)	NA	NA	N/A	8,920	Beneficiary surveys baseline data collection planned for
Component 2: Capacity Enhancement					
2.1 Individuals participating in community savings (number)	NA	21,909	20,000 savers	NA	MIS, LGA Reports
2.2 Communities' satisfaction with support provided by LGAs/CMO (%)	NA	90	85%	85%	Community Score Card
2.3 Trained Trainers facilitating the LGAs and Communities on subproject cycle management (number)	732	3,030	3,500	N/A	MIS, LGA Reports
2.4 Trained Community Management Committees members in subproject implementation (number)	22,687	57,530	50,000	90,000	MIS, LGA Reports
2.5 O&M committees members trained (number)	NA	25,269	24,000	50,000	MIS, LGA Reports
2.6 Subprojects completed according to design (number)	1,483	3,115	5,950	6,000	
2.7 Subprojects completed within time of subproject cycle (Number)	1,483	1,191	90%	90%	MIS, LGA Reports

* Person-days from all subprojects for FI to date. Each beneficiary is assumed to work for 65 days; thus 220,000 beneficiaries will have provided 14,300,000 person-days.

** Given the distribution of FI subprojects funded to date, it is assumed that earth roads will account for 60% of total subprojects, afforestation/conservation will account for 15%, irrigation will account for 20%, and market structures will account for 5%. Figures for subcomponents 1.7–1.10 are based on these percentages.

*** It is assumed that 50 hectares will be conserved under each conservation subproject.

****Indicators aligned with IDA 15 indicators are noted as such.

*****N/A Indicators are not in the original PAD

Table C.1 (b); Revisions in the Performance Monitoring Indicators in the Original DFA

No.	Indicator (Original DFA Schedule 5)	Revised Indicators	Remarks
1.	Number and percentage increase in citizen satisfaction with delivery of basic social services	Percentage of citizens satisfied with the delivery of basic social services (PDO Indicator #5)	–
2.	Increased income from wages earned from the implementation of public works subprojects	Number of person-days provided in labor-intensive public works program (PDO indicator #4)	–
3	Annual dropout rate percentage of students in primary and secondary schools	-	Dropped; high-level, not Project specific
4.	Number and percentage of girls and boys in primary and secondary schools	Student/classroom ratio (PDO indicator #2)	–
5.	Number and percentage of children under the age of five (5) suffering from malnutrition using the weight-for-age method	–	Dropped - high level
6.	Number of maternal deaths in the community	–	Dropped; high-level, not Project-specific
7.	Number of households using insecticide-treated nets	–	Dropped; Not identified as priority under TASAF by communities and health issues incorporated in PDO indicator #1
8.	Number and percentage of persons with access to protected water sources	Number of people with access to improved social economic services(health, water, sanitation, roads, irrigation, markets) (PDO indicator #1)	-
9.	Number of operational drug revolving funds	–	Dropped; Not identified as priority under TASAF by communities and health issues incorporated in PDO indicator #1
10.	Number of vulnerable individuals provided with assistance by type of vulnerability	Percentage increase in income of targeted vulnerable beneficiaries (PDO indicator #3)	Initial indicator. Retained at component level
11.	Number of households with access to safe waste disposal methods	–	Collapsed into PDO indicator #1
12.	Number of individuals participating in community savings schemes	–	Retained at the component level

Table C.1.(c): Characteristics of the Original Project, TASAF II Components and the Additional Financing

	Original Project	Additional Financing
Funding	<ul style="list-style-type: none"> - Credit US\$129 million - Grant US\$21 million 	Credit US\$30 million
Components supported	<ul style="list-style-type: none"> - National Village Fund - Capacity Enhancement 	<ul style="list-style-type: none"> - National Village Fund - Capacity Enhancement
Beneficiaries	<ul style="list-style-type: none"> - Food-Insecure - Vulnerable Groups - Service-Poor Communities 	<ul style="list-style-type: none"> - Food-Insecure - Vulnerable Groups, including CCT beneficiaries - Not applicable
Coverage	Nationwide	Districts targeted yearly using Food Vulnerability Assessment Reports

Annex C.2: Support for the Food-Insecure Group of Beneficiaries under Additional Financing, Tanzania Second Social Action Fund

1. The Food-Insecure (FI) beneficiary group is one of the three subcomponents under the National Village Fund (NVF) component in TASAF II. This subcomponent is designed to specifically provide an effective safety net for poor persons from food-insecure households with limited employment opportunities.

2. The objectives of supporting this beneficiary group are to increase their cash income, enhance their skills and opportunities for future employment (so they can meet food security and other basic needs), and prevent them from falling even deeper into poverty. The interventions will promote labor-intensive activities that provide jobs for the poor and, in the process, create or improve community assets. The following principles will guide the interventions for this beneficiary group:

