INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE

Report No.: AC5052

Date ISDS Prepared/Updated: 05/17/2011

I. BASIC INFORMATION

A. Basic Project Data

Country: Malawi	Project ID: P117617
Project Name: Malawi: Shire River Basin Management Project	
Task Team Leader: Nagaraja Rao Harshadeep	
Estimated Appraisal Date: November 1, 2011	Estimated Board Date: December 21, 2011
Managing Unit: AFTEN	Lending Instrument: Specific Investment Loan
Sector: Forestry (30%);General agriculture, fishing and forestry sector (30%);General water, sanitation and flood protection sector (20%);Public administration- Water, sanitation and flood protection (20%)	
Theme: Other environment and natural resources management (30%);Land administration and management (30%);Water resource management (20%);Other rural development (20%)	
IBRD Amount (US$m.): 0.00 IDA Amount (US$m.): 100.00 GEF Amount (US$m.): 0.00 PCF Amount (US$m.): 0.00 Other financing amounts by source: BORROWER/RECIPIENT 0.00 0.00	

B. Project Objectives [from section 2 of PCN]

The overall program development objective is to make significant progress in achieving socially, environmentally and economically sustainable development in the Shire Basin. To achieve this objective, the APL will: (i) support establishment of a basin level planning, management and development system for the Shire River Basin; (ii) prepare and implement investments to accelerate sustainable growth in an integrated manner; (iii) support efforts to reduce erosion and sedimentation in priority catchments, together with enhanced agricultural productivity; and, (iv) improve water resources management and development in the basin.

The specific Project Development Objective (PDO) in support of the first phase of the program is to develop a strategic planning and development framework for the Shire River Basin and support targeted investments to improve land and water resources management in the basin.

The proposed project results indicators are:

- Initial Shire River Basin management plan prepared and an institutional mechanism for Shire River Basin management agreed.
- Increased adoption of sustainable land and water management practices in select catchments;
- Kamuzu Barrage rehabilitated;
- Preparatory studies conducted for water and flood management related investments in the Shire River Basin.

C. Project Description [from section 3 of PCN]

The Project will address the interlinked challenges of poverty and a deteriorating natural resource base in the Shire River Basin to halt the process of environmental degradation and improve the productive potential of natural resources. The Project will promote integrated climate resilient investment planning in the basin, including institutional capacity building to plan and monitor changes in land use patterns at a basin level. Project activities will support strategic planning of large-scale infrastructure investments and adoption of sustainable land, forest and water management practices to reduce land degradation in production landscapes and improve the productivity and incomes of smallholder farmers. Project investments will be designed to support the Government of Malawi's economic growth and development plans in the basin.

The Project is organized in three components: (i) Institutional Capacity Strengthening for Basin Planning, Management and Development; (ii) Livelihoods-Based Watershed Management; and, (iii) Infrastructure Development to Mitigate the Impacts of Floods and Droughts to Support Sustainable Economic Growth and Food Security.

Component A: Institutional Capacity Strengthening for Basin Planning, Management and Development (US$15 million). The objective of this component is to support establishment of the Shire River Basin management institution to promote harmonized watershed development interventions and policies for the basin. The institution will coordinate public as well as private sector interests in its strategy formulation exercise.

Specifically, this component will invest in institutional capacity building for river basin and watershed management and support strategic planning and preparation of significant infrastructure investments within an integrated and sustainable basin development framework. Elements included under this component are:

a. Strengthen capacity for basin management. This activity would help create the enabling environment for improved basin planning, development, and management. It will support building a sound knowledge base and analytical tools for basin planning and management; including enhanced forecasting and management of floods and droughts.

This work will be targeted at building basin planning and management capacity in the Shire River Basin management institution and include support for:

- Water and land monitoring, including: hydro-meteorological, land use, forest cover, sediment/watershed degradation, and water quality aspects, using both ground-based and satellite systems. This work will build on existing systems such as the web-based GIS watershed maps developed during project preparation.

