



## Malawi: Shire River Basin Management Program (Phase-I) Project (P117617)

AFRICA | Malawi | Water Global Practice |

IBRD/IDA | Investment Project Financing | FY 2012 | Seq No: 12 | ARCHIVED on 25-May-2018 | ISR32103 |

Implementing Agencies: Ministry of Agriculture, Irrigation and Water Development

### Key Dates

#### Key Project Dates

Bank Approval Date: 14-Jun-2012

Effectiveness Date: 07-Sep-2012

Planned Mid Term Review Date: 01-Oct-2015

Actual Mid-Term Review Date: 19-Oct-2015

Original Closing Date: 31-Jan-2018

Revised Closing Date: 31-Jan-2019

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The overall Program Development Objective of the Shire River Basin Management Program is to generate sustainable social, economic and environmental benefits by effectively and collaboratively planning, developing and managing the Shire River Basin's natural resources. The program would support the Government's Shire basin Policy Letter, and would have a duration of 12-15 years. The first phase project – the Shire River Basin Management Program (Phase-I) Project (SRBMP) – would establish coordinated inter-sectoral development planning and coordination mechanisms, undertake the most urgent water related infrastructure investments, prepare additional infrastructure investments, and develop up-scalable systems and methods to rehabilitate sub-catchments and protect existing natural forests, wetlands and biodiversity. Future phases would consolidate Basin planning and development mechanisms and institutions, undertake further infrastructure investments, and up-scale catchment rehabilitation for sustainable natural resource management and livelihoods. The Project Development Objective (PDO) of the SRBMP is to develop a Shire River Basin planning framework and improve land and water management for ecosystem and livelihood benefits in target areas. The project would: (a) strengthen the institutional capacities and mechanisms for Shire Basin monitoring, planning, management and decision support systems; (b) invest in water related infrastructure that sustainably improves water resources management and development; (c) reduce erosion in priority catchments and sedimentation and flooding downstream, while enhancing environmental services, agricultural productivity and improving livelihoods; (d) improve flood management in the Lower Shire and provide community level adaptation and mitigation support; and (e) protect and enhance ecological services in the Basin.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components

Name

SHIRE BASIN PLANNING: (Cost \$41.60 M)

CATCHMENT MANAGEMENT: (Cost \$45.00 M)

WATER-RELATED INFRASTRUCTURE: (Cost \$59.00 M)



## Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Substantial	● Substantial

## Implementation Status and Key Decisions

The project has achieved most of its objectives and targets. Four out of the five development objective indicators have been achieved, and 11 out of the 15 intermediate indicators have been achieved. The rest of the indicators are on track to be achieved by project closure. Project beneficiary targets have been exceeded. A total of 431,520 people (compared to an end-of-project target of 400,000) are directly benefiting from the project's interventions related to land and water management, as well as ecological enhancement activities such as forest co-management, forest-based enterprises and various livelihood and income-generating activities. The average Management Effectiveness score (METT score) for the nine targeted protected areas stands at 73 against a target score of 65. An improved operational decision support tool for Kamuzu Barrage operation has been developed and is currently in use. Most of the planned project activities are either completed or close to completion. However, weaknesses in project management have led to missed completion dates for some activities, resulting in contract extensions and cost overruns.

The Shire Basin Plan has been completed and adopted. The planning process followed a well-structured stakeholder participation process supported by state-of-the-art decision-support tools. The next step is to disseminate the plan to all stakeholders and facilitate districts to integrate the basin plan recommendations in their respective district development plans. A comprehensive set of knowledge products have been developed to facilitate integrated natural resources management in the Shire basin. However, knowledge management and dissemination remains weak. Collaboration and coordination between different government agencies involved in Shire Basin management has improved, and various training and capacity building activities have been undertaken to further enhance capacity for coordinated basin planning and management. A multi-sectoral Shire River Basin Agency (SRBA) has been established, with an Executive Director and four key professional staff in place. However, operationalization of the National Water Resources Authority (NWRA) under which SRBA is supposed to be legally anchored, is still pending. The future of SRBA is thus a major cause of concern as the agency remains a prototype organization with no legal backing and no budget.

A network of 95 hydromet monitoring stations across the basin has been revamped to improve hydro-meteorological information for improved planning, operational decision support and flood forecasting. Modern hydromet equipment and associated software have been installed to enable access to hydromet data in near real time, although there are still a few teething problems (mainly battery issues) – to be resolved before project closure. An operational decision support system (ODSS) has been developed, and system operators from both Department of Water Resources (DWR) and Department of Climate Change and Meteorological Services (DCCMS) have been trained. The ODSS can perform the following forecasting functions for decision support: riverine flood and flow forecasting, catchment flash flood forecasting, seasonal forecasts of flows and water levels in the river basin including Lake Malawi to support water infrastructure operation (Kamuzu barrage), drought monitoring, and crop calendar providing seasonal rainfall predictions and information relating to planting times and other agricultural activities.

