

AFRICAN DEVELOPMENT FUND

**Language: English
Original: English**



UNITED REPUBLIC OF TANZANIA

DISTRICT AGRICULTURE SECTOR INVESTMENT PROJECT

APPRAISAL REPORT

**AGRICULTURE AND RURAL DEVELOPMENT DEPARTMENT
NORTH, EAST AND SOUTH REGIONS**

**ONAR
NOVEMBER 2004**

TABLE OF CONTENTS

	<u>Page</u>
Table of Content, List of Tables and List of Annexes, Project Information Sheet Currency and Measures, List of Abbreviations, Logical Framework for the Project, Logical Framework for ADF Grant, Comparative Socio-Economic Indicators, Executive Summary	(i-ix)
1. ORIGIN AND HISTORY OF THE PROJECT	1
2. THE AGRICULTURAL SECTOR	1
2.1 Overview of the Sector	1
2.2 Land Tenure and Land Use	2
2.3 Poverty, Gender and Health Issues	2
2.4 Sector Development Constraints	3
2.5 Sector Development Strategy and Priority Policy Reforms	3
2.6 Agricultural Sector Development Programme	4
3. CROP AND LIVESTOCK SUB-SECTORS	6
3.1 Overview of Crop Sub-sector	6
3.2 Overview of Livestock Sub-sector	6
3.3 Institutional Framework	7
3.4 Donor Interventions	8
3.5 Lessons Learnt from Past Interventions in Tanzania	8
4. THE PROJECT	9
4.1 Project Concept and Rationale	9
4.2 Project Area and Beneficiaries	11
4.3 Strategic Context	11
4.4 Project Objective	12
4.5 Project Description	12
4.6 Production, Markets and Prices	17
4.7 Environmental Impact	18
4.8 Project Costs	19
4.9 Sources of Financing	19
5. PROJECT IMPLEMENTATION	21
5.1 Executing Agency	21
5.2 Institutional Arrangements	21
5.3 Supervision and Implementation Schedule	22
5.4 Procurement Arrangements	23
5.5 Disbursement Arrangements	25
5.6 Monitoring and Evaluation	25
5.7 Financial Reporting and Auditing	26
5.8 Aid Co-ordination	26
6. PROJECT SUSTAINABILITY AND RISKS	27
6.1 Recurrent Costs	27
6.2 Programme Sustainability	27
6.3 Critical Risks and Mitigating Measures	28

7.	PROJECT BENEFITS	28
7.1	Financial Analysis	28
7.2	Economic Analysis	29
7.3	Social Impact Analysis	30
7.4	Sensitivity Analysis	30
8	CONCLUSIONS AND RECOMMENDATIONS	30
8.1	Conclusions	30
8.2	Recommendations and Conditions for Loan and Grant Approval	31

LIST OF TABLES

4.1	Summary of Cost Estimates by Component	20
4.2	Summary of Costs Estimates by Category of Expenditure	20
4.3(a)	Sources of Finance	21
4.3(b)	Sources of Finance (ADF Loan Financed Components)	21
4.3(c)	Sources of Finance (ADF Grant Financed Component)	21
5.1	Expenditure Schedule by Components	23
5.2	Expenditure Schedule by Sources of Finance	23
5.1	Procurement Arrangements	24

LIST OF ANNEXES

	<u>Number of Pages</u>	
1.	Map of Project Area	1
2.	Existing ASDP Organizational Chart	1
3.	Project Implementation Schedule	1
4(a)	Provisional List of Goods and Services	1
4(b)	ADF/GOT Financing of Recurrent Costs	1
5.	Summary Financial and Economic Analysis	3
6.	Environmental and Social Management Plan Summary	2
7.	Tanzania - List of On-Going Operations as at June 30 2004	1
8.	Highlights of the Project Preparation and Review Process	1

This report was prepared by J. Coompson, Principal Agricultural Economist (Task Manager), ONAR.1; A. Mend, Principal Agronomist, ONAR.1; S. Pitamber, Gender Specialist, ONAR; M. Tafesse, Consultant-Infrastructure Engineer; D. Mazvimavi, Consultant-Environmentalist; N.K. Mohanty, Consultant-Rural Finance Expert; and C. Omoluabi, Senior Forestry Officer as Peer-Reviewer. Enquiries should be directed to the authors or A. Beileh, Manager, ONAR.1 (ext. 2139)

AFRICAN DEVELOPMENT FUND
(TEMPORARY RELOCATION AGENCY)

Angle des trois rues: Avenue du Ghana, Rue Pierre de Coubertin, Rue Hedi Nouira
BP. 323, 1002 TUNIS BELVEDERE
TUNISIA

Tel : (+216) 71 333 511 / (+216) 7110 3450

FAX: (216) 71 351 933

EMAIL: afdb@afdb.org

PROJECT INFORMATION SHEET

The information given hereunder is intended to provide some guidance to prospective suppliers, contractors and consultants and to all persons interested in the procurement of goods and services for projects approved by the Boards of Directors of the Bank Group. More detailed information and guidance should be obtained from the Executing Agency of the Borrower.

1. **COUNTRY:** Tanzania
2. **PROJECT TITLE:** District Agriculture Sector Investment Project
3. **LOCATION:** 25 Districts in Kagera, Kigoma, Mara, Mwanza and Shinyanga Regions of North West Tanzania.
4. **BORROWER:** The United Republic of Tanzania
5. **EXECUTING AGENCY:** Ministry of Agriculture and Food Security (MAFS)
P.O. Box 9192
Kilimo 1
Dar-es-Salaam
Tanzania
Tel: +255 (0) 22 2862064
Fax: +255 (0) 22 2862077
E-mail: psk@kilimo.go.tz
6. **DESCRIPTION:**
The project consists of four components:
 - A) Farmer Capacity Building
 - B) Community Planning and Investment in Agriculture
 - C) Support to Rural Financial Services and Marketing
 - D) Project Co-ordination and Management
7. **TOTAL COST**

i)	Foreign Exchange	:	UA 25.32 million
ii)	Local Cost	:	<u>UA 32.69 million</u>
	Total		UA 58.01 million

8. **SOURCES OF FINANCE FOR PROJECT**

ADF (Loan)	:	UA 36.00 million
ADF (Grant)	:	UA 7.00 million
Government	:	UA 6.64 million
Beneficiaries	:	UA <u>8.37 million</u>
TOTAL	:	UA 58.01 million

9. **DATE OF APPROVAL** : November 200410. **ESTIMATED STARTING DATE AND DURATION** : July 2005 for 6 years11. **PROCUREMENT OF GOODS AND WORKS:**

National Competitive Bidding (NCB), and National/Local Shopping for construction works in accordance with the Bank Group's "Rules of Procedure for Procurement of Goods and Works"; NCB for motorcycles and equipment.

12. **CONSULTANCY SERVICES REQUIRED AND STAGE OF SELECTION:**

Consultancy services will be required for the design, supervision of civil works, studies and the provision of training. Procurement will be in accordance with the "Bank Group's Rules of Procedure for Use of Consultants". The basis will be through competition on the basis of a shortlist of firms/individuals.

CURRENCIES AND MEASURESCurrency equivalents

As at August 2004

UA 1	=	TZS 1623.57
US \$ 1	=	TZS 1113.74
UA 1	=	US \$ 1.45776

Financial Year1st July to 30th JuneWeights and Measures

Metric system

LIST OF ABBREVIATIONS AND ACRONYMS

ADB/F	African Development Bank/Fund
AIDS	Acquired Immuno Deficiency Syndrome
ASDP	Agriculture Sector Development Programme
ASDS	Agriculture Sector Development Strategy
ASLMs	Agricultural Sector Lead Ministries
ASSP	Agricultural Services Support Programme
CBO	Community-Based Organization
CSP	Country Strategy Paper
DADP	District Agriculture Development Plan
DALDO	District Agriculture and Livestock Development Officer
DASIP	District Agriculture Sector Investment Project
DED	District Executive Director
DFT	District Facilitation Team
DMT	District Management Team
DTC	District Training Coordinator
ESMP	Environmental and Social Management Plan
FASWOG	Food and Agriculture Sector Working Group
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
GDP	Gross Domestic Product
GOT	Government of Tanzania
HIV	Human Immunodeficiency Virus
IFAD	International Fund for Agricultural Development
LBT	Labour Based Technologies
LGA	Local Government Authority
MAFS	Ministry of Agriculture and Food Security
NAEP	National Agricultural Extension Programme
NGO	Non-Governmental Organization
NPES	National Poverty Eradication Strategy
NSC	National Steering Committee
PADEP	Participatory Agricultural Development and Empowerment Project
PCU	Project Coordination Unit
PFG	Participatory Farmer Group
PO-RALG	President's Office – Regional Administration and Local Government
PRA	Participatory Rural Appraisal
PRS/P	Poverty Reduction Strategy Paper
PSRP	Public Sector Reform Programme
SACA	Savings and Credit Association
SACCOS	Savings and Credit Cooperative Society
SPFS	Special Programme for Food Security
TDV2025	Tanzania Development Vision 2025
VDC	Village Development Committee
VADP	Village Agriculture Development Plan
WB	World Bank
WFT	Ward Facilitation Team

Tanzania - DASIP: Logical Framework for the Project

NARRATIVE SUMMARY	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>1. Sector Goal To contribute to the reduction of rural poverty and food insecurity.</p>	<p>The project will contribute to reducing the:</p> <p>1.1 Proportion of the rural population below the basic poverty line reduced from 57% to 29% by year 2010.</p> <p>1.2 Proportion of the rural population below the food poverty line reduced from 27% to 14% by year 2010.</p>	<ul style="list-style-type: none"> • Poverty Reduction Monitoring System Reports. • ASDP progress reports. 	
<p>2. Project Development Objective To increase agricultural productivity and incomes of rural households in the project area, within the overall framework of the Agricultural Sector Development Strategy.</p>	<p>2.1 Households of gender balanced participating farmer groups increase agricultural productivity by 20% and net incomes (TZS 400,000) by 15% by PY 4.</p> <p>2.2 Households of participating SACCOS will have increased agricultural productivity by 25% and incomes (TZS 400,000) by 20% by PY4</p> <p>2.3 Crop production within the project area increased from 4.98 million tonnes to 5.28 million tonnes over the project life.</p>	<ul style="list-style-type: none"> • Baseline and impact assessment and survey reports. • District surveys and statistics. • Supervision reports. • Mid-Term Review. • Project Completion Report. 	<ul style="list-style-type: none"> • Stable macro-economic environment. • Rural Development Strategy, and ASDS effectively implemented. • Moderate weather patterns. • HIV/ AIDS infection rates do not increase in the project area.
<p>3. Project Outputs 3.1 Participatory farmer groups established, made operational and adopting improved technologies.</p>	<p>3.1 10 000 Gender balanced-participatory farmer groups trained in improved technical, organizational and managerial capacities.</p> <p>3.2 250 000 farmers/group members (50% of whom are females) using improved agricultural production skills.</p> <p>3.3 25 districts with the capacity to train at least 80 participatory farmer groups per year.</p> <p>3.4 210 HIV/ AIDS sensitization and awareness raising campaigns conducted by 2010.</p>	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. • Impact assessment surveys. 	<ul style="list-style-type: none"> • Farmers show continued commitment at sustaining the groups formed.
<p>3.2 Management capacity of rural communities enhanced. Rural infrastructure facilities developed</p>	<p>3.5 750 VDCs trained in community mobilization, leadership, and micro-project identification and formulation by 2010.</p> <p>3.6 750 participatory VADPs, initiated by committees proportionally represented by women, prepared, implemented and annually updated.</p> <p>3.7 25 participatory DADPs prepared, implemented and annually updated.</p> <p>3.8 750 villages with successful investments, selected by gender balanced committees, in value adding technology and equipment.</p> <p>3.9 750 micro-projects and infrastructure works established.</p> <p>3.10 500 km of feeder roads improved.</p> <p>3.11 25 water control structures with on-farm works established.</p>	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. • Impact assessment surveys. 	<ul style="list-style-type: none"> • Effective support from LGAs, MAFS, MCM and MWLD staff in the districts.

NARRATIVE SUMMARY	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS																				
<p>3.3 Viable Savings and Credit Schemes able to benefit from microfinance and marketing services and engaged in farming as a business established.</p>	<p>3.12 200 operationally sustainable Savings and Credit Cooperatives (SACCOs) (made of 8000 savings groups) with an average 1000 members (composed of at least 45% women) and TZS 40 million in savings after 6 years of operation. 3.13 90% of SACCOs maintaining a loan repayment rate >95%. 3.14 Market information network established in 25 districts. 3.15 70% of districts where the marketing information network continues to operate after the project end. 3.16 60% of SACCOs with successful agro-processing facilities.</p>	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. • Impact assessment surveys. 	<ul style="list-style-type: none"> • Chambers of Commerce (or other private entities) interested in taking over the management of the marketing information network. 																				
<p>3.4 Project coordinated and managed effectively in compliance with the ADB Loan Agreement, and effective monitoring and evaluation system established.</p>	<p>3.17 Coordination of activities effective. 3.18 Regular monitoring of project activities. 3.19 At least Project Steering Committee meetings a year. 3.20 Disbursement schedule adhered to.</p>	<ul style="list-style-type: none"> • Supervision reports. • Impact assessment surveys. • Audit reports 																					
<p>4. Project Activities:</p> <p>4.1 Build the capacity of districts to train participatory farmer groups. 4.2 Train participatory farmer groups. 4.3 Build the capacity of districts to plan, manage and monitor VADPs and DADPs. 4.4 Invest in medium size rural infrastructure. 4.5 Invest in agriculture-related micro-projects and infrastructure. 4.6 Invest in agriculture related technology and value adding equipment. 4.7 Build the capacity of participatory farmer groups to aggregate into SACCOs. 4.8 Build a marketing information network in districts. 4.9 Establish Project Coordination Unit</p>	<p>Project Costs (UA million)</p> <table border="0"> <tr> <td>4.1 Farmer Capacity Building:</td> <td style="text-align: right;">UA 8.3</td> </tr> <tr> <td>4.2 Comm. Planning and Investment in Agric:</td> <td style="text-align: right;">UA 43.8</td> </tr> <tr> <td>4.3 Support to Rural Finance and Marketing:</td> <td style="text-align: right;">UA 3.6</td> </tr> <tr> <td>4.4 Project Coordination and Management:</td> <td style="text-align: right;"><u>UA 2.3</u></td> </tr> <tr> <td>Total:</td> <td style="text-align: right;">UA 58.0</td> </tr> </table> <p>Sources of Financing (UA million)</p> <table border="0"> <tr> <td>4.1 ADF Loan:</td> <td style="text-align: right;">UA 36.0</td> </tr> <tr> <td>4.2 ADF Grant:</td> <td style="text-align: right;">UA 7.0</td> </tr> <tr> <td>4.3 Government:</td> <td style="text-align: right;">UA 6.6</td> </tr> <tr> <td>4.4 Beneficiaries:</td> <td style="text-align: right;"><u>UA 8.4</u></td> </tr> <tr> <td>Total:</td> <td style="text-align: right;">UA 58.0</td> </tr> </table>	4.1 Farmer Capacity Building:	UA 8.3	4.2 Comm. Planning and Investment in Agric:	UA 43.8	4.3 Support to Rural Finance and Marketing:	UA 3.6	4.4 Project Coordination and Management:	<u>UA 2.3</u>	Total:	UA 58.0	4.1 ADF Loan:	UA 36.0	4.2 ADF Grant:	UA 7.0	4.3 Government:	UA 6.6	4.4 Beneficiaries:	<u>UA 8.4</u>	Total:	UA 58.0	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. 	<ul style="list-style-type: none"> • Moderate weather patterns • Effective support from LGAs, MAFS, MCM and MWLD staff in the districts.
4.1 Farmer Capacity Building:	UA 8.3																						
4.2 Comm. Planning and Investment in Agric:	UA 43.8																						
4.3 Support to Rural Finance and Marketing:	UA 3.6																						
4.4 Project Coordination and Management:	<u>UA 2.3</u>																						
Total:	UA 58.0																						
4.1 ADF Loan:	UA 36.0																						
4.2 ADF Grant:	UA 7.0																						
4.3 Government:	UA 6.6																						
4.4 Beneficiaries:	<u>UA 8.4</u>																						
Total:	UA 58.0																						

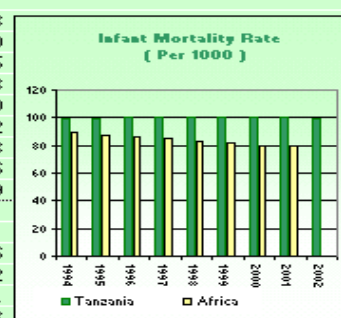
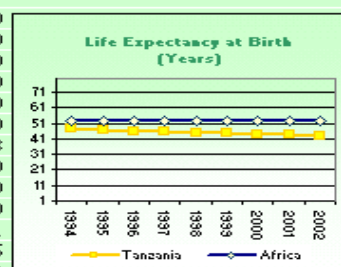
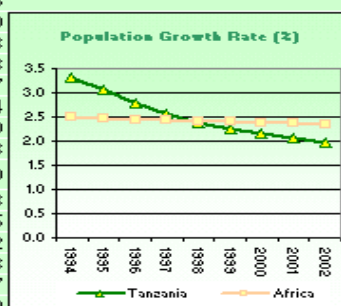
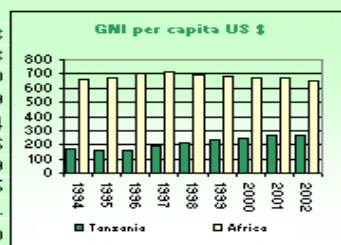
Tanzania - DASIP: Logical Framework for ADF Grant

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>(i) Sector Goal To contribute to the reduction of rural poverty and food insecurity.</p>	<p>1.1 Households of gender balanced participating farmer groups increase agricultural productivity by 20% and net incomes (TZS 400,000) by 15% by PY 4.</p> <p>1.2 Households of participating SACCOS will have increased agricultural productivity by 25% and incomes (TZS 400,000) by 20% by PY4</p> <p>1.3 Crop production within the project area increased from 4.98 million tonnes to 5.28 million tonnes over the project life.</p>	<ul style="list-style-type: none"> • Poverty Reduction Monitoring System Reports. • Agriculture Sector Public Expenditure Reports. • ASDP progress reports. 	
<p>(ii) Component Objective : To increase farmers' productivity and profitability, through improved practices for water, soil, crop, and livestock husbandry and marketing.</p>	<p>1.1 Training of 10,000 PFGs (consisting of at least 50% female members) in technical and organisational management and better placed to engage in economic activities and community-wide social activities.</p> <p>1.2 Agricultural production skills of 250,000 farmers, of which 50% are women improved.</p>	<ul style="list-style-type: none"> • PCU Quarterly and annual progress reports. • District extension records 	<ul style="list-style-type: none"> • Farmers will demand and accept new technologies and marketing approaches.
<p>(iii) Outputs: Farmers empowered to organize in participatory farmer groups and trained to increase agricultural production and farm profitability, groups able to demand productive agriculture related investment and services.</p>	<p>1.1 10 000 participatory farmer groups trained in improved technical, organizational and managerial capacities.</p> <p>1.2 250 000 farmers/group members using improved agricultural production skills.</p> <p>1.3 50% of farmer group members will be female.</p> <p>1.4 25 districts with the capacity to train at least 80 participatory farmer groups per yr.</p>	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. • Impact assessment surveys. 	<ul style="list-style-type: none"> • Farmers interested in forming groups and sustaining them.
<p>(iv) Activities 1. Build the capacity of districts to train participatory farmer groups. 2. Train participatory farmer groups.</p>	<p>Component Costs</p> <p>1. District Training Capacity: UA 2.44 million</p> <p>2. Farmer Training: <u>UA 5.86 million</u></p> <p>Total: UA 8.30 million</p> <p>Sources of Financing</p> <p>ADF Grant: UA 7.00 million</p> <p>Government: UA 0.59 million</p> <p>Beneficiaries: <u>UA 0.71 million</u></p> <p>Total: UA 8.30 million</p>	<ul style="list-style-type: none"> • Quarterly and annual progress reports. • Supervision reports. 	<ul style="list-style-type: none"> • Effective support from LGAs, MAFS, MCM and MWLD staff in the districts • Moderate weather patterns • HIV/AIDS infection rates do not increase I the project area

