

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB6611

<b>Project Name</b>	Lake Victoria Environmental Management Project (Burundi and Rwanda)
<b>Region</b>	AFRICA
<b>Sector</b>	General water, sanitation and flood protection sector (29%);Forestry (21%);Public administration- Water, sanitation and flood protection (18%);Sewerage (16%);Sanitation (16%)
<b>Project ID</b>	P118316
<b>Borrower(s)</b>	GOVERNEMENTS OF BURUNDI AND RWANDA
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<b>Environment Category</b>	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
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### 1. Country and Sector Background

Lake Victoria is a shared transboundary resource of Kenya, Tanzania, and Uganda. Rwanda and Burundi are part of the upper watershed that drains into Lake Victoria through the Kagera river. The Lake is part of the Nile River basin system, which is shared by ten countries: Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Eritrea, Kenya, Rwanda, Sudan, Tanzania, and Uganda. In addition to its environmental values, including biodiversity and the hydrological

cycle, Lake Victoria Basin (LVB) supports a large fishing industry for export and local consumption, hydropower production, drinking and irrigation water, lake transport, and tourism. The above benefits are threatened by environmental stresses manifest in five key areas: (i) deteriorating water quality, due to increased sedimentation, pollution and eutrophication; (ii) declining lake levels and river flows, caused by water over-abstraction and climate change; (iii) overexploited natural resources, leading to reduced fish stocks, loss of biodiversity, degradation of forests and wetlands, and loss of littoral habitat; and (iv) resurgence of water hyacinth caused by increased wastes discharge from industries and municipals, and nutrient loads. These stresses have altered the hydrological and ecological processes of the Lake. Widespread poverty in the LVB countries exacerbates environmental stress.

Even in its current degraded state the lake is a valuable asset, supporting the livelihoods of approximately three million people directly, and indirectly the entire population of the LVB estimated recently at 35 million. Without better management on an urgent basis, the Lake is likely to suffer irreversible environmental damage. Should this occur, a valuable regional and global asset will be lost forever.

Efforts to regulate and manage the activities threatening the Lake started under the Lake Victoria Environmental Management Project Phase I (LVEMP I). The LVEMP II seeks to upscale its successful interventions by strengthening both regional and national institutional capacity for managing shared natural resources; and investing in cost-effective pollution and soil erosion control and preventive measures. APL1 of the LVEMP II, approved on March 3, 2009, finances investments in Kenya, Tanzania, and Uganda, and regional dialogue involving all five countries in the LVB for the harmonization of policies and elaboration of regional basin management plans. APL2 will provide Burundi and Rwanda with IDA resources for investments aimed at improving the environmental management of the LVB.

As upstream countries, Rwanda and Burundi contribute significantly to, and also suffer from, the degradation of the LVB water quality and the ecosystem in general through unsustainable natural resources use in the Kagera river basin. The basin's land and water resources, and associated biodiversity, are threatened by land degradation, deforestation, proliferation of water hyacinth, and encroachment on wetlands. The Kagera River contributes about 24 percent of the total surface discharge (about 7.5 km<sup>3</sup> of water per year) into Lake Victoria, which represents 30% of total inflow into the Lake if surface rainfall-evaporation is included. However, the river also brings into Lake Victoria sediments rich in nutrients (Nitrogen and Phosphorus) resulting from massive soil erosion; and an estimated 2 hectares coverage of water hyacinth per day. LVEMP II objectives are consistent with priorities of the Bank's regional and national assistance strategies, including the Africa Action Plan (AAP) i.e. improving governance, strengthening drivers of growth, enhancing participation, and building partnerships. They are also in line with the Bank's Regional Integration Assistance Strategy's priority of strengthening the management of regional commons and cooperation on regional public goods.

APL2 of the LVEMP II is consistent with both the Burundi's Poverty Reduction Strategy Paper (PRSP, 2006) and Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS, 2008 - 2012) and Vision 2020. Under economic growth pillars, among others priorities, they aim at modernizing agriculture by improving land administration, and land use management

practices; and adopting production techniques that will reduce soil erosion and enhance fertility. Watershed management activities to be financed under LVEMP II will complement these efforts. The APL2 is also in line with the Bank's Country Assistance Strategies (CASes) for Burundi's CAS (2008-2012) and Rwanda (2009-2012). These strategies place emphasis on the importance of sustainable water and land management to achieve higher agricultural productivity.

