**AFRICAN DEVELOPMENT BANK** 



UGANDA

# FARM INCOME ENHANCEMENT AND FORESTRY CONSERVATION PROGRAMME: PROJECT -2 (FIEFOC-2)

Public Disclosure Authorized

**OSAN DEPARTMENT** 

November 2015

#### **TABLE OF CONTENTS**

I – STRATEGIC THRUST & RATIONALE	1
1.1. Project linkages with country strategy and objectives	1
1.2. Rationale for Bank's involvement	2
1.3. Donors coordination	3
II – PROJECT DESCRIPTION	3
2.1. Project components	4
2.2. Technical solutions retained and other alternatives explored	4
2.3. Project type	5
2.4. Project Cost and financing arrangements	5
2.5. Project's target area and population	7
2.6. Participatory process for project identification, design and implementation	8
2.7. Bank Group experience, lessons reflected in project design	8
2.8. Key performance indicators	9
III – PROJECT FEASIBILITY	.10
3.1. Economic and financial performance	.10
3.2. Environmental and Social impacts	.11
IV – IMPLEMENTATION	.13
4.1. Implementation arrangements	.13
4.2. Monitoring	.16
4.3. Governance	.17
4.4. Sustainability	.17
4.5. Risk management:	.18
4.6. Knowledge building	.18
V – LEGAL INSTRUMENTS AND AUTHORITY	.18
5.1. Legal instrument	.18
5.2. Conditions associated with Bank's intervention	.18
5.3. Other conditions	19
5.4. Compliance with Bank Policies	.19
V-RECOMMENDATION	20
Appendix I. Country's comparative socio-economic indicators	

- Appendix II. AfDB's Ongoing Portfolio in Uganda (as at 30 September 2015)
- Appendix III. Key related projects financed by the Bank and other development partners in the country
- Appendix IV. Map of the Project Area
- Appendix V. Agriculture and Water Sector Project: Fragility Analysis Uganda
- Appendix VI. Financial and Economic Analysis
- Appendix VII. Climate Screening Full Results

Appendix VIII. Concept Note Summary: Youth in Agri-business Development

# **Currency Equivalents**

As of August, 2015

Currency U	Unit =	Ugandan Shillings (UGX)
UA 1	=	UGX 4787.95
UA 1	=	USD 1.3947
USD 1	=	UGX 3432.96

# **Fiscal Year**

July 1 – June 30

# Weights and Measures

1 metric tonne	=	2204 pounds (lbs)
1 kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (")
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

# Acronyms and Abbreviations

ADB	African Development Bank	M&E	Monitoring and Evaluations
ADF	African Development Fund		
AAMP	Area-based Agricultural Modernisation	MGLSD	Ministry of Gender, Labour and Social
	Programme		Development
ASDP	Agriculture Sector Development	MOFPED	Ministry of Finance, Planning and
	Partners Group		Economic Development
AREP	Adaptation Review and Evaluation	MOWE	Ministry of Water and Environment
	Procedures	MOU	Memorandum of Understanding
BOU	Bank of Uganda	MTR	Mid-Term Review
CAADP	Comprehensive Africa Agricultural	NAADS	National Agricultural Advisory Services
	Development Programme	NCB	National Competitive Bidding
CAIIP	Community Agricultural Infrastructure	NDF	Nordic Development Fund
	Improvement Programme	NDP	National Development Plan
CAP	Catchment Afforestation Project	NEMA	National Environment Management
СВО	Community Based Organisation		Authority
CSP	Country Strategy Paper	NFA	National Forestry Authority
DANIDA	Danish International Development	NFP	National Forestry Plan
	Agency	NPV	Net Present value
DEAP	District Environmental Action Plan	O&M	Operation and Maintenance
DFID	Department for International	NPCU	National Project Coordination Unit
	Development	PEAP	Poverty Eradication Action Plan
DP	Development Partners	PY1	Programme Year One
EIRR	Economic Internal Rate of Return	PY2	Programme Year Two
ESMP	Environmental and Social Management	PY3	Programme Year Three
	Plan	PY4	Programme Year Four
EU	European Union	PY5	Programme Year Five
FBMOs	Farmer Based Management	PMA	Plan for Modernisation of Agriculture
FFS	Organizations	PPP	Public-Private-Partnership
FID	Farmer Field School	PRA	Participatory Rural Appraisal
FIRR	Forestry Inspection Division	RBLF	Result-Based Logical Framework
GDP	Financial Internal Rate of Return	SFI	Soil Fertility Initiative
GoU	Gross Domestic Product	SME	Small and Medium Scale Enterprise
HDI	Government of Uganda	SSI	Small Scale Irrigation
IAWMP	Human Development Index	TA	Technical Assistance
	Integrated Agriculture and Watershed	TOT	Training of Trainers
ICB	Management Project	UA	Unit of Account
IFAD	International Competitive Bidding	UBOS	Uganda Bureau of Statistics
	International Fund for Agricultural	UGFO	Uganda Field Office of ADB
LCA	Development	UGX	Uganda Shillings
LFR	Local Currency Account	WAP	Watershed Action Plan
MAAIF	Local Forest Reserve	WUA	Water Users' Associations
	Ministry of Agriculture, Animal		
	Industry and Fisheries		

# Loan and Grant Information

Client's information

# BORROWER:Republic of UgandaEXECUTING AGENCY:Ministry of Water and Environment

# Financing plan

Source	Amount (USD Million)	Instrument
ADB	76.70	Loan
Nordic Development Fund (NDF)	5.60	Grant
Government	9.13	Not applicable
TOTAL COST	91.43	

# ADB's key financing information

Loan / grant currency	US Dollars
Loan Type	Enhanced variable spread type
Interest rate *	Base Rate + Funding Cost Margin + Lending Margin
Base Rate	Floating Base Rate based on 6 month LIBOR with free option to fix the Base Rate.
Funding cost margin	The six months adjusted average of the difference between: (i) the refinancing rate of the Bank as to the borrowings linked to 6- month LIBOR and allocated to all its floating interest loans denominated in USD and (ii) 6-month LIBOR ending on 30 June and on 31 December. This spread shall apply to the 6-month LIBOR which resets on 1 February and on 1 August. The Funding Cost Margin shall be determined twice per year on 1 January for the semester ending on 30 June.
Lending Margin	60 basis point (0.60%)
Commitment Fee	Not Applicable
Other fees*	Not Applicable
Tenor	20 years maximum
Grace period	5 years maximum
FIRR NPV (USD base case )	18% 1.3 Million
EIRR (base case)	21%

\*if applicable

Timefra	me - Main Milestones (expected)	5 °FF
	Concept Note approval	15 June, 2015
	Project approval	December, 2015
	Effectiveness	June, 2016
	Last Disbursement	June,2021
	Completion	December, 2020
	Last repayment	20 years; December, 2040

# **Project Summary**

# 1. Project Overview

1.1 The Farm Income Enhancement and Forest Conservation Programme – Project 2 (FIEFOC-2) is designed within the context of the Government of Uganda's National Development Plan (NDP) and the long term development strategy, the Vision 2040 both of which promote of agricultural infrastructure and income enhancement. In order to realize the 2040 vision, the project will contribute to improvement of farm incomes, rural livelihoods, food security and climate resilience, sustainable natural resources management and agricultural enterprise development; (ii) Agribusiness Development; (iii) Integrated Natural Resources Management; and (iv) Project Management with a total cost of USD 91.43 million. The project seeks to consolidate and expand the notable achievements of the FIEFOC Programme first phase which was completed in December 2012.

1.2 According to Uganda National Household Survey 2013, about 19.7%, of the total population representing 6.7 million people, are unable to meet their basic needs and are living below absolute poverty line. The incidence of poverty is highest among food-crop growing category in the rural areas due to low income. The project seeks to increase production and farmer incomes through improvements to, and expansion of small-scale irrigation schemes, development of agribusiness and adoption of sustainable land, forest, and water management practices and technologies to generate income from natural resources.

The project will be implemented over a five-year period in five districts where the 1.3 proposed irrigation schemes are located namely: Nebbi, Oyam, Butaleja, Kween, and Kasese. The target population in those districts is about 1,816,756 of which 51.7% are women and comprising 386,543.8 households. It is envisaged that the Project would lead to increase in yields of major crops by 50% and per capita incomes of the target population specifically women by an average of 10%. In particular a greater percentage (50%) of the start-up enterprises and income generating activities from natural resources, capacity building and service delivery of the project would specifically target women and youth whose incomes are expected to increase by an average of 30%: thus enhancing their socio economic status through improved standard of living. The project will benefit further 300,000 households of which 20% are female headed outside of irrigation command areas, by introducing or improving soil conservation measures in the catchments feeding the irrigation schemes. Moreover, the project is expected to provide technical skills in conservation and other farming practices that promote environmental management and thus increasing agricultural productivity in the proposed project area. It will also assist in the formulation and implementation of measures that reduce deforestation and promote agro-forestry which will lead to emission reductions and the protection of carbon reservoirs as part of the Reduction of Emissions from Deforestation and Degradation (REDD+) agenda. The carbon dioxide (CO2) sequestered as a result of tree planting by the project is estimated at 245, 000 tons of over 20 years. Training under the project will provide an opportunity for special attention to be given to intensification of climate-smart farming operations.

#### 2. Needs Assessment

2.1 FIEFOC- 2 has been identified as a flagship project under NDPII that will contribute to achievement of Uganda's national objectives to increase household income; generate employment; develop the infrastructure; and increase access to quality social services. This Appraisal Report follows a request from the Government of the Republic of Uganda through a Concept Note in 2012 for the Bank Group assistance to finance the Farm Income Enhancement

and Forest Conservation Programme – Project 2 (FIEFOC 2). Government had commissioned feasibility studies and detailed designs of 11 irrigation schemes located in the North, South and Eastern regions of Uganda. The development partners namely JICA has undertaken feasibility studies for three more sites in the Elgon region. These studies have formed the basis for prioritization and selection of the proposed sites by the Government to be financed under the project. The multi criteria used for selection was: (i) technical soundness; (ii) economic viability; (iii) environmental sustainability; and (iv) social desirability. This phase is demand driven by farmers, local governments, various stakeholders and the GoU to address requirements of increased agricultural production and enhancement of household incomes. The project will build on Uganda's relatively strong record in improving gender equity through deliberate inclusion and promotion of project activities with farms and agribusiness activities owned, operated, and managed by women. The project will aim to empower more women and youth to make decisions, invest in agriculture, and improve their social and economic status for the family's overall wellbeing.

2.2 In keeping with the Bank's new strategy on addressing fragility and building resilience, this project has also been developed with the goal of building resilience in mind. Food security is critical to community resilience, and agribusiness provides value addition, creating micro enterprises and micro industries. By helping the development of agribusiness micro-enterprises and cottage industries, the Bank will contribute to more stable sources of income, greater food security, boosts youth employment, and expand economic opportunities for the communities.

# 3. Bank's Added Value

3.1 The proposed project is anchored on the Country Strategy for Uganda which focuses on two main pillars namely (i) Infrastructure development and increased agriculture productivity and (ii) Human capacity improvement and skills development for poverty reduction. This is in line with the Bank's Ten-Year Strategy (2013-2022), which prioritizes agriculture and food security as one of the key areas for the Bank's future assistance. The Bank has gained considerable experiences under FIEFOC-1 in implementation of irrigated agriculture and has also accumulated vast experience through the implementation of other agricultural infrastructure projects in Uganda. The Project is in furtherance of the Bank assisted phase-1 of the project and thus has a comparative advantage based on the lessons it learned from the completed Project.

#### 4. Knowledge Management

4.1 Knowledge gained from implementation of the phase 1, particularly on the need to build country capacity for project implementation, has been duly applied in designing this project. In the same pattern, the knowledge that will be generated by the project will be instrumental in designing and managing similar Bank-financed projects in the future. Provisions made for knowledge and information management include on Geographic Information System and webbased technology for natural resources data collection, compilation and presentation, the market Information System (MIS) that will generate data pertaining to prices, sources and volumes of commodities to be shared with all stakeholders and the gender sensitive value chain analysis and development that allow women and youth to design and manage sustainable SMEs.

# **RESULTS-BASED LOGICAL FRAMEWORK**

Country and project name:	UGANDA: Farm Income Enhancement and Forest Conservation Programme, Project 2 - (FIEFOC-2)
Purpose of the project :	To improve household incomes and, food security and climate resilience through sustainable natural resources management and agricultural enterprise development.

	RESULTS CHAIN	INDICATOR	BASELINE	TARGET	MEANS OF VERIFICATION	RISK/MITICATION MEASURES
IMPACT	1.1 Enhance livelihoods through increased income, food security, and climate resilience	<ul> <li>1.1: Reduction in proportion of people living below poverty line</li> <li>1.2: Increased average household income (UGX per month) (female headed HH)</li> <li>1.3 Reduction in months of food scarcity in male/female-headed households per year</li> </ul>	2015 1.1: 19.7% 1.2:223000 (117000) 1.3: 04(05)	2025 1.1:14.2% 1.2: 10% (10%) 1.3: 02(02)	Uganda poverty status report 2014, MoFPED	
OUTCOMES	<ul><li>2.1.Improved incomes for farmers and rural entrepreneurs</li><li>22 Improved integrated natural resources management practices</li></ul>	<ul><li>2.1: % Increase in yields of major crops</li><li>2.2.: % Reduction in Sediment in the river at the irrigation schemes</li></ul>	2015 2.1: 0 2.2: tbd	<u>2022</u> 2.1: 20% 2.2: 50%	Crop forecast survey, UBOS	<b><u>Risk 1</u></b> : Poor sustainability of infrastructure coupled with lack of adequate social inclusion due to cultural barriers. <u><b>Mitigation1</b></u> : Establish and support management entity for O&M participatory approach, and community mobilization
PUIS	<ul> <li>3. Agricultural Infrastructure</li> <li>Development</li> <li>3.1 Irrigation infrastructure developed (head works, conveyance system, drains, WUA -offices, on-farm roads, etc.)</li> <li>3.2: Access roads constructed</li> <li>3.3. Meteorological stations established</li> <li>3.4 Farmer based institutions established for irrigation schemes</li> </ul>	<ul> <li>3.1: Acreage of new irrigated areas (Ha)</li> <li>3.2 length of access roads constructed (kms)</li> <li>3.3 Number of Met-stations established</li> <li>3.4 Number of WUAs established (women in leadership)/Farmer based management organizations</li> </ul>	<u>2015</u> 3.1: 0 3.2: 0 3.3: 0 3.4: 0	2020 3.1:4038 3.2:50 3.3: 4 3.4: 5	Quarterly and Annual Project reports, MoWE	<b><u>Risk 2</u></b> : The project may be exposed to future climate risks. <u><b>Mitigation 2</b></u> : Future climate risks will be mitigated by strengthen the weather forecast capacity of government in the project areas.
EDO I	<ul> <li>4. Agribusiness Development</li> <li>4.1: Alternative livelihoods and business skill developed</li> <li>4.2: Business skills development</li> </ul>	<ul> <li>4.1 1Number of alternative livelihoods established and jobs created</li> <li>4.2: Number of Business skills programs developed and farmers and entrepreneurs trained (women and youth)</li> </ul>	2015 4.1:0 4.2:0	2020 4.1:1000 4.2:1400 (70%)	Quarterly and Annual Project reports, MoWE	<b><u>Risk 3</u>:</b> Sources of financing required for value addition activities may be scarce. <u><b>Mitigation 3</b></u> : Provision of Business Development Support Services to potential actors will motivate private sector participation.

