July 2012

FINAL REPORT

GOVERNMENT OF RWANDA

Environment and Climate Change Fund (FONERWA) Design Project

EXECUTIVE SUMMARY

Environmentally sustainable, climate resilient and green economic growth are established development priorities of the Government of Rwanda (GoR). Since 2005, Rwanda has worked to operationalise a sustainable financing mechanism in order to achieve these objectives, known as the Environment and Climate Change Fund – FONERWA.

FONERWA (a French acronym[1]) is the intended vehicle through which environment and climate change finance is channelled, programmed, disbursed and monitored in Rwanda. As a national basket fund, FONERWA is both an instrument to facilitate direct access to international environment and climate finance, as well as to streamline and rationalise external aid and domestic finance. The operation and organisation of this mechanism is ultimately guided by Rwandan Law, in the form of the FONERWA Law which has been approved by Parliament and is awaiting gazetting.

The following report details the final results of the FONERWA Fund design project. Summarised below, the contents cover FONERWA's:

- Background and purpose;
- Design basis;
- Results of the design process;
- Financing mechanism (capitalisation);
- Financial structure and instruments;
- Governance and institutional structure;
- Proposal screening process.

As and when the FONERWA Managing Committee (FMC) is constituted, this design document, including governance and operational aspects, will be presented for approval to formalise operationalisation of FONERWA.

Background and purpose of FONERWA

The aim of FONERWA is to respond to Rwanda's current and future needs for environment and climate change related financing, to further support and accelerate goals of sustainable economic development. This aim was established in the Organic Law No. 04/2005 calling for the establishment of the Fund. The organisation, patrimony, functioning and responsibilities of FONERWA have been formalised through the FONERWA Law. Mandated organisation includes formation of a Managing Committee, a Fund Secretariat and other relevant staff recruited under the guidance of the Ministry of Environment and Natural Resources (MINIRENA) and the Rwanda Environment and Management Authority (REMA).

All funding decisions are ultimately made by the FONERWA Managing Committee (i.e. the Steering Committee), informed by the FONERWA Technical Committee (FTC), with implementation oversight provided by the Secretariat. Among other responsibilities, the FMC will be in charge of final review and approval of shortlisted project/programme proposals submitted by sponsoring Ministries, civil society organisations (CSOs) and the private sector. The FMC will also provide necessary guidance in defining and approving rules, criteria and procedures for selection of proposals for funding that will be used by the Technical Committee to screen projects.

Fund patrimony includes grants and aid, donation and bequests, environmental fines and fees and 0.1% of capital project costs (less operating costs) required to conduct environmental impact assessments, in addition to other revenues determined by laws.

FONERWA functions and responsibilities are to support activities aimed at conserving and protecting the environment, land, water, forestry mines and quarries, as well as managing climate change and its impacts. The Fund also supports promotion of using renewable energy in a sustainable manner, fighting causes of pollution, and awarding prizes for all the above to outstanding individuals, associations or institutions. Access to the Fund is open to public and private entities, including businesses, civil society and research institutions.

1 The French acronym, FONERWA, was coined in 2005 under Organic Law no.4/2005 and means fund for environment and natural resources for Rwanda. Through the FONERWA Law, it has taken on the additional meaning of environment and climate change fund for Rwanda.

Proposed basis of the FONERWA Fund design process

The basis of the proposed FONERWA design involves three key considerations: (1) National environment and climate commitments and development priorities, (2) National, cross-sectoral environment and climate assessments, plans and strategies, (3) International climate and environment finance architecture and emerging best practice.

National commitments and national development priorities. The foundational basis of the Fund design is the proposed FONERWA Law (described above), and underlying Organic Law 04/2005, calling for the Fund's establishment. These frameworks are complimented by Rwanda's commitments under a wide range multilateral environment and climate change conventions, protocols and agreements.

National development priorities including Rwanda's Vision 2020 and Economic Development and Poverty Reduction Strategy (EDPRS) are also critical Fund design considerations, as they provide the country's overarching development, budgeting and planning frameworks. Under these frameworks (and as part of their planned revisions taking place in 2012), environment and climate change are top priorities for sustainably ensuring Rwanda's continued economic growth and poverty reduction. The Fund design aims to support these linkages, and compliment related priorities within sector and sub-sector strategic plans.

National, cross-sectoral environment and climate assessments, plans and strategies. In recent years, Rwanda has spearheaded numerous initiatives to assess and address the country's environment and climate related management challenges and opportunities. This substantial body of work provides the technical basis for areas of intervention proposed as part of the FONERWA design process. A key environmental assessment includes the State of the Environment Report (2009), which (in combination with recent household and poverty assessment surveys) provides a valuable tool for identifying and ranking the root causes of poverty-environment/climate challenges facing Rwanda. A recent UNEP sponsored post-conflict environmental assessment proposing a total of 90 sector-specific interventions also provides a valuable resource for environment related Fund design and investment considerations.

In terms of climate change, Rwanda has identified a wide range of national priorities which inform potential Fund investment areas through a number of assessments, plans and strategies. Key assessments include the Second National Communication to the UNFCCC (2011) and a study on the Economic Costs of Climate Change in Rwanda (2009), both covering adaptation and mitigation. Key plans and strategies include the National Adaptation Programme of Action (NAPA) (2006) and Rwanda's Climate Resilience and Green Growth Strategy (2011). Recommendations and priority actions from each of these assessments fed directly into the overall design of FONERWA's Thematic Financing Windows and their respective Entry Points for investment (below).

International environment and climate finance architecture and emerging best practice also informed design considerations. The report highlights the complex and continuously changing landscape of international architecture for resource mobilisation (both public and private). The relevance of these requirements will depend on the financial structure and instruments identified as preferred options under FONERWA, though broad criteria are discussed. Linked to this, case studies capturing design elements of other emerging national climate funds were examined based on literature and interviews with national funds including Ethiopia, Indonesia and Bangladesh. Key lessons for FONERWA were highlighted, including the need for clear fund objectives, accountability and ownership, as well as balanced stakeholder representation and the consideration of innovative financing tools such as Indonesia's Special Purpose Vehicle to spur green investment.

Results of the design process

The above legal, technical and experiential basis was explored in partnership with the Core Design Team over the course of multiple engagements in order to determine an overall design for FONERWA. Three key criteria guided this process, emphasising that the design should: 1) Align with the FONERWA Law, 2) Reflect FONERWA's national character and identified national priorities for environment, climate & development and 3) Meet demonstrated financing needs.

Based on consultations, the following Overall Objective, Outcome, Impact and Results were formulated:

> ***Overall objective:*** FONERWA will have the overarching objective of contributing to sustainable wealth creation and poverty reduction in Rwanda, through sustainable management of natural resources, climate resilient and green economic growth[2].

> ***Outcome:*** The outcome of the FONERWA Fund would be to sustainably and equitably finance3 and further strengthen national programmes and private sector initiatives in the areas of current and future environment and climate change, and development related challenges and opportunities. The overall objective and outcome are compatible with the strategic priorities set in GoR's latest Climate Resilience and Green Growth Strategy, National and Sub-national Sector Strategic Plans, as well as other plans and strategies.

> ***Results:*** In order to achieve the above, FONERWA will deliver the following results (i.e. outputs). The Fund is structured into three financing windows (see below) which correspond to these results areas.4

RESULTS PILLAR 1

Conservation & management of natural resources strengthened and sustained.

RESULTS PILLAR 2

R&D and technology transfer and implementation facilitated and utilised.

RESULTS PILLAR 3

Environment and climate change issues mainstreamed into policies, programmes, plans, budgets and activities for public and non-public agencies.

Building on the above overall objective, outcome and results, and guided by the three key criteria, an overarching framework for FONERWA is proposed. The framework consists of four Thematic Financing Windows and respective Entry Points, or priority investment areas, detailed in the table below5. A key rational in proposing thematic financing windows is to manageably structure and categorise the priorities of the GoR in relation to environment and climate objectives, as reflected in various GoR policies, strategies and relevant studies that demonstrate financial need. As an overarching framework, the windows facilitate capitalisation based on actual financing gaps and expenditure, including earmarking of funds, rather than having broader themes such as adaptation, mitigation and environment, which are very crosscutting/overlapping in the Rwandan context. Subject to approval by the FONERWA Managing Committee, the windows and entry points will inevitably evolve over time based on demands and future aspirations of the GoR.

Given the FONERWA Law's requirement that 0.1% of all public and private capital projects (less operating costs) are collected under FONERWA for Environmental Impact Assessment related monitoring and enforcement by the GoR, this is also given a specific thematic window – but was kept separate from the financial needs assessment.

2 Green economic growth implies economic growth and development with limited negative environment and climate-related externalities.

3 Ensuring balanced investment across Provinces/Districts and urban and rural areas.

4 Note: Window 4 relating to Environmental Impact Assessments is a standalone window, as per the FONERWA Law's stipulation that 0.1% of capital project budgets are set aside for monitoring of these assessments and monitoring of associated environmental management plans.

5 The thematic windows and entry points are intended to help rationalise GoR priorities and facilitate allocations tied to certain conditions (e.g. Forestry Fund, EIA fees, other specific environmental fines/fees). However, many areas are not mutually exclusive by windows. In the case of Window 3, for example, mainstreaming environment and climate considerations is crosscutting and technically relates to all windows/entry points.

Proposed thematic financing windows and entry points for Fund capitalisation and expenditure.

Window 1: Conservation & Sustainable Natural resources management	Window 2: R&D and technology transfer and implementation	Windows 3: Environment & climate change mainstreaming	Window 4: Environmental Impact Assessment (EIA) Monitoring & Enforcement
1. Ecosystem rehabilitation	1. Renewable energy & energy efficiency technology	1. Strategic Environment & Climate Assessments (SECAs)	1. Monitoring implementation of environment management plans for capital projects
2. Sustainable land management	2. Pollution management	2. Sector-specific adaptation and mitigation	2. Environmental auditing
3. Integrated water resource management (IWRM)	3. Water storage, conservation and irrigation technologies	3. Support to implementation of cross-sectoral integrated planning (e.g. IDP, VUP)	
4. Sustainable forestry management	4. Applied and adaptive research (agroforestry, waste, urban planning)		
5. Sustainable mines & quarries	5. Disaster risk reduction		
6. Promotion & protection of biodiversity	6. Data collection, monitoring &MIS		

Initially, it is up to the FONERWA Managing Committee, which will have representation from the GoR, Development Partners (DPs), the private sector and civil society, to further prioritise key entry points of each of the windows, **based on the resource ceiling available every year**. Prioritisation will be determined by the FONERWA Managing Committee, based on yearly Strategic Issue Paper (SIP) (that identifies yearly priorities of budget agencies in line with EDPRS) submissions by relevant line Ministries, as part of their budget submission process to the Ministry of Finance and Economic Planning (MINECOFIN).

Regarding resource allocation across windows, it is important to be open and flexible in early stages of Fund operationalisation. As a result, prioritisation and allocation decisions will be based on emerging priorities, the nature of investments from various sources and associated conditions. Although Development Partners will have the option to focus resources on specific windows/entry points, or broader themes of environment and climate change, earmarking resources is not recommended as expenditure is intended to facilitate the functioning of a largely demand-based Fund (i.e. submitted project/programme proposals).

The thematic split of the windows will be kept under review by the FONERWA Managing Committee, so that it is responsive to new opportunities, Economic Development and Poverty Reduction Strategy Paper (EDPRS) II priorities, negotiations with Development Partners and ongoing assessment of impacts and value for money across windows.

Financial needs assessment (gap analysis)

In addition to alignment with the FONERWA Law and established national priorities, a financial needs assessment (gap analysis) was conducted to further justify the investment areas (windows, entry points) proposed above. The assessment was based on differences between requested and approved budgets using the 2010/11 budget law, as well as financing gaps identified in sector and sub-sector strategic plans. Results show that Windows 1-3 and their respective Entry Points demonstrate significant, unmet financial need. Aggregated results for windows are presented in the below table.

Aggregate results of financial needs assessment based on proposed financing windows and entry points.

Thematic Window & Entry Points	% Mean financing Gap
W1: Ecosystem Rehabilitation; Sustainable Land Management, Integrated Water Resource Management (IWRM), Forestry, Mines and Quarries)	36%
W2: Renewable Energy and Energy Efficiency; Pollution Management, Irrigation Technology, Applied and Adaptive Research in Agro-Forestry, Waste, & Urban Planning.	29%
W3: Support to Implementation of Cross-Sectoral Integrated Planning (e.g. IDP, VUP) .	43%

**Mean calculated by averaging financing gaps from 2010/11 Budget year and Sector Strategic Plans. For absolute numbers see section 4.6 and Annex 3.*

Results of both the 2010/11 budgetary analysis and financing gaps within sector and sub-sector strategic plans were found to be in broad alignment with each other. Aggregated results show the mean gaps seen under Thematic Windows 1, 2, and 3 are 36%, 29%, and 43%, respectively. Combined results of both assessments demonstrate that the largest gaps are found in entry points for Ecosystem Rehabilitation, Sustainable Mining and Quarries, Irrigation Technology, and Integrated Water Resources Management (IWRM). Given informational constraints and lack of clear data, arriving at definitive financing gaps is a challenge. However, the aim of the analysis was to demonstrate general trends observed in the funding for priority investment areas, rather than quantify FONERWA capitalisation requirements or cost a pre-selected pipeline of projects/programmes. The latter two exercises were not appropriate given FONERWA's orientation as a demand-based Fund (i.e. driven by proposals from project/programme promoters).[8]

6 Note: Entry Point 5 (Disaster Risk Reduction) under Window 2 is not included in the financing gap analysis given the ministry in charge (MIDIMAR) was not yet in function during 2010/11.

7 There is no separate sector-specific adaptation and mitigation budget heading in the 2010/11 and subsequent budgets so it was not possible to take this entry point into consideration.

8 A demand-based fund is a core operating principle of the overall fund design. It is the GoR's preference not to design the fund based on a pipeline of pre-selected projects/programmes, rather to highlight priority areas demonstrating financial need and let the demand of project promoters guide FONERWA investment decisions. In this context, the concept of 'demand' can apply to current areas requiring urgent priority (for adaptation, mitigation or environment related activities), or those based on anticipated future needs or long-term policy goals. 'Demand' within the context of the fund is not interpreted as reactive in nature and can apply to short-term or longer-term needs.

Financing mechanism (capitalisation) of FONERWA

Potential sources of FONERWA capitalisation were quantitatively explored based on stipulations for internal and external finance in the FONERWA Law, and subject to data availability. Domestic capitalisation sources include: (1) Environmental fines & fees, (2) EIA fees (mentioned above), (3) Forestry and Water Funds, (4) Other environmental revenue and (5) Seed financing from domestic stakeholders (line ministries). In fact, FONERWA is only fund in Rwanda that mobilises resources from the GoR's own revenue sources, therefore making it less vulnerable to external aid shocks compared to other funds currently in operation in Rwanda.

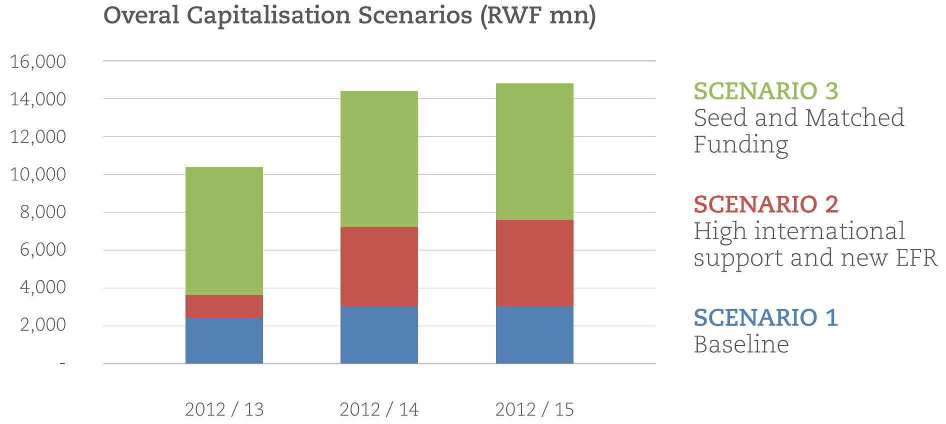
Projections of potential external capitalisation scenarios were based on donor contributions to other national climate funds (Indonesia, Bangladesh and Ethiopia), estimated using respective per capita contributions. Other external sources were considered qualitatively (given high levels of related capitalisation uncertainty), including international environment and climate funds. Although the Fund is open to private sector investment, such investment is highly uncertain in the Rwandan context and there is limited precedent internationally upon which to base quantitative private sector capitalisation estimates (proxies).