Both Burundi and Rwanda have shown their commitments to implement the LVEMP II by meeting both eligibility criterion and policy trigger for APL2. The eligibility criterion met is the ratification of the Protocol on Sustainable Development of the LVB. With regards to the policy trigger, they have prepared National Project Documents, which outline steps to: (i) review land, water and fisheries policies, and regulatory standards; (ii) revise them and/or their rules of practice to ensure that national authorities cooperate in implementing measures to reduce environmental stress in the LVB; and (iii) agree to participate in developing and implementing regional management frameworks for natural resources – land, water and fisheries.

## **2. Rationale for Bank Involvement**

An Adaptable Lending Program for the environmental management of Lake Victoria (LVEMP II), envisioned as a series of three horizontal loans (APLs), was approved by the Board on February 3, 2009, together with the first operation in the series (LVEMP II APL1). The current project, the second APL under LVEMP II, is identified as a priority in the Country Assistance Strategies for Rwanda (2008) and Burundi (2008) and is well aligned with other World Bank-supported operations in those countries, particularly in the agricultural sector.

LVEMP II APL2 is also well aligned with the recently approved World Bank Strategy for Africa. Pillar Two (“Vulnerability and Resilience”) of the Strategy highlights the need to support adaptation to the effects of climate change, building resilience against the impacts of droughts and other climate-related risks on the agriculture sector. In many cases, this will be achieved through sustainable management of fresh water resources, forests and wetlands, grazing lands, fisheries and biodiversity, some of which are an integral part of the activities under LVEMP II. Moreover, the project will contribute to Burundi and Rwanda's efforts to improve their weather monitoring systems and capacity for weather forecasting, thus building their ability to respond to extreme weather events. In addition, LVEMP II, as part of a regional program for improved environmental management of the Lake Victoria Basin, takes advantage of regional opportunities for collective action on integrated water-basin management. This is well aligned with the foundation of the Strategy, which highlights the need to promote regional integration and cooperation through, among others, investment in regional public goods.

LVEMP II, including APL1 and APL2, meets the IDA's regional project eligibility criteria as it supports: (i) three or more countries; (ii) is a platform for regional policy harmonization and has a high degree of country and regional ownership; and (iii) has social and economic benefits that spill over countries' boundaries. LVEMP II provides opportunities for building on the institutional and knowledge foundations laid by LVEMP I. For Burundi and Rwanda, which were not beneficiaries under LVEMP I, the current project will allow them to benefit from and build on that knowledge as they implement measures to foster more sustainable utilization and management of the natural resources of LVB. Bank support to LVEMP II will help strengthen

mechanisms for knowledge development and dissemination at the basin level, as well as institutional capacity for shared natural resources and environmental management.

### **3. Project Objectives**

APL2 of LVEMP II is part of a regional project involving five EAC Partner States. The higher development objective of the LVEMP II is to contribute to the East African Community (EAC) Vision and Strategy Framework for Management and Development of the Lake Victoria basin – “*a prosperous population living in a healthy and sustainably managed environment providing equitable opportunities and benefits*”. The EAC Partner States are cognizant of the contribution of natural resources to economic growth, and of the strong link between their over-exploitation and poverty. Therefore, the project will contribute to broad-based poverty alleviation and improvement of livelihoods of people, by supporting sustainable management of shared natural resources of the LVB, which many communities depend upon.

APL2 will adopt the shared regional project development/ objectives (PDO), which are to: (i) improve collaborative management of the transboundary natural resources of the LVB for the shared benefits of the EAC Partner States; and (ii) reduce environmental stress in targeted pollution hotspots and selected degraded sub-catchments to improve the livelihoods of communities, who depend on the natural resources of LVB.

The key performance indicator for the first PDO of the APL 2, which focuses on collaborative management of the shared natural resources is: (i) the adoption by Burundi and Rwanda of harmonized policies, legislation and regulatory frameworks for water and fisheries management. It is important to note that the process for the five LVB countries to elaborate and agree on these harmonized policies is being coordinated by the LVBC under APL 1. The key performance indicators for the second PDO of APL 2, which focuses on reducing environmental stress, were revised to reflect the realities of Burundi and Rwanda, and are: (ii) number of urban centers with technical designs and investments to address major point source pollution hotspots; (iii) number of children with access to improved sanitation facilities at education institutions; (iv) number of hectares under sustainable land management practices in the targeted sub-catchments; and (v) number of direct project beneficiaries and percentage of which are women.

