Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD1431

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 29 MILLION
(US$40 MILLION EQUIVALENT)
IN IDA CRISIS RESPONSE WINDOW RESOURCES

AND

PROPOSED GRANT

IN THE AMOUNT OF SDR 29 MILLION
(US$40 MILLION EQUIVALENT)
IN IDA CRISIS RESPONSE WINDOW RESOURCES

TO THE

REPUBLIC OF MALAWI

FOR A

MALAWI FLOODS EMERGENCY RECOVERY PROJECT

April 24, 2015

Social, Urban, Rural and Resilience Global Practice (GSURR)
Africa Region

CURRENCY EQUIVALENTS
(Exchange Rate Effective March 31, 2015)

Currency Unit	=	Malawian Kwacha
MWK 438.53	=	US$1
US$1.37949	=	SDR 1

FISCAL YEAR
July 01 – June 30

ABBREVIATIONS AND ACRONYMS

ACE	Agricultural Commodity Exchange for Africa
AHCX	Auction Holdings Limited Commodity Exchange
ASWAp-SP	Agriculture Sector Wide Approach Support Project
BoQ	Bill of Quantities
CAS	Country Assistance Strategy
CQS	Consultant's Qualifications
CPM	Critical Path Method
CRW	Crisis Response Window
DA	Designated Account
DFID	Department for International Development
DIO	District Irrigation Officer
DoDMA	Department of Disaster Management Affairs
DRM	Disaster Risk Management
EIA	Environmental Impact Assessment
EIRR	Economic Internal Rate of Return
ERR	Economic Rate of Return
EOC	Emergency Operations Center
ESMF	Environmental and Social Management Framework
FA	Framework Agreement
FMS	Financial Management Specialist
FRR	Financial Rate of Return
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GoM	Government of Malawi
GRS	Grievance Redress System
HDM	Highway Design and Maintenance
IDA	International Development Association
IFA	Inputs for Assets
IFR	Interim Financial Report
IFRMP	Integrated Flood Risk Management Plan
IPC	Internal Procurement Committee
IPMP	Integrated Pest Management Plan
IRLADP	Irrigation Rural Livelihoods and Agricultural Development Project
LIB	Limited International Bidding
MASAF	Malawi Social Action Fund
MFERP	Malawi Floods Emergency Recovery Project

MGDS-II	Malawi Growth and Development Strategy II
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoEST	Ministry of Education, Science and Technology
MoFED	Ministry of Finance, Economic Planning and Development
MoH	Ministry of Health
MoLGRD	Ministry of Local Government and Rural Development
MoLHUD	Ministry of Lands, Housing and Urban Development
MoNREM	Ministry of Natural Resources, Energy and Environment
MoTPW	Ministry of Transport and Public Works
MT	Metric Tons
MVAC	Malawi Vulnerability Assessment Committee
NCB	National Competitive Bidding
NFRA	National Food Reserve Agency
NPV	Net Present Value
NWDPII	National Water Development Plan 2
ODPP	Office of Director of Public Procurement
PDNA	Post Disaster Needs Assessment
PIU	Project Implementing Unit
PMC	Project Management Committee
PRAS	Procurement Risk Assessment System
PSC	Project Steering Committee
PT	Prioritization Taskforce
QBS	Quality-Based Selection
QCBS	Quality and Cost-Based Selection
RAP	Resettlement Action Plan
RFA	Roads Fund Administration
RFP	Request for Proposal
RPF	Resettlement Policy Framework
SATTFP	Southern Africa Transport and Trade Facilitation Programme
SBD	Standard Bidding Document
SGR	Strategic Grain Reserve
SOP	Standard Operating Procedure
SORT	Systematic Operations Risk-Rating Tool
SPU	Specialized Procurement Unit
SRBMP	Shire River Basin Management Program
UNDP	United Nations Development Programme
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WUA	Water User Association
WUG	Water User Group

Regional Vice President:	Makhtar Diop
Country Director:	Kundhavi Kadiresan
Senior Global Practice Director:	Ede Jorge Ijjasz-Vasquez
Practice Manager:	Sameh Naguib Wahba
Task Team Leader:	Ayaz Parvez, Francis Samson Nkoka

Malawi Floods Emergency Recovery Project

TABLE OF CONTENTS

PAD DATA SHEET

Malawi

Malawi Floods Emergency Recovery (P154803)

PROJECT APPRAISAL DOCUMENT

AFRICA

Report No.: PAD1431

Basic Information		
Project ID P154803	EA Category B - Partial Assessment	Team Leader(s) Ayaz Parvez, Francis Samson Nkoka
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [X] - Natural or man made disaster	
	Financial Intermediaries [ ]	
	Series of Projects [ ]	
Project Implementation Start Date 07-May-2015	Project Implementation End Date 15-Jun-2019	
Expected Effectiveness Date 15-Jun-2015	Expected Closing Date 31-Dec-2019	
Joint IFC No		

Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President
Sameh Naguib Wahba	Ede Jorge Ijjasz-Vasquez	Kundhavi Kadiresan	Makhtar Diop

Borrower: Ministry of Finance			
Responsible Agency: Government of Malawi			
Contact:	Peter K Simbani	Title:	Director
Telephone No.:	00265-999-135245	Email:	pksimbani@finance.gov.mw

Safeguards Deferral (from Decision Review Decision Note)
Will the review of Safeguards be deferred? [X] Yes [ ] No

Project Financing Data(in USD Million)					
[ ]	Loan	[ ]	IDA Grant	[ ]	Guarantee
[ ]	Credit	[ ]	Grant	[X]	Other

Total Project Cost:	80.00	Total Bank Financing:	80.00
Financing Gap:	0.00		

Financing Source	**Amount**
Borrower	0.00
IDA Credit from CRW	40.00
IDA Grant from CRW	40.00
Total	80.00

Expected Disbursements (in USD Million)

Fiscal Year	2016	2017	2018	2019	2020
Annual	15.00	25.00	30.00	10.00	0.00
Cumulative	15.00	40.00	70.00	80.00	80.00

Institutional Data

Practice Area (Lead)

Social, Urban, Rural and Resilience Global Practice

Contributing Practice Areas

Agriculture, Education, Transport & ICT, Water

Cross Cutting Topics

[X] Climate Change
[ ] Fragile, Conflict & Violence
[ ] Gender
[X] Jobs
[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	Irrigation and drainage	20	10	10
Education	General education sector	20	10	10
Transportation	Rural and Inter-Urban Roads and Highways	20	10	10
Agriculture, fishing, and forestry	General agriculture,	20	10	10

	fishing and forestry sector			
Water, sanitation and flood protection	General water, sanitation and flood protection sector	20	10	10
Total		100		

☐ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Water resource management	20
Social protection and risk management	Natural disaster management	50
Social protection and risk management	Social Safety Nets/Social Assistance & Social Care Services	20
Environment and natural resources management	Climate change	10
Total		100

Proposed Development Objective(s)

The Project Development Objective is to "sustainably restore agricultural livelihoods, reconstruct critical public infrastructure to improved standards in the flood-affected districts, and improve the Government of Malawi's disaster response and recovery capacities".

Components

Component Name	**Cost (USD Millions)**
Livelihoods Restoration and Food Security	29.00
Infrastructure Rehabilitation and Reconstruction	43.00
Promoting Disaster Resilience	4.00
Program Management	4.00

Systematic Operations Risk- Rating Tool (SORT)

Risk Category	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate

5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
OVERALL	Substantial

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ] No [X]
Does the project require any waivers of Bank policies?	Yes [ ] No [X]
Have these been approved by Bank management?	Yes [ ] No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ] No [X]
Explanation:	
Does the project meet the Regional criteria for readiness for implementation?	Yes [X] No [ ]

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	**X**	
Natural Habitats OP/BP 4.04	**X**	
Forests OP/BP 4.36	**X**	
Pest Management OP 4.09	**X**	
Physical Cultural Resources OP/BP 4.11	**X**	
Indigenous Peoples OP/BP 4.10		**X**
Involuntary Resettlement OP/BP 4.12	**X**	
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50	**X**	
Projects in Disputed Areas OP/BP 7.60		**X**

Legal Covenants

Name	**Recurrent**	**Due Date**	**Frequency**
Maintaining a Project Implementation Unit (PIU)	**X**		CONTINUOUS

Description of Covenant

The Recipient shall maintain throughout Project implementation, the Project Implementation Unit (PIU) with terms of reference, staffing and other resources satisfactory to the Association.

Name	Recurrent	Due Date	Frequency
Staffing the Project Implementation Unit (PIU)		14-Jul-2015	

Description of Covenant

The Recipient shall not later than thirty (30) days of the Effective Date assign to the PIU, and thereafter maintain through-out Project implementation, a National Project Coordinator, a road engineer, two water resources specialists and a procurement assistant all with qualifications, experience, and terms of reference satisfactory to the Association.

Name	Recurrent	Due Date	Frequency
Setting up PIU Field Offices		14-Jul-2015	

Description of Covenant

The Recipient shall not later than thirty (30) days of the Effective Date, set up PIU field offices in Chikhwawa and Zomba with terms of reference, institutional framework and staffing satisfactory to the Association.

Name	Recurrent	Due Date	Frequency
Project Implementation Manual		13-Aug-2015	

Description of Covenant

The Recipient shall not later than sixty (60) days of the Effective Date, prepare, under terms of reference satisfactory to the Association, and furnish to the Association a Project implementation manual containing detailed guidelines and procedures for the implementation of the Project.

Name	Recurrent	Due Date	Frequency
Project Technical Committee		14-Jul-2015	

Description of Covenant

In order to ensure prompt and efficient technical support for the Project, the Recipient shall establish, not later than thirty (30) days following the Effective Date, and thereafter maintain throughout Project implementation, a Project Technical Committee with terms of reference satisfactory to the Association and with adequate resources to carry out its responsibilities under the Project.

Name	Recurrent	Due Date	Frequency
Project Steering Committee		14-Jul-2015	

Description of Covenant

The Recipient shall establish, not later than thirty (30) days following the Effective Date, and thereafter maintain throughout Project implementation, a Project Steering Committee with terms of reference satisfactory to the Association and with adequate resources to carry out its responsibilities under the Project.

Name	Recurrent	Due Date	Frequency
Safeguard Instruments		14-Jul-2015	

Description of Covenant

The Recipient shall, not later than thirty days following the Effective Date: (i) prepare the safeguard instruments and furnish them to the Association for its review and approval; (ii) thereafter disclose the

Safeguard Instruments in country and at the Infoshop; and (iii) ensure and cause the PIU, and the Roads Authority, to implement the Project in accordance with the Safeguard Instruments.

Conditions

Source Of Fund	Name	Type
IDAW	Withdrawal Condition for First Payment for SGR Restocking	Disbursement

Description of Condition

under Category (2.A), unless the Recipient has (i) carried out an assessment of the grain demand of the flood-affected population, (ii) put in place an arrangement for independent verification of the quantity/quality of the maize received into the SGR, and (iii) put in place an arrangement for confirming that such maize has been distributed to flood-affected people, acceptable to the Association

Source Of Fund	Name	Type
IDAW	Withdrawal Condition for Second Payment for SGR Restocking	Disbursement

Description of Condition

under Category (2.B), unless the Recipient has (i) completed the Strategic Grain Reserve management modality revision study in a manner satisfactory to the Association, and (ii) provided a Receipt Verification report acceptable to the Association with regard to the Project-financed quantity of maize received into the storage facilities of the Strategic Grain Reserve under the Project.

Source Of Fund	Name	Type
IDAW	Withdrawal Condition for Third Payment for SGR Restocking	Disbursement

Description of Condition

under Category (2.C), unless the Recipient has disclosed the final report of the Strategic Grain Reserve management modality revision study and shared its conclusions and recommendations with stakeholders at the joint agricultural sector review under the framework of the Agricultural Sector Wide Approach.

Source Of Fund	Name	Type
IDAW	Project Implementation Agreement for Roads Subcomponent	Disbursement

Description of Condition

under Category 3, unless the Project Implementation Agreement has been executed on behalf of the Recipient, the Roads Authority and the Roads Fund Administration, duly authorized or ratified by, and legally binding upon, each of them in accordance with its terms.

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit
Ayaz Parvez	Team Leader (ADM Responsible)	Senior Disaster Risk Management Specialist		GSURR

Francis Samson Nkoka	Team Leader	Disaster Risk Management Specialist		GSURR
Steven Maclean Mhone	Procurement Specialist	Procurement Specialist		GGODR
Trust Chamukuwa Chimaliro	Financial Management Specialist	Financial Management Specialist		GGODR
Alexandra C. Bezeredi	Safeguards Advisor	Regional Environmental and Safeguards Advisor		OPSOR
Allen Lee Baumgardner-Zuzik	Team Member	Consultant		GSURR
Chalida Chararnsuk	Team Member	Program Assistant		GSURR
Cheikh A. T. Sagna	Safeguards Specialist	Senior Social Development Specialist		GSURR
Chikondi Clara Nsusa-Chilipa	Team Member	E T Consultant		GFADR
Christoph Pusch	Team Member	Lead Disaster Risk Management Specialist		GSURR
Christopher Mazuwa Chiumia	Team Member	Consultant		GSURR
Hastings Solomon Mumba	Safeguards Specialist	Consultant		GWADR
Jayna Kishor Desai	Team Member	Consultant		GSURR
Kisa Mfalila	Safeguards Specialist	Senior Environmental Specialist		GENDR
Laurence Elodie Esther Fanny Chalude	Team Member	Consultant		GWADR
Maiada Mahmoud Abdel Fattah Kassem	Team Member	Finance Officer		WFALA
Marc C. Neilson	Team Member	E T Consultant		GSURR
Maria Angelica Sotomayor Araujo	Team Member	Lead Specialist		GSURR
Olivier Durand	Team Member	Sr Agricultural Spec.		GFADR
Pieter Waalewijn	Team Member	Sr Water Resources Mgmt. Spec.		GWADR
Priscilla Flaness Kandoole	Team Member	E T Consultant		GMFDR

Robin Mearns	Team Member	Program Leader		AFCS3
Stephen Mugendi Mukaindo	Counsel	Counsel		LEGAM
Tamara Juvenile Mwafongo	Team Member	E T Temporary		AFMMW
Time Hapana Fatch	Team Member	E T Consultant		GFADR

Extended Team

Name	Title	Office Phone	Location

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments

Consultants (Will be disclosed in the Monthly Operational Summary)

Consultants Required ?	Consultants will be required

I. STRATEGIC CONTEXT

A. Country Context

1. Malawi is a landlocked country located in southeast Africa and encircled by Mozambique to the South-east, Zambia to the West and Tanzania to the North with a population of just over 16 million. It is also one of the continent's most densely populated countries, partly due to the famous Lake Malawi taking up nearly a third of the country's area. Malawi's young and growing population is expected to reach 22.8 million by 2025.[1] With over half of its total population living in poverty, Malawi is one of the world's poorest countries and is ranked 174 out of 187 countries on the United Nations Human Development Index (UNDP, 2013). It has one of the lowest per capita incomes in the world at approximately US$270 annually.[2]

2. Around 85 percent of Malawi's population lives in rural areas, with the majority engaged in smallholder, rain-fed subsistence agriculture. While agriculture remains the main source of Malawi's economic growth (about 40 percent of Gross Domestic Product (GDP) and over 85 percent of total export earnings) the high level of subsistence farming is one of the key factors behind high poverty rates. Rural poverty stood at 55.9 percent in 2004/05 and increased to 56.6 percent by 2010/11, compared to approximately 25 percent in urban areas in 2010/11.[3]

3. Agriculture is predominantly rain-fed and dependent on one brief and variable, annual rainy season. Much of the population reliant on subsistence agriculture is located in the Southern Region, a prime location for cultivation but which also contains the country's poorest districts. The primary staple for most rural households is maize. However, over 70 percent of all farmers cultivate less than one hectare of the crop and a significant number struggle to produce enough food to meet their household consumption requirements. Rates of malnutrition, especially among children in the Southern Region, remain high. Even in times of good production, poor roads have often prevented the marketing of surpluses.

4. Malawi also faces a number of disasters, both natural and human-made, which include floods, drought, stormy rains, strong winds, hailstorms, landslides, earthquakes, pest infestations, diseases outbreaks, fire and accidents. The intensity and frequency of disasters has been increasing, in the face of climate change, population growth, urbanization and environmental degradation. Poor households in Malawi are more exposed to natural hazards (and other shocks) and likely more susceptible to suffer losses from such events. This stems from locational factors as rural households (the majority in Malawi) are typically being pushed due to land ownership and market factors to marginal hazard prone areas (i.e., steep land), but also housing materials and infrastructure are of poorer quality, and the production activities conducted by the majority are typically unsafe or less resilient to natural hazard impacts.

[1] US Census Bureau, International Database, 2011
[2] Malawi Public Expenditure Review, World Bank 2013
[3] IHS2 and the IHS3 National Absolute Poverty Rates

B. Situations of Urgent Need of Assistance

5. Farmers in Malawi are thus directly affected by such disasters, as they are highly vulnerable to natural hazards. The Lower Shire, for instance, which constitutes a key agricultural region of the country, is prone to cycles of recurrent floods and droughts. Between 1967 and 2003, the country experienced six major droughts and 18 incidences of flooding, which heavily impacted smallholder farmers. More recently, two major floods struck the country, including the district of Nsanje in January 2012, and the Mangochi District in January 2013, impacting many people and washing away large swathes of agricultural fields. These disaster events also resulted in the loss of life, infrastructure destruction (including roads, rail and homes), crop loss, perpetual food insecurity and health impacts (diarrhea, cholera and malaria). In the case of Nsanje for instance, recovery and reconstruction needs were estimated at US$7.3 million.

6. The January 2015 seasonal rainfall was the highest on record for Malawi, and caused significant flooding – predominantly in the Southern Region, exacerbating an already precarious situation for rural households in this region. It is estimated that the floods affected 1,150,000 people, displaced 336,000 and killed 104 people. As a result, on January 13, 2015, the President declared a state of disaster for the following 15 districts: Nsanje, Chikwawa, Phalombe, Zomba, Blantyre, Chiradzulu, Thyolo, Mulanje, Balaka, Machinga, Mangochi, Ntcheu, Salima, Rumphi and Karonga. Several of these affected districts represent the poorest areas of the country. Based on the recent Integrated Malawi Household Survey, the most highly affected districts – Nsanje, Chikwawa, Phalombe and Zomba – have poverty incidences above the national average of 50.7 percent, ranging from 55 to 80 percent. Following the declaration of the disaster, the Malawi Vulnerability Assessment Committee (MVAC) conduced a rapid assessment that identified 617,000 people requiring food assistance as a result of the floods. This number is in addition to the previously identified 695,000 in need of food assistance during the traditional lean period, thereby putting a significantly larger number of people at risk of food insecurity.

7. The 2015 floods have inflicted substantial damages and losses in the productive, public infrastructure and social service sectors, including private and community assets. The floods washed away livestock, destroyed thousands of buildings, houses and assets, and damaged roads, bridges, irrigation infrastructure and school and health facilities. To compound the disaster, the onset of the rains this year was delayed by more than 30 days in most parts of the Southern Region. This late start of the rainy season, the shortened growing season that followed, and the looming drought will likely further impede crop production and recovery in a country that heavily relies on agriculture for economic growth and subsistence.

Table 1: Key Physical Assets Damaged or Destroyed

Physical Asset	Baseline	Damaged or Destroyed	Loss (%)
Houses	1,694,569	523,347	31
Crop Land Destroyed (Ha)	1,800,629	89,110	5
Livestock	47,561,665	195,019	0.4
Health facilities	473	22	4.6
Number of Community Based Structures	6,285	1,233	20
Water Intake Structures	59	36	61
Hydrological Stations	45	14	31
Dams	18	4	22

8. The lingering impact of the 2015 floods on living conditions and services has further exacerbated the misery of the affected people. The destruction of about 523,000 homes has caused the displacement of people from their homes, many of whom sought refuge in camps. The International Organization for Migration recently estimated that 56 percent of the internally displaced population resided in 25 sites only. This congestion and lack of hygiene are increasing the risk of water borne and other communicable and vector borne diseases in the sites, including malaria, tuberculosis and diarrheal diseases. However, in some districts, despite a prompt response to the initial disaster, failure to sustain the response resulted in shortages of essential commodities, including essential medicines, reproductive health commodities and dignity kits. There has also been a disruption of routine critical health services, such as vaccination, leading to a high likelihood of vaccine-preventable diseases, such as measles. With regards to education, approximately 461 out of 2,662 schools across the 15 districts were affected by either floods or storms. This affected the ability of about 414,173 primary school learners (or 17 percent) to access quality education. It is also estimated that the floods led to up to a 32 percent drop in school enrolment. Further details can be found in Annex 6.

9. On January 28, 2015, the Government of Malawi (GoM) requested the Bank's support to conduct a comprehensive Post Disaster Needs Assessment (PDNA), in partnership with the United Nations Development Programme (UNDP) and the European Union. The PDNA, led by the Department of Disaster Management Affairs (DoDMA) took place from February 18 to March 7, 2015. While the PDNA report is expected to be finalized before end of April, it has already provided: (1) an impact and needs assessment across 12 selected sectors (2) cross-cutting guiding principles and a preliminary recovery strategy and (3) a roadmap that prioritizes early, medium and long-term needs for each sector. These elements are expected to be followed by the development of a Disaster Recovery Framework (DRF) under the auspices of DoDMA that will provide a programmatic plan of action covering key institutional, policy, financing and implementation actions to ensure efficient, resilient and sustainable recovery.

10. According to the presently available PDNA, the effects of damages and losses are estimated to result in a projected negative impact on GDP growth in 2015, to the tune of 0.6 percent. The economic costs resulting from the negative impact of the floods, other things being equal, may thus lead to GDP growth falling short of the 5.8 percent projection set for 2015. Economic growth is largely premised on expansions in agriculture, manufacturing, wholesale and retail trade, utilities, and transport sectors, most of which have been directly or indirectly adversely affected by the floods. The Government's fiscal position may also deteriorate as the floods exert further pressure on the already limited fiscal space. The table below shows the total disaster effects and recovery and reconstruction needs for the 12 affected sectors, which come to around US$324 million (equivalent to approximately 5.2 percent of GDP) and US$445.5 million respectively. Excluding private housing, transport poses the single largest recovery needs (at 32 percent), followed by agriculture (including crops, irrigation, fisheries and livestock) (at 16 percent) and water and sanitation (at 13 percent). These damages are also split between public and private losses, with transport accounting for 100 percent of public losses, agriculture accounting for 30 percent of private and 70 percent of public losses, and water and sanitation accounting for 20 percent of public and 80 percent of private losses.

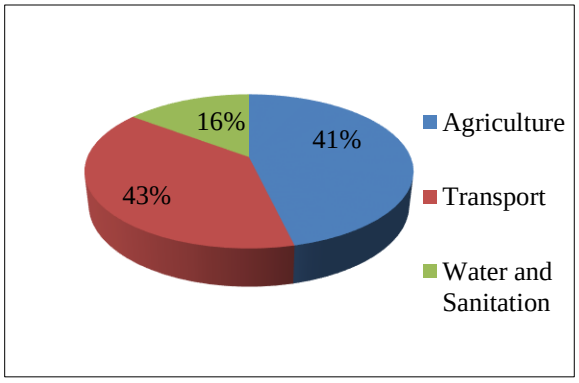
11. The Government has been requested to expedite the formal endorsement of the PDNA by the Ministry of Finance, Economic Planning and Development, which is expected before end-April, 2015. This will further formalize the findings and needs estimates included in the PDNA, allowing other potential financing partners to advance their efforts and any planned contributions towards the Government's overall recovery program.

Table 2: Estimate of Disaster Effects and Recovery and Reconstruction Needs

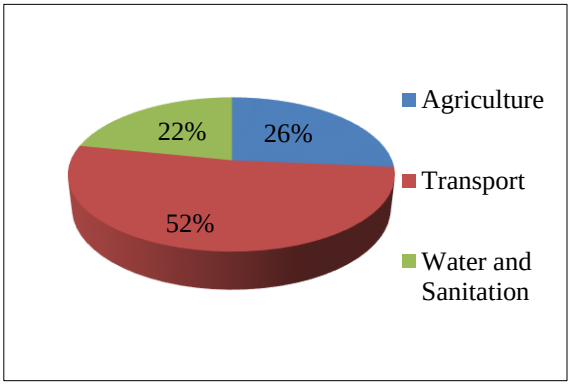
Sector/Subsector	Total Disaster Effects (Damages and Losses) (US$M)	Recovery and Reconstruction Needs (US$M)
Agriculture – Crops	49.9	51.8
Agriculture – Fisheries	1.4	1.2
Agriculture – Irrigation	5.6	7.7
Agriculture – Livestock	13.6	18.9
Commerce & Trade	10.8	3.2
Disaster Risk Management	1.0	1.3
Education	13.4	18.8
Energy	1.1	2.6
Environment	n/a	14.4
Health	12.3	10.0
Housing	114.5	98.3
Nutrition	3.3	12.3
Social Protection Infrastructure	3.9	4.4
Transport – Railways	5.2	13.1
Transport – Roads	62.4	128.2
Water and Sanitation	25.6	59.3
Total	**324**	**445.5**

Figure 1: Ratios of Damages and Recovery and Reconstruction Needs for the Top Three Sectors

Damages and Losses



Reconstruction and Recovery Needs



12. Moreover, according to the currently available PDNA, the floods have resulted in huge loss of income for farming households, rendering it difficult for them to meet their basic needs.

Additionally, Micro and Small Enterprises have been deprived of both household-based and market–based stalls. Proportional with housing sector damages, it is estimated that 33 percent of all household enterprises in the flood districts have been affected. The floods are also generally feared to have pushed most households in the affected districts further into poverty while there is a risk that non-poor households will move into poverty as a result of loss of assets and livelihoods. The loss of assets is particularly disastrous, as asset holdings offer a crucial means to buffer income fluctuations and poor people's ability in dealing with adverse hazards. Lower asset levels are also likely to have reduced the income-generating potential of poor households, thereby hindering the accumulation of assets and leading to lower welfare and more poverty. Finally, these floods will likely also deepen an already increasing income inequality across Malawi. Household surveys from previous floods in Malawi show that the affected people were more likely to live in larger families, with more children and elderly members, with household heads working in agriculture, with worse ownership of durable goods and worse access to services. These earlier surveys also revealed that the coping strategies in the aftermath of floods have relied on own-savings (between one-fifth and one-third of affected people), to help from relatives and friends and changes in dietary patterns.