Results of domestic financing analysis show overall capitalisation is projected to be low, ranging between RWF 793.4mn to 5.3bn (US$1.3 to 8.7mn) in 2012-13 and RWF 339.7mn to 7.3bn (US$549,000 to11.9mn) by 2014-15, largely depending on seed financing from ministries. This demonstrates the need for external financing sources such as bilateral and multilateral donor contributions, international environment and climate finance. Results of projected external financing show there is a wide range of possible scenarios for bilateral and multilateral development partner support, depending upon how donors' commitments evolve over time.

However, this support is within roughly the same range as projected domestic support. **Estimates indicate that overall external capitalisation is projected to range between RWF 1,456.8 to 5,277.1mn (USD $2.4 to 8.7mn) in 2012-13 and RWF 2,660 to 7399mn (USD $4.3 to 12mn) by 2014-15**. This demonstrates the need for strong support of Rwanda's Development Partners for FONERWA capitalisation, and commitments of multi-year support to help ensure sustainable and predictable external financing.9

Based on scenario findings for potential domestic and external capitalisation, three combined financing scenarios were developed. The baseline scenario (SI) takes the baseline assumptions for domestic and external capitalisation scenarios, and the second (S2) and third (S3) scenarios take assumptions for the corresponding scenarios in domestic and external capitalisation sections.

FONERWA Capitalisation Scenarios (RWF mn)



Under the most optimistic case – supposing all scenarios come about across each of the three years – overall capitalisation increases from RWF 10.6bn in the first year (2012-13) to RWF 14.8bn in the third year (2014-15) or US $17.4 to 23.9mn, respectively. Under the most pessimistic case (S1 baseline only), capitalisation increases from RWF 2.3bn in the first year to RWF 3bn in the third year, or US $3.7 to 4.8mn, respectively. Under the middle Scenario (S2), capitalisation ranges from RWF 3.5bn to RWF 7.7bn from the first year to the third year, or US$ 5.7mn to 12.5mn.

9 development partner support may be provided either into the overall FONERWA basket fund or be earmarked for specific windows/entry points.

Considering current levels of aid flow to the environment and natural resources sector by Development Partners, Scenario 2 is considered the most likely capitalisation prospect for FONERWA. This is attributed to the high potential for generating new environmental revenue through payments for ecosystem services (PES) – a framework which has been developed – and the expectation that DPs will invest at equivalent levels in Rwanda (77.36 cents/capita) as those invested in the Bangladesh Climate Change Resilience Fund (BCCRF). In the short to medium-term, Scenario 1 is considered overly pessimistic and Scenario 2 more likely than Scenario 3, the latter of which assumes investment from key line ministries and the prospect of matching funds from DPs. However, it is to be noted that considering the large gap in overall financing to the sector, even in the most optimistic scenario FONERWA will not be able to finance the entire sector gap. The aim, therefore, should be to finance only those projects/programmes that are fully compatible to FONERWA's objectives and bring maximum value for money.

Prioritisation of funding. Prioritisation of activities funded by FONERWA will be initially decided by the FONERWA Managing Committee, and based on an overall framework including the following considerations:

> Volume and nature (associated conditions) of funds available – e.g. dedicated sectoral finance streams from fines/fees, DP earmarking of specific windows/entry points or themes such as climate change adaptation and mitigation;

> GoR priorities – Highlighting EDPRS 2 and annual budget submission priorities based on Strategic Issue Papers (that identify yearly priorities of budget agencies in line with EDPRS) of relevant line ministries, which the Fund can improve upon or support on a needs basis.

Further prioritising of windows/entry points (or estimating entry point allocations based on estimated capitalisation scenarios (S1 or S2 or S3) could be counterproductive and potentially misleading during Fund design process.

As mentioned, although private sector capitalisation through investment options is a possibility, this is not anticipated to materialise in the short to medium-term, and therefore has not been considered in capitalisation projections. FONERWA does not yet have a proven track record for domestic project/programme innovation to satisfy expectations of high rates of return of international/national private investors. Given FONERWA's largely "public goods" orientation, focus on financial returns on investment from inception for the short to medium term may undermine the core focus of expenditure targeting social and environmental returns, yet likely yielding very low actual financial returns on investment.

To be competitive with other commercial ventures – and to satisfy private sector investors – the financial return from any FONERWA investment has to be around 15% for domestic and at least 10% for international investors. It would therefore be important for FONERWA to demonstrate over the initial 3 to 5 years of operation that financially viable business models related to environment and climate change can be developed. Nevertheless, FONERWA is open to capitalisation proposals from private sector investment sources. Any such proposal with an "investment return prospect" will have to be analysed by the Fund Management Team (FMT) on a case by case basis, and approved by FONERWA Managing Committee.

Additional external financing from large international public funding sources for project and/or programmatic support was also explored. Although quantification of such support for future FONERWA activities is not possible due to the unpredictable nature of these financing sources (largely provided on a project by project basis10), they are important to highlight for Fund design considerations. Findings show that disbursements from major external project/programme financing sources for environment and climate adaptation and mitigation have been limited in both Sub-Saharan Africa and Rwanda to date. The Global Environment Facility (GEF) has been a leading contributor to Rwanda and SSA for both environment and climate project/programme-level finance. On the whole, Rwanda has received an estimated USD $31 million to date from major international public sources of environment and climate change finance.

10 Quantitative estimates or projections from direct access to international public funds was not included in any capitalisation scenario, given the considerable uncertainty and delays surrounding both existing (e.g. Adaptation Fund, Clean Technology Fund,) and emerging funds (e.g. Green Climate Fund, GCF). Moreover, the Fund design and capitalisation estimates fundamentally account for this risk, but at the same time fully consider the possibility (flexibility) of FONERWA utilising these public funds through its project screening mechanism (in partnership with other national entities such as the Adaptation Fund NIE, CDM DNA etc).

In the short term, Rwanda stands to benefit from its early mover advantage to attract Adaptation Fund (AF) support, due to the limited number of accredited National Implementing Entities to date, though this will change as more entities are accredited. Similar short-term advantage may materialise for the emerging Green Climate Fund (GCF), which is likely to adopt analogous structures/modalities as the AF (i.e. NIEs). However, access to this finance remains uncertain as the GCF is still under development, and will likely not be operational for at least 2 years.

Financial structure and instruments

The financial structure of FONERWA refers to the profile of disbursements of the Fund over time. Since various sources of resources from the GoR, DPs, and other external climate finance are expected to be pooled to the Fund every year it is appropriate to consider FONERWA as a **basket fund**. This follows from consideration of other types of financial structures including endowment funds, revolving funds, sinking funds and investment funds.

Endowment funds, for example, are investment vehicles that are established with a large initial capitalisation, but generally have no major subsequent replenishment apart from "interest earned." Endowment funds are invested in financial markets, and a pre-determined mix of the interest earned and principle of the endowment fund are used during pre-determined financial years to conduct activities consistent with the fund's mission. FONERWA does not fall into this category. It is also noted that some Development Partners (e.g. Netherlands) cannot contribute to this type of financial structure due to their foreign aid policy.

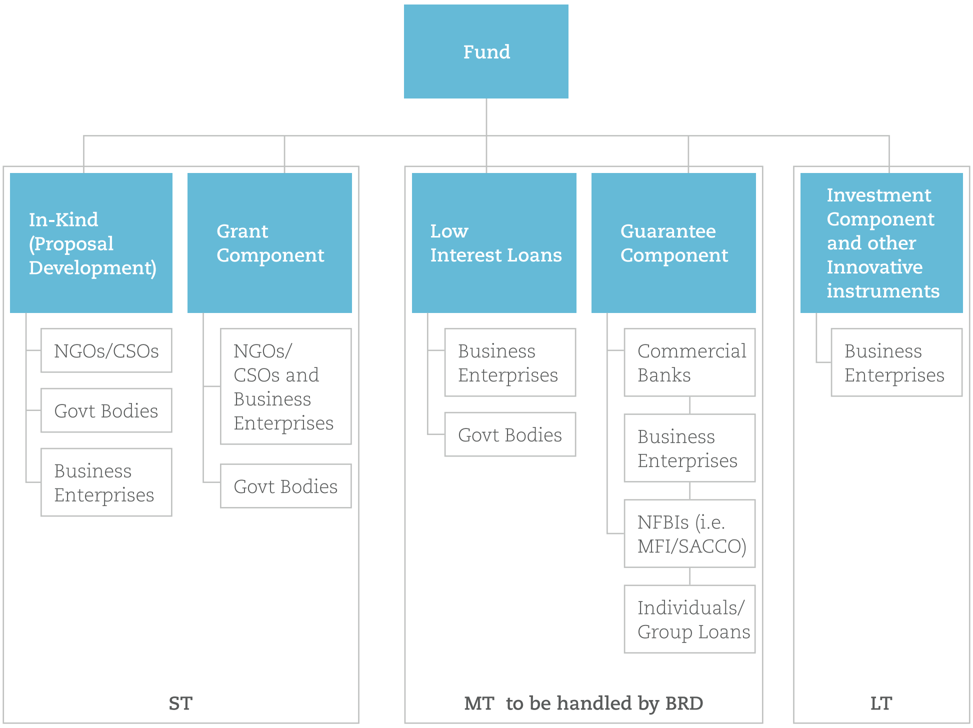
Another financial structure considered is **revolving fund**. According to the Global Environment Facility (GEF) definition, revolving funds provide for the receipt of new resources on a regular basis – for example, proceeds of special taxes designated to pay for conservation programs – which can replenish or augment the original capital of the fund, and provide a continuing source of money for specific activities.11 Although the GoR's own revenue streams are expected to be added to the Fund every year, this is only a partial feature of the fund. In addition, FONERWA funds will not be exhausted each financial year, as under **sinking funds**, and the Fund (in the short to medium-term) is not expected to generate sufficient financial returns (profit) for investors, as under an **investment fund** structure.

However, as the Fund starts demonstrating adequate return potential (which has been taken into consideration in project screening procedures), the structure of the Fund or a portion of the Fund can be changed to "venture capital", to provide the private sector with an investment option. Subject to approval by the FONERWA Managing Committee, this option should only be explored in the long-term, given the key priorities and focus of FONERWA Law.

Regarding financial instruments, FONERWA will utilise several instruments to achieve its objectives, phasing in more complicated instruments over time, depending on actual and emerging needs. The figure below presents the financing instruments in the short term (ST), medium term (MT), and long term (LT), and targeted beneficiaries, which includes national (line ministries) and sub national (e.g. Districts) Government bodies, civil society and the private sector.

11 "Any particular environment fund can combine these features depending on its sources of capital." The Global Environment Facility (GEF), 1998. "Evaluation of Experience with Conservation Trust Funds," pg. 4. Online: http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.12.Inf_.6.p

Proposed financial and non-financial instruments for FONERWA.



In the short-term (year 0-1), two primary financial instruments are proposed: (1) In-kind support for proposal development and (2) Grants, a component of which will be co-financing (e.g. for private sector beneficiaries). In-kind support includes mostly technical assistance for proposal development to project promoters and, in some cases, offset of proposal development costs through grants. Regarding grants, these may be offered for 100% of a project cost to both public and private beneficiaries, but will generally be provided on co-financing or 'top-up' terms. *Grants of no more than RWF 1 million cash* will also be provided in the form of awards or prizes to reward new innovation.

It is anticipated that, for the first two years, the majority of the private sector resource allocations (20% of total fund resources) will come in form of grants until the guarantee and concessional loan facilities are introduced. Since GoR revenue should not be used to offer these financial instruments, according to Ministry of Finance and Economic Planning, MINECOFIN), sufficient resources have to be generated from other sources (i.e. development partners) to offer these facilities targeting the private sector. A two-year period has therefore been recommended to mobilise fund and develop these financial instruments accordingly.

Medium-term (2-5 years) instruments include slightly more complicated financial instruments, namely low interest and/or concessional loans, that will require the Fund Management Team to work together with a Rwanda-based financial institution, or other international bilateral/multilateral banks with experience in offering such instruments e.g. KfW. This would constitute a **hybrid institutional arrangement** whereby FONERWA is separated into funding streams: one focusing on government and civil society, managed directly by the FONERWA FMT/ Secretariat, and the other focused on the private sector, managed by the Rwanda Development Bank (BRD), with both reporting to the same Governance structure and following the same project/programme screening procedures. The percentage allocation for each of the streams in the medium to long-term will be subject to approval by the FONERWA Managing Committee.

Long-term (>5 years) financial instruments are expected to be introduced several years into the operationalisation of FONERWA, subject to the Fund's performance and private sector demand. The makeup and sequencing of these phased developments will be determined by the evolution of the Fund and the FONERWA Managing Committee. Examples of various instruments such as investment and equity finance are explored. The need for capacity building (particularly within the private sector) to facilitate use of more complex financial instruments in the long-term is also highlighted. A **capacity needs assessment**, therefore, needs to be conducted (and acted upon) by the FMT – recommended for year 1. See **Capacity Building Plan** for further details.

Governance and institutional structure

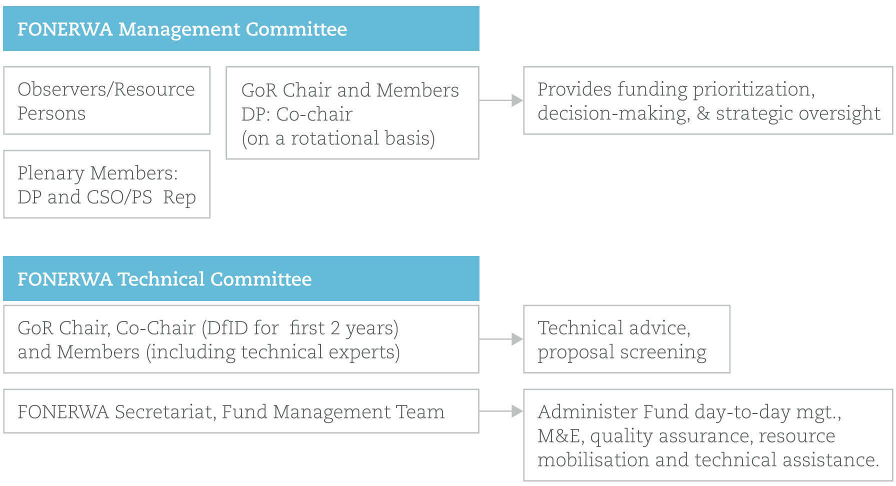
The Ministry in charge of environment and climate change (presently MINIRENA) is stipulated in the FONERWA Law as the national institution responsible for Fund oversight, while REMA, as instructed by MINIRENA, is the authority to house a Fund Management Team (FMT) recruited for day-to-day management. The FMT will be in place for the first two years of FONERWA operation, in order to build capacity for the full handover of Fund day-to-day management to MINIRENA/REMA. To further consider the rationale for this organisational arrangement, a comparative advantage (CA) analysis was conducted to assess the institution best suited to facilitate management of the Fund over the short to medium term (0-5 years).

Results of the analysis found that a disbursement mechanism split between the public sector (as well as CSOs and research institutions) and private sector to be the most advantageous, in order to maximise efficiency and sustainability, and reach target beneficiaries. The FONERWA Secretariat and FMT will be responsible for overall management of both disbursement channels. Accordingly, publically oriented funds will be channelled through MINIRENA/REMA using existing GoR procedures, while the Rwanda Development Bank (BRD) channels private sector disbursement using its existing procedures. It is important to note that both MINIRENA/REMA and BRD have expressed willingness to carry out these functions.

The FONERWA Secretariat will be housed in REMA, as delegated by MINIRENA. However, in line with the overall governance structure and project approval process through the Technical and Managing Committees, this will afford REMA no unfair advantage in terms of resource allocation or disbursement. The same applies to BRD. Planning, co-ordination and budgetary oversight of the Fund will be ensured by the Ministry of Finance and Economic Planning (MINECOFIN), along with other relevant ministries that are part of the Governance structure.

The Governance structure of FONERWA has been developed to allow the GoR, Development Partners, the Private Sector and civil society oversight of projects/ programmes, and to ensure maximum transparency and accountability. In the event of private sector capitalisation, oversight may be granted through a position on the Technical and Managing Committee on a case by case basis, subject to Managing Committee approval. In line with the FONERWA Law, and drawing from other international environment and climate funds, the figure below illustrates the proposed FONERWA governance structure consisting of a Managing Committee, Technical Committee and Secretariat, with the latter working in partnership with a FMT for the first 1-2 years of operation.