RESULTS CHAIN	INDICATOR	BASELINE	TARGET	MEANS OF VERIFICATION	RISK/MITICATION MEASURES
4.3 facilitate linkage with financial	4.3 Number of actors accessing support from financial	4.3:0	4.3: 50%		
institutions and markets	4.4 Number of start-up enterprises (women and youth)	4.4:0	4.4: 120No (80 No)		
<ul> <li>5. Integrated Natural Resources Management</li> <li>5.1: Integrated soil and water conservation improved in irrigation scheme catchment areas (soil and water conservation, conservation farming practices)</li> <li>5.2 Sustainable Forest Management in Watershed areas (forest regeneration, agro forestry)</li> <li>5.3 Capacity Building (gender responsiveness, awareness on integrated NRM, productive use of natural resources)</li> </ul>	<ul> <li>5.1.1: No of KM of soil and water conservation measures established</li> <li>5.1.2: % of targeted farmers adopt conservation farming practices</li> <li>5.2: Hectarage of degraded forest rehabilitated in hotspot areas</li> <li>5.3: No. of farmers trained in Natural Resources Management.</li> </ul>	5.1.1: 0 5.1.2: 0 5.2: 0 5.3:0	5.1: 2000 5.1.2: 30% 5.2: 5000 5.3: 90683	District and sub- county extension records Bureau of Statistics (UBOS) reports M & E reports	<b><u>Risk 4</u>:</b> There may not be enough planting materials for the identified tree species <b><u>Mitigation 4</u></b> : The Districts would be tasked with the provision of the planting materials for the identified tree species
6. Project Management		<u>2015</u>	<u>2020</u>	Progress reports, M&E reports	<b><u>Risk 5</u></b> : Delayed approval of the project by the Government and
6.1: National Project Coordination Unit established	6.1: NPCU fully constituted	6.1: 2 (40%)	6.1:5 (100%)	Audit reports, Supervision	delayed VAT payment.
<ul><li>6.2: Financial Management and M&amp;E system established</li><li>6.3: Training</li></ul>	<ul><li>6.2.1: Set up a financial management system</li><li>6.2.2: Establishment of M&amp;E system</li><li>6.3: Training related to irrigated agriculture agribusiness and environment</li></ul>	6.2.1: 0 6.2.2: 0 6.3: 0	6.2.1: (1) 6.2.2: (1) 6.3: 2000	Mission reports	Mitigation 5: UGFO will work and follow up closely with the Government
Components				Inputs	
<ul> <li><u>Component 1</u>: Agricultural Infrastructure Development: 1.1 Irrigation Infrastructure, 1.2 Access road, 1.3 Meteo-stations, 1.3 WUA organization and Capacity Development</li> <li><u>Component 2</u>: Agribusiness Development: 2.1 Alternative Livelihoods Development, 2.2 Youths in Agri-business Development.</li> <li><u>Component 3</u>: Integrated Natural Resources Management: Subcomponent 3.1 Integrated Soil and Water Conservation, 3.2 Sustainable forest management, 3.3 Capacity Development (Gender and youth employment cross-cutting issues).</li> <li><u>Component 4</u>: Project Management: 4.1 Project Coordination, 4.2 Monitoring and Evaluation 4.3 Capacity Building.</li> </ul>				Total Project Co.         ADB Loan:       USI         NDF Grant:       USI         Government:       USI         Component 1:       USI         Component 2:       USI         Component 3:       USI         Component 4:       USI	st: USD 91.43 million D 76.70 million D 5.60 million D 9.13 million SD 68.46 million SD 5.93 million SD 10.10 million SD 6.84 million

# **Project Timeframe**



#### REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSED ADB LOAN TO THE REPUBLIC OF UGANDA FOR THE FARM INCOME ENHANCEMENT AND FOREST CONSERVATION PROGRAMME – PHASE 2 (FIEFOC-2)

Management hereby submits this Report and Recommendation for an ADB loan of USD 76.70 million, under ADB terms to finance the Farm Income Enhancement and Forest Conservation Programme – Phase 2 (FIEFOC-2) activities in Uganda.

# I. STRATEGIC THRUST & RATIONALE

#### **1.1. Project linkages with country strategy and objectives**

1.1.1 The Farm Income Enhancement and Forest Conservation Programme – Project 2 (FIEFOC-2) is consistent with Uganda's National Development Plan (NDPII) 2015/16-2019/20, which has been designated by Government of Uganda (GoU) as the second of a series of six 5-year NDPs to translate the country's Vision 2040 into action. The NDPII, whose implementation commenced on 01 July 2015, builds on experiences of NDPI and aims to enable Uganda attain a middle income status by 2020 through strengthening the country's competitiveness for sustainable wealth creation, employment, and inclusive growth.

1.1.2 The NDP's core objectives, therefore, are to increase household income; generate employment; develop the infrastructure; increase access to quality social services; promote science and technology; and develop human capital. FIEFOC-2 has been identified as a flagship project under NDPII that will contribute to achievement of Uganda's national objectives. The Project is also consistent with the Bank's CSP (2011-2016) with its two pillars focusing on (i) the development and rehabilitation of critical economic infrastructure and increased agricultural productivity; and (ii) improving capacity skills development for poverty reduction, both of which are well aligned to NDPI and NDPII, and subsequently to Vision 2040. FIEFOC-2 (see section 1.2) is identified as one of the key investment projects by the CSP to be supported by the Bank under its first pillar mentioned above. The CSP (2011 – 2016) is also well aligned with the Bank's Ten Year Strategy (2013-2022). The project is also in line with the Bank Group's Strategy on addressing Fragility and Building Resilience in Africa and with the Gender Strategy 2014-2018 under its Pillar 2, Women Economic Empowerment. A key focus of the strategy is strengthening state capacity, establishing effective institutions and promotion of inclusiveness to build resilient societies.

1.1.3 The Project's key outputs, notably, development of irrigation infrastructure, promotion and development of agribusiness, and integrated natural resources management, to enhance household incomes are consistent with the country's Agricultural Sector Development Strategy and Investment Plan (DSIP) 2010. The DSIP will be succeeded by a new Agricultural Sector Support Programme (ASSP) which is expected to be in force by December 2015. Both the DSIP and ASSP prioritise investment in water for production and promote investment in sustainable natural resource use. The Project is also consistent with the Rural Development Strategy (RDS) of the Ministry of Finance, Planning and Economic Development (MoFPED) which focuses on rural infrastructure development, the National Agriculture Policy (2013) of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), and the Irrigation Master Plan of the Ministry of Water and Environment (MoWE). Further, the project activities are also in line with the Gender Policy Brief for Uganda's Agriculture Sector (2012), the Uganda Forestry Policy, the Uganda Climate Change Policy and Uganda's Ministry of Gender's revised Gender Policy 2007.

1.1.4 The sector and the project area face varying degrees of fragility. Food insecurity, lack of rural infrastructure, lack of economic opportunities for women etc. are key elements of fragility. The project is designed to address these challenges and build resilient institutions and societies as shown in Appendix V.

1.1.5 Regionally, the project is consistent with Pillar 2 of the NEPAD's Comprehensive African Agricultural Development Programme (CAADP), which focuses on improvement of agricultural infrastructure and related capacities for enhanced food security; and with the Sustainable Development Goals.

1.1.6 The Project was originally programmed to be financed under the ADF 13 window. Due to reduced ADF allocations to Uganda and the high importance the Government attaches to expanding irrigated agriculture, the Government has requested the Bank to provide financing for the Project under ADB terms. The Government of Uganda is committed to operationalising its National Development Plan (NDP) but remains with the challenges of fully financing all activities using the limited budgetary resources available.

#### **1.2. Rationale for Bank's involvement**

1.2.1 The Farm Income and Forest Conservation Programme – Project-2 (FIEFOC-2) is designed to assist the GoU increase the area under irrigated agriculture. With effects of climate change and the increasingly unreliable rainfall pattern, the need for investment in irrigation has become of paramount importance. Only about 5% of the irrigation potential of Uganda has been exploited so far and the GoU requested the Bank to support its renewed efforts to expand its irrigation investments. The GoU has developed an Irrigation Master Plan for the period 2010-2035 which targets to expand irrigation infrastructure to cover at least 70% of surface water irrigation potential by 2035. This will increase the total agricultural land under irrigation from the current 14,418ha to about 420,000ha by 2035. As a result, the GoU has ranked irrigation as the third most important infrastructural investment that will facilitate economic transformation of the country as envisaged under Vision 2040.

1.2.2 The first phase of this Programme, FIEFOC-1 that closed in 2012, assisted the GoU to rehabilitate three key irrigation schemes (i.e. Mubuku, Doho, and Agoro) that has enabled full scale irrigation on 2,328 ha. The Project also increased the forest cover of the country by about 31,000ha by planting trees within identified watershed areas across Uganda's cattle corridor. Based on these key achievements under FIEFOC-1 and the confidence that the Government has in the Bank's expertise in agricultural infrastructure projects, the Bank has been requested to finance FIEFOC-2. The Bank has accumulated valuable experiences under FIEFOC-1 and the vast experience through implementation of other similar agricultural infrastructure projects in the past, predominantly in the rural setting. The projects have had considerable impact on the livelihoods of the beneficiary communities and the economy as a whole.

1.2.3 The project is also in line with the Bank's focus on financing capital intensive hardware infrastructure related development activities, while other donor agencies undertake the software services. In this case, support for integrated soft services under FIEFOC-2 is provided by the Nordic Development Fund (NDF). It also fits well with the Bank's overall Ten Year Strategy for 2013-2022 and the Bank's Framework for Reduction of Post-Harvest Losses in Africa (PHLP -2010-2014), under revision. This project complies and is consistent with all applicable Bank policies.

1.2.4 In May 2014 the Bank approved a credit policy to "Diversify the Bank's Products to provide Eligible ADF-Only Countries Access to the ADB Sovereign Window". The Board approved Uganda's request for ADB public sector financing in 2014 in connection with the Uganda Markets and Agricultural Trade Improvement Programme (MATIP-2) Project in accordance with the Bank's Credit Policy, as at 2014, following a Credit Risk Committee (CRC) decision that Uganda was sufficiently creditworthy, had a Low Risk of Debt Distress classification and was within its non-concessional borrowing limit. There has subsequently been no major change in Uganda's macroeconomic and debt outlook that would invalidate the original assessment provided in the Information Note to the Board in 2014.

# **1.3. Donors coordination**

	Sector or		Size	
	subsector*	GDP	Exports	Labor Force
	Agricultural Sector	23.1%	55%	81%
	Players - Public An	nual Expenditure (a	verage 2009/2010	to 2013/2014)**
	Government	Donors		
IIA m	UA 31 / m	UA 52.0 m	A FDB	30.2%
0A III %	36.1%	63.9%	IDA	31.6%
70	50.170	03.970	IFAD	10.9%
			USAID	7.8%
			Danida	7.0%
			EC	7.7%
			JICA	1.6%
			Italy	1.7%
			FAO	1.6%
Level of Donor Coordination				
	Existence of Thematic	Working Groups		Y
	Existence of SWAPs of	r Integrated Sector A	pproaches	Y
	ADB's Involvement in	donors coordination*	 ***	M****

\* as most appropriate; \*\* Years [yy1 to yy2]; \*\*\* for this sector or subsector \*\*\*\* L: leader, M: member but not leader, none: no involvement

1.3.1 The Bank is one of the major Development Partners (DPs) in Uganda, providing about 30.2% of development assistance in the agriculture and rural development sector. The Bank collaborates closely with the other Development Partners, especially the World Bank, IFAD, USAID, JICA, and the EU for agricultural related projects, within the framework of the Agriculture and Rural Development Donor Coordination Group. The Group has been greatly invigorated through the Bank's field presence. In an effort to harmonize Development Partner intervention, the Bank has partnered with the other DPs under the umbrella of the Agricultural Sector Development Partners Group (ASDPG) to undertake development programme, in the choice of sub-sectors and activities where it has a comparative advantage. In regard to this Project, the Bank will work closely with NDF which will co-finance the pilot youth employment programme, watershed management and climate-smart agriculture activities within the project, JICA, who are preparing an irrigation programme, but in particular to tap on their experiences with farmer groups development in irrigation activities; the IDA who are processing a cluster development project that will also undertake some irrigation related activities; the Netherlands Embassy on crop intensification and inputs supply.

1.3.2 The ASDPG is currently chaired by the Embassy of The Netherlands. The Group is well informed about the project through consultations with Bank Teams at preparation/appraisal missions and also continually by UGFO through monthly meetings. The Uganda Field Office is an active member of this group, which relates with the overall Heads of Missions' Local Development Partners Group (LDPG), currently chaired and coordinated by the World Bank.

# **II. PROJECT DESCRIPTION**

<u>Project development goal:</u> The overall goal of the Project is to contribute to poverty reduction and economic growth in Uganda through enhanced productivity and commercialization of agriculture. <u>Specific Project objective</u>: The project objective is to improve household incomes, food security, and climate resilience through sustainable natural resources management and agricultural enterprise development.