- a. ***Poverty ranking as the main instrument for targeting.*** The ranking will give weight to communities with (i) low literacy rates, with a high share of children who drop out of school, (ii) a high percentage of female-headed households, and a marked lack of job opportunities; and (iii) high incidence of shocks such as seasonal droughts and crop failures (with their resulting food shortages) and other disasters. Additional criteria that are important for targeting communities in Mainland and Zanzibar Island districts include (iv) inaccessibility/remoteness, (v) whether the communities are persistently short of food, and (vi) whether they lack access to cash income.
- b. ***Subprojects that promote labor-intensive technologies,*** with at least 50 percent of the subproject funds providing wages for unskilled labor.
- c. ***Protection of prevailing employment opportunities in targeted areas*** by paying less than the average wage in the area (a self-targeting wage that is 10 percent less than the prevailing market wage rate for unskilled labor).
- d. ***Adherence to sectoral work norms and technical standards*** in all subproject activities.
- e. ***Compliance with safeguard policies.***
- f. ***Implementation within local Government structures.***
- g. ***Active community participation*** in identifying subprojects, targeting beneficiaries, and implementing the subsequent subproject activities.
- h. ***Ensure gender inclusiveness.***

3. **Food insecurity.** Locally grown crops are the major source of food in Tanzania. Food security among rural and urban households is generally stable nationwide, and a variety of food is available in local markets. Even so, food prices remain higher than the five-year average and higher than last year's prices. These high prices continue to constrain households' access to food, particularly among households that depend greatly on buying their food in the market. As food prices begin to rise again, which typically occurs between September and January, these poor, market-dependent populations face increasing pressure, particularly as high transportation costs

and general inflation contribute to higher food prices (USAID/Famine Early Warning Systems Network, August 2008 Food Security Update).

4. Food insecurity and vulnerability are present everywhere in rural Tanzania, but these problems vary by region. The central band of the country has the highest proportion of food-insecure households. In regions such as Dodoma, Singida, and Tabora, 45–55 percent of households are food insecure. In Mwanza, Manyara, and Kagera Regions, food insecurity affects 20–30 percent of households. In some areas traditionally considered food secure, a 2007 survey by the World Food Program found that a large proportion of the population was in fact food insecure, specifically in Ruvuma and Iringa Regions, where 15 percent of households were classified as food insecure. A high percentage of households (24–27 percent) also appear vulnerable to food insecurity in Singida, Tabora, Dodoma, and Mwanza Regions; 21.4 percent of households in Lindi Region are vulnerable as well (World Food Program). The most food-insecure and vulnerable groups are: (i) groups with low incomes, mainly derived from food crop production; (ii) small-scale farmers, whose income comes mainly from food production; (iii) wage laborers, whose income is from agriculture or unskilled labor; (iv) people who rely on remittances and grow food crops as well; and (v) people who rely mainly on growing food crops but supplement their income by selling natural resources.

5. **Based on a Rapid Vulnerability Assessment**, 40 districts and Zanzibar that are widely viewed as food insecure are selected for intervention under TASAF Additional Financing in the first year of the Project (listed in Table C.2.1 at the end of this Annex). Within each district, and communities, households will be selected for participation in the public works program and safety net schemes on the basis of criteria developed for this purpose.

6. **Targeting and selection criteria.** Within a district, the target group consists of poor households with able-bodied persons. As noted, these households share many characteristics. They have high levels of illiteracy, are often headed by women, and lack job opportunities. The children often must drop out of school, and the household is affected by shocks such as natural disasters (droughts, earthquakes, and floods) and crop failure. The procedure for selecting eligible households will be based on the SPIFs, which demonstrate community interest in initiating a subproject. The Village Fund Coordinator will sort and compile the forms by sector for presentation to the TASAF Management Team for review, targeting, and decision by E-PRA. The targeting of resources within an LGA will be guided by poverty and service coverage indicators as well as community demands in line with their capacities. Interested communities will be notified if an E-PRA team will be deployed from the district.

7. The community members targeted under public works investments will, in a participatory process using the wealth ranking tool, identify the food-insecure households among them. Targeting will also occur through the self-targeting wage rate discussed previously. Female-headed households and youth groups will be particularly taken into consideration.

8. **Delivery methodology.** LGAs will target local areas for funding based on chronic food insecurity, poor access to services, and conformity to the guiding principles discussed in paragraph 2. Subprojects will be appraised by the LGA and approved by the Village Council or LGA, depending on the NVF contribution. Implementation will be carried out by the CMC

supported by a Local Service Provider (LSP), while technical supervision will be carried out by the Village Council, LGA, and (at the national level) by the TASAF Management Unit.

9. **Service packages.** Potential service packages to be funded under the Additional Financing will include but not be limited to:

- a. ***Works that conserve and restore the natural resource base for livelihoods, including food production,*** such as water-shade restoration, reforestation of degraded areas, setting wind breaks, stabilizing gullies, and constructing dykes in flood-prone areas and waste disposal pits.
- b. ***Water retention structures*** like earth dams, including structures adapted to fish breeding, small-scale irrigation, and vegetable gardening.
- c. ***Economic infrastructure,*** including community markets with associated facilities such as water supply, storm water drainage, waste disposal pits, and latrines.
- d. ***Improve accessibility to marketplaces, health centers, schools, and other social services,*** including community earth/gravel roads with associated small structures like culverts, footbridges, and drifts.

