PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: PIDC978

Project Name	Landscape Approach to Forest Restoration and Conservation (LAFREC) (P131464)
Region	AFRICA
Country	Rwanda
Sector(s)	Forestry (80%), Flood protection (10%), Irrigation and drainage (10%)
Theme(s)	Biodiversity (40%), Other environment and natural resources management (30%), Climate change (20%), Natural disaster management (10%)
Lending Instrument	Specific Investment Loan
Project ID	P131464
GEF Focal Area	Multi-focal area
Borrower(s)	Ministry of Finance and Economic Planning
Implementing Agency	: Rwanda Environment Management Agency
Environmental Category	B-Partial Assessment
Date PID Prepared/ Updated	26-Jul-2013
Date PID Approved/ Disclosed	26-Jul-2013
Estimated Date of Appraisal Completion	20-Dec-2013
Estimated Date of Board Approval	20-Mar-2014
Concept Review Decision	

I. Introduction and Context

Country Context

Rwanda is a small, landlocked and mountainous country. The westernmost fifth of the country lies within the Congo basin, whereas the remainder is part of the Nile basin. The Nile-Congo Crest divides these two catchments along a north-south line, and forms part of the Albertine Rift Montane Forest Ecoregion, which hosts 52% of all bird species and 39% of all mammal species on the African continent. Rwanda's two most important forest protected areas lie at either end of the crest – to the north the Volcanoes National Park, and Nyungwe National Park to the south. The ridge in between had been largely deforested, but includes two forest reserves – Gishwati and Mukura, which have been designated Key Biodiversity Areas for supporting population of eastern chimpanzee and an endangered swamp warbler, respectively.

Rwanda is subject to some of the highest demographic pressures in Sub-Saharan Africa, with a population estimated at 11 million, growing at 3.3% p.a., whilst only 52% of the land is arable. Mean landholdings are very small: 60% of households cultivate less than 0.7 ha, and more than 25% less than 0.2 ha, typically divided between tiny, scattered plots. It remains among Africa's poorest countries, despite having made significant progress in the past decade. More than 90 percent of the poor live in rural areas, and poverty remains deep and pervasive. In recent years, ODA reached 26% of GDP and $64 per capita, driven by severe need, but also impressive results. From 2005, the OECD has consistently rated Rwanda as one of the countries that uses aid most effectively. Recent political events have severely impacted the reliability of some forms of donor support, however.

Much of Rwanda's economy depends directly upon its land, water and biodiversity resources – i.e. on its landscapes. The agricultural sector accounts for about 32,7 % of GDP (2012), 80% of employment, and in 2010, 45% of foreign exchange earnings (mostly from tea and coffee). Around 50% of power generation comes from (small-scale) hydropower, and 86.3% of the domestic energy supply in the country is from wood fuels. In addition to ecological services supporting these sectors, biodiversity makes a substantial direct contribution to the economy through tourism, which was Rwanda's largest foreign exchange earner (at $251m) in 2011. Leisure tourism is almost exclusively nature-based, with gorilla-watching at Volcanoes being the flagship.

Steep terrains and the highest population density in sub-Saharan Africa make sustainable land and landscape management strict necessities for natural-resource-dependent sectors. Agricultural productivity is low, with yields of several key crops lagging behind other sub-Saharan African countries. Almost two thirds of forest cover has been lost since independence. Natural forests are virtually non-existent outside of protected areas, many of which have been encroached and reduced in size through successive re-gazetting. About 40% of Rwanda is classified as very high to high erosion risk, 75% is classified as "highly degraded" by FAO, and the country has one of the highest negative nutrient balances in sub-Saharan Africa with more than 14 million tons soil being lost each year.

Average temperature in Rwanda has increased over the last twenty years, whilst rainy seasons are tending to become shorter with higher intensity. Climatic factors, exacerbated by loss of forest and vegetation cover, steep slopes and high dependence on traditional rain-fed agriculture, are causing a variety of impacts. The eastern and south eastern regions (Umutara, Kibungo, Bugesera and Mayaga) are most affected by prolonged drought while the northern and western regions (Ruhengeri, Gisenyi, Gikongoro and Byumba) experience abundant rainfall that usually causes erosion, flooding and landslides (Twagiramungu 2006). These extreme climate events have adverse environmental impacts on agricultural productivity. For instance, 2008 harvests were negatively affected by serious droughts that came at the beginning of both planting seasons.