# 2.1. Project components

No.	Component name	Est. cost (USD M)	Component description
1	Agriculture Infrastructure Development	68.46	<ul> <li>Development of five (5) new gravity fed irrigation schemes as described in C.1.2 (section 2.5) of the Technical Annex; Wadelai (1000 ha), Mubuku II (480 ha), Doho II (1178ha), Tochi (500 ha), and Ngenge (880 ha), covering a total area of 4038ha for high value crops.</li> <li>Multipurpose use of water by providing livestock watering troughs and fisheries development on a case by case basis.</li> <li>Construct 50 km of access roads to link the schemes with the nearest road network.</li> <li>Establishment of 4 No. class-B-climatic station, near each scheme and 50 number of fixed staff gauges on main canals and rivers for discharge measurement.</li> <li>Formation of water Users' Associations (WUAs)/(FBMOs); construct office blocks with water and sanitation facilities for each of the schemes.</li> <li>Provision of capacity development for farmers and extension agents in project related areas of services.</li> </ul>
2	Agribusiness Development	5.93	<ul> <li>Agribusiness development for climate smart livelihoods aquaculture (Fisheries), Apiculture (Honey production), seedling production, crop intensification, etc.</li> <li>Business skills development especially among youths (capacity development, market development, cooperative development, facilitate access to finance).</li> <li>Youths in Agribusiness development pilot activity Recruitment of anchor institution for the pilot activity.</li> </ul>
3	Integrated Natural Resources Management	10.2	<ul> <li>Preparation of watershed management master plan for each irrigation scheme.</li> <li>Installation of sedimentation and erosion control structures.</li> <li>Promotion of Conservation Farming and Agro-Forestry through demonstrations and basic input packages for farmers.</li> <li>Sustainable forest management measures.</li> <li>Establishment of improved and adapted varieties of economic trees such as mango, fuel wood species, as well as agroforestry species.</li> <li>Promote fuel saving stoves at watershed level to reduce fuel wood consumption and carbon emissions.</li> <li>Capacity building and supporting measures on NRM (with focus on women and youth).</li> </ul>
4	Project Management	6.84	<ul> <li>Coordinate activities of the MoWE and MAAIF through an appropriate Steering Committee.</li> <li>Coordinate Monitoring, Evaluation and Reporting activities.</li> <li>Coordinate Financial Management processes and also ensure preparations for External Audits.</li> <li>Facilitate Procurement processes.</li> <li>Mainstream Gender and also facilitate HIV/AIDS Awareness raising.</li> </ul>

#### Table 2.1: project components

# 2.2. Technical solutions retained and other alternatives explored

Alternative	Brief description	Reasons for rejection			
Alternative 1	Invest in rain water harvesting infrastructure such as smaller water holding structures scattered all over the selected districts for agriculture, livestock and domestic use	Rain water harvesting structures cannot sustain the impacts of climate change and their socio-economic impact will be spread out thinly. In addition they cannot provide food and cash crops two to three times a year.			

Table 2.2: project alternatives considered and reasons for rejection

Alternative 2	Invest in pumped irrigation development by lifting water mechanically to higher ground for crop production	Pumped irrigation schemes were dropped on account of the complex nature of their operation and maintenance, costs are high and the capacity to maintain at small farm level does not exist. Further it contributes to carbon emission.
Alternative 3	Introduce spate irrigation system	Not sustainable due to variability of rainfall; non- efficiency and drudgery.

#### 2.3. Project type

FIEFOC-2 is a public sector investment project that builds on successful investments undertaken under FIEFOC-1. It complements other existing agricultural production and natural resources management programmes that the Government of Uganda is undertaking to achieve its objectives under the NDP.

#### 2.4. Project Cost and financing arrangements

2.4.1 <u>Project Costs</u>: The total cost of the project is estimated at USD 91.43million, net of taxes and based on August 2015 exchange rate, comprising USD 24.09 million or 26% in local costs and USD 67.34 million or 74% of the total cost in foreign cost. This cost is inclusive of physical and price contingencies estimated at an average rate of 9%. All project costs are exclusive of taxes, and therefore Government should provide budget allocation for VAT in each quarter of the financial year in addition to the 10% Government contribution. A summary of project cost estimates by components, expenditure categories, and schedule are presented in Tables 2.3, 2.4 and 2.5 below, while details are provided in the Technical Annexes B2 Volume II of the appraisal report.

Components	Costs (UGX '000000')			C	osts (USD'0	% Foreign	% Total	
Components	Local	Foreign	Total	Local	Foreign	Total	Exchange	Base Costs
Component 1: Agricultural infrastructural development	54 059	162 175	216 234	15 747	47 240	62 987	75	75
Component 2: Agribusiness Development	4 312	14 432	18 744	1 256	4 204	5 460	77	6
Component 3: Integrated Natural Resources Development	7 611	24 107	31 718	2 217	7 022	9 239	76	11
Component 4: Project Management	7 340	14 250	21 590	2 138	4 151	6 289	66	8
Total base costs	73 322	214 964	288 286	21 358	62 617	83 975	75	100
Physical Contingencies	3 519	10 563	14 082	1 025	3 077	4 102	75	5
Price Contingencies	5 874	5 647	11 521	1 711	1 645	3 356	49	4
Total project costs	82 715	231 174	313 889	24 094	67 339	91 433	73	

 Table 2.3: Summary Project Cost by Component

Fynondituros	ADB (US D'000')		NDF (USD'000')			GVT (USD'000')			
	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total
L Investment Costs									
A. Works	15 277	41 350	56 627	101	274	375	924	2 576	3 500
B. Goods	523	2 965	3 488	154	871	1 025	-	-	
C. Services	1 557	7 093	8 650	666	3 034	3 700	230	689	919
Total Investment Costs	17 357	51 408	68 765	921	4 179	5 100	1 154	3 265	4 419
II. Recurrent Costs									
A. Operating And Maintenance Costs	470	1 412	1 882	-	-	-	595	1 780	2 375
B. Personnel	861	574	1 435	-	-	-			
Total Recurrent Costs	1 331	1 986	3 317	-	-	-	595	1 780	2 375
Physical Contingencies	635	1 905	2 540	69	206	275	321	966	1 287
Price Contingencies	1 060	1 018	2 078	115	110	225	536	516	1 052
Total project costs	20 383	56 317	76 700	1 105	4 495	5 600	2 606	6 527	9 133

**Table 2.4: Summary Project Cost by Expenditure Categories** 

Table 2.5: Summary Project Cost Schedule by Components (USD '000')

Components	Y1	Y2	¥3	Y4	¥5
Component 1: Agricultural infrastructural development	12,207	29,696	15,339	3,545	2,200
Component 2: Agribusiness Development	478	3,232	865	585	300
Component 3: Integrated Natural Resources Development and Management	1,003	3,074	2,459	2,251	452
Project Management	1,625	1,127	1,182	1,118	1,237
Total BASELINE COSTS	15,313	37,129	19,845	7,500	4,189
Physical Contingencies	748	1,814	969	366	205
Price Contingencies	612	1,484	793	300	167
Total PROJECT COSTS	16,673	40,426	21,607	8,166	4,561

2.4.2 <u>Project Financing Arrangement</u>: ADB loan will finance 100% of the agricultural infrastructure development component, and part of the agribusiness development (component 2) activities. The project also has a co-financing from the Nordic Development Funds grant to the tune of USD 5.6 million. NDF will mainly finance the natural resources management component and youth in agribusiness (pilot programme). The Government will mainly finance capacity building activities, salaries of Government staff assigned to the Project both at national and local government levels, compliance certification by NEMA, and part of component 3 activities (conservation farming and agro-forestry, forest plantation and woodlots, forest resources inventory, training in use of weather information, and expand community radios coverage). The Government of Uganda will also finance some recurrent costs of the National Project Coordination Unit. The beneficiaries will be responsible for the operation and maintenance (O&M) of the irrigation infrastructure, and the agricultural enterprises will operate with the principles of private sector. The breakdown of financing for the project is presented in the Table 2.6.

SOURCES OF FINANCING	UGX '000000'			USD'000'	Financing		
	Local	Foreign	Total	Local	Foreign	Total	%
ADB LOAN	69 975	193 336	263 311	20 383	56 317	76 700	84
NDF GRANT	3 793	15 431	19 224	1 105	4 495	5 600	6
GOVERNMENT	8 947	22 407	31 354	2 606	6 527	9 133	10
TO TAL COST	82 715	231 174	313 889	24 094	67 339	91 433	100

Table 2.6: Financing Plan of the project

2.4.3 <u>Counterpart Funds</u>: The Government of Uganda counterpart contribution to the project will be 10% of the total project cost (USD 9.13 million). The total government contribution to the project including 18% VAT is USD 25 million, representing 27.4% of the total cost of project (also equivalent to 33% of total loan funds). This contribution is in addition to financing of the feasibility and detail design of the irrigation schemes valued at USD 2.3 million, in kind contributions in form of salaries for government staff assigned to the project both at national and district levels, and the required office spaces.

2.4.4 The Government of Uganda financing contribution to the project of USD 9.13 million represents about 10% of the total project cost, which is less than the recommended 50% minimum counterpart contribution as per the Bank's 2008 Policy on Expenditure Eligible for Bank Group Financing. The policy further stipulates that the ADB may finance more than 50% of the total project costs on a case-by-case basis and up to a limit that does not exceed 100%.

2.4.5 <u>Financing of Greater Than 50% of the Project Cost</u>: Uganda has been faced with a narrow fiscal space and dismal revenue generation over the last decade. The average fiscal deficit between 2006/7 and 2015/16 was at 6.3% of GDP, owing largely to low levels of revenue that averaged at 12.8% of GDP. Uganda's overall deficit as a share of GDP for FY 2015/16 budget is highest in the region which is indicative of low revenue collections relative to its regional counterparts. The current socio-economic and macroeconomic context presents a number of challenges constraining Government resources. These include current account deficits arising from external shocks to the economy leading to the depreciation of the Ugandan currency and related inflationary pressures, widening current account deficit and an increasing stock of external and domestic debt. On account of the above challenges, the Bank financing is raised to 90% of the project cost of the Farm Income Enhancement and Forest Conservation Programme – Project- 2 (FIEFOC- 2). Detailed justification for Bank financing of 90% of the project costs is shown in B2.2 of the Technical Annex -Volume II.

#### 2.5. Project's target area and population

2.5.1 The interventions will take place in a total of 5 irrigation schemes, spread in five Districts namely: Nebbi, Oyam, Butaleja, Kween, and Kasese as shown in Appendix IV. The target beneficiaries shall be both public and private institutions and individuals associated with the sector. The total population of the 5 districts, based on the 2014 census, is about 1,816,756, 51.7% of whom are women. This population corresponds to about 386,543.8 households. Main target beneficiaries are farmers cultivating rice, cotton, and horticultural crops. According to the Socio-Economic Gender Disaggregated Profile conducted by the Feasibility Study, about 31,000 households from the irrigation schemes will benefit directly of which about 51% are women. In addition to these five core districts, the Project's natural resources management activities and agri-business development activities will cover 34 districts, which form the watershed area of these five irrigation schemes. The 34 districts are also listed in appendix IV.

2.5.2 The natural resources management Component will be implemented in 34 districts of hot-spot areas and will provide direct benefits to 300,000 households. These districts are located within the watersheds of the river systems feeding the irrigation schemes. The interventions will target selected areas within the watershed depending on the level of deforestation, status of environmental degradation, degraded lands, and degree of bank erosion. Beneficiaries will include communities living in degraded lands, farmers adopting agro-forestry practices, conservation farming, and agribusiness development as well as service providers and Ministry staff who will be trained on sustainable conservation and tree planting practices. The Agribusiness component will create about 1000 alternative livelihood opportunities in addition to the 1400 participants in business skills development programme.

#### 2.6. Participatory process for project identification, design and implementation

2.6.1 The formulation of the project was largely participatory, with the relevant stakeholders fully involved in the process of project identification throughout its design. The preparation of the Government feasibility study involved a rigorous participatory approach, whereby the relevant stakeholders, particularly Authorities of the respective districts and ministries and the directly benefiting farmers, were fully consulted. Likewise, at preparation and appraisal phases, the Bank team visited 10 of the 14 proposed schemes, in the process of which it interacted with the Central and Local Government Authorities, farmers and their associations; private sector agencies, NGOs including input suppliers, micro credit providers, and development partners, institutions working on gender issues. The appraisal phase also incorporated participation by NDF. This consultative approach will also continue during implementation of project activities especially between the Executing Agency, project steering committee, local governments, participating farmer groups, NGOs, the Bank, and other Development Partners.

2.6.2 Key stakeholders in the FIEFOC-2 Project include; Government, NGOs, Ministries (MoWE, MAAIF, MoFPED, MoGLSD) and parastatal bodies (NEMA, etc.); Civil Society, Organisations working with community groups and those on gender issues; District and community leaders; Farmer cooperatives including women and youth groups; Private sector companies; District Local Governments; and Existing irrigation farmers' associations, etc. In a bid to ensure stakeholder input into the project design, a number of consultative meetings were held with various institutions and personalities. The Bank has undertaken public consultations with communities, private sectors, Government Ministries and Departments at national and districts levels as well as with the development partners. Ideas were solicited on the relevance of the various project components, target groups and geographical locations. Efforts were made to ensure gender and social inclusiveness in these consultations. A stakeholder workshop was organized on May 5, 2015 which was attended by more than 45 representatives of stakeholder organisations from national to community levels. During the session participants provided valuable input to inform the design of the FIEFOC-2. A wide range of issues were noted for follow-up including among others: access to inputs, microfinance and extension services, market linkages, mechanisation and post-harvest handling, the need for inclusion of value addition to the produce, operations and maintenance of irrigation facilities, strong farmers' capacity development programme, establishment of demonstration centres, consideration to multipurpose use of water, use of existing government structures and the need to complement community initiatives, enhance the participation of private sector actors, etc.

#### 2.7. Bank Group experience, lessons reflected in project design

2.7.1 The CPPR review highlighted some lessons, including: (i) role played by project implementation unit in expediting project execution after delay in start-up when implementation was entrusted to Ministries; (ii) lack of project designs and drawings at project start-up results in implementation delay; (iii) inadequate consultation with stakeholders in selection of sites results in poor utilisation and lack of ownership; (iv) weak M&E system results in poor project monitoring; and (v) lack of irrigation scheme management entities compromises sustainability. Based on said lessons, (i) FIEFOC-2 will have a NPCU due to inadequate technical staff within MoWE, (ii) participatory M&E system will be established in PY1 which will be linked to MoWE M&E system, and (iii) detail designs of the irrigation schemes will be made available before the end of 2015 whilst the supervision consulting firm will be brought on board in PY1 through advance procurement arrangement to offset the time spent in the parliamentary approval process.

2.7.2 The Bank has considerable experience in implementing infrastructure projects in Uganda, including the Area-based Agricultural Modernization Programme (AAMP) and the Northwest Smallholder Agricultural Development Project (NSADP) both of which completed in 2009, and

Community Agricultural Infrastructure Improvement Programme – Project 1 (CAIIP-1) - the 2013 U.S. Department of the Treasury MDB Awards winner, and FIEFOC 1. The project draws extensively from lessons learned from AAMP, which are well documented in the Impact Study (August 2008), CAIIP-1, FIEFOC1 and from other small scale irrigation schemes, natural resources, watershed management, and community driven development projects in Uganda and other countries. The most pertinent include (i) the enhancement of agricultural commodity trade, including establishment of linkages between Bank financed projects such as CAIIP community access roads and agro-processing facilities built in districts where irrigation schemes will be constructed); (ii) integration of the value addition activities, representing the private sector; (iii) adopting integrated watershed development and alternative livelihood; and (iv) Building the capacity of Water Users' Associations (WUAs)/FBMOs to ensuring maintenance of the infrastructure and project sustainability. AfDB's ongoing portfolio in Uganda is rated satisfactory at 2.4 (overall) with no problem projects, aging projects, or slow disbursing projects. A detailed overview of the portfolio as at 30 September, 2015 is provided as Appendix II.