10. Degraded natural resources and reduced biodiversity directly threaten food supplies and the incomes of food-insecure people, unleashing a vicious cycle of poverty, environmental degradation, and hunger. Some agricultural practices harm soils, biodiversity, and water resources; for example, land clearing and mono-cropping negatively affect biodiversity. Poverty and population pressure fuel deforestation and overharvesting of vegetation. To reduce hunger and malnutrition, it is vital to explicitly integrate agricultural production, conservation, and nutritional goals to the greatest possible extent. Given the rationale for the Additional Financing and emergency intervention requested for Tanzania, the public works program will focus on means of coping with risks and disasters that can cause food insecurity. Investments to sustain the natural resources that are essential to food security generate important synergies with other actions to reduce food insecurity. Natural resource management enhances biodiversity and raises agricultural production and productivity by increasing the supply of natural inputs. Such investments improve the availability of micronutrients while reducing the impact of natural climatic risks and disasters on food security.

29. Monitoring. Monitoring is done by LGA/Island technical staff and the TASAF Management Unit. Its purpose is to ensure that intended objectives are achieved within the set time frame in the subproject management cycle. A specific format provided in the Community Subproject Management Handbook requests specific information on physical progress and the corresponding expenditures and compares them with the original plan. Additional information for monitoring includes:

- Adherence to planned cash transfers to the beneficiaries with the set gender balance.
- Adherence to technical standards and work norms as per sector Ministries' specifications.

- Impact assessment in regard to poverty alleviation.
- Value of the asset created (to assess whether the undertaking is cost-effective).

Table C.2.: Food-insecure districts on Mainland and Zanzibar, Tanzania, 2008/09

S/N	Region	Number of districts	District name
1	Arusha		Longido
			Meru
			Monduli
			Ngorongoro
	<i>Subtotal</i>	4	
2	Lindi		Kilwa
			Lindi (Town Council (TC))
			Lindi (District Council (DC))
			Liwale
			Nachingwea
			Ruangwa
	<i>Subtotal</i>	6	
3	Kilimanjaro		Same
			Mwanga
			Rombo
	<i>Subtotal</i>	3	
4	Manyara		Babati (DC)
			Kiteto
			Hanang
			Mbulu
			Simanjiro
	<i>Subtotal</i>	5	
5	Mara		Bunda
			Rorya
			Musoma (DC)
	<i>Subtotal</i>	3	
6	Morogoro		Morogoro (DC)
			Mvomero
	<i>Subtotal</i>	2	

Continued...

Table C.2.1 (cont'd.)

S/N	Region	Number of districts	District name
7	Shinyanga		Bariadi
			Kishapu
			Maswa
			Meatu
	<i>Subtotal</i>	4	
8	Pwani		Bagamoyo
			Kibaha
			Mafia
	<i>Subtotal</i>	3	
9	Mwanza		Magu
			Ukerewe
	<i>Subtotal</i>	2	
10	Mtwara		Masasi
			Nanyumbu
	<i>Subtotal</i>	2	
11	Tanga		Handeni
			Kilindi
			Korogwe
			Lushoto
			Mkinga
			Pangani
	<i>Subtotal</i>	6	
	Zanzibar		Unguja
			Pemba
	<i>Subtotal</i>	2	
	TOTAL	42	

Annex C.3: Support for Vulnerable Groups, Tanzania Second Social Action Fund, Additional Financing

1. The Vulnerable Groups Support (VGS) under TASAF II is designed to contribute to other efforts that enable vulnerable groups and their foster families to respond to vulnerability by preventing and mitigating the risks and shocks surrounding them.

2. **Objective.** The main objective of the support provided to vulnerable groups is to empower them and their foster families to manage subprojects that will enable them to respond to vulnerability associated with different risks and shocks and thus improve their quality of life and social well-being. The specific objectives of this support are to: (i) support sustainable income-generating activities for vulnerable groups through financial grants and technical resources and (ii) increase the capacity of vulnerable groups to cope with and mitigate risk. The following principles will guide the selection and implementation of subprojects:

- a. Subprojects will be supported if they are in line with the sector norms and standards listed in the community service packages.
- b. Funds will not be used to make transfers for immediate consumption—for example, for buying food, paying school fees, buying clothes, and so on, except in the CCT.
- c. Subprojects to be funded are selected by the beneficiaries (target group).
- d. Income-generating subprojects will be financed if they are expected to break even within five years. In other words, the subproject will have recovered all of the money invested over the first five years and continue to generate a profit.
- e. A household, even if it has more than one type of vulnerable person (for example, a widow and orphans), cannot be supported more than once;
- f. Women and men must participate equally in managing subprojects.
- g. Transparency and accountability are required in all activities and operations.
- h. Beneficiaries and community members must participate effectively in designing and implementing subprojects.
- i. Adherence to the Environmental and Social Management Framework and the Resettlement Policy Framework are mandatory.

3. **Targeting and selection criteria.** The eligibility of vulnerable persons requesting support from the National Village Fund (NVF) will be confirmed when a SPIF is received by the VFC and when the particular vulnerable group is targeted for Extended Participatory Rural Appraisal (E-PRA). The eligibility of vulnerable persons and foster families will be confirmed in a participatory, transparent manner in Village/Shehia/Mtaa assembly meetings that will be organized on the first day of the E-PRA. In selecting the most vulnerable households, food insecurity and inability to meet other basic needs will be the basic criteria. Vulnerable persons to be supported will include orphans, chronically ill persons, persons infected and affected by HIV/AIDS, the elderly, people with disabilities, malnourished children, and children who head households. Other vulnerable children include abandoned children, street children, widows and widowers, unemployed youths (ex-primary school), and single mothers.