- Development of suitable models (e.g. simulation, optimization, multi-criteria) for basin planning and operational management and examining scenarios of development and climate variability and change. These tools will be used to help examine water resources availability and sustainability of large-scale water and land related infrastructure investments, improve flood and drought forecasting and management, and improve water infrastructure operations.

- Structured stakeholder involvement and outreach to improve use of monitored information and to better customize analytical frameworks and outputs.

This activity will provide financing for monitoring and communication systems, related IT and office equipment, data development, and related consultancies and training.

b. Support strategic planning of large-scale infrastructure investments within an integrated basin approach (e.g., Shire Valley Irrigation Project, multipurpose storage dams as identified and designed under NWDP II, and major transport and energy investments) and prepare for these investments applying a coherent and sustainable basin development framework.

c. Embed general project management functions with broader institutional capacity building efforts aimed at promoting harmonization of policies and strategies for basin planning, management and development in accordance with best practice.

Component B: Livelihoods-Based Watershed Management (US$25 million). The objective of this component is to build local capacity and pilot rehabilitation of degraded upper watersheds in select catchments through a participatory livelihoods-based approach to encourage rural communities to manage natural resources sustainably. Specific activities supported under this component would include:

a. Pilot adoption of community-based sustainable land and water management practices in priority catchments to reduce land degradation and increase soil productivity and rural incomes based on a menu of options packaged as an integrated set of interventions for each targeted area, including: i) reforestation to decrease soil erosion and sedimentation of rivers (e.g., Mwanza, Rivi Rivi, Ruo and Lisungwe) that deposit significant amounts of sediment in the Shire; ii) adoption of new agronomic practices, crop diversification into high-value crops and reduction of post-harvest losses; iii) rainwater harvesting and mini-scale irrigation; and, iv) improved land conservation techniques to reduce run off and improve water retention and soil fertility. Soil and water conservation interventions will be area specific (guided by spatial maps), need-based and identified for specific priority catchments where ownership and the potential for impact are deemed high.

b. Specific catchments (e.g., Mwanza, Ruo) will include forest sector interventions (e.g., reforestation, fire management, pilot Carbon finance opportunities) and measures to reduce the

gap between biomass production and consumption (i.e., promoting establishment of community plantations in degraded areas on customary land; thereby helping communities gain access to sustainable timber, pulpwood, firewood, minor forest produce and cash).

The Shire River Basin stocktaking analysis and Strategic Environmental and Social Assessment are among the tools that will be used to identify priority catchments for component interventions. Lessons learned from the IRLAD Project will assist in the identification of the most effective technologies already tested in the basin. And, in the Lower Shire, in particular, investments will complement early successes in community catchment conservation promoted by the IRLAD Project.

Component C: Infrastructure Development to Mitigate the Impacts of Floods and Droughts to Support Sustainable Economic Growth and Food Security (US$30 million). The objective of this component is to mitigate risks posed by droughts and floods and to reduce the uncertainty of access to water due to rainfall variability. This component builds on important advances made by the Second National Water Development Project and Bank supported Disaster Risk Reduction work.

This component would support two lines of intervention, namely:

a. Upgrade Kamuzu Barrage at Liwonde. Flow in the Shire River is largely determined by the water level in Lake Malawi. The Kamuzu Barrage at Liwonde regulates the natural fluctuations of Lake Malawi within set boundaries, thereby regulating the flow of the Shire River so that generation of hydro-power downstream is not affected. Building on the detailed design work, EIA and social assessment financed by the Second National Water Development Project, this component will finance rehabilitation of the Kamuzu Barrage, including a better operating system for managing lake flows based on real time meteorological and hydrological data. Rehabilitation of the Kamuzu Barrage will increase the capacity to regulate water flows from Lake Malawi into the Shire River. Regulating the flow of the river benefits the cities of Blantyre and Limbe (urban and industrial water supply), irrigation, fisheries and important ecosystems including protected areas in the Middle and Lower Shire. Studies have shown that better lake level control can eliminate the risk of the river going dry in all but the most severe drought sequences.