13. The Bank team also conducted a simulation that showed that the maximum observed rainfall shocks as well as flood-associated losses in agricultural production has increased the depth of poverty. For those who were already poor in 2013, the estimated drop in consumption due to different flooding impact scenarios ranges from MWK 7,637 up MWK 19,296. The estimated drop in consumption due to a 60 percent loss in agricultural productivity for those individuals who are already in poverty in 2013 is particularly substantial: These individuals would experience cuts by about half the poverty line of MWK 37,002, which are the total expenditures deemed necessary for a person to meet its basic needs in a year. Floods also increase the percent of individuals falling into poverty as a result of their consumption shortfall under all five impact scenarios. Experiencing the maximum observed rainfall shock during the 2012/2013 flowering season would send 11.4% more individuals into poverty. In the same fashion, experiencing the maximum observed rainfall shock during the 2014/2015 flowering season would drive 20.8 percent more individuals into poverty. Hence, dramatic changes in the incidence of poverty can occur as a result of flood shocks. Further information on the impact of the floods on poverty in the affected region can be found in Annex 6.

14. Owing to these large-scale damages, losses, disruptions in services delivery and the likely increase in poverty and vulnerability levels in the affected region, the GoM requested the Bank's assistance to help finance key recovery interventions on February 9, 2015. In view of this precarious situation and the unavailability other financing options, US$80 million is sought from the International Development Association (IDA) Crisis Response Window (CRW) to help support the recovery phase.[4] CRW funds will primarily focus on the sustainable restoration of agricultural livelihoods, enhanced food security, resilient reconstruction of critical public infrastructure, restoration of services, and investments in longer-term risk reduction. The selection of interventions and the corresponding resource allocation under the Malawi Floods Emergency

[4] A technical briefing to the Board of Executive Directors in April 10, 2015 informed the Executive Directors of Management's intention to allocate resources from the IDA Crisis Response Window to support the GoM's response to the floods. The technical note titled "IDA Crisis Response Window (CRW) Support for the Malawi Floods Emergency Recovery Project" is being presented to the Board before the technical briefing.

Recovery Project (MFERP) is based on the principle of maintaining "proportionality" with the impact and needs quantified under the PDNA. Therefore, the activities proposed under the MFERP are based on a prioritization of the most critical needs identified by the current version of the PDNA, including the transport, agriculture and other public infrastructure sectors. The MFERP also intends to move the vulnerability-reduction agenda forward to help Malawi mitigate similar disasters in the future.

15. The Bank has been collaborating closely with various United Nations agencies and other development partners in planning and preparing the interventions included in the Project, in support of the Government's overall programming for recovery. UN agencies and the Red Cross Movement have increased their capacity in country and scaled up their support to enhance coordination activities. The cluster system has also been activated in order to conduct assessments and coordinate the disaster responses on the ground. UN agencies are in the process of developing a systematized approach to address key issues highlighted in the current version of the PDNA in the form of an Early Recovery Framework. As for the GoM, it established emergency operations centers in Blantyre and Lilongwe, and completed an Inter-Agency Flood Assessment in Nsanje and Chikwawa, which identified immediate response needs. The GoM has also been taking a leading role in coordinating the international response in addition to investing its own resources to provide humanitarian and emergency support to the disaster-affected communities. Other development partners will also confirm their intervention strategies and activities upon the finalization of the PDNA report. The proposed Project activities will build upon the early recovery interventions being undertaken by the GoM, UN agencies and other partners as well as seek to align with their long-term plans. This will be ensured by helping the Government in bringing all players and stakeholders on board within a single recovery planning platform, in the form of a Recovery Framework, in continuation of the PDNA. This will help build synergies and avoid overlaps across the Bank Project, UN agency interventions and other donor-funded programs. Further details can be found in Annex 6. This Project will also be implemented in collaboration with other Bank-funded Disaster Risk Management (DRM) activities in Malawi. Further details are described in Section D.

16. A typical trajectory of disaster recovery based on contemporary experiences around the world is included in Annex 6. This has helped inform the emphasis and design of the MFERP, and to clarify its linkages and contributions towards with the broader recovery program, and the trajectory that the program is likely to take in the coming months. Global experiences suggest that the first three months are usually dedicated to humanitarian response followed by a Post Disaster Assessment. This is conducted in parallel to setting a national vision of recovery, clarifying roles and responsibilities and mobilizing funding. The next three months are then focused on elaborating a program-level recovery framework and implementation strategy and strengthening in-country implementation capacity and instituting coordination mechanisms across various recovery partners, both in the humanitarian and development realms. Within these first six months, quick disbursing interventions like livelihoods support can be very effective in supporting the transition from the humanitarian to early and medium term recovery phases. Finally beyond the first six months, medium to long-term recovery interventions such as rehabilitation and reconstruction of physical infrastructure can commence. The MFERP and the broader recovery program that it supports have been accordingly designed to follow a similar recovery trajectory, and achieve the corresponding progress and outcome achievement milestones.

C. Sectoral and Institutional Context

17. Malawi has faced two economic shocks during the past five years. In 2010, the country suffered from a macroeconomic crisis with falling growth, currency volatility, shortage of fuel and other factors. Corrective policy actions taken in 2012 stabilized the economy to some extent. Malawi suffered from another crisis, due to large-scale corruption in 2013 dubbed locally as "cashgate" – this eroded public trust in the governance and accountability systems in the country. The resulting withdrawal of budget support by development partners resulted in a significant shortfall in aid resources requiring major fiscal adjustment by the Government. The Public Financial Management agenda has since got much attention, with the Government in recent months taking legal action against some of the accused in "cashgate" and preparing a prioritized Public Financial Management reform plan. The new Government has also prioritized public sector reforms as another area where it plans to initiate actions. These will remain an important area of engagement between the Government and development partners. In order to address these fiduciary risks head-on, the MFERP has incorporated mitigation measures, such as the use of ring-fenced, and tried and tested implementation arrangements (including the use of an existing and well performing PIU, designated accounts, standalone accounting systems and use of external auditors from the private sector) to ensure closer and tighter fiduciary oversight.

18. Agriculture and Livelihoods: The January 2015 floods have aggravated an already highly precarious situation for rural households. Agriculture remains the main source of livelihoods, growth and exports in Malawi. With 85 percent of the population residing in the rural areas, the sector accounts for over 80 percent of the country's employment and about 85 percent of exports. Over 70 percent of all farmers in the country cultivate less than one hectare of land and a significant number of these farmers struggle to meet their annual consumption needs. Farmers are also highly vulnerable to disasters. The Lower Shire in particular, which represents a key area for agriculture in Malawi, is hit by recurrent floods and droughts, which seriously undermine agricultural gains and incomes.

19. Food Storage and Security: The Government's Strategic Grain Reserve (SGR) was first established in 1981 to help cope with food (maize) shortages and emergencies. In 1999, the GoM established the National Food Reserve Agency (NFRA) for the management and marketing activities of the SGR. NFRA is supervised by a Board of Trustees and operates under the supervision of the Ministry of Agriculture, Irrigation and Water Development (MoAIWD). Drawdowns and maize purchases are also validated and monitored by an SGR Management Committee, chaired by the Secretary of Agriculture, Irrigation and Water Development and composed of various maize sector and food aid stakeholders, including donors. NFRA's objectives are to: (i) maintain the SGR through storage, purchase and release of maize grain; (ii) assist in stabilizing grain prices; (iii) oversee grain importation and exportation on behalf of the Government; (iv) contribute to private sector development of the grain market in Malawi; and (v) advise the Government on matters relating to food security and grain market.

20. Transportation: The transport sector in Malawi is comprised of four sub-sectors, namely roads, rail, water and air. Road transport is the dominant mode of transport on land as compared to rail due to the flexibility allowed to users in reaching remote areas and also due to the poor condition

of rail infrastructure. Road transport handles more than 70 percent of the internal freight traffic and 99 percent of passenger traffic. The total road network covers 15,451km, of which 28 percent is paved, while the rest consists of either earth or gravel roads. Accessibility in rural areas has remained a challenge in Malawi due to the condition of the rural roads, which are mainly comprised of secondary, tertiary, district and community roads. Pre-existing shortcomings, such as a lack of flood resistant infrastructure as well as inadequate design standards, have also significantly contributed to the extensive road damages caused by the latest floods.

21. The Roads Authority was formed through an Act of Parliament chapter 98:08 to replace the NRA that was established in 1998 and has the mandate of overseeing the maintenance, rehabilitation and upgrading of main, secondary and tertiary roads in Malawi. District and community roads are administered by the District Councils but the Roads Authority still assists the districts in providing rehabilitation and maintenance services due to the councils' lack of capacity. The GoM is currently implementing several programs, including the Agriculture Sector Wide Approach Support Project (ASWAp-SP), to address challenges related to the transport sector. The main intervention in the ASWAp-SP roads component is to provide access to areas that have agricultural potential. The Road Fund Administration (RFA) was established by an Act of Parliament chapter 69:08 to administer the road fund collected from the fuel levy and other road user charges for purposes of road maintenance and rehabilitation. It also generally manages the funding of all operations by the Roads Authority.

22. Flood Mitigation and Climate Resilience: To improve climate resilience in the Shire River Basin, the GoM is implementing the Integrated Flood Risk Management Plan (IFRMP) for the Lower Shire. The Bank's Shire River Basin Management Program (SRBMP) is supporting the implementation of the IFRMP in collaboration with other initiatives. Key activities under the SRBMP that are relevant for the design of the MFERP include priority flood mitigation interventions[5], community awareness raising on flood mapping and zoning, design and construction of adaptation measures, connectivity to flood early warning systems, civil protection, ecological flood mitigation and climate resilient livelihoods. The recovery and resilience-building strategy underpinning the MFERP builds upon and complements these SRBMP interventions. In terms of DRM, the World Bank has been supporting the GoM across a variety of sectors, including: a) education with the Safer Schools program; b) building standards / codes for safer housing construction; c) building safety nets for vulnerable people; d) conducting preparedness planning and data management, amongst others.

D. Rationale for the Bank's Involvement and Selection of Project Activities

23. Leveraging Resources for Programmatic and Holistic Disaster Recovery: The Bank's proposed financing of the Government's broader flood recovery program draws upon its global investment experience and thought leadership on the post-disaster reconstruction agenda. The Project would allow the Bank to assume a convening role towards the development and implementation of an integrated, holistic and programmatic framework for post-flood recovery in Malawi. Such a framework will increase the likelihood of achieving greater balance across public sector reconstruction and the sustainable recovery of the disrupted lives and livelihoods of the disaster-affected population. It would also allow objective, criteria-based prioritization and optimization of

[5] Such as river bank stabilization, dykes, culverts and flood diversion structures.

recovery investments across short-term humanitarian needs and medium to long-term reconstruction and risk reduction objectives.

24. Selection of Project Interventions: The proposed Project components have accordingly been selected on the basis of a multifaceted rationale for Bank engagement and draws upon the following core principles:

(a) ***Addressing Fast Disbursing Emergency Recovery Needs***: In order to ensure faster disbursements where possible in this emergency context, certain Project activities have also been selected based on their relative ease and timeliness of implementation. The project will therefore provide the option of retroactive financing for expenditures such as SGR restocking and immediate livelihoods support. This is further specified elsewhere in the document.

(b) ***Addressing Critical Early Recovery Needs***: The proposed livelihood support will help alleviate the suffering of the most affected segments of society and contribute to their immediate needs through labor-intensive social protection interventions. This includes the extension of the existing Inputs for Assets (IFA) program that will provide communities with agricultural inputs in return for their participation in labor-intensive schemes for the restoration of critical community infrastructure.

(c) ***Financing Medium-Term Reconstruction and Recovery of Critical Public Infrastructure***: The proposed interventions under the MFERP will help reconstruct critical public infrastructure, such as secondary roads, schools and health facilities, small-scale irrigation facilities, and riverbank protection, to improved standards in the flood-affected districts. These activities will be complemented by medium and long-term interventions to ensure that resilience to future events is improved.

(d) ***Enhanced Food Security and Fiscal Liquidity***: Utilizing Project resources for the restocking of the Government's SGR will not only enhance the country's food security, but also inject much needed fiscal stability, thereby freeing up resources for the Government to invest in other recovery interventions and developmental activities.

(e) ***Building Back Better***: All physical interventions under the Project will target sustainable and resilient recovery, through a Building-Back-Better/Smarter strategy based on the principles of right sizing, right siting, and increased structural resilience. Further, the Project includes interventions for longer-term DRM, building upon or scaling up existing technical assistance programs.

25. Complementarity with Bank Strategy and Existing Country Portfolio: The Bank has started to systematically engage with the GoM on flood risk mitigation and social protection programs. Activities planned under the MFERP complement a number of ongoing and pipeline projects within the Bank's portfolio, most notably including: (a) the agricultural livelihood, productivity and access enhancing interventions under the ASWAp-SP and the Irrigation Rural Livelihoods and Agricultural Development Project (IRLADP); (b) social protection interventions under the Malawi Social Action Fund (MASAF); (c) the flood risk management work under the SRBMP, and; (d) improved infrastructure and pedagogical materials, as well as Water, Sanitation and Hygiene (WASH) services provisions under the Education Program and the National Water Development Plan 2 (NWDPII), respectively. The MFERP also links in with the DRM and Climate Change Technical Assistance program for Malawi that focuses on strengthening early warning systems and the institutional capacity of the Government to effectively coordinate DRM activities

across the country. Utilizing and scaling up the IFA approach for livelihoods support under MASAF and IRLADP will allow the use of a well-established and efficient project mechanism geared towards providing quick support to the rural poor. It must also be noted that the Africa DRM team, in cooperation with the Markets and Finance Global Practice, has been engaged in discussion with the GoM on disaster risk financing solutions. The MFERP will not directly address the issue of risk financing as this activity is part of a dedicated regional Africa Disaster Risk Financing program financed by the European Union.

The Project will also complement regional initiatives, including: (a) the Zambezi River Basin Management Program, which supports the optimization of shared water resource management and development among the eight riparian states; (b) the Pilot Program for Climate Resilience, which helps reinforce a regional and nested sub-basin approach to building climate resilience throughout the Zambezi basin; (c) the upcoming project on trade and transport facilitation under the regional IDA-supported Southern Africa Trade and Transport Facilitation Program, which will contribute to longer-term resilience through investments to reduce the cost of cross-border trade; and (d) the upcoming Shire Valley Transformation Project designed to increase agricultural productivity and commercialization, including contract farming and out-grower schemes for smallholder farmers.

E. Higher Level Objectives to which the Project Contributes

26. Contribution towards Broader Program-level Recovery Objectives: As explained, the Project will leverage resources and contribute towards broader disaster recovery objectives that are being articulated by the Government at a programmatic level through the PDNA and DRF.

27. Contribution towards Bridging Developmental Gaps Created by the Disaster: The MFERP will further consolidate the developmental gains being made under the above mentioned Government and Bank activities towards the objectives of disaster resilience building, community vulnerability reduction, inclusive growth and poverty reduction. The primary higher-level objective of the MFERP is to contribute towards bridging the developmental gaps created or exacerbated by the January 2015 floods, as well as providing renewed impetus to ongoing growth and poverty reduction strategies. The MFERP also supports the country's poverty reduction strategy, as reflected in the Malawi Growth and Development Strategy II (MGDS-II, 2011-2016). MGDS-II represents the overarching medium-term strategy designed to achieve the country's long-term development aspirations as highlighted in Malawi's Vision 2020. The MGDS-II identifies six broad thematic areas – including sustainable economic growth, social support and DRM, and infrastructure development – as well as priority areas, such as agriculture and food security, transport infrastructure, education and public health.

28. Contributions towards CAS/CPF Objectives: The Project will also further the broader program of support outlined in the Bank's Country Assistance Strategy (CAS) for Malawi for the period FY13-16 (Report Number 74159-MW). This will specifically include contributions towards the following result areas: lowering vulnerability and improving the resilience of poor communities through adequate social safety nets, improved climate resilience, and enhanced capacity to respond to disaster risks. This program will directly address all three areas by providing a social safety program, reconstructing critical community assets, restoring livelihoods, strengthening the

institutional capacity of the Government to respond to disaster, and promoting long-term resilience.

29. The CAS recently went through a Performance and Learning Review, which made several adjustments relevant to the MFERP. In the aftermath of the financial management scandal that the country was confronted with, an in-depth financial management review of the entire Bank portfolio in Malawi was undertaken. This review identified a number of control and accountability weaknesses, particularly in projects mainstreamed in Ministries, Departments and Agencies (MDAs). The Bank is working with the Government to address these issues and to minimize future fiduciary risks. The MFERP has also incorporated mitigation measures to address these public financial management challenges, such as ensuring tighter fiduciary controls by implementing the project primarily through an already accredited and tested project implementation unit functioning under the IRLADP. Another proposed adjustment was a greater emphasis on understanding the drivers of rural poverty and developing a more coherent strategy for addressing them. This has informed the selection and design of the activities included in the MFERP.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

30. The Project Development Objective is to "sustainably restore agricultural livelihoods, reconstruct critical public infrastructure to improved standards in the flood-affected districts, and improve the Government of Malawi's disaster response and recovery capacities".

31. This will be achieved through a combination of recovery interventions across the most affected sectors, aimed at the following key outcomes: (a) sustainable restoration of agricultural production and livelihoods as well as enhanced food security for the flood-affected people; (b) reconstruction and improvement of roads, schools, as well as health, irrigation, water resources and water supply facilities to disaster resilient standards; and (c) institutionalization and adoption of strengthened and improved disaster recovery and response systems.

B. Project Beneficiaries

32. This Project will directly benefit a significant proportion of the people affected by the floods, with variances across various project components and sub-components. This ranges from 180,000 people benefiting from direct livelihood support, to roughly about 500,000 people benefiting from food assistance, over 300,000 people with increased access to health and education, and 400,000 people with restored access to water supply and irrigation networks. Additionally, over 200,000 people could benefit from improved and rehabilitated roads and bridges. Moreover, the people of Malawi will benefit, either directly or indirectly, from the introduction of improved infrastructure design standards and the Government's increased capacity to respond to and recover from disasters.

C. PDO Level Results Indicators

33. The achievement of the PDO will be monitored by the following outcome indicators:

- Number of households with sustainably restored agricultural livelihoods
- Number of schools and health facilities reconstructed with services fully restored
- Number of kilometers of roads reconstructed to improved standards and with services restored
- Institutionalization/adoption of PDNA methodology, and institutional and financing framework for recovery
- Institutionalization/adoption of disaster resilient designs for schools, health facilities and roads

III. PROJECT DESCRIPTION

A. Project Components

34. The Malawi Floods Emergency Recovery Project (MFERP) constitutes a set of multi-sectoral interventions in response to the wide-scale damages and losses resulting from the January 2015 floods. These are summarized below with details provided in Annex 2.

Component 1: Livelihoods Restoration and Food Security

35. **Sub-component 1.1: Labor-Intensive Community Infrastructure Repair – US$14 million**: This sub-component will provide immediate assistance for livelihood-supporting and income-generating activities. It will enable beneficiaries to meet their basic requirements by providing farm inputs for the next season and possibly other in-kind assistance in return for their participation in labor-intensive community infrastructure repair schemes. It will also provide a cash for work option following the MASAF modalities. These interventions will create jobs while simultaneously repair and restore community infrastructure as well as indirectly regenerate farmers' agricultural production. This will help beneficiaries in meeting their food and basic household needs.

36. **Sub-component 1.2: Restocking of the Strategic Grain Reserve (SGR) – US$15 million**: An estimated 150,000 to 200,000 households could be in need of food assistance for part or all of next year. It is therefore anticipated that an additional 61,700 metric tons (MT) of maize is required to be released from the SGR for providing food assistance to flood-affected people over the next 10 months. To maintain the SGR at its optimal level, the Project will contribute to its replenishment for an estimated amount of 50,000MT. This quantity is however adjustable depending on prices during the periods of procurement. Purchase of maize will be done through the existing national mechanisms in compliance with the Bank's guidelines for procurement of goods. Release of maize for food assistance will follow existing procedures based on the PDNA and MVAC estimates. Distribution will be done through the existing modalities using World Food Programme (WFP) under the supervision of the Department of Disaster Management Affairs (DoDMA). Purchase modalities will include a combination of the three options described earlier, using mainly NFRA and ACE, as well as AHCX on a pilot basis. Additional details can be found in Annexes 2 and 3. Finally, a study on the revision of the SGR management modalities financed under ASWAp-SP will also help determine appropriate procurement and operational procedures.

Component 2: Infrastructure Rehabilitation and Reconstruction

37. This component will generally employ contractor-built approaches for reconstruction and rehabilitation, complementing the labor-intensive program under Component 1. These investments will be guided by sector Building-Back-Better standards, such as right sizing and right siting, as well as the Flood Risk Management Action Plan under the SRBMP. These will be technically screened to ensure adequate flood resistant designs.

38. **Sub-component 2.1: Reconstruction and Improvement of Roads and Bridges – US$24 million:** This sub-component will support the reconstruction of selected critical access infrastructure, including secondary roads, bridges and other drainage structures. This will include the reconstruction and improvement of approximately 90km of secondary roads, as well as 780m of bridges (including drainage structures) that were either partially or totally destroyed during the floods. However these are notional estimated amounts and eventual utilization of funds under this component will factor in subsequent prioritization exercises and ground surveys by the Government. This subcomponent also retains the flexibility of funding the repair and rehabilitation of other roads (including primary, tertiary, district and community roads) if subsequently agreed between the Bank and GoM.

39. **Sub-Component 2.2: Irrigation and Rural Water Supply and Sanitation – US$5 million:** This sub-component will fund the operational restoration of selected and prioritized irrigation and water supply schemes that have been destroyed or damaged by the floods. This will entail the repair and rehabilitation of:

(a) *Critical Irrigation Schemes and Infrastructure ($3.5 m)*: This can include headworks, flood protection bunds, main canal sections, drains and in-field infrastructure. All of the irrigation schemes proposed to be rehabilitated are community infrastructures that are smallholder farmer managed and range from mini schemes (below 10 hectares) to about 400 hectares. Rehabilitation will be required, especially for recently constructed and revived schemes that were showing high productivity and have incurred a significant setback.
(b) *Water Supply and Sanitation Schemes and infrastructure ($1.5 m)*: This can include water intake structures, water treatment plants, conveyance systems, storage systems, distribution networks, pumping stations, wells and boreholes.

40. **Sub-Component 2.3: Water Resources Management – US$6 million:** This sub-component will finance flood mitigation works, including: (a) river training works; (b) river bank protection, afforestation of river banks and localized embankment repair works in critical flooding rivers; (c) creation and restoration of storm-water drainage; (d) restoration of riparian forests; and; (e) flood protection bunds around critical infrastructure. The works will be designed to reduce risk levels and will be in line with the Flood Risk Management Action Plan for the Shire Basin.

41. **Sub-Component 2.4: Rehabilitation and Reconstruction of Education and Health Facilities – US$8 million:** This sub-component will primarily include the rehabilitation and in-

situ reconstruction of a proportion of the schools and health facilities damaged or destroyed by the floods. In line with presently available PDNA results, the sub-component will seek to reconstruct and restore the functionality of damaged schools and health facilities (including their upgrading) as well as finance the replacement of school learning materials and furniture, medical equipment and medical supplies. This sub-component will also incorporate the element of Building Back Better, such as right sizing and right siting, as well as promoting disaster preparedness and risk reduction activities. In addition to the above reconstruction and major rehabilitation, and if needed, part of the funding could also be used for repair of partially damaged education and health facilities.

Component 3: Promoting Disaster Resilience

42. **Sub-Component 3.1: Institutional Strengthening of DoDMA – US$2 million:** This sub-component will provide technical assistance to strengthen the institutional set-up and operational capacities of DoDMA for post-disaster response and recovery. In addition, it will also study the economic viability of the rehabilitation of the railway lines, which were severely damaged by the floods. This sub-component will include: (a) improving data preparedness and capacity development for post-disaster needs assessment (PDNA); (b) strengthening recovery planning and implementation; (c) developing community mapping and improve land use planning; and (d) enhancing disaster response systems.

43. **Sub-Component 3.2: Multi-sector Design of Disaster Resilient Infrastructure – US$2 million:** This sub-component will provide technical assistance to different departments and ministries for the development and institutionalization of disaster and climate-resilient design standards for infrastructure construction in the future. This could include the design of roads, drainage infrastructure and public buildings, such as schools, health centers and government offices. The sub-component will also provide technical assistance for: (i) a review and strengthening of guidelines for safer housing; (ii) development of an awareness raising strategy in respect to the use of safer housing construction guidelines; (iii) development of national building codes and standards for private housing; and (iv) carrying out a study to assess the viability of railways rehabilitation.

Component 4: Program Management – US$4 million

44. This component will finance the following activities: (a) incremental operating costs of the Project Implementation Unit (PIU); (b) technical designs for the reconstruction and rehabilitation of infrastructure included under various Project components; (c) supervision quality control and contract management of reconstruction and rehabilitation sub-projects; and (d) audit, studies and assessments required under various Project components.

B. Project Financing

Lending Instrument

45. The lending instrument will be Investment Project Financing, and the implementation period for the Project will be four years. This is required to ensure the satisfactory completion of Project

activities and the fuller achievement of the PDO, particularly including the infrastructure rehabilitation works that would require a longer execution period. However the rapid commencement and efficient delivery of the Project's fast disbursing subcomponents on the livelihoods support and restocking of grain reserves, over the first 12-18 month implementation period, will be ensured.

Project Cost and Financing

46. The total Project cost is US$80 million, which will be financed by an IDA Credit of US$40 million and an IDA Grant of US$40 million. Summary costs are provided below, while further details on Project costs are provided in Annex 2.

Table 3: Project Components of MFERP

Project Components	Project Cost (US$M)	IDA CRW Financing (US$M)	% Financing
1. Component 1: Livelihoods Restoration and Food Security	29	29	
2. Component 2: Infrastructure Rehabilitation and Reconstruction	43	43	100%
3. Component 3: Promoting Disaster Resilience	4	4	
4. Component 4: Program Management	4	4	
Total Costs Total Project Costs	**80**	**80**	
Total Financing Required	**80**	**80**	

C. Lessons Learned and Reflected in the Project Design

47. Based on past experiences with the Malawi Social Action Fund (MASAF) and Irrigation Rural Livelihoods and Agricultural Development Project (IRLADP), labor-intensive public works programs are a preferable means of livelihood support in disaster response situations due to their immediate scalability. This was evidenced in the Rapid Response Program in 2012, when many people benefited in a short period from a massive scaling up of public works programs nationwide. Such programs also offer strong targeting potential by supporting growth-oriented agricultural development and by working with the economically-active poor in rural areas.