4. **Delivery methodology.** LGAs will select subprojects for funding on the basis of vulnerability and conformity to guiding principles. Subprojects will be appraised by the LGA and approved by the Village Council or LGA, depending on the NVF contribution. Implementation will be done by the CMC, supported by a local service provider, and supervision will be done by the Village Council and LGA. At the national level, supervision will be carried out by the TASAF Management Unit.

5. **Service package.** Resources will be provided to vulnerable persons and foster families for increasing their household income. The service packages defined by respective sector ministries will guide communities on the kinds of activities that are eligible for support. Examples of typical community subprojects that can be supported include alternative income-generating activities based on fisheries; growing crops and livestock; and training in carpentry, masonry, tailoring, and other vocational skills, which will include provision of start-up kits.

6. **Monitoring.** Monitoring is done by the LGA/Island technical staff and the TASAF Management Unit to ensure that the intended objectives are achieved within the set time frame. Specific format in the Community Subproject Management handbook specify the information required on physical progress and corresponding expenditures for comparison against the original plan. Additional monitoring information includes: (i) verification of the existence of the operation and maintenance plans to ensure sustainability; (ii) adherence to technical standards and work norms as per sector ministries' specifications; (iii) an assessment of impacts with respect to poverty alleviation; and (iv) the presence of markets for the products and the potential to break even.

Annex C.4: TASAF NSC Composition, Original and Current

Position	NSC composition at start of Project	Current NSC composition
Chair	Permanent Secretary (PS), Vice President's Office	PS, Prime Minister's Office
Member	Executive Director for TASAF	Executive Director for TASAF
Representatives	Vice President's Office (1)	Planning Commissioner in the President's Office
	Ministry of Finance (1)	Ministry of Finance and Economic Affairs (1)
	Ministry of Community Development and Children (1)	Ministry of Community Development, Gender, and Children (1)
	President Office's Regional Administration and Local Government(1)	Prime Minister's Office Regional Administration and Local Government (1)
	President Offices, State House (1)	President Offices, State House (1)
	–	Ministry of Labor and Youth Development (1)
	–	1 x Regional Administration (1)
	Presidential Trust Fund for Self Reliance(1)	Presidential Trust Fund for Self Reliance (1)
	Research on Poverty Alleviation (1)	Research on Poverty Alleviation (1)
	x 2 from Chief Minister's Office (1)	Chief Minister's Office (2)

Annex C.5: Procurement Capacity Assessment and Procurement Plan

I. Procurement Capacity Assessment

1. An assessment of the capacity of the implementing agencies to implement procurement actions under the Additional Financing has been carried out at the levels of TASAF II Management Unit (MU), District/LGA, and Village. The key issues and risks regarding implementation of procurement include: (i) inadequate procurement filing and record keeping, and (ii) inadequate skills and experience at the village/community level in procurement. The overall Project risk for procurement remains *high*, and the following mitigation measures have been agreed to: (i) training will continue on community participation in procurement, procurement filing, and record-keeping skills through capacity-enhancement activities at the LGA and community levels; and (ii) MU will take on more responsibility for oversight while the LGAs continue to provide support at the subproject level. The action plan to mitigate the procurement risk is provided in Table C.5.1.

Table C.5.1: Action plan to mitigate procurement risk

Risk/role	Action plan	Time frame	Responsibility
Inadequate procurement filing and record keeping	Carryout training and establish acceptable procurement filing and record keeping	Within six months of implementation	MU/ IDA
Inadequate skills and experience at village/ community level in procurement.	i) Continue with training on community participation in procurement	i) Before launch of a subproject	i) LGAs/ MU
	ii) LGAs provide support at subproject level	ii) During implementation	ii) LGAs

II. Procurement Plan

A. Details of the Procurement Arrangements Involving International Competition and other Methods

1. Goods, Works, and Nonconsulting Services

1	2	3	4	5	6	7	8	9
Ref. no.	Contract (description)	Estimated cost (US\$)	Procurement method	P-Q	Domestic preference (yes/no)	Review by IDA (prior/post)	Expected bid-opening date	Comments/ Implementing agency
1	Office equipment	20,350	S	NA	No	Post	Jul 15, 2009	TASAF

ICB contracts for works estimated to cost above US\$5,000,000 equivalent per contract, for goods estimated to cost above US\$500,000 equivalent per contract, and all direct contracting will be subject to prior review by the Bank. However, a specified number of NCB contracts will be identified in the Procurement Plan to be prior reviewed.

2. Consulting Services

(a) List of consulting assignments with short-list of international firms and other selection methods.

1	2	3	4	5	6	7
Ref. no.	Description of assignment	Estimated cost (US\$)	Selection method	Review by (prior/post)	Expected proposals submission date	Comments/ Implementing Agency
1	Monitoring and Baseline Survey	450,000	QCBS	Prior	Aug 20, 2009	TASAF

(b) Consultancy services estimated to cost above US\$200,000 equivalent per contract for firms and single source selection of consultants will be subject to prior review by the Bank. Prior review of the evaluation process for individual consultant contracts above US\$100,000 will be done in exceptional cases only, such as when hiring consultants for long-term technical assistance or advisory services for the duration of the Project.