Tanzania

COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Tanzania	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km ²)		945	30 061	80 976	54 658
Total Population (millions)	2002	36.3	831.0	5,024.6	1,200.3
Urban Population (% of Total)	2002	34.1	38.6	43.1	78.0
Population Density (per Km ²)	2002	38.4	27.6	60.6	22.9
GNI per Capita (US \$)	2002	290	650	1 154	26 214
Labor Force Participation - Total (%)	2002	51.1	43.1	45.6	54.6
Labor Force Participation - Female (%)	2002	49.3	33.8	39.7	44.9
Gender -Related Development Index Value	2001	0.396	0.484	0.655	0.905
Human Develop. Index (Rank among 174 countries)	2001	160	n.a.	n.a.	n.a.
Popul. Living Below \$ 1 a Day (% of Population)	1993	19.9	46.7	23.0	20.0
Demographic Indicators					
Population Growth Rate - Total (%)	2002	2.0	2.2	1.7	0.6
Population Growth Rate - Urban (%)	2002	5.8	3.9	2.9	0.5
Population < 15 years (%)	2002	46.1	43.2	32.4	18.0
Population >= 65 years (%)	2002	2.4	3.3	5.1	14.3
Dependency Ratio (%)	2002	91.0	86.6	61.1	48.3
Sex Ratio (per 100 female)	2002	98.0	98.9	103.3	94.7
Female Population 15-49 years (% of total population)	2000	...	24.0	26.9	25.4
Life Expectancy at Birth - Total (years)	2002	43.3	50.6	62.0	78.0
Life Expectancy at Birth - Female (years)	2002	44.1	51.7	66.3	79.3
Crude Birth Rate (per 1,000)	2002	39.3	37.3	24.0	12.0
Crude Death Rate (per 1,000)	2002	18.1	15.3	8.4	10.3
Infant Mortality Rate (per 1,000)	2002	99.8	81.9	60.9	7.5
Child Mortality Rate (per 1,000)	2002	162.0	135.6	79.8	10.2
Maternal Mortality Rate (per 100,000)	1995	530	641	440	13
Total Fertility Rate (per woman)	2002	5.1	4.9	2.8	1.7
Women Using Contraception (%)	1999	25.4	40.0	59.0	74.0
Health & Nutrition Indicators					
Physicians (per 100,000 people)	1995	4.3	57.6	78.0	287.0
Nurses (per 100,000 people)	1987	17.7	105.8	98.0	782.0
Births attended by Trained Health Personnel (%)	1999	35.0	38.0	56.0	99.0
Access to Safe Water (% of Population)	2000	54.0	60.3	78.0	100.0
Access to Health Services (% of Population)	1991	93.0	61.7	80.0	100.0
Access to Sanitation (% of Population)	2000	90.0	60.5	52.0	100.0
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2001	7.8	5.7	1.3	0.3
Incidence of Tuberculosis (per 100,000)	2000	155.0	198.0	144.0	11.0
Child Immunization Against Tuberculosis (%)	2002	88.0	76.4	82.0	93.0
Child Immunization Against Measles (%)	2002	89.0	67.7	73.0	90.0
Underweight Children (% of children under 5 years)	1999	29.4	25.9	31.0	...
Daily Calorie Supply per Capita	2001	1 998	2 444	2 675	3 285
Public Expenditure on Health (as % of GDP)	1998	1.3	3.3	1.8	6.3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2000	63.0	89.2	91.0	102.3
Primary School - Female	2000	63.2	83.7	105.0	102.0
Secondary School - Total	2000	6.0	40.8	88.0	99.5
Secondary School - Female	2000	4.9	38.2	45.8	100.8
Primary School Female Teaching Staff (% of Total)	1997	43.7	49.9	51.0	82.0
Adult Illiteracy Rate - Total (%)	2002	23.0	37.9	26.6	1.2
Adult Illiteracy Rate - Male (%)	2002	14.8	29.2	19.0	0.8
Adult Illiteracy Rate - Female (%)	2002	30.8	46.4	34.2	1.6
Percentage of GDP Spent on Education	1998	5.8	3.5	3.9	5.9
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2002	4.2	6.2	9.9	11.6
Annual Rate of Deforestation (%)	1995	1.0	0.7	0.4	-0.2
Annual Rate of Reforestation (%)	1990	8.0	4.0
Per Capita CO2 Emissions (metric tons)	1998	0.1	1.1	1.9	12.3



Source : Compiled by the Statistics Division from ADB databases; UNAIDS; World Bank Live Database and United Nations Population Division.

Notes: n.a. Not Applicable; ... Data Not Available.

EXECUTIVE SUMMARY

Project Background

The Government of Tanzania (GOT) considers improvement in farm incomes of the majority of the rural population as a precondition for the reduction of rural poverty. Its vision is for decentralized development efforts that provide for a modernised agriculture sector, and the creation of an enabling environment for improving agricultural productivity and profitability, improving farm incomes, reducing rural poverty and ensuring household food security.

The majority of the rural population in Tanzania still depends on agriculture for income and subsistence. However, the sector has been facing a number of constraints in the past years, which has made it difficult to reduce rural poverty. The sector has suffered from inadequate outreach to the rural poor, insufficient participation of communities in the planning process resulting in supply driven programmes, declining agriculture productivity due to lack of adequate resources such as water and irrigation systems, improved technology, improved rural infrastructure and marketing opportunities. In response to these challenges the GOT developed the Rural Development Strategy (RDS) and the Agriculture Sector Development Strategy (ASDS), which put district level demand identification, project management and implementation as the most effective methodology for achieving sustainable development. The Agriculture Sector Development Programme (ASDP) is Government's main mechanism for implementation of the RDS and ASDS. This project illustrates a participatory local development concept plus a beneficiary demand driven approach. It falls under Sub-Programme A: Agricultural Sector Support and Implementation at District and Field Levels of the Agriculture Sector Development Programme (ASDP), which is the agreed framework for donor interventions to the agriculture sector. Districts and villages, their agricultural development plans and empowerment of communities are at the core of this project.

The project is in line with the Bank's key policy documents such as the (i) Vision Statement, (ii) Poverty Reduction Policy; (iii) Agricultural and Rural Development Sector Bank Group Policy (2000); and (iv) Tanzania-CSP for 2002-2004, and the Tanzania's Rural Development Strategy and Agricultural Sector Development Strategy (ASDS).

Purpose of the Loan and Grant: The ADF loan will be used to finance part of the investment and recurrent costs of the project amounting to UA 36.0 million, while an ADF Grant amounting to UA 7.0 million will be used to finance all costs of Farmer Capacity Building Component. Altogether, the Bank Group will finance 74% of the total project cost.

Sector Goal and Project Objectives: The Sector Goal is to contribute to reduced rural poverty and food insecurity. The Project Development Objective is to increase agricultural productivity and incomes of rural households in the project area, within the overall framework of the Agricultural Sector Development Strategy.

Brief Description of the Project: The project design incorporates the lessons learnt from past and on going national and donor interventions in Tanzania, which use similar approaches. The project will lay the foundation for the preparation and implementation of more effective Village Agriculture Development Plans (VADPs) by (i) creating and strengthening the capacity of large numbers of participatory farmer groups and networks, using the Farmer Field School and Participatory Farmer Group intervention model which is already widely used in many donor-funded projects in Tanzania so as to increase production, productivity and profitability, and (ii) strengthening the capacity of local government authorities (LGAs) concerned with the facilitation, preparation and execution of VADPs and DADPs.

The project has three major field components based on the demand driven approach and one project management component. The following outputs will be attained under the project:

- **Farmer Capacity Building:** (i) 25 districts will have the capacity to train participatory farmer groups through participatory adult education methods; (ii) 250,000 farmers in 10,000 participatory farmer groups with an average of 25 members each, trained in technical, organizational and managerial subject matters through participatory adult education methods.
- **Community Planning and Investment in Agriculture:** (i) 25 districts will have the capacity to plan, manage and monitor District and Village Agricultural Development Plans; (ii) 25 District Agricultural Development Plans prepared and implemented; (iii) 750 Village Agricultural Development Plans prepared and implemented including agriculture related micro-projects, small infrastructures and agricultural technology investments; (iv) Improved market access through the improvement of 500 km of feeder roads; and (v) Improved water control for agriculture through the construction of 25 water harvesting structures.
- **Support to Rural Micro-finance and Marketing:** (i) 200 operationally sustainable Savings and Credit Cooperatives (made up of 8,000 Savings Groups) with each cooperative having on average 1000 members and TZS 40 million in savings after six years of operation; and (ii) Marketing information network established and functioning in 25 districts.
- **Project Coordination and Management:** A Project Coordination Unit (PCU) will be established to coordinate the activities of the implementing districts and agencies.

Project Cost: The total project cost is estimated at UA 58.01 million of which UA 25.33 (44%) will be in foreign exchange, and UA 32.68 million (56%) will be in local currency.

Sources of Finance: The ADF, Government of Tanzania and beneficiaries will finance the project. The ADF Loan of UA 36.0 million and Grant of UA 7.0 million will cover the entire 100% of the foreign cost of UA 25.33 million and 54% of the local costs amounting to UA 17.67 million. The Government and beneficiaries will fund UA 6.64 million and UA 8.37 million respectively which is the balance of the local costs amounting to UA 15.01 million.

Project Implementation: The project will be implemented over a six-year period. Implementation will be within the existing institutional framework of the ASDP which has proved to be effective in the context of the programme. Day-to-day management and coordination will be carried out by a Project Coordination Unit. Most activities are community based and will be derived from development plans developed out of a participatory appraisal process. The District Management Team (DMT) will be responsible for the overall coordination of project activities as well as reviewing and approving of proposals for funding from communities, and monitoring the implementation of the approved projects at the district level.

Conclusions and Recommendations:

Conclusions: The project is participatory in design and decentralized in its implementation with significant beneficiary input intended to ensure sustainability. It will contribute to raising productivity and growth in the agriculture sector, and significantly increase the incomes of over 0.5 million rural households. The project is financially attractive, which will provide an incentive for farmers and farmer groups to participate actively in the realization of project objectives. The project is also economically viable, with an Economic Internal Rate of Return of 24%. The project concept and institutional set up have been tested under the WB assisted PADEP. The project attempts to scale up the successful implementation gains in productivity obtained under the Bank supported SPFS in Tanzania

Recommendations: It is recommended that a loan not exceeding UA 36.0 million and a Grant of UA 7.0 million be granted to the Government of the United Republic of Tanzania for the purpose of implementing the project as described in this report, subject to conditions to be specified in the Loan Agreement and Protocol of Agreement for the Grant.

1. ORIGIN AND HISTORY OF PROJECT

1.1 Tanzania's main development goal, since its independence, has been to improve the welfare of its population and promote equity. After experiencing relatively rapid economic growth during the 1960s and 1970s, Tanzania's economy declined from the early 1980s with sharply deteriorating real per capita income and high inflation reaching 30% per year. In order to arrest this decline, the Government of Tanzania (GOT) introduced the economic recovery programme including decentralization, with devolution of power to local authorities. These initiatives have had a positive impact on the economy. GDP growth in real terms increased from 4.7% in 1997 to 6.2% in 2002, although it fell back to an estimated 5.5% in 2003. The country's Poverty Reduction Strategy Paper (PRSP) identifies sustained economic growth as a precondition for poverty reduction, with emphasis on sound macro-economic management, increased investment and improvements in productivity. Growth in agriculture and other pro-poor sectors has been prioritised and improvement to the road network is identified as an essential component of this strategy.

1.2 The majority of the rural population in Tanzania still depends on agriculture for income and subsistence. However, the sector has been facing a number of constraints in the past years, which has made it difficult to reduce rural poverty. The sector has suffered from inadequate outreach to the rural poor; insufficient participation of communities in the planning process resulting in supply driven programmes; declining agriculture productivity due to lack of adequate resources such as water and irrigation systems, poor capital mobilisation, lack of improved technology, poor rural infrastructure and inadequate marketing opportunities. In response to these challenges the Government of Tanzania has developed the Rural Development Strategy (RDS) and the Agriculture Sector Development Strategy (ASDS) which put district level demand identification, project management and implementation as the most effective methodology for achieving sustainable development. The Agriculture Sector Development Programme (ASDP) is Government's main mechanism, in agreement with donors, for channelling investments to the agriculture sector. It forges the connection between demand-driven, field-based district planning processes, and the mobilization and monitoring of national and international investment in agriculture.

1.3 A general identification mission in February 2003 proposed a potential project that will focus on investments at district and field level, based on the District Agriculture Development Planning (DADP) process. In March 2003, a Bank Special Programme for Food Security (SPFS) Pilot Project follow-up mission to Tanzania recommended the inclusion of an extended programme based on the SPFS experience within the framework of the ASDP.

1.4 Following a formal request from the Government in August 2003, an ADB project identification mission visited Tanzania in September 2003 and further outlined the identified potential project. In March 2004, a joint Food and Agriculture Organisation (FAO)/Bank formulation mission revised the project outline, agreed on a tentative project area and identified information gaps. In May 2004, FAO's Investment Centre assisted GOT with the preparation of the District Agriculture Sector Investment Project (DASIP). This was followed by a Bank appraisal mission in August 2004. The proposed intervention falls within the GOT ASDP strategy as well as the Bank's CSP areas of focus intervention in the country.

2. THE AGRICULTURAL SECTOR

2.1 Overview of the Sector

2.1.1. Agriculture continues to form the backbone of the Tanzanian economy, accounting for about 45% of GDP in 2002. The sector also accounts for three-quarters of commodity exports. Agricultural exports as a share of GDP rose from 13% in 1990 to 16% in 2002. In recent years, the sector has started to show signs of sustained growth. Agricultural GDP is estimated to have grown at 3.6% since 1990. In 1999, it grew at 4.1%, and in 2000, 2001 and 2002 by 3.4%, 4.3%, and 5.5%

respectively. The production of the six main food crops- maize, paddy, sorghum, millet, cassava and potatoes have grown by 3.5% per year, while export crops have grown at 5.4% per year. The livestock and forestry sub-sectors have recorded lower growth rates.

2.1.2. Despite the availability of unutilized land, Tanzanian agriculture is dominated by small-scale subsistence farming. Approximately 85% of the arable land is used by smallholders who operate between 0.2 and 2.0 ha per household, and traditional agro-pastoralists who keep an average of 50 head of cattle per household. It is estimated that between 95% and 97% of the food consumed in the country is locally produced. While the absolute numbers dependent on agriculture as a source of livelihood have increased by more than 6 million during 1990-2001. The proportion of the total population that depends on agriculture has fallen slightly, from 82.5 % in 1990 to 77.7% in 2001. The percentage of the agriculturally active population is expected to remain in the 75-76 % range by 2015.

2.2 Land Tenure and Land Use

2.2.1 Land tenure in Tanzania is governed by the Land and Village Lands Acts of 1999 and amended in 2003. Under these Acts, all land in Tanzania is vested in the President as the trustee for the citizens. The Ministry of Lands and Human Settlements (MLHS) in collaboration with the Local Government Authorities, Ministry of Agriculture and Food Security, and Ministry of Water and Livestock Development are mandated under the Government's Agricultural Sector Development Strategy to undertake land surveys and demarcation to identify potential land for private investors. The facilities to be upgraded/rehabilitated under this project have to a large extent already been demarcated for the purpose and are owned by the District Councils.

2.2.2 Tanzania is endowed with an area of 94.5 million ha of land, out of which 44 million ha are classified as suitable for agriculture. However, only an estimated 23 percent of the arable land is under cultivation. It is also estimated that out of 50 million ha suitable for livestock production only 50 percent is currently being used, mainly due to tsetse fly infestation. Forest, woodland and bush land account for about 61% of the land use; grassland for 20%; cultivated land for 11%; and open land; water and urban areas for the remaining.

2.3 Poverty, Gender and Health Issues

2.3.1 **Poverty:** The 2004 Human Development Report (UNDP), ranked Tanzania 162 from 177 countries in terms of Human Development Index. The Poverty Reduction Strategy Paper (PRSP, 2000) has estimated that well over 50% of households in mainland Tanzania are living below the poverty line (defined as living under one US dollar per day). According to the Household Budget Survey of 2000/ 2001 poverty in the rural areas is high, with almost 39% of the rural population below the basic needs poverty line. In addition, about 19% of all Tanzanians are food poor (minimum of 2,200 kcal per day), up from 16.4% in 1991/92. In the rural areas, the proportion of the food poor has increased from 18.5% in (1991/92), to 20.4% in (2000). Thus, poverty in Tanzania remains overwhelmingly a rural phenomenon with the poor engaged in subsistence agriculture, though urban poverty is also widespread and increasing. In the project area, the per capita income in the five selected regions varied in 2001 from TZS 150,000 in Kagera and Kigoma, TZS 180,000 in Mara and TZS 220,000 in Mwanza to TZS 280,000 in Shinyanga, while the national average was TZS 230,000. Food deficit estimates for 2000/2001 ranged from 3% of the households in Bukoba district to 91% in Magu district.

2.3.2 **Gender:** Tanzania is committed to gender equity and has ratified international and regional conventions aimed at eliminating the different forms of discrimination against women. This commitment is manifested in the adoption of a National Gender Policy, the establishment of gender focal points in Ministries, Departments and Agencies, and the amendment of the Constitution raising the percentage of seats reserved for women in Parliament from 15 to 20%, and to 30% in local governments.

2.3.3 It is estimated that about 80% of the rural women are involved in agricultural activities. While women partake to a great degree in all farming activities, their major role is in weeding, harvesting, transportation, storage, threshing and processing. Men are predominantly engaged in land preparation (by hoe or by draught power), sowing and planting. Gender division of labour regarding marketing the agriculture produce differs by region but is mostly done by men, and women may assist by selling within the villages and other local markets. Women have limited access to mechanised transport methods, and therefore, commodities are commonly transported on foot. In some areas women have organised themselves into trading groups and some formed around credit activities. Generally both men and women are free to purchase available land.

2.3.4 **Health Issues:** The prevalence of malaria, tuberculosis and HIV/AIDS is high and are adversely affecting the rural poor through: (i) loss of on- and non-farm labour; (ii) decline in income and erosion of household asset bases through depletion of savings and forced disposal of assets and livestock; and (iii) loss of agricultural knowledge, skills and social capital resulting from premature death or incapacity to perform productive physical labour. The HIV/AIDS pandemic has emerged as a major development constraint. The infection rate is estimated at 12% (2000) with a higher prevalence (9.7%) among females as compared to men (4.3%) in the 15-49 age group. The consequence of HIV/AIDS is profound, on the socio-economic growth and development of Tanzania as it is estimated that this will cause the GDP to decline by 15% by 2010.

2.4 Sector Development Constraints

2.4.1 Tanzanian agriculture has a number of weaknesses and threats that constitute the basis of the development agenda for the ASDS. One of the most critical weaknesses in agriculture is low productivity of land, labour and other inputs. This is caused mainly by limited availability of support services including extension; lack of appropriate technology, which compels the majority to produce only for subsistence; inadequate rural financial services to obtain productivity-enhancing inputs or capital; and over-dependency on rainfed agriculture. An additional threat to agricultural development is now posed by the reduction in human capital in agriculture caused by the HIV/AIDS pandemic and malaria. The agricultural sector involves many actors within the public sector who are not well coordinated in policy formulation, programme planning or implementation. Many public institutions, particularly LGAs, also lack capacity in terms of staff, funding, and facilities for carrying out their mandated activities. The poor state or lack of rural infrastructure is a cause of high transport costs for distribution and marketing of inputs and produce, leading to lower farm gate prices to the producer. Moreover, poor linkages within the marketing, processing and production chains affect the performance of agriculture, as do poor market-orientation.

2.4.2 The Bank's Tanzania-Agriculture Sector Review (2002) indicated among others that the sources of growth in the sector will largely emanate from (i) increasing crop and livestock productivity, (ii) irrigation (iii) expanding market opportunities (iv) growth in agribusiness, and (v) increasing productivity of labour. These growth sources will be pursued under this project

2.5 Sector Development Strategy and Priority Policy Reforms

2.5.1 The development of the agriculture sector has been identified as a priority for poverty reduction in the Poverty Reduction Strategy Paper. The improvement in farm incomes of the majority of the rural population is considered a precondition for the reduction of rural poverty in Tanzania.