48. A relatively smaller menu of assets presented for reconstruction enables higher quality and oversight through streamlined procedures and guidelines, as well as a focus on assets that present demonstrable returns on investment. The Project will be selective and strategic in the selection of

critical assets to be reconstructed or rehabilitated. By and large, the focus will be on the reconstruction or rehabilitation of key strategic assets, including secondary roads, selected schools and health facilities, small-scale irrigation facilities, riverbank protection and irrigation rehabilitation. In line with this key lesson, the Project has also avoided spreading funding too thinly and in a diversity of areas, and instead focused on more strategic investments. Moreover, learning from the IFRMP supported by the SRBMP, Project sub-components on irrigation and water resources management will follow a comprehensive (but rapid) planning process ahead of sub-project selections that borrows from the modalities adopted under the ongoing flood risk management and resilience program in the Shire Basin.

49. Over the past years, through sector operations, the Bank along with other donors has been advocating for proposed revisions to the SGR management and operation modalities. Following the guidelines presented in the Bank's publication on "Using public food grain stocks to enhance food security" (September 2012) and lessons learned in Malawi and other countries, the policy dialogue has been mainly focusing on clarifying: (i) the SGR objectives, especially on the dual approaches of the Malawi SGR around humanitarian assistance and price stabilization; (ii) the optimal level of maize reserve; (iii) the most efficient maize restocking and purchase modalities; and (iv) the appropriate, transparent and evidence-based mechanisms for maize release. A study to analyze all these dimensions is being commissioned by MoAIWD with support from the ASWAp-SP. This Project is co-financed through a Bank-managed Multi-Donor Trust Fund comprised of the European Union, Norway, the Department for International Development (DFID), Irish Aid, Flanders and USAID who have joined efforts to advocate for improving the SGR management, efficiency and impact. The use of MFERP funds for restocking SGR will be a critical opportunity to recommend, stimulate and incentivize policy and operational changes to SGR modalities.

50. The MFERP's Project design also reflects several lessons learned from previous Bank-financed activities in similar emergency operations in other parts of the world. This includes drawing lessons from the nine disaster recovery case studies that have been recently launched by the Global Facility for Disaster Reduction and Recovery (GFDRR), the United Nations and the European Union as part of the Guide to Developing Disaster Recovery Framework launched in March 2015. While details of specific lessons learnt from this exercise are included in Annex 6, one key lesson learnt in respect of the reconstruction of private housing was that this requires a strong, conducive policy environment, institutional framework and capacity to implement a housing program that employs Building Back Better approaches and provides appropriate certification mechanisms for quality assurance. It also preferably requires prior engagement of the Bank in the housing sector in the disaster-affected country. This lesson formed the basis of the non-selection of housing reconstruction in the MFERP, in agreement with the GoM.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

51. The challenges faced by Malawi towards achieving effective and efficient flood recovery warrant the institution of dedicated arrangements for recovery planning and implementation at a central-programmatic level. However these arrangements must also rely upon and tap into existing

delivery mechanisms for implementation at the sector and departmental levels. The overall implementation arrangements agreed for the MFERP are illustrated in a flow chart included in Annex 3 and are briefly explained below. These arrangements also take into account the recent financial management scandal and contain measures to address the ensuing high-risk fiduciary environment.

52. Need for an Institutional Locus for Programmatic Recovery Planning: The GoM has tasked DoDMA with providing advice on a programmatic, cross-sectoral framework of recovery interventions. DoDMA will thus have an advisory role in guiding the PIU in the development and implementation of a Recovery Framework that will help towards coordinating and planning floods recovery in an integrated and cohesive manner. DoDMA will thereby also serve as a convening forum and repository for multi-sector and programmatic recovery planning. However, it will not have a direct role in implementation other than providing technical oversight for Component 3. Sectoral and line-department focal points may also be designated to ensure that an inclusive process that incorporates elements of bottom-up planning merge together with central policy precincts towards shaping a holistic framework for cross-sectoral and programmatic recovery.

53. Process for the Prioritization and Sequencing of Recovery Interventions: DoDMA may consider setting up and heading an inter-departmental Prioritization Taskforce (PT) to sequence and prioritize activities across and within various sectors. The PT will work closely with the Project Steering Committee (PSC) to solicit policy decisions from Government and communicate them to the respective implementing entities for the various Project components. The above will require putting in place processes and functions for recovery planning including the development of: (a) a central vision for recovery; (b) policy frameworks for recovery; (c) inter-sectoral strategy and program development for recovery; (d) inter-sectoral prioritization and sequencing of recovery needs, and; (e) sector-level recovery programs leading to specific sector interventions.

54. Project Steering Committee (PSC): The principal or apex decision-making body for the MFERP will be the PSC chaired by the Ministry of Finance, Economic Planning and Development (MoFED) and composed of representatives from the MoFED, MoAIWD, Ministry of Education, Science and Technology (MoEST), Ministry of Health (MoH), Ministry of Natural Resources, Energy and Environment (MoNREM), Ministry of Local Government and Rural Development (MoLGRD), Ministry of Transport and Public Works (MoTPW) (which includes the Roads Authority), Ministry of Lands, Housing and Urban Development (MoLHUD) and DoDMA. This committee will provide oversight for project implementation as well as central policy guidance as required on a periodic basis. DoDMA will act as the lead technical agency for the development of the Recovery Framework and sit on the PSC in an advisory role.

55. Project Implementation Unit (PIU): The existing PIU for the Bank-funded IRLADP will transition into a dedicated PIU for the MFERP. The IRLADP PIU is coming to an end in June 2015 and will be converted into the MFERP PIU. The IRLADP PIU is composed of government-contracted staff and its existing mandate and functions will be extended and adjusted in line with the requirements of the MFERP through a notification to be issued by the GoM. The use of an existing PIU will also facilitate timely implementation of Project activities, particularly including the fast disbursing components. IRLADP was chosen in order to take advantage of an existing and efficient project implementation structure for similar interventions and will remain housed within

MoAIWD. The staff of IRLADP will be responsible for overall project management, which includes coordination across implementing agencies and ministries, financial management, centralized procurement, inter-ministerial reporting arrangements, quality control, social and environmental controls and monitoring and evaluation. In light of the recent financial management scandal[6], the Project's use of a well-established, Bank-accredited and functioning PIU will also ensure closer and tighter fiduciary oversight.

56. IRLADP currently has 26 staff and will procure additional environmental, social and safeguard specialists according to the needs of each Project component. The additional staff will include a Roads Engineer, two Water Resources Specialists, and a Procurement Assistant as well as additional regional support staff.

B. Results Monitoring and Evaluation

57. Outcome Monitoring and Evaluation: The IRLADP/MFERP PIU will be responsible for the overall monitoring and evaluation of the Project, using the Project results framework to issue semi-annual updates on the overall project implementation. This will cover all of the 15 affected districts and thus entail significant staff resources and adequate monitoring systems. The PIU will be responsible for operationalizing the Overall Results Framework for monitoring and assessing the Project at a consolidated level. The PIU will carry out community-level surveys on a periodic basis to record baseline data in line with indicators found within the results monitoring framework. This will include compiling and updating baseline, present and target indicator values for all sub-components and results reporting to the PSC and the Bank on a routine basis. To this effect, the capabilities of the present central monitoring and evaluation system of the PIU shall be enhanced and/or improved to include functions, such as query and search and automated cross tabulation.

58. Physical, Financial and Quality Monitoring: In parallel, there will be project implementation monitoring that will involve the various national, district and community-level implementing organizations. Supervision and monitoring roles will be divided according to the work performed and specific results being achieved, then relayed to the PIU for consolidation. The implementation monitoring will also form the basis for the payment system for contractors for work completed.

59. Supervision will generally entail routine quality checks at various stages of implementation, be it the construction of bridges or re-stocking of the reserve grain supply. Periodic monitoring will include process reviews/audits, reporting of outputs and maintaining updated records. Broad thematic areas that will be supervised and monitored include the following: (i) Social and Environmental Monitoring, (ii) Regular Quality Supervision & Certification, (iii) Periodic Physical Progress Monitoring & Third-Party Quality Audit, and (iv) Results Monitoring and Evaluation. Additionally, there will be a project management milestone chart to ensure administrative and implementation related activities are completed on schedule. The PIU may also explore the installation and use of a more systematic Critical Path Method (CPM)- based software for the physical and financial progress monitoring of various sub-components and sub-projects within.

[6] This is described in the Section C on Sector and Institutional Context.

C. Sustainability

60. Many of the proposed interventions under the Project are aimed at fostering sustainable developmental solutions. To this effect, the MFERP will adapt cost-effective Building Back Better strategies, such as right sizing and right siting, to ensure that all critical public assets and infrastructure funded under the Project are reconstructed to more climate and disaster resilient standards. By embracing a programmatic approach to recovery, under which the Project is part of a broader recovery framework, the Bank will also attempt to leverage more international financial resources for the improved reconstruction of assets not directly funded under the Project. In order to ensure the long-term maintenance and climate resilience of public infrastructure reconstructed or rehabilitated under this Project, the Government will also furnish adequate plans for routine and periodic maintenance of these assets.

61. The above activities will be complemented by medium and long-term interventions to ensure that a stable base for livelihoods is restored and resilience to future events is improved. The livelihoods program provides farm inputs in return for work that will help restore agricultural livelihoods and production on a sustained and cyclical basis. This will help farmers in targeting the next cropping season, while also deriving sustained benefits from the restoration of productive community assets.

62. Further, the Project includes interventions for the improvement of the country's disaster response and recovery systems to ensure that the gains made under the immediate Project interventions are not lost over time, increasing resilience of both public infrastructure and agriculture production to natural disasters. The Project's technical assistance activities have been accordingly designed to transition and consolidate into duly institutionalized operating procedures and structures for recovery need assessment, policy-making, standard-setting, implementation management and financing in the future.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Risk Categories	**Rating (H, S, M or L)**
1. Political and governance	S
2. Macroeconomic	S
3. Sector strategies and policies	M
4. Technical design of project	M
5. Institutional capacity for implementation and sustainability	S
6. Fiduciary	S
7. Environmental and social	M
8. Stakeholders	M
9. Others	
Overall	S

B. Overall Risk Rating and Explanation of Key Risks

63. The overall risk for achieving the PDO is Substantial.

64. From a macroeconomic perspective, there remain considerable policy uncertainties and macroeconomic imbalances, with a persistently high inflation rate (which stood at 23.8 percent in 2014), high interest rates (hovering over 35 percent) and a weak fiscal position in an already constrained environment. Combined with substantial governance risks, these imbalances may affect the achievement of the PDO through diminished capacities and inefficiencies in implementation as well as the diminished potential of the Project's Building-Back-Better approaches and technical assistance activities to transition into sustainable development solutions after the completion of the Project.

65. Risks related to institutional coordination across various Project components and implementing entities are also substantial. The implementation of various Project activities will be spread over a range of departments and district-level entities, which make effective coordination and consolidation of Project gains a difficult proposition. The placement of the PIU within MoAIWD and its mandate to oversee the work of various line departments could be seen adversely and be not duly acknowledged by other ministries. However, the use of an already well-established and well-functioning PIU is expected to successfully mitigate this risk. This will still require an early and formal notification of the Project's implementation arrangements to all implementing entities, and clarification of their respective roles and responsibilities through a Project Implementation Manual, followed by adequate training and technical assistance.

66. There is also a risk related to the lack of collaboration and communications amongst districts as well as a risk that implementing agencies will not prioritize investments to meet the most urgent and greatest needs. The Bank will thus stringently review procurement processes to ensure the prioritized emergency investments follow agreed standards, and are in line with the IFRMP implemented by the SRBMP. The PIU will also work on the coordination functions with the support of outreach offices, and districts will be allocated budgets to propose work plans and implement Project activities in their respective areas. Inefficiencies and delays could affect the procurement process. There is also a high probability of transfers for staff handling procurements. This will be mitigated by conducting regular monitoring through procurement plan as well as ongoing dialogues with the Government to ensure that trained staff is retained. Also training will be provided to project implementing agencies on procurement, and if needed a roster of country procurement accredited staff will be retained to quickly mobilize additional procurement resources in case such transfers do take place.

67. In terms of SGR specifically, as previously noted, the Bank along with other donors has been advocating for proposed revisions to the SGR management and operation modalities over the past years. A study is also currently being commissioned by MoAIWD with support from the ASWAp-SP. Committing Project funds to restock SGR while simultaneously advocating for improved management, efficiency and impact of the reserve could therefore pose an implementation risk. The team will continue to work closely with SGR to ensure that proposed revisions to the reserve's management are developed without hindering the implementation of MFERP. The use of MFERP funds for restocking SGR will also be a critical opportunity to recommend, stimulate and

incentivize policy and operational changes to SGR modalities. The progressive release of funding under this subcomponent will therefore also take into account: a) an independent verification of the quantity and quality of the maize received into the storage facilities of the SGR through a Receipt Verification report; b) an assessment of the grain demand of the flood affected population and developed mechanisms to ensure that grain purchased under the Project is only distributed to the flood affected population along with a Distribution Verification report; and c) the completion of the SGR management modality revision study and the sharing of its conclusions and recommendations with stakeholders at the joint agricultural sector review under the framework of the Agricultural Sector Wide Approach.

68. From a financial management perspective, IRLADP also has some control and accountability issues that need to be addressed. The entity has been provided with audit recommendations that they will be implementing. This will be monitored as it transitions into the MFERP PIU. Moreover, in the light of the recent financial management scandal and the ensuing high-risk fiduciary environment, the Project's fiduciary risk is rated as **Substantial**. The key proposed mitigation measures in this respect are the use of a well-established and functioning PIU, ring fenced funds flow, and accounting and auditing arrangements, which will considerably increase fiduciary oversight and transparency. Procurement processes have also been streamlined so that only the PIU will be responsible for the procurements of all goods, works and services under the Project except those under the road component, which will be procured by the Roads Authority.

69. Safeguards risks include: i) loss of land acquired for use in rehabilitation and re-construction of roads, bridges and expansions of irrigation schemes; ii) loss of trees due to an increase in migrant workers using fuel wood, leading to potential growth in soil erosion and siltation of stream/rivers in the area; iii) increase in water logging and salinization around rehabilitated irrigation schemes; iv) increase in incidences of water-borne diseases around irrigation schemes; and v) conflicts in the use of water in rivers between irrigation farmers and upstream and downstream water users.

70. To mitigate those risks, the Government will prepare an Environmental and Social Management Framework (ESMF) to guide the mainstreaming of environmental and social considerations, as well as mitigations in design, implementation and operation of sub-projects under the MFERP. The Government has also prepared a Resettlement Policy Framework (RPF) to provide guidance on mitigations of social and economic negative impacts, resettlement planning and possible compensation issues within sub-projects under the MFERP. Through its Environmental Affairs Department (District Environmental Officers), the GoM has the technical capacity to supervise this environmental work at the local level.

VI. APPRAISAL SUMMARY

Economic Analysis

71. The currently version of the PDNA estimates that aggregate damages and losses as a result of the floods amount to US$324.5 million (equivalent to approximately 5.2 percent of GDP). This includes damage to crops (mostly subsistence farming for own consumption), loss of livestock, housing and livelihoods, as well as damage to public infrastructure such as roads, schools, health facilities, water and sanitation infrastructure. The effects of damage and losses are estimated to

result in a projected negative impact on GDP growth in 2015, equivalent to a 0.6 percent change in GDP (i.e. other things being equal, the floods will reduce annual GDP growth by 0.6 percent).

72. The impact of the floods on GDP growth is muted due to the low levels of economic development in the affected areas, with the majority of the population engaged in subsistence agriculture. Poverty rates in the affected areas are among the very highest in Malawi, and as a result while a significant share of Malawi's total population has been affected by the floods, the impact on purchasing power is low. The investment activities under the Project are thus aimed at resolving the emergency situation in the flood-affected areas with immediate benefits for affected households and communities as well as medium and long-term economic impact.

73. An economic and financial analysis was undertaken to assess the economic relevance and value addition of this Project. It is recognized that the Project would comprise both quantifiable (direct and indirect) and unquantifiable (direct and indirect) benefits that are expected to accrue for the flood-affected population, surrounding communities and the economy as a whole. Given the difficulties associated with estimating all the Project's benefits, the quantitative focus was only based on benefit and cost streams of the transport (roads and bridges) and irrigation within the Infrastructure, Rehabilitation and Reconstruction component. Results from a Cost benefit analysis for the irrigation sub-component reveals that the investment is viable, establishing a Financial Rate of Return (FRR) of 31 percent and an Economic Rate of Return (ERR) of 24 percent.[7] For the roads component several methodologies were used including avoided costs, cost effectiveness and HDM-IV. The preliminary results are presented in Annex 4. Given the absence of final designs and cost estimates and the reduced time for preparation, it was agreed that further economic analysis will be undertaken by the Roads authority, during project implementation but prior to initiation of the procurement phase to ensure the viability of the final selected investments in the road sector. An examination of expected benefits for the other components was undertaken using qualitative methods. Further detailed analyses can be found in Annex 4.

Technical

74. Institutional Appraisal: A set of urgent actions are needed to formalize and operationalize the institutional structure of MFERP to ensure the earliest possible commencement of project activities as well as the effectiveness of the project implementation arrangements subsequently. A formal notification from the Government to bring into effect the transition and establishment of the IRLADP PIU into the new MFERP PIU is a key first step. Other key actions include: (a) notification of project implementation arrangements including progress and results reporting arrangements across the PSC, Bank, PIU and various implementing entities; (b) a PIU staffing enhancement plan commensurate with MFERP requirements and duly sanctioned by the government, and; (c) exchange of letters signifying a memorandum of understanding between the MOFED, PIU and all other related ministries and line departments that allocate and demarcate functions, roles and responsibilities for project execution. Once a Project Director is selected for the PIU, staffing will commence using the proposed plan (see Annex 3) which will include the

[7] While typically the ERR tends to be higher than the FRR, in this analysis, the reverse is true for the following reasons: (1) there are no taxes associated to the imports of agricultural inputs such as fertilizer and pesticides in Malawi, thereby bringing the FRR and ERR closer to each other; and (2) the deviation toward a higher FRR comes as a result of the higher financial price of the local variety of rice which fetches a premium on the local market vis-à-vis the parity price computed for ERR calculations based on global commodity price data.

hiring of additional environmental, social and safeguard specialists. Additionally, a Project Implementation Manual will be prepared to guide the PSC, PIU and all other implementing entities in various project execution functions including but not restricted to selection and prioritization of subprojects, design and supervision of subprojects, procurement, financial management, safeguards monitoring, and progress and results reporting.

75. Specific implementation arrangements for each component have also been developed as detailed in Table 3.2 in Annex-3. This table describes the allocation of roles and responsibilities between the PIU and line ministries. For instance, in terms of the road sector, while the PIU will be responsible for quality, process and procurement oversight, the Roads Authority will work on identifying roads, preparing designs and bid documents, procuring contractors and supervising consultants, and technical quality assurance, etc. The PIU will guide the Roads Authority generally on procurement but also on specific issues on a needs basis.

76. In order to ensure prompt and efficient technical support for the Project, a Project Technical Committee will be established to provide technical guidance at both strategic and operational levels, as well as help resolve technical issues that are brought to its attention. The Project Technical Committee will also serve as the primary mechanism for ensuring the implementation of the inter-ministerial and inter-departmental coordination modalities, and for managing the respective roles and responsibilities set out for the various implementing entities and departments responsible for the implementation of Project, as further specified in the Project Implementation Manual. The Project Technical Committee will report to the Project Steering Committee.

77. The table below shows an implementation readiness checklist for GoM to ensure effective and rapid implementation of the Project. The team has assessed the government's readiness against this checklist. Additional work will be required in preparing the Project Implementation Manual, safeguard instruments, as well as the review and strengthening of SGR management modalities. Please refer to Annex 3 for additional details.

Table 4: Implementation Readiness Checklist

Formal Notification of Establishment of PIU
Ensuring adequate PIU staffing per agreed plan
Project Implementation Agreement between the Recipient, Roads Authority and the Roads Funds Administration
Preparation of Project Implementation Manual
Preparation of ESMF and RPF and disclosure by GoM and WB
Provision of timeline for the finalization of the SGR management modality revision study
Verification of maize demand for flood affected people

78. Building Back Better: Project-funded rehabilitation and reconstruction of public assets and infrastructure will be based on the "Building Back Better" principle, such as right sizing and right siting, but with due recognition of affordability and technical viability constraints. In the design and rehabilitation or reconstruction of Project-funded infrastructure, particular care will be put into improving resilience of infrastructure to future flooding as well as seismic risk. For public

buildings, structural assessments will be carried out to determine the full extent of reconstruction/retrofitting needs. Modifications to current layouts and structures will be proposed to ensure the safety of equipment and access during future disasters. As for land use, should a facility be built in a flood-prone zone, the location will then be evaluated and if deemed an at risk location, the facility will be sited elsewhere.

79. Roads and Bridges: For roads and bridges financed by the Project, improved design and construction standards will be used to ensure flood and seismic resilience, with a special focus on critical sections to avoid severe connectivity disruptions during future events. The designs will take into account best available knowledge on hydrology, particularly as it relates to flood prevention and future flood estimates.

80. Irrigation and Water Supply: Irrigation and water supply rehabilitation will be based on a thorough engineering assessment of the flood damages, design improvements and the prioritization of long-term schemes showing good management in order to ensure the largest agricultural potential at a low cost. Design and supervision will be through third-party engineers with close backstopping from regional engineers and the PIU, while Project works will be contracted to qualified contractors.

81. Flood Mitigation and Water Resources Management: All flood mitigation and river training works will be carefully designed by the flood risk management service provider under the SRBMP, whose scope of work will be broadened to also support DRM investments under the MFERP, as it is already designing and supporting flood management interventions in the districts of Chikhwawa and Nsanje. This service provider will also carry out the technical screening of sub-projects under the IFA program against the national flood risk management technical guidelines and the Integrated Flood Risk Management Action Plan for the Shire Basin.

82. SGR Restocking: A timeline for the finalization of the SGR management modality revision study will be agreed with Government. Additionally, there will be detailed estimates on the maize restocking needs based on: (i) maize releases already done to flood affected people and (ii) the assessment of future releases required to support flood affected households in need of (full or partial) food assistance until the next harvest. The maize purchasing channels will be refined in order to combine the various options available (NFRA, ACE, and AHCX), to give opportunities to large traders, small traders and farmer organizations. The release of maize will be ensured based on priority needs identified by MVAC and for price stabilization based on sound market analysis (including price spike analysis, distribution plan targeting priority areas, detailed sale reporting and impact analysis).

Financial Management

83. A financial assessment of the IRLADP PIU (to be renamed the MFERP PIU) and RFA was conducted with the objective of ascertaining whether: (a) the entities have adequate financial management arrangements in place to ensure the funds will be used for the purposes intended in an efficient and economical manner and the entities are capable of correctly and completely recording all transactions and balances related to the Project; (b) the Project's financial reports will

be prepared in an accurate, reliable and timely manner; and (c) the Project's assets will be safely guarded; and (d) the Project will be subjected to auditing arrangements acceptable to the Bank.

84. The IRLADP/MFERP PIU and RFA have computerized accounting systems with a chart of accounts that can accommodate the requirements of the proposed Project. Each agency has experience in financial management for Bank-financed projects and have been producing required reports on time and correctly. The staffing is adequate in numbers, qualifications and experience. Overall, the Financial Management assessment concluded that the IRLADP/MFERP PIU and RFA financial management arrangements meet the Bank's minimum requirements under OP/BP 10.00. The residual risk rating for both the IRLADP/MFERP PIU and RFA is still rated as **Substantial** due to the lingering public financial management risks unearthed by the financial management scandal. The details of the assessment are outlined in Annex 3.

Procurement

85. As part of the project preparation process, a capacity assessment of the MoAIWD, Roads Authority, MoESTD and DoDMA was carried out using the Procurement Risk Assessment System (PRAS). The assessment reviewed the current staffing and resources of MoAIWD, Roads Authority, and MoEST, which were found satisfactory as they are familiar with IDA guidelines and procedures given that they are implementing similar IDA-financed projects. All procurement activities implemented by DoDMA are funded following a procurement system under the Malawi Public Procurement Act of August 2003, and its Regulations and Desk Instructions. Therefore, switching over from government procedures to Bank procurement procedures would be a challenge and in this regard there is a need for constant training support. Dedicated support will also be required at the initial stages of Project implementation. It must be noted that the procurement assessment has included all agencies to ensure that additional capacities for procurement have been explored and could be summoned if needed. However, only the PIU and Roads Authority will be directly involved in procurement.

86. A technical and capacity assessment of the IRLADP/MFERP PIU was undertaken and in the past eight years, it was shown to have performed at a high standard following Bank and Government procurement procedures for the award of contracts. Contract management as well as record keeping has been generally good and there has been no mis-procurement declared. Since the PIU is embarking on a project that will require it to undertake procurement on behalf of a number of departments, it is recommended to add procurement staff to PIU. This has been reflected in the staffing plan proposed by the IRLADP/MFERP PIU.

87. Given that fiduciary risk for the MFERP has been rated as **Substantial**, the following mitigation measures have been proposed: (i) providing training on Bank procurement procedures for DoDMA staff before the start of the Project; (ii) attending short procurement courses within the region at a later stage by key personnel handling procurement; (iii) a strengthened complaint handling mechanism; and (v) conducting post review by the Bank as per the risk rating.

88. Risk of fraud and corruption: Due to the use of simplified procurement procedures as per OP 11.00 for this Project, there is an increased risk of fraud and corruption, in particular with regards

to the abuse of simplified procurement procedures as contractual terms and conditions may not be adequately observed or applied.

89. The Project has been triggered by an emergency situation (OP 10.00) and therefore, provisions under paragraph 20 of OP 11.00 procurement under emergency situation shall apply. Further details are provided in Annex 3.

Social including safeguards

90. Application of Bank Safeguards Policies: The key sets of activities proposed to be financed under Component 1: Labor Intensive Community Infrastructure Repair and Component 2: Rehabilitation and Reconstruction of Infrastructure include: (i) reconstruction of critical access infrastructure, including secondary road, bridges, and drainage structures, (ii) operational restoration of selected and prioritized water supply schemes, (iii) flood mitigation works, and (iv) rehabilitation and reconstruction of school and health facilities. The reconstruction and strengthening of the affected secondary roads, bridges, flood infrastructure and public services are to be carried out within the existing alignments and will not involve any new construction. However, a rapid/current assessment of Project activities shows they may involve temporary displacement and therefore OP 4.12 is triggered.

91. The Involuntary Resettlement policy is triggered due to foreseen low to medium civil works activities (i.e. Rehabilitation and reconstruction of roads, bridges, basic social services such as health facilities and schools, and irrigation schemes, etc.) may require land for temporary or permanent usage. The land acquired for this purpose may lead to loss of asset, sources of income or means of livelihoods for some poor households, especially in rural communities whether or not project affected people must move to another location. To ensure proper mitigation measures are set forth, especially at this very juncture where details of Project footprint are still unknown, the Borrower will, using the existing Resettlement Policy Frameworks (RPFs) from SRBMP, ASWAp-SP and IRLADP, prepare an RPF to guide the preparation of site specific Resettlement Action Plans (RAP) once such details are known. Just as the Environmental and Social Management Framework (ESMF) and Integrated Pest Management Plan (IPMP), the RPF will be fully consulted upon, reviewed and cleared by the Bank, and publicly disclosed both in-country and on InfoShop prior to project implementation.