b. Identification of priority multi-purpose investments for initial preparation and financing of full feasibility studies, preliminary design, environmental impact assessments and safeguard plans for the selected works. Floods in the Lower Shire have significant economic and social implications. Interventions to mitigate the impacts of floods are required to improve rural livelihoods and sustain economic growth and diversification. The sediment and flooding challenges are interrelated and require a range of interventions including both physical and nonphysical measures such as flood protection works, an early warning system and a flood plain management plan. Selection of priority investments and associated flood management planning would be based on the recently completed Disaster Risk Reduction Situation Analysis, Economic Vulnerability and Disaster Risk Assessment study and Flood Risk Study for the Lower Shire. Such investments complement the emerging work under the National Program to Manage Climate Change in Malawi as well as preparation of the Disaster Risk Management Plan for

Malawi and the Integrated Disaster Management Plan for the Lower Shire. Actual investments would be financed under the second phase of the proposed APL.

Project Implementation and Coordination Arrangements

Given the complexity and multi-sector nature of the proposed operation, and subject to discussion with the Government of Malawi and Bank management, it is proposed that a multi-sector Project Management Unit (PMU) be housed in the Ministry of Natural Resources, Energy and Environment staffed with experts from the relevant line ministries and specialized departments (e.g., DoDMA) for coordination and implementation of specific project interventions.

To ensure broad government ownership and long-term leadership of the APL, and to support cross-sector coordination, the project would also establish a Project Steering Committee (PSC) chaired by the Principal Secretary of the Ministry of Development Planning and Cooperation. The PSC would have general oversight of the project. It would be comprised of representatives from the Ministry of Natural Resources, Energy and Environment, the Ministry of Agriculture and Food Security, the Ministry of Irrigation and Water Resources, and the Ministry of Transport and Public Works, among others, engaging the Departments of Energy, Environmental Affairs, Forestry, Irrigation, Land Resources and Conservation, Mines, Meteorology, Transport, Water Resources and Disaster Management Affairs. The PSC would be responsible for general policy making, approval of annual work plans and budgets, review of quarterly and annual implementation progress reports, including audit reports, and inter-ministerial coordination.

A Technical Committee (TC) would be established and responsible for providing technical oversight of project implementation as well as reviewing and recommending project work plans and budgets to the PSC. The TC would also advise on the quality of implementation reports and policy documents, guidelines and M&E reports. This committee would be comprised of senior technical staff of the principle line ministries involved in project implementation as well as other units (e.g., Department of Disaster Management Affairs) and external experts.

At the local level, the District Assemblies, in close cooperation with communities, would hold primary responsibility for implementing the pilot sustainable land and water management activities proposed under Component B. The PMU would facilitate development of catchment plans in collaboration with the District Assemblies and communities. The specific activities derived from the catchment plans would then be implemented by the DAs and involve key departments from relevant line ministries in identification, planning and implementation. All activities would be community-based.

Formal partnership arrangements will be established during project preparation with the Millennium Challenge Account, DFID, Norway and UNDP, among others, who are actively investing in watershed management activities in the Shire River Basin. The vast majority of development partners welcome the proposed approach for basin level planning, management and development through a basin management institution.

D. Project location (if known)
Shire River Basin, Malawi.

E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]
The Ministry of Natural Resources, Energy and Environment, through its Environmental Affairs Department, is responsible for management of environmental considerations, including environmental assessment work. However, Malawi is considered to have weak institutional capacity for safeguard policy implementation and monitoring, particularly at the district level. As such, the Borrower will prepare the requisite safeguard policy tools, as per Bank policy, to minimize and mitigate all potentially adverse environmental and social impacts generated by the specific investments financed by the APL. In addition, the institutional capacity to apply the project's safeguard policies and tools will be enhanced through targeted training for central, regional and district level stakeholders tasked with application and monitoring of the project's safeguard policies and tools throughout project implementation.