2.5.2 **Rural Development Strategy (RDS):** The RDS is emphasises: (i) decentralisation, (ii) liberalisation of markets and removal of state monopolies; (iii) relying on the private sector for production and marketing; while (iv) stressing food security at national and household levels.

2.5.3 **Agricultural Sector Development Strategy:** The ASDS aims at creating an enabling environment for improving agricultural productivity and profitability, improving farm incomes, thereby contributing to reducing rural poverty and ensuring household food security. It focuses on productive and gainful agriculture: subsistence agriculture must become profitable smallholder

agriculture, and the spotlight must switch from public institutions to farmers and agribusiness. The ASDS identified five strategic areas of intervention in the agricultural sector, namely: (i) strengthening the institutional framework; (ii) creating a favourable environment for commercial activities; (iii) identifying public and private sector roles in improving supporting services; (iv) strengthening marketing efficiency for inputs and outputs; and (v) mainstreaming planning for agricultural development in other sectors.

2.5.4 ***The Local Government Reform Policy of 1998*** aims at improving the delivery of quality services to the public. According to the Policy, local government authorities (LGAs) are responsible for the provision of basic public services with special emphasis on priority sectors that target poverty reduction. These include primary education, primary healthcare, agricultural extension services, local water supply and roads. By doing so, the LGAs should promote and ensure democratic participation and control of decision-making by the people concerned. For the purpose of co-ordinating service delivery at the sub-district level, the districts/municipalities are divided into Divisions, Wards, Villages and Sub-villages.

2.5.5 ***National Micro-finance Policy***: The objective of the National Micro-finance Policy (2000), is to establish a basis for the evolution of an efficient and effective micro-finance system in the country that serves the low-income segment of the society, and thereby contribute to economic growth and reduction of poverty by: (i) establishing a framework within which micro-finance operations will develop; (ii) laying out principles that will guide operations of the system; (iii) serving as a guide for coordinated intervention by participants; and (iv) describing the roles of the implementing agencies and the tools to be applied to facilitate development. The policy notes that financial intermediation will be undertaken without necessarily relying on injections of external donor or government funds, and that Best Practice Principles are to be followed. Under the Policy, The Bank of Tanzania (BOT) has overall responsibility for regulation and oversight of the micro-finance sector.

2.6 Agricultural Sector Development Programme (ASDP)

2.6.1 The ASDP provides the stakeholders with a sector-wide approach that establishes the framework for implementing the country's Agricultural Sector Development Strategy. The Programme (ASDP) is the main tool of central government for coordinating and monitoring agricultural development and for incorporating nationwide reforms. It forges the connection between demand-driven, field-based district planning processes, and the mobilization and monitoring of national and international investment in agriculture. The programme is underpinned by national policies supporting, in particular: (i) a focus on poverty reduction; (ii) the decentralization of many public sector responsibilities to Local Government Authorities (LGA); (iii) increased participation and involvement of local communities in decision making; and (iv) a shift towards private sector leadership in production, marketing, processing and service delivery.

2.6.2 The five strategic areas of intervention in the agricultural sector identified by the ASDS have been used as the basis for identifying the three complementary ASDP Sub-Programmes. *Sub-programme A*, under which DASIP falls, includes activities that are undertaken in the field in direct support to agricultural production and processing, particularly the provision of rural infrastructure facilities. The activities are also focused on the work of district and local extension and support services, and contract service providers. The intent is to establish favourable local conditions for small, medium and large-scale production. The sub-programme also include improved coordination with other sectors on locally, important cross-cutting and cross-sectoral issues, such as HIV/AIDS, and community and gender responsive participatory planning approaches. Approximately 75 percent of public resources are intended to be invested in this sub-programme.

2.6.3 *Sub-programme B* includes activities which are public sector functions at the national level in support of agricultural development. These cover interventions on the policy and regulatory framework; research, advisory services and training; and private sector development, marketing and rural finance. Approximately 20 percent of public resources are intended to be invested in this sub-programme.

2.6.4 *Sub-programme C* covers cross-cutting and cross-sectoral issues related to agricultural development at a national level, but its functions are beyond the direct mandate of the four ASLMs. Cross-cutting issues include, among others, gender, HIV/AIDS and environment, and cross-sectoral issues including land tenure, energy, telecommunication, education, as well as water, forestry and wildlife. It is estimated that approximately 5 percent of the agricultural sector budget will be spent on these aspects.

2.6.5 **Coordination and Management of the Agriculture Sector Development Programme:** The overall Agriculture Sector Development Programme (ASDP) is managed by the four Agricultural Sector Lead Ministries (ASLMs) through their established institutional arrangements. The ASLMs comprise the Ministry of Agriculture and Food Security (MAFS- the Agricultural Sector coordinating ministry), the Ministry of Cooperatives and Marketing (MCM), the Ministry of Water and Livestock, and the President's Office-Regional Administration and Local Government (PO-RALG). A National Steering Committee (NSC) is responsible for the overall coordination and policy making. It is composed of the Permanent Secretaries of the ASLMs and the Permanent Secretaries of main collaborating ministries and representatives from the private sector. The NSC is chaired by the Permanent Secretary (PS) of MAFS, and meets at least once every quarter. An Inter-ministerial Coordination Committee (ICC) composed of the Permanent Secretaries of the four ASLMs has been mandated to act on behalf of the NSC on matters that require urgent decisions. The ICC is chaired by the PS of MAFS. It serves as the project steering committee for all projects that fall under the ASDP.

2.6.6 The *ASDP Secretariat* facilitates ASDP coordination, under the direction of the chairperson of the ICC. The Secretariat has a facilitation and oversight function and does not directly implement the main ASDP activities, as these are the responsibility of the NSC/ICC, districts and line ministries. The mandate of the Secretariat is to: (i) coordinate the implementation of ASDP; (ii) facilitate the mobilisation of resources for the agricultural sector; (iii) enhance stakeholder involvement in ASDP; (iv) facilitate the ASDP budgeting and financing process; (v) monitor and evaluate ASDP implementation; and (vi) commission and supervise sector studies. Within LGAs, ASDP management and coordination is achieved through the District Management Team (DMT).

2.6.7 Currently, all ongoing and upcoming projects within the agricultural sector fall under the umbrella of the ASDP. The on-going projects include the ADB/IFAD supported Agricultural Marketing Services and Development Programme (USD 42.3 million); World Bank supported Participatory Agricultural Development and Empowerment Project (USD 70.0 million); IFAD and Irish Aid supported Participatory Irrigation Development Project (USD 25.3 million); DANIDA funded Agricultural Sector Programme Support (USD 58.0 million); and IFAD Supported Rural Financial Services Programme (USD 23.7 million). The following are some of the projects in the pipeline - European Union supported District Based Investment Project (US 7.0 million); and World Bank, IFAD and Irish Aid Agricultural Services Support Programme (initial estimate of USD 200-250 million). Indications from the ASDP Secretariat are that these projects are to be formulated along the concept of farmer and community capacity strengthening and the provision of rural infrastructure facilities.

3. CROP AND LIVESTOCK SUB-SECTORS

3.1 Overview of the Crop Sub-sector

3.1.1. Crop production accounts for close to 75% of agricultural GDP. Agricultural surveys carried out during the 1990s indicate that about two-thirds of farmers cultivate crops only, one-third cultivate crops and raise livestock (mixed farming), while less than one percent are engaged in livestock production alone. Maize is Tanzania's principal food crop and is grown in almost every region of the country. Although other food crops are of greater importance in specific locations, most farmers still cultivate maize to meet at least some of their subsistence needs. In some areas, maize is also grown as the main cash crop. For most smallholder farmers with limited sources of income, there is pressure each year to sell at least some maize for cash soon after harvesting when prices are low. In such cases, farmers are often forced to buy back maize later in the year for home consumption at a much higher price.

3.1.2. The financial costs and returns for seven important smallholder crops (maize, sorghum, rice, cotton, tobacco, coffee and cashew), grown in five areas of Tanzania under varying degrees of intensity in input use, were analyzed during the preparation of the World Bank supported Participatory Agricultural Development and Empowerment Project (PADEP). Overall, the results of this analysis, based on current production trends, are encouraging and show that most crops offer a potential for attractive producer profits and good returns on labour. The data show that good farm husbandry offer higher returns, and that use of high levels of purchased inputs is rarely the most advantageous approach. In particular, with most food crops, farmers' returns can improve substantially, simply through the use of organic fertilizer (manure) and careful adherence to the fundamentals of good crop husbandry (timely planting and adequate attention to weed control). For most cash crops the data show that the use of purchased inputs (chemical fertilizers, agro-chemicals etc.) is more important and likely to have a positive impact on profitability.

3.1.3. Though the potential and role of irrigation have been recognized, currently irrigation in Tanzania has a relatively low contribution to agricultural production and represents about 5% of total cropped area. Common types of irrigation are: traditional with low water use efficiency of 10-15%, improved traditional with efficiency of about 30%, modern with the highest efficiency of 60% and rain water harvesting with efficiency of 20-30%. Major crops grown include rice, sugarcane, maize and horticulture. There is limited use of water storage reservoirs and sprinkler or drip systems due to high investment costs. In semi-arid lands various forms of water harvesting through micro-catchments and other techniques are used to retain and concentrate runoff. At perennial water sources, pumping or river diversions are practiced. A National Irrigation Masterplan has been prepared in 2002 with the support of JICA to promote sound sustainable irrigation practices.

3.2 Overview of the Livestock Sub-Sector

3.2.1. Livestock is an integral part of the livelihood system of many farmers. It provides about 13% of agricultural GDP of which 40% is from beef, 30% from milk and the remaining 30% comes from other species such as small ruminants and poultry. Levy on livestock is also an important source of revenue for the public sector and for the District authorities in particular. In 2003 the livestock population in Tanzania was estimated at 17.4 million cattle, 12.5 million goats, 3.6 million sheep, 0.88 million pigs and about 47 million chickens.

3.2.2. The rangelands of Tanzania supply over 90% of the feed requirements for ruminant livestock. They are of very diverse nature owing to the wide variety of altitudes, climatic conditions and rainfall patterns throughout the country. Less than 2% of the rangelands are enclosed and managed as commercial ranches. The remainder is grazed communally.

3.2.3. Small stock, particularly sheep and goats, consisting of almost entirely of local breeds contribute significantly to local consumption and incomes in the rural areas. Their small size, reproductive efficiency and relatively low cost of keeping make them attractive to smallholders

with limited feed resources and capital. Crossbred dairy goats have also been introduced and distributed but their numbers are small. The importance of sheep and goats has changed over the last few decades with the number of sheep growing at a slow rate and the number of goats increasing rapidly. Sheep and goats are kept by almost one third of all rural households and are common throughout the country. The animals are normally looked after by women and children.

3.2.4. The growth rate of the livestock sub-sector has remained almost static as the value added increased by only eight percent over the last two decades. This dismal performance is due to: (i) inadequate provision of animal health services, which is causing widespread outbreaks of epidemic and vector-borne diseases; (ii) outdated and weak regulatory framework with –legislation relating to animal health and diseases being over 20 years old; (iii) inadequately defined or demarcated legal codes and institutional arrangements relating to land and water rights; (iv) lack of market and marketing infrastructures; and (v) periodic drought and rangeland degradation.

3.3 Institutional Framework

3.3.1 **Agriculture Sector Lead Ministries:** The responsibilities of the ASLMs include: (i) formulate and review sectoral policies and monitor performance; (ii) provide and supervise the implementation of regulatory services for crop and livestock development, marketing and farmers' organizations; (iii) contribute to the development and promotion of improved and sustainable agricultural practices; (iv) monitor the performance of both public and private sector agricultural support services; (v) promote the private sector's role in primary production, processing, marketing and provision of agricultural services; and (vi) promote farmers' organizations.

3.3.2 **Regional Administration and Local Government:** Districts are grouped into regions, with each region having staff forming the Regional Secretariats with the following four basic functions: (i) create a conducive environment for LGAs to operate efficiently; (ii) assist LGAs in capacity building; (iii) provide technical support to LGAs; and (iv) monitor the performance of LGAs. All agricultural extension services have been decentralized to the district level and are the responsibility of the District Council. The post-decentralization structure at district level consists of a District Agriculture and Livestock Development Officer (DALDO) as the senior person, with 15-20 subject matter specialists located at the district headquarters, and with Ward and Village Extension Officers (VEOs) as the frontline extension staff. Though there is roughly one VEO post per village, vacancy rates are high, and the actual ratio is closer to one VEO per two villages. The DALDO is part of the District Management Team and is responsible to the District Executive Director who heads the DMT. The lowest Government body is located at the village level. Five to six villages are grouped into wards, and 2-3 wards into divisions, which report to the district.

3.3.3 There are several NGOs with specialized micro-finance expertise in Tanzania, and these include CARE, PRIDE Africa, FINCA and Financial Services and Enterprise Development Association. Capable NGOs and service providers that are active in marketing and/or business development services include Technoserve, Hach Consulting and AFROTECH. Other experienced NGOs in the training for gender, participation and HIV/AIDS related issues include TGNP and the network of NGOs called TANGO. ASDP envisages two major roles for NGOs. First, in many districts they will be able to help in the participatory rural appraisal process that will result in the formulation of District Agricultural Development Plans (DADPs). Second, they will have an increasingly significant role to play as technical service providers, working under contract to LGAs to provide specific support to producers and processors.

3.3.4 The Bank of Tanzania's directory of Microfinance Institutions indicates that currently there are approximately 8 banks, 29 NGOs, 617 SACCOSs, and 11 SACAs providing microfinance services in Tanzania. These institutions have an outreach of about 220,000 clients. The largest of these institutions is PRIDE Africa (51,000 members) and Small enterprise Development Agency (12,000 clients). Within the project area, there are about 205 entities providing microfinance services, with a combined client base of about 13,000. While this statistic understates the number of

MFI and clients, it does indicate that the regions are poorly served in the terms of financial services.

3.4 Donor Interventions

3.4.1 A 2001 Study of on-going agricultural projects and programmes in the context of the ASDS worked with a list of 48 ongoing and pipeline projects, widely diverse in terms of objectives and scope. The projects and programmes most relevant to the present project, in terms of complementarities and/or active in the project area, are mentioned here. The Bank supports the Special Programme for Food Security and, together with IFAD, supports the Agricultural Marketing Systems Development Programme in the Northern and Southern Zones of Tanzania. IFAD also provides support for the Agricultural and Environmental Management Project in the Kagera region; Participatory Irrigation Development Project; and Rural Financial Services Programme. World Bank (WB) interventions include support to local government authorities and rural communities through the Tanzania Social Action Fund Project (TASAF); Forest Conservation and Management Project; and Participatory Agricultural Development and Empowerment Project (PADEP). The District Rural Development Programme, funded by the Netherlands, supports a number of LGAs to build their capacity in service delivery. Sweden supports the long-term District Development Programme in three districts in the Lake Victoria Basin.

3.4.2 In general, these projects seek to address the issues of food security and poverty reduction through empowerment of rural communities, support to the decentralization process through capacity building of local government authorities, improvement of the performance of agricultural marketing systems; support to small-scale infrastructure to improve access to markets and water, promoting improved crop and livestock husbandry practices.

3.4.3 In addition, a number of projects are currently under preparation within the framework of the ASDP. These include the Livestock Sub-Sector and Agro-Pastoral Community Development Programme by IFAD; Agricultural Services Support Programme (ASSP) by WB, IFAD and some bilateral donors and an agricultural sector related assistance programme for Kigoma Region.

3.5 Lessons Learnt from Past Interventions in Tanzania

3.5.1 Experience in the country has shown that District Agricultural Development Plans (DADPs) are usually not prepared in accordance with the participatory guidelines mainly due to the shortcomings of the participatory planning and managerial capabilities at the district (and below) level. However, as shown by the experience gained under the World Bank financed TASAF and PADEP, DADPs prepared by districts that have in the past benefited from targeted donor supported interventions in participatory planning and capacity building of stakeholders at district, ward and village levels tend to be of relatively higher quality. It has also been observed that in those villages with a critical mass of active Participatory Farmer Groups (PFGs) that engage in market oriented agriculture and business type activities, the plans are more likely to include effective income generating interventions. Such villages also benefit from a stronger managerial capacity base to effectively implement the planned activities.

3.5.2 The formation and capacity building of PFGs in Tanzania is often referred to as “farmer empowerment”. The experience with farmer empowerment and farmer-driven agricultural services in Tanzania includes projects like the ADB supported Special Programme for Food Security (SPFS) where the Farmer Field School (FFS) – type intervention models have been extensively tested, and have started to reach relatively large numbers of farmers in a relatively short time. They are now ready for full-fledged up-scaling. FFS consist of groups of people with common interest who meet on a regular basis, once per week, throughout the whole season, and farmers learn together to increase their agriculture production and productivity and solve their own problems.

3.5.3 Evidence from various studies indicates production increases of 50 to 200 percent (depending on crop type) in response to FFS-type farmer capacity building. These benefits arise not only from rising yields and gross returns per area of land, but more often from savings as a result of improved husbandry practices, improved water management, and diversification.

3.5.4 One of the strongest impacts of the SPFS project is the formation of strong, dynamic and cohesive farmer groups. The PFGs which evolve from the FFSs, are well grounded at grass root levels as strong social and economic organizations. These groups act as vehicles for farmer empowerment, and, emerging as instruments to foster changes across a wider range of community concerns thus contributing to farmer empowerment. Both FFSs and PFGs provide training consultancy to other members of the communities where they belong. Emergence of Farmer Facilitators who organize formation of fellow farmer groups and facilitate their season-long field-based group learning has also contributed significantly to empowerment, social cohesion and trust.

3.5.5 The majority of the FFSs and PFGs have evolved into Saving and Credit Associations (SACAs) and they are registered as associations with organized administrative framework and bank accounts.. The training on FFS participatory approaches has deeply transformed extension workers to bottom-up farmer friendly extension services providers. Season long hands-on farmer field school training has increased farmer knowledge and raised farmers' confidence to solve their own problems and become managers of their environment.

3.5.6 Even where active PFGs exist, the fulfillment of the agricultural and business potential is still limited at the village level by a lack of market information and market access, the insufficient availability of inputs, and the absence of microfinance services. However, there are many scattered local initiatives in the form of farmer group networks, SACAs, Saving and Credit Cooperative Societies (SACCOs), small scale value adding enterprises, input kiosks, etc., that point at opportunities to address these limiting factors. In the area of rural finance, experience has shown that credit led rural finance schemes have not in most cases been successful as against schemes where capacity building and savings have been the initial focus as shown by the Bank financed Small Entrepreneurs Loan Facility (SELF) Project.

3.5.7 One of the components of the UNDP/GOT/UNCDF Support to Decentralisation Programme, which has been operational in Mwanza Region since 1997 and is coming to an end in 2004, is geared at rehabilitating and maintaining district and feeder roads. This programme uses Labour Based Technologies (LBT) and operates through small local contractors and consultants. The Ministry of Works supports the use of LBT in rural road and other civil works, through TANROADS and PO-RALG. LBT creates more employment, increases income to labourers and helps re-distribute income within a locality. However, experience has also shown that LBT should not be used for constructing canal embankments as reported under the Bank financed Madibira Irrigation Project.

4. THE PROJECT

4.1 Project Concept and Rationale

4.1.1 The Government considers the improvement in farm incomes of the majority of the rural population as a precondition for the reduction of rural poverty in Tanzania. Its vision is for decentralized development efforts that provide for a modernised agriculture sector and the creation of an enabling environment for improving agricultural productivity and profitability, improving farm incomes, reducing rural poverty and ensuring household food security. Within the ASDP framework, this project will fall under Sub-Programme A: Agricultural Sector Support and Implementation at District and Field Levels. As such districts and villages, their (agricultural) development plans (DADPs and VADPs) and empowerment of communities are at the core of this project.