Environment including safeguards

92. The project will target areas that were hit hardest by the floods in the region. Given the magnitude of damage caused by flooding, the Project is designed to provide reconstruction and recovery support to affected areas in which public infrastructure and service delivery were impacted severely. It is expected that it will yield benefits and livelihood opportunities through provision of high priority reconstruction and rehabilitation of public infrastructure in the worst affected areas of the region in addition to enhancing the Government's capacity to deal with future disasters. Based on a rapid/current assessment, the Project is classified as environmental category "B" and Operational Policies Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), and Forests (OP 4.36) have been triggered.

93. ***Safeguards Action Plan:*** Recognizing the emergency nature of the proposed operation and the need for providing immediate assistance, while at the same time ensuring due diligence in managing potential environmental and social risks, a Safeguards Action Plan has been prepared. It indicates a list of activities that correspond to Category A subprojects which will not be financed under this proposed operation. The subject Project is being prepared as an emergency operation triggered by a natural disaster event. The Project processing will follow condensed procedures as outlined in instructions: Preparation of Investment Project Financing - Situations of Urgent Need of Assistance or Capacity Constraints. A request for the deferment of the Project Safeguards Requirements under paragraph 12 of OP 10.00 has been approved by the regional Vice President as of April 6, 2015. The deferment of the ESMF disclosure for the emergency Project is linked to a legal covenant in the Project Financing Agreement stating that the Project will not be allowed to tender any civil works related project until such a point that the Project ESMF has been disclosed publicly in-country and in the Bank's Infoshop. Based on partial assessment, the Environmental Assessment category for the project is classified as Category B.

94. The subprojects will be selected after detailed/appropriate level of assessment, including consultation with concerned key stakeholders. However, any activity/work having significant adverse, irreversible and long-term impacts will be excluded from the scope of the Project – established methodology and process will be carried out.

95. A comprehensive ESMF will be prepared in line with the Safeguards Action Plan as agreed during Project Negotiations. In line with Bank policy requirements, the ESMF will clearly identify the following: (i) policy triggers for the Project; (ii) the screening criteria to be used for subproject identification and selection; (iii) list out comprehensively a range of likely environmental and social impacts for the various types of works/activities envisaged under the Project and; (iv) applicable national/local policy and regulatory requirements; (v) the measures to mitigate the identified environmental risks/issues; (vi) assessment of the institutional capacity of the implementing agency and measures for filling capacity gaps; and (vii) an estimate of the budget needed for the implementation of the ESMF and related instruments. The ESMF will provide a list of activities that cannot be financed, and screen out activities that correspond to Category A projects, or that may trigger additional safeguards policies.

96. Malawi, Tanzania and Mozambique are co-riparian countries of the Shire River. Namibia, Angola, Zimbabwe, Botswana and Zambia are co-riparian countries above the confluence of the Shire and Zambezi Rivers in the greater Zambezi Basin. However, the Project will only be financing rehabilitation of existing infrastructure and therefore an exception under paragraph 7(a) OP 7.50 has been obtained from the regional Vice President as of April 6, 2015.

Table 5: Safeguard Policies Triggered by the Proposed Project

Safeguard Policies Triggered	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)	X	
Forests (OP/BP 4.36)	X	
Pest Management (OP 4.09)	X	
Physical Cultural Resources (OP/BP 4.11)	X	
Indigenous Peoples (OP/BP 4.10)		X
Involuntary Resettlement (OP/BP 4.12)	X	
Safety of Dams (OP/BP 4.37)		X
Projects on International Waterways (OP/BP 7.50)	X	
Projects in Disputed Areas (OP/BP 7.60)		X

World Bank Grievance Redress

97. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

ANNEX 1: RESULTS FRAMEWORK AND MONITORING

Country: Malawi

Project Name: Malawi Floods Emergency Recovery (P154803)

Results Framework

Project Development Objectives

PDO Statement

The Project Development Objective is to "sustainably restore agricultural livelihoods, reconstruct critical public infrastructure to improved standards in the flood-affected districts, and improve the Government of Malawi's disaster response and recovery capacities".

These results are at	Project Level

Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Direct project beneficiaries (Number) - (Core)	0.00					500000.00
Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	0.00					50.00
Number of households with sustainably restored agricultural livelihoods under the IFA program (Number)	0.00	72000	144000	180000	180000	180000.00
Number of schools with services fully restored (Number)	0.00	8.00	25.00	57.00	82.00	82.00
Number of health facilities reconstructed with services fully restored (Number)	0.00	0.00	0.00	1.00	2.00	2.00
Number of kilometers of roads reconstructed to improved standards and with services restored (Kilometers)	0.00	5.00	22.00	63.00	90.00	90.00
Institutionalization/adoption of PDNA methodology, and institutional and financing framework for recovery (Yes/No)	No	No	No	No	Yes	Yes

Institutionalization/adoption of disaster resilient designs for schools, health facilities and roads (Yes/No)	No	No	No	No	Yes	Yes

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Number of individuals receiving IFA vouchers (Number)	0.00	72000	144000	180000	180000	180000.00
Quantity of maize purchased (Metric ton)	0.00	37500	50000	50000	50000	50000.00
Quantity of maize released (Metric ton)	0.00	40000	50000	50000	50000	50000.00
Number of SGR beneficiaries (Number)	0.00	375000	500000	500000	500000	500000.00
Roads rehabilitated, Rural (Kilometers) - (Core)	0.00	5.00	22.00	63.00	90.00	90.00
Number of additional classrooms built or rehabilitated at the primary level resulting from project interventions. (Number) - (Core)	0.00	8.00	25.00	57.00	82.00	82.00
Health facilities constructed, renovated, and/or equipped (Number) - (Core)	0.00	0.00	0.00	1.00	2.00	2.00
Improved Damage Assessment Guidelines, Templates and SOPs for Damage Assessment (Yes/No)	No	No	No	No	Yes	Yes
DoDMA and Civil Protection Committees trained in Emergency Response (Number)	0.00	0.00	5.00	10.00	15.00	15.00
Disaster resilient designs for the education, health and roads sectors(Yes/No)	No	No	No	No	Yes	Yes

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Direct project beneficiaries	Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., children who benefit from an immunization program; families that have a new piped water connection). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage.	Annual	PIU Progress Reports	All Implementing Entities
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	No description provided.	No description provided.	No description provided.
Number of households with sustainably restored agricultural livelihoods under the IFA program	Households with individuals who received support to restore their livelihoods by engaging in labor-intensive community infrastructure repair	Annual	PIU Progress Reports	Project Surveys through MoAIWD/MLGRD/ Districts
Number of schools with services fully restored	Number of primary schools reconstructed and supplied with instructional materials, including textbooks and exercise books	Annual	PIU Progress Reports	Project Surveys through MoEST/MLGRD/ Districts
Number of health facilities reconstructed with services fully restored	Number of health facilities reconstructed and supplied with medical supplies and equipment	Annual	PIU Progress Reports	Project Surveys through MoH/MLGRD/ Districts
Number of kilometers of roads reconstructed to improved standards and with services restored	Number of kilometers of secondary roads (including bridges and drainage structures) reconstructed to improved standards and with transport services restored,	Annual	PIU Progress Reports	Project Surveys through MoTPW/ Roads Authority

	as well as a reduction in disruptions to restored transport services			
Institutionalization/adoption of PDNA methodology, and institutional and financing framework for recovery	Building the capacity of District Civil Protection Committees in the use of the PDNA methodology and development of national institutional and financing framework for recovery	Annual	PIU Progress Reports	DoDMA/MOFED
Institutionalization/adoption of disaster resilient designs for schools, health facilities and roads	The institutionalization/adoption of disaster-resilient designs for primary and secondary schools, primary health facilities and secondary roads	Annual	PIU Progress Reports	DoDMA/MoH/ MoTPW/MoEST

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Number of individuals receiving IFA vouchers	Number of people who are enrolled in IFA program	Quarterly	PIU Progress Reports	MoAIWD/MLGRD/ Districts
Quantity of maize purchased	Maize purchased for SGR restocking	Monthly	NFRA	MoAIWD
Quantity of maize released	Maize quantity released for humanitarian assistance to affected people	Monthly	NFRA	MoAIWD
Number of SGR beneficiaries	Number of people who receive food assistance through SGR disbursement	Quarterly	WFP	DoDMA
Roads rehabilitated, Rural	Kilometers of all rural roads reopened to motorized traffic, rehabilitated, or upgraded under the project. Rural roads are roads functionally classified in various countries below Trunk or Primary, Secondary or Link roads, or sometimes Tertiary roads. Such roads are often described as rural access, feeder, market, agricultural, irrigation, forestry or community roads. Typically, rural roads connect small urban centers/towns/settlements of less than 2,000 to 5,000 inhabitants to each other or to higher classes of road, market towns and urban centers.	Annual	PIU Progress Reports	MoTPW/ Roads Authority

Number of additional classrooms built or rehabilitated at the primary level resulting from project interventions.	This indicator measures the number of additional classrooms constructed or rehabilitated at the primary level through the Bank-funded program. In most cases, it is expected that the baseline value for this indicator will be zero (‘0'). The baseline might not be zero, for example, for an additional financing IL operation. This indicator will be used to calculate the "decline in shortfall of classrooms at the primary level". TTLs should report on the progress of this indicator only if it is relevant to the project, that is, if the project aims to reduce the shortfall of classrooms at the primary level. Please visit the EdStats database to view the shortfall of classrooms at the primary level by country.	Semi-annual	PIU Progress Reports	MLGRD/ MoEST/Districts
Health facilities constructed, renovated, and/or equipped (number)	This indicator measures the cumulative number of health facilities constructed, renovated and/or equipped through a Bank-financed project.	Annual	PIU Progress Reports	MLGRD/ MoH/Districts
Improved Damage Assessment Guidelines, Templates and SOPs for Damage Assessment	a) Review of national damaged assessment guidelines; b) SOPs for PDNA execution; c) strengthening of MASDAP; d) guidance notes and templates for data collection	Annual	PIU Progress Reports	DoDMA
DoDMA and Civil Protection Committees trained in Emergency Response	a) Training DoDMA staff and Civil Protection Committees: b) identification of technical enhancement needs for EOCs	Annual	PIU Progress Reports	DoDMA
Disaster resilient designs for the education, health and roads sectors	Development of Disaster-resilient design standards for schools, health facilities and roads	Annual	PIU Progress Reports	DoDMA

ANNEX 2: DETAILED PROJECT DESCRIPTION

Malawi Floods Emergency Recovery Project (MFERP, P154803)

Introduction and Summary

98. The MFERP supports the Government of Malawi's (GoM) broader floods recovery program by providing immediate support to the affected populations in restoring their livelihoods, as well as rehabilitating critical infrastructure essential for the restoration of public service delivery and sustainable economic recovery in the flood-affected areas. The Project will also seek to increase the institutional capacity of the Government's post-disaster recovery system and promote long-term resilience.

99. The various Project components have been designed in keeping with the corresponding sector damage and loss estimates, recovery strategies and needs identified under the Post Disaster Needs Assessment (PDNA), coordinated and being finalized by the Government and the Bank in close consultation with the United Nations and European Union. The MFERP components are considered to be part of a broader, multi-sectoral and programmatic Disaster Recovery Framework (DRF) that needs to be developed by the Government upon the completion of the PDNA, to guide and oversee recovery planning and its implementation. The table below provides a summary of the four MFERP components.

Table 2.1: Project Components of MFERP

Project Components	Bank Financing (US$ M)
Component 1: Livelihoods Restoration and Food Security	29.0
Component 2: Infrastructure Rehabilitation and Reconstruction	43.0
Component 3: Promoting Disaster Resilience	4.0
Component 4: Program Management	4.0
Total Costs	80.0

Component 1: Livelihoods Restoration and Food Security – (US$29 million)

100. This component includes the provision of: (a) immediate livelihood support to the predominantly agricultural community and households in the flood-affected areas and; (b) food support to meet the critical needs of the affected populations by enhancing and restocking the Government's Strategic Grain Reserve (SGR).

Sub-Component 1.1: Labor-Intensive Community Infrastructure Repair – (US$14 million)

101. Agriculture and Livelihoods Loss Estimates and Recovery Strategy under the PDNA: According to preliminary estimates available through the PDNA, around US$74 million worth of income losses are estimated to have been caused by the disaster, of which approximately US$65 million constitute losses in agricultural productivity. These numbers reflect the 146,000 smallholder households that have been hit by the disaster as well as the 4 million working person-

days lost in the non-farm sectors. In view of these substantial agricultural losses, the PDNA livelihoods restoration strategy recommends a targeted livelihoods recovery program that provides short-term employment and supports sustainable livelihoods for the agricultural community. The PDNA includes labor-intensive community infrastructure restoration schemes that in return provide agricultural inputs and other in-kind assistance to farmers. The PDNA also proposes micro-enterprise rejuvenation and development to provide sustainable employment to non-farm workers. However the MFERP will only focus on providing agricultural inputs and other in-kind assistance in return for labor.

Table 2.2: PDNA Livelihoods Loss and Recovery Estimate

Livelihoods Sector	Losses (US$)	Needs of Targeted Population for Lower 33rd Percentile – US$
Agricultural Income Loss	65.4	21.6
Non-farm Income Loss	8.3	2.7
Total Income Loss	73.7	24.3

Table 2.3: PDNA Reconstruction and Recovery Estimate for the Agriculture Sector

Agriculture Recovery and Reconstruction Needs	Estimated Cost (MWK M)	Estimated Cost (US$ M)
Crops	22,526	51.8
Fisheries	541	1.2
Irrigation	3,355	7.7
Livestock	8,208	18.9
Total	**33,959**	**79.6**

102. Sub-component Description: This sub-component will provide immediate assistance for livelihood-supporting and income-generating activities. It will enable beneficiaries to meet their basic requirements by providing farm inputs for the next season and other in-kind assistance in return for their participation in labor-intensive community infrastructure repair schemes. It will also provide a cash for work option following the MASAF modalities. These interventions will create jobs while simultaneously repair and restore community infrastructure as well as indirectly regenerate farmers' agricultural production. This will allow beneficiaries to meet their food and basic household needs, while the restoration of community assets will also support more diversified and sustainable livelihoods.

103. This sub-component will be comprised of costs for the inputs (vouchers), the materials/implements to be used during works, additional small works element for which skilled labor needs to be contracted locally, and district administration and technical oversight. The largest percentage of costs (70 percent) will go to wages/inputs in keeping with the objective of the program, leaving the balance to cover the costs of conducting the technical feasibility studies; purchase of inputs (such as cement, seedlings and hand tools); training of project management committees; hiring and training foremen and forewomen; and the transaction costs of the voucher system (printing and distributing vouchers to the workers and the handling charges for distributors and retailers/dealers).

104. Approach: This sub-component will broadly adopt the Inputs for Assets (IFA) approach that has been successfully implemented in Malawi for over the past 12 years, and blend in elements of the equally successful Malawi Social Action Fund (MASAF) approach with regard to cash-for-works elements. It has been designed as a hybrid between traditional farm input subsidy in Malawi and traditional public works programs. Customarily, participants work for one month (20 days) on a community asset and, in return, receive a voucher for farm inputs with the objectives of reducing food insecurity and improving rural infrastructure and developing public assets.

105. Eligibility Criteria: Assets to be targeted for IFA activities under the MFERP will meet the following eligibility criteria:

- Repair and reconstruction of flood-damaged community assets or new assets that increase resilience to future flooding and that have wide public benefit. These could include rural feeder roads; soil conservation and afforestation works; storm and road drainage works; reservoirs; embankments; market collection centers; community grain banks; and small-scale irrigation.
- The asset must address the priority needs of the majority of the community.
- The asset must render improved services to the beneficiaries and contribute toward poverty reduction.
- The asset must be suitable for reconstruction or rehabilitation using simple and appropriate labor-based methods that are gender sensitive.
- The size of the task must be suited to the available population within the work catchment.
- The asset must be designed to Building Back Better as relevant and this is to be screened with the flood risk management guidelines and planning under the Shire River Basin Management Program (SRBMP).
- The unskilled labor proportion is at least 50 percent of the cost of the works.
- Assets for private use will be excluded.

106. Selection of Schemes: The selection of specific infrastructure projects will follow established procedure with the additional requirement that they will be screened against the Flood Risk Management Action Plan of the SRBMP, which provides a framework for flood activity for the Shire as well as the draft national flood risk management guidelines, where relevant.

107. Coordination with MASAF: The MFERP will also work in close collaboration with MASAF throughout project implementation to ensure that it adapts MASAF experiences to the extent possible. In an effort to ensure that livelihoods are built back better, the Project will also provide MFERP beneficiaries with access to any existing MASAF mechanisms on enhancement of crop yields and crop diversification.

Sub-Component 1.2: Restocking of the Strategic Grain Reserve (SGR) – (US$15 million)

108. Following the floods, the Government released 14,000 metric tons (MT) of maize from its SGR to quickly provide food assistance to the affected and displaced populations. However, households in the flood-affected districts who have lost their current harvest will be in need of food assistance throughout the year until the next cropping season. Some farming families will be able to partially recover their productive capacity with support provided under the IFA program and will either grow cereals or legumes using residual moisture and irrigation.

109. Sub-component Description: An estimated 150,000 to 200,000 households could be in need of food assistance for part or all of next year. It is therefore anticipated that an additional 61,700 metric tons (MT) of maize is required to be released from the SGR for providing food assistance to flood-affected people over the next 10 months. To maintain the SGR at its optimal level, the Project will contribute to its replenishment for an estimated amount of 50,000MT. This amount is based on the current maize market trends and a simulation of various quantity, supply and price scenarios. The corresponding estimated cost of the SGR restocking under the MFERP has been factored into the project cost estimates as well as project results monitoring indicators. This quantity is however adjustable depending on prices during the periods of procurement. Purchase of maize will be done through the existing national mechanisms in compliance with the Bank's guidelines for procurement of goods. Release of maize for food assistance will follow existing procedures based on the PDNA and the Malawi Vulnerability Assessment Committee (MVAC) estimates. Distribution will be done through the existing modalities using the World Food Programme (WFP) under the supervision of the Department of Disaster Management Affairs (DoDMA). A study on the revision of the SGR management modalities financed under the under the ongoing Agriculture Sector Wide Approach Support Project (ASWAp-SP) will also help determine appropriate procurement and operational procedures.

110. The restocking of the SGR will utilize existing government mechanisms and will be under the direct supervision of MoAIWD and the National Food Reserve Agency (NFRA), as the managing entities of the Reserve. To ensure value-for-money, the following procurement channels or auction mechanisms could be used:

- Direct procurement by NFRA: NFRA organizes maize purchases several times a year to restock the Reserve and has experience in the maize commodity market.
- Agricultural Commodity Exchange for Africa (ACE): ACE is a spot and forward market commodity exchange that has adopted widely used regional commodity quality and trading standards. Supported by USAID, ACE is known in Malawi for successfully promoting the warehouse receipt system that offers market opportunities to small local traders and farmer organizations and cooperatives. ACE is already used on a regular basis by various institutions, including the World Food Programme (WFP), and has been successfully utilized by bilateral donors (Irish, Norway and Flanders Co-operations) for grain reserve restocking.
- Auction Holdings Limited Commodity Exchange (AHCX): AHCX is a recently established subsidiary of the Auction Holdings Limited that has more than 70 years of experience in tobacco auction trading. AHCX is now active on the private trading of agricultural commodities, including maize and other traded legumes such as groundnuts and soya beans.

Component 2: Infrastructure Rehabilitation and Reconstruction – US$43 million

111. This component will finance the reconstruction and rehabilitation of selected critical public infrastructure destroyed or damaged by the floods. This will include access, irrigation, social, flood protection, water resources management and Water, Sanitation and Hygiene (WASH) infrastructure, demarcated into the subcomponents described below.

112. This component will generally employ contractor-built approaches for reconstruction and rehabilitation, complementing the labor-intensive program under Component 1. These investments will be guided by sector Building-Back-Better standards, such as right sizing and right siting, as well as the Flood Risk Management Action Plan under the SRBMP. These will be technically screened to ensure adequate flood resistant designs.

Sub-Component 2.1: Reconstruction and Improvement of Roads and Bridges – (US$24 million)

113. Sub-component Description: This sub-component will support the reconstruction and improvement of selected critical access infrastructure, including secondary roads, bridges and other drainage structures.

114. Transport Sector Damage Estimate and Recovery Strategy under the PDNA: Existing transport sector challenges have been aggravated by the floods, which have washed away bridges, drainage structure and road sections, thereby isolating people from their socio-economic amenities, including schools, hospitals and others. The effect of the floods on road infrastructure was also felt when relief items were failing to reach their intended victims, causing them to be delivered by air transport. The majority of the unpaved network lies in rural areas where the flood disaster has had the strongest effect. The Lower Shire has been the most affected. The affected network is comprised of a total of approximately 1,200km, of which about 7km are main roads, 214km are secondary, 360km are tertiary, and 573km are district and community roads. This represents 7 percent of the whole network in Malawi. The table below shows a summary of the damage caused by the floods on the road infrastructure in the 15 badly hit districts.

Table 2.4: Damage and Loss on Road Infrastructure

	Roads (Km)	**Bridges (#)**	**Culverts (#)**	**Drifts (#)**
Partially damaged	872.05	64	153	331
Totally Damaged	344.03	121	312	1009
Total	**1216** (*rounded to 1200 in text*)	**185**	**465**	**1340**

Table 2.5: PDNA Estimate of Damages to the Transport Sector

PDNA Estimate of Transport Damages and Needs (In Million)							
Roads				**Bridges**	**Culverts/ Drifts**	**Total (MWK)**	**Total (US$)**
Primary roads	**Secondary Roads**	**Tertiary Roads**	**District Roads**				
2.8	10.5	194.7	193.9	11.5	665.8	26	60

115. Rehabilitation and Reconstruction of Secondary Roads and Associated Drainage Structures: The currently available version of the PDNA estimated that a total of 213km of secondary roads were affected, of which more than 100km is comprised of a single road (S151 and S152) in the Lower Shire in Chikwawa and Nsanje districts, amounting to an estimated cost of US$24 million. This sub-component will support the reconstruction of selected critical access infrastructure, including secondary roads, bridges and other drainage structures. This will include the reconstruction and improvement of approximately 90km of secondary roads, as well as 780m

of bridges (including drainage structures) that were either partially or totally destroyed during the floods.

116. Since these roads are routinely washed away during the rainy season, the Project will build these roads to improved standards to make them more resilient to floods as well as offer a more sustainable solution for their future operation and maintenance. This will include the rehabilitation and reconstruction of drainage structures, such as bridges, that will be designed for enhanced structural stability and to ensure resilience against similar future disasters. The Project will also factor in design issues for roads in flood-prone areas such as: (i) the importance of adequate slope protection or road embankment works so that flooding does not undercut the road structure; and (ii) consideration for the use of concrete pavements in the most flood prone areas, which will significantly reduce long term maintenance costs.

117. The above are, however, notional estimated amounts and eventual utilization of funds under this component will factor in subsequent prioritization exercises and ground surveys by the Government. This subcomponent also retains the flexibility of funding the repair and rehabilitation of other roads (including primary, tertiary, district and community roads) if subsequently agreed between the Bank and GoM. Other than reconstruction of secondary roads, and if needed, part of the funding could be used for repairs of critical sections for other types of damaged transport infrastructure as included in the current version of the PDNA.

118. The above works will be implemented by the Roads Authority and the Road Fund Administration (RFA), which are also currently implementing works under the ongoing ASWAp-SP Roads Component as well as the upcoming Southern Africa Transport and Trade Facilitation Programme (SATTFP).

Sub-Component 2.2: Irrigation and Rural Water Supply and Sanitation – (US$5 million)

119. Flooding in a number of tributaries to the Shire and Lake Chilwa caused extensive damage to irrigation schemes' headworks, flood protection bunds, main canal sections, drains, and in some cases, in-field infrastructure. The current version of the PDNA also assessed damages to a large number of water supply and sanitation schemes, pipes, wells, embankments, drainage structures and dams for a total value of US$6.1 million.

120. Sub-component Description: This sub-component will fund the operational restoration of selected and prioritized irrigation and water supply schemes that have been destroyed or damaged by the floods. This will entail the design, supervision, repair and rehabilitation of:

(a) *Critical Irrigation Schemes and Infrastructure (US$3.5 m)*: This can include headworks, flood protection bunds, main canal sections, drains and in-field infrastructure. All of the irrigation schemes proposed to be rehabilitated are community infrastructures that are smallholder farmer managed and range from mini schemes (below 10 hectares) to about 400 hectares. Permanent repair will be required especially for recently constructed and revived schemes that were showing high productivity and have incurred a significant setback.

(b) *Water Supply and Sanitation Schemes and Infrastructure (US$1.5 m)*: This can include water intake structures, water treatment plants, conveyance systems, storage systems, distribution networks, pumping stations, wells and boreholes.

121. Repairs under this sub-component shall be prioritized based on the damage assessment above and will be refined prior to implementation in consultation with the Government. They will focus on revitalizing the area, leading back to high value production as soon as possible. They will also prioritize schemes where relatively small repairs unlock large productive areas quickly, and where performance of management by Water User Associations (WUA) has been good. Since many of these schemes have received integrated support on scheme management, marketing and farmers' organization over the past years under different programs, the MFERP focuses only on physical repairs to infrastructure (canals, bunds, roads, buildings, drains and headworks) that are a priority and beyond the ability of WUAs to repair.

Sub-Component 2.3: Water Resources Management – (US$6 million)

122. Summary of Damages to Water Resource Infrastructure and River Banks: This sub-component addresses the fact that the major flooding created a situation on the ground that is several times larger in magnitude than assessed during the Integrated Flood Risk Management Plan (IFRMP) formulation, with the presently available PDNA results showing that 90 percent of river embankment protection was lost to floods. The severe flooding of the Ruo Basin – a tributary that is commonly a significant contributor to flooding in the Lower Shire due to steep sided valleys and headwaters of the upper catchments – caused it to switch to a new channel by cutting across the railway line and flowing northeast into Elephant Marsh. The new situation puts the region at risk of future flooding, transport and lack of access to this part of the country. The river can be trained back but this can only happen when waters have subsided and will need to be carefully studied. The PDNA assessed widespread damage and the overall flood risk assessments have identified catchment degradation, high sedimentation rates and riverbank degradation as critical factors contributing to the devastating impact of the floods.

