

INTEGRATED SAFEGUARDS DATA SHEET

CONCEPT STAGE

Report No.: ISDSC1395

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I. BASIC INFORMATION

A. Basic Project Data

Country:	Africa	Project ID:	P131323
Project Name:	Senegal River Basin Multi-Purpose Water Resources Development Project 2 (P131323)		
Task Team Leader:	Shelley Mcmillan		
Estimated Appraisal Date:	06-May-2013	Estimated Board Date:	16-Jul-2013
Managing Unit:	AFTN2	Lending Instrument:	Adaptable Program Loan
Sector(s):	General water, sanitation and flood protection sector (30%), Irrigation and drainage (25%), Health (20%), General agriculture, fishing and forestry sector (15%), General public administration sector (10%)		
Theme(s):	Water resource management (40%), Regional integration (30%), Malaria (15%), Climate change (10%), Gender (5%)		
Financing (In USD Million)			
Total Project Cost:	126.00	Total Bank Financing:	110.00
Total Cofinancing:		Financing Gap:	0.00
Financing Source			Amount
BORROWER/RECIPIENT			0.00
International Development Association (IDA)			90.00
IDA Grant			20.00
Global Environment Facility (GEF)			4.00
Least Developed Countries TF for Climate Change Activities			12.00
Total			126.00
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

B. Project Objectives

The PDO of MWRD2 will remain the same as of MWRD1: to enhance regional integration among the riparian countries of the Senegal River Basin through OMVS for multi-purpose water resources development to improve community livelihoods.

Responding to the needs of OMVS and riparian country governments MWRD2 will have broadly similar components to MWRD1: (i) consolidating and further strengthening the institutional, legal and technical framework of the Senegal River Basin to better serve all four riparian countries, (ii) expanding the scope or coverage of concrete water resources development activities at the local level that generate significant income to reduce poverty, and (iii) defining and preparing new multipurpose infrastructure to harness the hydropower potential identified in the basin. MWRD2 activities will primarily be located in the priority areas defined by studies in MWRD1. Each component will scale-up activities started under MWRD1, incorporating lessons learnt and taking forward successful elements for further development.

C. Project Description

Lending instrument: The Adaptable Program Loan (APL) spans 10 years and is being implemented in 2 phases (MWRD1 & 2), of 5 years each. MWRD1 had an envelope of US\$ 110 million and it is expected that MWRD2 will have the same envelope. MWRD1 was approved by the Board in 2006. The rationale for using the APL instrument is to ensure long-term commitment and sustainability in scaling up multipurpose water resources development activities in the Senegal River Basin. The phased approach facilitates the prioritization of investments in alignment with appropriate funding. The APL instrument will also allow OMVS and the riparian countries of the Senegal River Basin to consolidate the benefits deriving from jointly-owned and managed infrastructure.

Triggers were established for continuation with the second phase (MWRD2) and, as defined during the Level 1 Restructuring in June 2011, these are: (i) satisfactory integration of Guinea into OMVS' institutional, legal, and financial structures; and (ii) clear consensus among riparian countries to build one dam to complement the hydroelectric capacity of the OMVS member countries. These triggers have been successfully met.

Overview of the program design: The project design aims to simultaneously increase the productive uses of water and enable macro-economic growth while safeguarding the health and livelihoods of vulnerable communities in the river basin. The issue of partition of benefits, regionally, nationally and locally, is key to the design of MWRD2. The regional integration process establishes the inter-related parameters for sustainable water resources development across all sectors and the project components provide mutually reinforcing interventions at regional, local and national levels.

As described in the Project Appraisal Document for MWRD1, components covered institutional modernization, local level water resources activities and regional water resources development planning. The main achievements and outcomes of MWRD1 have been outlined in the Sectoral and Institutional Context given above.

Since the needs in these key areas continue to exceed the budget envelopes, the activities planned for MWRD2 scale up similar interventions to MWRD1, incorporating lessons learnt to improve technical quality. Fisheries will be introduced as a new activity in Guinea and the treatment of 5 other neglected tropical diseases (in addition to Schistosomiasis) will be incorporated in the health sub-component.