### **4. Project Description**

APL2 (FY12-FY18) is estimated to cost US\$30 million i.e., US\$15 million per country. Burundi and Rwanda are also beneficiaries of the GEF grant of US\$7 million and Sida grant of about US\$10 million equivalent provided under APL1 to finance regional activities coordinated by the EAC. Consistent with the APL1 of LVEMP II, the APL2 will focus on supporting: (a) Strengthening of institutional capacity for managing shared water and fisheries resources; (b) Point source pollution control and prevention; and (c) Watershed management. In both countries, the project will be implemented in districts located within the Kagera River basin, in close coordination with land and water management approaches deployed by other Bank-funded projects, such as Burundi Agricultural Rehabilitation and Sustainable Land Management Project (PRASAB) and Rwanda Land Husbandry, Water Harvesting and Hillside Irrigation Project (LWHP), to avoid duplication of efforts. APL2 will have four components:

***Component 1: Strengthening institutional capacity for managing shared fisheries and water resources.*** This component will focus on building the capacity and increasing the effectiveness of the existing national institutions in order to improve the cooperative management of shared transboundary natural resources of the LVB, thus contributing to the achievement of the first PDO<sup>1</sup>. Its objectives are to contribute to the development of: improved effectiveness of key regional and national institutions through harmonization of national policies, legislation, and standards; sustainable financing options for natural resources management interventions; and regional frameworks for the management of key transboundary natural resources – water and fisheries. In addition, the component will also finance equipment and technical assistance to improve water quality monitoring in Rwanda and Burundi, and hydromet station equipment and technical assistance in Burundi to improve the capacity for weather and water balance forecasting, including collection and analysis of data and dissemination of information to potential users. There will be two sub-components: (i) Harmonization of policy, and regulatory standards; and (ii) Ecosystem monitoring and applied research.

***Component 2: Point source pollution control and prevention.*** The main objective of this component is to reduce environmental stresses, from point source pollution, on the rivers, wetlands, and lakes in the LVB portion of Rwanda and Burundi, and thus contribute to the achievement of the second PDO. It will finance feasibility studies and designs aimed at future reduction of municipal and industrial point sources of pollution in to be identified priority hotspots in urban areas, and also support investments in sanitation in public facilities and capacity building for sanitation solutions in private dwellings. These investments will also complement activities supported by other water and sanitation projects and initiatives, both forthcoming and under implementation, in the two countries. There will be two sub-components: (i) Planning for sewerage systems and wastewater treatment facilities; and (ii) Promotion of cleaner production technologies.

***Component 3: Watershed management.*** This component seeks to reduce environmental stresses in the Lake Victoria Basin through integrated watershed management, including the rehabilitation of degraded wetlands and river banks, and the adoption of on-farm soil and water conservation programs on the hillsides. This will result in a reduction of non-point sources of pollution (sediment loads, nutrients, and agro-chemicals) in LVB, thus contributing directly to the achievement of the second PDO. In addition, in countries where agriculture contributes a high percentage of GDP and employs most of the active population – which is the case for Rwanda and Burundi, the rehabilitation and conservation of stable and healthy agricultural ecosystems will help reduce the stresses caused by present climate variability, and will provide greater resilience against potential future climate change impacts. The expected outcome is that an estimated total area of about 13,500 hectares will be rehabilitated under this component. The main focus will be on: mobilizing community participation; building the capacities of selected local governments and communities; and preparing and implementing subprojects focused on improvement of livelihoods and of local environmental management. There will be three sub-components: (i) Restoration of wetlands and riparian vegetation; (ii) Rehabilitation of hillside

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<sup>1</sup> As beneficiaries of the GEF and Sida grants channeled through the EAC under APL1, both Burundi and Rwanda are already active participants in the harmonization process.

areas for production and conservation; and (iii) Community driven development for livelihoods improvement.

**Component 4: Project coordination and management.** The objective of this component is to provide complementary resources necessary for the effective coordination and communication, and monitoring and evaluation of the project activities. At the national level, these will be the responsibility of the National Project Coordination Teams (NPCTs). This component will have two sub-components: (i) Project coordination and communication; and (ii) Monitoring and evaluation.