(c) Short lists composed entirely of national consultants: Short lists of consultants for services estimated to cost less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Subprojects

Ref.	Category	Estimated total amount FY 2009/10 (US\$)
1	Food Insecure Households Subprojects	6,000,000
2	Vulnerable Groups Subprojects	1,680,000

B. Thresholds for Procurement Methods and Prior Review

Expenditure category	Contract value threshold(US\$)	Procurement/selection method	Contracts subject to prior review
Works	>5,000,000	ICB	All
	<5,000,000	NCB	None (Post review) unless specified in the Procurement Plan
	<50,000	Shopping	None (Post review)
	All values	Direct Contracting	All

Continued...

Thresholds for Procurement Methods and Prior Review (cont'd.)

Expenditure category	Contract value threshold(US\$)	Procurement/selection method	Contracts subject to prior review
Goods	>500,000	ICB	All
	<500,000	NCB	None (Post review) unless specified in the Procurement Plan
	<50,000	Shopping	None (Post review)
	All values	Direct Contracting	All
Consulting Services – Firms¹	> 200,000	QCBS/ Other ² (QBS/FBS/LCS)	All
	< 200,000	CQS/ Other ² (QBS/FBS/LCS)	None (Post review)
	All values	SSS	All
Consulting Services – Individuals (IC)	>100,000	IC - Qualification	None (Post review) unless specified in the Procurement Plan ³
	<100,000	IC - Qualification	None (Post review)
	All Values	IC - SSS	All
Subprojects⁴	>45,000	Community Participation	All

Note: Terms of reference for all contracts shall be cleared by the Bank.

1. Shortlists for consultancy services for contracts estimated to be less than US\$200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

2. QBS, FBS, and LCS for assignments meeting requirements of paragraphs 3.2, 3.5, and 3.6, respectively, of the Consultant Guidelines.

3. The selection of Individual Consultants will normally be subject to post review. Prior review will be done in exceptional cases only, such as when hiring consultants for long-term technical assistance or advisory services for the duration of the Project and prior review of these contracts will be identified in the Procurement Plan.

4. Procedures for Community Driven Development (CDD) Components Subprojects are as per paragraph 3.17 of the Procurement Guidelines. Specific subproject thresholds under the National Village Fund Component will be according to the table below, with further details in the Project Operational Manual.

National Village Fund subproject thresholds by beneficiary category and by subproject type

Type of subprojects	Ceiling in US\$
Food Insecure	
Irrigation, earth dams, dykes, stabilization of gullies	45,000
Watershed restoration, reforestation, setting windbreaks	35,000
Fishponds and valley tanks	25,000
Tree nursery	15,000
Vulnerable Group Support	
Fishing subprojects	20,000
Fish farming	15,000
Tailoring, poultry, horticultural gardening, dairy goat, beekeeping	10,000
Service Poor	
Classrooms, dispensary unit, teachers' house	45,000
Administration block	40,000
Boreholes, other water points	25,000

Annex C.6: Tanzania Second Social Action Fund and Additional Financing: Proposed Reallocation

To permit smooth and effective support for Project delivery, a reallocation of funds from the Unallocated Category to the five Project disbursement categories is proposed as per Table C.6.1. The reallocations build on the agreements reached with the Government during the MTR and the March 2009 Implementation Support Mission. The justification for the reallocations is explained in the Notes to the table, on the next page.

Table C.6.1: Proposed reallocation of funds for TASAF II under Additional Financing

S/N	Category	A (Before reallocation)			B (After reallocation)		(C) Additional Financing	(D) Total
		Amount of the Credit allocated.	Amount of the Grant allocated.	Percentage of expenditure to be financed	Position of the amount of Credit after reallocation	Position of the amount of Grant after reallocation		
(1)	Subprojects under Part A of the Project (a) Food Insecure Households (b) Vulnerable Groups (c) Service Poor Communities (d) Conditional Cash Transfers	0 0 61,300,000 0	6,850,000 6,850,000 0 0	95% of expenditure to be disbursed	0 0 62,132,000 0	6,995,000 7,405,000 0 0	11,200,000 3,000,000 0 3,000,000	18,195,000 10,405,000 62,132,000 3,000,000
(2)	Goods	2,730,000	0	100% of Foreign expenditure 90% of local expenditure	3,063,000	0	0	3,063,000
(3)	Consultants' Services	6,850,000	0	93%	8,762,000	0	1,000,000	9,762,000
(4)	Training	5,410,000	0	100%	5,528,000	0	1,000,000	6,528,000
(5)	Operating Costs	3,400,000	0	90%	7,415,000	0	1,000,000	8,415,000
(6)	Unallocated	8,210,000	700,000		1,000,000	0.00	0	1,000,000
	TOTAL	87,900,000	14,400,000		87,900,000	14,400,000	20,200,000	122,500,000

Note: Justification for Reallocations from Unallocated Category to other Categories