Rainfall and topography are most severe in western Rwanda. Risks of flash floods and landslides are highest where recent deforestation has occurred, such as within the Gishwati Forest reserve (see Annex III). Its forests were largely intact in 1978, and substantial forest cover still remained in 1986 despite a significant decrease. But by 2001, following the settlement in the area of refugees from the conflict in the mid 90s, only a small circular patch of native forest remained, and today the gazetted area is only 86 ha, with a further 578 ha under natural regeneration. Deforestation is believed to have exacerbated local flooding, with one event in 2007 alone causing m ore than a dozen deaths and leading to extensive crop and property damage. A study on the Economics of Climate Change in Rwanda estimated that the direct economic costs of the 2007 flood ranged from US$4 m to US

$20 m in 2 districts alone.Landslides and erosionare estimated to cause the loss of a million tons of soil per year, reducing local agricultural productivity and causing heavy siltatio nof the Sebeya river, increasing water supply and hydropower maintenance costs.

Sectoral and Institutional Context

Rwanda's long term development vision articulated in the Rwanda Vision 2020 document is to become a lower middle income economy operating as a knowledge-based service hub by 2020. Within this long term vision, the first Economic Development and Poverty Reduction Strategy (EDPRS) focused on growth and governance. EDPRS II (2013-2018) is currently in advanced draft form and highlights 4 priorities: (i) economic transformation, including green growth; (ii) rural development; (iii) productivity and youth employment; and (iv) accountable governance. It also identified environment and climate change, and disaster management as cross-cutting issues to be mainstreamed throughout all sectors. The proposed project is aligned with priorities under these programs, such as intensification of sustainable agriculture systems, rehabilitation of degraded lands, and enhancing cross-sectoral coordination and implementation through local government.

A number of sectoral strategies further elaborate goals germane to the project, many of which are also reflected in the Environment and Natural Resources Sector Strategic Plan (ENRSSP, 2009), including programs of agricultural intensification through terracing and a comprehensive national land titling program. Rwanda's National Adaptation Plan of Action (NAPA 2006) identifies the Northern and Western provinces in Rwanda as priorities area due to risks of floods and landslides, which led to the choice of the Gishwati forest area as the main focus for implementation of adaptation investments under the proposed project. There are also a number of recent and current projects in related sectors, including the World Bank financed Land Husbandry, Water Harvesting and Hillside Irrigation Project (LWH – which is investing in terracing), the Lake Victoria Environmental Management Project (LVEMP – which aims to improve the health of the Lake Victoria basin), and a UNEP / UNDP LDCF grant focused on enhancing community resilience to climate shocks in the Nile-Congo Crest area. The latter two are implemented by the Rwanda Environment Management Authority (REMA). See Annex IV for more details.

Rwanda has a relatively comprehensive and progressive legislative framework, and has established agencies to work cross-sectorally to support natural resource management, notably REMA and the Rwanda Natural Resources Authority (RNRA) within MINIREMA. In addition, a National Fund for Environment and Climate Change (FONERWA) is also being developed to address cross-sector financing needs 1/. Rwanda also recognizes the importance of engaging multiple-stakeholders and has established mechanisms including regular cross-sectoral planning meetings and the Joint Action Development Forums (JADF), consultative platforms used for promoting cooperation between the private sector, civil society and the public sector. Nevertheless, in the face of extremely high pressure on land and inevitable trade-offs required in land use, effective collaboration is still a challenge. A 2011 stakeholder consultation organized by IUCN revealed: conflicting targets and indicators between sectors; inadequate appreciation of environmental issues and capacity amongst non-environment sectors (e.g. infrastructure) resulting in limited use of existing coordination platforms; and a need to broaden civil society, private sector and, in particular, vulnerable groups in evidence-based planning and decision-making processes.

1/ There is an intention to merge FONERWA with similar operational and planned funds, i.e. the

National Fund for Forestry, established in 1998, and the National Fund for Water, proposed in Law No 62/2008. There is also some hope in government that it will benefit from the climate change adaptation funds.