## 5. Financing

Source:	(US\$m.)
BORROWER/RECIPIENT	1.5
International Development Association (IDA)	30.0
Total	31.5

## 6. Implementation

### *Institutional and implementation arrangements at the Basin level*

The project implementation arrangements are based on a two-prong institutional set up provided in the Protocol on the Sustainable Development of the LVB, i.e. at the EAC/regional and at national levels. LVEMP II program embraces the “subsidiarity principle”, whereby most of the interventions will be implemented at the national level. The national institutions in the five Partner States will be responsible for implementing the project in their own territories, through the key line ministries, local government authorities, and participating communities. The regional institutions, such as LVBC and LVFO, will be responsible for coordinating project implementation by individual Partner States, and implementing limited regional activities. LVEMP II would provide assistance to improve the capacity of the implementing entities in Burundi and Rwanda, including in management of natural resources, enforcement of environmental standards, internal and external communications, and monitoring and evaluation. Annex 3 provides a detailed description of the institutional arrangements for implementing LVEMP II, including the regional arrangements defined under APL 1, in which Rwanda and Burundi are already participants through membership in the LVEMP II Regional Policy Steering Committee (RPSC).

### *National Project Management Set-up*

National Project Coordination Team (NPCT): The project coordination and management structure at the national level will mirror that of other NPCTs from APL 1. Each country will have a LVEMP II National Project Coordination Team headed by a National Project Coordinator (NPC). The NPCT will be embedded in the National Focal Point Ministry, and within this institution, it will organizationally be linked to the National Focal Point Officer. In addition to the NPC, the NPCT will include: (i) at least one procurement specialist and one accountant; (ii) technical specialists/experts, as needed, from fisheries, agriculture, forestry, sanitation, and environment/social sectors; and (iii) staff for support functions such as information systems

management, M&E, or communications. They will be tasked with the coordination of their sector's activities within the project to ensure that they are implemented effectively and in accordance with approved work plans and budgets. The NPCT officers will carry out their tasks in close liaison with the implementation staff in the field.

Ideally, most of the NPCT core functions would be performed by civil servants seconded from the concerned Ministries in each country, while other technical specialists would be hired as consultants when needed. In Burundi and Rwanda, an assessment of institutional capacity indicates that, at least during early stages of project implementation, most or all of the NPCT members will likely be consultants. This arrangement will be re-evaluated at the project Mid-Term Review when it is expected that at least some of the core functions would be absorbed into the staff roster of MEEATU or of other concerned line Ministries.

National Focal Point Ministries (NFPMs): The designated NFPMs, which will be the main implementing agencies in the Partner States, are:

- **Rwanda** - Ministry of Environment and Natural Resources (MINERENA), and
- **Burundi** - Ministry of Water, Environment, Land and Urban Planning (MEEATU).

Each country will designate a National Focal Point Officer (NFPO), who will be responsible for linking its NFPM with the LVBC. Each NFPM will, through its National Project Coordination Team (NPCT) be: (i) accountable for the overall project implementation, which will be carried out by multiple key ministries and local government authorities; (ii) tasked with the coordination of its ministry's activities within the project, to ensure that they are implemented effectively, and in accordance with approved work plans and budgets; and (iii) responsible for monitoring and evaluation of project implementation.

National Policy Steering Committees (NPSCs): The NPSC for Burundi and the one for Rwanda will be responsible for coordination of cross-sectoral dialogue and activities at the national level in their respective countries. Specifically, the NPSCs will be responsible for: (i) providing national-level project operational policy guidance; (ii) approving national project investments; (iii) reviewing and approving project annual work plans and budgets; and (iv) resolving implementation bottlenecks to achieve the project's objectives (results/outcomes). The NPSCs will consist of the Permanent Secretaries from the actively involved line ministries (typically four to six ministries), as well as the Ministries responsible for EAC Affairs. The NFPMs will serve as Secretariats to NPSCs.

National Technical Advisory Committee (NTAC): The members of the NTAC will be technical specialists in the key sectors relevant to the project, and may include representatives from the key line ministries (at director/ commissioner level), local government, universities and research institutions, the private sector, and NGOs operating within the LVB, as deemed best suited for providing advice concerning methods and approaches for the successful implementation of the investment projects, including CDD sub-projects. Further, the NTAC will provide advice in connection with applied research activities, vetting of proposals and recommend topics for new areas of research, targeting improvement and efficiency in achieving the project outputs and outcomes. The NTAC will meet on an as needed basis, but no more than quarterly. The Chair to

the NTAC will be the National Focal Point Officer (NFPO) while the National Project Coordinator will be the Secretary to the committee.