Proposed FONERWA governance structure.



The FONERWA Managing Committee will be responsible for monitoring and directing the Fund's activities. It is the highest organ in the Government of Rwanda for FONERWA management and oversight and involves participation from a cross-section of stakeholders including the GoR at central (Permanent Secretaries) and district levels (through MINALOC), civil society, the private sector and development partners. The FONERWA Technical Committee will be responsible for ensuring strong ownership of FONERWA-supported activities, and enhancing their sustainability, and will consist of Director Generals from key environment and climate related sectors as well as Development Partners.

As mentioned, the Secretariat will provide facilitation for the central coordination of FONERWA. The Fund Management Team (recruited and funded by DFID for a period of two years) will initially provide support to the Secretariat, responsible for day-to-day management of the Fund. The FMT's role will be to build the capacity of MINIRENA/REMA and BRD for management, but also across key sectors. The detailed roles and responsibilities of the FMT related to fund raising, knowledge sharing, outreach, and capacity building, among others, have been elaborated in the Terms of Reference (ToR), enclosed in Operational Manual. The FMT will bring in three technical advisors for the purposes of capacity building during this two-year period. A single technical adviser will sit in the Ministry of Agriculture (MINAGRI) sector, and another in the Ministry of Infrastructure (MININFRA) on a full time basis, while a private sector development adviser will serve various ministries on a rotational basis. Further call down support may be drawn upon depending on needs.

Fund accessibility

The fund can be accessed by line ministries, Government agencies, Districts, civil society organisations (CSOs) including academic institutions and the private sector, as long as the proposed activities are in compliance with Fund eligibility criteria, and the project/programmes are screened through various steps as discussed in the project screening section of this document. At least 20% of total FONERWA resources will be earmarked for the private sector for use across core financing windows (excluding Window 4), and at least 10% of Fund resources will be earmarked for Districts.

Proposal screening

The FONERWA project/ programme proposal screening will be carried out in a fair and transparent, multi-step process, the guidelines for which will be made public. Only those projects and programmes that clearly demonstrate their contribution to FONERWA's outputs/outcomes, and are results-based, will be supported.

The process will be overseen by the FMT and Technical Committee, each with representatives from the public sector, private sector and CSOs and the Development Partner community; with the ultimate funding decisions made by the FONERWA Managing Committee. The 6 key steps of the proposed screening process include: (1) Submission of a Project Profile Document (PDD), (2) Review for Eligibility Criteria, (3) Preparation and Submission of Full Project Document (PD), (4) Technical Appraisal and Short-listing of PDs, (5) Strategic Appraisal and (6) Decision Making. During the screening process, it will be ensured that any project submitted is aligned with the relevant Sector Strategic Plans and overarching goals of the GoR related to environment, climate change and development.

Transparency throughout the screening process will be ensured by providing feedback to project promoters in each of the steps. In cases where projects are both approved and not approved, written justification will be provided. At least 40% of the Fund Management Team's time will be spent on providing technical assistance for proposal development to both public and private sector project promoters. Those members of the FMT directly involved with development of proposals will not be part of the associated project screening team, in order to avoid conflicts of interest.

Fund risk assessment

A risk assessment was conducted to identify potential risks associated with design, implementation, establishment and operational stages of FONERWA development. These risks are crosscutting in nature and are therefore combined in an assessment of the Fund's implementation (years 1-2) and ongoing management (years >2) phases. The risk assessment took into consideration key issues, challenges and areas of uncertainty associated with these two phases, reflecting associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Identified risks were assigned High, Medium or Low likelihood and impact. Overall, risks associated with FONERWA implementation and ongoing management demonstrate low to medium likelihood, corresponding with medium to high impacts.

Conclusion

In order to realise FONERWA operationalisation, the Fund Managing Committee (once configured) will need to make a number of critical decisions regarding the above recommendations in relation to the finalisation and approval of:

> Overall Fund structure;
> Investment priorities;
> Capitalisation sources for further development;
> Financial structure and priority financial instruments;
> Institutional arrangements and
> Governance modalities.

The role of the FMT will be critical in facilitating the implementation of these decisions and – most importantly – building capacity and awareness across Rwanda's public and private sectors to generate demand through development of high-quality project/programme proposals.

Following the 2-year appointment of the FMT, FONERWA should be well placed as a fully Rwandan owned and managed Fund. At this time, there will also be more clarity in the context of bilateral/multilateral capitalisation as Development Partners are able to include contributions to FONERWA in programming country commitments, in addition to the development of international public funds (e.g. GCF). These and other developments will enable FONERWA to start building a solid, performance-based track record of results in achieving Rwanda's environment and climate change objectives, in turn building confidence of potential public and private investors as well as Fund beneficiaries at national and sub-national levels.

***Please forward any comments or questions to Jahan Chowdhury, FONERWA Design Project team leader (Jahan.Chowdhury@wlv.ac.uk) or Dr. Rose Mukankomeje, DG-REMA (dgrema@gmail.com).**

ABBREVIATIONS AND ACRONYMS

AAP:
Africa Adaptation Programme

ADB:
Asian Development Bank

AF:
Adaptation Fund

AfDB:
African Development Bank

AusAid:
The Australian Government's Overseas Aid Program

BAPPENAS:
Indonesia's State Ministry of National Development Planning

BCCRF:
Bangladesh's Climate Resilience Fund

BCCSAP:
Bangladesh Climate Change Strategy and Action Plan

BCCTF:
Bangladesh's Climate Change Trust Fund

BNDES:
Brazilian Development Bank

BPR:
Banque Populaire du Rwanda

BRD:
Rwanda Development Bank

BTC:
Belgian Technical Cooperation

BWB:
Blantyre Water Board

CA:
Comparative Advantage

CBFF:
Congo Basin Forest Fund

CDM:
Clean Development Mechanism

CEO:
Chief Executive Officer

CEF:
China Environment Fund

CER:
Certified Emission Reduction

CFU:
Climate Funds Update

CIDT:
Centre for International Development and Training

CIF:
Climate Investment Fund

CITES:
Convention on International Trade in Endangered Species

CMS:
Convention on Migratory Species

CORFO:
Chile's Production Development Corporation

CRGG:
Climate Resilience and Green Growth Strategy

CSO:
Civil Society Organization

CTF:
Clean Technology Fund

C2D:
Debt Reduction-Development Contract

DAWASCO:
Dar es Salaam Water and Sewerage Company

DG:
Director-General

DNA:
Designated National Authority

DP:
Development Partner

DFID:
UK Department for International Development

EAC:
East African Community

EDPRS:
Rwanda's Economic Development and Poverty Reduction Strategy

EDRI:
Ethiopian Development Research Institute

EE:
Energy Efficiency

EFR:
Environmental Fiscal Revenue

EIA:
Environmental Impact Assessment

ENR:
Energy and Resources

EPA:
Environmental Protection Authority

EU-ETS:
European Union's Emission Trading Scheme

ABBREVIATIONS AND ACRONYMS

EWS:
Early Warning Systems

EWSA:
Rwanda's Energy, Water and Sanitation Authority

FANP:
Mexico's Fund for Natural Protected Areas

FCPF:
Forest Carbon Partnership Facility

FDI:
Foreign Direct Investment

FGA:
Rwanda's Agricultural Guarantee Facility

FIP:
Forest Investment Program

FMC:
Fund Managing Committee

FMCN:
Mexico's National Environment Fund

FMT:
Fund Management Team

FNC:
First National Communication

FONERWA:
Government of Rwanda Climate and Environment Fund

FTC:
FONERWA Technical Committee

GCCA:
Global Climate Change Alliance

GCF:
Green Climate Fund

GDP:
Gross Domestic Product

GEF:
Global Environment Facility

GFI:
Government Fund for Irrigation

GHG:
Greenhouse Gas

GoB:
Government of Bangladesh

GoI:
Government of Indonesia

GoR:
Government of Rwanda

HIPC:
Heavily Indebted Poor Countries

HQ:
Headquarter

HWSA:
Harar Water Supply and Sewerage Authority

ICCTF:
Indonesia's Climate Change Trust Fund

ICI:
International Climate Initiative

ICT:
Information and Communications Technology

IDP:
Integrated Development Programme

IFAD:
International Fund for Agricultural Development

IGIF:
Indonesia's Green Investment Fund

IPCC:
International Panel for Climate Change

IWRM:
Integrated Water Resources Management

JV:
Joint Venture

KPIs:
Key Performance Indicators

LDCF:
Least Developed Country Fund

LDCs:
Least Developed Countries

MCA:
Multi-Criteria Analysis

MDB:
Multilateral Development Bank

MDRI:
Multilateral Debt Relief Initiative

MEAs:
Multilateral Environmental Agreements

MFI:
Microfinance Institution

MIDMAR:
Rwanda's Ministry for Disaster Management and Refugee Affairs

MIEs:
Multilateral Implementing Entities

MINAGRI:
Rwanda's Ministry of Agriculture and Animal Resources

ABBREVIATIONS AND ACRONYMS

MINALOC:
Rwanda's Ministry of Local Government

MINECOFIN:
Rwanda's Ministry of Finance and Economic Planning

MINELA:
Rwanda's Ministry of Environment and Lands

MINICOM:
Rwanda's Ministry of Trade and Industry

MININFRA:
Rwanda's Ministry of Infrastructure

MINIRENA:
Rwanda's Ministry of Environment and Natural Resources

MINISANTE:
Rwanda's Ministry of Health

MIS:
Management Information Systems

MoEF:
Ministry of Environment and Forests

MoU:
Memorandum of Understanding

MP:
Member of Parliament

MTEF:
Medium-Term Expenditure Framework

MV:
Motor Vehicle

MW:
Mega Watt

M&E:
Monitoring and Evaluation

NAFA:
National Forestry Authority

NAMA:
National Appropriate Mitigation Action

NAPA:
National Adaptation Programme of Action

NCCC:
National Committee for Climate Change

NCWSC:
Nairobi City Water and Sewerage Company

NAFA:
National Forestry Authority

NEF:
National Environment Fund

NFF:
National Forestry Fund

NGO:
Non-governmental organization

NIEs:
National Implementing Entities

NWSC:
Uganda's National Water and Sewerage Corporation

ODA:
Official Development Assistance

OGMR:
Rwanda Geology and Mines Authority

PAIGELAC:
Inland Lakes Integrated Development and Management Support Project

PDCRE:
Smallholder Cash and Export Crops Development Project

PEER:
Public Environmental Expenditure Review

PEI:
Poverty Environment Initiative

PES:
Payment for Ecosystem Services

PIP:
Public Investment Procedures

PIP:
Indonesia's Government Investment Unit

PoA:
Programme of Action

POPs:
Persistent Organic Pollutants

PPCR:
Pilot Program for Climate Resilience

PPD:
Project Profile Document

PPP:
Public Private Partnership

PROESCO:
Brazilian Guarantee Fund for Energy Service Company's

PS:
Private Secretary

PSKF:
Palli Karma-Sahayak Foundation

RECO:
Rwanda Electricity Corporation

REDD:
Reducing Emissions from Deforestation and Forest Degradation

REMA:
Rwanda Environment Ministry Authority

RMS:
Rwanda Meteorological Service

RNRA:
Rwanda Natural Resource Authority

RRA:
Rwanda Revenue Authority

RWASCO:
Rwanda Water and Sanitation Corporation

RURA:
Rwanda Utilities Regulatory Agency

RWF:
Rwandan Franc

R&D:
Research and Development

SACCO:
Savings and Credit Co-operative

SCAF:
Seed Capital Assistance Facility

SCCF:
Special Climate Change Fund

SCIP:
Strategic Climate institutions Programme

SDE:
Senegal Water Company

SEA:
Strategic Environmental Assessment

SECA:
Strategic Environment and Climate Assessment

SEI:
Stockholm Environment institute

SEZ:
Special Economic Zone

SIDA:
Swedish International Development Cooperation Agency

SNC:
Second National Communication

SoE:
State of the Environment

SONEDE:
Tunisia's National Society of Water Distribution

SPV:
Special Purpose Vehicle

SREP:
Scaling Renewable Energy Program

SSA:
Sub-Saharan Africa

SSP:
Sector Strategic Plan

SSSP:
Sub-Sector Strategic Plan

TVET:
Technical and Vocational Education and Training

UNCCD:
United Nations Convention to Combat Desertification

UNDP:
United Nations Development Programme

UNEP:
United Nations Environment Programme

UNFCCC:
United Nations Convention on Climate Change

VAT:
Value Added Tax

VUP:
Vision 2020 Umurenge Programme

WFP:
World Food Programme

CONTENT

SECTION 1

INTRODUCTION

SECTION 1 - INTRODUCTION

1.1 BACKGROUND

The Government of Rwanda (GoR) recognises the importance of environmentally sustainable, climate resilient and low-emission development at the highest policy levels. Towards this, the GoR has committed to establishing an environment and climate change fund – FONERWA – to enable sustainable financial support for numerous national initiatives and strategies addressing Rwanda's environment and climate change challenges and opportunities. This commitment was formalised in Rwanda's Organic Law No. 4/2005, calling for the establishment of FONERWA. A FONERWA Law, elaborating the functions and organisation of the Fund, is currently under consideration by Rwanda's Parliament.

FONERWA is intended to be a vehicle through which climate and environment finance is channelled, programmed, disbursed and monitored in Rwanda. This is part of Rwanda's strategy to directly access international environment and climate finance in order to maximise country ownership and address unique national needs. Targeted priority areas include those which have been (and continue to be) constrained by limited budget support and fragmented, unpredictable project sponsorship. As a 'basket fund', FONERWA also serves as an instrument to streamline extra-budgetary support as well as domestic funds and revenues (e.g. Forest and Water Funds, environmental fines and fees).

The resulting rationale for establishing the FONERWA Fund includes:

> ***Rwandan Law –*** Legal basis in Article 65 of the Organic Law on Environment No. 04/2005, and the FONERWA Law (approved by Parliament, awaiting gazetting);
> ***Financing gaps –*** Addresses existing environment and climate change related financing gaps across sectors;
> ***Resource mobilisation –*** Opportunity to generate resources to support environmental sustainability, resilience to climate change and green growth;
> ***Harmonisation –*** Instrument to streamline aid, extra-budgetary support, existing (e.g. Forestry & Water funds) and emerging international funds (e.g. Adaptation Fund, Green Climate Fund);
> ***National priorities –*** Support mechanism to diverse beneficiaries within the GoR, civil society, private sector, communities and individuals to facilitate implementation of national priorities and commitments.

1.2 PURPOSE OF FINAL REPORT

The aim of this Final Report is to present the Government of Rwanda with various conclusions relevant to critical design elements of FONERWA. These include the Fund's:

1 Overall design basis and structure;
2 Proposed priority investment areas;
3 Capitalisation – domestic and external;
4 Financial structure, instruments and beneficiaries;
5 Institutional and governance structure;
6 Proposal screening process.

Initial stakeholder engagement has taken place on each of these design elements through the project **Inception Workshop (February 29th), Interim Workshop (March 21st)** and individual meetings with the GoR Core Design Team12, Development Partners and key ministries, among other stakeholders (See Annex 1 for complete stakeholder list). The Final Report reflects the progress of discussions and feedback to date. The report will be used as a tool to further validate Fund design decisions resulting from initial engagement in order to achieve wider stakeholder consensus and awareness.

12 The Core Design Team is comprised of the project team, Director General of the Rwanda Environment and Management Authority (REMA) and Director General of National Budget in the Ministry of Finance and Economic Planning (MINECOFIN).

SECTION 1 - INTRODUCTION

Note: Based on stakeholder engagement to date, an area requiring clarification is the rationale behind the financial needs assessment undertaken as part of the Fund design process. The assessment presented in this report (See 4.6) is one of a number of lines of evidence to support the Fund's proposed priority investment areas. In this regard, *the purpose of the financial needs assessment (gap analysis) is to demonstrate the relative need for financing across priority investment areas, drawn from the FONERWA Law and national priorities, rather than to carry out a complete costing of capitalisation requirements across sectors or cost a pipeline of proposed projects*.

It has been the express interest of the GoR that the **FONERWA Fund is demand-based and grounded in sectors' proposals, rather than based on pre-selected projects/programmes**. Although demonstrated financial needs are important to help guide the overall fund design and understand existing gaps, ultimately sponsorship of initiatives will be based on a proposal screening process, which includes project/programme promoters own budgetary assessments.