MWRD2 builds on several regional to local level experiences including (i) the successful completion of MWRD1; (ii) the development and management of jointly-owned energy infrastructure of the Manantali and Diama dams; (iii) the Inclusive Framework that encouraged the full involvement of Guinea in the joint management of the Senegal River Basin (iv) the GEF funded Senegal River Basin Water and Environmental Management Project which laid the foundation for more integrated land, water and environmental management in the Basin and (v) the Bank's experience internationally in transboundary river basins, for example the Nile basin, Lesotho Highlands, Niger and Zambezi in Africa, and the Ganges, Syr Darya, and Columbia River Basin. Lessons and experiences from the above coupled with the Bank's long standing involvement in the Senegal River Basin clearly demonstrate that regional integration fosters more effective sustainable development and multi-sectoral investments. Therefore, the project provides a unique comparative advantage to mainstream close collaboration between institutions working on water resources management of the Senegal River Basin at three different levels (regional, national and local) while consolidating donor interventions through a coherent framework of actions.

The broad components of MWRD2 are identified below:

Component 1: Regional Institutional Development for Water Resources (USD\$5 million). This first component will continue to support the implementation of the Inclusive Framework, which will involve the strengthening of institutional knowledge and technical capacity but also strengthening of the legal, institutional and financial frameworks. This component was reviewed during the pre-appraisal mission and revised to focus on key activities. This component will now focus upon capacity building for Guinea while also supporting: (i) the strengthening of institutional capacities of the dam holding agencies for infrastructure development and management, (ii) improving OMVS strategic coordination and collaboration among national water and agricultural technical bodies, developing exchange of experiences, best practices, and management tools for water resources management. Part of this subcomponent could potentially support OMVS to take a leading role regionally following the recent dialogue on hydropower prioritization; (iii) updating the partition of benefits, to include a) Guinea; b) developments since 1981; c) the inclusion of additional sectors such as environmental and social management and health, which will require additional data collection, updating the existing model and analyzing a number of different scenarios; and updating the compensation framework for OMVS to correspond with the new structure developed.

Component 2: Local Level Multi-Purpose Water Resources Development (USD\$98 million). In order to promote income-generating activities and to improve livelihoods across a wide section of the basin population, this component includes a number of core activities related to the development of water resources in some sub-basins. Activities under this component will be multi-sectoral and cover irrigation, fishing, health and environment. This component will help to ensure the ownership and active engagement of the local population to protect current and future investments. Planned activities and targeted areas have been developed and refined through MWRD1 and will lead to rapid results on the ground. These activities are designed to ensure that responsibilities are clearly assigned to implementing agencies, while ensuring the participation and involvement of stakeholders in decision-making.

a) Hydro-Agricultural development (optimization of the investments made in MWRD1). This sub-component will continue to support:

- The establishment and capacity building of water user associations to ensure that water resources are managed properly;
- Capacity building of farmers in the operation and maintenance of facilities;

- Irrigation infrastructure development primarily for activities for which the feasibility studies were completed under MWRD1.

b) Water Resources Protection. This sub-component will support planning and management of land and water resources at the community and sub-basin levels to ensure sustainable development of the resource and provide community stakeholders with tools and mechanisms for appropriate development. Key activities will: (i) map key areas and develop plans for local income-generation activities based on suitable land and water conditions; (ii) restore and maintain river banks; (iii) support community-based agro-forestry development.

c) Traditional fisheries improvements. This sub-component will continue to contribute to the development of traditional fisheries and aquaculture along the Senegal River. The main activities in this sub-component will include:

- continued promotion of more efficient fishing practices;
- continued facilitation of improved access for fishermen to modern technology (such as training, improved equipment, boats, and up-to-date fish processing and storage techniques) to improve their living conditions;
- continued institutional support to the strengthening of fishing activities;
- rehabilitation of existing aquaculture farms;
- improved fishery management of fish stocks

d) Reduction of the incidence of water-borne diseases. This sub-component will support activities to reduce malaria-related morbidity and Neglected Tropical Diseases (NTDs) (which include schistosomiasis, geo-helminths, onchocerciasis, lymphatic filariasis and trachoma) among local populations. The use of implementing partners through outsourcing will play a crucial role in the smooth and efficient execution of this sub-component in MWRD2. The activities in this sub-component will leverage the distribution networks set up in MWRD1 and the availability of drugs through WHO to address a wide range of NTDs dependent upon local needs and incidence levels. The main activities in this sub-component include: (i) the continued widespread distribution of long-lasting insecticide treated nets and the promotion of other suitable control measures against malaria-carrying mosquitoes (e.g. the spraying of insecticides in homes), (ii) the establishment of measures against health hazards related to water resources, such as the decongestion of irrigation canals and drainage (iii) the application of Praziquantel, Albendazole, Mebendazole and Ivermectin against schistosomiasis, geo-helminths, lymphatic filariasis and onchocerciasis, (iv) the establishment of disease surveillance and operational research in the fight against malaria and Neglected Tropical Diseases (NTDs), and (v) the mobilization of communities, in the fight against NTDs, through information, education, communication and behavior change activities to support periodic mass treatment and other activities.

Component 3: Regional Multi-purpose and Multi-sectoral Planning (USD\$7 million). During the pre-appraisal mission the scope of this component was reviewed and revised to focus upon infrastructure which are critical to ensure the productive use of water in the Senegal river basin. This component will complete critical maintenance works for the DIAMA dam, based upon studies completed during the first phase, and studies for the Koukoutamba and Boureya dams.

- a) Support for essential maintenance work on Diama dam. Including renovating electrical and control systems, inspection of corrosion control systems and overall inspection and studies of the dam and work areas
- b) Completion of essential studies to advance priority dam projects. This sub-component aims to: (i)

prepare comprehensive feasibility studies and, if necessary, update previous studies on the implementation of a multi-purpose dam project to be built in the basin at Boureya, (ii) complete complementary studies for example access roads and transmission lines, from the proposed Koukoutamba dam, and (iii) carry out Environmental and Social Impact Assessments to define the nature and scope of environmental and social safeguards for each site.

MWRD2 Co-financing

MWRD2 is co-financed by three grants from the Global Environmental Facility (GEF), the Least Developed Countries Trust Fund for Climate Change and the Dutch Government respectively. OMVS has previous experience working with the GEF and with the Dutch Government and has successfully implemented projects supported by these trust funds. The activities supported under the co-financing will build upon previous engagement and will be complementary to the MWRD2 so as to mutually reinforce integrated water resources management and development to improve community livelihoods.

The GEF will focus on adaptation to climate change and implementation of the Strategic Action Plan. The project will support improved environmental management; identify a series of measures and actions to be aligned with the climate change adaptation strategy of each Member State; improve the data quality on climatic variability, including long-term trends, and the possible future impacts on water resources in the river basin. The project will also support community mobilization and promote adaption measures to reduce the vulnerability of livelihoods in the river basin.

The Dutch Trust Fund will finance (i) the control/reduction of invasive aquatic plants; (ii) river bank restoration and protection and (iii) watershed protection.

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

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 km². The high plateau in northern Guinea represent 31,000 km² (11 percent of the basin), 155,000 km² are situated in western Mali (53 percent of the basin), 75,500 km² are in southern Mauritania (26 percent of the basin) and 27,500 km² 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 Senegal River Basin Water and Environmental Management GEF Project and even more so under the MWRD1 project. This included building a core group of transboundary environmental management expertise.

During 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 are currently being reviewed and updated for use in MWRD2.