4.1.2 The project has been designed taking into consideration the lessons learnt from past and on going national and donor interventions in Tanzania, especially the World Bank supported PADEP and TASAF as well as the ADB supported SPFS, which use similar approaches. The project will lay the foundation for the design and implementation of more effective Village Agriculture Development Plans (VADPs), (i) by creating and strengthening the capacity of large numbers of participatory farmer groups and networks, so as to increase production, productivity and profitability, and (ii) strengthening the capacity of local government authorities (LGAs) concerned with the facilitation, preparation and execution of VADPs and DADPs. This will generate demand for specific services and infrastructure, which should create an environment that will lead to business oriented VADPs. The project will be demand driven adopting a participatory development approach whereby specific activities and investments will be determined by the PFGs and communities.

4.1.3 The mode of training for farmer capacity building will be the Farmer Field School (FFS) methodology, a participatory community-based process which is already widely used in many donor-funded projects in Tanzania for strengthening farmer and extension skills. Farmer Field School and PFG – type intervention models have started to reach relatively large numbers of farmers in a relatively short time, they are now ready for full-fledged up-scaling. Gender mainstreaming in the project will be done with a focus on gender responsive and equitable participation for development planning and implementation, as well as ensuring participation of women and other vulnerable groups in project implementation and community representation and decision-making. Microfinance and marketing activities will build on existing or newly formed participatory farmer groups and networks, and will aim at running farming as a business, rather than as subsistence agriculture.

4.1.4 Capacity building of local government authorities (LGAs) will enable them to provide adequate planning and implementation support. Funds will be made available to implement VADPs of a substantial number of villages in each district. This number will be limited by both availability of project funds and duration of the project. Areas with higher potential and better accessibility will be the first to be targeted. The project will provide support to communities to purchase agricultural equipment and technology, establish agriculture related micro projects and infrastructures at the village level or establish medium-sized inter-village infrastructures that will open up areas that are remote or poorly accessible. In order to effectively reach all the districts, phasing of project activities will have to be within districts rather than between districts. By the end of the second year all 25 district would be actively engaged in the project.

4.1.5 The project is in line with the Bank's key policy documents such as (i) Vision Statement, which regards agriculture, given its importance to African economies, as the starting point for supporting overall production growth and improving living standards in the regional member countries. (ii) Poverty Reduction policy, which aims to support the RMCs in their efforts towards poverty reduction and considers that agriculture and rural development will continue to be the engine of pro-poor growth in Africa; (iii) Agricultural and Rural Development Sector Bank Group Policy (2000), which seeks to promote sustainable use of natural resources, strengthen rural institutions, support improvements in agricultural productivity and create an economic environment conducive for the commercialisation of agriculture, enhanced food security and increased poverty reduction; and (iv) Tanzania-CSP for the 2002-2004 ADF IX cycle, which indicates that Bank's support to agriculture and rural development is to be provided within the overall framework of Tanzania's Rural Development Strategy and Agricultural Sector Development Strategy (ASDS).

4.2 Project Area and Beneficiaries

4.2.1 The project will cover 25 districts in five regions of the North-West of Tanzania, as given in the table below. The location of these districts in Tanzania is shown in Annex 1.

Regions	Districts
Kagera	Biharamulo, Bukoba, Karagwe, Muleba and Ngara
Kigoma	Kasulu, Kibondo and Kigoma Rural
Mara	Bunda, Musoma Rural, Tarime and Serengeti
Mwanza	Geita, Kwimba, Magu, Misungwi, Sengerema and Ukerewe
Shinyanga	Bariadi, Bukombe, Kahama, Kishapu, Maswa, Meatu, and Shinyanga Rural

4.2.2 The selection of districts is based on the rural and agricultural focus of district development within the ASDP framework, and priority intervention areas identified for investment and capacity building. Moreover, the selected areas follow the GOT strategy to allocate specific regions and districts to specific donors for support as a means of streamlining donor interventions in clusters of districts and regions and avoid duplication and overlap.

4.2.3 There are 611 wards in the five regions, with each ward consisting on average of 4 to 5 administrative villages. There are about 2,750 administrative villages, on average 110 villages per district, most of which consist of two or more sub-villages or hamlets. The total population of the project area is approximately 10 million people, of which around 50% are women. There are about 1.5 million households, of which around 23% are female headed, most of which are engaged in the agriculture sector and many of whom are living in poverty. The total area of the 25 districts amounts to 177,000 km², and population densities vary from 16 persons per km² in Serengeti to 616 persons per km² in Ukerewe. The average household size is 6.5 persons.

4.2.4 The direct beneficiaries in the Project area will be: (i) the participatory farmer groups and their grassroots institutions (such as SACAs and SACCOS); and (ii) villages (750) where the rural infrastructural facilities will be constructed or rehabilitated. It is estimated that a total of 3.4 million people in 0.57 million households will benefit directly, of which 23% are expected to be female headed households, from the project.

4.3 Strategic Context

The overall direction of government policy as articulated in the Tanzania Development Vision 2025 and Agriculture Sector Development Strategy (ASDS) is for decentralized development efforts that provide for a modernised agriculture sector. The ASDS aims to create an enabling environment for improving agricultural productivity and profitability, improving farm incomes, reducing rural poverty and ensuring household food security. Moreover, the development of the agriculture sector has been identified as a priority for poverty reduction in Tanzania's Poverty Reduction Strategy Paper (PRSP). Agriculture is of strategic importance, not only as a means of increasing household incomes amongst a large number of the population's disadvantaged and poor, but also, in fulfilling household nutritional needs, increasing foreign exchange earnings and providing raw materials for industry. By improving the capacities of farmers and the District officials, and the provision of the rural infrastructural facilities, the project will contribute towards increasing farm incomes for its clients and enhancing food security. It will ultimately contribute to the sector goal of promoting national economic growth and reducing poverty, which are consistent with the country's vision as well as its agricultural strategy. Finally, the project will assist in alleviating some of the constraints that presently hamper the development of the sector as identified above. The sector goal of the project is to contribute to the reduction of rural poverty and food insecurity. The project will contribute to achieving the Millennium Development Goal of halving the proportion of people living in extreme poverty by 2015.

4.4 Project Objective

The project specific objective is to increase productivity and incomes of rural households in the project area, within the overall framework of the Agricultural Sector Development Strategy.

4.5 Project Description

4.5.1 The project has three major field components and one project management component, with the following outputs:

A. Farmer Capacity Building Component: (i) 25 districts will have the capacity to train participatory farmer groups through participatory adult education methods; (ii) 250,000 farmers in 10,000 participatory farmer groups with an average of 25 members each, trained in technical, organizational and managerial subject matters through participatory adult learning methods.

B. Community Planning and Investment in Agriculture Component: (i) 25 districts will have the capacity to plan, manage and monitor District and Village Agricultural Development Plans; (ii) 25 District Agricultural Development Plans prepared and implemented; (iii) 750 Village Agricultural Development Plans prepared and implemented including agriculture related micro-projects, small infrastructures and agricultural technology investments; (iv) Improved market access through the improvement of 500 km of feeder roads; and (v) Improved water control for agriculture through the construction of 25 water harvesting structures.

C. Support to Rural Micro-finance and Marketing Component: (i) 200 operationally sustainable Savings and Credit Cooperatives with each cooperative comprising on average 1,000 members and TZS 40 million in savings after six years of operation; and (ii) Marketing information network established and functioning in 25 districts.

A. Farmer Capacity Building Component:

4.5.2 The component is divided into two sub-components: (1) Agriculture Extension Training capacity; and (2) Farmer training.

4.5.3 The **Agriculture Extension Training Capacity Sub-component** consists of several elements: (i) curriculum development; (ii) training of District Training Coordinators (DTC) and coordination; (iii) training of Ward level training facilitators (WTF) and facilitation. During the first year of the project, appropriate training curricula will be developed for the different agro-ecological zones and production systems. Two curriculum development workshops involving research stations, NGOs, and the private sector will be organized, with one workshop for the higher rainfall districts (or the banana-coffee based cropping systems), and another for the lower rainfall districts (or the cereal-cotton based cropping systems). Based on the outcomes of these workshops, training curricula will be elaborated in detail by experts (consultants or relevant institutions).

4.5.4 Two DTCs will be appointed per district to develop the component over the six years of the project. They will be in charge of training ward level and farmer-training facilitators, communicate with all stakeholders in the project around training issues, planning, budgeting, reporting on progress of the component activities and coordinate with other components. They will be experienced extension staff drawn from the District Agriculture and Livestock Development Office (DALDO) and will be equipped with motorcycles and a travel budget, computers and internet access. To prepare these DTCs, a four months training of trainers will be undertaken during the first year of the project, covering a wide range of subjects, including participatory training and monitoring, relevant technical subject matters and marketing, and also cross-cutting issues as well as project management and computer literacy.

4.5.5 The WTFs will be selected from the existing extension staff based in the targeted wards and villages. They will be responsible for the farmer training programme in their ward. The WTF will be assisted by one farmer facilitator, who will be selected from the first batch of PFGs to be trained in each particular ward. Both ward and farmer facilitators will be trained by the DTCs using

the training of trainers approach. This particular training will be for two days per week at the district level, and during the second part of the week each facilitator will deliver the lessons learned earlier in the week to PFGs. During the next week they will return to the district to share their experience, solve problems, build confidence and continue their training. This will continue for the season. The training of facilitators will also include methods to assist farmers to undertake financial assessments and focus on profitable enterprises.

4.5.6 The first batch of ten ward training facilitators per district will be selected and trained during project year one, the second batch of ten ward training facilitators per district will be selected during project year two, for a total of 20 ward training facilitators per district and 500 as project total. The first batch of ten farmer facilitators per district will be selected and trained during project year two, the second batch of ten farmer facilitators per district during project year three, for a total of 20 farmer facilitators per district and the total for the entire project will be 500. Both groups will be equipped with bicycles.

4.5.7 Under the **Farmer Training Sub-component**, the Farmer Field School (FFS) methodology will form the backbone of capacity building of the Participatory Farmer Groups (PFG). The training will be open to interested groups with an average of 25 farmers per group within target villages and wards. These could be existing groups or new groups, while women farmers are expected to form at least 50 percent of all trainees. The ward training facilitators and the farmer facilitators will each train two PFGs in one year. In addition, each trained PFG will be expected to train one additional PFG (farmer-to-farmer training), with back-up support of the facilitators. Altogether, an average of 20 wards per district will be targeted, and on average 20 PFGs will be trained in each ward. In total, 10,000 PFGs with a total of 250,000 farmers will be trained over the project life.

4.5.8 Farmers will decide, in consultation with their training facilitator and based on their own analysis of opportunities and constraints, which technologies they wish to be trained in. The optional technologies will be those that are known to improve income in the different agro-ecological settings. For instance farmers could opt for production *increase* through improved water management or production intensification (such as the use of manure to improve soil fertility), but they could also opt for *diversification* (for instance producing and selling small livestock) to have different sources of income at different times of the year, or technologies that provide a combination of advantages. In addition, there is the possibility of combining topics, so that the profitable nature of one topic will carry other topics that, though not profitable, are still a priority. In all cases, organisational management skills (e.g. leadership, financial transparency), livelihood topics (e.g. gender and health issues, such as HIV/AIDS), and environmental management topics will also be included in the training.

4.5.9 The initial training and focus on profitability will prepare the PFGs for small group mini-grants of up to TZS 300 000 per group of up to 25 farmers of which 50% will be women. This training will enable them to undertake economic mini-projects and thus acquire management and business skills. This mini-grant will be provided after the PFG has been operational and would have been meeting regularly for four to six months (to avoid input-driven participation). The decision on how the mini-grant will be invested will be made by the group in consultation with their training facilitator, based on a participatory analysis of potential opportunities. The proceeds from the mini-projects will be used to strengthen the group savings activities and to capitalise SACAs

4.5.10 From project year 3 onwards, ward-level PFG-association/network training will be organized with the objective to stimulate the formation of effective networks of PFGs. Similarly, from year 3 onwards, the project will make funds available for annual district-level PFG-forum workshops, and regional-level PFG forum workshops from year 4 onwards.

4.5.11 The **gender mainstreaming strategy** in the project will be done with a focus on gender responsive and equitable participation for development planning and implementation, as well as ensuring participation of women and other vulnerable groups in project implementation and

community representation and decision-making. This will include training and awareness raising in (i) gender responsive participatory approach in identification of development needs with specific focus on social inclusion of women and other vulnerable groups in the community decision making process such as water user committees, village development committees, etc., (ii) gender responsive monitoring and evaluation of project implementation and progress, (iii) training in community mobilization, management and leadership skills, including training in micro-projects identification and formulation, and (iv) HIV/AIDS awareness raising and sensitisation. Specialized service providers and/ or NGOs, which are readily available in the country, will carry out the different training and sensitization activities, and will be guided and monitored by the PCU.

B Community Planning and Investment in Agriculture Component

4.5.12 This component involves three sub-components: (i) Planning and implementation capacity building, (ii) Medium size rural infrastructure, and (iii) Village micro project and agricultural technology.

4.5.13 **Planning and Implementation Capacity Building:** Under this sub-component, Village Agricultural Development Plans (VADPs) will be prepared through participatory process. Initial project activity will focus on strengthening the capacity of 25 District Facilitation Teams (DFTs) and about 200 Ward Facilitation Teams (WFTs) in participatory planning, implementation and participatory monitoring and evaluation. Representatives of regional and divisional offices will be invited to participate in the initial and annual follow-on training programmes. The DFTs and WFTs will be responsible for facilitating the Participatory Village Planning Exercises, VADP and DADP planning, approval and integration processes, appraisal of proposed sub-projects, technical support during implementation and project monitoring. Environmental management concerns will be integrated within the process of formulation of VADPs and DADPs. The project will work closely with PO-RALG to tap into the existing experience of training facilitators, using the Opportunities and Obstacles to Development Methodology (O&OD) especially for community mobilisation, leadership and management skills training, and supporting the preparation of VADPs. A total of 750 VADPs will be prepared (with participatory annual plan evaluation and re-planning) and integrated into 25 DADPs.

4.5.14 **Medium Size Rural Infrastructure:** This sub-component will support the construction/improvement of agriculture related rural infrastructure such as water control structures and rural roads, both categories to be implemented through the respective districts. The type of irrigation water abstraction methods to be used will mainly comprise locally familiar systems of water harvesting technologies (water storage mara-bunds) or small run-of the river diversions with a combined potential of irrigating about 1,770 ha. The specific sites and type of technologies to be selected will depend on completion of the demand driven VADP process. However, 25 water control structures, one for each district, comprising of 18 storage type and 7 river diversion systems are considered, reflecting the water resource and irrigation potential assessments of the National Irrigation Master Plan (NIMP).

4.5.15 The mara-bund comprise a storage reservoir with an average minimum capacity of 100,000 cubic meters of water for supplementary irrigation of 40ha of land. The system consist of an earth embankment, spillway to discharge floods, conveyance and distribution canals with on-farm structures. The run-of-the river diversions comprise masonry or concrete weirs constructed across small perennial rivers and fitted with gated intake structures to divert water for irrigating up to 150 ha per scheme. Conveyance and distribution canals as well as on-farm structures (division boxes) will also be provided.

4.5.16 Water control schemes proposed for support will initially go through a preliminary assessment by the District and Zonal Irrigation Units and those that pass the initial screening and approval at VADP and DADP levels, will be taken up to detailed design starting from feasibility assessments that take into account technical, social/gender, financial and environmental suitability. MAFS and JICA Guidelines for Irrigation Scheme Formulation will be used to provide guidance to

District and Zonal Irrigation Units for the initial planning and screening. Water availability assessments and acquisition of water rights from respective Basin Authorities will be important considerations. Beneficiary communities will be required to contribute 20% of the project costs (mainly labour for simple excavations and bunds for their plots) and also agree to operate and maintain the systems through their Water User Associations, after receiving training in management, accounting and technical aspects (through FFS supplemented with specific training). Cost estimates used for the project reflect the experience of recently completed small-scale irrigation schemes. Experienced consultants will be recruited by the project for feasibility assessments, detailed design, preparation of tender documents and construction supervision. Local contractors will be engaged to undertake the construction, using as much as feasible labour-based technologies (for excavations). The project will work closely with the Zonal Irrigation Units of MAFS, who will backstop the District Water Engineers. The project will cover their travel costs and supply of limited basic equipment such as hand held GPS, Clinometers, pH and EC-meters for on-site measurements.

4.5.17 Rural roads which will facilitate improved access of villages to markets will be selected to ensure synergy with other project activities such as agricultural technology investments, agricultural micro-project investments and/or in those localities where farmers' capacity has been built. These roads are classified as district or feeder roads and will be improved (and later maintained) by districts. District and feeder roads have a carriageway width of 5.5m with properly formed side slopes, side drains and drainage structures. Embankment will be compacted to standard specification using rollers and covered with compacted gravel surfacing of 12 cm. While the final length of the rural roads to be supported will be established based on demand-driven VADP process as well as elaboration of district level transport network, it is estimated to be about 500 km (average 20 km per district). The project will utilize where feasible labour-based technologies (LBT) in line with the experience gained in Mwanza Region. In order to support and facilitate the early commencement of the medium size rural infrastructure, the PCU will recruit a team of consultants to prepare criteria for site selection, standard designs, technical specifications, and bidding documents. All the water control structures, small-scale irrigation schemes, and rural feeder roads will be subjected to an environmental impact assessment process so as to comply with the National Environmental Policy of Tanzania, and Bank's policy. The maintenance of the roads constructed under the project will be the responsibility of the Government. Government will be required to provide an undertaking to make adequate annual budgetary allocation and timely flow of funds to the participating districts for maintenance.

4.5.18 **Village Micro-projects and Agricultural Technology:** To support the implementation of the VADPs, two categories of funding will be made available by the project: a) support to agricultural micro-projects and infrastructure, and b) agricultural technology investments. Based on identified and prioritised demands, the PFGs of the target villages will select the micro-projects and infrastructure to be supported by the project. Accordingly, though the selection of technologies will depend on farmers' choice, they are expected to include: improvement of water distribution in existing water control structures, spot improvement to facilitate road communication (drifts or footbridges), improvement of market grounds, shallow dug wells for livestock and vegetable watering, erosion control in watersheds, charco dams (small water storages) for livestock watering and storage works for agricultural produce. Micro-projects and infrastructure will be implemented through the Community Supervision Committee (or PFGs) after being trained and through the support of the ward and district officers. The allocated project funding per village is TZS 35 million, which includes a mandatory beneficiary contribution of 20 percent.

4.5.19 The agricultural technology investments support investments that enhance increased agricultural productivity and incomes. The investments include acquisition of value adding equipment with the beneficiaries required to raise a matching fund of 50%. Value adding equipment that may be selected by villages is expected to include: coffee hullers and driers, cereal hullers and/or huskers, cereal and cassava mills, oil presses, fruits, vegetables and spices driers and

processors, livestock parasite treatment equipment, improvement to livestock slaughter facilities, milk chilling and cold storage facilities. The project funding for this category is TZS 10 million per village inclusive of farmers' 50% matching fund. On a pilot basis SACCOs or PFGs that wish to invest in value adding equipment and technology with a positive value to the community will be encouraged to apply through the VADP process. A pre-condition will be the submission of sound business and management plan and the technology having positive or neutral impact on the environment.

C. Support to Rural Micro-Financial Services and Marketing Component

4.5.20 The component will have two sub-components (i) strengthening of rural savings and credit institutions, and (ii) promotion of marketing opportunities.

4.5.21 **Strengthening of rural savings and credit institutions:** The project will build upon group based savings and credit methodology, which will further build on the PFG model and the expressed desire of the farmers to save. Training and oversight will be provided to the savings group and its elected officeholders by a specialised implementing NGO in coordination with the district administration and the PCU. The Project will not provide any line of credit.

4.5.22 The strengthening of existing and creation of new SACCOSs will be gradual. It is anticipated that approximately 25 members of a PFG will form a savings group. Assuming that 20 percent of the groups are unable to progress to forming SACAs, it is expected that 200,000 members will form 8,000 savings groups, with 4-6 PFGs per village. The combination of the savings groups from 8villages will enable a SACCOS with a membership of 1000 participants to be created. This will result in about 1000 SACCOSs being supported under the project. The creation of SACCOSs will start in project year two with the strengthening/creation of 10 SACCOSs. Thereafter, the strengthening/creation of the SACCOSs will gather momentum, with the creation of 40 in project year three, 70 in project year four, and 80 in project year five. All SACCOSs created from the second half of year four onwards will be add-on SACCOSs to existing ones that are being either split because they are too big for local management to adequately manage, or the new ones will be added to an existing apex SACCOS. The Project will liaise closely with the on-going Bank financed Small Entrepreneurs Loan Facility Project (SELF) as well as the on going IFAD supported Rural Finance Programme, in adopting its successful capacity building practices. A specialised NGO/MFI will be recruited to do the different training, facilitation and monitoring under this sub-component.