SECTION 2

BACKGROUND AND PURPOSE OF FONERWA

SECTION 2 - BACKGROUND AND PURPOSE OF FONERWA

2.1 LEGAL BASIS: ORGANIC LAW 04/2005

The aim of FONERWA is to respond to the current and future national, climate and environmental financial landscape, and further support and accelerate Rwanda's sustainable economic development goals. This aim was formalised in the Organic Law No. 4/2005 Determining the Modalities of Protection, Conservation and Promotion of the Environment in Rwanda, adopted in 2005.

In the implementation framework of the Organic Law, Chapter III, Article 65 provides for establishment of both the Rwanda Environment Management Authority (REMA) as well as the National Fund for Environment in Rwanda, abbreviated as 'FONERWA' in French. The responsibility of the Fund is to solicit and manage financial resources towards its environmental mandate. The Organic Law clearly stipulates that specific [ordinary] laws shall determine the organisation, patrimony, functioning and responsibilities of the Fund.

Under Rwandan Law, an organic law takes precedence over ordinary laws. Moreover, although Organic Law No. 04/2005 provides for the elaboration of an ordinary law to determine the character of FONERWA, the contents of the Organic Law remain legally valid.

2.2 FONERWA LAW

History and status of adoption

The FONERWA Law was drafted under the auspices of MINIRENA/REMA. In accordance with the Organic Law 04/2005, the Law elaborated FONERWA's organisation, patrimony, functions and responsibilities for resource mobilisation and management. Further to the Law, the Law incorporated management of climate change and its impacts, along with environment as part of its core responsibilities. Cabinet approval of Rwanda's Climate Change Unit within REMA in 2009 also complimented this.

In subsequent years, various initiatives led by REMA have worked to operationalise the Law. This involved close engagement with and guidance from Rwanda's Ministry of Finance and Economic Planning (MINECOFIN) in particular. The FONERWA Law was approved by the Parliament on April 5th 2012 and is awaiting gazetting.

Purpose and rationale

As elaborated by the FONERWA Law, the Fund is an organ in charge of mobilising and managing resources used in activities to protect the environment and natural resources, as well as managing climate change and its impacts. Further to this purpose, and as mentioned above, the rationale behind establishing a FONERWA basket fund[13] is based upon the Fund being an:

> Opportunity to attract, absorb and manage resources to support Rwanda's goals of environmental sustainability, resilience to climate change & green growth;
> A vehicle to address existing environment and climate change related financing gaps across sectors to ensure sustainable economic growth;
> Instrument to streamline extra-budgetary support and existing funds (e.g. Water and Forestry funds) and environmental revenue in order to leverage more resources, and improve aid effectiveness;
> Provide support to diverse activities and beneficiaries within the GoR, private sector, civil society, communities and individuals;

In particular, FONERWA is part of Rwanda's direct response to the growing recognition that climate finance can be best managed at the country level to meet unique national needs. The Government of Rwanda will also be a contributing partner to capitalisation of the Fund in order to help ensure predictable and sustainable financing as it evolves.

13 There is no standard definition of a 'basket fund'. However, DFID defines it as a fund in which 1) at least two donors pool resources into a common bank account to support a government to implement and agreed sector programme or set of activities; 2) procedures relating to the operation of the bank account are additional to government's own procedures; and 3) are governed by an agreement between government and donors (http://www.publications.parliament.uk/pa/cm200607/cmhansrd/cm061127/text/61127w0001.htm)

2.3 ORGANISATION, PATRIMONY, FUNCTIONS & RESPONSIBILITIES OF FONERWA

Organisation

In line with the FONERWA Law, Chapter III, Article 3, the functioning and management of the Fund are overseen by a managing committee, whose mandate is to give its strategic vision and programme of action. Members of the managing committee are appointed by the Prime Minister's order from public and private institutions.14 Chapter III, Article 6 states that daily activities of FONERWA are to be executed by a Fund Coordinator and other relevant staff appointed by REMA. These legal requirements will comprise the foundational structure of the Fund's governance as part of the design process. Section 7 further elaborates the FONERWA's institutional and governance structure, and procedures.

Patrimony

FONERWA benefits from a diverse range of capitalisation sources, providing for both domestic public and external contributions (See Section 5). In accordance with Chapter IV, Article 8, sources of funds used by FONERWA include:

1 Grants and aid;
2 Grants and special aid aiming at management of climate change and its impacts;
3 Donation and bequest;
4 Fines emanating from penalties determined by different laws aiming at environmental, water and forestry protection and laws on mining and quarrying exploitation;
5 0.1% of a capital project total cost minus operating costs of those projects that have already gone through an environmental impact assessment;
6 Other revenues determined by laws.

Functions and responsibilities

As mentioned, FONERWA's primary responsibility is the mobilisation and management of financial resources used in activities for protecting Rwanda's environment and natural resources, and managing climate change and its impacts – contributing to overall economic growth and development. From this, attributions or functions of the Fund specified under Chapter II, Article 2 of the FONERWA Law include:

1 Support the activities aimed at conserving and protecting the environment, land, water, forestry, mines and quarries, as well as managing climate change and its impacts;
2 Support any activity aiming at using renewable energy in a sustainable manner;
3 Support any activity intended to fight against causes of pollution;
4 Award prizes to individuals, associations or model institutions involved in environmental, water, forestry, mines and quarry conservation, as well as managing climate change and its impacts.

Guided by these attributions, the Fund Managing Committee approves projects that require FONERWA's support (See Section 7 for further details).

14 As explained in the latter part of the document, Development Partners, particularly those contributing to the Fund will have the right to be on this management committee.

SECTION 3

PROPOSED BASIS OF FONERWA DESIGN PROCESS

SECTION 3 - PROPOSED BASIS OF FONERWA DESIGN PROCESS

Building upon the foundation of the FONERWA Law, the following sub-sections highlight the proposed basis of the FONERWA design process. These mainly include: (1) Legal frameworks and national development priorities, (2) National, cross-sectoral environment and climate assessments, plans and strategies, (3) International climate and environment finance architecture and emerging best practice.

3.1 LEGAL FRAMEWORKS AND NATIONAL DEVELOPMENT PRIORITIES

National and international commitments

A number of national and international legal frameworks provide the foundation of the FONERWA design process. Under the mandate of Organic Law 04/2005, the proposed FONERWA Law elaborates the organisation, patrimony, functions and responsibilities of the FONERWA Fund. These guidelines are being strictly adhered to for the design of core Fund components highlighted in section 2.3 above.

In particular, attributions articulated under Chapter II, Article 2 of the FONERWA Law define the scope of priority investment areas (See Section 4). In addition to the Organic Law 04/2005 and the FONERWA Law, other key national Laws that support the Fund's legal framework include the Forestry Law of 1988, establishing the Forestry Fund, and the Water Law (2008), establishing the Water Fund (which is yet to be operationalised), and recently passed Biodiversity Law, among other Laws, Ministerial Instructions and Orders15.

Resources collected under Forestry/Water funds will be consolidated under FONERWA, along with other environmental fines and fees (See Section 5 for details). The rationale for this is that *(1) pooled funds are better capable of leveraging greater resources than individual funds, (2) reduced transaction costs will promote efficiency, (3) more sustainable and predictable financing for environment and climate change will be better enabled than under the current fragmented financing model and (4) will improve the usage of the GoR systems and procedures by development partners, in line with the Paris Declaration on Aid Effectiveness.16*

In terms of international commitments that support financing of FONERWA, chief among these are the Multilateral Environmental Agreements (MEAs) to which Rwanda is party, detailed in Table 1 below:

TABLE 1 Environmental commitments to which Rwanda is signatory and/or has ratified

No.	Protocols, conventions, treaties	Topic
1	Kyoto Protocol	Climate Change; protocol to the United Nations Convention on Climate Change (UNFCCC)
2	CITES Convention	Convention on International Trade in Endangered Species of Wild Fauna and Flora
3	Basel Convention	Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
4	Montreal Protocol	Protocol on Substances the Deplete the Ozone Layer
5	Vienna Convention	On the Law of Treaties (defines diplomatic relations)

15 See the Ministry of Environment and Natural Resources (MINIRENA) Laws and Orders publications: www.minirena.gov.rw.

16 The use of most national systems (i.e. auditing, budget execution, financial reporting, and procurement) remain very low amongst Development Partners. Less than 30% of bilateral/multilateral aid to the ENR sector in 2010/11 utilised GoR national systems, as per the GoR Sector Wide Assessment Report, 2012.

TABLE 1 Environmental commitments to which Rwanda is signatory and/or has ratified

Continued

No.	Protocols, conventions, treaties	Topic
6	Rotterdam Convention	On the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade
7	Cartagena Protocol	Protocol on Bio safety to the Convention on Biological Diversity
8	Ramsar Convention	Convention on Wetlands of International Importance, especially as waterfowl habitat
9	UNCCD	United Nations Convention to Combat Desertification
10	UNCBD	United Nations Convention on Biological Diversity
11	CMS	Convention on the Conservation of Migratory Species of Wild Animals
12	Stockholm Convention	Convention on Persistent Organic Pollutants (POPs)
13	Nile Basin Cooperative Framework Agreement	Water sharing agreement amongst Nile Basin countries (not yet in force).

Source: GoR, www.rema.gov.rw.

From climate change and biodiversity protection, to the phasing out of ozone and treatment of hazardous wastes, the issues elaborated in the above MEAs have in turn shaped Rwanda's national legal landscape for environmental management. This is reflected in the breadth of coverage of environmental issues, including climate change and pollution management, in the FONERWA Law, and the level of national commitment to environmental sustainability in economic sectors to which FONERWA financing will contribute.

Future of Kyoto Protocol: Particular to the FONERWA mandate for the management of climate change and its impacts, the Kyoto Protocol to the UNFCCC is notable as the first commitment period for emissions reductions (2008-2012) expires in 2012. As a result, the future of UNFCCC climate negotiations remains highly uncertain. In December 2011, a treaty referred to as the "Durban Platform" was signed by developed and developing nations, agreeing to continue the Kyoto Protocol between 2012 and 2015. During this period, the terms of a future treaty on climate change will be defined by 2015 and become effective in 2020. Key outcomes of this arrangement include:

> Agreement to negotiate a new international climate treaty as an "outcome with legal force" [a phrase interpreted differently by different countries, contributing to the uncertainty of a future agreement] by 2015;
> Provides for a second commitment period for the Kyoto Protocol;
> Effectively secures the future of the Clean Development Mechanism (CDM);
> Little short-term impact on the European Union's Emissions Trading Scheme (EU-ETS). 17

17 Gordon, 2012. The UNFCCC's Durban Platform Explained. Holman fenwick willan (hfw). http://www.hfw.com/home/unfcccs-durban-platform accessed 05/03/12.

A related legality relevant to Rwanda is the decision by the EU to only allow Clean Development Mechanism credits from projects registered in least developed countries (LDCs), such as Rwanda, from December 2012. This will come into force if no acceptable international agreement is developed for emissions reduction targets by other major economies18. Given debatable consensus on the legally binding nature of the Durban Platform agreement, there is potential for this EU ETS clause on CDM origin to come into effect – lending preferential benefit to Rwanda for CDM.19

RELEVANCE TO FONERWA?

National and international commitments provide the foundational basis for the FONERWA design process. In particular the FONERWA Law specifying the organisation, patrimony, functions and responsibilities of the Fund, provide the basis for its overall design. The outcome of post-Kyoto Protocol negotiations will also be critical in determining new and additional climate financing accessible (directly, indirectly) to FONERWA, as well as existing mechanisms such as CDM.

Vision 2020 and EDPRS

Environment and climate resources underpin an estimated 80% of Rwanda's economy20, and the majority (85%) of working adults deriving livelihoods mainly from subsistence farming21. In the 18 years since 1994, Rwanda has made great strides in socio-economic development, institutional strengthening and awareness raising for environmental management.

In 2012, the Government of Rwanda confirmed remarkable progress in poverty reduction and environmental education, based on results of the third Integrated Household Living Conditions Survey (EICV3). *Between 2005/6 and 2010/11, Rwanda has demonstrated a poverty reduction of 12 percentage points, contrasting with only 2 percentage point reduction over the 2000/01 to 2005/6 period.*[22] Also based on EICV3, more than 50% of households surveyed claim they have received some form of training or attended a meeting informing them about environmental issues, with radio (39%) and other media cited as the main sources of information.23

The combination of economic growth, poverty reduction and sustainable environmental management are at the heart of Rwanda's overall development Vision 2020, and Economic Development and Poverty Reduction Strategy (EDPRS) (2008-2012).24 In the case of the EDPRS, this includes direct mention of managing climate change and its impacts.25

However, despite this strategic focus, challenges of sustainable environmental management persist.26,27 In order to address these challenges, and safeguard development gains to date, the Government of Rwanda, supported by initiatives including the UNEP/UNDP sponsored Poverty Environment Initiative (PEI), is working to mainstream environment and climate considerations in the next iteration of EDPRS, as well as a revised Vision 2020, both being undertaken in 2012. Results of these iterations, and particularly key performance indicators (KPIs), will be critically important to FONERWA outreach across key environment and climate related sectors.

18 Gordon, 2012.

19 Modalities of the relationship between Rwanda's CDM Designated National Authority (DNA), responsible for both CDM and voluntary carbon market development (VCM), as well as National Implementing Entity (NIE) for the Adaptation Fund have yet to be agreed upon, and are subject to approval by the Managing Committee, once established. Further, the extent to which proposal development for CDM, VCM, projects targeting the Adaptation Fund or other international public funds will be funded wholly or in part by FONERWA is subject to Technical and Managing Committee approval, as with all projects supported by the Fund. Note that the CDM DNA is exploring tax revenues from issued certified emissions reductions (CERs) in partnership with the Rwanda Revenue Authority (RRA); revenues which would support the DNA's operational costs.

20 SEI, 2009. Economics of Climate Change in Rwanda.

21 Republic of Rwanda, 2012. The third integrated household living conditions survey (EICV3). National Institute of Statistics of Rwanda.

22 National Institute of Statistics of Rwanda, 2012. The evolution of poverty in Rwanda from 2000 to 2011: results from the household surveys (EICV).

23 EICV3, 2012.

24 Republic of Rwanda, 2000. Rwanda Vision 2020. Ministry of Finance and Economic Planning.

25 Republic of Rwanda, 2007. Economic development & poverty reduction strategy 2008-2012.

26 Republic of Rwanda, 2006. Economic analysis of natural resource management in Rwanda. Poverty Environment Initiative (PEI).

27 Republic of Rwanda, 2012. The third integrated household living conditions survey (EICV3). National Institute of Statistics of Rwanda.

RELEVANCE TO FONERWA?

Vision 2020 and EDPRS are directly relevant to the FONERWA design process as they provide the overarching development, budgeting and planning frameworks for Rwanda. The Fund design process will therefore closely engage with key sectors and MINECOFIN to ensure that FONERWA has a strong, complimentary basis in these core development strategies, and their upcoming (2012) iterations.

Sector and sub-sector strategic plans

The Government of Rwanda is comprised of 19 total sectors, each with an associated line ministry. In the context of environment and climate issues, and for the purposes of the FONERWA design process, 8 key sectors and 12 sub-sectors are focused on, detailed in Table 2 below. These priority sectors were selected in consultation with the Core Design Team based on Rwanda's strategic environment and climate priorities and mainstreaming activities to date (See 3.2). They also align with sectors covered by *Rwanda's Climate Resilience and Green Growth Strategy*.

The budgeting and pl anning system across sectors is highly structured, aligning closely with Vision 2020 and EDPRS to better harmonise and prioritise the development process. As part of this, each sector and sub-sector is responsible for producing strategic plans. Although the implementation period of these plans may differ (e.g. 2010-2015 versus 2009-2012), they are critical blueprints for sector and sub-sector strategic planning.

TABLE 2 Identified priority sectors for environment and climate.

Sector	Line Ministry	Environment/ CC focus Sub-Sectors
1. Environment & Natural Resources	MINIRENA	> Land > Water Resources > Environment & Climate Change > Forestry > Mines
2. Agriculture & Animal Resources	MINAGRI	--
3. Infrastructure	MININFRA	> Energy > Transport > Habitat & Urbanism > Water & Sanitation > Meteorology
4. Trade & Industry	MINICOM	--
5. Local Government	MINALOC	> Social protection
6. Disaster Management and Refugee Affairs	MIDIMAR	> Disaster management
7. Health	MINISANTE	--
8. Education	MINEDUC	--

The above priority sectors were selected based on Rwanda Climate Resilience and Green Growth Strategy, 2011, discussed further in section 3.2 below. In this context, the private sector is considered crosscutting.