Catchment management guidelines have been prepared and adopted at the national level. Further, various plans (at sub-catchment and micro-catchment/village level) have been developed to guide implementation of community-based land and water management interventions in the critical catchments of upper Lisungwi, upper Wamkulumadzi, Kapichira and Chingale. Studies on alternative livelihoods and enterprise value chains in these catchments have been completed, and these have informed the selection of viable rural enterprises which are currently benefiting from a micro-loan facility supported by the project. Targeted catchments are still undergoing rehabilitation, through implementation of a total of 305 Village-Level Action Plans (VLAPs). Available data suggests that project targets related to catchment management have been exceeded. To date, about 77 percent of households within targeted catchments are engaged in sustainable land and water management (SLWM) activities, compared to an end-of-project target of 75 percent. The total area under SLWM treatment has reached 25,212 ha compared to an end of project target of 24,460 ha, and a total of 10,173 ha of previously degraded community forests have been regenerated. In addition, a total 80 Farmer Field Schools (FFS) have been established to promote conservation agriculture techniques and improved crop management practices.

Various rural infrastructure works – rural feeder roads (80km), bridges (11) and markets (13) – designed to support alternative livelihoods have been completed and commissioned. The project has also supported the creation and training of a total of 338 Common Interest Groups (CIGs) for different livelihood activities. The groups have already received a total of US\$850,000 in low-interest micro-loans as start-up capital for various rural enterprises. In addition, all the 305 VLAP communities have received the first and second tranche of the Community Environment Conservation Fund (CECF) grants that offer a financial incentive to individual community members to engage in SLWM activities. Environmental management activities designed to protect and conserve substantial areas of existing natural ecosystems in the Shire basin, have progressed well, with all but one activity completed, and with positive results emerging from these investments.

Community flood protection infrastructure at five sites in Chikwawa and Nsanje has been completed. The structures have substantially reduced the risk of flooding in the targeted communities. The quality issues at Tengani dyke (which attracted much media attention following the Vice President's visit to the site) have been addressed and the dyke has been completed to a satisfactory quality standard.

Finally, rehabilitation and upgrade of Kamuzu barrage – the project's flagship infrastructure investment – is close to completion. However, the overall construction schedule has slipped by an estimated three months since the last mission. The delay is attributed to failure of certain mechanical parts (sprockets for the lifting hoists) to pass factory tests which impacted the schedule for manufacturing and shipping of the lifting hoists to Malawi. The deficiencies have since been corrected and all lifting hoists are expected to be delivered on site by end of June 2018. The rehabilitation and upgrading works are now expected to be completed and commissioned by end of October 2018 (compared to an earlier estimate of July 2018).



However, there has not been much progress on previously agreed institutional actions that are critical to sustainability of key project interventions, including Kamuzu Barrage. For instance, with less than six months to the completion of Kamuzu barrage, the Ministry of Agriculture, Irrigation and Water Development (MAIWD) has not yet put in place a sustainable institutional arrangement for management of the Barrage. Further, progress on operationalization of the National Water Resources Authority (NWRA) – a key sector institution established under the Water Resources Act 2013 – remains slow. The delays continue to create considerable institutional uncertainty and delayed decision-making in the overall management of water resources in the Shire Basin and in the country. During previous Bank missions (July 2016, January 2017 and August 2017), MAIWD committed to an action plan to operationalize NWRA by finalizing all necessary regulations and appointing the NWRA Board. To date, only the regulations have been completed and gazetted in March 31, 2018. Appointment of the Board has been pending approval since June 2017. The Bank urges MAIWD and relevant authorities to expedite appointment of the NWRA Board.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Substantial	● Substantial
Macroeconomic	--	● Substantial	● Substantial
Sector Strategies and Policies	--	● Moderate	● Moderate
Technical Design of Project or Program	--	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	--	● High	● High
Fiduciary	--	● Substantial	● Substantial
Environment and Social	--	● Moderate	● Moderate
Stakeholders	--	● Moderate	● Moderate
Other	--	● Low	● Low
Overall	--	● Substantial	● Substantial