4.5.23 **Marketing Support:** This sub-component will be implemented by a specialised and experienced service provider. It will mainly focus on providing training to the PFGs, bringing market information to PFGs, creating market contacts on both the buying and selling sides, and identifying and training District agricultural officers who will progressively take over. Towards the close of the project, the introduction of fee payment for this information will be introduced. This component will focus on including at least 35% women within the farmer groups identified for training. This will be a monitoring and reporting indicator.

4.5.24 In this sub-component, training will be provided by the service provider with the goal of enabling the farmers to better understand how markets function, and how to improve their negotiating positions. This training will include: (i) understanding of market mechanisms; (ii) how to negotiate with traders, (iii) the importance of quality, and quality control; (iv) the need for grading of products; (v) the importance of reliability both in terms of timeliness and in terms of quantity delivered. Furthermore, a market survey will be carried out to document the various agricultural goods and livestock that are produced or can be produced within the project area. Based on these activities, the market data and information that needs to be disseminated to the farmers at the village level will be identified. The collection of the market data will be the primary responsibility of the service provider. The market information will be distributed to villages, GOT ministries, and other interested parties through the following channels: (i) as a text format on a pre-set telephone number, which can be accessed by mobile phone from the mobile phone operators in

the villages; (ii) Daily, or weekly, radio broadcasts, (iii) newspapers, especially the Kiswahili newspapers; (iv) pamphlets to be distributed, (v) distributing the data to the local office of the MCM, where it will be posted on a blackboard; and(vii) by clients phoning into the local MCM office.

4.5.25 The sub-component, through its basic business development services (BDS) will help identify likely business opportunities for farmers and will provide some technical assistance in the managing of these operations. The Business Development Service activities will include training in skills needed for basic business planning, product pricing, inventory management, and cash flow management, identifying profitable business opportunities, etc.

D Project Coordination and Management Component

4.5.26 The Project will support the establishment of a Project Coordinating Unit at Mwanza to oversee the day-to-day coordination and management of its activities. The PCU staff will include a Project Coordinator, Accountant, Training and Participatory Officer, Monitoring and Evaluation Officer, Procurement Specialist and Liaison Officer (to be based at Dar-es-Salaam) who will be recruited competitively and funded by the project. The Government will provide the necessary support staff and meet their remunerations as part of its counterpart contribution. Given the size of the project area and the need to closely monitor project implementation in all the 25 districts involved in the project, the PCU will be equipped with three vehicles. It will also be provided with computers and other office equipment, and furniture. It will have a budget to operate and fund planning and review workshops; commission external auditors (to audit project/district accounts and village level investments); produce flyers, documents and communication material.

4.6 Production, Market and Prices

4.6.1 The main production output of this project will be from the increased productivity and intensification of agricultural production, as a result of farmer capacity building in an enabling environment. The projections on increased crop production as a result of the project are based on the assumption that all together 0.55 million out of 1.5 million households in the project area will benefit directly from the project, and that this share of 36.7 percent of households produces the same proportion of the different crops included in the table below. Of these 0.55 million households, 0.3 million will increase production by 15 percent, 0.2 million by 20 percent, and 50,000 by 25 percent. Based on these projections, it is anticipated to achieve an overall production increase of six percent, with a projected incremental value of TZS 40 billion per year is estimated. This projected six percent increase in crop production is modest, and should not in itself give rise to strong price fluctuation.

4.6.2 The market situation differs from place to place. It is envisaged that the produce will continue to use the existing marketing channels. Marketing links across the borders to neighbouring countries are important, and it is often easier to sell across the border than to transport produce all the way to Dar es Salaam. To improve market knowledge, a market survey of the various agricultural goods and livestock that are produced/ can be produced within the project area will be carried out under Component C.

4.6.3 The prices of these crops fluctuate year by year, but also between regions and districts. The prices used in the table below are those reported from the largest production region in the project area: Kagera for banana and coffee, Mara for Irish potato, and Shynianga for all other crops.

Crop	Approximate current project area production (000 ton/year)	Projected project related production increase (000 ton/year)	Farmgate price (TZS/kg)	Additional production value (TZS million/year)
Maize	591	35.5	180	6,383
Sorghum	166	10.0	165	1,643
Rice	280	16.8	280	4,704
Banana	1,423	85.4	100	8,538
Cassava	1,299	77.9	80	6,235
Sweet potato	708	42.5	70	2,974
Irish potato	78	4.7	180	842
Pulses	164	9.8	400	3,936
Groundnut	75	4.5	450	2,025
Coffee	38	2.3	200	456
Cotton	157	9.4	280	2,638
Total	4,979	5,277.8		40,374

4.7 Environmental Impact

4.7.1 The Project has been classified in accordance with the Bank's Environmental Categorization Screening Checklist as being in Category 2, since the potential adverse impacts can be managed using internationally recognized design criteria and standards, and proven mitigation measures.

4.7.2 The project has several environmental benefits: 1) farmer training will promote environmentally sound farming practices; 2) food security will be enhanced through the increase in crop yields arising from the improvement in farming skills; 3) improvement in agricultural production and household incomes will reduce the dependency on harvesting natural resources for sustenance, and thereby contribute to biodiversity conservation and sustainable use; 4) improvement in environmentally-sound agricultural practices and natural resources inventories will be direct outcomes during the formulation of District and Village Agricultural Development Plans; 5) in accordance with the Tanzania's Environmental Assessment Policy, the proposed infrastructure (e.g. rural feeder roads, water control structures, irrigation schemes) will be the subject of an ESIA and mitigation measures will be mainstreamed into project design and implementation. This will give an opportunity to district councils to develop their capacity to better integrate environmental issues within their decision-making process; 6) improvement in water availability will result from the development of water control structures; 7) efficiency of water use will increase at irrigation schemes through water management training of farmers and improvement in water conveyance and distribution structures; 8) improvement in the quality of life due to improved access to social and health services will result from the development of feeder roads.

4.7.3 The potential negative impacts include the following: 1) soil erosion occurring at un-rehabilitated excavations made during construction of roads, irrigation schemes and charco-dams where livestock will congregate; 2) incidences of water-borne/related diseases are likely to increase due to the development of water storage and irrigation works; 3) the release of drained water from irrigation schemes into streams could contaminate recipient streams and aquatic habitat; 4) expansion of the road system could impact negatively on areas with significant vegetation and biodiversity.

4.7.4 Measures for enhancing environmental benefits include: 1) incorporation of environmentally sound farming practices in the training curricula; 2) development of awareness manual and courses on biodiversity conservation and sustainable use to farmers; 3) implementation of District and Village Agricultural Development Plans; 4) strengthening institutional

environmental management capacities in district councils and its linkages with the Environmental Management Unit in MAFS and the National Environmental Management Agency.

4.7.5 Mitigation measures for potential negative impacts include: 1) implementing environmental restoration measures for sites disturbed during infrastructure development; 2) provision of adequate livestock watering facilities to reduce soil erosion around watering points; 3) public health education aimed at controlling water-borne/related diseases; 4) alignment of rural feeder roads should avoid, where possible, locations with significant vegetation stands.

4.7.6 The implementation of the Environmental and Social Management Plan, which has been developed for this project and summarised in Annex 6, will enhance positive impacts and mitigate identified negative impacts. The District councils will be primarily responsible for the implementation of the ESMP under the guidance of the Environmental Management Unit in MAFS. The coordination of these activities will be the responsibility of the Project Coordinator.

4.8 Project Costs

4.8.1 The total cost of the project excluding taxes and duties is estimated at UA 58.01 million equivalent to TZS 94.19 billion. The cost will include foreign cost of UA 25.33 million or (44% of total costs) and local costs amounting to UA 32.68 million (56% of total costs). The physical contingencies on civil works have been estimated at 10%, 5% for other categories of costs and 0% for technical assistance. The summaries of cost estimates by component and by category of expenditure are given in Tables 4.1 and 4.2 respectively.

4.8.2 The bulk of the project resources amounting to UA 35.2 million (60.7%) are earmarked for the development and construction of rural infrastructure and micro projects at the community level. The price contingencies adopted for the project are based on the domestic prices, in line with current and projected inflation figures which is assumed at 4.6 per cent per annum, throughout the project period. For the foreign costs, the inflation rates are based on the MUV index of Manufactured Exports from the G-5 industrial countries and are estimated at 2.4 percent.

4.9 Sources of Financing

4.9.1 The Project will be financed by an ADF Loan to the tune of UA 36.0 million (62.1%) and an ADF Grant of UA 7.0 million (12.1%). The Government will fund a total of UA 6.64 million (11.5%) and the beneficiaries UA 8.37 million (14.4%). The ADF loan and grant will cover the entire 100% of the foreign cost of UA 25.33 million and 54% of the Local Costs amounting to UA 17.67 million. The Government and beneficiaries will fund the balance of the local costs amounting to UA 15.01 million.

Table 4.1 Summary of Cost Estimates by Component

Components	(TZS Million)			(UA '000)			% Foreign Exchange
	Local Cost	Foreign Cost	Total Cost	Local Cost	Foreign Cost	Total Cost	
1. Farmer Capacity Building							
- Agric. Extension Training Capacity	2,089.2	1,416.7	3,505.9	1,286.8	872.6	2,159.4	40
- Farmer Capacity	5,165.0	3,165.0	8,330.0	3,181.3	1,949.4	5,130.7	38
Sub total	7,254.2	4,581.7	11,835.9	4,486.1	2,822.0	7,290.0	39
2. Community Planning and Investments in Agric.							
- District Capacity Building	9,982.7	2,089.0	12,071.7	6,148.6	1,286.7	7,435.3	17
- Medium Scale Rural Infrastructure	7,778.0	5,017.0	12,795.0	4,790.7	3,090.1	7,880.8	39
- Village Micro Projects and Infrastructure	14,475.0	19,725.0	34,200.0	8,915.5	12,149.2	21,064.7	58
Sub total	32,235.7	26,831.0	59,066.7	19,854.9	16,525.9	36,380.8	45
3. Support to Rural Finance and Marketing							
- Rural Financial Services	1,796.7	1,748.8	3,545.5	1,106.6	1,077.2	2,183.8	49
- Marketing Support	682.8	682.8	1,365.6	420.6	420.6	841.1	50
Sub total	2,479.5	2,431.6	4,911.1	1,527.2	1,497.7	3,024.9	50
4. Project Coordination and Management	1,677.0	1,528.5	3,205.5	1,032.9	941.5	1,974.4	48
Total Base Costs	43,646.4	35,372.8	79,019.2	26,883.0	21,787.1	48,670.1	45
Physical Contingencies	1,946.2	2,630.6	4,576.8	1,198.7	1,620.2	2,819.0	57
Price Contingencies	7,473.4	3,119.0	10,592.4	4,603.1	1,921.1	6,524.2	29
Total Cost	53,066.1	41,122.4	94,188.5	32,684.8	25,328.4	58,013.2	44

Table 4.2: Summary of Cost Estimates by Category of Expenditure

Category of Expenditure	(TZS Million)			(UA '000)			% Foreign Exchange
	Local Cost	Foreign Cost	Total Cost	Local Cost	Foreign Cost	Total Cost	
<i>Investment Costs</i>							
1. Civil Works	17,028.0	20,142.0	37,170.0	10,488.0	12,406.0	22,894.0	54
2. Goods							
- Vehicles	-	540.0	540.0	-	332.6	332.6	100
- Equipment and Materials	6,782.3	5,041.0	11,823.3	4,177.4	3,104.9	7,282.3	43
Sub total	6,782.3	5,581.0	12,363.3	4,177.4	3,437.5	7,614.9	45
3. Training, Workshops and Studies							
- Training	5,470.5	5,422.7	10,893.2	3,369.4	3,340.0	6,709.4	50
- Workshops	50.0	50.0	100.0	30.8	30.8	61.6	50
- Studies	1,337.5	712.5	2,050.0	823.8	438.8	1,262.6	35
- Audit	90.0	90.0	180.0	55.4	55.4	110.9	50
Sub total	6,948.0	6,275.2	13,223.2	4,279.5	3,865.0	8,144.5	47
4. Technical Assistance	2,623.0	2,623.0	5,245.9	1,615.5	1,615.5	3,231.1	50
Total Investment Costs	33,381.3	34,621.1	68,002.4	20,560.4	21,324.0	41,884.5	51
<i>Recurrent Costs</i>							
1. Salaries	7,990.0	-	7,990.0	4,921.3	-	4,921.3	-
2. Allowances	1,523.4	-	1,523.4	938.3	-	938.3	-
3. Operating and Maintenance	751.8	751.8	1,503.5	463.0	463.0	926.0	50
Total Recurrent Costs	10,265.1	751.8	11,016.9	6,322.6	463.0	6,785.6	7
Total Base Costs	43,646.4	35,372.8	79,019.2	26,883.0	21,787.1	48,670.1	45
Physical Contingencies	1,946.2	2,630.6	4,576.8	1,198.7	1,620.2	2,819.0	57
Price Contingencies	7,473.4	3,119.0	10,592.4	4,603.1	1,921.1	6,524.2	29
Total Cost	53,066.1	41,122.4	94,188.5	32,684.8	25,328.4	58,013.2	44

4.9.2 The ADF loan will fund the rehabilitation/upgrading of the rural roads, and small-scale irrigation infrastructure, training and studies, technical assistance, field expenses and some operating and maintenance costs. Contributions by the beneficiaries will be both in cash (for technology improvement equipment, and the mini grants) and in kind (labour and construction

material for micro-projects). These contributions will be for the co-financing of the grants for technology transfer equipment, district/village infrastructure including rural roads and irrigation schemes, as well as the mini-grant projects. The Government will contribute office space to house the PCU and meet the salaries of the government officials (both at the national and district levels) who will be working on the project, 50% of the cost of the O & OD training, as well as part of the operating and maintenance cost of the project.

4.9.3 The ADF grant will fund the Farmer Capacity Building Component. It will meet 84.3% of the component cost. The summary of the sources of financing for the entire project, ADF Loan and Grant are given in Tables 4.3 (a), 4.3 (b) and 4.3 (c) below.

Table 4.3 (a) - Sources of Finance (UA '000)

Source	Foreign Exchange	Local Cost	Total Cost	% of Total
ADF Loan	23,358.9	12,641.1	36,000.0	62.1
ADF Grant	1,969.5	5,029.5	6,999.0	12.1
Government		6,645.1	6,645.1	11.5
Beneficiaries		8,369.1	8,369.1	14.4
Total	25,328.4	32,684.8	58,013.2	100.0

Table 4.3 (b) – Sources of Finance (ADF Loan Financed Components)(UA '000)

Source	Foreign Exchange	Local Cost	Total Cost	% of Total
ADF Loan	23,358.9	12,641.1	36,000.0	72.4
Government		6,056.0	6,056.0	12.2
Beneficiaries		7,657.6	7,657.6	15.4
Total	23,358.9	26,354.7	49,713.6	100.0

Table 4.3 (c) – Sources of Finance (ADF Grant Financed Component)(UA '000)

Source	Foreign Exchange	Local Cost	Total Cost	% of Total
ADF Grant	3,074.2	3,924.8	6,999.0	84.3
Government		589.1	589.1	7.1
Beneficiaries		711.5	711.5	8.6
Total	3,074.2	5,225.4	8,299.6	100.0

5. PROJECT IMPLEMENTATION

5.1 Executing Agency

The project will be implemented within the framework of the ASDP, which falls under the purview of the Ministry of Agriculture and Food Security (MAFS). MAFS, which is also the lead ministry of the ASLMs, will be designated as the executing agency of the project. This entails that MAFS will be responsible for coordination of policy directives and actions of the ASLMs as they relate to the project.

5.2 Institutional Arrangements

5.2.1 *Project Steering Committee*: The project will be implemented within the existing institutional framework of the ASDP, just as all the other projects in the sector. In line with the framework explained in paragraph 2.6.5, the existing Inter-Ministerial Coordination Committee (ICC) will serve as the Project Steering Committee of the project. In this regard, the ICC will consider and approve annual project work plan and budget and the annual training programme before these are submitted to the Bank for approval. The ICC will also monitor performance of the project and advise on policy issues. However, in order that the ICC be given necessary advisory support to properly perform its functions, a Project Technical Committee (PTC) will be established. This will be the only new committee to be established to assist in the implementation of the project. The PTC will comprise Director of Regional Coordination, PO-RALG; Directors of Policy and Planning of MAFS, and MWLD; Directors of Crop Development, Marketing, and Animal

Production; two District Executive Directors from the project area, and two representatives of NGOs operating in the project area, ASDP Coordinator, with DASIP Coordinator as Secretary. The committee may co-opt other members as and when needed. The PTC will meet at least three times a year, one of which will be within the project area. The establishment of the committee will be a loan condition. Annex 2 shows the organizational chart of the project.

5.2.2 **Project Coordination Unit (PCU):** During the appraisal of the project, Government indicated that it was considering the setting up of an overall ASDP Programme Coordination Unit (or Programme Facilitation Unit) to coordinate and manage all the projects that fall under the District-based projects. In the absence of the ASDP Programme Coordination Unit, a DASIP Project Coordination Unit (PCU) will be established and located in Mwanza, within the project area. It has been agreed that if this ASDP Programme Coordination Unit is formed, DASIP's PCU will be absorbed by the Unit after consultation and agreement with the Bank.

5.2.3 DASIP's PCU will fall under the supervision of the Permanent Secretary of MAFS. It will also liaise closely with the ASDP Secretariat. The Project Coordinator will also be the secretary of the PTC. The PCU will have the overall responsibility for co-ordination and monitoring of the Project activities. As such, it will ensure that project activities are initiated and are adequately budgeted for, consolidate Project records, submit all procurement documents to the Bank for approval, compile and submit all disbursement applications, and quarterly progress reports and undertake annual audits of its accounts. The staffing of the PCU has been already reviewed in paragraph 4.5.26 of the report. In view of the district focus in implementation, the size of the PCU has been kept small. However, pending the recruitment of the Project Coordinator, Government will designate a Programme Administrator to work on the initial project start up activities for establishment of the PCU and recruitment of its staff. Responsibility for the implementation and day-to-day coordination and management of field activities will be as much as possible taken up by the direct implementers of the different components, which are first and foremost the concerned Local Government Authorities (in particular districts), as well as contracted service providers.

5.2.4 The main focus of project activities will be at the district level. The District Management Team (DMT) headed by the District Executive Director (DED), which comprise of all the District Departmental Heads will be responsible for the overall coordination of project activities as well as reviewing and approving proposals for funding from communities before transmittal to the PCU, and monitoring the implementation of the approved projects. Day-to-day project implementation will be the responsibility of a District Facilitation Team (DFT), which will comprise the DALDO, Water Engineer, Roads Engineer, Community Development Officer, District Cooperative Officer, District Planning Officer and the District Treasurer. The District Executive Director (DED) will designate one of the officers to head the DFT.

5.3 Supervision and Implementation Schedule

5.3.1 **Supervision:** Given the fact that the Project area is quite extensive, the Bank will supervise the project at least two times a year instead of the usual rate of once every eight months. The day-to-day supervision of the rehabilitation or construction works for the rural roads and other major rural infrastructures will be undertaken by the engineering consulting firms under the guidance of the District Engineers. The consultants will assist the District Engineers to prepare the monthly progress reports to be submitted to the DMTs and the PCU. This approach will enable the Districts to build their capacity in the management of maintenance/rehabilitation of rural infrastructures and related reporting. The Bank's Country Office will also play an active role in the overall supervision of the project.

5.3.2 **Implementation Schedule:** The Project will be implemented over a 6-year period to provide sufficient time for capacity building to take effect and for farmer groups and micro-finance organizations to become sustainable institutions able to continue their operations after the project support ceases. The Project is expected to commence by July 2005 and to end by about December 2011. The capacity building aspects of the project will commence in the first year of the project.