F. Environmental and Social Safeguards Specialists
Mr Sibekile Mtetwa (AFTSP)
Mr Cheikh A. T. Sagna (AFTCS)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
The project involves a series of interventions and investments that range in scope and scale from micro-irrigation projects and community-based soil and water conservation pilot activities to rehabilitation of Kamuzu Barrage and identification of priority multi-purpose investments for initial preparation. In addition, the project will support strategic planning of large-scale infrastructure investments. The complexity of this multi-sector operation will require a number of safeguard tools to properly minimize and mitigate any and all potentially adverse environmental and social impacts generated by specific project investments. For some investments, the precise location and nature of the works is known (e.g., rehabilitation of Kamuzu Barrage), however in other instances, the exact location, scope and scale of specific project investments is unknown at this stage. As such, the Borrower will prepare a set of safeguard tools, including: an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) that will contain standard methods and procedures, along with the institutional arrangements for screening, reviewing, implementing and monitoring specific Environmental and Social Management Plans to minimize and mitigate any adverse impacts at each site in addition to any cumulative impacts that may be generated in targeted catchments. To support identification of potentially adverse environmental and social impacts, including cumulative impacts, and appropriate associated mitigation measures, a Strategic Environmental and Social Assessment (SESA) will also be prepared. For the rehabilitation of Kamuzu Barrage, in particular, the Environmental Impact Assessment (EIA) and Social Assessment (SA) financed by the NWDP II will be used by the Borrower for this investment. All of the project's safeguard tools will be prepared prior to appraisal and disclosed in country and in the InfoShop 120 days prior to Board.			
Natural Habitats (OP/BP 4.04)	X		
Although several positive environmental impacts will be generated by the project, some			

Safeguard Policies Triggered	Yes	No	TBD
activities may involve investments near or adjacent to critical natural habitats and others may have indirect impacts on critical natural habitats (e.g., rehabilitation of Kamuzu Barrage impact on Lake Malawi National Park). Specific areas may include Majete Wildlife Reserve, Lengwe National Park, Mwabvi Wildlife Reserve, Liwonde National Park in addition to a number of Forest Reserves as well as potential indirect impacts on Lake Malawi National Park, a UNESCO World Heritage Site. All critical natural habitats will be identified and mapped out in the ESMF to ensure that appropriate safeguard measures are established to avoid any impacts in any of the critical natural habitats. The SESA will inform the Borrower on potential impacts on critical and non-critical natural habitats. All potentially adverse environmental or social impacts in critical and non-critical natural habitats will be addressed in the ESMF. The ESMF and SESA will be prepared and disclosed in country and in the InfoShop prior to appraisal and 120 days prior to Board.			
Forests (OP/BP 4.36)	X		
Project investments under component B are specifically targeted at forest sector interventions to improve the quality of forests in priority catchments in the basin. The forest sector investments are aimed at improving the health and quality of natural forests in degraded production landscapes throughout the basin; many of which are adjacent to critical natural habitats. Although the aim of these investments is to ameliorate the quality of natural forests to reduce environmental degradation, soil erosion and sedimentation into the Shire River and its main tributaries, it is possible that minor, time bound adverse environmental impacts may be generated as a result of specific actions during implementation. To eliminate, minimize and mitigate such impacts, the Borrower will make explicit in the ESMF how such investments will be screened, approved, designed, implemented and monitored.			
Pest Management (OP 4.09)	X		
The project involves specific investments in the agriculture and fisheries sectors aimed at enhancing production. However, the project does not envision purchasing or supporting application of pesticides or bactericides in any of its investments, in particular the rural livelihoods activities supported under component B. However, there is a possibility that the project may indirectly cause the purchase of such agents. Thus, the ESMF will address any potential issues associated with pest management and pesticide purchase and use. The ESMF will include a template for an Integrated Pest Management Plan (IPMP). If necessary, a separate IPMP will be prepared if the scope and scale of pesticide purchase and use is deemed significant during project preparation. In addition, the Borrower will abide by the WHO negative list to further mitigate any risks associated with pesticide application. The ESMF (and, if necessary, the IPMP) will be prepared and disclosed prior to appraisal.			
Physical Cultural Resources (OP/BP 4.11)	X		
Project investments may occur in areas that contain physical cultural resources. Since the exact location of these resources are unknown at this stage, the ESMF will include a template for a Physical Cultural Resources Management Plan (PCRMP) and the team will assess during project preparation whether a full-fledged PCRMP will be required or whether specific guidelines aimed at addressing adverse impacts on Physical Cultural Resources in the project's ESMF are sufficient to mitigate any adverse impacts on these resources. The ESMF and PCRMP (if developed as a stand-alone plan) will be finalized and disclosed prior to appraisal.			