- i. *Category 1(a) Food Insecure: From SDR 6,850,000 to SDR 6,995,000*
Increase in the allocation of IDA Grant proceeds to category 1(a), Food Insecure, from SDR 6,850,000 to SDR 6,995,000 to address price escalations and impart business skills to the beneficiaries of ongoing subprojects.
- ii. *Category 1(b) Vulnerable Groups: From SDR 6,850,000 to SDR 7,405,000*
Increase in the allocation of IDA Grant proceeds to category 1(b), Vulnerable Groups, from SDR 6,850,000 to SDR 7,405,000 to address price escalations and impart business skills to the beneficiaries for ongoing subprojects.
- iii. *Category 1(c) Service Poor: From SDR 61,300,000 to SDR 62,132,000*
Increase in the allocation of IDA Credit proceeds to Category 1(c), Service Poor, from SDR 61,300,000 to SDR 62,132,000 to make the subprojects functional and address price escalations.
- iv. *Category 2 Goods: From SDR 2,730,000 to SDR 3,063,000*
Increase in the allocation of IDA Credit proceeds to Category 2, Goods, from SDR 2,730,000 to SDR 3,063,000 to enable: (a) Replenishment of funds used to procure Communication Development equipment for 121 LGAs and 2 Islands in line with the original approved Procurement Plan. Acquisition of Communication Development equipment was done to help IEC teams at the LGAs and Islands to create awareness among the communities about TASAF operating procedures and rules of accessing funds; (b) Acquisition of motor vehicles by LGAs to assist in the facilitation processes among communities when planning and implementing subprojects; (c) Acquisition of Community Savings and Investment Promotion stationery and cash boxes for 46 LGAs.
- v. *Category 3 Consultancy Services: From SDR 6,850,000 to SDR 8,762,000*
Increase in the IDA Credit proceeds to Category 3, Consultancy Services, from SDR 6,850,000 to SDR 8,762,000 to cover activities up to the closure of TASAF II and support consultancies for Citizen Report Card, Community Score Cards, and assessment of the environmental and social safeguards.
- vi. *Category 4 Training: From SDR 5,410,000 to SDR 5,528,000*
Increase in the allocation of IDA Credit proceeds to Category 4, Training, from SDR 5,410,000 to SDR 5,528,000 to cover training Village/Mtaa Councils/and Shehias that will be implementing new subprojects.
- vii. *Category 5 Operating Costs: From 3,400,000 to SDR 7,415,000*
Increase in the allocation of IDA Credit proceeds to Category 5, Operating Costs, from SDR 3,400,000 to SDR 7,415,000 to enable: (a) Technical backstopping for justification reports from LGAs by TASAF Management Unit and (b) to provide technical supports to the communities so that the subprojects are completed as planned.
- viii. *Category 6 Unallocated: From SDR 8,910,000 to SDR 1,000,000*
Reduction of Category (6) of IDA Credit and Grant, Unallocated, from SDR 8,910,000 to SDR 1,000,000 to enable the financing of the Category 1(a)–Food Insecure Households, 1(b)–Vulnerable Groups, Category 1(c)–Service Poor, Category 2–Goods, Category 3–Consultancy Services, Category 4–Training, and Category 5–Operating Costs.

Annex C.7: TASAF II and Additional Financing Risk Assessment

Risk	Risk rating	Risk mitigation measure	Residual risk rating
Capacity development in LGAs is too low to adequately respond to community demands	H	i) Extensive simplification of handbooks and Operational Manual with resources to support capacity-building work is ongoing ii) TASAF is deploying staff from national and cluster level to augment LGA capacities	M
Village Councils fail to become accountable to the Village Assemblies over use of resources	N	Disbursement of funds split between Village Councils and CMCs, and resources available for capacity building	N
CMCs continue to resist being fully accountable to Village Councils	M	CMCs only receive funds once the Village Councils approve sub-projects and reports on the accounts	N
Local Service Providers (LSPs) are not readily available to meet demand for subprojects needing support	M	The menu for LSPs has been widened to include NGOs, CBOs, and skilled individual consultants and firms	M
Government counterpart funds are not available on time	N	Under the President's Office, TASAF has a budget line in Government expenditure schedules from MOF	N
Implementation of decentralization in the country slows down	S	Clear division of responsibilities between LGAs (supported under the LGSP) and Village Councils (supported under TASAF II)	M
Overall risk rating	M		M

Note: Risk rating H (High), S (Substantial), M (Modest), N (Negligible or Low)