This will be followed up with the development of the infrastructural facilities from the second year onwards. Project implementation will commence in all districts simultaneously. A Mid-Term Review (MTR) of the overall Project will be conducted at the end of PY3, and a project completion report (PCR) will be prepared by both the Borrower and the Bank by PY6. The implementation schedule for the Project is given in Annex 3. A summary of the tentative Expenditure Schedule by Component and by Sources of Finance is presented in table 5.1 and 5.2 respectively.

Table 5.1 – Expenditure Schedule by Component (UA ‘000)

Component	05/06	06/07	07/08	08/09	09/10	10/11	Total
Farmer Capacity Building	754.0	791.0	1,671.7	2,285.6	2,610.5	186.9	8,299.6
Comm. Planning & Investment in Agric.	1,438.6	4,063.5	9,417.2	14,096.8	11,634.2	3,156.6	43,807.0
Support to Rural Finance and Marketing	-	599.7	693.4	829.1	845.2	620.1	3,587.5
Project Coordination	399.2	287.8	388.6	382.3	396.6	464.6	2,319.1
TOTAL	2,591.9	5,742.0	12,170.9	17,593.8	15,486.5	4,428.2	58,013.2

Table 5.2 – Expenditure Schedule by Sources of Finance (UA ‘000)

Source of Finance	05/06	06/07	07/08	08/09	09/10	10/11	Total
ADF Loan	1,608.4	3,563.2	7,552.6	10,917.8	9,610.1	2,747.9	36,000.0
ADF Grant	312.7	692.7	1,468.4	2,122.6	1,868.4	534.2	6,999.0
Government	296.9	657.7	1,394.1	2,015.3	1,773.9	507.2	6,645.1
Beneficiaries	373.9	828.3	1,755.8	2,538.1	2,234.1	638.9	8,369.1
TOTAL	2,591.9	5,742.0	12,170.9	17,593.8	15,486.5	4,428.2	58,013.2

5.4 Procurement Arrangements

5.4.1 All procurement of goods, works and acquisition of consulting services financed by ADF will be in accordance with the ADF *Rules of Procedure for Procurement of Goods and Works*, or as appropriate, *Rules of Procedure for the Use of Consultants*, using the relevant Bank Standard Bidding Documents.

5.4.2 The Project Coordination Unit (PCU) will be responsible for overall procurement issues and will monitor implementation through communication with the District Councils. Because community based projects often present difficulties in the execution of procurement procedures, the PCU will therefore include a procurement specialist with experience in procurement under community-based investment projects (CBIP).

5.4.3 *Civil Works*: Civil works estimated at about UA 28.06 million in aggregate will be carried out on demand by districts/community groups. The contracts will be in relatively small packages distributed over the 25 districts. In line with the Bank's Guidelines for Procurement under Community-Based Investment Projects, contracts of value greater than UA 200,000 will be procured through International Competitive Bidding (ICB). However, no individual contract is expected to be above UA 200,000. Works of value between UA 50,000 and UA 200,000 will be procured through National Competitive Bidding (NCB) and below UA 50,000 National/Local Shopping as the case maybe, soliciting bids from at least three qualified contractors. The mode of Community Participation in Procurement is justified by the fact that, in the interest of project sustainability, it is desirable to call for the participation of local district authorities and communities in this project.

Table 5.3 – Summary of Procurement Arrangements (UA ‘000)

	NCB	Consulting Services**	Other*	NBF	Total
<i>Civil Works</i>	6,030.4 (6,030.4)		22,025.1 (17,099.9)		28,055.5 (23,130.3)
<i>Goods</i>					
-Vehicles	214.1 (214.1)		129.6 (129.6)		343.7 (343.7)
-Equipment & Materials	213.1 (213.1)		8,310.6 (4,866.7)		8,523.7 (5,079.8)
<i>Consultancy Services</i>					
-Training		5,726.5 (5,726.5)	1,876.0 (1,098.3)		7,602.5 (6,824.8)
-Studies		1,549.7 (1,549.7)			1,549.7 (1,549.7)
-Workshops			74.3 (74.3)		74.3 (74.3)
- Audit		129.4 (129.4)			129.4 (129.4)
-Technical Assistance		3,809.5 (3,809.5)			3,809.5 (3,809.5)
<i>Miscellaneous</i>					
- Salaries				5,704.9	5,704.9
- Allowances			1,085.7 (1,085.7)		1,085.7 (1,085.7)
- Operating and Maintenance			971.8 (971.8)	162.6	1,134.4 (971.8)
Total	6,457.6 (6,457.6)	11,215.1 (11,215.1)	34,473.1 (25,326.3)	5,867.5	58,013.2 (42,999.0)

*Other includes mainly National Shopping; ** Shortlist applies to the use of consultants only;
 Figures in bracket represent ADF funding.

5.4.4 *Goods*: Goods estimated at about UA 8.86 million in aggregate will be procured. Whenever lots can be grouped to an aggregate value exceeding UA 200,000 ICB will be used, those between UA 50,000 and UA 200,000 will be procured through National Competitive Bidding (NCB) and below UA 50,000 National/Local Shopping as the case maybe, soliciting bids from at least three qualified suppliers.

5.4.5 *Consulting Services*: Consulting services including curriculum development and testing; the recruitment of PCU personnel; technical assistance for construction supervision and coordination, community sensitisation and mobilization will be recruited through competition on the basis of shortlists. The selection procedure will be based on the technical quality with price consideration. Individual consultants for specific assignments will be selected following the Bank's procedures for the use of individual consultants. Services for community-based training, seminars and workshops will be procured through shortlists. For services costing less than UA 100,000, for individuals and UA 350,000, for consulting firms, the Borrower may limit the publication of the advertisement to national/regional newspapers. However, any eligible consultant, being regional or not, may express his desire to be short-listed

5.4.6 *Miscellaneous items*, including personnel costs, operation and maintenance of equipment, and other administrative costs, will be procured through existing GOT procedures which are acceptable to the Bank.

5.4.7 *Project Coordination Unit*: The PCU will appoint a Procurement Officer with responsibility for seeing that the Bank's procurement rules and procedures are followed. The Districts have their own individual tender committees through which the respective procurement units will pass their recommendations for local purchases for components being directly implemented in the districts.

5.4.8 *General Procurement Notice*: The text of a General Procurement Notice (GPN) will be discussed and agreed with the Borrower at negotiations and this will be issued for publication in the *UN Development Business*, upon approval by the Board of Directors of the loan proposal.

5.4.9 *Review Procedures:* The following documents are subject to review and approval by the Bank before promulgation: Specific Procurement Notices; Tender documents/Requests for Proposals; Tender Evaluation/Evaluation of Proposals' reports, including recommendations for contract award; Draft contracts, if these have been amended from drafts included in the tender invitation documents; manual of operations for community initiatives.

5.4.10 *Post Review:* In view of the many small contracts that will be processed and the need to maintain sustained project implementation, contracts for goods and works up to an amount of UA 20,000 will be subject to post review in accordance with Banks Rules of Procedure for Procurement of Goods and Works. In this regard, the Bank will review for prior approval the first 10 contracts. Then, subsequently, procurement documents, including solicitations of price quotations, evaluation sheets and contract awards will be kept at the PCU for periodic review by ADF supervision missions. One year after project effectiveness, ADF will review the correctness of the procurement activities. This review will determine the need for modifications and improvement of the procurement arrangements. Information on procurement processing will be collected by the PCU quarterly and shall be included in detail in the Project Quarterly Progress Report to be submitted to ADF.

5.4.11 *National Procedures and Regulations:* Tanzania's national procurement laws and regulations have been reviewed and determined to be acceptable.

5.5 Disbursement Arrangements

The Special Account and Direct Payment Methods will be used for the disbursement of the Loan and Grant funds. Government will open and maintain two Special Accounts (in foreign currency) for the receipt of the Loan and Grant funds respectively. The ADF funds will be disbursed according to an annual work programme and budget. The Bank will replenish the Special Accounts after the PCU has provided sufficient justification for the use of a least 50% of the previous deposits. The direct payment method will be used for the payment of contract sums above the threshold of UA 20,000. The PCU will maintain separate records at all times of all disbursement made by the Fund. Project Accounts in local currency will be opened in each participating District. These will be for channelling funds for activities that have to be paid for at the district level. The accounts will be opened at banks acceptable to the ADF. Funds will be disbursed to the District Accounts from the Special Account based on approved annual/quarterly workplan and budgets.

5.6 Monitoring and Evaluation

5.6.1 The basis for the overall project monitoring and evaluation will be the logical framework. The PCU will have overall responsibility for monitoring of the project, based on participatory M&E reports from participating districts, and other technical experts, and feedback from the benefiting communities. A Monitoring and Evaluation Officer (M&E Officer) will be recruited for the PCU. He/she will be responsible for monitoring the implementation progress as well as the implementation of the mitigation and environmental monitoring programme which is part of the Environmental and Social Management Plan. In cooperation with the Project Coordinator and Financial Controller, they will monitor both financial and physical progress. The M&E Officer will be responsible for assembling information from all participating districts, and preparing the periodic progress reports for the consideration of the Government and the Bank. The progress reports will provide updated information on project implementation; progress achieved against implementation and disbursement schedules, key performance indicators such as production and incomes levels, and women participation in project activities; as well as highlight key issues and problem areas and recommend solutions.

5.6.2 Monitoring in this regard will be carried out in a participatory manner and will, include not only technical aspects of the interventions but also an assessment of the responsiveness of district authorities and contracted firms to beneficiary requirements, as well as assess social,

including issues of gender, and environmental impacts. In this regard, special efforts will be made to seek the views of women and less advantaged members of the communities.

5.6.3 The M&E Officer will organise Annual Review and Planning Workshops. These will be attended by representatives from a wide range of stakeholders in the regions and a small number of participants from the other region will be invited which will allow a cross-fertilisation of experiences. The workshops will provide opportunities to: (i) review the overall implementation progress in the project; (ii) analyze problems encountered in the course of implementation and discuss possible actions; (iii) review the Project approach and propose modifications as necessary; and (iv) use the findings for planning activities for the subsequent year. These workshops will provide the project staff with an opportunity to report back to advisory groups, district staff and groups on changes made to implementation on the basis of M&E. The M&E Section of MAFS will be used in the collection and analysis of relevant M&E data. Provisions have also been made for the PCU to commission diagnostic studies and periodic impacts assessments of project activities. A baseline study will also be carried out at the beginning of the project.

5.7 Financial Reporting and Auditing

5.7.1 The Project Accountant will be responsible for ensuring the maintenance, at all times, of satisfactory and professionally acceptable accounting records and in accordance with Bank guidelines and also maintenance of adequate internal control systems for the project. He/she will prepare regular accounting reports for management, which will include expenditure reports from all the districts as well as produce consolidated annual financial statements for the project. Fund will be provided to provide adequate training (initial start up and periodic workshops) to the District Accountants on the maintenance and reporting of the project accounts. The District Accountants will be required to submit monthly returns of expenditures to the PCU to enable it closely monitor and collate the expenditures for the timely submission of requests for replenishment of the Special Account.

5.7.2 The project accounts will be audited annually either by Government Auditors (the Auditor General) or private auditors recruited through a Bank-approved shortlisting process. When conducted by private auditors, the audit work will be reviewed by the Auditor General to determine compliance with the TOR before certification. The private auditors will be paid from the loan resources. The accounts will be presented annually to the Bank, within six months following the end of each financial year. Budgetary provision has been made for recruiting private auditors.

5.7.3 The PCU will be responsible for the preparation and submission of quarterly and annual progress reports. Reporting by Districts will be set against agreed annual work plans and organised by components. They will report about their progress on a quarterly and annual basis (no later than one month after the end of the quarter or year), in physical and financial terms, to the Project Coordination Unit. The PCU will collate and consolidate the District progress reports into a single progress report for the Project and forward copies to the Bank within 2 months of the end of the reporting period. These same reports will be shared with the Project Steering Committee. All reports will follow a format to be developed by the PCU to ensure consistency with the project's management information system and Bank's requirements. The reports will bring together physical and financial records, relate these to the work plan and inform in a concise way on progress, issues and suggested ways of resolving them. Three months after the end of the project, GOT will submit a Project Completion Report (PCR) to the Fund. The Bank will also prepare its PCR.

5.8 Aid Coordination

5.8.1 The Food and Agriculture Sector Working Group (FASWOG) provides a consultative forum under ASDP. It is composed of representatives from multilateral and bilateral donors involved in the sector, the four ASLMs, the Ministry of Finance and other selected ministries, and is chaired by the Permanent Secretary of MAFS. The FASWOG interacts with and advises the ASDP Inter-ministerial Coordination Committee. The ASDP donors also regularly meet without

government representatives. The newly opened ADB Country Office will participate in these groups.

5.8.2 During the preparation of the project, a series of discussions were held with FASWOG and the Task Force 1, a technical group comprising Government, donor representatives and selected qualified stakeholders mandated to oversee the formulation of projects under the ASDP. The key issues that were discussed were the harmonisation of implementation procedures and arrangements for basket funding. Government with the support of the resident donors indicated that it is considering the setting up of an ASDP Programme Coordination Unit (or Programme Facilitation Unit) to coordinate and manage all the ASDP District-based projects using common procedures. The setting up of this unit is still under discussion. It has been agreed that should this unit be formed, DASIP's PCU will be absorbed by the Unit after consultation and agreement with the Bank. The ASDP framework provides for stand-alone project support in addition to the basket funding. As at the time of appraisal, the Government was yet to put in place the mechanism for basket funding in the agriculture sector. It was therefore agreed that the Bank could proceed with its project support as is currently being done by the other donors, and consider joining the basket for future interventions.

6. PROJECT SUSTAINABILITY AND RISKS

6.1 Recurrent Costs

6.1.1 Recurrent expenditure under the proposed project is estimated to amount to UA 7.92 million for the entire six-year implementation period. This represents about 13.7% of total project costs. The recurrent costs are mainly for staff salaries, operation and maintenance of vehicles and motorcycles, as well as for office and field expenses. The recurrent costs will be financed mainly by the Government of Tanzania to the tune of 74%, and a modest contribution of 26% from ADF resources. GOT will finance government staff salaries and a gradually increasing share of operation and maintenance of equipment and office expenses.

6.1.2 Annex 4(b) shows the sources of financing of the recurrent costs over the project's life. The Bank's contribution to the recurrent cost declines from 39% in the first year of the project to only 11% of the total recurrent costs by the sixth year, while the contribution from Government increases from 61% to 89% over the same period. By the last year of the project, the average Bank contribution to recurrent cost per district will be UA 6,780, which can easily be absorbed by the District Councils during the subsequent years.

6.1.3 The GOT contributions to the recurrent costs arise mainly from salary payments for staff at the district level and offices expenses. These budgetary allocations are already in place through the annual subventions made to the Districts for the staff who are already at post and will be used in implementing the project. Given the commitment and priority attached to the project and the size of the recurrent cost, GOT should not have any difficulty in meeting its share of the cost.

6.2 Project Sustainability

6.2.1 The financing of recurrent expenditure by Government of Project activities when the project comes to an end will to a large extent not be necessary. The District Training Coordinators and Ward Training Facilitators who will provide training during the Project will be part of the existing personnel of district councils. They will continue to be employed by these local authorities and undertake similar training of farmers as part of their normal duties.

6.2.2 Project activities to be undertaken will be part of approved village, ward, and district agricultural development plans. A participatory approach will be adopted in identifying, prioritising, and agreeing on initiatives that the Project will provide financial assistance. This participatory approach is already in use by MAFS and PORALG and therefore the local administration staff are conversant with the methods. Funding will only be provided to initiatives that are clearly owned by the communities who present them. The beneficiaries are required to make initial contributions

towards the implementation of the various project activities, as well as pay user fees for the facilities provided. It is envisaged that the sense of community ownership of the facilities will encourage them to ensure the financial sustainability of the assets.

6.2.3 Water control structures and irrigation works to be developed will be owned, operated and maintained by trained water users associations who will be mandated to collect water fees for operation and maintenance activities from their members. Rural roads (classified as district and feeder roads), fall under the responsibility of the Districts for their maintenance using mainly annual budgetary provisions made by the Road Fund and occasionally augmenting these when more resources are needed for upkeep of the roads. PFGs will be responsible for maintaining the micro-projects and infrastructure as these are owned and constructed by them based on their prioritised VADP plans and contributed resources. It is envisaged that savings and credit associations and cooperatives will continue to fund their own operations from their own resources as is the currently being done. District Cooperative Officers will continue to support these institutions in terms of inspecting their operations as part of their regulatory functions, as well as provide technical advice.

6.3 Critical Risks and Mitigating Measures

6.3.1 The external risks that have the potential to affect the successful implementation of the project are: (i) the occurrence of severe droughts in successive years during project implementation resulting in farmers not making meaningful returns on adopted improved crop varieties, this will be mitigated to some extent by the provision of irrigation facilities under the project; (ii) political instability within neighbouring countries which share a border with some of the project regions (Kagera and Kigoma Regions). It is anticipated that on-going peace initiatives in the sub region will yield positive results; (iii) change in policies relating to marketing of agricultural produce; and (iv) increased HIV/ AIDS prevalence and infection rates in the project area which may impact farmer productivity. This risk has been mitigated in the project by putting funds to support awareness raising among farmers, local administration staff and other stakeholders in the project area.

6.3.2 Internal risks of the Project include (i) lack of capacity of some districts to plan and manage the implementation of project activities. This will be mitigated by providing adequate training to all key implementing bodies. In addition, the PCU and ASLMs will closely monitor and evaluate project progress in each district to enable the PCU and the ICC to take timely corrective measures. In this regard, the disbursement of funds to each district will be based strictly on annual and quarterly work plans and budgets approved by the ICC. The district accountants will be required to submit monthly returns of expenditures to the PCU to enable it closely monitor and collate the expenditures for the timely submission of requests for replenishment of the Special Account. Furthermore, the Bank will ensure that the project is supervised at least two times a year instead of the average of 1.5 times. (ii) Farmers may not show continued commitment at sustaining the groups formed as these groups may be based on poorly defined problems or problems not shared by group members. A participatory approach to the formation of farmer groups will be adopted and these groups shall be based on the need to address a shared problem(s). (iii) Widespread mismanagement of funds of savings and credit groups that will be formed is a potential risk to the improvement of the access of farmers to credit facilities. The functioning of these groups will require close monitoring by the regional and district cooperative inspectors.

7. PROJECT BENEFITS

7.1 Financial Analysis

7.1.1. The proposed project is expected to yield considerable benefits to participating farmers and to the whole economy of the 25 districts concerned. The main quantifiable benefits will be increased production as indicated in section 4.6. Farm models suggest potential increases in farmer income of 30-50 percent over several years. However, to avoid over-ambitious projections, more conservative “with project” assumptions are used (see Annex 5).

7.1.2. A total of two farm models which are representative of a large part of the North-Western part of the country have been analysed. These are the cotton, rice, sorghum and cattle farm model; and the coffee/banana farm model. The models rely on rain fed agriculture on average quality soils for the given agro-climatic zones. A cultivated area of 0.75-1.45 ha per household in both the without and with project situation is assumed.

7.1.3. *Cotton, Rice, Sorghum and Cattle Farming:* It is assumed that the household will cultivate 0.35 ha of rice and cotton each, and 0.75 ha of sorghum. In the “without programme” situation, the household will produce some 350 kg of rice per year, 125 kg of seed cotton, 560 kg of sorghum and be able to sell one adult bull or cow. Farming in a semi-arid climate is labour intensive, yet the 328 person-days of family labour (including herding by children) are remunerated at TZS 1,070 per person-day.

7.1.4. In the “with project” the annual net farm income will rise from TZS 350,000 to TZS 509,000. The average labour requirements in the “with project” situation increase by some 23%, while returns to labour will rise by 18% to TZS 1,260 per person-day, as against the average daily wage for farm labour TZS 800.

7.1.5. *Coffee / Banana Farming:* The household will increase its production from 25 to 75 kg of coffee and from 3,000 to 5,000 kg of bananas over a 3- year period, allowing a much larger part of the produce to be sold. Net farm income will rise from TZS 401,000 to TZS 664,000, with returns to labour reaching some TZS 1,780 per person-day in the “with programme” situation.