2.7.3 Particular lessons learnt during the implementation of FIEFOC-1 include (i) the identification of an appropriate executing agency and inadequately staffing of the NPCUs with the required skills. MoWE with demonstrated performance in implementing FIEFOC phase-1 was identified as an executing agency. Effort will also be made to reinstate staff that existed during phase-1 of the project with the necessary skill mix to avoid delays in project implementation; (ii) in addition, advance procurement method will be adopted to counter balance delays experienced in getting approvals from Parliament; (iii) the importance of establishment of a technical committee was underscored comprising the most relevant stakeholders to provide technical supervision and back-stopping; (iv) inadequate information regarding land use: Adequate information flow and proper sensitization of stakeholders especially, farmers and land owners are necessary for successful implementation and ownership of the project. Inclusion of secondment of staff from MAAIF is also considered to ameliorate the already improving relationship between the two Ministries; (iv) There is need for a strong Project Monitoring and Evaluation Unit to ensure collection, collation, analysis and dissemination of information and data for timely management decision making, free-flow of information and documentation of lessons learnt and impacts of the project.

#### **2.8. Key performance indicators**

2.8.1 The Results Based Logical Framework contains indicators pertaining to the impact, outcomes and outputs of the project. It includes the Bank's Core Sector Indicators (CSI) and other institutional indicators that will be used to gauge the effectiveness of project management. Monitoring and evaluation of the project activities and results based logical framework indicators will be conducted by the Monitoring and Evaluation Expert of the National Project Coordination Unit (NPCU), in close collaboration with all the partners involved. Special emphasis will be on disaggregation of data to capture benefits from the project to gender and youth. Baseline data will be collected at the beginning of project implementation in addition to the baseline information collected during the feasibility study to improve measurement of indictors of the project. An experienced M&E expert will be put in place from the start of the project.

2.8.2 The impact and outcome indicators include: (i) income level among farmers, (ii) food security among farmers and extended community, (iii) reduction in people living below poverty line, (iv) increase in yield of major agricultural produce, (v) number of livelihood activities and businesses developed, and (vi) reduction in sediment load of rivers feeding the irrigation schemes.

Key output indicators are: (i) area developed under irrigation; (ii) number of farmers adopting conservation farming practices and land area protected against erosion; (iii) involvement of women and youth in decision-making bodies; (iv) jobs created in the agribusiness, especially for women and youths, and (v) number of entities women and men trained.

2.8.3 **Baseline data**: Baseline data was collected as part of the socio-economic study and used in the RBLF. The baseline data will be further strengthened and gaps filled including collection of gender disaggregated data in PY1. Indicators will be used to compare project performance against the baseline situations. Various supervision missions and periodic progress reports will reflect the level of achievement under each of these indicators.

# **III. PROJECT FEASIBILITY**

# **3.1. Economic and financial performance**

3.1.1 The main economic benefits of the project are increase in basic crops productivity and production, increase in beneficiary incomes and strengthening of food security and climate resilience. Other project benefits include jobs generated by business developed, reduction in sediment load of rivers resulting from degraded forest rehabilitation and soil conservation measures.

3.1.2 The economic and financial analysis was based on the incremental net benefit arising from the project investment. The main assumption underlying the economic and financial analysis is an anticipated increase in the productivity of the main crops and the generation of added value on the agricultural products. Crop diversification and intensification will be enhanced under irrigated agriculture using improved seeds and the practice of modern system. Irrigation schemes covering 4038 ha will be developed. The main crops retained for the analysis are rice, maize, cassava, sweet potatoes and beans. Beans are used as representatives of the other food crops cultivated in the regions. The project also promotes aquaculture and apiculture, agribusiness activities on a pilot basis to enhance value addition on maize, cassava and honey. It is estimated that the production of the basic crops will increase by 50% on the average.

3.1.3 The production costs were derived from the results of the 1st phase of the project and computed field data from Uganda. Prevailing 2014 market prices were used for input and output valuation. The O&M costs have been incorporated in the crop budgets. The other assumptions include: (i) all project's outputs are incremental as they expand supply to meet growing demand; (ii) project's inputs are mostly non incremental since they are met not by an expansion of overall supply but from existing supplies; (iii) maize and cassava are treated in the analysis, as a traded good since they offer an important export potential. All Project costs and prices were estimated on the basis of constant market prices for a span of 25 years. For the economic analysis, (i) maize and cassava market prices considered as a traded good were adjusted to reflect their economic values; (ii) for the others crops, the market prices were used since they were not import substitute, (iv) all subsidies were excluded. The FIRR is 18% with a NPV of USD 1.3 million at a capital opportunity cost of 12%. The EIRR is tabulated below:

FIRR, NPV (base case)	18%, NPV (12%): USD 1.3 million
EIRR, NPV (base case)	21%, NPV (12%): USD 1.7 million

3.1.4 The economic rate of return (EIRR) and the internal rate of return (FIRR) are sensitive to changes in prices and costs. A 10% increase in the prices of agricultural products generates an EIRR of 23% and a FIRR of 20%. Similarly, a 10% increase in production costs decreases the EIRR and the FIRR to 20% and 17% respectively. Details of financial and economic analysis is shown in in Appendix VI.

## **3.2. Environmental and Social impacts**

3.2.1 <u>Environment</u>: The project is classified as Environment Category 2 according to the Bank's Environmental and Social Assessment Procedures (ESAP), which implies that the potential negative environmental and social impacts are not major and can be mitigated with the application of measures specified in ESMPs. An ESMP, with a budgetary allocation of USD 850,000, was prepared and its Summary posted on Bank's website on 24 July, 2015 to provide guidelines for the management of potential environmental and social aspects at all possible project sites.

3.2.2 FIEFOC-2 will have significant *positive environmental impacts* including (i) contribution to the restoration of forest cover that will lead to reduced soil erosion, flooding, and water pollution. The carbon dioxide (CO2) removed from the atmosphere is estimated at 245, 000 tons over 20 years as a result of tree planting by the project as shown in the details under Technical Annex C.3.1 (b) of the Technical Annex; (ii) restoration and enhancement of the ecosystems through re-vegetation and tree planting activities planned as part of the project - this will have significant impacts on combating deforestation and desertification as well as mitigating the impacts of climate change; (iii) rehabilitation of degraded watersheds to sustain and enhance water catchment ; and (iv) improved farm productivity, soil fertility management and increased uptake of proper crop husbandry practices that will improve agricultural production and marketing, thus contributing to food security and improved farm incomes.

3.2.3 Most of the *negative impacts* to the environment will be attributed to construction activities with minimal operation and post operation effects. Some of these impacts will pertain to (i) loss of vegetation due to land clearing for irrigation schemes and farm/forest roads construction that can be minimised by refilling of burrow pits and re-vegetation, (ii) increase in water abstraction arising from small-scale irrigation schemes requirement, that could upset the existing flow patterns of the rivers, but will be minimised through established water management systems and environmental flow requirements to allow sufficient water for downstream users, and (iii) soil erosion due to loose top soil.

3.2.4 <u>Climate Change:</u> Climate change models for Uganda suggest a projected increase in temperature of 0.70 C to 1.50 C by 2020. These models also predict a likely increase in the variability of rainfall with most areas projected to experience higher rainfall. Uganda is already experiencing extreme weather events including droughts, floods and landslides. Floods and landslides have been linked to drained wetlands, deforestation, and compacted soil that no longer have any water-retention capacity. The Uganda Vision 2040- the long term development blue print for the country-recognizes the impacts of climate change on all sectors of Uganda's economy, and has committed to the need for preparedness through adaptation and mitigation strategies to ensure the resilience of the country to climate change impacts. The Bank categorized the project as Category 2 in terms of Climate Risk, requiring the application of the Climate Adaptation Review and Evaluation Procedures (AREP). The project carried out Climate Screening Score (CSS) as shown in Appendix VII. The project design reflects the projected climate change risks in Uganda and has embedded adaption measures based on the Bank's AREP and aligned with the country's National Adaptation Programme of Action (NAPA) priority projects including community tree planting, land degradation and water for production projects.

3.2.5 The FIEFOC programme is by design part of a strategic response to the impact of climate change evidenced by environmental degradation, dry spells and floods in the vulnerable districts of Uganda. The planned interventions of FIEFOC-2 project will help reduce impacts of extreme weather events through the development of irrigation systems and promotion of alternative livelihoods that will help smoothen the cyclical impacts of droughts and ensure all-year income generating activities. Specifically, the catchment management activities under component 3 of the project will facilitate the reduction of land degradation and related flood impacts; thus increasing the resilience of the community. The irrigation infrastructure will also be designed to be climate resilient in order to prolong the life span of the infrastructures. The project's ESMP further elaborates the challenges

posed by climate risks on the project outcomes as well as proposed adaptation and mitigation measures.

3.2.6 **Involuntary resettlement**: The proposed new irrigation structures will be located on two Governments owned land and three communally owned land tenure systems. It is anticipated that all Project activities will not lead to land acquisition as project activities will be carried out on land that already belongs to the Government or the beneficiary groups, therefore no land disputes are anticipated. Extensive consultations on access were held with beneficiary groups, district officers, and other government counterparts including the Uganda National Environmental Management Agency. There is a strong commitment from all stakeholders.

3.2.7 <u>Green Growth:</u> FIEFOC-2 has been designed in accordance with the Green Growth principle of "quality and inclusiveness of growth". The Program design is flexible enough to address existing and emerging development challenges (equitable rural development, youth unemployment, equitable access to food, water and clean environment) without locking resources into activities that may deplete the country's natural resource capital. FIEFOC-2 has been designed in a holistic manner that has integrated economic, social and environmental concerns for overall improvement of the well-being of the communities.

3.2.8 Gender and Social: In 2014, 19.79 million females accounted for 51.5% of the total population, while an estimated 31% of rural households were female headed. The significance of women's role in community is underscored by the fact that females are normally charged with the responsibility of food production at household level. The low access to water for production, especially in rural areas, undermines agricultural productivity. While the GoU has made substantial efforts in adopting genderrelated laws and with the amendment of the Land Act (2010), and the launch of Uganda National land Policy (2013), significant progress has been registered in increasing female land ownership, from a low 16% in 2010 to 39% in 2012. Despite this, issues of limited ownership, access to land owing to cultural barriers and lack of access to credit continue to affect women's agricultural production. Other hindrances include, lack of extension service, inadequate access to information technology and poor linkages to markets, post-harvest loses, and degradation of the environment which mostly affects women. Consequently, FIEFOC 2 has been designed to address gaps in sustainable agricultural water management and low agricultural productivity. The project will support a minimum of 30% representation of women in the leadership role in water user associations, and emphasize 50% of the target group training on agribusiness skills in crop value chain preferred by women and youth. The project will support a minimum of 30% women, and 30% youth employment in the labour intensive infrastructure development activities on the scheme.

3.2.9 The project will support gender capacity building activities for FIEFOC as detailed in Annex B8 of the Technical Annex. Furthermore, the project will adopt a gender sensitive approach to support implementation, to ensure capacity is built for effective gender responsiveness in all project components. As such, gender mainstreaming guidelines will be developed in project Y1 to prepare women to participate in different community committees dealing with financing (Tier 4 Microfinance institutions), agriculture and natural resources. The project will also promote strong institutional involvement of women as beneficiaries in farmer cooperatives group trainings, specifically with regards to extension service in agronomic practices, access of financial resources, post-harvest handling, collective commodity bulking and marketing and the establishment to sustainable market linkages. A Social Development Specialist/Gender expert will be recruited. The gender mainstreaming in this project is estimated at UGX 548,900, 000 for capacity building as shown in the Technical Annex page B8.9 (ii).

3.2.10 <u>Youth unemployment</u>: The challenges facing the youth include limited job opportunities, inadequate employable skills and skills mis-match, limited access to productive assets, and early marriages hence forcing the youth into informal agricultural practices. According to the Uganda

statistical abstract 2014, the overall national unemployment rate increased to 9.4% (2012/13) from 3.6% (2009/2010) and 1.9% in 2005/06. Similarly youth unemployment remains high at 78% (NDPII). Majority (79%) of the youth live in rural areas engaging in agriculture. The FIEFOC 2 project will ensure the participation of youth on the irrigation scheme management and engage youth farmer groups in agribusiness skills trainings, value chain activities especially in income generating projects such as Apiary and fish farming. At least 10% youth will be employed in any labour intensive agricultural activities on the irrigation schemes by providing targeted training programme. The Empowering Novel Agri-Business-Led Employment for Youth in Uganda's Agriculture (ENABLE Youth Uganda) Program will be piloted in Uganda by the African Development Bank (AfDB) with support from the Nordic Development Fund (NDF) under the umbrella of the Farm Income Enhancement and Forest Conservation Program Phase 2 (FIEFOC 2). A summary and full text of the Concept Note are shown in Appendix VIII and the Technical Annex C2 of Volume 2 respectively.

3.2.11 HIV/AIDS: The project does not envisage the creation of farm worker camps. Notwithstanding this, the Project will support selected activities aimed at reduction of HIV/AIDS new infection especially among women and youth who present a higher rates of infection (8.3% women, 6.1% men and youth 3.7%). The National HIV prevalence increased from 6.4% in 2004 to 7.3% in 2011 among 15-49 year olds (Uganda Aids Indicator Survey). The core activities to be supported include awareness creation on HIV/Aids among farmer and agribusiness groups to enhance their protection from HIV/Aids infections and also improve the living conditions of those who are already persons Living with Aids. The schemes will designate an HIV-AIDS coordinator from farmer groups and collaborate with the existing national programmes to publicize the HIV/AIDs activities in the schemes. The project will collaborate with such organizations like the Uganda AIDS commission; and with local NGOs at the project levels (for execution purposes). It is mandatory that contractors to have an active HIV and AIDS workplace policy (with activities for (Staff) internal awareness raising, prevention, tackling issues like stigma and discrimination, treatment, focal point etc.). At implementation level, the partners will be mandated to enhance capacity of beneficiaries to address issues like awareness raising, prevention, treatment; the design should include community categories like the youth, farmers, mothers etc., incorporate HIV and AIDS module in the proposed entrepreneurial training, strengthen beneficiary referral systems with the already established structures like hospitals (for prevention and treatment purposes); strengthen/ create community support structures like e.g. treatment groups etc.