123. Sub-component Description: This sub-component will finance flood mitigation works for the Ruo Basin of the Shire River, including: (a) river training works; (b) river bank protection, afforestation of river banks and localized embankment repair works in critical flooding rivers; (c) creation and restoration of storm-water drainage; (d) restoration of riparian forests; and; (e) flood protection bunds around critical infrastructure.

124. These works will complement the activities carried out under the community infrastructure schemes of Component 1.1 and will respond to the requirements of the Flood Risk Management Action Plan as identified under the Bank-funded SRBMP. The SRBMP will assess the needs and advise on implementation modalities. This will also enhance the MFERP, as the Project will be able to leverage support structures already in place, including flood modeling; early community plans; flood risk management guidelines; technical assistance in the form of an implementation service provider which can be a technical clearing house for water-related investments; hydromet systems; early warning system design; and mapping.

Table 2.6: PDNA Recovery and Reconstruction Needs for Water

Reconstruction Needs for Water Management	Estimated Cost (MWK M)	Estimated Cost (US$ M)
River Training	135	0.3
Bank Protection and Flood mitigation	8,500	19.6
Total	**8,635**	**20**

Sub-Component 2.4: Rehabilitation and Reconstruction of Education and Health Facilities – (US$8 million)

125. Overview of Education Sector Damages and Needs: According to present PDNA estimates, 82 classrooms (in primary and secondary schools) were totally damaged, while 420 classrooms were partially damaged and 34 suffered minor damages. The total replacement cost amounts to US$1.6 million. Learning materials were lost as well. This includes textbooks and exercise books with a total replacement cost of approximately US$690,000 as well as furniture losses amounting to US$2 million.

Table 2.7: Reconstruction Needs for Education Sector

Education Reconstruction Needs	Estimated Costs (MWK M)	Estimated Costs (US$ M)
Primary Schools	815	18.7
Secondary Schools	25	0.5
Tertiary Schools *	-	-
Total	**840**	**19.3**

* No Tertiary Schools were reported as damaged during the PDNA.

126. Overview of Health Sector Damages and Needs: The floods affected health facilities in six districts, with two public health facilities being fully destroyed in Ntcheu (Masasa and Namisu dispensaries). In addition there were 20 health facilities that were partially damaged; of these, 18 were primary care facilities (all public) and two were secondary care level facilities (one from CHAM). In Chikwawa and Zomba, some facilities are inaccessible due to damaged bridges and roads. Health centers in the affected areas also face problems with health workers being absent, as their homes have been affected and they have lacked medical supplies to cope with the increased needs of the displaced populations.

Table 2.8: Reconstruction and Recovery Needs for Health Sector

Health Recovery and Reconstruction Needs	Estimated Cost (MWK M)	Estimated Cost (US$ M)
Recovery Needs	4,600	11
Reconstruction Needs	1,900	4.5
Total	**6,500**	**15.5**

127. Sub-component Description: This sub-component will primarily include the rehabilitation and in-situ reconstruction of a proportion of the schools and health facilities damaged or destroyed by the floods. In line with present PDNA results, the sub-component will seek to reconstruct and restore the functionality of damaged schools and health facilities (including their upgrading) as well as finance the replacement of school learning materials, medical equipment and medical

supplies. In some cases, facilities in high-risk locations will be rebuilt in less vulnerable areas and schools and health facilities will double up as evacuation centers. This sub-component will also incorporate the element of Building Back Better, such as right sizing and right siting, as well as promoting disaster preparedness and risk reduction activities. In addition to the above reconstruction and major rehabilitation, and if needed, part of the funding could also be used for repair of partially damaged education and health facilities.

128. Adequate provisions will also be made for WASH facilities and improvement in sanitation standards of schools in these new settlement areas. The Project will take into consideration proper sanitation facilities in education structures, especially as they double up as safe havens/evacuation centers and should be able to accommodate periodic influx of flood-affected communities from the surrounding flood plain. Boreholes, water tanks, water kiosks and latrines should be integrated in the design of these centers. Several previous initiatives have proposed flood-resilient designs and construction techniques and lessons of these initiatives need to be considered in the coming reconstruction phase.

Component 3: Promoting Disaster Resilience – (US$4 million)

129. This component will provide technical assistance for: (a) strengthening the Government's post-disaster response and recovery systems; and (b) development and institutionalization of disaster resilient design standards for future infrastructure construction across multiple sectors.

Sub-Component 3.1: Institutional Strengthening of DoDMA – (US$2 million):

130. Sub-component Description: This sub-component will strengthen the institutional set-up and operational capacities of DoDMA for post disaster response and recovery.

a) *Sub-component 3.1.1: Improving Data Preparedness and Capacity Development for PDNA*: This will include: (i) review and improvement of the national damage assessment guidelines; (ii) formalization of institutional roles and responsibilities for PDNA, including Standard Operating Procedures (SOPs) for its execution; (iii) strengthening the role of the Malawi Spatial Data Portal (MASDAP) for damage data management and sharing; (iv) building the capacity of District Civil Protection Committees in the use of the PDNA methodology and; (v) development of guidance notes and data templates for data collection in the aftermath of disasters.

b) *Sub-component 3.1.2: Strengthening Recovery Planning and Implementation:* This will entail support for conducting reviews and diagnostics to improve: (i) existing national and local institutional frameworks for disaster recovery; (ii) institutional coordination and oversight mechanisms for recovery; and (iii) country budgetary and resource allocation processes, and financial management systems for recovery.

c) *Sub-component 3.1.3: Community Mapping and Land Use Planning:* This will include: (i) scaling up community mapping in selected communities of the disaster-affected districts; (ii) carry out a flood zone mapping based on existing topographic information and models developed as a background for the selection of flood mitigation measures and spatial

planning; and (iii) develop land use plans that factor Disaster Risk Management (DRM). Land use planning will entail collating the best available information on historical and existing land use, disaster scenarios, investment and land use incentives, land use management practices, and proposed major land use management changes.

Sub-component 3.1.4: Enhancing Disaster Response Systems: This will include technical assistance for (a) training District Civil Protection Committees in disaster response; (b) identifying technical enhancement needs of operational facilities, such as Emergency Operation Center (EOCs), and; (c) training DoDMA officers in successfully implementing DRM coordination and emergency response.

Sub-component 3.2: Multi-sector Design of Disaster Resilient Infrastructure – (US$2 million)

131. Sub-component Description: This sub-component will provide technical assistance to different departments and ministries for the development and institutionalization of disaster and climate-resilient design standards for infrastructure construction in the future. This could include the design of roads and drainage infrastructure and public buildings, such as schools, health facilities and government offices.

132. Railway Rehabilitation Study: A study under this component will also look at the viability of the rehabilitation of railway lines and rail bridges affected by the floods. This is especially true in the Southern Region where major damage can be seen across the line, bridges, culverts and protection works. The effects are much evidenced between Makhanga and Limbe, where the line was affected due to the Ruo River changing its course and creating a 100m gap. This study will therefore assess the economic viability of the rehabilitation of railway lines as well as measures to enhance their physical resilience to disasters. It will determine whether it is technically, operationally and financially viable to rehabilitate flood-affected lines or to explore alternative transportation solutions.

133. The sub-component will also provide technical assistance for: (i) a review and strengthening of guidelines for safer housing; (ii) development of an awareness raising strategy in respect to the use of safer housing construction guidelines and; (iii) development of national building codes and standards for private housing.

Component 4: Program Management – (US$4 million)

134. This component will finance the following activities: (a) incremental operating costs of the Project Implementation Unit (PIU); (b) technical designs for the reconstruction and rehabilitation of infrastructure included under various Project components; (c) supervision quality control and contract management of reconstruction and rehabilitation of sub-projects; and (d) audit, studies and assessments required under various Project components, including a social impacts monitoring exercise.

Table 2.9: Overall Cost Summary for all Project Components

Activity	Estimate (US$ M)	Category
Sub-Component 1.1: Livelihoods Support	**14.00**	
Procurement of Materials		Goods and Minor Works
Procurement and Redemption of Inputs		Goods
Sub-Component 1.2: SGR Restocking	**15.0**	
SGR Restocking		Goods
Component 1 (Livelihoods Restoration and Food Security) Total	**29.00**	
Sub-Component 2.1: Roads and Bridges	**24.00**	
2.1 Reconstruction and Improvement of Secondary Roads		Works
2.2 Reconstruction and Improvement of Bridges		Works
Sub-Component 2.2: Irrigation and Water Supply	**5.00**	
2.3 Irrigation – Works		Works
2.5 Water Supply Schemes – Works		Works
Sub-Component 2.3: Water Resources Management	**6.00**	
2.7 River Training – Works		Works
2.8 Selected River Bank Protection and Flood Mitigation Works		Works
Sub-Component 2.4: Schools and Health Facilities	**8.00**	
2.9 Rehabilitation of Schools with Improved Water Sanitation		Works
2.10 Provision of Learning Materials		Goods
2.11 Rehabilitation of Health Facilities		Works
2.12 Medical Equipment Replacement		Goods
2.13 Medical Supplies Replacement		Goods
Component 2 (Infrastructure Rehabilitation and Reconstruction) Total	**43.00**	
Sub-Component 3.1: Institutional Strengthening of DoDMA	2.00	Services
Sub-Component 3.2: Design of Disaster Resilient Infrastructure	2.00	Services
Component 3: (Promoting Disaster Resilience) Total	**4.00**	
4.1 Operational Costs of Project Implementation unit		Works
4.2 Construction Supervision and Contract Management		Works
4.3 Quality Control and External Audits		Services
4.4 Project Studies and Assessments		Works
Component 4 (Program Management) Total	**4.00**	
Grand Total	**80.00**	

ANNEX 3: IMPLEMENTATION ARRANGEMENTS

A. Project Institutional and Implementation Arrangements

135. The challenges faced by Malawi towards achieving effective and efficient flood recovery warrant the institution of dedicated arrangements for recovery planning and implementation at a central-programmatic level. However these arrangements must also rely upon and tap into existing delivery mechanisms for implementation at the sector and departmental levels. The overall implementation arrangements agreed for the MFERP are illustrated in the ensuing flow chart and further explained below.

Integrated Recovery Planning at a Programmatic Level

136. Need for an Institutional Locus for Programmatic Recovery Planning: The GoM has tasked DoDMA with providing advice on a programmatic, cross-sectoral framework of recovery interventions. DoDMA will thus have an advisory role in guiding the PIU in the development and implementation of a Recovery Framework that will help towards coordinating and planning floods recovery in an integrated and cohesive manner. DoDMA will thereby also serve as a convening forum and repository for multi-sector and programmatic recovery planning. However, it will not have a direct role in implementation other than providing technical oversight for Component 3. Sectoral and line-department focal points may also be designated to ensure that an inclusive process that incorporates elements of bottom-up planning merge together with central policy precincts towards shaping a holistic framework for cross-sectoral and programmatic recovery.

137. Process for the Prioritization and Sequencing of Recovery Interventions: DoDMA may consider setting up and heading an inter-departmental Prioritization Taskforce (PT) to sequence and prioritize activities across and within various sectors. The PT will work closely with the Project Steering Committee (PSC) to solicit policy decisions from Government and communicate them to the respective implementing entities for the various Project components. The above will require putting in place a cascading series of processes and functions for recovery planning including the development of: (a) a central vision for recovery; (b) policy frameworks for recovery; (c) inter-sectoral strategy and program development for recovery; (d) inter-sectoral prioritization and sequencing of recovery needs; and (e) sector-level recovery programs leading to projectization.

Project Administration Mechanisms

138. Project Steering Committee (PSC): The principal or apex decision-making body for the MFERP will be the PSC chaired by the Ministry of Finance, Economic Planning and Development (MoFED) and composed of representatives from the MoFED, MoAIWD, Ministry of Education, Science and Technology (MoEST), Ministry of Health (MoH), Ministry of Natural Resources, Energy and Environment (MoNREM), Ministry of Local Government and Rural Development (MoLGRD), Ministry of Transport and Public Works (MoTPW) (which includes the Roads Authority), Ministry of Lands, Housing and Urban Development (MoLHUD) and DoDMA. This committee will provide oversight for project implementation as well as central policy guidance as required on a periodic basis. DoDMA will act as the lead technical agency for the development of the Recovery Framework and sit on the PSC in an advisory role.

139. Project Implementation Unit (PIU): The existing PIU for the Bank-funded Irrigation Rural Livelihoods and Agricultural Development Project (IRLADP) will transition into a dedicated PIU for the MFERP. The IRLADP PIU is coming to an end in June 2015 and will be converted into the MFERP PIU. The IRLADP PIU is composed of government-contracted staff and its existing mandate and functions will be extended and adjusted in line with the requirements the MFERP through a notification to be issued by the GoM. IRLADP was chosen in order to take advantage of an existing and efficient project implementation structure for similar interventions and will remain housed within MoAIWD. The staff of the IRLADP/MFERP PIU will be responsible for overall project management, which includes coordination across implementing agencies and ministries, financial management, centralized procurement, inter-ministerial reporting arrangements, quality control, social and environmental controls and monitoring and evaluation.

140. Field Offices: The IRLADP/MFERP PIU will have field offices in Chikhwawa and Zomba, which are nearest to the most flood-affected areas in the Southern Region of the country. These offices will be staffed with regional Safeguard, Water Resources Specialists to better support district implementation of the Project activities.

141. PIU Staffing: IRLADP currently has 26 staff and will procure additional specialists according to the needs of each Project component under the MFERP. The additional staff will include a Roads Engineer, two Water Resources Specialists and a Procurement Assistant as well as additional regional support staff. IRLADP has submitted a detailed costing plan for the IRLADP/MFERP PIU, which includes operational costs, technical design, construction supervision, contract management, quality control, external audits and project studies and assessments.

Figure 3.1: Staffing Structure for the PIU

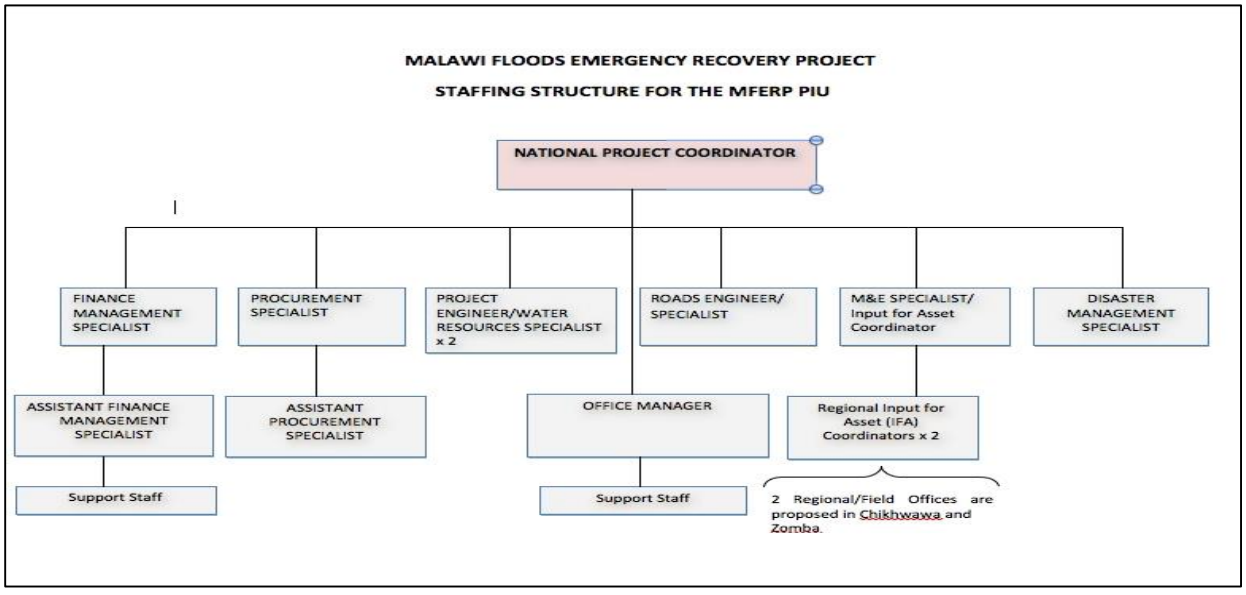
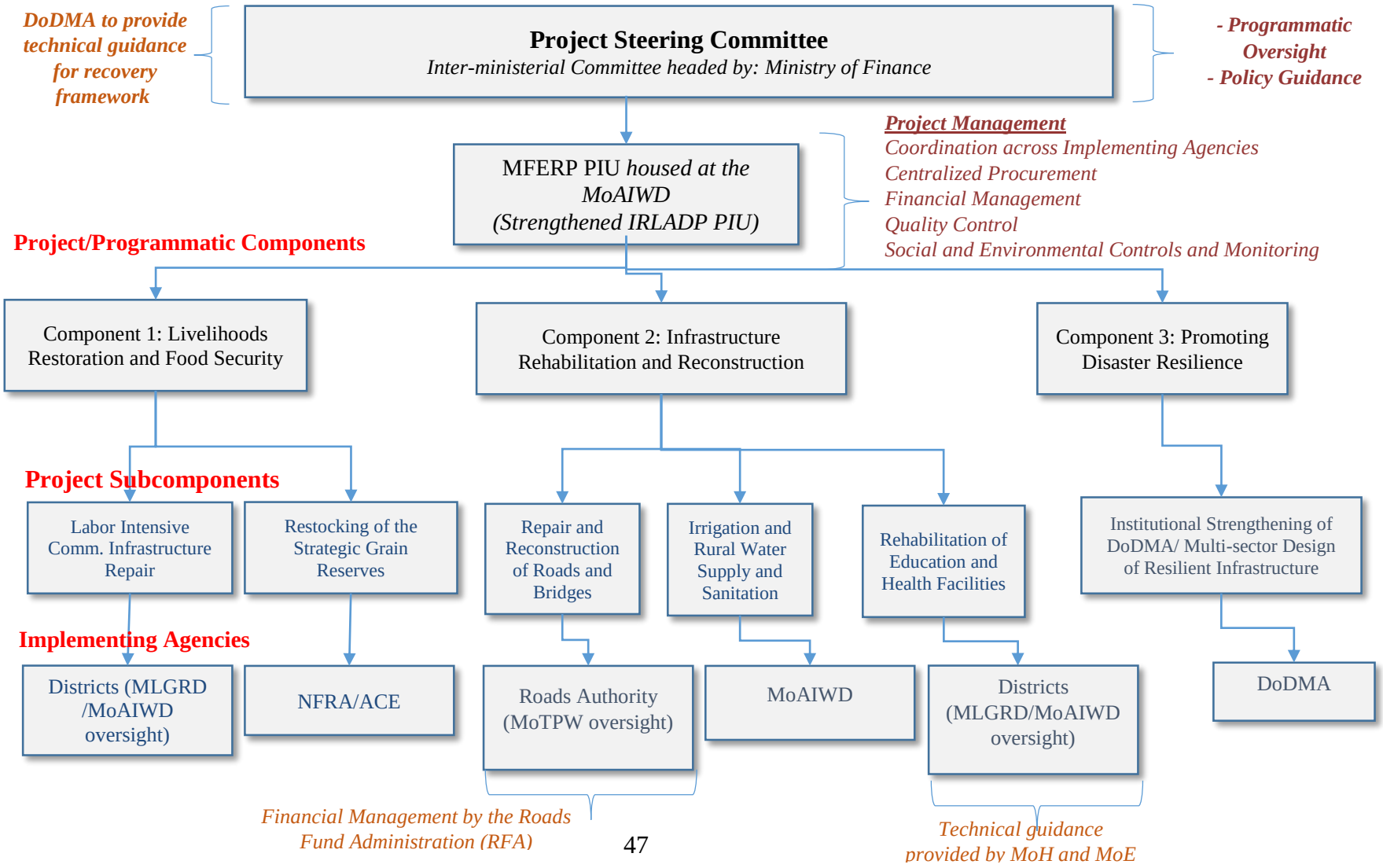


Figure 3.2: Overall Implementation Arrangements for MFERP
(Continuation and Strengthening of IRLADP PIU)



142. Component Level Implementing Units: Each component of the Project will be implemented at the line or district department level, overseen and guided by the relevant ministry. This is explained in the table below.

Table 3.1: Component Level Implementing Units

Components / Sub-components		*Functions of Component Implementing Agencies*
1)	**Livelihoods Restoration and Food Security**	
	1.1 Labor-Intensive Community Infrastructure Repair	The Districts will implement this sub-component under the oversight, coordination and guidance of the MLGRD.
	1.2 Restocking of the Strategic Grain Reserve (SGR)	MoAIWD and the NFRA will be responsible for various functions associated with the implementation of this sub-component.
2)	**Infrastructure Rehabilitation and Reconstruction**	
	2.1 Reconstruction and Improvement of Roads and Bridges	The Roads Authority under the guidance of the MoTPW will be in charge of the reconstruction and improvement of roads and bridges.
	2.2 Irrigation and Rural Water Supply and Sanitation	The relevant departments of MoAIWD, guided by the ministry, will be responsible for rehabilitating irrigation systems and rural water supply and sanitation schemes using third-party design and supervision engineers plus hired contractors.
	2.3 Water Resources Management	The relevant Department of Agricultural Extension Services and of the MoAIWD, guided by the ministry, will be responsible for implementing the interventions included under the water resources management sub-component. This builds on the technical guidance from the Flood Risk Implementation Service Provider hired under the MoAIWD as part of the coordination of the Shire River Basin Management Program.
	2.4 Rehabilitation and Reconstruction of Education and Health Facilities	The districts will implement this sub-component under the oversight, coordination and guidance of the MLGRD. The Ministries of Education and Health will provide technical guidance, particularly on quality and construction standards on a routine basis.
3)	**Promoting Disaster Resilience**	
	3.1 Institutional Strengthening of DoDMA	DoDMA will be responsible for undertaking or contracting the activities included under this sub-component.
	3.2 Multi-sector Design of Disaster Resilient Infrastructure	DoDMA will be responsible for undertaking or contracting the activities included under this sub-component.
4)	**Program Management**	The IRLADP/MFERP PIU will be responsible for overall project implementation, management and coordination, as well as also other activities included under this Project component.

Table 3.2: Allocation of Implementation Roles and Responsibilities

Sector	PIU	Line Ministry/Department
Roads: **Roads Authority & RFA**	✓ Quality and Process Oversight ✓ Procurement oversight ✓ Contract management oversight and controls ✓ Financial reporting ✓ Monitoring and evaluation	• Identification of roads • Preparation of designs • Preparation of bid documents • Procurement of contractors and supervision of consultants • Site Supervision & Technical Quality Assurance • Contract Management • Certification and Payment of works
SGR Restocking: **MoAIWD & NFRA**	✓ Procurement guidance and oversight for maize purchase ✓ Seek Bank no-objections ✓ Prepare payment documents ✓ Certify delivery of maize to project beneficiaries through independent means	• Identify procurement mechanisms and sources and advise on policy • Carry out procurement as per government procedures and under PIU oversight • Advise on quality determination • Ensure delivery of maize to the silos • Ensure transparent and proportionate distribution of maize to flood affected communities
Livelihoods Support: **MoAIWD**	✓ Planning for IFA ✓ Screening appraisals ✓ Verification of subprojects ✓ Verification of beneficiaries ✓ Consultation with communities and districts ✓ Procurement procedures ✓ No objections ✓ Input procurement ✓ Prepare Bid documents for inputs ✓ Certification of works and payment of contractors ✓ Quality control ✓ Monitoring and reporting	• Consultation with communities • Prepare BoQs • Identify supervising engineers • Supervise community procurement for local artisans • Supervise contractors • Certification of works
Irrigation, Water Supply, Water and Resource Management: **MoAIWD**	✓ Quality and Process Oversight ✓ Procurement of contractors and supervision consultants ✓ Seek Bank no-objections ✓ Contract management oversight and controls ✓ Financial reporting ✓ Monitoring and evaluation	• Identification of interventions and schemes • Preparation of designs • Preparation of bid documents • Site Supervision & Technical Quality Assurance • Contract Management • Certification and Payment of works
Health and Education: **MLGRD, Districts,**	✓ Quality and Process Oversight ✓ Procurement of contractors and supervision consultants	• Identification of interventions and schemes • Preparation of designs • Preparation of bid documents

MoH, MOEST	✓ Procurement of goods and services ✓ Seek Bank no-objections ✓ Contract management oversight and controls ✓ Financial reporting ✓ Monitoring and evaluation	• Participation in procurement of works, goods and services • Site Supervision & Technical Quality Assurance • Contract Management • Certification and Payment of works
Disaster Risk Management**: DODMA**	✓ Quality and Process Oversight ✓ Procurement of goods and services ✓ Seek Bank no-objections ✓ Contract management oversight and controls ✓ Financial reporting ✓ Monitoring and evaluation ✓ Certify progress reports ✓ Payment of consultants	• Development and operationalization of Recovery Framework for Government's overall Recovery Program • Identify areas of study • Develop ToRs • Supervise studies • Certify completion • Arrange and manage trainings/seminars/ workshops

Table 3.3: Implementing Agency per Sub-Component

Category as per Financial Agreement	Corresponding Subcomponent	Amount (US$)	Implementing Agency
(1) Farm Inputs Vouchers under Part A.1 of the Project	1.1	14,000,000	PIU
(2) Goods under Part A.2 of the Project	1.2	15,000,000	PIU
(3) Goods, works, non-consulting services, consultants' services, Operating Costs and Training under Part B.1 of the Project	2.1	24,000,000	RFA[8]
(4) Goods, works, non-consulting services, consultants' services, Operating Costs and Training under Parts B (except B.1), C and D of the Project	2.2, 2.3, 2.4, 3.1, 3.2, 4	27,000,000	PIU
TOTAL AMOUNT		**80,000,000**	

Special Implementation Arrangements for Component 1.1: Labor-Intensive Community Infrastructure Repair

District level

143. Within the affected districts, the District Executive Committee will appoint a technical committee with staff drawn from technical services housed within the respective district

[8] Please note that while the Roads Authority will be in charge of procurement, the RFA will administer project funds for sub-component 2.1.

administration offices, such as public works, forestry or land resources. The selection of staff will depend on the assets being constructed or rehabilitated (such as schools or bridges). The committee will oversee the technical appraisals, detailed costing and technical inputs during implementation. These activities may be contracted out to a qualifying NGO in districts where there are significant constraints on staff resources.

144. If the proposed activity is considered to be viable, the lead technical unit will prepare the bill of quantities and work schedule. The information will then be submitted to the IRLADP/MFERP PIU Officer based in the district using pre-agreed formats for approval.

145. An assessment of the technical feasibility of the proposed asset to be developed under the Input for Asset (IFA) program will be undertaken by staff from the relevant technical service, including desk and field studies and the preparation of detailed costing. The appraisal will include confirmation of the community's commitment to constructing or rehabilitating the asset and ensure that it represents one of the priority interests of the majority of the affected population within the Project focal area. The assessments are to be verified by field-based staff from the IRLADP/MFERP PIU.