Attachment D: Statement of Loans and Credits

Project ID	FY	Purpose	Original Amount in US\$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P092898	2008	TZ-Performance Results & Accountability	0.00	40.00	0.00	0.00	0.00	29.54	-1.13	0.00
P098496	2008	TZ-Sci.&Tech. High Educ. Prog-Ph.1 (FY08)	0.00	100.00	0.00	0.00	0.00	79.04	0.32	0.00
P101645	2008	TZ-Energy Development & Access Expansion	0.00	105.00	0.00	0.00	0.00	104.17	26.41	0.00
P103633	2008	TZ Second Central Transport Corridor	0.00	190.00	0.00	0.00	0.00	140.89	-30.09	0.00
P102262	2007	TZ-Zanzibar Basic Educ. SIL (FY07)	0.00	42.00	0.00	0.00	0.00	40.23	2.19	0.00
P087154	2007	TZ-Water Sector Support SIL	0.00	200.00	0.00	0.00	0.00	153.38	46.92	0.00
P082492	2006	TZ-Marine & Coastal Env Mgmt SIL (FY06)	0.00	51.00	0.00	0.00	0.00	27.91	12.08	0.00
P085009	2006	TZ-Private Sector/MSME Competitiveness	0.00	95.00	0.00	0.00	0.00	67.41	18.38	0.00
P085752	2006	TZ-Agr Sec Dev (FY06)	0.00	90.00	0.00	0.00	0.00	41.61	-3.02	0.00
P070544	2006	TZ-Accountability, Transparency & Integrity	0.00	40.00	0.00	0.00	0.00	33.09	11.67	0.00
P099231	2006	Financial Sector Support	0.00	15.00	0.00	0.00	0.00	14.43	5.70	0.00
P100314	2006	TZ-Tax Modernization Project	0.00	12.00	0.00	0.00	0.00	6.96	6.03	0.00
P070736	2005	TZ-Loc Govt Supt SIL (FY05)	0.00	150.00	0.00	0.00	0.00	75.27	-30.52	14.14
P085786	2005	TZ-Soc Action Fund 2 SIL (FY05)	0.00	150.00	0.00	0.00	0.00	24.24	18.20	0.00
P082335	2004	TZ-Health Sector Development II (FY04)	0.00	125.00	0.00	0.00	0.00	26.81	-36.77	21.72
P078387	2004	TZ-Central Transp Corridor Prj (FY04)	0.00	122.00	0.00	0.00	0.00	13.90	11.01	0.00
P071014	2004	TZ-HIV/AIDS APL (FY04)	0.00	70.00	0.00	0.00	0.00	8.40	0.45	-1.91
P059073	2003	TZ-Dar Water Suply & Sanitation (FY03)	0.00	61.50	0.00	0.00	0.00	6.97	1.46	-2.44
P067103	2003	TZ-Partic Agr Dev & Empwrmnt SIL (FY03)	0.00	56.58	0.00	0.00	0.00	7.67	1.80	-4.82
P002797	2002	TZ-Songo Gas Dev & Power Gen (FY02)	0.00	183.00	0.00	0.00	0.00	78.21	49.05	57.85
P058706	2002	TZ-Forest Conserv & Mgmt SIL (FY02)	0.00	31.10	0.00	0.00	0.00	6.86	1.47	1.05
P073397	2002	TZ-Lower Kihansi Env Mgmt TAL (FY02)	0.00	9.80	0.00	0.00	0.00	2.61	-1.79	0.26
P069982	2001	Regional Trade Fac. Proj. - Tanzania	0.00	15.00	0.00	0.00	0.00	6.62	4.45	0.00
P049838	2000	TZ-Privatization & Priv Sec Dev	0.00	45.90	0.00	0.00	0.00	14.42	12.48	12.48
Total:			0.00	1,999.88	0.00	0.00	0.00	1,010.64	126.75	98.33

Attachment E: Country at a Glance

POVERTY and SOCIAL	Sub-Saharan Africa				
	Tanzania	Low-income			
2007					
Population, mid-year (<i>millions</i>)	40.4	800	1296		
GNI per capita (<i>Atlas method, US\$</i>)	400	952	578		
GNI (<i>Atlas method, US\$ billions</i>)	16.3	762	749		
Average annual growth, 2001-07					
Population (%)	2.5	2.5	2.2		
Labor force (%)	2.4	2.6	2.7		
Most recent estimate (latest year available, 2001-07)					
Poverty (<i>% of population below national poverty line</i>)	36		
Urban population (<i>% of total population</i>)	25	36	32		
Life expectancy at birth (<i>years</i>)	52	51	57		
Infant mortality (<i>per 1,000 live births</i>)	74	94	85		
Child malnutrition (<i>% of children under 5</i>)	17	27	29		
Access to an improved water source (<i>% of population</i>)	55	58	68		
Literacy (<i>% of population age 15+</i>)	69	59	61		
Gross primary enrollment (<i>% of school-age population</i>)	112	94	94		
Male	113	99	100		
Female	111	88	89		
KEY ECONOMIC RATIOS and LONG-TERM TRENDS					
	1987	1997	2006	2007	
GDP (<i>US\$ billions</i>)	..	7.7	14.2	16.2	
Gross capital formation/GDP	..	14.9	16.7	..	
Exports of goods and services/GDP	..	16.2	21.9	..	
Gross domestic savings/GDP	..	5.4	10.8	..	
Gross national savings/GDP	..	3.8	10.7	..	
Current account balance/GDP	..	-10.4	-11.0	..	
Interest payments/GDP	..	0.5	0.3	..	
Total debt/GDP	..	89.9	29.9	..	
Total debt service/exports	35.4	12.8	3.5	..	
Present value of debt/GDP	14.0	..	
Present value of debt/exports	6.14	..	
	1987-97	1997-07	2006	2007	2007-11
(<i>average annual growth</i>)					
GDP	2.7	6.1	6.7	7.1	..
GDP per capita	-0.4	3.5	4.1	4.5	..
Exports of goods and services	14.3	10.1	-0.2