At the start of the implementation of MWRD1, the ESMF was used to screen all subprojects. The majority of subprojects were found to pose very low environmental and social risks, mostly related to environmental and social management during construction. One of the reasons for this low risk was that irrigated agriculture subprojects involved rehabilitation of irrigation systems rather than new construction. For these low risk subprojects only an Environmental and Social Management Plan (ESMP) was prepared and implemented, which was based on the ESMP in the ESMF. An Environmental and Social Impact Assessment (ESIA) was only prepared and implemented for those sub projects with potentially high impacts. The only subproject for which a specific ESIA and associated ESMP and a Resettlement Action Plan (RAP) were prepared and implemented was the construction of the Krankaye canal, a new main irrigation water supply canal, in the Senegal River Delta. The Krankaye subproject did not physically displace any households, but did impact on property. Project Affected People (PAP) have been compensated in compliance with OP/BP 4.12. Community level measures taken to mitigate or compensate for impacts in the Krankaye subproject included flood protection, foot bridges for continued access to irrigation schemes at the other side of the canal and a siphon to continue to supply water to private irrigated areas. All the ESMPs, the ESIA and the RAP have been disclosed in-country and in the World Bank Infoshop. None of the other subprojects triggered OP 4.12.

The various ESMPs for subprojects included a wide range of mitigation measures. These mitigation measures included among others social compensation measures, for example the construction of laundry and bathing areas, ramps for cattle to have access to water, foot bridges to provide access to irrigation areas at the other side of the river and so on. All the ESMPs included construction related environmental and social management measures, including prevention and management of hydrocarbon spills and health and safety measures during construction. Component specific measures were also taken, for example improving hygiene and solid waste management at the new fish markets financed under MWRD1.

The Pest and Pesticide Management Plan (PPMP) was not implemented during MWRD1, since the rehabilitation of all the irrigation systems financed under MWRD1 is only now being finalized. There was no increased agricultural production under MWRD1. The updated PPMP will be implemented under MWRD2.

Fisheries management actions were prepared under MWRD1, but will be further refined and implemented under MWRD2. Fisheries management will be strengthened under MWRD2. MWRD2 might also finance the rehabilitation and improved management of existing aquaculture farms.

MWRD2 has prepared an ESIA, since most subprojects have already been defined, updated the RPF and the PPMP. It is not expected that OP 4.12 will be triggered during the implementation of MWRD2, but if this policy is triggered a RAP will be prepared and disclosed in-country and in the World Bank Infoshop. RAPs will need to be cleared by the Bank. Construction can only start after Project Affected People (PAP) have been compensated in compliance with OP/BP 4.12. The three safeguard instruments mentioned above will be disclosed in-country and in the World Bank Infoshop 120 days before Board. MWRD2 has been categorized as a Category A project, since it finances studies for one new dam at Gourbassi.

The screening instrument developed in MWRD1 will be used during the preparation of MWRD2 to screen all the sub-projects which are already defined; including the majority of the agricultural sub-projects. If required, the ESIA and RAP documentation for these sub projects would be prepared by appraisal.

The main area of institutional support, which OMVS will require during the implementation of MWRD2 is in advancing the Feasibility Studies and Environmental and Social Impact Assessments of the Goubassi dam. It has been agreed with OMVS that a Dam Safety and an Environmental and Social Advisory panel will be established as soon as MWRD2 becomes effective, so that the panel can provide advice on the TORs for the Feasibility Studies and the ESIA and on these studies themselves. TORs for the ESIA of new dams will need to be cleared by the Bank.

F. Environmental and Social Safeguards Specialists on the Team

Robert A. Robelus (AFTN2)

Salamata Bal (AFTCS)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The MWRD2 involves a significant number of construction activities related to the subprojects which will have environmental and social impacts, some of which are significant. Also the management of the subprojects, for instance the fisheries and irrigation components include environmental and social management actions, which also would trigger OP/BP 4.01. An ESIA will be prepared, consulted upon, and disclosed before appraisal.
Natural Habitats OP/BP 4.04	Yes	Stocking of natural water bodies with indigenous fish species might be one of the subproject activities. This activity could upset the natural balance in existing fish stocks if not done according ecological principles. This potential activity triggers OP/BP 4.04.
Forests OP/BP 4.36	Yes	OP/BP 4.36 is triggered by the reforestation activities carried out in the Fouta Djallon, a very sensitive ecological area in the headwaters of the Senegal River, which has been and is subject to significant deforestation as a consequence of agricultural expansion.
Pest Management OP 4.09	Yes	The Pest and Pesticide Management Plan (PPMP) was not implemented under MWRD1, since there was no production in the rehabilitated irrigation systems. Presently the rehabilitation is being finalized and production will start during the implementation of MWRD2. The updated PPMP will be implemented during MWRD2. Intensification of irrigated agricultural production, as envisaged during MWRD2 might increase the use of