## Results

### PDO Indicators by Objectives / Outcomes

### Intermediate Results Indicators by Components

## Data on Financial Performance

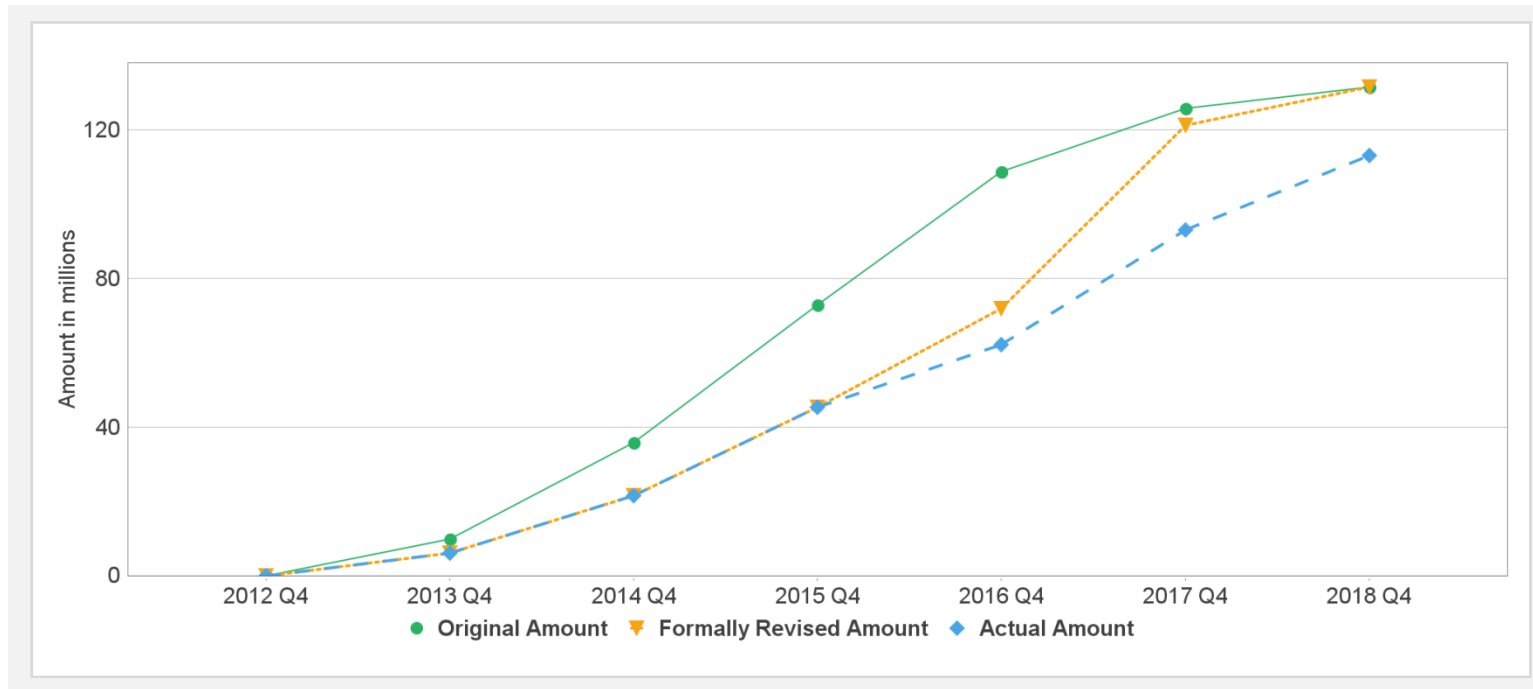
### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P117617	IDA-51250	Effective	USD	93.75	93.75	0.00	76.36	8.58	90%
P117617	IDA-H7750	Effective	USD	31.25	31.25	0.00	30.60	0.00	100%
P127866	TF-12920	Effective	USD	5.08	5.08	0.00	4.68	0.40	92%
P127866	TF-12921	Effective	USD	1.50	1.50	0.00	1.40	0.10	94%

### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P117617	IDA-51250	Effective	14-Jun-2012	22-Aug-2012	07-Sep-2012	31-Jan-2018	31-Jan-2019
P117617	IDA-H7750	Effective	14-Jun-2012	22-Aug-2012	07-Sep-2012	31-Jan-2018	31-Jan-2019
P127866	TF-12920	Effective	22-Aug-2012	22-Aug-2012	07-Sep-2012	31-Jan-2018	31-Jan-2019
P127866	TF-12921	Effective	22-Aug-2012	22-Aug-2012	07-Sep-2012	31-Jan-2018	31-Jan-2019

### Cumulative Disbursements



### Restructuring History

There has been no restructuring to date.

### Related Project(s)

P127866-Shire River Basin Management Program (GEF)

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