Community Level

146. A Project Management Committee (PMC) will be democratically elected by the communities in the targeted areas to implement the component activities. The members will be residents of the area and chosen for their leadership qualities. They need not be drawn from among the participants of the IFA program. However, the carrying out of activities will follow the IFA approach. Using the IFA approach has the benefit of using a well-established project mechanism that is geared toward diversified support to the rural poor, has demonstrated efficacy and satisfactory progress as well as management and fiduciary controls and is therefore considered the appropriate channel for rapid rural response. The PMC will have at least ten members of whom at least 50 percent will be women. The holders of the principal positions must be numerate and literate. The membership of the PMC is voluntary and committee members will not receive remuneration. Keeping with the current practice in Malawi, village or group heads would not be members of the PMC. PMC members will be liable for de-selection if they do not follow the guidelines for selecting beneficiaries or procedures for distributing vouchers.

147. The role of the PMC is four-fold:

- Oversee the selection of workers using the relevant criteria;
- Supervise the work;
- Endorse the labor register for the preparation of voucher payments;
- Oversee the distribution of vouchers to workers.

148. Once the component-specific activity tasks are quantified in detail, the number of local laborers required to complete the work within the given timeframe are estimated. People within the Project focal area will be informed about the nature of the work, duration, form of remuneration and criteria that will be used to select beneficiaries. If they are interested in being considered for such employment, they will be informed of where, when (time and date) and with whom (for example, the PMC) they may register their interest. The PMCs will prepare a list of qualifying

laborers. A grievance redress mechanism is in place under the Malawi Social Action Fund (MASAF) and IRLADP and will be extended to this program as well.

149. The responsibility for the overall execution of the tasks lies with the foremen/women, the workers' committee and the PMC. Technical oversight is provided by the district technical services / NGO and the contractor (if hired). The work norms will conform to agreed standards. The system will also be flexible to accommodate short periods of workers' non-availability. Upon the completion of work, an asset management committee will be formed to take over formal responsibility for operating and maintaining the asset.

150. The procurement procedure will follow established IFA processes with the District Technical Unit securing quotations from suppliers and contractors and the District Project Officer overseeing the process.

Categorization of Schemes

151. The damaged schemes including those rehabilitated by IRLADP will be categorized according to size (hectares) of the scheme as follows:

152. Mini Irrigation Schemes – 10 hectares: Mini schemes are small, and therefore, the investment is basic. In many cases, it is only the water intake that is made out of concrete and the rest of the field canals are earthen. In some cases, the intake and the main canal are brick lined and the rest of the canals (secondary and tertiary) are earthen. Most of the damage therefore will be expected at the water intake and that is where external assistance in terms of repair would be expected.

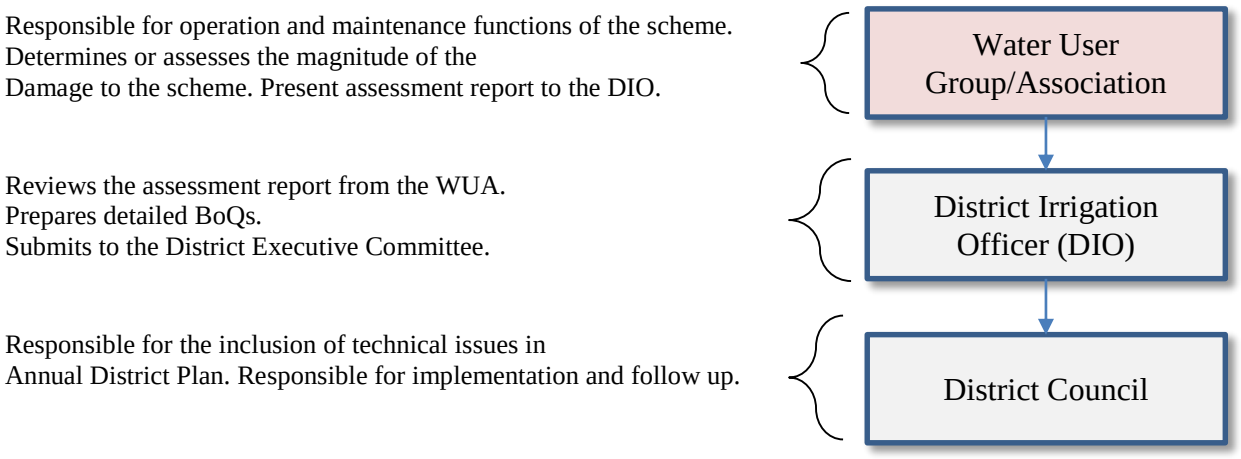
153. Small-Scale Irrigation Schemes – 10-50 hectares: The small-scale irrigation schemes have substantial investments covering the intake, main canal and in many cases the secondary canals. The intake usually is complex requiring more attention by Water User Associations (WUA) in terms of operation and maintenance work. Organizational structure in small-scale irrigation is more elaborate because of the size of the scheme and number of farmers involved.

154. Large-Scale Schemes – 50 hectares and above: These schemes attract relatively large investments and any damage to both intake and in-field structures mean high cost. Fortunately, scheme organization is generally better organized to orient activities toward maintenance.

155. The role of the WUG/A in scheme rehabilitation or reconstruction is to determine the level of damage that has occurred to the schemes or related sections. When this determination or assessment is completed, the community invites the District Irrigation Officer (DIO), who then reviews the assessment report and prepares the Bills of Quantities (BoQ), which is then submitted to the District Executive Committee for approval and inclusion in the district's Annual Plan. Considering that the schemes damaged have already been identified, communities or WUA/G should be approached to properly determine the areas of damage that can be repaired by outside institutions (through project resources) and the parts of the damaged scheme that can be repaired by the community itself. The WUG/A will then approach the DIO to produce BoQs for submission to the district committees. The district will submit the BoQs to the DOI and PIU for cost estimates to determine the method of repairing the scheme. If upon assessment and costing it is determined

to engage a contractor, then bid documents will be prepared and the appropriate procurement procedures will be followed to engage both a supervising engineer and contractor. If they are small works, local contractors or artisans will be recruited through community contracting.

Figure 3.3: Illustration of Processing Schemes from the Community Level to the District Level



B. Financial Management, Disbursements and Procurement

Financial Management

156. Budgeting arrangements: The budgeting processes will be informed by the Project's annual work plans that will be based on the PAD as agreed upon between the Bank and the GoM. The IRLADP/MFERP PIU will manage the budget processes for the Project. The budget will be incorporated into the Sun accounting package and TOMPRO package used by the Roads Fund Administration (RFA) and IRLADP (to be migrated to the MFERP PIU) respectively.

157. Accounting arrangements: The computerized systems used by both RFA and the IRLADP/MFERP PIU have a chart of accounts that will capture Project components and disbursement categories. In both cases, procedures and policies are documented in accounting manuals.

a) Internal control and internal auditing arrangements: RFA will use their internal audit department to review the financial management of the components. The department will report to a committee of the Board of RFA. RFA contains an internal audit function and will use this mechanism to regularly report compliance to management. Internal audit function under the IRLADP/MFERP PIU is done by MoAIWD's internal audit unit.
b) Internal control systems: Policies, procedures and internal controls will be maintained according to the existing manuals. The recent audit of IRLADP indicates a number of control and accountability issues that must be addressed in order to improve the financial management arrangements. The audit report of RFA shows that procedures and controls are being adhered to as prescribed.

c) Financial reporting arrangements: Both RFA and the IRLADP/MFERP PIU will produce quarterly unaudited Interim Financial Reports (IFRs) for the Designated Accounts (DA) and related project accounts. The IRLADP/MFERP PIU will be responsible for the consolidation of the reports. The IFRs are to be produced on a quarterly basis and submitted to the Bank within 45 days after the end of the calendar quarter. The reporting requirements will be incorporated into the accounting packages to enable automatic generation of the IFRs. The IFRs submitted to the Bank will have a section on financial reporting and disbursement containing the following:

d) Reporting section includes:
   - Statement of sources and uses of funds; and
   - Statement of uses of funds by Project activity/component.

e) Disbursement section includes:
   - DA activity statement;
   - Bank statements for both the designated and project accounts;
   - Summary statement of DA expenditures for contracts subject to prior review; and
   - Summary statement of DA expenditures not subject to prior review.

158. The IRLADP/MFERP PIU will also prepare the Consolidated Project's annual audited accounts/financial statements that must be submitted to the Bank within six months after the end of the accounting year i.e. no later than December 31. RFA will submit to the IRLADP/MFERP PIU in good time annual financial statements for expenditures under part of Component 2 of the Project for which it will be responsible. The Project will prepare its accounts in accordance with international public sector accounting standards. The accounts/financial statements will be comprised of:

a) A Statement of sources and uses of funds/cash receipts and payments, which recognizes all cash receipts, cash payments and cash balances controlled by the PIU and separately identifies payments by third parties on behalf of the entity.
b) The adopted accounting policies and explanatory notes: The explanatory notes will be presented in a systematic manner with items on the statement of cash receipts and payments being cross referenced to any related information in the notes.
c) A management assertion that Bank funds have been expended in accordance with the intended purposes as specified in the relevant Bank legal agreement.
d) Auditing arrangements: the IRLADP/MFERP PIU, RFA and the Bank will agree on the ToRs to be used for recruitment of private sector external auditors. The audited financial statements will be submitted to the Bank within six months after the end of the fiscal year along with the management letter.

Disbursements

159. The total amount available to the Project is split in terms of an IDA Credit (Credit # 5636 MW) of US$40 million and an IDA Grant (Grant # D058 MW) of US$40 million. Withdrawal applications will reflect this 50:50 split of project finances across the IDA Credit and the IDA Grant. Accordingly, in each such application, the Government will withdraw equal sums of money from the Credit and Grant allocations of the Project.

160. Funds flow arrangements: Funds flow arrangements for the Project are as follows:

a) The IRLADP/MFERP PIU and RFA will each separately open a US$ DA and Malawi Kwacha operating account with commercial banks acceptable to the Bank. The IRLADP/MFERP PIU will manage funds for Components 1, 3 and 4, while RFA will manage funds for Component 2 with the exception of the sub-component 'Irrigation and Rural Water Supply and Sanitation', which will remain under the IRLADP/MFERP PIU fund management.
b) The Project will prepare a six-month cash flow forecast based on agreed work plans then submit a withdrawal application request to the Bank (IDA) through MoFED. The six-month forecast will be revised quarterly and the resultant funds requirements will be used to replenish the DAs.
c) Project expenditure can be paid from either the DA or Project account.

161. IDA disbursement methods:

a) Special commitments and direct payments: Special commitments using irrevocable letters of credit will be used as well as direct payments to suppliers for works, goods and services upon the borrower's request.
b) Advances: The Project will receive funds into the DA using the report based disbursement method. IDA will make the initial disbursement to the Project after receiving a withdrawal application with a six months cash flow forecast. This withdrawal application should be prepared within one month after project effectiveness. Thereafter, IDA will disburse into the respective DA based on quarterly IFRs, which would provide actual expenditure for the preceding quarter (three months) and cash flow projections for the next two quarters (six months). The IFR will be reviewed by the Bank's Financial Management Specialist (FMS) and approved by the Task Team Leader before the Bank's loan department processes the request for disbursement.
c) Reimbursements: The Government can request a reimbursement in cases where Project activities have been pre-financed. Activities most likely to be eligible for retroactive financing include SGR restocking and the livelihoods support subcomponents of the Project.

162. The IDA Disbursement Letter contains details concerning the aforementioned disbursement arrangements.

Procurement

163. The PIU will be responsible for the procurements of all goods, works and services under the Project except those under the road component which will be procured by the Roads Authority. Public procurement in Malawi is governed by the Public Procurement Act of August 2003. The Act requires procurement regulations to provide, inter alia, a threshold for the use of various procurement methods, bidding and bid evaluation procedures and contract management. The law further established the Office of Director of Public Procurement (ODPP) with oversight for public procurement. The Office became operational in 2005 with the appointment of the Director and other substantive officers. The Government also established Internal Procurement Committees (IPCs) and Specialized Procurement Units (SPUs) in all ministries and departments as the responsible bodies for procurement and award of contracts in the ministries and departments.

Procurement regulations and desk instructions have been distributed to all procuring entities. The ODPP has also established a dedicated website for the sharing of information, placing of adverts and notification of awards to the general public.

164. The ODPP issued a number of Standard Bidding Documents (SBDs), the use of which is mandatory, covering works, goods, and services. The Office further issued desk instructions, Request for Proposals (RFPs) and forms of contract for consulting services as well as a request for quotations for goods, works and services which are consistent with Bank Guidelines and may be used under National Competitive Bidding (NCB) procedures with due attention to some issues related to clarity of the evaluation criteria, award to the lowest evaluated responsive and qualified bidder, participation of foreign bidders, domestic preference and advocacy for artificial division of lots to promote participation of small enterprises in national competitive bidding and the registration or classification that should not be used as criteria for bidding.

165. Procurement of goods, works and services under the proposed MFERP will be carried out in accordance with the Bank's "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by the World Bank Borrower" dated January 2011, Revised July 2014 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers" dated January 2011, Revised July 2014 (Consultants Guidelines) and the provision stipulated in the Financing/Legal Agreement. The Malawi Public Procurement Act of August 2003, Regulations and Desk Instructions will be used for all procurements below prior review thresholds as agreed in the Procurement Plan.

166. In addition to the use of Bank Guidelines, the Project will also be carried out in accordance with the provisions of the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 ("Anti-Corruption Guidelines").

167. The proposed Project has been triggered by emergency situation (OP 10.00) and therefore, paragraph 20 of OP 11.00 procurement under emergency situation using simplified procurement procedures will apply. The general description of various procurement methods under different expenditure categories is described below.

168. Selection of consultants: For all consultancy services under IDA financing, all consultant assignments for contracts with firms estimated to cost more than US$200,000 or equivalent per contract would be selected through *Quality and Cost Based Selection* (QCBS) procedures. Consultant assignments for contracts with firms estimated to cost less than US$200,000 or equivalent per contract may be selected using the *consultants' qualifications* methods. Consulting firms who will be required to carry out assignments that are standard or routine in nature, such as audit, would be selected through *Least Cost* Method. Individual consultants will be selected on the basis of their qualifications in accordance with Chapter V of the *Consultants Guidelines*. *Single source* selection will be used where it can be justified and after consultation with the Bank. Short list of consultants for services estimated to cost less than US$200,000 or equivalent per contract may be composed entirely of national consultants in accordance with the provision of Paragraph 2.7 of the *Consultants Guidelines*. The prior review threshold for consultants' services would be

US$100,000 or equivalent per contract for individual consultants and US$200,000 or equivalent per contract for firms. All single source consultants from firms shall be subject to prior review by the Bank.

Table 3.4: Prior Review Threshold for Consultancy Services

	Selection Method	Prior Review Threshold	Comment
1.	Competitive Methods (Firms such as QCBS, Consultant's Qualification (CQS), QBS, Fixed Budget, Least Cost Selection)	Above US$200,000	
2.	Works Supervision	Above US$300,000	
2.	Single Source (Firms)	All Values	
3.	Individual Consultants	Above US$100,000	

169. Direct contracting: Direct contracting for the procurement of civil works and goods (paragraph 3.7 of the Procurement Guidelines) may be used to extend an existing contract or award a new contract. For such contracting to be justified, the Bank should be satisfied that the price is reasonable and that no advantage could be obtained by further competition. The direct contracting may be from the private sector, United Nations agencies/programs (for goods), or contractors and NGOs that are already mobilized and working in the emergency areas.

170. Shopping: Shopping in accordance with paragraph 3.5 of the Procurement Guidelines is the appropriate method for procuring readily available off-the-shelf goods of value less than US$200,000, or simple civil works of value less than US$1,000,000. The procurement plan should determine the cost estimate of each contract, and the aggregate total amount. The borrower will solicit at least three price quotations for the purchase of goods, materials, small works, or services (non-consulting), to formulate a cost comparison report.

171. NCB: Any contract exceeding the shopping threshold will be subject to NCB. The model bidding documents for NCB as agreed with the ODPP, the Malawi Public Procurement Act, Regulations and Desk Instructions (and as amended from time to time), shall be used for bidding. The following NCB exceptions shall apply:

a) No bidder or potential bidder shall be declared ineligible to bid for reasons other than those provided in Section I of the Procurement Guidelines;

b) Bidding documents acceptable to the Association shall be used;

c) The bidding documents and contract shall include provisions reflecting the Bank's policy relating to firms or individuals found to have engaged in fraud and corruption as defined in the Procurement Guidelines;

d) Each bidding document and contract shall provide that bidders, suppliers and contractors, and their subcontractors, agents, personnel, consultants, service providers, or suppliers shall permit the Association to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Association. Acts intended to materially impede the exercise of

the Association's inspection and audit rights provided for in the Procurement Guidelines constitute an obstructive practice as defined in the Procurement Guidelines;

e) Unquantifiable criteria, such as local content, technology transfer, and managerial, scientific, and operational skills development shall not be used in the evaluation of bids; and;

f) Contracts may not be split in order to avoid the use of higher threshold.

172. Force account: When contractors/suppliers are unlikely to bid at reasonable prices because of the location and risk associated with the Project, or a certain government agency has a sole right in a certain type of works/supply, borrowers may use their own government departments' personnel and equipment or government-owned construction unit, provided that the government agency has sufficient managerial capacity and possesses the required technical and financial controls to report to the Bank on expenditure as per paragraph 3.9 of the Procurement Guidelines.

173. Framework Agreements (FAs): FAs shall be used as an alternative to an NCB or shopping for goods that can be procured off-the shelf or which are commonly used with standard specifications, non-consulting services of a simple and non-complex nature, or small works under emergency. An agreement amount for the FAs shall be set in the Procurement Plan and agreed with the Bank.

174. Use of government institutions and parastatals: Government-owned institutions or parastatal organizations in Malawi may be hired for their unique and exceptional nature if their participation is considered critical to project implementation. In such cases, the conditions given in clauses 1.13 of Consultant Guidelines shall be satisfied and each case will be subject to prior review by the Bank.

Table 3.5: Prior Review Thresholds for Goods, Works and Non Consulting Services

	Procurement Method	**Prior Review Threshold US$**	**Comments**
1.	ICB and Limited International Bidding (LIB) (Goods) and Non Consultant Services	Above US$1 million	All
2.	NCB (Goods) and Non Consultant Services	Below S$1 million	First Contract
3.	ICB (Works)	Above US$5 million	All
4.	Shopping (Goods) and Non Consultant Services	Below US$200,000	
5.	NCB Works	Below US$5 million and above US$1 million	First Contract
6	Shopping Works	Below US$1 million	

175. Restocking of maize grain reserves: Procurement of maize grain for restocking, in line with Clause 2.68 of the Procurement of Goods, Works and Non Consulting Services, will involve the establishment of a list of prequalified suppliers to whom periodic invitations will be issued and bidders will be invited to quote prices linked to commodity market prices prevailing at the time of

the invitation. The list of prequalified suppliers will be established through advertising in the press both locally and internationally. Invitations to supply grain will be made during favorable market conditions. Bids will be priced in a prescribed currency and payments will be made in the same currency. Standing bid securities valid over a specified period will be required for prequalified suppliers. Standard contract conditions and forms consistent with market prices shall be used.

176. Operational cost: Any operational expenses that would be financed by the Project would be procured using the implementing agency's administrative procedures, which are reviewed and found acceptable to the Bank.

177. Other conditions: The Bank will also consider further simplification of procedures if so requested by the implementing agencies and which are within the overall framework of Bank Guidelines.

178. The Procurement Plan for the Project shall be prepared and submitted before board approval. It will detail the activities to be carried out during the first 18 months, reflecting the actual project implementation needs. For each contract to be financed under the Project, different procurement methods, the estimated cost, prior review requirements and timeframe will be agreed between the Borrower and the Bank. The Procurement Plan, to be submitted to the Bank before end-April, 2015, will be made available in the Project's database and in the Bank's external website. The Procurement Plan shall be subsequently updated annually and will reflect the changes in prior review thresholds, if any.

179. Frequency of procurement supervision and review by the Bank: The Bank normally carries out the implementation support mission on a semi-annual basis. The frequency of the mission may be increased or decreased based on the procurement performance of the Project.

180. Review by the Bank: The Bank will review the following contracts:

a) Works: All contracts more than US$5.0 million equivalent;
b) Goods: All contracts more than US$1.0 million equivalent;
c) Non-Consulting Services: All contracts more than US$1.0 million equivalent;
d) Consultancy Services: All contracts more than US$200,000 equivalent for firm and US$300,000 for works supervision;
e) Consultancy Services: All contracts more US$100,000 equivalent for individuals.

181. The first contract issued by each implementing agency will be reviewed by the Bank irrespective of value. In addition, the justifications for all contracts to be issued on LIB, single-source or direct contracting basis will be subject to prior review. These thresholds are for the initial 18 months period and are based on the procurement performance of the Project. In addition, the Bank will carry out an annual ex-post procurement review of the procurement falling below the prior review threshold mentioned previously. All contracts below the specified prior review threshold value shall be subject to post review.

182. The restocking of the SGR utilizes existing government mechanisms and, therefore, the implementation arrangements need to be specified. The restocking will be under the direct supervision of MoAIWD and the National Food Reserve Agency (NFRA), as the managing entities

of the Reserve. Further to what was outlined in the aforementioned procurement section and to ensure value-for-money, the following procurement channels or auction mechanisms could be used:

- Direct procurement by NFRA: NFRA organizes maize purchases several times a year to restock the Reserve and has experience in the maize commodity market.
- Agricultural Commodity Exchange for Africa (ACE): ACE is a spot and forward market commodity exchange that has adopted widely used regional commodity quality and trading standards. Supported by USAID, ACE is known in Malawi for successfully promoting the warehouse receipt system that offers market opportunities to small local traders and farmer organizations and cooperatives. ACE is already used on a regular basis by various institutions, including the World Food Programme (WFP), and has been successfully utilized by bilateral donors (Irish, Norway and Flanders Co-operations) for grain reserve restocking.
- Auction Holdings Limited Commodity Exchange (AHCX): AHCX is a recently established subsidiary of the Auction Holdings Limited that has more than 70 years of experience in tobacco auction trading. AHCX is now active on the private trading of agricultural commodities, including maize and other traded legumes such as groundnuts and soya beans.

183. To better support the fiduciary capacities required by the Bank's standards, the aforementioned institutions will receive support from the existing project implementation units of other Bank-funded projects (either the Agriculture Sector Wide Approach Support Project (ASWAp-SP) or IRLADP). The procurement specialists of these projects will provide technical assistance to the three trading institutions to ensure full compliance with the Bank's rules on procurement of goods. Tenders will be designed with all costs included, meaning with full delivery (handling and transport) to NFRA storage facilities. Based on the respective quantities indicated above, tenders through the three channels will distributed between the NFRA and ACE; delivering grain in Kanengo silos while AHCX would deliver to the Mangochi silo and in smaller depots located in the South of the country. Payment to maize suppliers would also be handled by the FMS of the PIU.

184. Since most of the contracts will be relatively small and localized, the MFERP will procure local or national contractors and supervision will be through third-party supervision consultancies. Designs will be verified for their climate resilience and revisions suggested as relevant. The procurement section outlines this process in more detail.

185. The project appraisal recognized the importance of restocking the SGR in anticipation of further needs to assist the affected populations with food assistance until the next harvest. It was therefore agreed to help the government through NFRA to purchase maize to not only restock the 14,000MT already released to address the emergency needs right after the floods, but also to anticipate further drawdowns required for food distribution to affected households who have lost their productive capacity for the cropping year. The following features of the proposed SGR restocking have been agreed:

a) SGR stock position and future need estimates: The exact SGR position presented by the Government shows a maize stock of 49,854MT + 5,553MT distributed between storage facilities as follows. Based on the Post Disaster Needs Assessment (PDNA) and Malawi

Vulnerability Assessment Committee (MVAC) simulations, it was originally estimated that 100,000MT will be required to assist affected households in the coming year. The GoM has subsequently re-estimated the demand to be around 61,700MT for the next 10 months. This demand estimation is subject to further independent verification.

b) Purchase modalities may include a combination of the three options described earlier, using mainly NFRA and ACE, as well as AHCX on a pilot basis. Procurement will follow the Bank's rules and will be closely monitored by procurement specialists already in place in MoAIWD under other Bank-funded projects.
c) Maize purchased under this Project will be used exclusively for humanitarian needs and any utilization for market price stabilization will be supported by sound evidence of market price analysis and by a detailed market intervention plan (with more specifically geographic distribution, beneficiary targeting as well as price setting justification).
d) SGR management modalities: MoAIWD will expedite the completion of the study on the revision of the SGR management modalities that is being financed under ASWAp-SP. The conclusions and recommendations of this study will be shared with stakeholders at the joint agricultural sector review under the framework of the Agricultural Sector Wide Approach. The final report will be completed and disseminated before June 30, 2015.

C. Project Monitoring and Evaluation

Results Monitoring and Evaluation

186. Outcome Monitoring and Evaluation: The IRLADP/MFERP PIU will be responsible for the overall monitoring and evaluation of the Project, using the Project results framework to issue bi-annual updates on the overall project implementation. The PIU will be responsible for operationalizing the Overall Results Framework for monitoring and assessing the Project at a consolidated level. The PIU will carry out community-level surveys on a periodic basis to record baseline data in line with indicators found within the results monitoring framework. This will include compiling and updating baseline, present and target indicator values for all sub-components and results reporting to the PSC and the Bank on a routine basis. To this effect, the capabilities of the present central monitoring and evaluation system of the PIU shall be enhanced and/or improved to include functions, such as query and search and automated cross tabulation.

187. Physical, Financial and Quality Monitoring: In parallel, there will be project implementation monitoring and evaluation that will involve the various national, district and community-level implementing organizations. Supervision and monitoring roles will be divided according to the work performed and specific results being achieved, then relayed to the PIU for consolidation. The implementation monitoring will also form the basis for the payment system for contractors for work completed.

188. Supervision will generally entail routine quality checks at various stages of implementation, be it the construction of bridges or re-stocking of the reserve grain supply. Periodic monitoring will include process reviews/audits, reporting of outputs and maintaining updated records. Broad thematic areas that will be supervised and monitored include the following: (i) Social and Environmental Monitoring, (ii) Regular Quality Supervision & Certification, (iii) Periodic Physical Progress Monitoring & Third-Party Quality Audit, and (iv) Results Monitoring

and Evaluation. Additionally, there will be a project management milestone chart to ensure administrative and implementation related activities are completed on schedule. The PIU may also explore the installation and use of a more systematic Critical Path Method (CPM)- based software for the physical and financial progress monitoring of various sub-components and sub-projects within.

189. For further details on the PDO level results indicators, intermediate results indicators and Project outcomes, refer to the results monitoring framework in section II C of the appraisal.