### ***Local Level Implementation Arrangements***

Implementation of the various project activities, in particular related to the project's Component 3 – Watershed management, will involve other agencies and partners including local government entities, NGOs, universities and research institutions, and the private sector. Memoranda of Understanding and/or other contractual arrangements will be entered into between the Accounting Officer of the NFPM, through the National Project Coordinator, and the implementing institutions/partners. At the national level, the overall coordination, supervision and monitoring of the activities and progress in implementation rest with the respective NPCT. To support the NPCT in this role, an NGO or other appropriate institution will be selected and hired early in project implementation to provide implementation support to local activities, including monitoring the status and evolution of project indicators at the local level and providing technical assistance to local government and communities on operational aspects of project implementation.

It is important to recognize that the institutional implementation framework at the local level will be harmonized with the prevailing local authority administrative set-up and organizational practices, which to some extent differ from one country to the other. Therefore, each Partner State has defined the most appropriate modality, whereby the district and local authorities get involved in project implementation. The local level institutional arrangements are stipulated in the country specific "Project Implementation Manual" and "Guidelines for Preparation and Implementation of Community-Driven Subprojects". In addition, establishment of District/Province and/or Community Facilitation Teams (DFT/CFT) or Committees will be mandatory to ensure adequate technical support and supervision of the subprojects.

## **7. Sustainability**

***Financial sustainability:*** At the national level project activities will be mainstreamed into the Medium-Term Expenditure Framework (MTEF) planning cycles of each participating country. Project activities are implemented through existing government mechanisms and sector strategies and programs. Financial sustainability of the watershed investments is assured by the program design, which ensures that it is in the self-interest of participants to maintain investments, since these provide a combination of short-term and longer-term private and broader public good benefits. For the cleaner production sub-component, the capacity building interventions supported and promoted in Burundi and in Rwanda are designed to improve production efficiency and costs savings, in the medium and long-run. The operating costs of medium and long-term monitoring of fisheries resource management will be provided for by the Fish Levy Trust Funds, which will be operationalized in each Partner State through activities supported under the regional aspects of APL 1.

At the regional level, Lake Victoria Basin management activities are part of both the EAC and the Partner States annual budgets. Long-term financing of the LVB development vision and strategy, and the LVBC and the LVFO, is through participating countries' contributions to the

EAC budget. The EAC Council of Ministers on the LVB issued a directive that each LVB country should include the financing of the LVEMP II activities in its MTEF, and its implementation started in FY09.

***Institutional sustainability:*** Implementation follows the “subsidiarity principle” with most activities implemented at the national and district levels. At the regional and national levels, institutional sustainability is likely to be achieved because the project will be implemented through the existing institutions of the East Africa Community and participating countries, and because commitment to the objectives of the Lake Victoria project is articulated in regional and national development strategies and budgets.

At the local level, the implementing institutions include the relevant district offices for the watershed management programs, the local municipalities for the point source pollution reduction activities, and national fisheries departments, and local fishermen or wetland management associations for the fisheries and wetlands management components. Some of these organizations already have experience implementing similar programs, or can learn from others in the country that have already that experience. The project supports training and capacity building to enhance the effectiveness of these organizations. Key parliamentarians in the participating countries have worked together to ensure broader governments commitments. The Council of Ministers, as established under the EAC Protocol for Sustainable Development of Lake Victoria Basin, is familiar with and committed to project goals. Outreach and communications activities will also be supported under the project, which provides a means for broader stakeholder understanding of the local and regional benefits of improved lake basin management.

***Environmental sustainability:*** This is likely for all components. Those concerned with developing common frameworks for shared LVB assets (water, fisheries, land, regional institutions) bring national, as well as regional environmental benefits. Those which aim to reduce environmental stress by controlling erosion run-off, strengthening watershed management, and controlling point-source pollution bring individual and community livelihoods, as well as broader national and regional benefits. Although there are always risks that, during crisis, short term national interests may conflict with longer term national and regional interests, the shared vision agreed to by LVB countries and the existing institutional cooperation mechanisms are expected to mitigate such risks.

