

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

**Report No.:** ISDSC14865

**Date ISDS Prepared/Updated:** 14-Jul-2015

**Date ISDS Approved/Disclosed:** 25-Aug-2015

## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	Western Africa	<b>Project ID:</b>	P153863
<b>Project Name:</b>	Senegal River Basin Integrated Water Resources Management Project (P153863)		
<b>Task Team Leader(s):</b>	Shelley Mcmillan,Ijeoma Emenanjo		
<b>Estimated Appraisal Date:</b>	14-Aug-2015	<b>Estimated Board Date:</b>	23-Oct-2015
<b>Managing Unit:</b>	GWA07	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	General water, sanitation and flood protection sector (45%), Public administration- Water, sanitation and flood protection (25%), Health (20%), Irrigation and drainage (10%)		
<b>Theme(s):</b>	Water resource management (40%), Environmental policies and institutions (25%), Other communicable diseases (20%), Regional integration (15%)		
<b>Financing (In USD Million)</b>			
Total Project Cost:	15.10	Total Bank Financing:	0.00
Financing Gap:	0.00		
<b>Financing Source</b>		<b>Amount</b>	
Borrower		0.00	
Free-standing TFs AFR COUNTRY DEPARTMENT, West 1		15.10	
Total		15.10	
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	Yes		

### B. Project Objectives

The development objective of the Senegal River Basin Integrated Water Management Project is to

strengthen the capacity of OMVS and local water user associations to improve the environmental conditions of the Senegal River's water resources.

### **C. Project Description**

The proposed Dutch Trust Fund, which is parallel financing to the Senegal River Basin Multi-Purpose Water Resources Development (MWRD2), is intended to address some of the issues identified above (the proliferation of typha, which leads to the clogging of irrigation canals; upstream erosion; and waterborne disease transmission-particularly schistosomiasis). MWRD2 is the second phase of a 10-year Program. Phase 1 of the program (MWRD1) has positively impacted the Basin across the agriculture, health and fisheries sectors. The new activities to be supported under this project will build upon previous Trust Funds and will be complementary to MWRD2 so as to mutually reinforce integrated water resources management and development to improve community livelihoods.

OMVS has previous experience working with the Dutch Government and has successfully implemented projects supported by two previous Dutch trust funds. The previous Dutch Government supported project provided institutional support at the regional, national and community levels and improved knowledge and monitoring and evaluation of water resources. . The previous Dutch Government supported project also supported: (i) the protection of public health through water supply reinforced livelihoods; (ii) capacity building for water user associations and irrigation cooperatives; and, (iii) river and irrigation channel clearance and slope stabilization.

The proposed project has the following components:

Component 1- Upper Basin Sustainable Land Management (US\$5.5 million): This component aims to address the challenge of degradation in the Upper Basin particularly the restoration of the main headwaters of the Senegal River, the banks of rivers, and the deforested slopes in Guinea and Mali through the sustainable reversal of the process of deforestation and erosion in Térékolé/Kolimbine/Lac-Magui system (TKLM), north of Kayes. In addition, the river banks protecting Kayes will be restored, continuing works initiated in the previously Dutch government financed project. This first component will support the following sub-components:

1.1 Diagnostic studies on deforestation, erosion and sedimentation in the Upper Basin (Guinea and Mali). The diagnostic studies will be designed to: (i) determine the sensitivity of different landscapes, in the Upper Basin, to deforestation and erosion due to differences in their geomorphological, geological, and vegetation attributes; and, (ii) identify high erosion and deforestation risk areas in order to plan site-specific management interventions.

1.2 The implementation of effective soil and water resource protection strategies. The efficiency of conservation measures may vary depending on the prevailing deforestation and erosion processes and controlling factors determined in sub-component 1.1. This sub-component will support the implementation of the most effective soil, vegetation and water resource protection strategies, in the Upper Basin, including strategies from the previously Dutch government financed project, such as: (i) slope stabilization works and reforestation of river banks, and (ii) agroforestry on slopes adjacent to low-land agricultural areas.

Component 2- Management of Invasive Aquatic Plants in the Delta and the Operationalization of Water User Associations (WUAs) (US\$6.3 million): This component aims to control and manage the proliferation of typha, to a level where it does not constitute a threat to the ecological balance and to economic activities the Basin This component also aims to improve access to drinking water and operationalize WUAs in continuity with the activities from the previously Dutch government

financed project. Specifically, this component will support the following sub-components:

- 2.1 Completion of a needs assessment on the control of invasive aquatic species in the Delta. The aim of this sub-component is to conduct a needs assessment to understand and synthesize the implications of the harvesting of Typha and other invasive plants. The needs assessment proposed under sub-component 2.1 will also include a cost benefit analysis (CBA) that will also look at technical options. Emphasis will be given to understanding externalities, and resulting from the various economic, market, policy and institutional failures which result in producers, consumers, investors and traders failing to take account of the costs of invasion when they carry out economic activities. The CBA will present two frameworks for the analysis of invasive species: one for tracing the economic causes of invasions, and one for understanding and analyzing the links between invasive species, ecosystem services and human wellbeing. The needs assessment will ensure that the activities in subcomponent 2.2 are implemented, in the best way possible, to balance social, economic and environmental needs and concerns.
- 2.2 Invasive aquatic plant management: (i) annual inventory of the spatial distribution of the typha by remote sensing; (ii) cost-recovery plans of typha management and development of maintenance schedules; (iii) mechanical removal of typha.
- 2.3 Installation of potable water supply stations in project area villages.
- 2.4 Training and support to existing WUAs on (i) invasive aquatic plant management; (ii) organizational management; and, (iii) the management of water stations (including water quality monitoring and control).