7.2 Economic Analysis

7.2.1 The economic benefits arising from proposed project activities are quantified by comparing “with” and “without” project cases. As with the financial analysis, an attempt was made to test the performance of the project under fairly conservative assumptions and estimates.

7.2.2 The incremental net benefits of all beneficiaries have been aggregated on a yearly basis and in accordance with the phasing in of the Participating Farmer Groups (PFGs) into the project. The following assumptions have been made: (a) those that only participate in the capacity building training of Component 1, and who will see an increase in income of 15 percent over three years as a result of the project (five percent per year), there will be 50,000 such households/farmers; (b) those that take part in farmer capacity building training of Component 1, but continue as members of savings and credit groups and benefiting from marketing services, and who will see an increase in income of 20 percent over four years (five percent per year), there will be 200,000 such households/farmers; and (c) those that reside in villages targeted for investment under Component 2, community planning and investment in agriculture, but who will not have been included in the capacity building training of Component 1, and who will see a rise in income as a result of the project of 10 percent over five years (two percent per year), there will be 300 000 such households/farmers.

7.2.3 A standard conversion factor of 1 has been assumed for the analysis, since foreign currency is traded freely in the country and as such does not carry any premium. Price contingencies and taxes have also been removed from the analysis.

7.2.4 Post-project recurrent costs were assumed to be composed of the maintenance costs of feeder roads, set at TZS 3 million per km per year, as well as 50% of the staff salaries and allowances. This is to provide for some follow-up action where necessary after the close of the project. All other recurrent costs have been discounted in the beneficiary models.

7.2.5 The economic analysis was carried out over a 20-year period. The Economic Internal Rate of return (EIRR) for the entire project, calculated over the period, is 24 percent. The Net Present Value at 12 % discount rate is TZS 46.38 billion (UA 28.56 million).

7.3 Social Impact Analysis

7.3.1 The proposed project is expected to have a positive impact on the livelihoods of the people in the project area, by contributing to the increase in their disposable income. It is estimated that the project will impact directly or indirectly 3.4 million people or about 570,000 households, of which about 23% are female headed. The project target groups will include: (i) the smallholder farmers, producer groups and grassroots institutions (such as primary societies involved in credit and savings, marketing etc.); (ii) small-scale traders/processors operating in rural areas; and (iii) small and medium-size traders and/or processors, who handle significant volumes of rural produce which have a strong rural outreach. The social impact of the project will be monitored through the annual impact surveys.

7.3.2 The increase in disposable income is expected to improve the standard of living of the population in many ways. With the increased income the population will be able to afford better nutrition at the family level, thereby reducing the occurrence of diseases. Moreover, better nutrition is expected to reduce maternal and child mortality and will also contribute to a decrease in children's nutrition-related, health deficiencies. It is also expected that with the rise in income amongst the majority of the poor, enrolment rates in schools will improve. This will particularly benefit the girls in accessing and continuing with education in the rural areas. It can also be expected that the project will promote entrepreneurial activities where women have greater concentrations, such as intermediate transportation systems, semi-processed food sellers, non-agriculture commodities trading of small and medium scales, etc. These in turn shall provide increased income earning opportunities for a wider cross-section of community members.

7.4 Sensitivity Analysis

A sensitivity analysis has been done to assess the impact on estimated project returns arising from changes in base case assumptions as presented below. The sensitivity analysis shows that:

- (i) A decrease of benefits by ten percent will reduce the EIRR to 21 percent and the NPV to TZS 34.76 billion (UA 21.41 million); and a decrease of benefits of 20 percent will reduce the EIRR to 18 percent and the NPV to TZS 23.14 billion (UA 14.25 million).
- (ii) An increase in project cost by ten percent will reduce the EIRR to 22 percent and the NPV to TZS 40.90 billion (UA 25.19 million); and a 20 percent increase in project cost will reduce the EIRR to 20 percent and the NPV to TZS 35.42 billion (UA 21.82 million).
- (iii) Delaying project benefits by one year will reduce the EIRR to 19 percent and the NPV to TZS 31.30 billion (UA 19.28 million); delaying benefits by two years will reduce the EIRR to 16 percent and the NPV to TZS 17.84 billion (UA 10.99 million).

These analyses show that the project is robust and can withstand a series of adverse effects by maintaining its EIRR above the assumed opportunity cost of capital of 12%.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 The project is technically feasible and socially desirable. The increases in productivity and income assumed under the project are conservative and are already being achieved by smallholder farmers in the areas where such activities have been piloted in the country. The project is financially attractive, indicating that farmers and farmer groups will participate actively in the realization of project objectives. The project is also economically viable, yielding an economic rate of return of 24 percent. The social benefits of the project include higher improved food security and better human nutrition.

8.1.2 The project is demand driven. The participatory development approach proposed, with specific activities and investments being determined through the community planning process, should bring about a high sense of ownership of the facilities developed through the project and

provide some guarantee of sustainability. Further guarantees are provided by the technically unsophisticated nature of the majority of the inventions anticipated and their simple maintenance requirements and by using to a large extent existing government structures for project implementation.

8.1.3 The environmental impact anticipated from this project is positive. Improved cropping systems introduced by the project will have beneficial effects on soil and water management, hence to environment. Environmental Impact Assessment studies and – where necessary – mitigation measures are foreseen to minimize potential negative environmental impact from the construction of water controlling works, in particular near sensitive areas such as parks and game reserves.

8.2 Recommendations

It is recommended that a Loan not exceeding UA 36.0 million and Grant not exceeding UA 7.0 million be provided to the United Republic of Tanzania for the purpose of implementing the project as described in this report subject to the following particular conditions:

A. Conditions Precedent to Entry into Force of the Loan Agreement

The entry into force of the Loan Agreement shall be subject to the fulfilment by the Borrower of the provisions of Section 5.01 of the General Conditions of the Fund.

B. Conditions Precedent to First Disbursement of the Loan

The obligations of the Fund to make the first disbursement shall be conditional upon the entry into force of the Loan Agreement and the fulfilment by the Borrower of the following conditions.

The Borrower shall have, to the satisfaction of the Fund:

(i) provided evidence that a special account (in foreign currency) has been opened, at the level of the Project Coordinating Unit, in a bank acceptable to the Fund, and on terms and conditions acceptable to the Fund, into which the loan proceeds shall be deposited at the request of the executing agency (Paragraph 5.5);

(ii) provided evidence of the establishment of a Project Technical Committee made up of the Director of Regional Coordination, President's Office – Regional Administration and Local Government (PO-RALG); the Directors of Policy and Planning of PO-RALG, Ministry of Agriculture and Food Security (MAFS), Ministry of Cooperatives and Marketing (MCM) and Ministry of Water and Livestock Development (MWLD); the Directors of Crop Development, Marketing, and Animal Production; two District Executive Directors from the project area, two representatives of NGOs operating in the project area and Agricultural Sector Development Programme (ASDP) Coordinator (Paragraph 5.2.1);

(iii) provided evidence of the designation of a Programme Administrator to work on the initial project start up activities, notably, the establishment of the PCU and recruitment of its staff, pending the appointment of the Project Coordinator whose qualifications will acceptable to the Fund (Paragraph 5.2.3);

(iv) provided a written undertaking that there will be adequate annual budgetary allocation and timely flow of funds from the Borrower to the participating districts to maintain the roads constructed/ improved under the Project (Paragraph 4.5.17).

Other Conditions: The Borrower shall have, to the satisfaction of the Fund:

(i) established the PCU and recruited the National Project Coordinator, Project Accountant, Training and Participation Officer, and Procurement Officer, whose experiences and qualifications are acceptable to the Fund, within six (6) months of first disbursement (Paragraph 4.5.26);

- (ii) provided evidence of having opened 25 District Project Accounts in banks acceptable to the Fund, and on terms and conditions acceptable to the Fund, into which project funds will be channelled prior to the commencement of any project sponsored activities in the districts (Paragraph 5.5);
- (iii) made on an annual basis, adequate budgetary allocation and timely flow of funds from the Borrower to the participating districts to maintain the roads constructed/ improved under the Project (Paragraph 4.5.17);
- (iv) provided evidence, on an annual basis, from each participating district that the constructed/ improved district or feeder roads has been included in and maintained as part of their annual maintenance plans (Paragraph 4.5.17).

C. Conditions Precedent to Entry into Force and First Disbursement of Grant

The Grant shall enter into force on its signature. The conditions precedent to first disbursement of the Grant shall be subject to the following conditions. The Recipient shall have, to the satisfaction of the Fund:

- (i) provided evidence that a special account has been opened in a bank acceptable to the Fund, and on terms and conditions also acceptable to the Fund, into which the grant proceeds shall be deposited on the request of the executing agency (Paragraph 5.5);
- (ii) provided evidence of the establishment of a Project Technical Committee made up of the Director of Regional Coordination, President's Office – Regional Administration and Local Government (PO-RALG); the Directors of Policy and Planning of PO-RALG, Ministry of Agriculture and Food Security (MAFS), Ministry of Cooperatives and Marketing (MCM) and Ministry of Water and Livestock Development (MWLD); the Directors of Crop Development, Marketing, and Animal Production; two District Executive Directors from the project area, two representatives of NGOs operating in the project area, and Agricultural Sector Development Programme (ASDP) Coordinator (Paragraph 5.2.1);
- (iii) provided evidence of the designation of a Programme Administrator to work on the initial project start up activities, notably, the establishment of the PCU and recruitment of its staff, pending the appointment of the Project Coordinator whose qualifications will be acceptable to the Fund (Paragraph 5.2.3)

Other Conditions: The Borrower shall have, to the satisfaction of the Fund:

- (i) established the PCU and recruited the National Project Coordinator, Project Accountant, Training and Participation Officer, and Procurement Officer, whose experiences and qualifications are acceptable to the Fund, within six (6) months of first disbursement (Paragraph 4.5.26);
- (ii) provided evidence of having opened 25 District Project Accounts in banks acceptable to the Fund, and on terms and conditions acceptable to the Fund, into which project funds will be channelled prior to the commencement of any project sponsored activities in the districts (Paragraph 5.5).

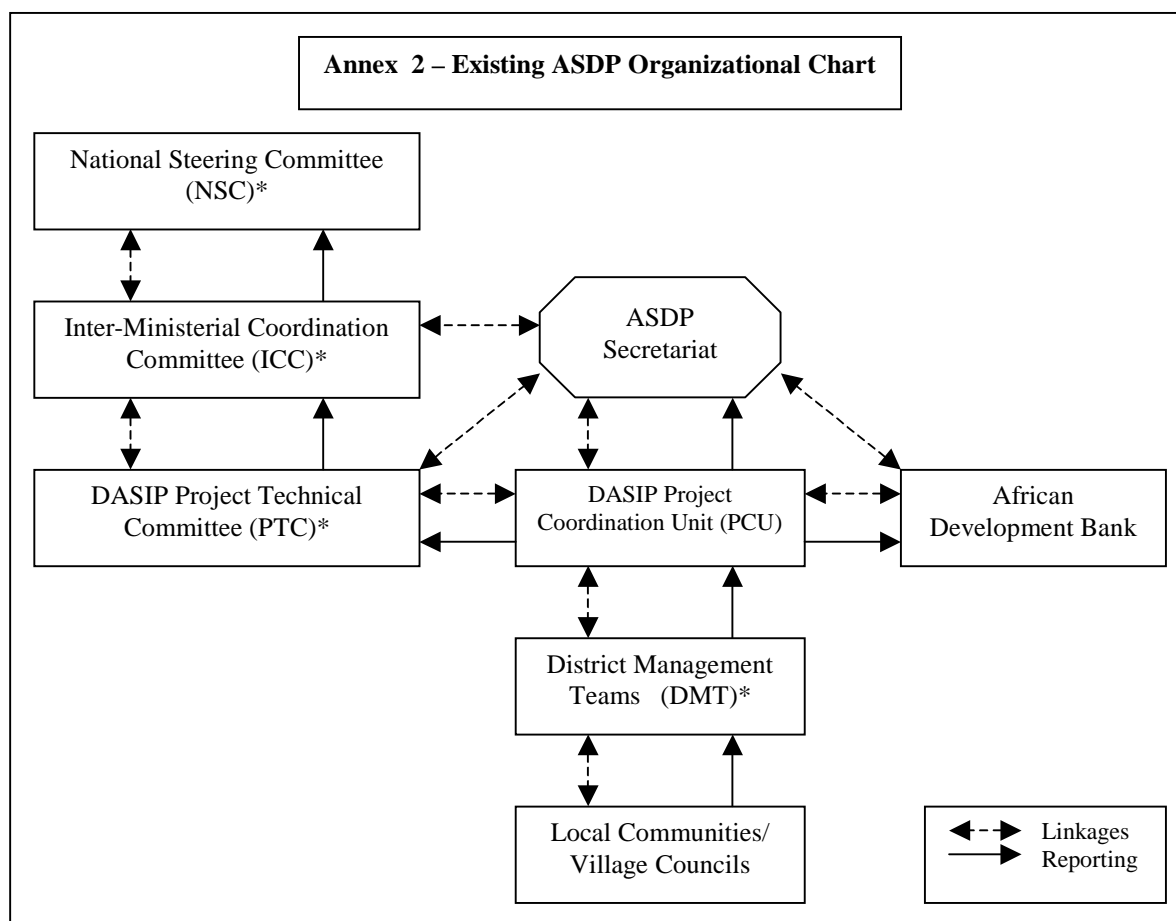
Annex 1: Map of Project Area



This map was provided by the African Development Bank exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgement concerning the legal status of a territory nor any approval or acceptance of these borders.

Tanzania: District Agriculture Sector Investment Project

Page 1 of 1



Membership Composition*

NSC	ICC	PTC	DMT
PS of ASLMs (4 No) - MAFS (Chairperson) - MWLD - MCM - PO-RALG PS of Collaborating Ministries - MoF - PMO - VPO - MCT - MLHS - MCDWL - POP&P - MoH - MEM - MLVDS - MoW - MIT - MNRT Rep of Private Sector (5)	PS of MAFS (Chairperson) PS MCM PS MWLD PO-RALG	Dir. of Policy & Planning of MAFS (Chair person) Dir. of Policy & Planning of MWLD Dir. of Policy & Planning of MCM Dir. of Regional Coordination, PORALG Dirs. of Coop. Dev, Marketing & Animal Production DEDs (2 No) NGOs (2 No) ASDP Coordinator DASIP Coordinator (Secretary)	DED (Chairperson) Head of Departments: - Health - Education & Culture - Water - Community Develop. - Finance - Administration - Planning - Trade - Works - Agriculture and Livestock Develop. - Natural Resources - Land - Cooperatives & Marketing

The ASDP organizational structure is an existing one and will be used for the implementation of the project. The only new additions to the structure in the establishment of the Project Coordination Unit and Project Technical Committee.

Tanzania: District Agriculture Sector Investment Project

Page 1 of 1

Annex 4(a): PROVISIONAL LIST OF GOODS AND SERVICES

Category	Local Currency (TZS million)			Foreign Currency (UA '000)			Co-financiers (UA '000)			
	F.E.	L. C.	Total	F.E.	L. C.	Total	ADF Loan	ADF Grant	Govt	Beneficiaries
A. Civil works										
Civil Works	24,054.8	21,495.2	45,550.0	14,816.0	13,239.5	28,055.5	23,130.3	-	0.0	4,925.2
B. Goods										
Vehicles	558.0	-	558.0	343.7	-	343.7	174.9	168.8	-	-
Equipment and Furniture	5,673.1	8,165.8	13,838.9	3,494.2	5,029.5	8,523.7	2,904.5	2,175.3	0.0	3,443.9
Subtotal Goods	6,231.0	8,165.8	14,396.8	3,837.9	5,029.5	8,867.4	3,079.4	2,344.1	0.0	3,443.9
C. Training, Workshops and Studies										
Training	5,945.8	6,397.4	12,343.1	3,662.2	3,940.3	7,602.5	2,907.4	3,917.5	777.6	-
Workshops	58.6	62.1	120.7	36.1	38.2	74.3	-	74.3	0.0	-
Studies	859.7	1,656.3	2,516.0	529.5	1,020.1	1,549.7	1,517.2	32.4	0.0	-
Audits	101.6	108.5	210.1	62.6	66.8	129.4	129.4	-	0.0	-
Subtotal Training, Workshops and Studies	6,965.6	8,224.2	15,189.8	4,290.3	5,065.5	9,355.8	4,554.0	4,024.2	777.6	-
D. Technical Assistance	2,981.0	3,204.0	6,185.0	1,836.1	1,973.4	3,809.5	3,557.1	252.4	0.0	-
Total Investment Costs	40,232.5	41,089.2	81,321.7	24,780.2	25,307.9	50,088.2	34,320.8	6,620.7	777.6	8,369.0
II. Recurrent Costs										
A. Salaries	-	9,262.3	9,262.3	-	5,704.9	5,704.9	-	-	5,704.9	-
B. Allowances	-	1,762.7	1,762.7	-	1,085.7	1,085.7	970.9	114.8	-	-
C. Operating and Maintenance	890.0	951.9	1,841.8	548.2	586.3	1,134.4	708.3	263.4	162.6	-
Total Recurrent Costs	890.0	11,976.8	12,866.8	548.2	7,376.9	7,925.0	1,679.2	378.3	5,867.5	-
Total PROJECT COSTS	41,122.4	53,066.1	94,188.5	25,328.4	32,684.8	58,013.2	36,000.0	6,999.0	6,645.1	8,369.0

Annex 4(b): ADF/GOT Financing of Recurrent Costs (UA'000)

Source of Finance	05/06	06/07	07/08	08/09	09/10	10/11	Total	%
ADF Loan	208.0	359.7	361.7	323.2	272.6	154.1	1,679.2	21%
ADF Grant	62.4	106.6	83.5	65.0	45.4	15.4	378.3	5%
Govt	422.9	865.9	946.1	1,065.0	1,196.5	1,371.1	5,867.5	74%
Total	693.3	1,332.1	1,391.3	1,453.1	1,514.6	1,540.6	7,925.0	100%

Annex 5 : Summary Financial and Economic Analysis

1. **Introduction:** Evidence from various studies in Tanzania (and elsewhere) indicates production returns of 50-200% (depending on crop type) to farmer field school/ integrated plant and pest management approaches. Zanzibar IPM experience concluded that for cassava yield increases of 125-190% occurred, while banana returned increases of 100-200%, and irrigated rice improved yields by 100%, with rain fed rice 20%¹. In the Southern Highlands, evidence from FFS by Kesege showed maize production increases of 20-50% and for coffee 50%. In Kenya, farmer groups recorded positive responses to the benefits of their FFS², with 91% claiming increased profits, 89% reporting decreased risk, 99% stating that they would participate again.

2. Benefits from FFS/IPM as documented arise not only from rising yields and gross returns per area of land, but more often from savings from reduced use of expensive inputs such as pesticide and fertilizers, through the use of sounder organic methods or appropriate application rates of inorganic inputs in terms of more careful use based on assessment of crop damage or pest population levels. This is particularly relevant in the post-subsidy era in Tanzania where purchased inputs are proving uneconomic when applied according to standard recommendations.

3. FFS/IPM was one of the extension approaches piloted under NAEP II. Findings from a recently completed study into various approaches tested under NAEP II have shown promising returns. Paddy rice and maize production were reportedly two to three times higher under the NAEP II FFS pilots. Other technologies disseminated were the use of animal drawn implements (resulting in 63% increase in maize yield and 48% increase in sorghum yield), improved water management for rice (doubling production), introduction of high value crops (such as mushroom and vanilla), and introduction of improved breeds and husbandry practices (reducing poultry mortality by 70%, and raising conception rates and milk production).

4. **Financial analysis:** The analysis assumes that the vast majority of smallholder farmers can be represented in their financial performance by models that depict rain fed agricultural or agro-pastoral production systems. Most of the data used for the analysis was derived from a comprehensive sectoral assessment by the then MOAC with assistance from the World Bank, FAO and DANIDA³. Where applicable, the crop models have been expanded and prices updated. These crop models were then assembled into representative farm models representing the major types of smallholder farming households.