Development diamond*

Life expectancy

GNI per capita

Gross primary enrollment

Access to improved water source

— Tanzania

— Low-income group

Economic ratios*

Trade

Domestic savings

Capital formation

Indebtedness

— Tanzania

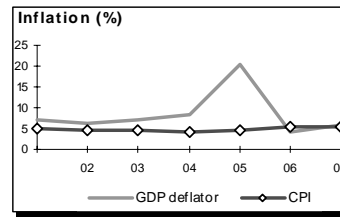
— Low-income group

STRUCTURE of the ECONOMY					
	1987	1997	2006	2007	
(% of GDP)					
Agriculture	..	46.8	45.3	..	<p>Growth of capital and GDP (%)</p> <p>— GCF — GDP</p>
Industry	..	14.3	17.4	..	
Manufacturing	..	6.9	6.9	..	<p>Growth of exports and imports (%)</p> <p>— Exports — Imports</p>
Services	..	38.9	37.3	..	
Household final consumption expenditure	..	86.3	72.8	..	
General gov't final consumption expenditure	..	8.3	16.3	..	
Imports of goods and services	..	25.7	27.8	..	
	1987-97	1997-07	2006	2007	
(<i>average annual growth</i>)					
Agriculture	3.2	4.5	3.8	..	
Industry	0.7	8.7	8.6	..	
Manufacturing	1.0	6.9	7.1	..	
Services	1.8	5.9	7.2	..	
Household final consumption expenditure	3.7	2.5	6.2	..	
General gov't final consumption expenditure	-9.7	17.4	11.9	..	
Gross capital formation	-4.3	7.0	7.4	..	
Imports of goods and services	1.4	4.5	3.6	..	

Note: 2007 data are preliminary estimates.
This table was produced from the Development Economics LDB database.
* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

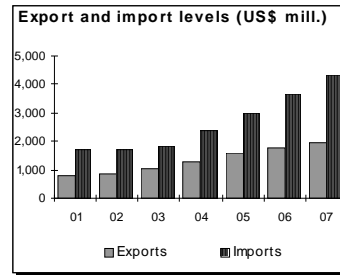
PRICES and GOVERNMENT FINANCE

	1987	1997	2006	2007
Domestic prices				
<i>(% change)</i>				
Consumer prices	29.9	15.4	5.4	5.4
Implicit GDP deflator	..	20.6	4.2	6.0
Government finance				
<i>(% of GDP, includes current grants)</i>				
Current revenue	..	12.2	116	12.4
Current budget balance	..	0.9	-8.0	-6.8
Overall surplus/deficit	..	-14	-13.6	-14.2



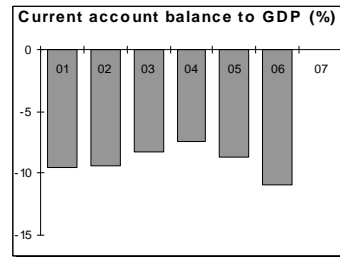
TRADE

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Total exports (fob)	348	744	1,759	1,981
Coffee	10	117	68	73
Cotton	44	130	115	126
Manufactures	63	111	143	155
Total imports (cif)	1,099	1,270	3,661	4,321
Food	86	97	212	217
Fuel and energy	157	173	1,065	1,224
Capital goods	552	514	1,155	1,232
Export price index (2000=100)	81	100	119	126
Import price index (2000=100)	113	119	166	167
Terms of trade (2000=100)	72	84	72	75



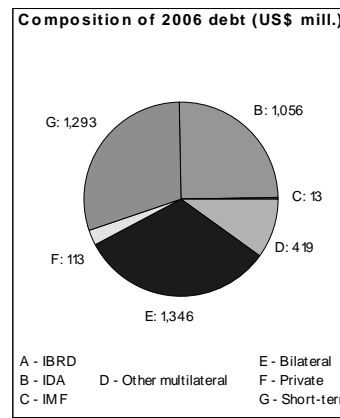
BALANCE of PAYMENTS

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Exports of goods and services	442	1,276	3,133	..
Imports of goods and services	1,277	1,948	4,565	..
Resource balance	-834	-672	-1,431	..
Net income	-149	-122	-182	..
Net current transfers	446	-3	58	..
Current account balance	-538	-797	-1,556	..
Financing items (net)	533	926	1,601	..
Changes in net reserves	5	-129	-46	..
Memo:				
Reserves including gold (US\$ millions)	32	622	2,259	2,886
Conversion rate (DEC, local/US\$)	64.3	612.1	1,251.9	1,245.0



EXTERNAL DEBT and RESOURCE FLOWS

	1987	1997	2006	2007
<i>(US\$ millions)</i>				
Total debt outstanding and disbursed	5,508	6,910	4,240	..
IBRD	325	34	0	0
IDA	801	2,306	1,056	1,585
Total debt service	156	169	113	..
IBRD	47	24	0	0
IDA	10	32	51	11
Composition of net resource flows				
Official grants	481	431	4,917	..
Official creditors	140	183	524	..
Private creditors	38	-22	1	..
Foreign direct investment (net inflows)	0	158	474	..
Portfolio equity (net inflows)	0	0	3	..
World Bank program				
Commitments	23	150	599	536
Disbursements	95	183	416	475
Principal repayments	28	36	31	1
Net flows	67	147	385	474
Interest payments	29	20	20	10
Net transfers	38	127	365	464



Note: This table was produced from the Development Economics LDB database.

9/24/08

MAP SECTION