## **8. Key Risks And Mitigation Measures**

The overall LVEMP II program risk is “High” mainly due to: (a) inherently complex regional and national institutional arrangements for project implementation, combined with relatively new Regional and National institutions; and (b) the complex set of environmental stresses that LVEMP II is aiming to address, through an Integrated Lake Basin Management (ILBM) and Ecosystem Approaches to transboundary lake basin and fisheries resources management. A number of mitigation measures have been integrated into project design and agreed with the EAC and LVB Partner States to reduce the potential risks, including capacity building and sharing of experiences among the five NPCTs, a more focused set of activities, and intensive

supervision including the hiring of an NGO or other appropriate institution to monitor the status and evolution of project indicators at the local level. In addition, a communication strategy for LVEMP II is being developed under APL 1, and also internally in the Bank, to keep stakeholders, including senior IDA management, informed of project progress and any critical issues arising during implementation. The project will also support Burundi and Rwanda to develop internal communication systems for better information sharing, informed decision-making, and prompt resolution of bottlenecks identified during implementation of APL 2.

APL 2 shares the same categories of risk identified for the overall LVEMP II project at the time APL 1 was approved. However, some specific risks are lower due to the incorporation of lessons learned from the initial stages of implementation of APL 1 into project design. Specifically, potential difficulties for the NFPMs to lead implementation of a project of regional, national, and local or community dimensions is mitigated by a concentrated effort to mainstream the various sectoral activities under APL 2 into the existing relevant projects and programs in each country. For example, under Component 2, in Rwanda the project is helping implement the Minister of Infrastructure's strategy and plans for addressing municipal sewage collection and treatment problems, while in Burundi the same component will build on and scale up the successful GIZ/KfW-supported project under implementation in the city of Gitega. Under Component 3, the project team will closely coordinate with relevant activities being implemented under existing World Bank-supported projects in the agricultural sector. In addition, because Kenya, Tanzania, and Kenya have started implementation ahead of Burundi and Rwanda, these Burundi and Rwanda should be able to continually learn from experience generated by the initial three countries and adjust their own implementation strategy as needed to facilitate and improve project implementation.

## **9. Lessons Learned from Past Operations in the Country/Sector**

The LVEMP II project design has incorporated key lessons learned from LVEMP I implementation, IEG review, GEF's work under the Lake Basin Management Initiative (LBMI), TerrAfrica Partnership, and the Bujagali Inspection Panel report<sup>2</sup>. The key lessons learned from LVEMP I include the need for: (a) clear delineation of responsibility between national and regional organizations and for implementation through government structures; (b) clear accountability mechanisms and monitoring frameworks; (c) a basin perspective, while at the same time linking environmental benefits to local livelihoods improvements; (d) long term

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<sup>2</sup> In April 2007, the International Rivers Network (IRN) and other NGOs requested the Bank's Inspection Panel, claiming that the potential environmental and social impacts (hydrology and climate change; aquatic ecology and fisheries; and protected reserves) of the Bujagali Hydropower Project were not adequately addressed by the Bank and the Government of Uganda. The Panel found the Bank in compliance with several policy provisions, including the assessment of project impacts on fisheries, establishment of a dam safety panel, issuing land titles to affected people, competing a baseline hydrologic data series, and conserving the Kalagala Falls area as an environmental offset to Bujagali project. The Panel found the Bank in non-compliance with the assessments of the Project alternatives and cumulative impacts, Project costs, risks, and impacts on electricity tariffs. It also found that the Bank did not meet its policy to achieve livelihood restoration of the displaced people and protection of cultural property of high spiritual value to the Busoga people.

capacity building; and (e) awareness building among the public and parliamentarians, as key to sustainability.

In additions, lessons learned from LVEMP I, and other related projects under implementation in Burundi and Rwanda have also been incorporated into project design:

- (i) A Basin-wide perspective is critical to addressing the key environmental issues of Lake Victoria.
- (ii) On and off-site consequences of land degradation can only be systematically addressed through up scaling of watershed management in the specific countries and ecosystems. Under LVEMP II APL 2, successful soil and water conservation interventions piloted in specific-countries and ecosystems during LVEMP I, as well as those implemented in Burundi and Rwanda through other national watershed management and social development projects will be scaled-up.
- (iii) Environmental benefits must be strongly linked to improved livelihoods for local people and communities.
- (iv) Raising awareness and ensuring the public and parliamentarians' participation is critical for long-term financial sustainability.
- (v) Scientific research must be targeted, provide usable information for management decisions, and be widely accessible.
- (vi) Sustainability of outcomes and activities at both national and regional levels must be planned for. The project implementation is mainstreamed in the National Focal Point Ministries and LVBC, which is a regional institution. LVEMP II will also support the operationalization of the Fish Levy Trust Funds, which are expected to finance fisheries management activities in each country.
- (vii) Institutional sustainability requires project implementation through existing government structures as well as strong country commitment to regional cooperation. Project implementation is mainstreamed into the National Focal Point Ministries and other key government departments, while regional cooperation institutions are validated through Head of State agreements within the Eastern Africa Community.