3.2 NATIONAL, CROSS-SECTORAL ENVIRONMENT AND CLIMATE ASSESSMENTS, PLANS AND STRATEGIES

In recent years (and particularly since the establishment of REMA), the Government of Rwanda has spearheaded numerous initiatives to assess and address the country's environment and climate related management challenges and opportunities. This substantial body of work provides the technical basis for areas of intervention proposed as part of the FONERWA design process (Section 4). The section below summarises key results of these initiatives and their relevance to Fund design.

Environmental assessments

REMA, 2009: State of the Environment (SoE) Report. In 2009, REMA produced Rwanda's first State of the Environment (SoE) Report.[28] This integrated assessment highlights the role of environment in Rwanda's socio-economic development, with particular emphasis on land use and agriculture, industry and mining as key economic issues. Surveys conducted on the causes of poverty in Rwanda also reveal a ranking of root causes, highlighted in Table 3 below.

TABLE 3 Major causes of poverty from surveyed respondents.

Causes	Share of respondents (%)
Lack of land	49.5
Poor soils	10.9
Drought/weather	8.7
Lack of livestock	6.5
Ignorance	4.3
Inadequate infrastructure	3.0
Inadequate technology	1.7
Sickness	1.7
Polygamy	1.2
Lack of access to water	1.1
Population pressure	0.7
Others	10.6
Total	100.0

Source: State of Environment Report, 2009, derived from EDPRS.

28 Republic of Rwanda, 2009. State of the environment. Rwanda Environment Management Authority.

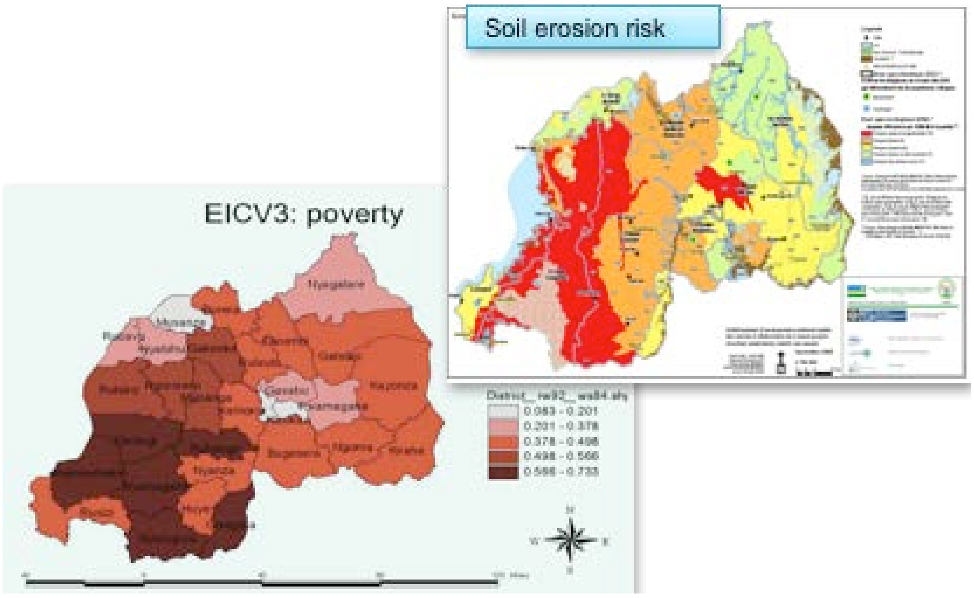
RELEVANCE TO FONERWA?

The SoE report is a key tool for identifying and ranking the root causes of poverty-environment challenges facing Rwanda. It also helps provide a possible method to spatially prioritise Fund interventions based on geographic vulnerability of Districts to environment and climate risks.

Among the top three root causes of poverty identified were (1) Lack of land, (2) Poor soils, (3) Drought and weather. These results demonstrate the apparent relationship between poverty and environment, as well as climate change, in Rwanda; a linkage that can also be demonstrated visually. This is further revealed by a 2006 economic analysis estimating that the economic loss due to soil erosion was equivalent to 1.9 percent of Rwanda's GDP annually. 29

Figure 1 shows Rwanda's soil erosion risk map (red highest risk) from the SoE, which can be correlated with the distribution of poverty by districts (dark red highest risk) from recent EICV3 results. The highest correlation between poverty and soil erosion is seen in the south and west.

FIGURE 1 **Correlation between incidence of poverty and soil erosion in Rwanda.**



As demonstrated in the above example, and throughout the SoE report, Rwanda's economic development, environment and natural resources are intimately linked. These linkages and recommendations of priority sectoral interventions, detailed in the box below, will be key considerations for FONERWA environment related financing priorities.

29 Republic of Rwanda, 2006. Economic analysis of natural resource management in Rwanda. Poverty Environment Initiative (PEI).

THE SoE ASSESSMENT HIGHLIGHTS FURTHER LINKAGES AND PRIORITY ACTIVITIES TO ADDRESS:

SoE, 2009.

- Rwanda's rapid **population growth, health** (especially water borne disease), and dense and mostly unplanned **human settlements**;
- **Forests** and protected areas, and strategies to harness opportunities including promotion of agroforestry and rehabilitation of degraded plantations;
- **Agricultural land** use and land degradation, and interventions including terracing, increasing soil cover and integrated management approaches such as agroforestry and zero-grazing, as well as expanding arable land through irrigation;
- **Industry and mining's** environmental impacts by mainstreaming Environmental Impact Assessments, promote more efficient production processes and preventative strategies including cleaner technologies and procedures;
- **Biodiversity** conservation and protection, including the promotion of tourism, improving the biodiversity knowledgebase and livelihood support to Rwandan's deriving benefits from protected areas;
- **Water sector and wetlands resources** through improved management including conservation and rehabilitation of wetlands and water ways, and establishment of water data collection and monitoring systems to support a comprehensive database for rational management;
- **Climate change and disaster management** by implementing Rwanda's 6 priority NAPA interventions and mechanisms to reduce vulnerability to disasters through establishing assessment and relief systems.

UNEP, 2011: Rwanda, From Post-Conflict to Environmentally Sustainable Development. Rwanda's State of the Environment report was complimented by a comprehensive post-conflict environmental assessment conducted by the United Nations Environment Programme (UNEP) in 2011.30 This is Rwanda's most current and comprehensive environmental assessment.

Analogous to the SoE, it considers each of Rwanda's key environment and natural resource related sectors, while also considering energy, urban environment, population displacement and resettlement, conflict and peace building. Soil and water quality testing, soil erosion and other survey work also enhanced the work. *The report proposes a total of 90 projects and interventions that would help accelerate environmentally sustainable economic development, at a total cost of $147 million*. In particular, the assessment calls for mobilising and focusing investments in key areas including: (1) Ecosystem rehabilitation, (2) Renewable energy, (3) Conservation agriculture and (4) Innovative water and sanitation technologies.

RELEVANCE TO FONERWA?

The UNEP assessment is an important resource for technical considerations of FONERWA's environment financing priorities. In contrast to many other assessments, plans and strategies, sector-specific recommendations were assigned cost estimates. This also informs estimations of FONERWA's capitalisation requirements.

Climate assessments, plans & strategy

NAPA, 2006. Since ratifying the Kyoto Protocol in 2004, the Government of Rwanda has consistently supported and participated in UNFCCC initiatives. This includes preparation of a National Adaptation Programme of Action (NAPA) in 2006. Rwanda's NAPA document was a result of a year and a half of intense stakeholder local, national and regional consultation, led by a NAPA team and assembled National Committee for Climate Change (NCCC).

30 UNEP, 2011. Rwanda: from post-conflict to environmentally sustainable development.

The NAPA development process identified three high priority sectors, as a function of vulnerability, including (1) Agriculture, (2) Water resources and (3) Energy, due to compounding influences of:

> High degradation of arable land due to erosion, following heavy rains and flooding (Northern, Centre/Western regions);
> Desertification trends (East, Southeast);
> Lowering of lake levels and water flows due to pluviometric deficit and prolonged drought;
> Degradation of forests.

Multi-Criteria Analysis (MCA) conducted to determine priority interventions resulted in identification of six priority adaptation options, and 7 high-priority projects detailed in Figure 2 below.[31]

FIGURE 2 **Results of Rwanda's NAPA process.**

NAPA Results

3 Priority Sectors

Agriculture ↔ Water ↔ Energy

6 Priority Adaptation Options

1.	2.	3.	4.	5.	6.
Integrated Water Resources Management (IWRM)	Early warning (EWS) & intervention systems	Promotion of Non-agricultural income	Promotion of Intensive agro-pastoral activities	Introduction of resistant species/ varieties	Alternatives to firewood energy

7 Priority projects

Project	Budget ($m)
1. Land conservation, protection against erosion & floods in Districts of vulnerable	1.45
2. Establish and rehabilitate hydro meteorological information systems and EWS	1.9
3. Develop gravity-fed irrigation from perennial streams/rivers in drought-prone areas	0.75
4. Support planning and implementation of water conservation & harvesting, intensive agriculture and promotion of resistant varieties in vulnerable Districts	0.56
5. Promote improved drinking water, sanitation and alternative energy services, and non-agricultural jobs in "Imidugudus" of vulnerable regions	1.65
6. Improve support (medicine/food) rapid response systems, stocking and conservation of agricultural products.	0.85
7. Prepare and implement national program to substitute firewood to combat deforestation and soil erosion.	0.95
Total	$8.11

These options and projects address crosscutting, and cross-sectoral impacts of current climate variability and climate change in Rwanda. Their aim is to improve the adaptive capacity of vulnerable populations and sectors, and reinforce the resilience of highly fragile ecosystems. *Significantly, effort was made to integrate these priority options and projects into Rwanda's EDPRS (2008-2012), which has been successful to a large extent*. Although NAPA costing (Figure 2) shows indicative project/pilot-level costs, these estimates are useful in scaling up estimates of Rwanda's total adaptation costs (discussed further in the SEI, 2009 study highlights in sections below).

31 Republic of Rwanda, 2006. National Adaptation Programmes of Action to Climate Change.

RELEVANCE TO FONERWA?

The FONERWA design process will work to assess, in partnership with REMA and key sectoral ministries, the extent to which integration into EDPRS was successful and sufficiently supported. This will help guide the prioritisation of FONERWA resources for adaptation in particular, and determine investment areas the Fund can support better mainstreaming in the iteration of EDPRS 2. NAPA costing also provides a useful reference.

Second National Communication to the UNFCCC, 2011. Further to UNFCCC obligations, Rwanda has produced a Second National Communication (SNC) reporting on the country's greenhouse gas emissions profile and mitigation plans, as well as assessing vulnerability to climate impacts and adaptation plans by selected sectors. This follows its Initial National Communication published in 2005.

Mitigation:

Mitigation analysis uses International Panel on Climate Change (IPCC) inventory methodologies and covers major GHG emissions and absorptions for Rwanda, based on available data from energy, land use and forestry, industry and waste sectors. The need for improved data collection was a primary recommendation for future inventories. Rwanda's SNC reports on emission inventory estimates for 2005 for all the main GHGs, and on possible mitigation measures for reducing emissions.

For the purposes of FONERWA, the inventory provides a useful guide concerning the key sources of emissions, and therefore where the opportunities might be for emissions reductions. It uses the recommended Revised 1996 guidelines and associated Good Practice Guidance. In the main, the approach appears to be the more basic Tier 1, using default emission factors and basic activity data.

There is recognition that *activity data issues and use of default emission factors leads to significant uncertainties across some sectors*, which to some extent is a function of information available. However, this need not necessarily be viewed as a limitation of the evidence base as the inventory would only be used as guidance for identifying key emission sources. *Projects funded under FONERWA would likely go through more detailed assessment concerning likely emission reductions / costs*.

Some analysis of mitigation options has also been undertaken, and presented. The approach taken determines a baseline (business as usual) scenario out to 2030 in a simplified way, e.g. Increased access to electricity energy from 2% in 2000 to 35% by 2020 and a reduction of fuel wood contribution from 94% in 2000 to 50% in 2020 – in line with Vision 2020. The mitigation scenario is similarly built up, defining a baseline and low-carbon pathway, considering the mitigation measures required.32

It is not evident from the SNC that the mitigation scenario (and associated measures) is determined based on cost or other criteria. Rather this scenario appears illustrative of what emission reductions could be achieved from a technical perspective. There is a '**Justification of selected mitigation options of GHGs**' discussion (Table 43); however, this does not provide significant information on costs or potential emissions reductions. Some of this may be available from the modelling.

In summary, the SNC provides important insights on emission sources in the current year using the established methodology. Given projections and mitigation methodologies appear to be relatively simplistic, *a more robust analysis, building on what is available in the SNC, is required to get an improved picture of how baseline emissions might evolve, and what might be the 'best' mix of mitigation measures, based on a range of criteria*.

Impacts and Adaptation: Projected climate impact results indicate that Rwanda's minimum, average and maximum temperatures will increase from 2020-2100, with average annual maximum temperatures increasing 3.3°C. Rainfall regimes are also expected to shift, though results are less certain and need to be used with caution. Combined changes are expected to contribute to increased vulnerability of the agricultural sector in particular; increasing evapotranspiration and causing shifts in growing seasons A (September-November) and B (March-May), which disrupts sowing dates, intensifies crop diseases and impacts irrigation and crop water availability – potentially reducing yields.

32 Some cost information is provided in tables, but it is not clear what these estimates mean.

As a function of vulnerability, adaptation to projected climatic changes were assessed in particular for (1) Water resources, (2) Agriculture, (3) Forests and (4) Health. Analogous to the NAPA and other technical resources, key recommendations from these assessments were considered for the selection of potential FONERWA priority investment areas. Table 4 below summarises these SNC recommendations33.

TABLE 4 Adaptation recommendations from the Second National Communication

Sector	Key adaptation recommendations
Water resources	> Strengthening institutional, legislative and management frameworks; > Sustainable management of water resources; > Emergency planning for drought; > Water conservation; > Integrated Watershed Management; > International, regional and sub-regional cooperation; > Research, monitoring & evaluation
Agriculture	> Continue implementing NAPA urgent actions; > Development of early maturing crop varieties; > Improved agricultural technologies (irrigation, fertiliser, etc.); > Introduction of household vegetable gardens; > Animal husbandry: Adopt zero-grazing, small livestock, and animal traction. > Aquaculture: Protect waterways from siltation; introduce adapted fish species.
Forests	> Organisational framework: created national coordinating committee on agro forestry for policy design; > Improved: Afforestation, reforestation/rehabilitation, forest management, timber and forest product management, tree species to increase biomass productivity and carbon sequestration, remote sensing technologies for vegetation and soil studies. > Reduced: Deforestation.
Health	> *Primary recommendation is to enhance the already substantial number of strategies underway in the health sector;* > New strategies: Launch information system on agricultural markets to help combat food insecurity; monitor state of malnutrition [already done] in each District and curb migration from countryside to cities.

33 Republic of Rwanda, 2011. Second National Communication Under the United Nations Framework Convention on Climate Change.

RELEVANCE TO FONERWA?

Rwanda's Second National Communication to the UNFCCC is the most recent national-level assessment on climate related emissions, impacts and adaptation options. It is important to note that many recommended options are already being undertaken. A key activity for the FONERWA design process is determining which existing or new activities require financial support, and represents top national priorities, relative to other options.

Economics of Climate Change in Rwanda (SEI, 2009). In 2009, DFID commissioned a study on the *Economics of Climate Change in Rwanda*, undertaken by the Stockholm Environment Institute (SEI)34. The study covers the costs of climate impacts, adaptation and mitigation (low carbon growth) considerations.

Mitigation: This was an extremely rapid review (1-2 months) to assess the low carbon opportunities in Rwanda to 2020. Base year emission estimates were reported for all sectors, based on the information provided in the First National Communication (FNC) and draft SNC. In the study, basic emission projections were developed bottom-up, based on key projection drivers (GDP, population, households, GDP per household / capita), and on planned near term investments e.g. in the power sector.

Low carbon mitigation measures were also considered across different sectors, with a strong focus on the power sector. For other sectors, measures were considered in terms of cost-effectiveness, building a simple cost curve. This provides a useful comparative analysis of some of the key options but is by no means comprehensive.