5. A total of two farm models which are representative of a large part of the North-Western part of the country have been analysed. These are the cotton, rice, sorghum and cattle farm model; and the coffee/banana farm model as presented in Table 1. The models rely on rain fed agriculture on average quality soils for the given agro-climatic zones. A cultivated area of 0.75-1.45 ha per household in both the without and with programme situation is assumed.

Table 1: Farm Models – Summary of Parameters

Farm Model	Represented Zone	Area Cultivated (ha)	Cropping Intensity	Average Number of Animals	
				Cattle	Chickens
Cotton, Rice, Sorghum and Cattle Farming	Central Semi-Arid Zone	1.45	100%	11	19
Coffee / Banana Farming	Northern Highlands	0.75	100%	5	19

¹ New ways of developing agricultural technologies, the Zanzibar experience with IPM, G.Bruin and F.Meerman, ICTA, 2001.

² IPM FFS, a Synthesis of 25 impact evaluations, v.d.Berg, Wageningen University, January 2004.

³ Agriculture: Performance and Strategies for Sustainable Growth, draft report, MOAC, February 2000

6. The results of the **financial** analysis are presented in Table 2. They demonstrate that real opportunities to increase the smallholders' incomes exist, which are not related to major investments at farm level and thus do not require any credit.

Table 2: Farm Models – Summary of Average Annual Results

Farm Model	Annual Income (TZS)		Labour Requirement (person-days)		Returns to Labour (TZS/person-day)	
	w/o	w	w/o	w	w/o	w
Cotton, Rice, Sorghum and Cattle Farming	350 000	509 000	328	404	1 070	1 260
Coffee / Banana Farming	401 000	664 000	286	373	1 400	1 780

Note: w/o = without Programme; w = with Programme

7. *Cotton, Rice, Sorghum and Cattle Farming*: It is assumed that the household will cultivate 0.35 ha of rice and cotton each, and 0.75 ha of sorghum. In the "without programme" situation, the household would produce some 350 kg of rice per year, 125 kg of seed cotton, 560 kg of sorghum and be able to sell one adult bull or cow. Farming in a semi-arid climate is labour intensive, yet the 328 person-days of family labour (including herding by children) are remunerated at TZS 1070 per person-day.

9. In the "with programme" situation, the farmer would practise soil fertility management (mainly manuring in the rice and sorghum fields), spend more time on ridging and weeding and introduce a minimum of chemical pest control in the cotton plot. He/she would maintain the cropped area of 1.4 ha. Total production would thus gradually rise to 245 kg of cotton, 490 kg of rice, 825 kg of sorghum and two heads of cattle over a 3-year period. As a result, the annual net farm income would rise from TZS 350 000 to TZS 509 000. The average labour requirements in the "with programme" situation increase by some 23%, while returns to labour would rise by 18% to TZS 1 260 per person-day, as against the average daily wage for farm labour TZS 800.

10. *Coffee / Banana Farming*: This model portrays a farm cultivating 0.75 ha of relatively fertile land in the Northern Highlands, two thirds to banana and one third to coffee. In the "with programme" situation, the farmer would introduce manuring and some chemical fertiliser and on coffee also integrated pest management. As a result, the household would increase its production from 25 to 75 kg of coffee and from 3 000 to 5 000 kg of bananas over a 3- year period, allowing a much larger part of the produce to be sold. Net farm income would rise from TZS 401 000 to TZS 664 000, with returns to labour reaching some TZS 1 780 per person-day in the "with programme" situation.

11. **Economic analysis**: The economic benefits arising from proposed project activities are quantified by comparing "with" and "without" project cases. As with the financial analysis, an attempt was made to test the performance of the project under fairly conservative assumptions and estimates.

12. The incremental net benefits of all beneficiaries have been aggregated on a yearly basis and in accordance with the phasing in of the Participating Farmer Groups (PFGs) into the project. The following conservative assumptions have been made: (a) those that only participate in the capacity building training of Component 1, and who will see an increase in income of 15 percent over three years as a result of the project (five percent per year), there will be 50 000 such households/farmers; (b) those that take part in farmer capacity building training of Component 1, but continue as members of savings and credit groups and benefiting from marketing services, and who will see an increase in income of 20 percent over four years (five percent per year), there will be 200 000 such households/farmers; and (c) those that reside in villages targeted for investment under Component 2, community planning and investment in agriculture, but who will not have been included in the

capacity building training of Component 1, and who will see a rise in income as a result of the project of 10 percent over five years (two percent per year), there will be 300 000 such households/farmers.

13. A standard conversion factor of 1 has been assumed for the analysis, since foreign currency is traded freely in the country and as such does not carry any premium. Price contingencies and taxes have also removed from the analysis.

14. Post-project recurrent costs were assumed to be composed of the maintenance costs of feeder roads, set at TZS 3 million per km per year, as well as 50% of the staff salaries and allowances. This is to provide for some follow-up action where necessary after the close of the project. All other recurrent costs have been discounted in the beneficiary models.

15. The economic analysis was carried out over a 20-year period. The Economic Internal Rate of return (EIRR) for the entire project, calculated over a 20 years period, is 24 percent. The Net Present Value at 12 % discount rate is TZS 46.38 billion (UA 28.56 million)

Sensitivity Analysis: A sensitivity analysis has been done to assess the impact on estimated project returns arising from changes in base case assumptions as presented in the table below. The sensitivity analysis shows that:

(i) A decrease of benefits by ten percent will reduce the EIRR to 21 percent and the NPV to TZS 34.76 billion (UA 21.41 million); and a decrease of benefits of 20 percent will reduce the EIRR to 18 percent and the NPV to TZS 23.14 billion (UA 14.25 million).

(ii) An increase in project cost by ten percent will reduce the EIRR to 22 percent and the NPV to TZS 40.90 billion (UA 25.19 million); and a 20 percent increase in project cost will reduce the EIRR to 20 percent and the NPV to TZS 35.42 billion (UA 21.82 million).

(iii) Delaying project benefits by one year will reduce the EIRR to 19 percent and the NPV to TZS 31.30 billion (UA 19.28 million); delaying benefits by two years will reduce the EIRR to 16 percent and the NPV to TZS 17.84 billion (UA 10.99 million).

Economic Analysis									
Incremental Benefit	1	2	3	4	5	6	7	8	9 to 20
Sub division I-A (TZS million)	-	17	99	297	611	858	990	990	990
Sub division I-B (TZS million)	-	66	396	1,188	2,508	3,498	4,752	5,280	5,280
Sub division I-C (TZS million)	-	53	290	845	1,637	2,244	3,168	3,722	3,960
Sub total (TZS million)	-	135	785	2,330	4,755	6,600	8,910	9,992	10,230
Sub division II-A (TZS million)	-	29	176	528	1,085	1,524	1,759	1,759	1,759
Sub division II-B (TZS million)	-	117	704	2,111	4,456	6,214	8,442	9,380	9,380
Sub division II-C (TZS million)	-	94	516	1,501	2,908	3,987	5,628	6,613	7,035
Sub total (TZS million)	-	240	1,395	4,139	8,448	11,725	15,829	17,752	18,174
Total Incremental Benefits (TZS million)	-	376	2,181	6,469	13,203	18,325	24,739	27,744	28,404
Project cost (TZS million)	4,133.9	8,821.8	18,092.4	25,283.9	21,450.3	5,813.8			
Estimated other recurrent costs (TZS million)	-	-	150.0	525.0	900.0	1,275.0	4,000.0	4,000.0	4,000.0
Total Project Cost (TZS million)	4,133.9	8,821.8	18,242.4	25,808.9	22,350.3	7,088.8	4,000.0	4,000.0	4,000.0
Net incremental benefit (TZS million)	- 4,133.9	- 8,446.1	- 16,061.8	- 19,340.1	- 9,147.1	11,236.2	20,738.8	23,744.1	24,403.8
NPV at 12% (TZS million)	46,379.0								
EIRR (over 20 years)	24%								

Sensitivity Analysis		
Assumption	EIRR	NPV (TZS million)
10 % Increase in Project Cost	22%	40,900.36
20 % Increase in Project Cost	20%	35,421.69
10% Decrease in Project Benefits	21%	34,759.54
20% Decrease in Project Benefits	18%	23,140.04
1 Year Delay in Project Benefits	19%	31,300.53
2 Year Delay in Project Benefits	16%	17,837.58

Annex 6: Environmental and Social Management Plan Summary

Project Title:	District Agriculture Sector Investment Project	Project Number:	PTZ-AAZ-001
Country:	Tanzania	Environmental Category:	2
Department:	ONAR	Division:	ONAR.1

a) Brief description of the project and key environmental and social components

The objective of the project is to increase agricultural productivity and incomes of rural households leading to improved food security and livelihoods. The project has the following four (4) components: 1) **Farmer Capacity Building** with two sub-components (1.1) Development of District Training Capacity, and (1.2) Farmer Training; 2) **Community Planning and Investment in Agriculture** with three sub-components; (2.1) Planning and implementation of capacity building, (2.2) Medium-size infrastructure, and (2.3) Village micro-projects and small infrastructure; 3) **Support to Rural Micro-Financial Services and Marketing** with two sub-components (3.1) Rural financial services, and (3.2) Marketing; 4) **Project Coordination and Management**. Project activities will be implemented using participatory approaches in 25 districts occurring in the northwestern part of Tanzania, with a total area of 177,000 km², and a population of about 10 million people. Annual per capita income varies from Tsh 150,000 to Tsh 280,000. The number of households experiencing food deficit varies among the 25 districts from 3 to 91% of the district population. The climate varies from being humid to semi-arid. Wetlands, swamps, and lakeside floodplains are important features in the humid areas.

b) Major environmental and social impacts

Positive Impacts

- Integration of environmental issues into district council's decision-making process as the project will comply with the National Environmental Policy.
- Mainstreaming environmental concerns in the production of District (DADP) and Village Agricultural Development Plans (VADP).
- Farmer training will develop skills for environmentally sound farming practices.
- Increased crop yields will reduce the tendency to extend cultivated areas and therefore contribute towards biomass and biodiversity conservation.
- Reduced reliance on harvesting natural resources for sustenance due to increased crop production.
- Enhancement of food security due to increased crop production.
- Improvement in water availability and water use efficiencies.
- Improved access to social services due to the presence of feeder roads.

Potential Negative Impacts

- Soil erosion due to un-rehabilitated excavations made during roads construction, irrigation schemes and charco-dams.
- Reduced availability of water downstream of charco-dams constructed across perennial streams.
- Increased incidences of water-borne/related diseases.
- Water contamination by return flows from irrigated lands.
- Vegetation loss arising from opening feeder roads in areas with dense vegetation stands.

c) Enhancement and mitigation program

The following measures for enhancing positive impacts of the project will be included:

- Provision of environmental impact assessment training to district staff and ward councillors.
- Development of environmental management manuals and courses for participatory farmer groups.
- Facilitation of the development of alternative livelihood sources not dependent on harvesting natural resources.
- Formation of water users association for managing developed water sources.

Mitigation measures given below for eliminating or minimizing negative impacts have been incorporated into the project design:

- Contractors and/or project beneficiaries will undertake environmental restoration for all excavations.
 - Adequate livestock watering facilities will be developed at charco-dams in areas without perennial rivers.
 - Water users associations will secure mandatory water releases from chaco-dams for downstream users.
 - Development of irrigation water management skills of farmers.
 - Training on the appropriate use of pesticides and fertilizers, and soil fertility management practices not requiring application of agro-chemical fertilizers.
 - The alignment of new feeder roads will take into account environmental issues.
 - Public health education aimed at controlling water-borne/related diseases will be organised.
-

d) Monitoring program and complementary initiatives

A environmental monitoring program has been developed and critical aspects to be monitored include (i) changes in environmental baseline conditions, (ii) application of EIA to medium-size infrastructures, (iii) water storage and use in charco-dams, (iv) maintenance of charco-dams, and irrigation works, (v) water-borne/related diseases, and (vi) water contamination. The district staff will implement the monitoring program while the Environmental Management Unit in MAFS will verify its compliance. District and Village Agricultural Development Plans will be formulated taking into account the Lake Victoria Environmental Management Plan and IFAD Agricultural & Environmental Management Project in Kagera.

e) Institutional arrangements and capacity building requirements

District councils will be primarily responsible of the implementation of the ESMP. The National Environmental Management Agency and the Environmental Management Unit in MAFS will train district staffs in environmental impact assessment, and the latter will annually review and verify that the ESMP is being implemented.

f) Public consultation and disclosure requirements

Participatory approaches will be used to plan, design and implement activities of the project, including the ESMP. Therefore stakeholders will be consulted at all project stages. Key stakeholders, such as the National Environmental Management Agency, the Environmental Management Agency in MAFS, and district councils were consulted regarding potential impacts of the project, and their views have been incorporated in developing the ESMP.

g) Estimated cost

All measures for enhancing benefits and mitigating negative impacts, implementing the monitoring program, and building the institutional and operational to successfully implement the ESMP have been incorporated into the project design and the relevant costs have been mainstreamed into the project budget.

h) Implementation schedule and reporting

The ESMP has been incorporated into the project design and therefore all the relevant measures will be implemented during project implementation. Reports about problems and achievements will be presented as part of the quarterly and annual progress reports for the project.

Tanzania: District Agriculture Sector Investment Project

Page 1 of 1

Annex 7

TANZANIA: LIST OF ON GOING OPERATIONS AS AT 30 JUNE 2004

SECTOR/PROJECT TITLE	FUNDS SOURCES	DATE APPROVED	AMNT (UA Mill)	DATE SIGNED	DATE EFFECTIVE	AMNT DISB.	UNDISB. AMNT	DEADLINE FINAL DISB	STATUS ON GOING
AGRICULTURE									
1 Livestock Marketing	ADF	27 June 1992	9.21	01 Dec. 1992	12 July 1994	7.57	2.08	31.12.04	On-going
2 Selous Game Reserve	ADF	26 Nov. 1997	5.91	8-May-98	16 Nov. 1998	2.99	2.92	31.12.05	On-going
3 Agric. Marketing Systems Dev. Programme	ADF	18-Sep-2002	15.90	12 May. 2003	15 Dec. 2003	0.00	15.90	31.12.08	On-going
4 Agric. Marketing Systems Dev. Programme	TAF	18-Sep-2002	1.00	12 May. 2003	15 Dec. 2003	0.06	0.94	31.12.08	On-going
SUB-TOTAL			32.02			10.62	21.44		
TRANSPORT									
5 Mutukula-Mukutwe Road Project	ADF	08 Oct. 1997	20.00	17 Nov. 1997	27-Jan-1999	11.34	8.66	29.06.04	On-going
7 El Nino Road Rehabilitation	ADF	16 Dec. 1998	9.75	5-Jan-1999	1-Oct-2000	2.34	7.41	31.12.04	On-going
8 Shelui-Nzega Road Project	ADF	17 June 1999	24.00	19 Nov. 1999	7-Mar-2000	5.89	18.11	30.11.03	On-going
9 Road Rehabilitation / Upg. Project	ADF	03 Sep. 2001	38.65	28 Sep. 2001	6-Jun-2003	2.51	34.14	31.03.07	On-Going
SUB-TOTAL			92.40			22.08	68.32		
INDUSTRY									
SUB-TOTAL			0.00			0.00	0.00		
PUBLIC UTILITIES									
10 Monduli Rural District Water Supply Study	TAF	16 July 1997	0.78	17 Nov. 1997	13 Jun. 2000	0.75	0.03	30.09.02	On-going
11 Rural Electrification Master Plan	TAF	28 June 2001	1.87	28 Sep. 2001	21 Oct. 2003	0.57	1.30	31.12.05	On-going
12 Dar es Salaam Water Supply	ADF	17 Dec 2001	36.94	29 May 2002	19 Nov. 2003	0.00	36.94	31.12.07	
13 Dar es Salaam Water Supply	TAF	17 Dec 2001	1.31	29 May 2002	19 Nov. 2003	0.00	1.31	31.12.07	
14 Monduli Rural District Water Project	ADF	27 Nov 2003	15.51	10 Feb 2004		0.00	15.51	31.12.08	
15 Electricity IV	ADF	16 Dec 1991	23.03	01 Dec 1992	17 Aug 1994	20.52	2.50	31.12.04	Utilising Savings
16 Electricity IV	NTF	16 Dec 1991	6.00	01 Dec 1992	17 Aug 1994	4.43	1.57	31.12.04	Utilising Savings
SUB-TOTAL			85.44			26.27	59.16		
SOCIAL									
17 First Health Rehabilitation Project	ADF	03 Dec. 1997	15.00	08 May 1998	10 Sep. 1999	5.38	9.62	31.12.05	On-going
18 Education II Project	ADF	10 Dec. 1997	20.00	08 May 1998	06 Jan. 1999	9.81	10.19	30.06.06	On-going
19 Zanzibar Health Dev. Requirement Studies	TAF	03 Dec. 1997	0.91	08 May 1998	24 Sep. 1999	0.88	0.03	30.06.04	On-going
20 Small Enterprises Loan Facility	ADF	11 Nov. 1998	8.00	12 Apr. 1998	29 July 1999	3.50	4.50	31.01.05	On-going
21 Three Regions Health Studies	TAF	14 July 1999	1.75	19 Nov. 1999	6-Apr-2001	0.31	1.44	28.06.05	On-going
22 Alternative Learning & Skills Dev. Project	ADF	31 Oct 2000	5.56	30-Jan-2001	24-Dec-2001	0.60	4.96	30/06/07	On-going
23 Alternative Learning & Skills Dev. Project	ADF	31 Oct 2000	1.01	30-Jan-2001	24-Dec-2001	0.32	0.69	30/06/07	On-going
24 SAP for Vocational Ed & Training	ADF	08 July 2003	14.22	15-Sep-2003		0.00	14.22	31.12.08	
25 SAP for Vocational Ed & Training	TAF	08 July 2003	1.6	15-Sep-2003		0.00	1.60	31.12.08	
SUB-TOTAL			68.05			20.80	45.65		
GRAND TOTAL			277.91			79.77	194.97		

Annex 8: Highlights on the Project Preparation and Review Process

1. **Project Identification:** A Bank's CSP dialogue/general identification mission took place in February 2003. The mission discussed with the Government of Tanzania (GOT) and other stakeholders the CSP and identified programmes for financing under ADF IX. The priority areas for ADB intervention for the period 2002-2004 included agriculture and rural development, human capital development/capacity building as well as support for key policy reforms. This was followed by a mission in September 2003 to identify a potential project in support of the ASDP. The mission identified a potential investment project in support of the ASDP. The project will focus on investments at district and field level, based on the District Agriculture Development Plan (DADP) process.
2. **Project Preparation:** The project was prepared in May/June 2003 by a multidisciplinary team of experts from the FAO Investment Centre (FAO-IC) comprising an agriculturist, economist, rural engineer, livestock and natural resources management specialist and microfinance expert, environmentalist, and an institutions specialist. The mission met stakeholders in both the public and private sectors including District personnel of line ministries, community based organizations (CBOs), NGOs and other private sector representatives. In order to assist the Preparation Mission, the Government established a National Formulation Team, which worked with the FAO-IC Team.
3. **Project Appraisal:** The project was appraised in August 2004 by a team comprising of an Agricultural Economist, Agronomist, Gender Expert, Consultant-Rural Infrastructure Engineer, Consultant-Rural Finance and Marketing Expert and Consultant-Environmentalist. The mission visited Tanzania and continued its broad consultative and participatory process that was commenced at preparation. Public and private interest groups, as well as donors involved in supporting the ASDP. A systematic review and verification of all aspects of the project was conducted by the mission.
4. **Internal Working Group/Country Team:** The internal working group and country team meeting that considered the project appraisal report was held on 3 September 2004. The report was carefully revised based on all comments received and processed further in accordance with the requirements of the Bank Group's Operations Manual.
5. **Inter Departmental Working Group:** The Inter-Departmental Working Group meeting that considered the draft project appraisal report was held on 22 September 2004. The report was carefully revised based on all comments received and processed further for the Senior Management Committee.
6. **Senior Management Committee:** The Senior Management Committee meeting was convened on 4 October 2004 to consider the draft project appraisal report. The report has been revised based on the comments received.