Relationship to CAS

The FY09-12 CAS is consistent with the donor division of labor whereby the Bank agreed with GoR to prioritize engagement in three sectors—agriculture, energy, and transport (including ICT)—as well as some cross-sector areas. It is framed around two strategic themes:
Promote economic transformation and growth focusing on four key outcomes: (i) raising agricultural production in a sustainable way; (ii) improving access to and quality of key economic infrastructure services; (iii) improving the environment for private sector development; and (iv) strengthening management of public resources at central and local levels.
Reduce social vulnerability to ensure that the most vulnerable Rwandans also benefit from growth and to help Rwanda make further progress in building a more stable society.

The project will primarily contribute to CAS Outcome 1. I: Agricultural production -particularly of food crops-sustainably raised, alongside the existing Bank projects that are promoting sustainable agriculture and watershed management – i.e. RSSP, LWH and LVEMP II. However, it will contribute to a broadening of this approach, helping to promote direct and indirect economic values to landscape management that go beyond local agricultural output, and include tourism and protection of water resources for energy and water supply. It is also relevant Strategic Theme Two: Reducing Social Vulnerability in that it will enhance climate resilience amongst highly vulnerable rural communities.

A new Country Partnership Strategy for Rwanda is currently under development. Following limits to the support able to be provided by some bilateral donors, this could pave the way for a broader engagement by the Bank around the nexus of natural resources, water resources and climate. Preparation of LAFREC will help to develop this dialogue. The project is also well aligned with the World Bank Strategy for Africa. Pillar Two of the Strategy - Vulnerability and Resilience – 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 better management of water resources through the adoption of sustainable land and water management approaches and technologies, as well as of improved management of biodiversity resources and adoption of sustainable forest management.

II. Proposed Development Objective(s)

Proposed Global Environmental Objective(s) (From PCN)

To promote landscape management for enhanced environmental services and climate resilient livelihoods, including via forest rehabilitation and sustainable land management investments in one target landscape.

Key Results (From PCN)

The project will establish national systems for planning, implementing and financing landscape restoration activities, as well as demonstrating the value of these in at least one critical landscape (expected to be the Gishwati landscape, possibly extending into other areas of the Congo-Nile Crest). PDO-level results for the project are likely to be along the lines of:

- National and sub-national land use plans that incorporate biodiversity and ecosystem services valuation developed, and their integration into sector planning and activities monitored.

- XX ha within the Gishwati / Congo-Nile Crest landscape under improved sustainable land management / community forestry management.
- YY households benefiting from improved livelihood resilience

III. Preliminary Description

Concept Description

The project will consist of four components:

Component 1- Nation-wide multi-sectoral landscape restoration planning and institutional development $1,112,000 GEF
This component aims to establish a nation-wide, integrated institutional framework for effective landscape restoration and conservation. Main activities will be:

1. Establishment of a knowledge platform that will provide a base for (i) identifying landscape management priorities based on hotspots of degradation and associated impacts, and complementarities between enhance environmental and economic functions; (ii) monitoring indicators of landscape health and productivity; and (iii) sharing of information and lessons amongst diverse stakeholders.
2. Development of a nation-wide landscape restoration strategy and operational guidelines for its implementation.
3. Elaboration and implementation of a sustainable financing strategy, which will consider payment for environmental services, climate-related financing, as well as policy opportunities to release private financing.
4. Establishment of a national multi-stakeholder mechanism to ensure an integrated approach to landscape restoration and conservation.
5. Advocacy, awareness and (as appropriate) targeted technical training activities to equip stakeholders with the understanding and skills to engage effectively.

The scope of the activities financed by the GEF grant will depend in part on the success of the parallel preparation by IUCN of a related project focused specifically on developing participation platforms and sustainable financing mechanism, and to be financed by the German Environment Ministry.