Component 3- Institutional Support for OMVS and National Agencies (US\$3.3 million): This component aims to build the capacity and skills of OMVS and National Cellule staff through training and the exchange of lessons learned. The component will support the management and implementation of regional and state level activities. The component will primarily target the OMVS bodies responsible for implementing the program. The component will also target national technical services to support the activities of the program based on areas of expertise relevant to this project: environment, forestry, water resource management, and public health. This sub-component will support:

- 3.1 Strengthening the capacity of OMVS and national agencies to lead invasive species management efforts in the region.
- 3.2 Strategic management of the Trust Fund.

#### **D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

As with MWRD2, the proposed Project involves all the riparian countries (Guinea, Mali, Mauritania and Senegal) of the Senegal River basin. The Senegal River basin covers a surface area of about 300,000 km<sup>2</sup>. The high plateau in northern Guinea represent 31,000 km<sup>2</sup> (11 percent of the basin), 155,000 km<sup>2</sup> are situated in western Mali (53 percent of the basin), 75,500 km<sup>2</sup> are in southern Mauritania (26 percent of the basin) and 27,500 km<sup>2</sup> are in northern Senegal (10 percent of the basin). The basin has three distinct parts: the upper basin, which is mountainous, the valley (itself divided into high, middle and lower) and the delta, which is a source of biological diversity and wetlands. Topographical, hydrographic and climatic conditions are very different in these three regions and seasonal temperature variations are extensive.

#### **E. Borrowers Institutional Capacity for Safeguard Policies**

The capacity of OMVS and the Member states for environmental and social management has been strengthened under the previous Trust Fund phases, and in the preparation and implementation of both MWRD projects. This included building a core group of transboundary environmental

management expertise. For the preparation of MWRD1, OMVS prepared an Environmental and Social Management Framework (ESMF), a Resettlement Policy Framework (RPF) and a Pest and Pesticide Management Plan (PPMP) in compliance with the requirements of the World Bank Safeguard Policies. These instruments were updated for use in Senegal River Basin Multi-Purpose Water Resources Development (MWRD2; P131323) and will also be used for this project.

#### **F. Environmental and Social Safeguards Specialists on the Team**

Maman-Sani Issa (GENDR)

Salamata Bal (GSURR)

## **II. SAFEGUARD POLICIES THAT MIGHT APPLY**

<b>Safeguard Policies</b>	<b>Triggered?</b>	<b>Explanation (Optional)</b>
Environmental Assessment OP/BP 4.01	Yes	The project and the parallel financed MWRD2, involves a significant number of civil works and environmental management activities. The project will rely on MWRD2 evaluations (ESMF, ESIA, RPF and PPMP) with regard to the environmental and social dimensions of the development of navigation on the Senegal River Basin and the development of micro-hydro sites etc. The Trust Fund will also conduct diagnostic studies on the environmental and social dimensions of the implementation of soil and water resource protection strategies.
Natural Habitats OP/BP 4.04	Yes	Riverbank erosion protection (slope stabilization) is one of the subproject activities, in this Trust Fund. This activity could upset the natural balance in the affected rivers if not done according ecological principles.
Forests OP/BP 4.36	Yes	Triggered by the reforestation activities to be carried out in the Upper Basin, a very sensitive ecological area of the Senegal River.
Pest Management OP 4.09	Yes	Intensification of irrigated agricultural production might increase the use of pesticides and chemical fertilizers.
Physical Cultural Resources OP/BP 4.11	Yes	OP/BP 4.11 is triggered by the feasibility studies for the the civil works activities in the Upper Basin.
Indigenous Peoples OP/BP 4.10	No	There are no indigenous people in the Senegal River Basin as defined by OP/BP 4.10.
Involuntary Resettlement OP/ BP 4.12	Yes	No physical resettlement is anticipated due to the nature of the intended rehabilitation works to be carried out under the various 4.12 subprojects. There might be a need to compensate for the loss of crops, trees or property caused by the Upper Basin erosion management activities. There may also be a

		restriction of access to certain fishing grounds or during certain periods of time.
Safety of Dams OP/BP 4.37	No	None of the activities funded by this project are relying on dams.
Projects on International Waterways OP/BP 7.50	Yes	The governments of the four riparian countries were notified of the International Project through the OMVS, in which all four countries are represented.
Projects in Disputed Areas OP/BP 7.60	No	The project is not located in a Disputed Area.

### III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 28-Jul-2015

**B. Time frame for launching and completing the safeguard-related studies that may be needed.**

**The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

The project will rely on the MWRD2 evaluations of the environmental and social dimensions of several interventions (e.g. the rehabilitation of irrigation schemes, micro-hydro development and the navigation). It has been agreed with OMVS that a Dam Safety and an Environmental and Social Advisory panel will be established as needed to provide advice on the terms of reference for the feasibility studies and the environmental and social studies and on these studies themselves.

The Trust Fund will also conduct diagnostic studies on deforestation, erosion and sedimentation in the Upper Basin (Guinea and Mali).

### IV. APPROVALS

Task Team Leader(s):	Name: Shelley Mcmillan,Ijeoma Emenanjo	
<b><i>Approved By:</i></b>		
Safeguards Advisor:	Name: Glenn S. Morgan (SA)	Date: 25-Aug-2015
Practice Manager/ Manager:	Name: Alexander E. Bakalian (PMGR)	Date: 25-Aug-2015

<sup>1</sup> 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.