190. Specific to procurement and according to the Bank's guidelines, procurement activities will be closely monitored by Procurement Specialists already in place in the MoAIWD under Bank-funded projects.

ANNEX 4: ECONOMIC ANALYSIS

Malawi Floods Emergency Recovery Project (P154803)

A. Introduction

191. The currently available version of the Post Disaster Needs Assessment (PDNA) estimates that aggregate damages and losses[9] as a result of the floods are US$324.5 million (equivalent to approximately 5.2 percent of GDP). This includes damage to crops (mostly subsistence farming for own consumption), loss of livestock, housing and livelihoods, as well as damage to public infrastructure such as roads, schools, health facilities, water and sanitation infrastructure. The economic costs of the floods are estimated to result in a projected negative impact on GDP growth in 2015, equivalent to 0.6 percent change in GDP (i.e. other things being equal, the floods will reduce annual GDP growth by 0.6 percent).

192. The impact of the floods on GDP growth is muted due to the low levels of economic development in the affected areas, with the majority of the population engaged in subsistence agriculture. Poverty rates in the affected areas are among the very highest in Malawi, and as a result while a significant share of Malawi's total population has been affected by the floods, the impact on purchasing power is low. The outlined investment activities of the Project are thus aimed at resolving the emergency situation in the flood-affected areas with immediate benefits for affected households and communities as well as medium and long-term economic impact.

193. In order to assess the economic relevance and value addition of this Project, this section will analyze the economic and financial rates of return for the Infrastructure, Rehabilitation and Reconstruction component of the Project: (i) Roads and Bridges and (ii) Irrigation. The analysis presumes that the components on Livelihoods Restoration and Food Security, as well as Promoting Disaster Resilience, whilst having numerous direct and indirect benefits, may be difficult to quantify. The following sections therefore firstly outline the direct and indirect benefits from the Project that have not been quantified. The second part discusses the benefits and costs streams associated with the investments in transport and irrigation.

B. Socio-Economic Benefits of the Project

194. The life cycle of various activities outlined in the Project range from 2-50 years, thus implying that the Project's benefits can be assessed in the short, medium and long term. The floods pose a risk that non-poor households may fall into poverty as a result of loss of assets and livelihoods. Furthermore, given the already very high rates of poverty in the affected areas, the greater threat is of deepening the extent of poverty for the poor as a result of the disaster. It is thus imperative that the exposure of communities to vulnerabilities is lowered and resilience enhanced. The Project intends to achieve this through social support as well as rehabilitation and

[9] Damages are defined as total or partial destruction of physical assets existing in the affected area whilst losses are changes in economic flows arising from the disaster. The value of damage is used as the basis for estimating reconstruction needs while the value and type of losses provides the means for estimating the overall socio-economic impact of the disaster and the needs for economic recovery.

reconstruction of critical infrastructure that is essential for public service delivery and economic recovery of affected communities.

Component 1: Restoring Livelihoods and Food Security

195. The natural disaster has affected 1,150,000 and displaced approximately 336,000 persons with an estimated average income loss of MWK 208,846 (US$469) per affected smallholder household (agriculture sector) and a total income loss of MWK3.6 billion (US$8.1 million) for household enterprises (trade sector)[10]. These sectors are the main sources of rural livelihood. With a majority of smallholder households relying on an annual rain-fed agriculture and most household enterprises having suffered damage to their infrastructure and assets, this disaster has livelihood and food security implications. This component, therefore, intends to facilitate the restoration of livelihoods and ensuring food security by providing labor-intensive community infrastructure repair and restocking the Strategic Grain Reserve (SGR).

196. **In the short term,** this component is expected to: (i) provide productive assets through the Inputs for Assets (IFA) approach; (ii) contribute to job creation through the Public Works Program element; (ii) restore incomes through the livelihood supporting and income generating activities; (iv) increasing food security for the affected households; (vi) contribute to stabilization of the food based inflation; and (v) ease the immediate fiscal burden for the Government.

197. **In the medium term,** this component is expected to: (i) restore agricultural production by providing communities with inputs and enabling off-season planting; and (ii) restore household income and food through improved agricultural production.

Component 2: Infrastructure Rehabilitation and Reconstruction

198. The floods have damaged or destroyed a considerable proportion of schools and health facilities. This Project intends to build better public facilities in lower flood-risk areas and double them up as evacuation centers. In addition, the Project intends to manage water resources through river training and flood mitigation works.

199. This sub-component is expected to: (i) restore school enrolment and attendance rates; (ii) restore access to medical care; (iii) restore access to water and sanitation facilities; and (iv) avoid negative impacts of the rainy season in these sectors for the design period of 15 years, ensuring adequate access to these basic services for the population of the 15 affected districts.

C. Economic and Financial Analysis of the Irrigation Investment[11]

200. The analysis reveals that the investment is viable, establishing a Financial Rate of Return (FRR) of 31 percent and an Economic Rate of Return (ERR) of 24 percent. The assessment was undertaken to ascertain the net costs and benefits of the proposed component on Irrigation and

[10] Post Disaster Needs Assessment estimates

[11] This analysis adopts a model that was used for the financial and economic analysis of the Irrigation, Rural Livelihoods and Agricultural Development Project (IRLADP) with similar assumptions.

Rural Water Supply, including whether the targeted households would derive sufficient benefits from the Project investment through their involvement. [12]

201. **Cost Stream.** These include incremental crop production costs; irrigation investment costs for the rehabilitation and reconstruction of damaged schemes; operation and maintenance costs of irrigation networks at 1 percent of investment costs; and project management costs at 25 percent of total cost.

202. **Assumptions.** The analysis assumes a 0.2-hectare average farm per family, which translates into 5,000 beneficiaries on approximately 1,000 hectares of cultivated land area. The total Project costs is estimated at US$5 million. The model assumes three crops whose cultivation may expand under irrigation. Rice is the dominant one due to profitability. Tomatoes were used as a proxy for other vegetables due to widespread farming in project area. Maize is also considered as an alternative crop that only grows in the winter under irrigation. The cropping pattern and intensity is envisaged to increase with the latter moving from 72 percent to 130 percent. The increase is estimated at 86 percent from 56 percent during the wet season and 44 percent from 16 percent in the dry season. In terms of pricing, the World Bank Global Prospects Commodity data for 2014 was used to estimate import parity prices for the ERR calculation. Financial prices for non-traded inputs and outputs based on prevailing market prices in Malawi in 2014 were used for the FRR calculation. Currency conversions were based on official annual average exchange rate for 2014 of one United States dollar equal to MWK424.

203. **Incremental Labor Demand and Daily Return.** The results in Table 1 below show that the Project will double employment opportunities and wage earnings with labor requirements increasing by 30 man-days and by MWK836 for daily wages. The household farm income would also significantly increase by about MWK63,861 per household.

Table 4.1: Incremental Labor Demand and Return per Day

	Without Project	**With Project**
Weighted average labor (man-days)	23	53
Incremental labor due to Project (man-days)		30
Weighted average gross margin return to labor (MWK/day)	645	1,481
Incremental labor income due to Project (MWK/day)		836
Household income per plot (MWK)	14,518	78,379
Incremental labor income per household (MWK)		63,861

Source: World Bank staff estimates

204. **Sensitivity Analysis.** The results in Table 4.2 below show that the ERR is robust with respect to cost increases, benefit reductions and delays in realizing benefits. The model was

[12] [12] While typically the ERR tends to be higher than the FRR, in this analysis, the reverse is true for the following reasons: (1) there are no taxes associated to the imports of agricultural inputs such as fertilizer and pesticides in Malawi, thereby bringing the FRR and ERR closer to each other; and (2) the deviation toward a higher FRR comes as a result of the higher financial price of the local variety of rice which fetches a premium on the local market vis-à-vis the parity price computed for ERR calculations based on global commodity price data.

subjected to sensitivity tests assuming a 10 percent cost increase, 10 percent benefit reduction and two-year lag in benefits.

Table 4.2: Estimated Economic Rates of Return

ERR for overall Project	24 percent
ERR if cost increases by 10 percent	22 percent
ERR if benefit decreases by 10 percent	22 percent
ERR if benefits lag by 2 years	18 percent

Source: World Bank staff estimates

D. Economic Analysis of the Road rehabilitation and Reconstruction Investment[13]

205. The reconstruction and rehabilitation of the East Bank roads (60km) is expected to benefit road users and surrounding communities in 2-3 main districts by facilitating traffic flow as well as trade and commerce. Transport efficiency will be enhanced, resulting in substantial transport cost savings and with social and economic benefits – not only for the flood-affected persons but other road users and surrounding communities, both in the short and long-run. The rationale for the use of public financing for the reconstruction of these primarily rural roads, using Bank funds is that these will help restore and maintain the access of poor remote communities to markets, other income generating opportunities and social infrastructure such as health and education facilities. This is fully aligned with the Bank's twin goals of reducing extreme poverty and promoting shared prosperity. It may also be noted that there is no private sector interest or opportunities to partake in financing such rural access infrastructure.

206. The chosen Project forms part of the country's road network, which is composed of 15,451km of which about 28 percent is of paved standard. In 2014, the condition of the road network was such that 41 percent, 42 percent, and 17 percent of paved roads were in good, fair and poor conditions respectively. The rest of the road network (72 percent) was of earth/gravel surface. Most of the paved road network is in the plateau and lakeshore areas of the country, where major traffic generating centers are located. The major roads linking neighboring countries are paved, thereby facilitating reliable, all-weather access.

207. The economic appraisal of the options of reconstruction and improvement of selected secondary roads has been completed using a mix of the Bank's Highway Design and Maintenance Standards Model (HDM IV) and the Cost Effectiveness approach. The Net Present Value (NPV), Cost Benefit Ratio and Economic Internal Rate of Return (EIRR) have thereby been considered primary parameters for assessing economic feasibility. The traffic projections consider normal, generated and diverted traffic.

208. The main areas of benefits calculated by HDM IV relate to savings in vehicle operating costs derived from reduced roughness on the road, passenger time savings derived from increase

[13] The economic analysis on transport was done in collaboration with the Roads Authority of Malawi. Further economic analysis will be undertaken by the Roads Authority using this model during project implementation but prior to initiation of the procurement phase to ensure the viability of the final selected investments in the road sector.

in speed due to improved road conditions, reduction in road accident cost and reductions in maintenance costs due to the complete repair of the existing road. Attention was directed mainly to the four basic elements of cost-benefit analysis for existing all-weather roads, namely, (i) changes in vehicle operating costs; (ii) changes in personal time costs; (iii) changes in road maintenance costs; and (iv) construction costs of proposed improvements.

209. **Assumptions.** The proposed works include resealing and rehabilitation of the road and bridges for about 60km. The existing alignment will be followed as much as possible. The evaluation process does however consider geometric improvements to improve road safety and level of service provided by the roads. The key analysis assumptions are as follows:

- **Valuation of costs and benefits.** Based on market prices in Malawi with financial prices adjusted for transfer payments, such as indirect taxes and subsidies.

- **Appraisal Period.** A 20-year appraisal period is selected to analyze the Project.

- **Discount Rate.** A 12 percent discount rate is applied.

- **Residual Value.** 50 percent of initial investment credited in final benefit year given that half the cost is for bridges and other structures.

- **Options.** (i) Reconstruct to gravel standard; and (ii) Reconstruct to paved standard.

210. The results indicate a positive EIRR, but below the minimum 12 percent to be defined as viable, and a negative NPV. The EIRR for gravel roads is 3.3 percent whilst that for paved roads is 7.7 percent. This result is not surprising because the HDM IV model initially tried and tested for this analysis is suitable only for high quality paved roads serving high traffic volumes, in which road surface improvements entail significant savings in vehicle operating costs due to improved surface roughness In this particular case, where the project financed rural roads will serve low traffic volumes and provide access only to remote and poor non-industrialized populations, and will entail no significant surface improvements (such as paving) other than structural improvements to improve flood protection, no significant reduction in operating costs and time savings is envisaged. Instead the reinstatement of these roads will restore and retain access to poor agricultural communities, build their social capital, and connect them with vital livelihoods opportunities and marketplaces. In such instances, transport economists advise the use of other cost benefit analysis models like the “avoided cost method” that was primarily used for this road sector economic analysis and , the results of which are described in the next section. It may also be mentioned that the Project also derives substantial non-directly quantifiable benefits to the affected communities and the Malawi economy in the form of improved transport efficiency, linking farmers to improved markets and – perhaps most significantly given the very high rates of poverty in the affected areas – better access to public services for health, education and social protection. In addition, reconstructing secondary roads in this area would also foster economic activity, commerce and trade, thereby boosting economic growth and improving road infrastructure beyond the pre-disaster state.

211. **Avoided Cost Method.** The proposed rehabilitation of the road network will follow the "Build Back Better" approach to minimize damages from future flood risks, which will particularly entail the following measures: (i) raising the embankment height to protect the main pavement structure from recurrent flood waters; (ii) embankment protection works; (iii) reinforced sub-based layers with improved construction materials to avoid water induced damages; and (iv) improved designed and raising of drainage structures such as bridges, culverts and drifts. The economic justification of the works in the transport sector was also analyzed based on the avoided costs of reconstruction and increased periodic maintenance that would be required based on the historic levels of recurrent flooding. The proposed 60km of roads prioritized are the main artery connecting the 15 affected districts directly or indirectly to economic and social facilities, essential for the restoration of the livelihoods and basic economic development of the affected region.

212. An economic analysis was carried out comparing unit cost estimates provided by the Government for the above Build Back Better approach for a 20-year period, for both gravel and paved (single surface treated) road reconstruction options, and a without project scenario with lower capital investments following a simple "building as usual restoration approach", showed that for a 20-year period, overall savings to the economy were estimated at US$8.7 million for the paved option, and US$7.2 million for the gravel option using Build Back Better as described above.

213. **Cost Effectiveness.** In addition, the Roads Authority provided a cost effectiveness analysis. This approach weighed the cost of the transport investment and compared to the time period during which the benefits would still accrue without the need for major repairs or maintenance needs. The results reveal that it is more cost effective to construct a paved road than a gravel road.

Table 4.3: Cost Effectiveness of the Gravel and Paved Roads Options

OPTION	COST
Gravel Roads	US$86, 174
Paved Roads	US$71,478

Source: Roads Authority

214. Given the absence of final designs and cost estimates and the reduced time for preparation, it was agreed that further economic analysis will be undertaken by the Roads authority, during project implementation but prior to initiation of the procurement phase to ensure the viability of the final selected investments in the road sector**.**

ANNEX 5: IMPLEMENTATION SUPPORT PLAN

Malawi Floods Emergency Recovery Project (P154803)

I. Strategy and Approach for Implementation Support

1. The Bank's Implementation Support Plan for the Project draws from the emergency nature of the Project and the lessons learned from past Bank projects in the country. The core principles underlying the MFERP Implementation Support Plan are: (i) the need for intensive risk-based implementation support[14], since the Project has been prepared using rapid procedures that did not allow time for very detailed appraisal; (ii) maximizing the use of national staff and consultants, and; (iii) the selective use of international staff and consultants on a needs basis. The plan will be regularly reviewed and revised as required.

2. The Implementation Support Plan includes frequent review of implementation performance and progress. The Bank team will monitor progress on several fronts including: (i) key performance indicators as defined in the Results Framework and the Project's contributions to broader programmatic outcomes for recovery; (ii) central Project-level and district-level sub-project implementation; (iii) independent verification of project outcomes; (iv) fiduciary management of activities carried out by the Project Implementing Unit (PIU) and other implementing agencies; (v) reconciliation of payments with contracts; (vi) supervision of large numbers of procurement activities, and (vii) monitoring of legal covenants.

3. Information from various sources will be used to assess and monitor the progress of the Project throughout its implementation. In addition to the data generated through the Project's Management Information System and Monitoring & Evaluation systems, the Bank will also review the findings and results of third-party assessments and environmental and social audits that will be undertaken during the course of project implementation.

4. In addition to formal semi-annual implementation support missions and field visits to the districts and the Project components target areas, continuous support will be provided to the PIU and component implementing entities, given the relative complexity of the Project. The semi-annual Implementation Status Reports will be produced to provide Bank management and the public with progress updates, tracking risk development and efficacy of mitigation measures. As required, frequent sector-specific missions will also be made to provide targeted support to address emerging issues.

5. The Bank's Procurement, Financial Management, and Environmental and Social Safeguards Specialists will also provide timely and effective support. In addition to carrying out an annual ex-post review of procurement that falls below the prior review thresholds, the Procurement Specialist will provide continuous support to the procurement agencies on a needs basis. The Financial Management Specialist (FMS) will review all financial management reports and audits and take necessary follow-up actions as per the Bank procedures. These team members will also help identify capacity building needs to strengthen procurement and financial management capacity. Semi-annual inputs from the environmental and social specialists will

[14] Including for implementation, fiduciary and safeguards risk mitigation.

be required throughout the Project, and both formal implementation support missions and continuous field visits will ensure that the Environmental and Social Management Framework (ESMF) is implemented in accordance with the Bank safeguard policies.

6. The following Implementation Support Plan reflects the preliminary estimates of the skill requirements, timing, and resource requirements over the life of the Project. Keeping in mind the need to maintain flexibility over Project activities from year to year, the plan will be reviewed annually to ensure that it continues to meet the Project's implementation support needs.

II. Implementation Support Plan

7. The table below indicates the level of inputs that will be needed from the Bank to provide implementation support for the proposed Project.

Table 5.1: Implementation Support Plan

Time Year	Focus	Primary Skills Needed	Number of Trips	Resource Estimate (US$)	Partner Role	Comments
Year 1	• Project launch • Initialization of Project components • FM systems functioning effectively • Procurement practices following Bank norms • ESMF in place	• Team lead • FM, Procurement • Safeguards Specialist • DRM Specialist • Water Resources, Irrigation and WASH Specialist/s • Road and Bridges Specialist • Livelihoods Specialist	• Conti-nuous support • June 2015 • Sept. 2015	• $40,000 • $50,000 • $50,000	• Fully staffed up PIU to operationalize Project components • Contract local Malawian support firms for various tasks • Strengthened DoDMA leading the initialization of the Recovery Framework and DRM components of the Project	• Project will likely become effective in June 2015 with the first mission occurring by the start of June 2015. • Task team to support smooth start-up following effectiveness • Ensure safeguard arrangements are built into implementation plans
Year 1 – Year 2	• Monitor implementa-tion of Project activities • FM, Procurement, Safeguards • Mid-Term Review	• Team lead • FM, Procurement • Safeguards Specialist • DRM Specialist • Water Resources, Irrigation and WASH Specialist/s • Livelihoods Specialist	• Conti-nuous Support • Dec. 2015 • July 2016	• $30,000 • $40,000 • $40,000	• Prepare comprehensive Project progress and results monitoring reports in advance of each mission • Update implementation and procurement plans routinely	• Review implementation, commitment and disbursement status • Ensure safeguards arrangements are built into implementation plans • Support to monitor

Time Year	Focus	Primary Skills Needed	Number of Trips	Resource Estimate (US$)	Partner Role	Comments
					• Organize field visits • Organize Mid-term review	progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed.
Year 2 – Year 3	• Monitor implementa-tion of Project activities • Mid-Term Review • FM, Procurement, Safeguards	• Team lead • FM, Procurement • Safeguards Specialist • DRM Specialist • Road and Bridges Specialist • Water Resources, Irrigation and WASH Specialist/s	• Conti-nuous Support • Nov. 2016 • July 2017	• $20,000 • $40,000 • $40,000	• Prepare comprehensive Project progress and results monitoring reports in advance of each mission • Update implementation and procurement plans routinely • Organize field visits • Prepare pre-closure review	• Review implementation, commitment and disbursement status • Support to monitor progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed.
Year 3 Year 4	• Project withdrawal and closure • Implementation Completion Review	• Team lead • FM, Procurement • Safeguards Specialist • DRM Specialist • Road & Bridges Specialist • Water Resources, Irrigation and WASH Specialist/s • Livelihoods Specialist	• Nov. 2017	• $40,000 • $50,000	• Prepare comprehensive Project progress report in advance of each mission • Organize field visits • Prepare Project closing, evaluation, and monitoring arrangements	• Support to monitor progress of activities, review implementation schedule to ensure timely completion of Project activities. • Prepare closing arrangements • ICR Mission

ANNEX 6: CONTEXT ANALYSIS

Introduction

215. This Annex provides a detailed context analysis and storyline of the emergency situation created by the 2015 floods, including: (a) the impacts of the floods on poverty; (b) impacts of the floods on living conditions and social services; (c) further information on the response situation on the ground and the Bank's collaboration with other humanitarian and development partners, and; (d) lessons learned from previous similar emergency operations across various regions. This will help in better relating the Project to the broader context of the overall disaster impact and responses by other players, and the emerging broader recovery program.

Impact on Poverty

216. Floods are pervasive in Malawi and often disproportionately hurt the poor. According to EM-DAT, parts of Malawi have experienced consecutive floods in the past five years. Poor households in Malawi are more exposed to natural hazards (and other shocks) and likely to be more susceptible to suffer losses from such events. This stems from locational factors as rural households (the majority in Malawi) are typically being pushed to marginal hazard prone areas (i.e., steep land) due to land ownership and market factors, but also housing materials and infrastructure are of poorer quality, and the production activities conducted by the majority are typically unsafe or less resilient to natural hazard impacts. Table 6.1 shows selected shocks experienced in 2013 by poverty status. It shows that poor households were affected negatively in larger proportions than non-poor households for a range of events.

Table 6.1: Selected shocks experienced in 2013 by poverty status in 2010 (% population)

	Non-poor	Poor	Total
Unusually high prices for food	81	86	83
Unusually high costs of agricultural inputs	73	79	76
Irregular rains	47	50	48
Unusually low prices for agricultural output	36	36	36
Drought	27	35	30
Serious illness or accident of household member(s)	17	17	17
Floods	11	16	13

Source: Poverty Assessment team calculations

217. The 2013 floods provide a good point of reference for the latest January 2015 disaster, which affected the poorest segments of the population. Indeed, in 2013, 94 percent of flood-affected households were in rural areas, and 74 percent of those affected by floods were in the Southern Region. As shown in the table above, floods had a higher brunt on poor households in Malawi in 2013. Based on the latest household survey data available for Malawi – the Integrated Household Panel Survey 2013 – those affected by floods in 2013 were more likely to live in larger families with more children and elderly members, have household heads working in agriculture, live in rural areas and in the south, have lower ownership of durable goods as well as lower access to services.

218. When floods hit households in contexts characterized by widespread poverty and precarious access to social protection mechanisms, credit and insurance markets it is not surprising to find that most household responses are based on self-help and informal mechanisms. About a third of the households affected by floods in 2012/2013 relied on their own-savings to cope with them. Help from relatives and friends, and changes in the dietary pattern were the two other coping strategies on which households counted more on.

219. High exposure to floods coupled with lower capacity to cope with them results in negative impacts on income, food production and asset levels. The impact of the floods on different aspects of households' living standards is examined in Table 6.2. Thus, among flood-affected households, 90 percent reported a loss of food production, 82 percent reported a loss of income, and 34 percent a loss of assets. Almost the totality of households experienced a fall in food production and food stocks as a result of the floods. Four in every five of the affected households also reported drops in income as a result of the floods. The effect on assets is more limited yet significant, with one third of families reporting a decrease. Lower asset levels can reduce the income-generating potential of poor households leading to lower welfare and more poverty in the future. Lower asset holdings also make households more vulnerable to future flooding events, through decreased means to buffer income fluctuations.

Table 6.2: Effect of floods on selected indicators, 2013

Effect on...	Increase	Decrease	No change	Total
Income	2	82	17	100
Assets	1	34	65	100
Food production	1	90	9	100
Food stocks	1	88	11	100
Food purchases	46	42	12	100

Source: Poverty Assessment team calculations

220. Reductions on income, food production and assets as a result of floods lead to drops in consumption and increased poverty. Two approaches were followed to estimate the impact of floods on consumption and poverty. The first is to estimate consumption losses associated with high rainfall events observed during the Dec.2012/Jan.2013 and the Dec.2014/Jan.2015 flowering seasons, and the second approach relied on the assumption that floods impact consumption through decreases in agricultural crop production and wage labor (ganyu). We therefore simulate consumption losses under five different flood impact scenarios: (i-ii) high rainfall events observed during the 2012/2013 and 2014/2015 flowering seasons; and (iii-v) drops of 20%, 40% and 60% in agricultural production.

221. The maximum observed rainfall shocks as well as flood-associated losses in agricultural production increased the depth of poverty. For those who were already poor in 2013, the estimated drop in consumption due to different flooding impact scenarios ranges from MWK 7,637 up MWK 19,296. The estimated drop in consumption due to a 60 percent loss in agricultural productivity for those individuals who are already in poverty in 2013 is particularly substantial: These individuals would experience cuts by about half the poverty line of MWK 37,002, which are the total expenditures deemed necessary for a person to meet its basic needs in a year. Floods also increase the percent of individuals falling into poverty as a result of their consumption shortfall

under all five impact scenarios. Experiencing the maximum observed rainfall shock during the 2012/2013 flowering season would send 11.4 percent more individuals into poverty. In the same fashion, experiencing the maximum observed rainfall shock during the 2014/2015 flowering season would drive 20.8 percent more individuals into poverty. At the other end, 38 percent of individuals would fall into poverty as a result of a 60 percent loss in agricultural productivity due to severe flooding. These same individuals would experience a drop of about a third of the annual consumption required to meet their basic needs. There is a substantial group of households with consumption near the poverty line, even if they are non-poor. Hence, dramatic changes in the incidence of poverty can occur as a result of flood shocks.

Table 6.3: Effect of flood shocks on consumption and prevalence of poverty in 2013

Flooding scenario under which 2013 Consumption is estimated	**Mean shortfall from poverty line for individuals that are poor in baseline scenario**	**Additional % of individuals that transition into poverty under shock scenario compared to baseline**	**Mean shortfall for additional individuals that transition into poverty compared to baseline**
Baseline scenario	5,628		
Maximum Dec. 2012-Jan. 2013 rainfall shock	7,978	11.4%	1,717
Maximum Dec. 2014-Jan. 2015 rainfall shock	10,404	20.8%	3,270
20% drop in crop production & ganyu labor	10,184	17.0%	3,515
40% drop in crop production & ganyu labor	14,740	30.9%	7,393
60% drop in crop production & ganyu labor	19,296	38.0%	12,581

Source: Poverty Assessment team calculations.
Note: Table accounts for complex survey design. Figures are calculated for rural households in Southern Region of Malawi only. Poverty threshold used is 2010 MWK 37,002 per person per year. Monetary values are expressed in terms of 2010 MWK per person per year. Consumption estimates were derived following the methodology outlined in Luc J. Christiaensen and Kalanidhi Subbarao (2005). "Towards an Understanding of Household Vulnerability in Rural Kenya" *Journal of African Economies*, Volume 14, Number 4, pp. 520-558.