This earlier report could be a useful source, in conjunction with the strategy, to identify promising options. It also provides perhaps the most robust near terms estimates (to 2020) concerning emission evolution (although should be subject to updating).

Adaptation: Key impact and adaptation economics related findings are summarised below.

> ***Current climate variability***. Existing climate variability already has significant economic costs in Rwanda as a result of its current adaptation deficit. Flood events are particularly costly. Direct costs of a major 2007 flood are estimated at $4 to $20 million (equivalent to 0.1 – 0.6% of GDP) for two Districts alone; total economic costs are likely much higher. The compound effect of these often annually recurring events leads to reductions in economic growth over time.

> ***Future climate change***. Although the future economic costs of climate change are very uncertain, aggregate models indicate that the additional net economic costs (on top of existing climate variability) could be equivalent to a loss of almost 1% of GDP each year by 2030 in Rwanda, excluding extreme events. Damage costs can also increase over time with development as more newly developed assets become vulnerable, even if exposure levels remain constant.

> ***Economics of Adaptation***. Although adaptation can reduce the economic costs of climate change, it still has a cost. Estimates of the costs of adaptation in Rwanda are still highly uncertain, as they follow impacts. However, indicative aggregate cost estimates of robust (i.e. no regret) strategies across sectors were estimated using four categories of adaptation: 1) addressing the current adaptation deficit, 2) increasing social protection, 3) building adaptive capacity and 4) enhancing climate resilience. Estimates of medium-term costs to address future climate change are $5 - $300 million per year by 2030, and in excess of $600 million/year if primary development activities of social protection and accelerated development are included.

34 SEI, 2009. The economics of climate change in Rwanda.

RELEVANCE TO FONERWA?

The SEI, 2009 study provides a valuable economic basis to the need for adaptation interventions in Rwanda in particular. The demonstration of Rwanda's already extensive 'adaptation deficit' underscores the need for additional finance to offset and/ or avoid damage costs from both current climate variability and future climate change, which risk undermining development gains. The FONERWA design process therefore has a strong economic rationale to make explicit the priority of adaptation investments to enhance the adaptive capacity of the population and resilience of Rwanda's most vulnerable sectors.

Climate Resilience and Green Growth Strategy, 2011. In 2011, Rwanda approved its *Climate Resilience and Green Growth Strategy*.35 The strategy aimed to simultaneously promote resilience to future climate change, as well as provide recommendations for low-carbon growth. As a landlocked country, Rwanda is entirely dependent on imports for all of its oil-based products. This results in a high trade deficit and inflationary spikes when oil prices rise. The climate strategy therefore proposes a Vision for "Rwanda to be a developed, climate resilient and low-carbon economy by 2050."

In order to achieve the strategic vision, 14 Programmes of Action are proposed, along with 5 Enabling Pillars, 'Big Wins' and 'Quick Wins', detailed in Table 5 below, and reorganised according to the Strategy's – and FONERWA's – priority sectors.

TABLE 5 Climate Resilience and Green Growth Strategy recommendations summary

Sector	Sub-Sector	Programmes of Action (PoA); Big Wins (BW; Quick Wins (QW)
ENR	Land	**PoA:** Sustainable land management
	Water	**PoA:** Integrated Water Resource Management (IWRM)
	Environment & Climate Change	**PoA:** Ecotourism, conservation and PES (note tourism is under RDB) **QW:** 1. Establish online Climate Portal to communicate the National Strategy, 2. Operationalise FONERWA
	Forestry	**PoA:** Sustainable forestry, agro forestry & biomass **BW:** Agro forestry
	Mines	**PoA:** Climate compatible mining
Agriculture		**PoA:** Sustainable intensification of small-scale farming **BW:** Integrated soil fertility management **BW:** Irrigation infrastructure

35 Republic of Rwanda, 2011. Climate resilience and green growth strategy.

TABLE 5 Climate Resilience and Green Growth Strategy recommendations summary

Continued

Sector	Sub-Sector	Programmes of Action (PoA); Big Wins (BW; Quick Wins (QW)
Infrastructure	Energy	**PoA:** Low-carbon energy grid **BW:** Geothermal power generation
	Transport	**PoA:** Resilient transport systems **BW:** Robust road network
	Habitat & urbanism	**PoA:** Low-carbon urban systems **BW:** High-density, walkable cities **QW:** Resource efficient design in Special Economic Zone (SEZ) in Kigali
	Water & sanitation	--
	Meteorology	**PoA:** Climate date and projections **BW:** Centre for Climate Knowledge for Development
Trade & Industry		**PoA:** Green industry and private sector development
Local government		**QW:** Use the Integrated Development Programme (IDP) and Vision 2020 Umurenge Programme (VUP) to facilitate climate resilient, low-carbon development in rural areas.
Disaster mgt.		**PoA:** Disaster management and disease prevention
Health		Above.
Education		**QW:** Expand Technical and Vocational Educational and Training (TVET) for Strategy implementation.

It is important to note that *this report is very much a strategy document and does not therefore contain the evidence around costs and potential of different options that might be important for operationalising FONERWA.*

This is noted in the strategy document –

> *Due to the short timeframe of the development of this Strategy, extra work will be required to develop the Programmes of Action and to explore the issues of health, gender equality, private sector development, economic analyses and future scenarios.*

In addition, it states –

> *Further work is then required to perform cost-benefit analysis on the programmes of actions and apply for climate finance for them. This will inform the revision of detailed sector strategies and annual budgets.*

To date, the above further work of the strategy has not been completed; therefore information sharing is not applicable. What is provided is the range of options that could be incorporated into different programmes of action; as suggested in the strategy document (and as part of strategy implementation), the actual prioritisation of these options would be a function of further research to better understand emission reduction (now and in future years), financing requirements and wider criteria as mentioned above.

In terms of option prioritisation in the strategy, it highlights *Big Wins* for low carbon development – geothermal generation36, soil fertility management, high-density walkable cities. The first and third of these are long-term ambitious objectives and make sense in terms of low carbon development. However, it is not clear how these big wins have been prioritised, as there is no analytical or economic analysis in the study. These options may therefore not represent the immediate priorities, the most cost-effective options, and they may not have considered possible synergies or conflicts with other policy37. . There are also issues whether these will drive economic growth, or promote pro-poor actions. *Quick Wins* are mentioned but these are more about strengthening enabling pillars rather than options per se.

The strategy cites the emission inventory published in the 2nd National Communication. However, these scenarios are not developed further within the strategy, nor widely considered in reference to the programmes of action. Therefore, there is no clear view of the emissions baseline in the longer term, the likely (and comparative) contribution of each of the programmes of actions or the associated aggregate/marginal costs, all of which are important for determining investment priorities.

Nonetheless, the strategy document (and associated sector papers) provides a useful basis for identifying options that have been considered as potentially promising in the Rwanda context, and could be part of the longer-term strategy. In addition, it goes some way to highlighting the enabling pillars that need to be strengthened through investment.

RELEVANCE TO FONERWA?

Rwanda's Climate Resilience and Green Growth Strategy is relevant to FONERWA as it sets out the Government of Rwanda's overall commitment to climate resilient and low-carbon development, and supports the call to operationalise FONERWA as a 'quick win'. Programmes of Action and Enabling Pillars also provide recommendations to draw on for climate mainstreaming considerations in the FONERWA design process.

However, further work will be needed to prioritise the near term opportunities, including the quick wins across different sectors, through a more robust and systematic appraisal framework. Such a framework would take account of actual emissions reductions and resilience benefits of specific measures, financing requirements and the wider benefits and synergies with other policies. This framework would also be integrated to look at inter-sector priorities, not simply intra-sector.

3.3 INTERNATIONAL ARCHITECTURE AND EMERGING BEST PRACTICE

International architecture for fund mobilisation

The ability of FONERWA to mobilise external financing (beyond DPs within Rwanda) is a critical core function. To perform this function requires detailed understanding of the landscape of international architecture for environment and climate, which is varied, complex and continuously changing.38 This presents an on-going challenge to developing countries seeking to identify and navigate existing and emerging opportunities for direct and/or indirect access to financial resources. The dimensions of this international architecture are indicated in Figure 3 below.

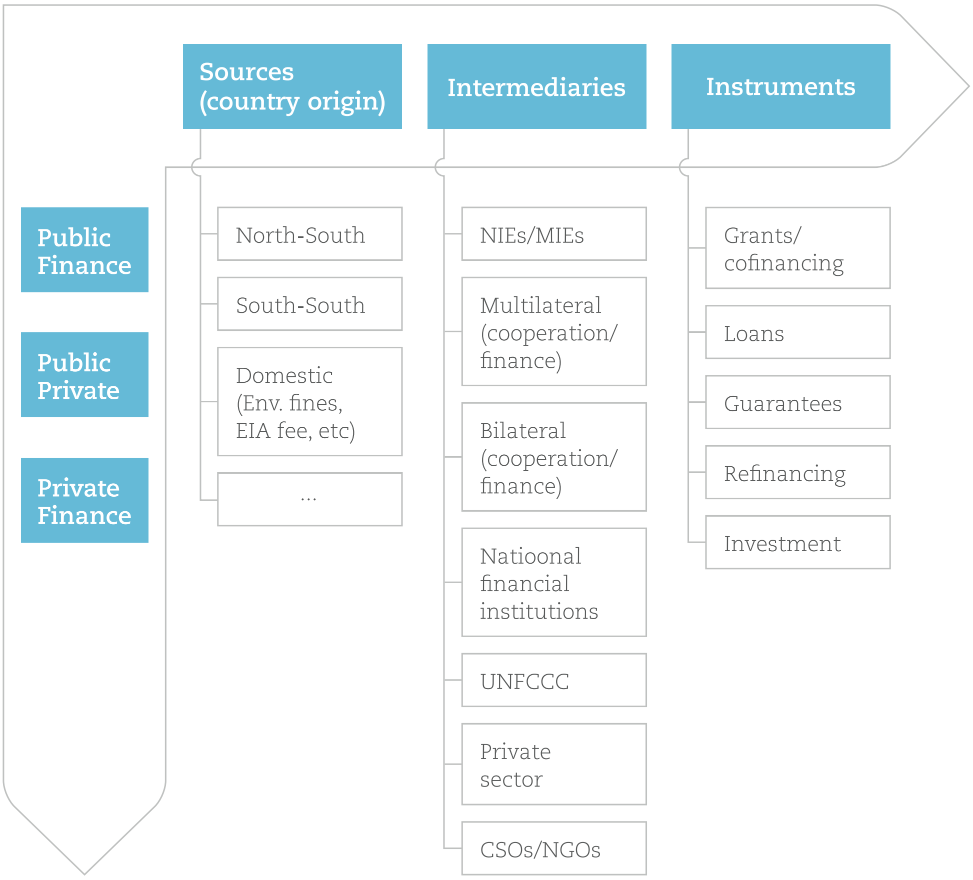
36 The levels of geothermal capacity being discussed in the strategy are likely to take a long time to realise. By next year, Kenya will have reached 350 MW in generation capacity; this level has taken over 30 years to reach. Part of the issue is the very high initial investment cost, in part associated with exploratory drilling.

37 As an example, while high density cities are extremely good in reducing carbon emissions, they do amplify the heat island effect, and thus they may increase vulnerability to future climate change.

38 UNDP, 2011. Catalysing climate finance: a guidebook on policy and financing options to support green, low-emission and climate-resilient.

Note that the following section is intended to highlight overall design requirements that are relevant to Rwanda's direct and indirect access to large, established, international public funds as a basis for informing overall FONERWA design. Section 5.2. proposes a strategy for specifically engaging bilateral and multilateral donors in Rwanda.[39, 40]

FIGURE 3 Dimensions of international environment and climate finance. Adapted from Buchner et al., 2011.[41]



Each of the sources, intermediaries and financial instruments in Figure 3 has specific eligibility criteria and requirements. Depending on the financial structure and instruments identified as preferred options under FONERWA (explored in Section 6), these requirements will need to be complied with in order to access funds. Broadly, public financing eligibility criteria depend on (1) Country eligibility criteria for the specific fund, (2) Thematic focus of the fund (e.g. REDD), (3) Financing instruments and terms and (4) Delivery mechanisms (e.g. disbursement timing). 42

Equally, private sector financing sources have specific investment criteria that must align with the Fund's mandate, position and capacity to act, and risks associated with Rwanda and the FONERWA fund management. These, along with public financing criteria, will be considered in the medium to long-term as the GoR selects FONERWA's preferred financial instruments, based on actual needs and tested demand from the private sector to invest in the Fund.

39 The proposed strategy is based on calculated per capita contributions to similar funds established in countries such as Bangladesh, Indonesia and Ethiopia, which can be presented to Rwandan DPs in order to help maximise capitalisation from in-country development partners.

40 See the Rwanda Aid Policy Manual of Procedure for procedures in terms of mobilisation, disbursement, accounting and mentoring of external financing, published by MINECOFIN (2011).

41 Buchner et al., 2011. Monitoring and tracking long-term financing to support climate action. OECD.

42 UNDP, 2011. Catalysing climate finance.

Direct access. Direct access to environment and climate finance is a critical rationale behind FONERWA's development. Note the definition of direct access referred to in the context of the Fund.43 Direct access enables more GoR ownership and control over the strategic use of additional finance, and ensures funds are addressing national priorities, rather than those derived externally. It should also have benefits in harmonising funding applications and reducing transaction costs. As above, the potential for direct access varies across the funding sources considered and is still an emerging option with high uncertainty. As a result, *FONERWA will not exclusively rely on direct access for its capitalisation*, in case of limited or no significant access to these sources. To date, the UNFCCC Adaptation Fund (AF) is the only dedicated direct access fund in operation.44 After a lengthy accreditation process, Rwanda's Ministry of Environment and Natural Resources received its status as an accredited National Implementing Entity (NIE) in early 2012. Another major emerging fund targeting direct access is the Green Climate Fund (GCF), also under the UNFCCC. Although it is anticipated that GCF operational modalities will build upon the NIE/MIE system of the Adaptation Fund, these will likely take 2 or more years to elaborate.45

RELEVANCE TO FONERWA?

Compliance with eligibility and investment criteria of existing and emerging international environment and climate finance architecture will be critical for FONERWA's external resource mobilisation functions. This includes direct and indirect access to finance from public and private sources.

Therefore, designing FONERWA around the GCF is only possible by proxy, assuming similar requirements to the Adaptation Fund will be put in place (which is accounted for in Section 9, the Fund risk assessment). Moreover, Adaptation Fund NIE eligibility criteria of (1) Fiduciary management and integrity, (2) Institutional capacity, (3) Transparency, (4) Self-investigative powers and (5) Anti-corruption measures are critical considerations for FONERWA design.46

Indirect access. With regards to indirect access to international financing sources, Rwanda has successfully complied with the existing architecture and received support from the Global Environment Facility (GEF) Least-Developed Country Fund (LDCF), among other GEF climate and environment funds. Other major sources of climate finance include the Fast-Track Finance and long-term climate finance from bilateral and multilateral donors, the GEF Special Climate Change Fund (SCCF), World Bank Climate Investment Funds (CIFs), International Climate Initiative (ICI) and the GCF (emerging), among others. Criteria for each of these, in addition to relevant international environment financing architecture will be considered in further FONERWA design stages.

National Climate Funds

National Environment Funds (NEFs) emerged in the 1990s in the form of trust funds establishing a long-term financial mechanism for environmental protection and conservation.47 The past decade has realised the emergence of new sources of funding for environmental protection, climate adaptation and mitigation activities. This has led to the establishment of dedicated national climate change funds in a number of developing countries. These funds vary depending on their objectives, source of financing, organisational and management forms, disbursement mechanisms, monitoring and evaluation tools, and asset management.48 The boxes below detail three recently established climate change funds, and how they can inform the FONERWA design process. Further details can be found in Annex 2.

43 Direct access implies that the facilitation and project management function played by multilateral, international, and bilateral entities is not used to access international public finance, and instead this function is taken on by a national entity. Direct access to finance as a concept is applicable across both multilateral and bilateral financing, and can be considered in terms of both public and private finance. Source: ODI, 2011. Direct access to climate finance: experiences and lessons learned. ODI Discussion Paper, http://www.odi.org.uk/resources/docs/7479.pdf

44 UNDP, 2011. Direct access to climate finance: experiences and lessons learned. Discussion Paper.

45 Khan, F., 2012. Green Climate Fund Board member. Personal communication, 20 March 2012.

46 Adaptation Fund Board, 2012. Accreditation Application Form for National Implementing Entities.

47 Bayon, R., Deere, C., Norris, R., and Smith, S. (1999) Environmental Funds: Lessons Learned and Future Prospects. Mimeo.