3.2.12 <u>Addressing fragility and building resilience</u>: The project will help build resilience in target communities by addressing the issues of food security and increasing economic opportunities through agribusiness.

#### IV. IMPLEMENTATION

#### 4.1. Implementation arrangements

4.1.1 Executing and Implementing Agencies: The Project's Executing Agency will be the Ministry of Water and Environment (MoWE) who will also be responsible for implementation of irrigation infrastructure and related activities under component 1 and the natural resources management activities under component 3. The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), on the other hand, will be a key implementing partner of the Project's activities that fall within her technical and policy mandate. MAAIF will be responsible for implementation of agronomy and extension related activities and the agri-business development component with the respective districts taking lead in implementation of their respective activities.

4.1.2 A National Project Coordination Unit (NPCU), established under FIEFOC-1 still exists with minimal staff and will continue to coordinate activities of the two ministries with the addition of the necessary skill mix. In addition to the existing National Project Coordinator and Project Accountant, an M&E Officer, Procurement Officer, an Environment and Social Development Officer, and an

Agri-business Development Officer will be recruited. The NPCU will also draw from the technical staff in the Ministries involved in the implementation to complement its work. A multi-sectoral Steering Committee will be established to provide policy oversight of the project, approve work plans and budgets, and ensure adherence to relevant strategies established by Government during project implementation. The Steering Committee will be chaired by the Permanent Secretary, MoWE. In addition, a technical committee will be considered comprising of relevant staff assigned to the Project by MoWE, MAAIF and others as appropriate to enable a collaborated implementation of project activities and provide technical support.

4.1.3 Furthermore, the National Project Coordination Unit will be an integral part of the Executing Agency under the direction and supervision of the Ministry of Water and Environment. The NPCU will ensure that Project activities are initiated and are adequately budgeted for, consolidate project records, submit all procurement documents to the Bank for review and approval; compile and submit all disbursement applications and quarterly progress reports; coordinate annual audits of all Project accounts and facilitate submission of audit reports to the Bank. Each District will designate a Project Support Officer (PSO) among its staff, who will head the District Technical Support Team as detailed in the Technical Annex (B3.3) to support the implementation and technical supervision of the Project, including sensitization of farmers, training, and monitoring and evaluation in the respective local governments. The PSO will also coordinate the relevant stakeholders involved in the implementation of the project in the district.

4.1.4 <u>Procurement Arrangements</u>: Procurement of ICB contracts and Consulting services will be carried out in accordance with the Bank's Rules and Procedures: "Rules and Procedures for Procurement of Goods and Works", dated May 2008 and revised in July 2012; and "Rules and Procedures for the Use of Consultants", dated May 2008 and revised in July 2012 and as amended from time to time, using the relevant Bank Standard Bidding Documents (SBDs), and the provisions stipulated in the Financing Agreement. Procurement of goods and works using National Competitive Bidding (NCB) procedures will be carried out in accordance with the Bank's Rules and Procedures and Bank's standard bidding documents (SBDs). The Executing Agency (Ministry of Water and Environment (MoWE) will prepare a Procurement Plan and submit it to the Bank for review and approval before negotiations of the Legal Agreement. The summary of the procurement arrangements and the detailed procurement arrangements are described in Table 3.1 below and B5.2 of the Technical Annex respectively. In order to expedite the procurement process, the GoU will request advance contracting for the procurement of civil works. Upon receipt of the GoU request for advance contracting, the Bank will review and provide its approval.

4.1.5 MoWE has a Procurement and Disposal Unit (PDU) that is responsible for procurement of goods, works and services with technical support from the directorates. The PDU is headed by a Principal Procurement Officer and has a total of four procurement officers as well as four contract staff. A Contracts Committee that approves all procurement activities is in place and functional. The ministry has experience in managing procurements of Bank financed projects. The resources, capacity, expertise and experience of MoWE are adequate to carry out the procurement activities financed under this project. However, in view of the work load, the capacity of the PDU will be further strengthened by the recruitment of a procurement specialist, who will fast track the procurement processes on the project.

	USD '000					
Project Categories	Use of Country Procurement Procedures	Use of Bank's Procedures	Nordic Dev. Fund	Total		
1. Civil Works						
1.1 Irrigation Schemes and Access Roads		60,749.28 [60,749.28]		60,749.28 [60,749.28]		
1.2 Sedimentation, Siltation & Erosion Control Structures		272.21 [272.21]		272.21 [272.21]		
1.3 Rehabilitation of Degraded Buffer Zones			408.31	408.31 [ ]		
1.4 Livestock Watering Troughs		217.77 [217.77]		217.77 [217.77]		
1.5 Office Rehabilitation		47.57 [47.57]		47.57 [47.57]		
2. Goods						
2.1 Installation of Meteorological Stations		38.06 [38.06]		38.06[38.06]		
2.2 Vehicles		449.11 [449.11]		449.11 [449.11]		
2.3 Office Equipment		33.78 [33.78]		33.78 [33.78]		
2.4 Office Furniture		6.34 [6.34]		6.34[6.34]		
2.5 Motorcycles		171.27 [171.27]		171.27 [171.27]		
<ul><li>2.6 Seedlings</li><li>2.7 Farm Equipment (Tractors &amp; excavators)</li></ul>		4,181.10[370.20] 1,744.41[1,744.41]	544.41	4,725.52[370.20] 1,744.41[1,744.41]		
2.8 Implements/ Hand tools		666.05 [666.05]	108.88	774.93[666.05]		
2.9 Apiculture Equipment		532.84 [532.84]	21.78	554.61 [532.84]		
2.10 Specialized Inputs			435.53	435.53		
2.11 Stoves and Drying Kilns		101.49[101.49]	5.44	106.94[101.49]		
3. Consulting Services						
3.1 Construction Supervision		2,813.31 [2,813.31]		2,813.31 [2,813.31]		
3.2 Technical Assistance		1,320.17 [1,320.17]		1,320.17[1,320.17]		
3.3 Studies		444.03 [444.03]		444.03 [444.03]		
3.4 Audits (Project and Environmental)		79.29 [79.29]		79.29 [79.29]		
3.5 Project Completion Report		158.58 [158.58]		158.58[158.58]		
3.6 Sustainable Institutional Management of Irrigation Schemes		3,438.87 [3,438.87]		3,438.87 [3,438.87]		
3.7 Youth Agribusiness Development Pilot			1,633.24	1,633.24 [ ]		
3.8 Training in GIS Database and Applications		210.31 [210.31]		210.31 [210.31]		
3.9 Capacity Building		2,334.73 [1,901.26]	1,861.90	4,196.63[1,901.26]		
3.10 Water Shed Management Activities		315.76[54.44]	424.64	740.40 [54.44]		
4. Project Management						
4.1 Rent	2,012.23 [ ]			2,012.23 [ ]		
4.2 Workshops and Meetings	421.83 [421.83]			421.83 [421.83]		
4.3 Monitoring and Supervision	1,664.33 [1,664.33]			1,664.33[1,664.33]		
4.4 Operating Costs	1,044.31 [496.89]			1,044.31 [496.89]		
4.5 Study tours	373.94 [215.36]		108.88	482.82 [215.36]		
4.6 Miscellaneous Expenses	38.06 [38.06]			38.06[38.06]		
TOTAL	5,554.70 [2,836.47]	80,326.32 [75,820.64]	5,553.03	91,433.05[78,657.11]		

#### **Table 3.1: Summary of Procurement Arrangements**

Note: NDF funded activities will follow NDF procurement guidelines.

4.1.6 <u>Financial Management</u>: Consistent with the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action, the project will make use of the country's PFM systems and the Assistant Commissioner, Finance of the Ministry of Water and Environment (MWE) will be responsible for the Financial Management (FM) of the project. In line with the Government of Uganda (GoU) administrative procedures, the Permanent Secretary MoWE will be the Accounting Officer. MoWE's

FM is led by an Assistant Commissioner who assigns accountants to manage the day to day financial operations of all donor funded projects guided by the GoU financial regulations and procedures. The project will use the Integrated Financial Management Information System (IFMIS) to capture and report on all its financial transactions based on the International public Sector Accounting Standards (IPSAS). The Finance Department has over twenty accountants with some of these staff members assisting the Project accountants in projects authorization and approval process.

4.1.7 Budgeting for the project will follow the GoU rules and procedures on budgeting. The total project budget will be included in the MoWE annual budget and included in the GoU's National budget. The project will follow the GoU financial year of 1st July to 30th June and its financial statements which will be prepared within three months of the end of the financial year, will be audited by the Office of the Auditor General. The audit terms of reference will be agreed between GoU and the Bank by negotiations. The audit report, complete with a Management Letter and responses, will be submitted to the Bank within six months of the end of the financial year. The Government procedures regarding internal controls in place and also applied to the existing projects will be used by the new project. The following internal control procedures among others are in place: Approval of Bank accounts opening, proper authorization and approval of Bank reconciliations, segregation of duties in payments and cash management, monthly bank reconciliations and timely banking of receipts. To provide oversight and assist in strengthening the Project Internal control mechanism, MoWE's internal audit section will include the project in its annual audit planning and the project's audit reports will be shared with the Bank as needed.

4.1.8 The results of the assessment indicate that the Financial Management overall risk rating is Moderate after mitigating measures. In conclusion, the proposed financial management arrangements put in place meet the Bank's minimum requirements for project financial management and therefore adequate to provide, with reasonable assurance, accurate and timely information on the status of the project required by the Bank.

4.1.9 Disbursement Arrangements: All the Bank's four disbursement methods will be available to the project as prescribed in the bank's Disbursement Handbook. The project will operate one foreign special account into which the proceeds of the loan will be deposited. The account will be opened at the Bank of Uganda. The opening of foreign currency special account will be made a condition precedent to first disbursement of the loan. An initial disbursement will be deposited in the project Special Account (SA) in foreign currency based on a six month cash flow forecast for the project and based on the agreed work plan approved by the Bank through the initial Withdrawal Application to the Bank after the effectiveness of the project. Actual expenditures will be replenished through submission of Withdrawal Applications (at least every six months) supported by Statements of Expenditures (SOE) while direct payment method will be used for payments in respect to contracts for equipment, works, supplies and services (including audit-where applicable and consultancy). A Bank's Disbursement Letter will be issued stipulating key disbursement procedures and practices. To ensure adherence to agreed financial regulations, the special account will be monitored by the AfDB supervision missions. The NDF support will be provided on parallel basis with parallel agreement with MOFPED but feed into same coordination and execution structure.

#### 4.2. Monitoring

4.2.1 Monitoring will be an integral part of project management activities. The M&E Officer at the NPCU will be responsible for the overall monitoring and evaluation of Project activities. In using the performance indicators and targets specified in the Results Based Logical Framework (RBLF), project implementers tracking progress towards project results are expected to take special note of changes that reflect advancement towards the translation of outputs into development outcomes. In developing monitoring and planning indicators, they will be disaggregated along gender lines. A gender sensitive baseline study will be undertaken in PY1 which will be followed up with annual gender sensitive surveys to assess performance and impact of project activities.

<u>Timeframe</u>	Milestone	<u>Monitoring process /</u> <u>feedback loop</u>
Q2 - 2016	Project Launching	Supervision and Progress Report
Q3 - 2016	Procurement of Civil Works Completed	Procurement Plan/Progress Report
Q2-2018	Mid-Term review	Midterm Review & Progress Report
Q2 - 2019	Substantial completion of civil works	Supervision and Progress Report
Q4 - 2020	Project Completion	Project Completion Report

#### Table 4.1 – Implementation Monitoring Timeframe

#### 4.3. Governance

4.3.1 International assessments show that Uganda has progressed its accountability and transparency ratings and indicators of Governance including corruption control, rule of law, regulatory quality and Government effectiveness. The 2014 Ibrahim Index of African Governance (IIAG) ranked Uganda 19th out of 52 African countries. The 2013 IIAG provided Uganda's performance across four categories of governance namely (a) Safety & Rule of Law (25 out of 52), (b) National Security (74.5 out of 100), (c) Gender (6th out of 52), and (d) Human Development (19th out of 52). Uganda's average score was 56.1 out of 100 which was higher than the continental average of 51.5. The 2012 World Bank Institute's Worldwide Governance Indicators rated Uganda as follows (0=low and 1=high): (a) voice and accountability = 0.31; (b) political stability and absence of violence = 0.20; (c) Government effectiveness = 0.33; (d) regulatory quality = 0.45; (e) rule of law = 0.44; and (f) control of corruption = 0.14. The proposed measures in terms of project implementation include: (i) provision of financial management manual to guide Project staff; (ii) utilization of internal audit to identify pre-audit transaction challenges; and (iii) regular submission of progress reports.

#### 4.4. Sustainability

4.4.1 The participatory approach adopted during the project design and envisioned to be extended during the implementation phase will enhance the ownership of project's activities and realizations by the main stakeholders ensuring its sustainability. This will be fostered by the capacity building for the MoWE and MAAIF staff, district staff, farmers and WUA/FBMOs in the delivery of related services.

4.4.2 As regards the management of the irrigation infrastructure, they will be operated and maintained by the Water Users Associations (WUAs)//FBMOs and the project will ensure that at least 30% of women are represented in the irrigation management committees. The schemes will be handed over to the WUAs/FBMOs whose capacities will be developed through training. Farmers will be supported to form WUAs/FBMOs in each of the schemes with good governance practices operating in private sector principles to manage the irrigation schemes, enhance their price bargaining ability for marketing their produce including accessing inputs and other services. Operation and Maintenance guidelines will be developed including tariff setting by the supervising consultant for the operation and maintenance of the schemes that takes into consideration past experiences in the management of irrigation schemes in the country. The cost of routine maintenance after handing over would be borne by the WUAs/FBMOs. The O&M cost shall be covered from the contribution of farmers.

4.4.3 Capacity Building: Lack of qualified engineers and farmers' experience in irrigation development has been identified as a serious constraint in implementation of the project. In this regard JICA is in the process of establishing "irrigation and drainage courses" in collaboration with Makarere University and graduate school of Busitema University The project would tap in to this trained human resources capabilities for the implementation, operation and maintenance of the irrigation schemes including use of pilot demonstration sites established by JICA and others. Specific training programmes will be supported by the project targeting farmers, technicians extension agents, and youth in agribusiness. Further, the project through MAAIF will collaborate with partners such

as JICA, WB, The Netherlands Embassy, DFID and others who have shown interest in the area of farmers capacity development, input supply, marketing, extension services, etc.

# 4.5. Risk management:

4.5.1 The first risk is related to the effect of climate change and its manifestations that could pose a threat to the irrigation schemes, in particular the intensification of extremes (floods and/or droughts) affecting the river flow regime. The intensification of flooding is taken into account in the design of the irrigation infrastructure.