Impact on Living Conditions and Services

222. The impact of the 2015 floods on living conditions and social services has been disastrous. About 523,000 houses are destroyed or badly damaged. The destruction of housing has caused the displacement of people from their homes, many of whom sought refuge in camps while others stayed with friends or relations, rented alternative accommodation or erected makeshift shelters adjacent to their house. Many families adopted a practice whereby wives and children went to camps and husbands stayed at the damaged house or in makeshift shelters. Some displacement sites have thus become very crowded. For instance, there are examples of 35 people living in a family tent made for 8 and more than 600 households camping in one school. The International Organization for Migration also estimated that 56 percent of the internally displaced population resided in 25 sites only.

223. The ensuing congestion and lack of hygiene are increasing the risk of water borne and other communicable and vector borne diseases in the sites, including malaria, tuberculosis and diarrheal diseases. There was an initial lack of basic services such as primary health care, water, sanitation and hygiene. However in some districts the response was prompt to the initial disaster but failure to sustain the response resulted in shortages of essential commodities, including essential medicines, reproductive health commodities and dignity kits. There has also been a disruption of routine critical health services, such as vaccination, leading to a high likelihood of vaccine-preventable diseases, such as measles. There was also a disruption of medication availability for patients on long-term treatments such as for HIV/AIDS, tuberculosis, hypertension and diabetes. The risk of increased malnutrition thus is eminent.

224. Micro and Small Enterprises have run out of trading venues including households or market stalls. These two locations are quite susceptible to flooding due to the nature of the materials used, from basic wooden structures to adobe bricks. It is estimated that a proportional 33 percent of all household enterprises in the flood districts were affected. This includes property damage, partial/complete loss of inventory, loss of business due to fracturing of infrastructure or lack of mobility, amongst others. According to the Trade, Commerce and Housing sector's findings of the PDNA, business or commercial enterprises made out of temporary or semi-permanent materials were the hardest hit.

225. With regards to education, approximately 461 out of 2,662 schools across the 15 districts were affected by either floods or storms. This affected the ability of about 414,173 primary school learners (or 17 percent) to access quality education. Out of 461 schools, 222 schools (or 48.2 percent) were also used as camps or shelters for internally displaced people who had lost their homes and more than 40 schools were inaccessible in the aftermath of the floods. It is also estimated that the floods led to up to a 32 percent drop in school enrolment.

Bank Collaboration with Donor Community

226. The Bank has been collaborating closely with various United Nations agencies and other development partners in planning and preparing the interventions included in the Project, in support of the government's overall programming for recovery. UN agencies are in the process of developing a systematized approach to address key issues highlighted in the PDNA in the form of an Early Recovery Framework. Other development partners will also confirm their intervention strategies and activities upon the finalization of the PDNA report. The proposed Project activities will build upon the early recovery interventions being undertaken by the GoM, UN agencies and other partners as well as seek to align with their long-term plans. This will be ensured by helping the Government in bringing all players and stakeholders on board within a single recovery planning platform, in the form of a Recovery Framework, in continuation of the PDNA. This will help build synergies and avoid overlaps across the Bank Project, UN agency interventions and other donor-funded programs. Further details of the initial activities and plans of various humanitarian and development partners in support of disaster recovery are provided below.

227. UN agencies[15] and Red Cross Movement have increased their capacity in country and scaled up their support to enhance coordination activities. The cluster system has also been activated in order to conduct assessments and coordinate the disaster responses on the ground. Ten clusters have been activated and have developed response plans, namely Coordination, communication and assessment; Food Security; Agriculture; Water and Sanitation; Health; Nutrition; Education; Shelter and Camp Management; Protection; and Transport and Logistics.

228. UN agencies have deployed additional experts across clusters to support national and district teams. The OCHA Regional Office for Southern Africa has deployed a surge team, which is working is close collaboration with the UN Resident Coordinator's Office, the Humanitarian Country Team members and DoDMA. Furthermore, a United Nations Disaster Assessment and Coordination (UNDAC) team was asked to provide assistance in the areas of: coordination, assessment, information management and shelter and camp management.

229. The UN and other development partners are also responding to this crisis by diverting existing resources towards recovery and reconstruction needs prioritized under the presently available version of the PDNA. All UN agencies are in the process of developing a coherent approach to address key issues highlighted by the PDNA is the form of an Early Recovery Framework. Other development partners and NGOs are also waiting for the PDNA report to clarify their intervention strategies and activities. The table below shows a summary of key proposed activities and areas of interventions per donor.

Table 6.4: Recovery Interventions of Humanitarian and Development Partners

DP	Activities	Indicative Budget
DFID	• Resources available for DISCOVER and ECRP Project to be used to support the affected communities in DRM, EWS, flood mitigation and agriculture activities. • Resources available to support recovery project by the NGOs in flood affected areas	£1 million
USAID	• Resources available for food aid and WASH and logistics assistance and malaria nets. • Released resources to UNICEF for WASH and Shelter activities • Released an NGO call for proposal for recovery interventions	US$7.8 million
FAO	• Resources available for agriculture recovery project focusing on providing seed and input for winter cropping.	Approx. US$500,000

[15] UN agencies involved in this operation include: UNDP, UNICEF, UNFPA, WFP, UN WOMEN, UNRCO, WHO, UN Habitat, ILO, UNAIDS, IOM, and FAO.

WFP	• Resources available for food security project • Labor-intensive activities in the flood-affected areas through the food for work approach to ensure the affected communities have food • Quick road infrastructure rehabilitation; Distribution of food to the affected communities • Distribution of food to the affected communities	US$2 million
UNICEF	• Resources available for WASH activities as well as for NGOs such as Goal Malawi • Provided tents for schools and education equipment for the affected communities in camps • Distribution of sanitation kits to camps and schools • Provision of sanitation support to hospitals	US$375,000
UNFPA	• Provision of medical kits for women and children in camps • Provision of medical support to hospitals, mobile clinic and NGOs involved in health intervention	N/a
EU	• Malawi intervention	€1 million
IRISH AID	• Agriculture recovery intervention	N/a

Lessons Learned Based on Previous Bank Projects

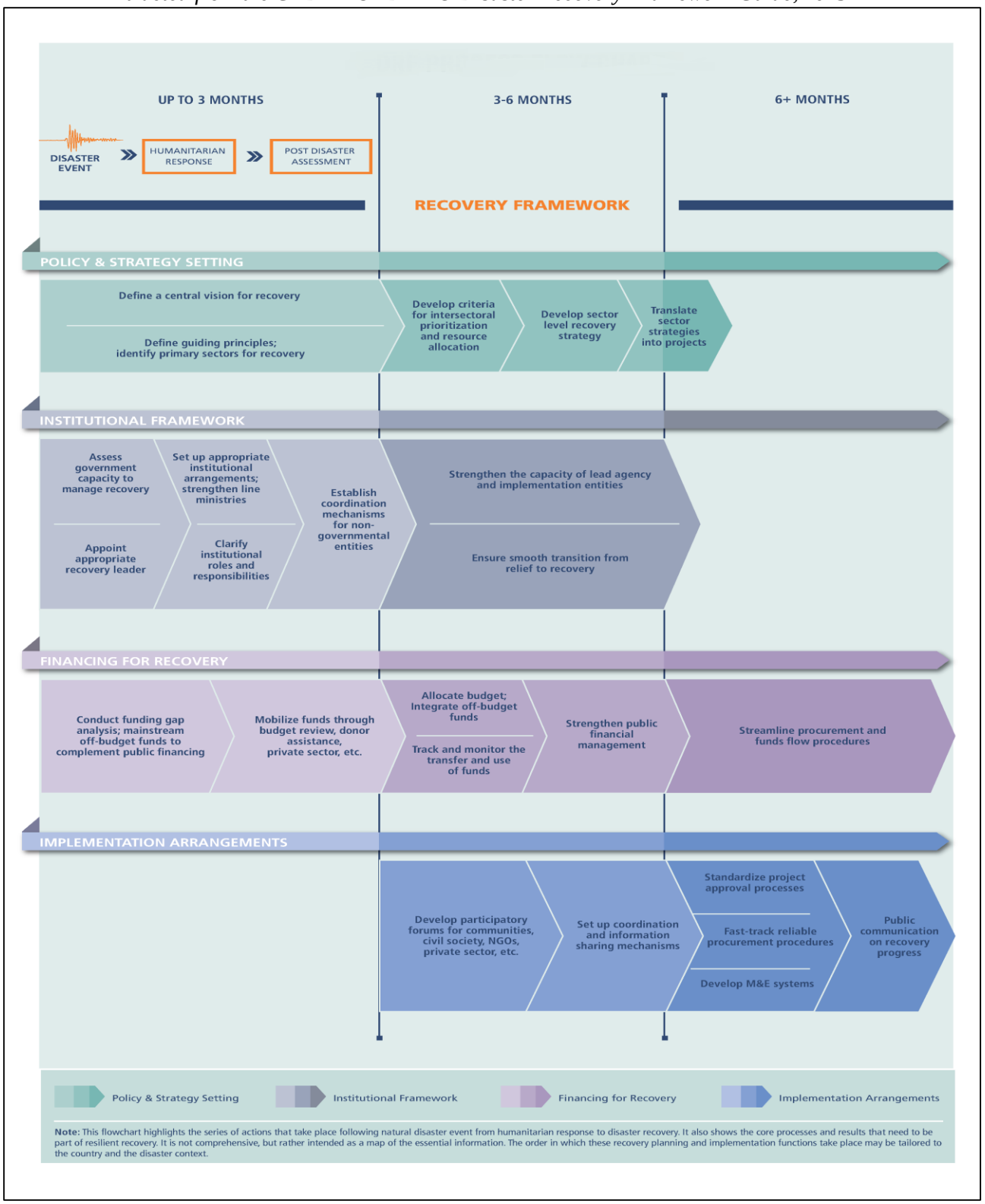
230. The MFERP's Project design also reflects several lessons learned from previous Bank-financed activities in similar emergency operations in other parts of the world. This includes drawing lessons from the nine disaster recovery case studies that have been recently launched by the Global Facility for Disaster Reduction and Recovery (GFDRR), the United Nations and European Union as part of the Disaster Recovery Framework Guide. These are summarized below:

- **Delegating implementation responsibilities to local administrative levels (such as districts) increases ownership and accountability**. Affected districts should take necessary action in identifying priority investments in order to tailor the overall response to best meet the recovery objectives. Furthermore, such an approach has proven to greatly improve ownership of the operations and enhances the accountability of district authorities. The Project will give the opportunity to local districts to set priority among local interventions in order to achieve benefits with a direct impact on the lives of people in their respective communities.

- **Ensure multi-agency and multi-tier inclusion while avoiding duplication of effort**. **The Bank's e**mergency projects should typically be part of a broader strategy with a specific focus on swiftly restoring key public services and rehabilitating key infrastructure. The proposed Project will ensure that the MFERP effectively complements any additional investments and resources from other donors through a unified approach and Recovery Framework.
- **Taking advantage of existing implementation capacity facilitates an effective response to an emergency situation**. Using the existing project implementation capacity is essential to provide effective support to the affected areas. This Project will use the existing IRLAPD PIU to facilitate project implementation.
- **Link post-disaster recovery to poverty alleviation and long-term development objectives**. Governments should take advantage of recovery plans to include in them their national poverty alleviation and long-term development objectives. The MFERP includes long-term development goals in a number of ways, such as by: (a) focusing on livelihood generation for vulnerable groups to sustain the local economy, and; (b) using and adapting the Building Back Better approach to national and local contexts to focus on strengthening the resilience of public infrastructure across key sectors including education, health, water and sanitation as well as transportation.
- **Housing reconstruction can be severely compromised by the lack of a conducive policy environment as well as a strong institutional apparatus.** In particular, Bank-financed housing reconstruction needs to develop and comply with improved design standards for Building Back Better and disaster resilience. Moreover, given the complexities that must be overcome in the design and implementation of large-scale reconstruction programs, strong ownership from the Government is also essential.

Table 6.5: Typical Trajectory for Disaster Recovery

Extracted from the GFDRR-UNDP-EU Disaster Recovery Framework Guide, 2015



ANNEX 7: ENVIRONMENTAL AND SOCIAL SAFEGUARDS ACTION PLAN

231. The arrangements made under the IRLADP can be used for the MFERP, and the Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) will be adopted for this Project. The Government has used harmonized safeguards instruments and trained district-level environmental staff on screening. Additionally, the Government will establish an effective safeguard implementation unit within the PIU, which will spearhead environmental and social safeguards within the Project activities. The Government intends to use the local government systems in order to maximize the best practices from the systems. Potential environmental and socially-adverse impacts have been identified and mitigation measures have been considered in readiness for implementation. The District Environmental Officer will be responsible for screening the proposed asset for land and resettlement issues and conduct environmental screening in line with the established procedures under the ESMF. Activities to be screened may include the construction or upgrading of feeder roads, flood protection embankments and storm drains. Project components that require land acquisition, compensation and resettlement of displaced persons will be reviewed under the framework for land acquisition and compensation, but should in principle be avoided.

232. The components under MFERP that would trigger environmental safeguard polices are Component 1: Livelihoods Restoration (community public works under Component 1) and Infrastructure Rehabilitation and Reconstruction (Component 2). The environmental safeguard policies that would be triggered are: (i) Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), and Forests (OP 4.36). Initial evaluation of the scope of activities and potential scale of impacts from construction and rehabilitation activities would have the Project assigned the environmental category B as the subprojects have moderate impacts, are localized and easily mitigated. This category requires a partial assessment of impacts and, in line with safeguard requirements, an ESMF will be prepared consulted upon and disclosed by the Government. An Integrated Pest Management Plan (IPMP), containing a guide on the procurement, distribution, and storage of pesticides near irrigation schemes under rehabilitation, will also be prepared, consulted upon and disclosed.

233. Project activities that would trigger environmental impacts include rehabilitation and construction works of roads, bridges, irrigation schemes, drainage structures, canals and headworks of irrigation schemes. Construction related to negative environmental impacts would include clearance of trees, noise nuisance, soil erosion, dust emissions, solid and liquid wastes and pollution of surface and ground water resources among others. The Project will be implemented in or near natural habitats, including, possibly some reserves. Physical cultural resources could be affected by the civil works. It is also important to recognize the implementation of an HIV/Aids prevention program to help ensure a healthy migrant labor force of contractors for civil works during construction periods.

234. Negative environmental impacts from operations of irrigation schemes and other facilities may include the following: increase in water logging and salinization of land, increase in pests and diseases, conflict in use of water resources with upstream or downstream users and poor sanitation. In general the extent and significance of the negative impacts will be localized and could be managed with appropriate interventions during the planning and implementation of sub-projects.

235. In line with Environmental Assessment OP 4.01, the Government will prepare an ESMF to guide the mainstreaming of environmental planning for the Project. The ESMF provides screening procedures for typical anticipated environmental and social impacts for all Project activities and the preparation of an Environmental and Social Management Plan. The screening process has been prepared as part of the requirements of the OP 4.01 Environmental Assessment, and will complement the National Environmental Policy and Guidelines for Environmental Impact Assessment (EIA) in Malawi (1997) which requires environmental and social screening for developments projects.

236. The Borrower will, drawing on the existing RPFs from the Shire River Basin Management Project (SRBMP), Agriculture Sector-Wide Support Project (ASWAp-SP) and IRLADP, prepare a RPF to guide the preparation of site specific Resettlement Action Plans (RAP) once such details are known. Just as the ESMF and IPMP, the RPF will be fully consulted upon, reviewed and cleared by the Bank, and publicly disclosed both in-country and on InfoShop prior to project implementation.

237. The environmental and social screening process consists of four steps: (i) review of environmental and social impacts checklist for projects; (ii) screening of impacts from the sub-projects and sites; (ii) assignment of environmental categories; and iv) preparation, review and approval of an environmental action plan. The screening process will be carried out using a screening form to be attached in the ESMF. A District Environmental Sub-Committee under the supervision of the District Commissioner will carry out the environmental and social screening.

238. The project may affect natural habitats and physical cultural resources. The ESMF will include guidance on mitigating any possible impacts on natural habitats and includes a procedure for chance finds. The project may involve clearing trees. The ESMF will include measures for managing the clearance and possible reforestation.

239. An IPMP will promote the use of biological or environmentally-friendly control of pests on irrigation schemes and reduce reliance on synthetic chemical pesticides. The IPMP will also promote integrated approaches that ensure that the health and environmental hazards associated with the use of pesticides are minimized. The plan will also include safer guidelines for the use of recommended and environmentally-friendly pesticides on Bank-funded rehabilitated irrigation schemes.

240. Environmental monitoring, evaluation and reporting on environmental and social management will be part of the project implementation process and local authority reporting system. During construction, contractors will keep records of all activities done on the Project site, which will be submitted to the District Council for consolidation. The District Lands Officers and District HIV/Aids Coordinators will be responsible for monitoring at the local level on a quarterly basis. Compliance to environmental and social screening will be generated from annual reports, evaluation reports and feedback meetings and implementation support missions.

241. Awareness on Environmental Mitigation Measures: The ESMF will also outline provisions for the awareness/orientation sessions for environmental and social training aimed at contractors

of civil works, staff from Roads Authority and local councils. Appropriate training will cover areas such as: screening of projects, policy and legal framework on environment and construction, disposal of solid and liquid waste from premises, and measures to prevent the spread and contraction of HIV/Aids. Environmental and social rules for contractors will be incorporated within construction bids and contracts to enhance obligations on contractors.

Social

242. The components triggering social safeguard polices are Component 1: Livelihoods Restoration (community public works under Component 1) and Infrastructure Rehabilitation and Reconstruction (Component 2).

243. Most of the flood-affected areas are high-density rural areas. Information sourced from preliminary PDNA report indicate that the majority of flood displaced and affected people are resource-poor rural smallholder farmers. The affected population includes socially and economically disadvantaged groups, such as women and children, aged and physically challenged citizens. Floods not only lead to a loss of land, shelter, transport infrastructure, health facilities, education facilities, land/gardens, trees and crops but also to a loss of social cohesion, livelihood systems, and other employment opportunities.

244. Land and natural resources are basic assets of production and livelihood systems in rural areas in Malawi, including flood-affected areas. Land tenure is predominantly through the customary land tenure system in which households own land for cultivations that is passed on to new generations. However, common properties, such as graveyards, rivers, community forests, hills and grazing lands are vested into the trust of local leadership.

245. The national HIV/Aids prevalence rate in Malawi is 12 percent of the adult population. Nevertheless, prevalence rates vary from one region to the other and from rural to urban areas. The highest rate is in the Southern Region at 20.5 percent and lowest in Northern Region at 10.2 percent. The prevalence rate is 17.1 percent in urban areas and 10.8 percent in rural areas. The Malawi Government National HIV/Aids Policy (2012) highlights that migrant workers (mobile populations) and women are among categories of people vulnerable to the transmission of HIV/Aids and other sexually transmitted diseases. Recruitment of migrant workers is anticipated during both rehabilitation and reconstruction of public infrastructure. Single male migrant workers would be at an increased likelihood of contracting HIV/Aids in the project area.

246. The RPF will be prepared providing guidance on the mitigation of social and economic losses among local communities. In addition, the framework will include measures to promote gender equality and a social inclusion framework to address the recovery needs of the disproportionately affected vulnerable/marginalized groups, specifically those living in scheduled caste habitations without the benefit of agricultural land, secure housing and incomes. The RPF will provide guidelines for free and informed consultation with the communities, ensuring community capacity building and participation, grievance redress, information disclosure and independent monitoring and evaluation. Requirements of land for Project activities will be met through the provision of government land, purchase or the voluntary donation of private land without resorting to land acquisition.

247. The RPF will also guide possible land acquisitions and resettlement issues for the new sites of roads, bridges, schools, health centers, new sites for irrigation diversion canals and head works. The RPF include: (i) resettlement screening process; (ii) description of typical socio-economic impacts; (iii) eligibility criteria for compensation and methods of delivery; (iv) methods of valuation of the affected properties; (v) preparation of resettlement action plan; (vi) provisions for preparation of checklists on resettlement and training in resettlement exercises; (vii) mechanisms to minimize resettlements and restrictions to access assets; and (viii) resettlement monitoring systems.

248. Resettlement screening process: The screening process consists of four steps: (i) screening of the sub-projects and sites; (ii) assignment of resettlement categories and preparation of a resettlement action plan; (iii) review and approval of resettlement action plan; and (iv) payment of compensation. The screening process will be carried out using a screening form as outlined in the RPF.

249. The RPF will include provisions on the orientation of resettlement for members of the District Environmental Sub-Committee, contractors of civil works (rehabilitation and reconstruction of roads, bridges, and canals), staff of Roads Authority, and Department of Irrigation, Department of Lands and Valuations to enhance knowledge of best practices in resettlement exercises. Appropriate orientations would cover areas such as: policy and legal framework on resettlement and compensation, screening, census of affected persons, use of screening forms, gender issues, methods of valuation of assets, eligibility criteria, administration and delivery of compensation among others.

Table 7.1: Triggered Safeguards

6. Safeguard Policies	Triggered?	Explanation
Environmental Assessment OP/BP 4.01	Yes	The MFERP will trigger this policy due to the involvement of civil works (rehabilitations, construction works) of public infrastructure in flood-affected areas. Civil works will possibly generate negative externalities such as: soil erosion and siltation, loss of trees, pollution to surface and ground water resources, soil erosion, dust emissions, solid and wastes. Components under the Project that would trigger this safeguard policy are community public works activities, rehabilitation and reconstruction of sections of roads and bridges, rehabilitation of schools and health centers, and canals and head works of irrigation schemes. The exact location, scope and scale of specific sub-project investments are not known at this stage. An ESMF will be prepared which will provide the criteria and procedures for screening sub-project investments and guide the preparation of site-specific environmental and social management plans. The ESMF will also assess the institutional capacity of the implementing agency and

		provide measures for capacity building along with an estimate of the budget needed for the implementation of the ESMF. The ESMF will also provide a list of activities that could be financed by the Project and screen out activities that correspond to Category A projects. Initial appraisal of the proposed activities under the MFERP has been classified as Category B under OP 4.01. The MFERP will not fund large-scale new infrastructure development projects (e.g. dams or power stations), but rather small to medium size rural infrastructural rehabilitation and reconstruction works in localized sites across the country (spread around 15 flood-affected districts). The justification for classification of category B is that most of the Project will focus on medium size rehabilitation and re-construction projects for sections of roads, bridges, canals and head works of irrigation schemes plus repair of schools and health facilities. The anticipated scale of potential adverse environmental or social impacts on human populations are site-specific, few if any of them are irreversible and in most cases, mitigation measures could be designed to address the impacts. An environmental and social management plan and abbreviated resettlement action plan for sub-projects can be used to address the impacts.
Natural Habitats OP/BP 4.04	Yes	Because of the sensitivity of the Lower Shire area (being within the proximity of natural reserves and flood prone areas), it is possible that the ecological balance of the area could be affected, including natural reserves. Restoration of some livelihood activities, such as bee keeping and nature-based enterprises, may affect some protected wildlife reserves in rural communities. Rehabilitation of services and access to roads in flooded-affected wildlife reserves may affect conditions, including natural habitats - e.g. in Mwabvi Game Reserve/Lengwe National Park.
Forests OP/BP 4.36	Yes	The project is expected to involve clearing of trees. The ESMF will include measures to manage the clearance, including possible reforestation in some areas.
Pest Management OP 4.09	Yes	The Project will support the rehabilitation of irrigation schemes. This involves investments in the agriculture sector that will enhance production and will likely increase the use of pesticides. However, the Project will not finance the procurement of pesticides. In cases where pesticides are used within existing production systems, the Project will promote the use of integrated pest management and the safe use, storage, and disposal of agro-chemicals. Irrigation schemes may use pesticides to control pests on schemes. An Integrated Pest Management Plan (IPMP) will be prepared, consulted upon and disclosed to provide guidance on the use of proper use of pesticides.
Physical Cultural Resources OP/BP 4.11	Yes	The Project may trigger this policy if contractors during rehabilitation and reconstruction of public infrastructure discover

		archeological sites, historical sites, remains and objects, including graveyards and/or individual graves. The GoM will prepare Chance Find Procedures for Contractors to guide them in the proper management of physical cultural properties in case they are found.
Indigenous Peoples OP/BP 4.10	No	There are no Indigenous Peoples in the project area.
Involuntary Resettlement OP/BP 4.12	Yes	Rehabilitation and construction of roads, bridges, health facilities and schools and irrigation schemes may require land for temporary or permanent use. The land acquired for this purpose may lead to loss of assets for some households. Potential risks are: loss of access to land/assets and loss of income sources or means of livelihoods whether or not affected people must move to another location. A RPF has been prepared to guide procedures on all sub-projects in incidences of land acquisitions, in cases of negative social impacts to people such as losses of assets, loss of income sources, loss of access to assets and income sources.
Safety of Dams OP/BP 4.37	No	The Project does not involve dams.
Projects on International Waterways OP/BP 7.50	Yes	Malawi, Tanzania and Mozambique are co-riparian countries of the Shire River. Namibia, Angola, Zimbabwe, Botswana and Zambia are co-riparian countries above the confluence of the Shire and Zambezi Rivers in the greater Zambezi Basin. However, the project will only be financing rehabilitation of existing infrastructure and therefore an exception under paragraph 7(a) OP 7.50 has been obtained from the regional Vice President as of April 6, 2015.
Projects in Disputed Areas OP/BP 7.60	No	The Project is not being implemented in disputed areas.

Safeguards Monitoring

250. Environmental monitoring, evaluation and reporting on environmental and social management will be part of the project implementation process and local authority reporting system. During construction, contractors will keep records of all activities done on the Project site, which will be submitted to the district council for consolidation. The District Lands Officers and District HIV/Aids Coordinators will be responsible for monitoring at the local level on a quarterly basis. Compliance to environmental and social screening will be generated from annual reports, evaluation reports and feedback meetings and implementation support missions.

251. Specific to resettlement screening, the District Executive Committee, under the supervision of the District Commissioner, will carry out the screening. Monitoring, evaluation and reporting on resettlement issues will be part of a project implementation process and local authority reporting system. Compliance to resettlement screening will be generated from monthly reports, evaluation reports and feedback meetings and implementation support missions.

252. Specific to safeguards, the Government has already used harmonized safeguards instruments and trained district-level environmental staff on screening. This set-up will be used for the MFERP, and the ESMF, IPMP and RPF will be adopted for this Project to monitor potential environmental and socially-adverse impacts. The District Environmental Officer will be responsible for screening the proposed asset for land and resettlement issues and conduct environmental monitoring in line with the established procedures under the ESMF.