Component 2 – Demonstration of land and forest restoration and conservation in a priority landscape $4,120,000 GEF

This Component will support the application of the landscape approach to forest restoration and conservation for the improvement of ecosystem functions and services in the Gishwati forest area, and possibly adjacent parts of the Nile-Congo Crest. It aims to arrest and eventually reverse the ongoing land conversion in the area thru forest restoration (if feasible), and agro-forestry approaches in a manner that will maximize ecological connectivity and hydrological function in the landscape.

The main activities of this component are:

1. Landscape restoration and management plans developed through a participatory process informed by analytics, integrated with sectoral plans & programmes, and implemented through District

Action Plans in selected priority sites.
2. Biological corridors identified and re-established to enhance connectivity and reduce fragmentation to enhance biological diversity.
3. Community based sustainable forest management systems established, integrating biodiversity consideration.
4. Adoption of new sustainable land management techniques including agro-forestry and in-field soil and water conservation.
5. Testin g of methodologies for monitoring above- and below-ground carbon stocks, exploration of the potential for carbon finance.

Component 1 would support and guide the definition of the methodology for carrying out such negotiated landscape planning and restoration, while Component 2 would put it into practice. It is expected that environmental benefits generated from restoration of forests and productive landscapes in the Gishwati area will decrease the pressure on the remaining na tive forests while providing additional habitat for biodiversity, including Chimpanzees. During project preparation the possibility will be explored for extending national land-titling programs to the Gishwati area – i.e. providing secure land tenure in what remains formally government land, in return for communal agreements to implement necessary sustainability measures.

Component 3 – Community climate resilience $3,850,000 GEF

This Component seeks to enhance community resilience through promoting diversified and climate-smart livelihoods, and implementing direct climate-risk management measures, potentially including slope stabilization measures, drainage improvements, rural infrastructure hardening, community awareness, early-warning and preparedness, and strengthening of government disaster response systems. Rwanda's NAPA identifies two sets of Districts for priority implementation of the climate adaptation activities: (a) districts prone to drought - Bugesera, Kirehe, Kayonza, Gatsibo, Rulindo and Nyamagabe; and (b) districts prone to floods - Nyabihu, Rubavu, Rutsiro and Ngororero. The flood-prone districts are all situated around the Gishwati landscape, and it is likely that this area will be the focus of the project, but needs and potential interventions in other areas will also be considered during preparation.

The main activities under this component will be:

1. Risk and vulnerability assessments conducted and updated within the Gishwati landscape (and potentially other areas).
2. Systems established to disseminate timely hazard warnings information.
3. Regional centers and networks trained and equipped to rapidly respond to extreme weather events.
4. Resilient rural infrastructure measures introduced through improved designs and/or retro-fitting, and potentially through slope-stabilization or run-off management works in areas of acute landslide and flood risk.
5. Climate resilient livelihoods promoted that complement and strengthen landscape restoration investments, including potentially value-addition for agricultural products that promote investments in sustainable land management, diversified sustainable livelihood options including nature-based tourism, improved water management practices, and alternative energy sources / increased wood fuel efficiency.

Component 4 – Project management & monitoring $450,000 GEF

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	×		
Natural Habitats OP/BP 4.04	×		
Forests OP/BP 4.36	×		
Pest Management OP 4.09	×		
Physical Cultural Resources OP/BP 4.11			×
Indigenous Peoples OP/BP 4.10		×	
Involuntary Resettlement OP/BP 4.12	×		
Safety of Dams OP/BP 4.37			×
Projects on International Waterways OP/BP 7.50			×
Projects in Disputed Areas OP/BP 7.60		×	

V. Financing (in USD Million)

Total Project Cost:	9.53	Total Bank Financing:	0.00
Total Cofinancing:		Financing Gap:	0.00

Financing Source	Amount
BORROWER/RECIPIENT	0.00
Global Environment Facility (GEF)	5.49
Least Developed Countries TF for Climate Change Activities	4.05
Total	9.53

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VI. Contact point

World Bank

Contact: Stephen Ling
Title: Natural Resources Mgmt. Spec.
Tel: 458-8815
Email: sling@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Finance and Economic Planning
Contact:
Title: Permanent Secretary
Tel: 252577994
Email:

Implementing Agencies

Name: : Rwanda Environment Management Agency

Contact: Rose Mukankomeje
Title: Director General
Tel:
Email:

VII. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

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