4.5.2 The second risk is associated with difficulties in marketing products which will be mitigated by facilitation of access to markets, forward linkage with processors, and targeted support will be provided for the selection of crops, sequencing of crops and search for new markets.

4.5.3 The third risk is that the beneficiaries may not attain the required level of Operation and Maintenance of the infrastructures. However, the training and procedures implemented through the project will enable the beneficiaries to pursue and develop the measures initiated, and to undertake sustainable maintenance of the infrastructure put in place. The design of the project included farmers, institutional strengthening for those directly involved in project implementation including specific actions to address identified capacity gaps at all levels.

4.5.4 The fourth risk might be delayed Government VAT payment to works, goods and services contracts. As a result, there could be possibility of a prolonged construction of the irrigated infrastructure resulting in project cost overrun. The risk will be mitigated by the Government's commitment to raise funds from its own budget in advance of each budget year to pay for the VAT.

4.5.5 The fifth risk is the diversity of the proposed project areas in terms of socio-economic development, human resource base, cultures, labour shortage and land related issues. There is a potential risk of the project not attaining its objectives uniformly in all the project areas. This will be averted through properly targeted advocacy and community mobilization, to ensure that the communities participate in the project interventions in their respective areas; ensure stakeholder participation right from the stage project design, through implementation, monitoring and evaluation to enhance shared understanding and also ensure local ownership of the initiative;

#### 4.6. Knowledge building

4.6.1 A number of studies/surveys are planned to be undertaken through the project, with a view to generating information that will inform both the farmers, the local governments, Ministries as well as other stakeholders in the course of decision making. The analytical work will mainly focus on marketing that will generate data pertaining to prices, sources and volumes of commodities to be shared with all stakeholders. All knowledge attributes and lessons generated from the project will be shared with the respective Government and Municipal Council authorities, the Bank, Development Partner agencies and civic society at large as facilitation tools in future decision making processes.

# V. LEGAL INSTRUMENTS AND AUTHORITY

# 5.1. Legal instrument

ADB Loan to the Republic of Uganda.

#### 5.2. Conditions associated with Bank's intervention

• <u>Conditions Precedent to Entry into Force</u>: The entry into force of the Loan Agreement shall be subject to the fulfilment by the Borrower of the provisions of Section 12.01 of the General Conditions of the Bank.

- <u>Conditions Precedent to First Disbursement</u>: The obligations of the Bank to make the first disbursement shall be conditional upon the entry into force of the Loan Agreement in accordance with the immediately preceding paragraph and the fulfilment by the Borrower of the following conditions:
  - (i) Provide evidence of having opened one foreign currency special account (SA) for the deposit of part of the proceeds of the loan in the Bank of Uganda;
  - (ii) Provide the Bank with a Letter of Comfort stating that the land where the project infrastructure is to be constructed are free of encumbrances and belongs to the communities and/or government who have consented to project activities.
  - (iii) Provide to the Bank a letter from the Executing Agency confirming that the multisectoral Steering Committee is in existence and will continue to be operational.

# **5.3. Other Conditions:**

The GoU shall have:

(i) Within 6 months of first disbursement, in addition to the existing National Project Coordinator and Project Accountant, recruited an M&E Officer, Procurement Officer, an Environment and Social Development Officer, and an Agri-business Development Officer for the NPCU.

# 5.4. Compliance with Bank Policies

The project complies with all applicable Bank policies.

# VI. RECOMMENDATION

Management recommends that the Board of Directors approve the proposed ADB loan of USD 76.70 million to the Republic of Uganda for the purposes of implementation of Farm Income Enhancement and Forest Conservation Programme – Project 2 (FIEFOC 2) and subject to the conditions stipulated in this report.

# Appendix I. Country's comparative socio-economic indicators

Indicator	Year	Uganda	Africa	Developing	Developed		
Basic Indicators				Countries	Countries		
Area ('000 Km <sup>2</sup> )		241.6	30.046.4	80,976.0	54,658,4		GNI per Capita (US \$)
Total Population (millions)	2014	38.8	1,136.5	5,628.5	1,068.7	3000	-
Urban Population (% of Total)	2014	16.8	40.6	44.8	77.7	0000	
Population Density (per Km <sup>2</sup> )	2014	160.6	35.4	66.6	23.1	2000	
GNI per Capita (US \$)	2013	550.0	1,969.6	2,780.3	39,688.1	1000	
Labor Force Participation - Total (%)	2009	32.0	32.7	0.0	0.0		
Labor Force Participation - Female (%)	2014	49.0	42.6	39.8	43.3		20 20 20 20
Gender -Related Development Index Value	2007	0.5	0.5		0.9		113 111 110
Human Develop. Index (Rank among 169 countries)	2012	161.0				1	Uganda 🖪 🖪 Africa
Popul. Living Below \$ 1 a Day (% of Population)	2009	38.0		25.0		L	
Domographia Indiastors							
Population Growth Pate Total (%)	2014	3.3	2.5	1.4	0.7		
Population Growth Rate - Urban (%)	2014	5.5	3.4	2.4	1.0		Population Growth
Population < 15 years (%)	2014	48.2	40.8	29.2	17.7	1 -	Rate - Total (%)
Population $\geq 65$ years (%)	2014	2.4	3.5	6.0	15.3	4	
Dependency Ratio (%)	2014	101.6	77.3	52.8		3.5 -	
Sex Ratio (per 100 female)	2014	100.5	100.0	934.9	948.3	3 -	
Female Population 15-49 years (% of total population)	2014	22.1	24.0	53.3	47.2	2.5 -	· • - • - • - • • • • •
Life Expectancy at Birth - Total (years)	2014	59.7	59.6	65.7	79.8	2 -	
Life Expectancy at Birth - Female (years)	2014	63.5	60.7	68.9	82.7	1.5 -	
Crude Birth Rate (per 1,000)	2014	42.6	35.0	21.5	12.0	1 -	
Crude Death Rate (per 1,000)	2014	9.0	10.2	8.2	8.3	0.5 -	
Infant Mortality Rate (per 1,000)	2014	54.7	60.4	53.1	5.8		
Child Mortality Rate (per 1,000)	2009	96.7	108.9	51.4	6.3		20 20 20 20
Total Fertility Rate (per woman)	2014	5.8	4.6	2.7	1.8		014 013 012
Maternal Mortality Rate (per 100,000)	2010	310.0	415.3	440.0	10.0	1 🗕	- Uganda - Africa
Women Using Contraception (%)	2014	39.7	32.5	61.0	75.0		
Health & Nutrition Indicators							
Health & Nutrition Indicators Physicians (per 100,000 people)	2010	11.7	52.6	77.0	287.0		Access to Safe Water
Health & Nutrition Indicators Physicians (per 100,000 people) Nurses (per 100,000 people)*	2010 2005	11.7 130.6	52.6	77.0 98.0	287.0 782.0	-	Access to Safe Water (% of Population)
Health & Nutrition Indicators Physicians (per 100,000 people) Nurses (per 100,000 people)* Births attended by Trained Health Personnel (%)	2010 2005 2011	11.7 130.6 57.4	52.6  	77.0 98.0 39.0	287.0 782.0 99.3	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators Physicians (per 100,000 people) Nurses (per 100,000 people)* Births attended by Trained Health Personnel (%) Access to Safe Water (% of Population)	2010 2005 2011 2009	11.7 130.6 57.4 71.5	52.6   66.9	77.0 98.0 39.0 84.0	287.0 782.0 99.3 99.6	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Health Services (% of Population)	2010 2005 2011 2009 2000	11.7 130.6 57.4 71.5 49.0	52.6   66.9 65.2	77.0 98.0 39.0 84.0 80.0	287.0 782.0 99.3 99.6 100.0	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Health Services (% of Population)         Access to Sanitation (% of Population)         Personnel of Adults (seed 15 400 Living with	2010 2005 2011 2009 2000 2012	11.7 130.6 57.4 71.5 49.0 33.9	52.6   66.9 65.2 39.4	77.0 98.0 39.0 84.0 80.0 54.6	287.0 782.0 99.3 99.6 100.0 99.8	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Health Services (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS	2010 2005 2011 2009 2000 2012 2009	11.7 130.6 57.4 71.5 49.0 33.9 6.5	52.6  66.9 65.2 39.4 4.4	77.0 98.0 39.0 84.0 80.0 54.6 161.9	287.0 782.0 99.3 99.6 100.0 99.8 14.1	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Health Services (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)	2010 2005 2011 2009 2000 2012 2009 2012	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0	52.6   66.9 65.2 39.4 4.4 223.6	77.0 98.0 39.0 84.0 80.0 54.6 161.9	287.0 782.0 99.3 99.6 100.0 99.8 14.1	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Health Services (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2012 2009	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0	52.6   66.9 65.2 39.4 4.4 223.6 85.5	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0	50	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2012 2009 2009	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6	50	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with         HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2 	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7	100	Access to Safe Water (% of Population)
Health & Nutrition IndicatorsPhysicians (per 100,000 people)Nurses (per 100,000 people)*Births attended by Trained Health Personnel (%)Access to Safe Water (% of Population)Access to Safe Water (% of Population)Access to Sanitation (% of Population)Percent. of Adults (aged 15-49) Living withHIV/AIDSIncidence of Tuberculosis (per 100,000)Child Immunization Against Tuberculosis (%)Child Immunization Against Measles (%)Underweight Children (% of children under 5 years)Daily Calorie Supply per CapitaPublic Expenditure on Health (as % of GDP)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2019 2009 2011 2009 2011	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2012 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9	100	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with         HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2012 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9		Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5		Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with         HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0 124.5	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5		Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0 124.5 28.4	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3	100 50 0 	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total         Secondary School - Total         Secondary School - Female	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011 2009 2011	11.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0 124.5 28.4 25.6	52.6      2,564.7 5.9   100.9 97.0 47.5 44.4	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0		Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female         Secondary School - Female         Primary School Female         Primary School Female         Primary School Female	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7 	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0		Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total         Secondary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0 124.5 28.4 25.6 40.5 71.4	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6 	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.2 100.3 100.0 	100 50 0 160 140 120 100 80	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total         Secondary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Male (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6 	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.2 100.3 100.0  	100 50 0 160 140 120 100 80 60	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Feducation Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Male (%)	2010 2005 2011 2009 2000 2012 2009 2012 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4	52.6  66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6  	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0 	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.2 100.3 100.0  	100 50 0 160 140 120 100 80 60 40	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Public Strong Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Female (%)         Percentage of GDP Spent on Education	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011 2009 2011 2009 2009	111.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4           3.3	52.6      2,564.7 5.9   100.9 97.0 47.5 44.4 44.6        2,53	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0 	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0        	100 50 0 160 140 120 100 80 60 40 20	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female         Secondary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Female (%)         Adult Literacy Rate - Female (%)         Percentage of GDP Spent on Education	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4           3.3	52.6       2,564.7 5.9   2,564.7 5.9   100.9 97.0 47.5 44.4 44.6            	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0  	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0    5.4	100 50 0 	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Female         Secondary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Female (%)         Percentage of GDP Spent on Education	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2011 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4           3.3           33.8	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6   5.3	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0    9.9	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.2 100.3 100.0        	100 50 0 	Access to Safe Water (% of Population)
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total         Secondary School - Female         Primary School - Female         Primary School Female Teaching Staff (% of Total)         Adult Literacy Rate - Total (%)         Adult Literacy Rate - Female (%)         Percentage of GDP Spent on Education         Environmental Indicators         Land Use (Arable Land as % of Total Land Area) <t< td=""><td>2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2009</td><td>11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4           3.3           33.8           2.0</td><td>52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6   5.3 5.3</td><td>77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0    9.9 9.9 0.4</td><td>287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0        </td><td>100 50 0 </td><td>Access to Safe Water (% of Population) 2000 1 22006 9 2000 22006 9 2000 2000 4 2000 2000 4 2000 2000 4 2000 2000 9 2000 1 2 2000 2 2000 1 2 2000 2 2000 9 2000 9</td></t<>	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2009	11.7           130.6           57.4           71.5           49.0           33.9           6.5           179.0           90.0           63.0           14.1           2,137.0           2.5              124.0           124.5           28.4           25.6           40.5           71.4           62.1           81.4           3.3           33.8           2.0	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6   5.3 5.3	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0    9.9 9.9 0.4	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.5 101.2 100.3 100.0        	100 50 0 	Access to Safe Water (% of Population) 2000 1 22006 9 2000 22006 9 2000 2000 4 2000 2000 4 2000 2000 4 2000 2000 9 2000 1 2 2000 2 2000 1 2 2000 2 2000 9 2000 9
Health & Nutrition Indicators         Physicians (per 100,000 people)         Nurses (per 100,000 people)*         Births attended by Trained Health Personnel (%)         Access to Safe Water (% of Population)         Access to Safe Water (% of Population)         Access to Sanitation (% of Population)         Percent. of Adults (aged 15-49) Living with HIV/AIDS         Incidence of Tuberculosis (per 100,000)         Child Immunization Against Tuberculosis (%)         Child Immunization Against Measles (%)         Underweight Children (% of children under 5 years)         Daily Calorie Supply per Capita         Public Expenditure on Health (as % of GDP)         Education Indicators         Gross Enrolment Ratio (%)         Primary School - Total         Primary School - Total         Secondary School - Female         Primary School Female (%)         Adult L	2010 2005 2011 2009 2000 2012 2009 2012 2009 2011 2009 2011 2009 2009	111.7 130.6 57.4 71.5 49.0 33.9 6.5 179.0 90.0 63.0 14.1 2,137.0 2.5  124.0 124.5 28.4 25.6 40.5 71.4 62.1 81.4 3.3 33.8 2.0 	52.6   66.9 65.2 39.4 4.4 223.6 85.5 75.2  2,564.7 5.9  100.9 97.0 47.5 44.4 44.6   5.3 5.3	77.0 98.0 39.0 84.0 80.0 54.6 161.9  89.0 76.0 27.0 2,675.2 4.0  106.0 104.6 62.3 60.7  19.0   9.9 9.9 0.4 	287.0 782.0 99.3 99.6 100.0 99.8 14.1  99.0 92.6 0.1 3,284.7 6.9  101.5 101.2 100.3 100.0        	100 50 0 160 140 120 100 80 60 40 20 0	Access to Safe Water (% of Population)

 Sources : ADB Statistics Department Databases; World Bank: World Development Indicators UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

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

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Last update: April 2015

#### Appendix II. AfDB's Ongoing Portfolio in Uganda (as at 30 September 2015)

The Bank's on-going portfolio in Uganda as at 30 August 2015 is made up of 21 Operations (Public 16, Multinational 2 and Private sector 3). The public sector operations including the multinational projects have a total net commitment value of UA 689.15 million. Of this amount, UA 407.31 million (59.1%) has been disbursed. However, there are Projects that have been approved and have entered into force but have not become disbursement effective. These include the Road Sector Support Project V (RSSP V) and Markets and Agricultural Trade Infrastructure Project 2 (MATIP 2). Three more Projects i.e. the Multinational East Africa's Centers of Excellence for Skills and Tertiary Education in Biomedical Sciences Phase 1-Uganda Project (CoEs 1-UGP), the Multinational Lake Edward and Albert Fisheries (LEAF) Project Phase 2, and the Rural Electricity Access Program are approved by the Bank but still await approval of Uganda's Parliament before the respective agreements are signed. When factored in, all newly approved and on-going portfolio (including the multinational and private sector projects) will have a total value of UA 945.78 million.