Furthermore, initial lessons from early implementation of LVEMP II APL 1 have also been taken into consideration during design of APL 2. These include: (a) project activities and investments should build on and partner with existing projects and programs; (b) implementation of all watershed management activities through the CDD methodology requires extensive upfront investments and time before subprojects are prepared and finalized by the communities, and undergo a selection and approval process before they can start actual implementation; (c) communication among the five NPCTs and the Regional Policy Steering Committee (RPCT) should be strengthened in order to better coordinate activities with regional implications and enhance benefits from synergies and shared experiences.

## **10. Safeguard Policies**

Salient conclusions from the social assessments carried out during preparation note that the LVB areas of Rwanda and Burundi are very densely populated, with a population that is predominantly rural and agrarian although progressively urbanizing, highly dependent on natural resources for livelihoods and energy, oftentimes with uncertain or precarious land tenure,

predominantly poor, and largely young (three quarters of the population is under 25 years of age and more than half are under 17). Especially vulnerable groups that will be targeted under the project include, among others, women and female-headed households, the elderly, HIV/AIDS afflicted persons, youth and particularly orphans and street children. The Bank social safeguards applicable to the project are: OP 4.12, Involuntary Resettlement, and OP 4.10, Indigenous Peoples. The following satisfactory safeguard instruments have been prepared, consulted and disclosed: Resettlement Policy Framework (RPF), and for Burundi, Strategy for Participation of Vulnerable Groups<sup>3</sup>.

The principal trans-boundary ecological issues in the LVB include the following: (i) sedimentation (from extensive soil erosion) responsible for silting in the wetlands and lakes, and contributing to declining water quality; (ii) escalation of waterborne diseases (including, for example, malaria, cholera and bilharzia); (iii) water pollution from the combination of siltation and poor municipal waste management; (iv) land degradation, especially in riparian zones, resulting from deforestation and non-sustainable agricultural practices, and leading also to shortages of timber, fuelwood and other forest products; (v) extensive reclamation of wetlands, resulting in declining water flow and quality, as well as losses of other critical ecological functions; (vi) loss of habitat for biodiversity, both aquatic and terrestrial; (vii) over-fishing and inappropriate exploitation that threaten the fishing potential of the lakes in LVB; (viii) increasing prevalence of invasive species such as water hyacinth; (ix) rainfall irregularity, with impacts on agriculture; and (x) high levels of poverty, leading to increasing pressure on natural resources. The Bank's environmental safeguard policies applicable to the project are: (i) Environmental Assessment (OP/BP 4.01); (ii) Natural Habitats (OP/BP 4.04); (iii) Pest Management (OP 4.09); (iv) Physical Cultural Resources (OP/BP 4.11); (v) Forests (OP/BP 4.36); (vi) Safety of Dams (OP/BP 4.37); and (vi) Projects on International Waterways (OP/BP 7.50). The following satisfactory safeguard documents have been prepared, consulted and disclosed: (i) Environmental and Social Management Framework (ESMF); and (ii) Integrated Pest Management (IPM) Plan.

In addition, the Bank's legal safeguard policy of Projects on International Waterways (OP/BP 7.50) is triggered because the LVEMP II supports investments in the LVB, which is part of the Nile river basin. The Bank notified the Nile Basin countries (Democratic Republic of the Congo, Egypt, Ethiopia, Eritrea, and Sudan), on behalf of Burundi, Rwanda, Tanzania, Kenya and Uganda in accordance with this policy. No unfavorable response was received from any of the riparians. The safeguard policy of Projects in Disputed Areas (OP/BP 7.60) is not triggered.

## **11. List of Factual Technical Documents**

### **RWANDA**

1. National Project Document – Lake Victoria Environmental Management Project Phase II, January 2009.
2. National Economic and Financial Analysis, March 2011
3. Final Report TDA of the LVB, May 2006.

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<sup>3</sup> This Strategy for Participation of Vulnerable Groups responds to the requirements of OP 4.10.

4. Final Report, June 2006: Private Sector Development for the LVB.
5. Assessment of Natural Resources Intervention and Investments for LVB, February 2007.
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