		pesticides and chemical fertilizers. The implementation of the PPMP will mitigate the health and environmental impacts of the increased use of pesticides and chemical fertilizers. MWRD2 will not finance the procurement of pesticides.
Physical Cultural Resources OP/BP 4.11	Yes	OP/BP 4.11 is triggered by the Feasibility and ESIA studies for the new Gourbassi dam and by the construction activities associated with the subprojects. A Chance Find Procedure will be included in all Contractor Contracts.
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	<p>No physical resettlement is anticipated due to the nature of the intended rehabilitation works to be carried out under the various subprojects. There might be a need to compensate for the loss of crops or property caused by the rehabilitation of the irrigation schemes. The lack of definition around specific subprojects will be addressed through the preparation and disclosure of the updated Resettlement Policy Framework (RPF).</p> <p>OP/BP 4.12 might be potentially triggered as a consequence of the restriction of access to certain fishing grounds needed as spawning areas, temporary closure of fishing areas for biological recovery of fish stocks. It is not yet certain that these activities will be carried out. In case OP/BP 4.12 will be triggered a Process Framework (PF) will be prepared, disclosed and implemented.</p> <p>Any subproject activity, including construction, can only start if Project Affected People (PAP) have been compensated in compliance with OP/BP 4.12. The eventual RAPs or PFs prepared for subprojects will need to be cleared by the Bank. These RAPs and PFs also be disclosed in-country and in the Bank's Infoshop.</p>
Safety of Dams OP/BP 4.37	Yes	<p>OP/BP 4.37 is triggered by the Feasibility and ESIA studies for the new Gourbassi dam</p> <p>This policy is also triggered by the fact that the irrigated agricultural subprojects are dependent for their water from the Manantali and Diama</p>

		<p>Dams. The dam safety reports for the Manantali and Diama Dams have been recently reviewed by the World Bank and no dam safety issues have been identified.</p> <p>In case the water of the Foug Gleita Dam in Mauritania will be used for subprojects, the dam safety aspects of this dam will need to be in compliance with OP/BP 4.37.</p> <p>A Dam Safety Advisory Panel will be established to manage the dam safety aspects of the MWRD2.</p>
Projects on International Waterways OP/BP 7.50	Yes	The governments of the four riparian countries were notified of the Project through the Permanent Water Commission of OMVS, in which all four countries are represented. A letter regarding this notification has been sent to the Bank during the pre-appraisal mission in February 2013.
Projects in Disputed Areas OP/BP 7.60	No	There are no Disputed Areas in the Senegal River Basin. Therefore OP/BP 7.60 is not triggered. OMVS has the mandate to implement and manage subproject activities in the Senegal River Basin with the support of the four riparian countries.

III. SAFEGUARD PREPARATION PLAN

- A. Tentative target date for preparing the PAD Stage ISDS:** 08-Mar-2013
- B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS:**
February - March 2013

The program (MWRD1 and MWRD2) is classified as category A in the Environmental Assessment classification of the World Bank. MWRD2 covers a similar range of activities as MWRD1 over an extended geographical area and therefore requires a similar or improved level of due diligence. The update of the safeguards instruments developed under MWRD1 will be completed and disclosed in country by early March 2013. The ESMF has been upgraded to an ESIA since most sub-projects are known. In addition, the screening of all sub-projects using the screening tool developed in MWRD1 will be completed by March 15, 2013 so any sub-project specific ESIA's and RAPs would be prepared by Appraisal.

IV. APPROVALS

Task Team Leader:	Name: Shelley Mcmillan
Approved By:	

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.

Regional Safeguards Coordinator:	Name: Alexandra C. Bezeredi (RSA)	Date: 03-Mar-2013
Sector Manager:	Name: Magdolna Lovei (SM)	Date: 10-Mar-2013