The Portfolio performance has been assessed to be satisfactory during the last Country Portfolio Performance Review (CPPR) conducted in July, 2015. Analysis of Key Performance Indicators (public sector operations only) which showed significant improvement over the years (2011 – 2015) also supports the satisfactory assessment. As of July 2015, there were no Problem Projects, ageing projects or slow disbursing projects. As a result, the share of Project at Risk (PAR) is 0% from 6.25% in 2014 and consequently a Commitments-at-Risk (CAR) rating of 0% was recorded in 2015 from 1.81% in 2014. There was a marginal increase in average age of the portfolio from 4.4 years in 2014 to 5 years in 2015 as well as a decrease in the average project size from UA 38.3 million in 2014 to UA 37.2 million in 2015. This is accounted for by the exit of some projects in 2015. Overall, there was an increase in disbursement rates from 44% in 2014 to 57% in July 2015. Table 1 below summarizes the status of the key performance indicators.

KPI	YEARS						
	2011	2012	2013	2014	2015 (July)		
Number of On-going Projects	-	22	21	18	17		
Problem Projects (%)	-	9.	0	0	0		
Potential Problematic Projects (%)	2	0	4.76	5.56	0		
Projects at Risk (PAR) (%)	16.70	9.09	4.76	6.25	0		
Commitment at Risk (CAR) (%)	10	12	6.62	1.81	0		
Disbursement Rate (%)	36	44	43	44	57		
Average age of active portfolio (Yr)	4	4	4	4	5		
Average Project Size (UA million)	34.3	39.01	37.78	38.3	37.2		
Number of Parallel PIU's	-	3	3	0	0		
Project Overall Evaluation (scale: SAP	-	2.5	2.66	2.6	2.41		
0-3, IPR 1-4)							
Implementation Progress (IP)	-	2.48	2.59	2.52	2.37		
Development Objective (DO)	-	2.64	2.72	2.68	2.45		

#### **Table 1: UGFO 2015 Key Performance Indicators**

Note:

Projects-at-risk (PAR): refers to projects that are either problematic (PP) or potentially problematic (PPP) – these flags are generated following supervision ratings in the SAP or IPR systems. The PAR rate for a sector or country is calculated as the percentage of the number of PARs divided by the total number of supervised projects. Commitments-at-Risk (CAR) is the sum of net loan values for operations that are at-risk divided by the sum of net loan values of supervised projects.

# Table 2: List of AfDB Public Sector Ongoing Projects (as at 30 Sep 2015)

No.	Sector and project name	Type of Instrument	Total amount (Million UA)	% disb. as of 30 Sep. 2015	Approval date
A. AGR	NCULTURE				
1	Community Agricultural Infrastructure Improvement Programme- Project II	ADF Loan	45.00	83.7%	17/09/2008
2	Markets and Agricultural Trade Improvement Programme -1 (MATIP-1)	ADF Loan	38.00	96.6%	25/03/2009
3	Community Agricultural Infrastructure Improvement Programme III	ADF Loan	40.00	32.1%	03/05/2011
	Total Approvals		123.00	70.9%	
B. TRA	NSPORT				
4	Road Sector Support Project 2 (Fort portal Bundibugyo Rd) (103KM)	ADF Loan and Grant	58.00	91.6%	17/12/2007
5	Road Sector Support Project 3( Nyakahaita Ibanda Rd)(143KM)	ADF Loan	80.00	88.5%	25/09/2009
6	Road Sector Project 4 ( Kigumbba Masindi Rd) 135 KM	ADF Loan	72.94	0.0%	13/03/2013
	<b>Total Approvals</b>		210.94	58.8%	
C. WAT	FER & SANITATION				
7	Kampala Sanitation Project	ADF Loan	35.00	51.1%	16/12/2008
8	Kawempe Urban Poor and Sanitation Improvement Project	ADF Grant	0.99	75.8%	04/01/2013
9	Water Supply and sanitation programme	ADF Loan and Grant	43.59	72.6%	05/10/2011
	<b>Total Approvals</b>		79.58	63.2%	
D. SOC	IAL				
10	Rehabilitation of Mulago and KCC Clinics	ADF Loan	56.00	35.4%	06/07/2011
11	Support to Post Primary Education and Training Project (Education IV)	ADF Loan	52.00	93.3%	25/11/2008
12	Education V Project (HEST)	ADF Loan	67.00	1.9%	21/11/2012
13	Rural Income and Employment Enhancement Project	ADF Loan	10.20	95.1%	17/11/2009
	<b>Total Approvals</b>		185.20	42.8%	
E. ENE	RGY				
14	Bujagali Transmission Interconnection Project	ADF Loan	19.21	90.2%	28/06/2007
15	Mbarara-Nkenda/Tororo-Lira Transmission Lines Project	ADF Loan	52.50	71.4%	16/12/2008
	<b>Total Approvals</b>		71.71	76.4%	
F. MUI	TI NATIONAL PROJECT				
16	NELSAP	ADF Loan and Grant	7.59	38.7%	27/11/2008
17	Lake Victoria Water Supply and Sanitation programme phase II	ADF Grant	11.13	79.2%	17/12/2010
	Total Approvals		18.72	56.1%	
	GRAND TOTAL		689.15	59.1%	

# Appendix III. Key related projects financed by the Bank and other development partners in the country

PROJECT NAME	COVERAGE	SOURCE of FUNDS	AMOUNT (millions)	STARTING	ENDING	PLANNED OUTPUTS
WATER FOR PRODUCTION						
Farm Income Enhancement and Forest Conservation Project	National	AfDB	UA 40.19	2006	2013	Irrigation and natural resource management
Agriculture Cluster Development Project	National	IDA	US\$150	2015	2019	Value addition and Market access
Irrigation Scheme Development in Eastern and Central Uganda	East and Central	JICA	US\$10	2014	2017	Design studies for irrigation schemes
Water for Production	Kamuli, lira and kiruhura district	AFD	Euro 50	2015	2018	Mainly livestock structures
Promotion of Rice Development project	National	JICA	US\$10	2011	2016	Research and Development
AGRO-PROCESSING/ VALUE ADD	DITION					
Danida U-Growth Programme	National	Danida	US\$110	2014	2018	Agri-business/ Private Sector support
Danida aBi Trust	National	Danida	US63	2013	2016	Value Chain approach
EU Small and medium Agribusiness Development Fund	National	EU	Euro 15	2013	2017	Agricultural business finance
USAID Livelihoods and Enterprises for Agric. Development	National	USAID	US\$35.9	2008	2014	Increased market access
Agricultural Technology and Agribusiness Advisory Services	National	IDA	US\$127	2011	2016	Value Chain Development
Agriculture Cluster Development Project	National	IDA	US\$108	2015	2019	Value addition and Market access
DISTRICT ROADS		<u> </u>	<b>_</b>			
Area Based Agricultural Modernization Programme (AAMP)	13 Districts of Western and Southern Western Uganda	AfDB	US\$ 13.6	June 2004	March 2009	1100km Rehabilitated
North West Region Small Holder Agricultural Development Project (NSADP)	Adjumani, Moyo,Yumbe, Nebbi, Arua, Koboko and Maracha and Terego Districts	AfDB	UA 17.6	2000	June 2009	205km Constructed
Community Agricultural Infrastructure Improvement Programme Project 1 (CAIIP-1)	26 District In Central and Eastern Uganda	AfDB	UA30	July 2007	2012	Rehabilitation of 390km and Maintenance of 587km of District roads
Community Agricultural Infrastructure Improvement Programme Project 2 (CAIIP-2)	15 Districts in Northern and Eastern Uganda	AfDB	UA45	Sept 2009	Dec 2015	225km of feeder roads to be rehabilitated
COMMUNITY ACCESS ROADS						
Area Based Modernization Programme (AAMP)	13 Districts of western and South Western Uganda	IFAD	US\$2.3	June 2004	Decemb er 2010	1438km Routine Manual Maintenance / Rehabilitation
North West Region Small Holder Agricultural Development Project (NSADP)	Adjumani, Moyo,Yumbe, Nebbi, Arua, Koboko and Maracha and Terego Districts	AfDB	UA 17.6	2000	June 2009	1600km Routine Manual Maintenance / Rehabilitation

PROJECT NAME	COVERAGE	SOURCE of FUNDS	AMOUNT (millions)	STARTING	ENDING	PLANNED OUTPUTS
Municipal Infrastructure Programme	All Municipal Councils	IDA	US\$150	2013	2017	Rehabilitation of Municipal roads
Community Agricultural Infrastructure Improvement Programme Project 1 (CAIIP-1)	26 District In Central and Eastern Uganda	AfDB/ IFAD	UA30	July 2007	2012	Rehabilitation of 3510Km and agri- business development
Community Agricultural Infrastructure Improvement Programme Project 2 (CAIIP-2)	15 Districts in Northern and Eastern Uganda	AfDB	UA45	Sept 2009	Dec 2015	4,365km of access roads and agri- business development
District Livelihood Support Programme (DLSP)	13 Districts West, North and Eastern Uganda	IFAD	US\$27.4	2007	2014	2,400km to be rehabilitated and agri-business development
Community Agricultural Infrastructure Improvement Project 3 (CAIIP-3)	Western Uganda	AfDB	UA 40	2012	2016	4000 km roads to be rehabilitated and agribusiness Development
MARKETS						
North West Agricultural Sector Development Programme(NWASDP)	North West Uganda	AfDB	Part of B.3 above	May 2001	June 2009	22 Markets; 200km access road Rehabilitation;340km of Maintenance
Agricultural Marketing & Agro- processing Support Programme	All Uganda (10 districts covered)	IFAD	US\$30	2011	2015	Seeks to connect farmers to markets and enhance enabling environment
District Development Support Programme	5 Districts in Western Uganda	IFAD	US20.6	Dec. 2001	Dec. 2006	Agricultural extension services and physical infrastructure
Community Agricultural Infrastructure Improvement Project - 1 (CAIIP-1)	26 District In Central and Eastern Uganda	AfDB/IFA D	UA30	July 2007	2012	Construction of 78 functional markets in 78 sub-counties within 26 districts.
Markets and Agricultural Trade Improvement Project (MATIP- 1)	Countrywide in Municipalities and Town councils	AfDB	UA38	Sept 2009	Sept 2014	7 urban markets
Markets and Agricultural Trade Improvement Project (MATIP-2)	Countrywide in Municipalities and Town councils	AfDB	UA55	Dec 2014	Sept 202019	11 urban markets
ENERGY						
Energy for Rural Transformation Project (ERT) (1&2)	All Uganda	IDA	US\$140	2007	2016	Facilitates investments in commercially oriented rural electrification projects





Disclaimer: This map has been drawn by the Ministry of Water and Environment of Uganda exclusively for the use of 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.

#### FIEFOC-2 DISTRICTS BY CATCHMENT

- I. WADELAI CATCHMENT: (i) Arua, (ii) Nebbi, (iii) Zombo, and (iv) Maracha
- II. **TOCHI CATCHMENT:** (i) Amuria, (ii) Adjumani, (iii) Apac, (iv) Kole, (v) Gulu, (vi) Lira, (vii) Aleptong, (viii) Amuru, (ix) Nwoya, (x) Oyam, (xi) Masindi, and (xii) Kiryandongo
- III. **MANAFWA CATCHMENT:** (i) Namayingo, (ii) Bugiri, (iii) Busia, (iv) Mbale, (v) Pallisa, (vi) Kibuku, (vii) Tororo, (viii) Budaka, (ix) Buduuda, (x) Butaleja, (xi) Manafwa, (xii) and Namutumba
- IV. NGENGE CATCHMENT: (i) Kween, (ii) Kapchorwa, (iii) Sironko, (iv) Bulambuli, (v) Bukedea, (vi) Bukwo, (vii) Nakapiripirit, and (viii) Amudat
- V. MUBUKU CATCHMENT: (i) Ntoroko, (ii) Kabalore, and (iii) Kasese

#### Appendix V. Agriculture and Water Sector Project: Fragility Analysis Uganda

**Background information:** The project covers various regions in the Northern, Eastern and Western regions of the Republic of Uganda. A number of the regions are in peripheral and border regions including in previously marginalized areas. The region faces both climatic challenges as well as challenges in access to water, and poorly developed agricultural infrastructure.

#### Agricultural and Water Sector – Sectoral Assessment – Drivers of Fragility

- 1. **Poor Infrastructure:** The region also suffers from poor infrastructure including lack of adequate roads, lack of reliable meteorological infrastructure and lack of agricultural infrastructure, such as irrigation. In addition, due to lack of piped water, water access for day to day activities is challenging for the population. Lack of access to water and irrigation facilities has led to a reliance on rain fed agriculture.
- 2. Environmental Factors: In addition to poor infrastructure, the regions selected for the project implementation although highly dependent on rain fed agriculture for food security are vulnerable to a number of environmental challenges, exacerbated by climate change. Project areas experience extreme weather events including droughts, floods and landslides. Floods and landslides have been linked to drained wetlands, deforestation, and compacted soil that no longer has any water-retention capacity. As a result, there are poor agricultural yields creating food insecurity, and low incomes which creates community vulnerability, and poverty.
- 3. Lack of economic opportunity: As in many rural areas in Africa, in Uganda, the lack of development of agriculture has led to limited economic opportunities. Without micro enterprises and cottage/medium industries, there are limited opportunities for gainful employment outside the manual labor needed to grow crops. Poor crop yields or poor planning leading to seasonal flooding of the market keeps incomes down, in addition, even during times of bountiful harvests, poor road and information infrastructure limits market access and makes it difficult for rural communities to exit the poverty trap.
- 4. **High Youth Population**: As with other countries in East Africa, it is estimated that more than 60% Uganda's population is under 30 years of age. Most are unemployed or under employed, particularly in the rural areas, and jobs and economic opportunities are not being created fast enough to meet this population demand. This leads to a vast underutilization of the human capacity available for development, and poses social and political risks as youths become susceptible to recruitment into antisocial activities.