48 Norris, Ruth. (2000). The IPG Handbook on Environmental Funds: A Resource Book for the Design and Operation of Environmental Funds. Published for the InterAgency Planning Group (IPG) by Pact Publications.
Bayon, R. and Deere, C. (1998). Financing Biodiversity Conservation: The Potential of Environmental Funds. Bratislava, Slovakia.

CASE STUDY 1: ETHIOPIA: STRATEGIC CLIMATE INSTITUTIONS PROGRAMME (SCIP):

Sources:
1) Strategic Climate Institutions Program (SCIP), 2011. Programme Memorandum. DFID Ethiopia.
2) Bekwet, W., 2012. Telephone interview conducted 8 March 2012.

> ***Creation & Objectives of Fund:*** In November 2011, the Ethiopian Development Research Institute (EDRI) and Environmental Protection Authority (EPA) launched the Strategy Document for Ethiopia's Climate Resilient Green Economy Initiative (CRGE). The CRGE is a green growth economic plan that builds upon the Growth and Transformation Plan (GTP), the Ethiopian government's development plan to reach middle-income status by 2025. To support the CRGE, the Strategic Climate Institution Programme (SCIP), funded by the UK (DFID), was formed to provide short-term institutional support and capacity building for climate change.

> ***Capitalisation:*** DFID is the sole donor to SCIP (£15 million over 4 years, 2011-14). The aim is for other bilateral and multilateral donors to invest in the SCIP after the inception phase. However, this objective is not being realised due to lack of donor interest, and possibly also the operation of a World Bank sponsored multi-donor climate trust fund for Ethiopia.

> ***Governance & Implementation:*** The governance structure of the SCIP comprises the Fund Manager, a Fund Management Committee (FMC), and Innovation Centre operated by InfoDev under the World Bank, to support the private sector. The Fund Manager and Innovation Centre will allocate funds. The Fund Manager will work with Government and Development Partners, Civil Society and academia whereas the Innovation Centre will work with the private sector. The Environmental Protection Authority (EPA) will provide the policy and institutional framework for SCIP.

> ***Relevance to FONERWA?*** Similar to Rwanda, Ethiopia needs to build its institutional capacity necessary in order to provide for a coordinated and effective strategic response to climate change. The SCIP is a short-term program (4 years) provides an interesting implementation structure, particularly regarding financial assistance to private sector projects through the Innovation Centre, which can inform FONERWA private sector engagement.

CASE STUDY 2: INDONESIA'S CLIMATE CHANGE TRUST FUND (ICCTF) & GREEN INVESTMENT GREEN FUND (IGIF)

Sources:
1) Brown, J. and Peskett, L. (2011). Climate finance in Indonesia – lessons for the future of public finance for climate change mitigation. EDC2020 Working Paper 11. Bonn: EADI.
2) BAPPENAS, 2011. ICCTF Business Plan 2011-2020.

> ***Creation & Objectives of Funds:*** In 2009, the Government of Indonesia (GoI) established the Indonesia Climate Change Trust Fund (ICCTF) through the State Ministry of National Development Planning (BAPPENAS) to pool and coordinate committed bilateral funds of $4.45b (not yet disbursed), as well as ensure national ownership over incoming climate finance. An Indonesia Green Investment Fund (IGIF) was legalised by a decree in 2010. The objectives of these funds are to operationalise emissions reductions and adaptation commitments.

> ***Capitalisation:*** The ICCTF is a grant expenditure fund that pools bilateral and multilateral grants, with a guarantee for the GoI to match by 15% with its own resources, upon receipt of pledges. The IGIF is a revenue generating revolving investment fund set up as public venture capital enterprise with the aim to leverage private sources of finance for low-emission development projects by providing debt at a lower cost. It is capitalised through the national budget, bilateral and multilateral grants, institutional investors and concessional loans. The fund will generate investment returns through a combination of dividends, strategic sales and initial public offerings of its portfolio companies. The GoI has allocated $400m and has secured €300-500m from France. JICA, Korea, and the Islamic Development Bank have also agreed to co-invest, although these funds have not yet been committed.

> ***Governance & Implementation:*** The ICCTF is governed by a Steering Committee (led by BAPPENAS), a Technical Committee to evaluate project proposals and a Secretariat that deals with day-to-day operations. The Steering Committee has assigned UNDP as Interim Fund Manager. IGIF was set up under the Ministry of Finance under its Government Investment Unit (PIP) and its Special Purpose Vehicle "PT Indonesia Green Investment".

> ***Relevance to FONERWA?*** Despite plans, the ICCTF has struggled to secure committed resources from donors. This raises concerns that a fund focused on grant financing cannot guarantee a sustainable source of funding. The decision to transfer a window of the ICCTF fund management to the IGIF provides a valuable case study of transferring fund management under a financial institution. In addition, IGIF elements including its revolving fund model and Special Purpose Vehicle to spur green investment, among others, provide innovative tools for informing FONERWA design and different fund management models.

CASE STUDY 3: BANGLADESH'S CLIMATE RESILIENCE FUND (BCCRF) & CLIMATE CHANGE TRUST FUND (BCCTF)

Sources:
1) Ministry of Environment and Forests, Government of the People's Republic of Bangladesh. (2009). Bangladesh Climate Strategy and Action Plan.
2) Khan et al., 2010. The Bangladesh National Climate Funds A brief history and description of the Bangladesh Climate Change Trust Fund and the Bangladesh Climate Change Resilience Fund.
3) UK Department of International Development (DfiD). Equity and Justice Working Group. (2010). Climate Change Trust Fund (CCTF) and Establishment of Democratic Ownership, Discussion Paper, National Seminar on Climate Finance.
4) Khan, M., 2012. Telephone interview conducted 6 March 2012.

> ***Creation & Objectives of Funds:*** In 2009, the Government of Bangladesh (GoB) launched the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), a ten-year program (2009-2018). To operationalise this strategy, the GoB established the Bangladesh Climate Change Trust Fund (BCCTF) under the Climate Change Trust Fund Act. Subsequently, development partners established the Bangladesh Climate Change Resilience Fund (BCCRF) in 2010, with the signing of a Memorandum of Understanding between the GoB and five development partners (UK, Denmark, Sweden, EU, and Switzerland).

> ***Capitalisation:*** The BCCTF is funded by a block budgetary allocation by the GoB amounting to $300m over 3 years (2009-12). The GoB has not yet decided to continue funding the BCCTF beyond this initial pilot phase. The BCCRF is currently capitalised by bilateral and multilateral grant contributions amounting to $125.5m from four main donors (above).

> ***Governance & Implementation:*** The BCCTF governance structure is composed of a Board of Trustees, Technical Committee and Sub-Technical Committees. A Climate Change Unit under the Ministry of Environment and Forests serves as a Secretariat for the BCCTF. The BCCRF follows a similar structure, including a Board of Trustees, a Technical Committee and a Secretariat. The World Bank is serving as an Interim manager, with technical support from Development Partners.

> The BCCTF will implement projects through the Sub-Technical Committee and Climate Change Unit, with the majority of funds allocated to the public sector. Two-thirds of BCCTF funds will be spent on projects and programmes. *The remaining one-third (34%) will be kept as a fixed deposit investment to support emergencies, with accrued interest spent on project implementation.* The BCCRF has two funding windows: 90% of the funding goes to an "on-budget" window, allocated to public sector projects and the remaining 10% to the "off-budget" window for civil society and private sector projects through a Government-designated microfinance institution, Palli Karma-Sahayak Foundation (PSKF).

> ***Relevance to FONERWA?*** *The BCCRF and BCCTF exemplify the potential of national climate funds to pool a significant amount of grant resources. However, contested issues in relation to "procurement modality" between the GoB and NGO's on one side and donors and the World Bank on the other, have meant that there are now two trust funds. Concerns have also been voiced that BCCTF decision-makers face political pressure from MP's during project selection. This highlights the need for clear goals and accountability, as well as balanced stakeholder representation that will inform FONERWA governance and project/programme implementation. Additionally, innovations such as investment instruments and separate allocations for public and private implementers provide insight into financing models and instruments for FONERWA.*

SECTION 4

RESULTS OF OVERALL DESIGN PROCESS

Strategic results formulation for overall Fund design

The above sub-sections including: (1) Legal frameworks and national development priorities, (2) National, cross-sectoral environment and climate assessments, plans and strategies, (3) International climate and environment finance architecture and emerging best practice, ***provide a legal, technical and experiential basis for FONERWA design***. This basis was explored over the course of multiple engagements with the Core Design Team, in order to determine an overall design for FONERWA. It was emphasised that this design should:

1 **Align with the FONERWA Law's** specified organisation, patrimony, functions & responsibilities;
2 **Reflect FONERWA's national character & identified national priorities for environment, climate & development;**
3 **Meet financing needs** of identified priorities for on-going and/or new initiatives that are either under-supported or not currently supported.

These criteria were critical in tackling the challenge of creating an overall Fund design that considers both the wide-range of recommended interventions available, but at the same time focuses on priority needs that are demand-driven. Based on consultations, the following Overall Objective, Outcome, Impact and Results were formulated.

> ***Overall objective:*** FONERWA will have the overarching objective of contributing to sustainable wealth creation and poverty reduction in Rwanda, through sustainable management of natural resources, climate resilient and green economic growth.
> ***Outcome:*** The outcome of the FONERWA Fund would be to sustainably and equitably finance and further strengthen national programmes and private sector initiatives in the areas of current and future environment and climate change related challenges and opportunities.
The overall objective and outcome are compatible with the strategic priorities set in GoR's latest Climate Resilience and Green Growth Strategy, National and Sub-national Sector Strategic Plans, as well as other plans and strategies.
> ***Results:*** In order to achieve the above, FONERWA will deliver the following results (i.e. outputs). The Fund is structured into three financing windows (see below) which correspond to these results areas.49

RESULTS PILLAR 1

Conservation & management of natural resources strengthened and sustained.

RESULTS PILLAR 2

R&D and technology transfer and implementation facilitated and utilised.

RESULTS PILLAR 3

Environmental and climate change issues mainstreamed into policies, programmes, plans, budgets and activities for public and non-public agencies.

The following sub-sections elaborate the overall design concept of using thematic financing windows to ensure the delivery of the above mentioned result pillars. These thematic windows enable flexible, yet strategically focused, prioritisation of resources. This maintains the overall design criteria of a Fund with national character that reflects across Rwanda's sectors, aligns with the FONERWA Law, and meets currently unmet financing needs of already identified national priorities.

4.1 PROPOSED THEMATIC FINANCING WINDOWS AND ENTRY POINTS

The study has taken on a pragmatic approach using the core attributions or functions of the Fund, stipulated in the FONERWA Law, to provide an overarching framework for the proposed FONERWA thematic financing windows. A large number of possible thematic financing windows and associated entry points are possible. The project has considered a number of these, which were discussed with stakeholders. These include themes that more strongly align with emerging climate finance, themes that are sectoral in nature, and broad crosscutting themes. All of these approaches have advantages (and disadvantages), whether this is in relation to external financing, discussion across Government, etc.

49 Note: Window 4 relating to Environmental Impact Assessments is a standalone window as per the FONERWA Law's stipulation that 0.1% of capital project budgets are set aside for monitoring of these assessments and monitoring of associated environmental management plans.

One of the key objectives of having thematic financing windows is to manageably structure and categorise the key priorities of the GoR in relation to environment and climate change objectives. As an overarching framework, the windows facilitate capitalisation based on actual financing gaps and expenditure (including ear-marking of funds), rather than having conventional generic themes such as adaptation, mitigation and environment, which are very crosscutting and often overlapping in the Rwandan context.[50]

The thematic split of the windows will be kept under review by the FONERWA Governance body (i.e. FONERWA Managing Committee) so that it is responsive to new opportunities, Economic Development and Poverty Reduction Strategy Paper (EDPRS) II priorities, negotiations with Development Partners (DPs) and ongoing assessment of impact of FONERWA financed interventions and their corresponding value for money across windows.

Given the FONERWA Law's requirement that 0.1% of all public and private capital projects (less recurrent costs) are collected under FONERWA for Environmental Impact Assessment monitoring & enforcement by the GoR, this theme given a specific thematic window. This window will also be the sole recipient of revenues derived from the 0.1% fee.

These functions, and corresponding thematic financing windows and entry points, are summarised in Table 6 below. Key Entry Points within thematic windows 1-3 are identified are directly derived from functions specified in the FONERWA Law, as well as already identified priority interventions, detailed in Section 3, and from sector and sub-sector strategic plans.

TABLE 6 Proposed Fund thematic financing windows and entry points[51]

FONERWA functions	Thematic Financing Window	Key Entry Points (sub-themes)
1. Support the activities aimed at conserving and protecting the environment, land, water, forestry, mines and quarries, as well as managing climate change and its impacts;	1. Conservation & sustainable management of natural resources	1 Ecosystem rehabilitation 2 Sustainable Land management 3 Integrated Water Resources Management (IWRM) 4 Sustainable mining and quarrying 5 Sustainable forestry 6 Promotion and protection of biodiversity

50 A mapping exercise between these windows and priorities of funds such as UK Government's International Climate Fund (ICF) demonstrates adequate alignment in terms of key thematic areas, sectors and interventions. The outcome of the mapping exercise can be made available upon request.

51 FONERWA Functions (Column 1) are direct excerpts from those stipulated in the FONERWA Law.

TABLE 6 Proposed Fund thematic financing windows and entry points

Continued

FONERWA functions	Thematic Financing Window	Key Entry Points (sub-themes)
2. Support any activity aiming at using renewable energy in a sustainable manner;	2. R&D and technology transfer and implementation	1 Renewable energy & energy efficiency technology 2 Pollution management 3 Water storage, conservation and irrigation technologies 4 Applied & adaptive research (agro forestry, waste, urban planning) 5 Disaster risk reduction 6 Data collection, monitoring & Management Information Systems (MIS)
3. Support any activity intended to fight against causes of pollution; 4. Award prizes	3. Environment & climate change mainstreaming	1 Strategic Environment & Climate Assessments (SECAs) 2 Sector-specific adaptation and mitigation 3 Support to implementation of cross-sectoral integrated planning (e.g. IDP, VUP)
5. EIA fee of 0.1%	4. Environnemental Impact Assessment (EIA) monitoring & enforcement	1 Monitoring and implementation of environmental management plans 2 Environmental auditing

Further prioritisation of these key entry points will be determined by the FONERWA Managing Committee, based on yearly Strategic Issue Paper (SIP) submissions by relevant line ministries, which identifies yearly priorities of budget agencies in line with EDPRS, as part of ministries' budget submission process to MINECOFIN.

In order to avoid funds being dispersed on a first-come first served basis, safeguards will be put in place. The quality of proposals, as set in the screening process, and how sufficiently they align with FONERWA objectives will be the key determining factors for selection of projects. The FMC will also have various options to choose from in order to balance distribution of resources across quarterly submission rounds:

1 Divide resources across the four rounds equally, depending on the resource ceiling available;
2 If there are cases of oversupply of applicants from specific windows/entry points in a given round/s, close funding for those windows/entry points in the subsequent rounds in any given fiscal year;
3 If there is an under supply of applications for specific windows/entry points, issue a special call for proposal;
4 Have rolling cycle on a quarterly basis but have only ONE decision round annually.

In addition, it may be necessary to establish a threshold of support FONERWA can provide (e.g. US $1 million) to projects, above which projects are redirected to international funds. Any such threshold will have to be reviewed by FMC on an annual basis, in line with achievement of capitalisation targets.

The potential for prioritisation – and maximising the results based financing – will also be *advanced through technical expert input and evaluation of proposals, which will provide an additional technical screening and help prioritise the likely effectiveness of each submission round*.

The thematic split of the windows will be kept under review by the FONERWA Managing Committee, so that it is responsive to new opportunities, Economic Development and Poverty Reduction Strategy Paper (EDPRS) II priorities, negotiations with Development Partners (DPs) and ongoing assessment of impacts and value for money across windows.

Section 7 of the report details generic criteria that have been developed as part of the project proposal screening process associated with windows and entry points. The screening process will ensure that only those interventions are approved that are fully aligned with FONERWA's objectives (i.e. overall objective, outcome and outputs). There is no separate eligibility criteria for each and every window/entry point, as having such a mechanism will unnecessarily complicate and overload the screening process in the early stages of operationalisation.