Safeguard Policies Triggered	Yes	No	TBD
Indigenous Peoples (OP/BP 4.10)		X	
Involuntary Resettlement (OP/BP 4.12)	X		
Given the scale, scope, nature and diversity of project investments, it is likely that project activities may generate some loss of land and livelihood resources (fruit trees, food crops) that would require appropriate compensation. Although it is unlikely that physical resettlement will occur, it may be necessary, in particular, with respect to the larger infrastructure investments financed by the project. Since the exact nature and location of all such investments is currently unknown, the Borrower will prepare a Resettlement Policy Framework (RPF). Once the specific investments that may generate such impacts have been identified and the location of each is known during implementation, Resettlement Action Plans will be prepared in line with the RPF guidelines. The RPF will be disclosed in country and in the InfoShop prior to appraisal.			
Safety of Dams (OP/BP 4.37)	X		
Although Kamuzu Barrage is only 4 m in height, i.e., less than the 10 m threshold for large dams, financing for the construction of the structure will be provided by the Shire River Basin Management Project using the detailed engineering designs, Environmental Impact Assessment (EIA), Social Assessment (SA) and consultation processes completed under the NWDP II. Rehabilitation of the barrage will also involve application of generic dam safety measures and will be based on the advice of an international panel of experts and the recommendation of the Bank's quality assurance group.			
Projects on International Waterways (OP/BP 7.50)	X		
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. As such, it will be necessary to issue a riparian notification to all co-riparian countries of the Shire and Zambezi Rivers as specified by this OP. The riparian notification will be publically disclosed in country and in the InfoShop prior to appraisal.			
Projects in Disputed Areas (OP/BP 7.60)		X	

Environmental Category: A - Full Assessment

III. SAFEGUARD PREPARATION PLAN

A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 06/25/2010

B. For projects that will not require a QER, the target date for preparing the PAD-stage ISDS: 09/15/2011

C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing[1] should be specified in the PAD-stage ISDS.

At this stage, five safeguard tools will be prepared, including: (i) SESA commenced on January 18, 2010 and will be finalized by June 30, 2010; (ii) The ESMF and RPF will be prepared and disclosed in country and in the InfoShop prior to appraisal and 120 days prior to Board; (iii) Riparian notification will be submitted prior to appraisal; and, (iv - v) The EIA and SA financed by the Second National Water Development Project for the rehabilitation of Kamuzu Barrage will be completed and disclosed in country and in the InfoShop prior to appraisal and 120 days prior to Board.

IV. APPROVALS

Signed and submitted by:		
Task Team Leader:	**Ms Cary Anne Cadman**	05/17/11
Approved by:		
Regional Safeguards Coordinator:	**Alexandra Bezeredi**	05/17/11
Comments:		
Sector Manager:	**Ms Idah Z. Pswarayi-Riddihough**	05/17/11
Comments:		

[1] Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.