Core areas of the Project linked to addressing the remaining downside risks as identified in Sectoral Fragility Assessment			
Driver of Fragility	Specific Risks Driving Fragility/vulnerability	Project interventions that address fragility risks	
Lack of basic infrastructure	<ul> <li>(a) Lack of access roads</li> <li>(b) Lack of meteorological facilities</li> <li>(c) Lack of irrigation infrastructure</li> <li>(d) Lack of effective water management systems</li> </ul>	Component 1: <b>Agricultural Infrastructure Development</b> : Subcomponent: Irrigation Infrastructure, Access road, Meteo-stations	
Population increase particularly among the youth	<ul> <li>(a) Population of youth outpacing economic opportunities,</li> <li>(b) Jobs/economic opportunities not expanding quickly enough</li> <li>(c) Risks of youth being recruited into antisocial activities</li> </ul>	Component 2 and 3: <b>Agribusiness Development:</b> Subcomponent Alternative Livelihoods Development, Business Skills Development <b>Integrated</b> <b>Natural Resources Development</b> <b>Management:</b> Capacity Development (gender responsive).	
Environmental Challenges	<ul><li>(a) Increasing Climate variability</li><li>(b) Regular droughts/floods</li><li>(c) Loss of nutrient rich top layers</li></ul>	Component 1 & 2: Integrated Natural Resources Development Management: Subcomponent Integrated Soil and Water Conservation, Sustainable forest management.	
Lack of Economic Opportunities	<ul> <li>(d) Lack of jobs</li> <li>(e) Lack of Agribusiness Skills</li> <li>(f) No value addition (thus no cottage/medium agro-industry)</li> <li>(g) Lack of opportunities for women and youth</li> </ul>	Component 2 and 3 <b>Agribusiness Development:</b> Subcomponent Alternative Livelihoods Development, Business Skills Development. <b>Integrated</b> <b>Natural Resources Development</b> <b>Management:</b> Capacity Development (gender responsive).	

#### Appendix VI. Financial and Economic Analysis

The main economic benefits of the project are increase in basic crops productivity and production, increase in beneficiary incomes and strengthening of food security. Other project benefits include jobs generated by business developed, reduction in sediment load of rivers resulting from degraded forest rehabilitation and soil conservation measures.

The economic and financial analysis was based on the incremental net benefit arising from the project investment. The main assumption underlying the economic and financial analysis is an anticipated increase in the productivity of the main crops and the generation of added value on the agricultural products. Crop diversification and intensification will be enhanced under irrigated agriculture using improved seeds and the practice of modern system. Irrigation schemes covering 4038 ha will be developed. The main crops retained for the analysis are maize, cassava, sweet potatoes and beans. Beans are used as representatives of the other food crops cultivated in the regions. The project also promotes aquaculture and apiculture, agribusiness activities on a pilot basis to enhance value addition on maize, cassava and honey. It is estimated that the production of the basic crops will increase by 50% on the average.

The production costs were derived from the results of the 1st phase of the project and computed field data from Zambia. Prevailing 2014 market prices were used for input and output valuation. The O&M costs including pumping cost have been incorporated in the crop budgets. The other assumptions include: (i) all project's outputs are incremental as they expand supply to meet growing demand; (ii) project's inputs are mostly non incremental since they are met not by an expansion of overall supply but from existing supplies; (iii) maize and cassava are treated in the analysis, as a traded good since they offer an important export potential. All Project costs and prices were estimated on the basis of constant market prices for a span of 25 years. For the economic analysis, (i) maize and cassava market prices considered as a traded good were adjusted to reflect their economic values; (ii) for the others crops, the market prices were used since they were not import substitute, (iv) all subsidies were excluded. The FIRR is 18% with a NPV of USD 1.3 million at a capital opportunity cost of 12%. The summary result is tabulated below:

FIRR, NPV (base case)	18%, NPV (12%): USD 1.3 million
EIRR, NPV (base case)	21%, NPV (12%): USD 1.7 million

The economic rate of return (EIRR) and the internal rate of return (FIRR) are sensitive to changes in prices and costs. A 10% increase in the prices of agricultural products generates an EIRR of 23% and a FIRR of 20%. Similarly, a 10% increase in production costs decreases the EIRR and the FIRR to 20% and 17% respectively.

	Investment costs	<b>Recurrent costs</b>	Total costs	<b>Gross Revenues</b>	Net revenues
Y1	48 035 643	-	48 035 643		- 48 035 643
Y2	118 413 917	13 179 736	131 593 652		- 131 593 652
Y3	122 175 805	1 593 981	123 769 785	28 803 475	- 94 966 310
Y4	24 718 044	2 125 308	26 843 351	48 965 908	22 122 556
Y5	14 270 210	4 250 615	18 520 825	53 862 498	35 341 673
Y6		4 463 146	4 463 146	60 991 358	56 528 213
Y7		4 686 303	4 686 303	72 144 064	67 457 761
Y8		4 920 618	4 920 618	79 358 470	74 437 852
Y9		5 166 649	5 166 649	83 326 394	78 159 745
Y10		5 424 982	5 424 982	87 492 713	82 067 732
Y11		5 696 231	5 696 231	91 867 349	86 171 118
Y12		5 981 042	5 981 042	96 460 717	90 479 674
Y13		6 280 094	6 280 094	101 283 752	95 003 658
Y14		6 594 099	6 594 099	106 347 940	99 753 841
Y15		6 923 804	6 923 804	111 665 337	104 741 533
Y16		7 269 994	7 269 994	117 248 604	109 978 610
Y17		7 633 494	7 633 494	123 111 034	115 477 540
Y18		8 015 169	8 015 169	129 266 586	121 251 417
Y19		8 415 927	8 415 927	135 729 915	127 313 988
Y20		8 836 723	8 836 723	142 516 411	133 679 687
Y21		9 278 559	9 278 559	149 642 231	140 363 672
Y22		9 742 487	9 742 487	157 124 343	147 381 855
Y23		10 229 612	10 229 612	164 980 560	154 750 948
Y24		10 741 092	10 741 092	173 229 588	162 488 496
Y25		11 278 147	11 278 147	181 891 067	170 612 920
	EIRR	21%			
	NPV (UGX '000')	5 836 125			

	Investment costs	<b>Recurrent costs</b>	Total costs	Gross Revenues	Net revenues
Y1	48 035 643	-	48 035 643		- 48 035 643
Y2	118 413 917	1 509 447	119 923 364		- 119 923 364
Y3	122 175 805	2 156 353	124 332 158	25 046 500	- 99 285 658
Y4	24 718 044	2 875 138	27 593 181	47 588 350	19 995 169
Y5	14 270 210	5 750 275	20 020 485	50 969 628	30 949 142
Y6		6 037 789	6 037 789	57 581 904	51 544 115
Y7		6 339 678	6 339 678	67 961 799	61 622 121
Y8		6 656 662	6 656 662	75 280 762	68 624 100
Y9		6 989 495	6 989 495	79 044 800	72 055 305
Y10		7 338 970	7 338 970	82 997 040	75 658 070
Y11		7 705 918	7 705 918	87 146 892	79 440 974
Y12		8 091 214	8 091 214	91 504 237	83 413 023
Y13		8 495 775	8 495 775	96 079 449	87 583 674
Y14		8 920 564	8 920 564	100 883 421	91 962 857
Y15		9 366 592	9 366 592	105 927 592	96 561 000
Y16		9 834 922	9 834 922	111 223 972	101 389 050
Y17		10 326 668	10 326 668	116 785 171	106 458 503
Y18		10 843 001	10 843 001	122 624 429	111 781 428
Y19		11 385 151	11 385 151	128 755 651	117 370 499
Y20		11 954 409	11 954 409	135 193 433	123 239 024
Y21		12 552 129	12 552 129	141 953 105	129 400 976
Y22		13 179 736	13 179 736	149 050 760	135 871 024
Y23		13 838 722	13 838 722	156 503 298	142 664 576
Y24		14 530 659	14 530 659	164 328 463	149 797 804
Y25		15 257 191	15 257 191	172 544 886	157 287 695
	FIRR	18%			
	NPV (UGX '000')	4 449 153			

# Appendix VII. Climate Screening – Full Results

Scorecard:Agriculture - Cropping and Irrigation / Agriculture - Cultures et IrrigationSAP ID :FIEFOC2

Project Name: FARM INCOME ENHANCEMENT AND FOREST CONSERVATION PROJECT-2

#### SCORES:

Торіс	Selected Option	Score
Water resource availability for irrigation / Disponibilité des ressources en eau pour l'irrigation	Irrigation activities are planned in an area where water is available to cover the project irrigation activities for most but not all of the growing season / Les activités d'irrigation sont prévues dans des zones où les ressources en eau disponibles sont en mesure de couvrir les activités du projet relatives à l'irrigation pour une grande partie, mais pas pour l'ensemble de la saison des cultures	15
Soil erosion / Érosion des sols	The project activities are not expected to increase soil erosion / Les activités programmées dans le cadre du projet ne devraient pas augmenter l'érosion des sols	5
Impact of severe weather conditions / Impacts des conditions météorologiques extremes	The project activities are located in an area with occasional drought periods and flooding incidents / Les activités du projet se déroulent dans une zone où les périodes de sécheresse et les incidents d'inondation sont occasionnels	15
Physical infrastructures / Infrastructures physiques	The project includes building terraces for irrigation / Le projet comprend la construction de terrasses pour les cultures d'irrigation	10
Building capacity in agriculture / Renforcement des capacités dans le secteur agricole	The project includes technical skill training in agriculture / natural resource monitoring / Le projet inclut des activités de formation en compétences techniques dans le secteur agricole/ la surveillance (le contrôle) des ressources naturelles	7
Cropping and irrigation technologies and systems/ Technologies & systèmes de cultures & d'irrigation	The project plans to improve the irrigation and cropping systems in place (e.g. use of fertilizer, new seeds, pest-control, rotation, new cultivars, Genetically Modified Organisms (GMOs), drought-resistant crops) / Le projet prévoit d'améliorer les systèmes d'irrigation et de cultures en place (notamment à travers l'utilisation des engrais industriels, de nouvelles semences, les programmes de lutte contre les animaux nuisibles, la rotation des cultures, les nouveaux cultivars, les organismes génétiquement modifiés, les cultures résistantes à la sécheresse)	7
Total Score		

#### JUSTIFICATIONS:

Торіс	Justification	for Selected Option
Water resource availability for irrigation / Disponibilité des ressources en eau pour l'irrigation	The project aims at developing an Integrated Nat tegrated and improve soil and water conservation	aral Resources Development and Management n management
Soil erosion / Érosion des sols	he project is expected to improve the integrated onservation a	natural resources management, water and soil

Impact of severe weather conditions / Impacts des conditions météorologique	Uganda is already affected by climate change and climate variability, which has been manifested through intense and extreme weather events such as droughts, floods and landslides.
Physical infrastructures / Infrastructures physiques	The activities of the project include the development of Irrigation Infrastructure to enable government to develop small and medium scale irrigation schemes.

Торіс	Justification for Selected Option
Building capacity in	The project include Business Skills Development, which will include activities for
agriculture / Renforcement	capacity development, especially for the youths, market development, and cooperative
des capacités dans le secteur	development. Capacity Development, which will include activities leading to
agricole	Information and knowledge, new approaches to extension and adoption, development of
	mechanisms for identifying, valuing and making use of local knowledge
Cropping and irrigation technologies and systems/	The project include Alternative Livelihoods Development, that will support activities to promote aquaculture, Apiculture, and seeds/seedling production and marketing.
Technologies & systèmes de	

#### CATEGORISATION:

Category 1	<ul> <li>[EN] Projects may be very vulnerable to climate risk. Requires a detailed evaluation of climate change risks and adaptation measures. Comprehensive risk management and adaptation measures should be integrated into the project design and implementation plans.</li> <li>[FR] Les projets peuvent être très vulnérables aux risques liés au changement climatique. Ceci nécessite par conséquent une analyse détaillée des risques liés au changement climatique et la mise en place des mesures d'adaptation. La gestion intégrée des risques et les mesures d'adaptation devraient être incorporées dans les plans de conception et de mise en œuvre des projets.</li> </ul>
Category 2	<ul> <li>[EN] Projects may be vulnerable to climate risk. Requires a review of climate change risks and adaptation measures. Practical risk management and adaptation options should be integrated into the project design and implementation plans.</li> <li>[FR] Les projets peuvent être vulnérables aux risques liés au changement climatique. Ceci nécessite par conséquent une analyse des risques liés au changement climatique et la mise en place des mesures d'adaptation. Les options pratiques de gestion des risques et d'adaptation devraient être incorporées dans les plans de conception et de mise en œuvre des projets.</li> </ul>
Category 3	<ul> <li>[EN] Projects are not vulnerable to climate risk. A voluntary consideration of low cost risk management and adaptation measures is recommended, but no further action is required.</li> <li>[FR] Les projets ne sont pas vulnérables aux risques liés au changement climatique. L'analyse facultative de la gestion des risques à faible coût et des mesures d'adaptation est recommandée, mais sans aucune action complémentaire.</li> </ul>

#### SUMMARY:

The project is categorized as Category 2 which means that the project may be vulnerable to climate risk. Requires a review of climate change risks and adaptation measures. Practical risk management and adaptation options should be integrated into the project design and implementation plans.

# Appendix VIII. Concept Note Summary: Youth in Agri-business Development

The Empowering Novel Agri-Business-Led Employment for Youth in Uganda's Agriculture (ENABLE Youth Uganda) Program will be piloted in Uganda by the African Development Bank (AfDB) with support from the Nordic Development Fund (NDF) under the umbrella of the Farm Income Enhancement and Forest Conservation Program Phase 2 (FIEFOC 2).

ENABLE Youth is a generalized program concept developed by the Bank's Agriculture and Agro Industry Department (OSAN) to focus on young entrepreneurs in the agricultural sector and promote the start-up and growth of youth-led agro-enterprises in multiple RMCs. It aims at creating opportunities for young 'agri-entrepreneurs' to upgrade technical skills, adopt innovative agricultural business management practices and access expansion capital with a flexible program design that can be adapted to match conditions in each country.

ENABLE Youth Uganda will be the pilot initiative of the ENABLE Youth Program. It will be nested and implemented within the Agribusiness Development Component of FIEFOC 2 and financed jointly by the Bank and NDF with an emphasis on specific themes to complement the delivery and sustainability of FIEFOC 2, notably, natural resources management, climate resilience and climate smart agriculture.

The program is designed as an entrepreneurship challenge competition program, composed of three phases, namely: i) Call for proposals (CfP) and selection of beneficiaries; ii) Incubation period to under-go skill development and training in project management and enterprise development; and iii) hands-on business management, mentoring, routine monitoring and evaluation and occasional on-sight visits.

It will be delivered by a specialized service agent under the direct supervision of the Ministry of Water and the Environment as lead executing agency for FIEFOC 2.