In cases of non-earmarked support over the short to medium-term, Fund resources will be allocated equally across the windows, except for window 4, which has its own revenue stream (EIA fees). In case of earmarked support from ministries and Development Partners, and for certain revenue streams such as those from the Forestry Fund, resources will have to be allocated as per the instructions of the donor/specific revenue stream. The FMC may decide to change the distribution of resources across windows/entry points, once demand is better characterised.

It is to be noted that the objective of FONERWA is not to finance the entire resource gap related to environment and climate change activities. Depending on capitalisation available, conditions attached to revenue streams in terms of their intended expenditure paths and emerging needs, it is up to the FMC to further prioritise or even amend the entry points/windows on a periodic basis.

FONERWA will not only disburse resources, based on the windows/entry points but, through the Fund Management Team, will also monitor the performance of each of the interventions financed by FONERWA, build the capacity of the implementation entities in project management and report accordingly to the FMC on their progress.

Discussion of selected Entry Points for proposed Windows

Similar to thematic windows, selection of entry points was based on the above criteria.52 For criterion 1, below sub-sections 4.2 to 4.5 reference alignment with FONERWA Functions 1 through 5, detailed in Table 6 above. With regards to criterion 2, these were assessed against identified priorities from strategic plans, assessments and strategies (Section 3), including Sector and Sub-Sector Strategic Plans (SSPs, SSSPs). For criterion 3, various methods were applied to conduct a financial needs assessment. Some entry points, unmet financing needs were assessed using Rwanda's Fiscal Year 2010/11 Budget Law. Others were determined using financing gaps identified in sector or sub-sector strategic plans. Results of the financial gap analysis are detailed in Section 4.6.53

4.2 WINDOW 1: CONSERVATION & SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

In line with FONERWA Function 1 of supporting conservation and protection of the environment, land, water, forestry, mines and quarries, the window of *Conservation & Sustainable Management of Natural Resources* is proposed. Window 1 addresses key focus areas of Rwanda's Environment and Natural Resources (ENR) sector. The six proposed entry points represent core mandates of sustainable natural resources management *reflected across the five sub-sectors within ENR* and the newly formed Rwanda Natural Resources Authority (RNRA). The primary justification of these entry points is their direct inclusion under FONERWA Function 1 within the FONERWA Law. They further reflect across numerous national priorities, detailed in Table 7, and demonstrate significant financial need, discussed below and in section 4.6.

Results of a 2009/10 Public Environmental Expenditure Review (PEER) study show that less than 1% of the national budget is spent on these five sub-sectors, and related six key entry points.54 A financing gap analysis

52 1) Alignment with the FONERWA Law, 2) Reflection of FONERWA's national character & identified national priorities for environment, climate & development, 3) Demonstrated financial need.

53 The financial gap analysis is a proxy exercise to approximately demonstrate the budget constraints in relation to the thematic financing windows. Based on these results, it is also possible to inform the 2012 revision of Vision 2020 and EDPRS 2 in terms of identifying areas where financing of strategic environment and climate objectives are not currently being met.

54 Republic of Rwanda, 2010. Public Environmental Expenditure Review (PEER). Supported by the UNEP/UNDP Poverty Environment Initiative (PEI).

for 2010/11 also suggests (at an aggregate level) that Window 1 has an estimated financing gap of approximately 36% (See Section 4.6 for details of absolute figures). As an example, only a fraction (RWF 2.8bn) of the requested budget (RWF 15bn) for rehabilitation activities and relocation of industries contributing to the degradation of the Gikondo wetland was approved in 2010/11, leaving a gaping deficit of 77%, despite ecosystem rehabilitation being a key national priority.

During the recent leadership retreat, His Excellency, President of Rwanda, Paul Kagame, prioritised mining as a key focus of EDPRS 2.[55] Although mining and quarrying have significant potential to generate economic growth, sustainability of environment need to be ensured, as also stressed by the President; this will be the key focus for FONERWA financing. Sustainable land management, on the other hand, is at present heavily dependent on donor financing. For example, 54% of the entire ENR donor budget is contributed by Land Tenure Regularisation programme of DFID (approximately US$19 million), making the entry point extremely vulnerable to external aid shocks. In order to reduce the impact of such shocks, more comprehensive internal resource mobilisation mechanisms are proposed in Section 5 of this document.

As a relatively new-sub sector, Integrated Water Resources Management (IWRM) is also receiving limited budget support, resulting in an average financing gap of 49%. Efforts by Rwanda's Energy, Water and Sanitation Authority (EWSA) to increase access to clean drinking water to households by more than 80% at the end of EDPRS 1, and to increase supply of water for irrigation to the agricultural sector (agriculture being the highest user of water) need to be increasingly seen from a sustainable water management perspective, consistent with IWRM, which is a weakness FONERWA will address.

With a 23% financing gap, achieving *and maintaining* the 30% forestry coverage by 2020 (as per Vision2020 target) through sustainable forestry management is also likely to pose a significant challenge for the GoR, based on discussions with sector stakeholders.

Lastly, as tourism revenues[56] increase, with 908,009 visitors coming in 2011 compared to 666,001in 2010,[57] more significant resources are also required for promotion and protection of biodiversity, considering the majority of this market is eco-tourism based. An internal revenue generating scheme (an ecotourism hotel tax) has therefore been proposed as part of capitalisation of FONERWA under section 5.

TABLE 7 Key entry points for Window 1: Conservation & rehabilitation of natural resources

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
1. Ecosystem rehabilitation	Functions 1,3	> Vision 2020, EDPRS, ENR SSP, Env/ CC SSSP > NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
2. Sustainable Land management	Functions 1,3	> Vision 2020, EDPRS, ENR SSP, Land SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
3. Integrated Water Resources Management (IWRM)	Functions 1,3	> EDPRS, ENR SSP, Water SSSP, NAPA, 2006 (#1), SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
4. Sustainable mining and quarrying	Functions 1,3	> EDPRS, ENR SSP, Mining SSSP, SoE, 2009, UNEP, 2011, CRGG, 2011

55 Annual Leadership Retreat, March 2012.

56 Tourism revenues in 2011 increased by 25% to US$ 251.8 million compared to 2010 (Recent Macro Economic Outlook, presented during the Development Partners Retreat, 2012 by MINECOFIN)

57 MINECOFIN, 2012. Recent economic developments and outlook. Development Partners Retreat, Musanze, March 28, 2012.

TABLE 7 Key entry points for Window 1: Conservation & rehabilitation of natural resources

Continued

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
5. Sustainable forestry	Functions 1,3	> Vision 2020, EDPRS, ENR SSP, Forestry SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
6. Promotion and protection of biodiversity	Functions 1,3	> Vision 2020, EDPRS, ENR SSP, Env/ CC SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011

4.3 WINDOW 2: R&D AND TECHNOLOGY TRANSFER AND IMPLEMENTATION

At the heart of Vision 2020 is Rwanda's aim to become a knowledge-based and technology-driven society. This crosscutting objective is in turn reflected in the EDPRS and promoted across all natural resources sub-sectors, productive sectors (particularly Agriculture), as well as Energy, Habitat & Urbanism, Water & Sanitation, Meteorology and Infrastructure, Trade and Industry. In the context of the FONERWA Law, this is reflected in the priority use of renewable energy in a sustainable manner (Function 2). To capture this high-level importance across key sectors, the proposed focus of Window 2 is *R&D and Technology Transfer and implementation*.

Key entry points for Window 2 are detailed in Table 8 below. Entry point 1 targets the FONERWA Law's core Function 2 of promoting renewable energy. In the latest Seven Year Plan of GoR, a target was set to generate 1000 MW of electricity by 2017, estimated to cost approximately US $4.3 billion. In order to ensure environmental sustainability as well as energy security, renewable energy sources will be important contributors to the target. This is in line with the MININFRA high-level strategic action plan's priorities to develop renewable energy sources for off-grid connections (e.g. biogas), diversification of supply and ensuring security of supply, energy efficiency (e.g. solar water heaters, improved stoves, carbonisation), and substitution of biomass. These national priorities are also features of the SoE, 2009 UNEP, 2011 and NAPA priorities as well as Rwanda's climate strategy (CRGG, 2011). In addition, entry point 1 (and others) compliment the ongoing work of Rwanda's national utility, the Energy, Water and Sanitation Authority (EWSA), as well as the Resource Efficiency and Cleaner Production (RECP) programme established in 2008 under the Ministry of Trade and Commerce (MINICOM) in partnership with UNIDO/UNEP.58

Entry point 2 targets the FONERWA Law core Function 3 of pollution management. This is also one of the six programmatic areas of the Environment and Climate Change Sub-Sector Strategic Plans, but is crosscutting in nature across all major sectors, namely transport, agriculture, mining, waste and water management.

In order to ensure intensification of agriculture, Entry point 3 of water storage, conservation and irrigation technologies represents high-level national priorities. Regarding the latter, this is reflected in Vision 2020, EDPRS and the Agriculture sector strategic plan to develop and transfer hillside irrigation technology to smallholder farmers. Sustainability focused technologies such as gravity-fed irrigation technologies are also a top NAPA priority for increasing farmers' resilience to drought and changing rainfall patterns, which affect sowing dates, highlighted in Rwanda's Second National Communication to the UNFCCC. Additional technologies including rain water harvesting and pond construction along with water conservation techniques are complementary technologies that can benefit irrigation and husbandry, ecosystem resilience and other supply needs.

Entry point 5 of Applied and Adaptive Research aligns with FONERWA Functions 1-3 and (like entry point 1) strongly reflects Rwanda's knowledge economy and sustainable development objectives. Particular emphasis is given to applied and adaptive research in agro forestry, waste management and urban planning. With regards to agro forestry, this is a leading priority within the EDPRS and across Forestry and Agriculture sector strategic

58 Resource Efficient and Cleaner Production Programme of Rwanda, 2011. Mainstreaming resource efficient and cleaner production in policies and strategies of Rwanda.

plans, and the Biomass Energy Strategy. It is also a featured 'Big Win' under Rwanda's climate strategy, and a top recommendation under Rwanda's SNC. Agro forestry is particularly crosscutting in Rwanda where there is limited land available for tree plantations (with biomass supplying 90% of energy needs), and as agro forestry resources provide integrated land, agricultural, energy and water management services, supporting food, energy and water security and erosion control.

Applied research is also critical for improved treatment of liquid and solid waste and urban planning including upgrading sewer systems, access to safe water supplies. These are highlighted as priority areas within Infrastructure sub-sectors of Habitat & Urbanism and Water and Sanitation, along with extensive recommendations in UNEP, 2011. Also important is consideration of efficiency and passive designs in buildings/houses for climate control, recommended in Rwanda's climate strategy.

Entry point 5 of Disaster Risk Reduction is a key element of Rwanda's environmental risk and climate adaptation strategy. This is reflected in the recent establishment of the Ministry for Disaster Management and Refugee Affairs (MIDMAR). Development of an Early Warning (EWS) and intervention system is also the second top NAPA priority option, and is reflected in numerous other strategic initiatives.59

Entry point 6 of Data Collection, Monitoring & Management Information Systems (MIS) represents a crosscutting issue for all major sectors in relation to environment and climate change. This is particularly relevant to the Rwanda Meteorological Service (RMS) service delivery functions to meet sectors' specific meteorological and climate related information needs. This is also critical for tracking Rwanda's GHG emissions, an area of much needed improvement highlighted in the SNC, in addition to environmental information systems, highlighted as a priority area in the Environment and Climate Change sub-sector strategic plan. See Section 4.6 for details of financing gaps for each of these entry points.

TABLE 8 Key entry points for Window 2: R&D and technology transfer and implementation

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
1. Renewable energy & energy efficiency technology	Function 2	> Vision 2020, EDPRS, ENR, Energy SSPs, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
2. Pollution management	Function 3	> Vision 2020, EDPRS, ENR, Habitat & Urbanism SSPs, Env./CC SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
3. Water storage, conservation and irrigation technology	Functions 1, 3	> Vision 2020, EDPRS, ENR, Agriculture SSP, Water SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
4. Applied & adaptive research (agro forestry, waste, urban planning)	Functions 1-3	> Vision 2020, EDPRS, ENR, Agriculture, Energy, Habitat & Urbanism SSPs; Env/CC, Forestry SSSPs, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011

59 Rwanda is one of 20 countries in the Africa Adaptation Programme (AAP), and is focusing efforts on Early Warning Systems (EWS) in Rwanda.

TABLE 8 Key entry points for Window 2: R&D and technology transfer and implementation

Continued

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
5. Disaster risk reduction	Function 1	> EDPRS, ENR SSPs; MIDIMAR; Env/CC, Meteorology SSSPs, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
6. Data collection, monitoring & Management Information Systems (MIS)	Functions 1-3	> Vision 2020, EDPRS, All SSP/ SSSPs, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011

4.4 WINDOW 3: ENVIRONMENT & CLIMATE CHANGE MAINSTREAMING

In the context of FONERWA, Functions 1 through 5 reflect Rwanda's overall objective of mainstreaming environment and climate change management throughout Rwanda's sectors. Although Windows 1 and 2 above demonstrate how recommended entry points are already mainstreamed to a large extent throughout Rwanda's national priorities and sector strategies, it is also clear that these *strategic interventions lack sufficient and reliable financing in the majority of cases* (See 4.6). In order to further address this beyond entry points of Window's 1 and 2, Window 3 of *Environment & Climate Change Mainstreaming is proposed* (Table 9).

The ENR sector strategy and Environment & Climate Change sub-sector strategy highlight environment and climate change mainstreaming across all sectors of the Rwandan economy, particularly Agriculture, Energy, Infrastructure, and Industry, at national and local levels, as a key priority. Corresponding to this priority is the carrying out of Strategic Environmental Assessments (SEAs), which is being piloted in the Agricultural sector. Entry point 1 is therefore a proposal to conduct full Strategic Environment & Climate Assessments (SECAs) across FONERWA's 8 priority sectors to scale out this work.60

Linked to this, entry point 2 offers the opportunity to seek support to tackle sector-specific climate adaptation and mitigation activities. This entry point is open to all sectors and enables a key outreach function of technical staff within the FONERWA secretariat to provide direct technical assistance (TA) for climate related activities, in light of the low levels of capacity for such issues across sectors.61,62 However, this entry point is not exclusively TA related in terms of Secretariat or Fund Management Team staff, and can involve monetary support for the development of full proposals where outside TA is needed where activities might require expertise and/or resources beyond those available among FONERWA staff. Moreover, this entry point provides an entry point for innovative emerging climate policy mechanisms including Nationally Appropriate Mitigation Action (NAMA) plans, which, when developed to a high technical standard (likely requiring external TA), can provide overall guidance and facilitate monitoring of specific activities in entry points across windows 1-3, e.g. promotion of renewable energy technologies.

Lastly, entry point 3 works to support the further implementation/scaling out of environment and climate mainstreaming related activities under existing integrated planning and development programmes such as Rwanda's Integrated Development Programme (IDP) and Vision 2020 Umurenge Programme (VUP), under the direction of MINALOC. Support for further planning and/or implementation is particularly important for District and sub-districts' mainstreaming and outreach activities of FONERWA, in line with Rwanda's Decentralisation and Social Protection policies. See Section 4.6 for details of financing gaps for each of these entry points.

60 It is appropriate to provide the support to public sector first before extending it to the private sector. However, coverage of RDB and MINICOM private sector related projects/programmes is eligible.

61 Republic of Rwanda, 2010. Environment and climate sub-sector strategic plan.

62 Republic of Rwanda, 2011. Climate resilience and green growth strategy.

TABLE 9 Entry points for Window 3: Environment & climate change mainstreaming

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
1. Strategic Environment & Climate Assessments (SECAs)	Functions 1-5	> Vision 2020, EDPRS, ENR SSP, Env/CC SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011, CRGG, 2011
2. Sector-specific adaptation and mitigation	Functions 1-5	> Vision 2020, EDPRS, ENR SSP, Env/CC SSSP, NAPA, 2006, SoE, 2009, UNEP, 2011, SNC, 2011 > CRGG, 2011
3. Support to implementation of cross-sectoral integrated planning (e.g. IDP, VUP)	Functions 1-5	> Vision 2020, EDPRS, ENR SSP, Env/CC SSP. NAPA, 2006, SoE, 2009, UNEP, 2011, CRGG, 2011

4.5 WINDOW 4: ENVIRONMENTAL IMPACT ASSESSMENT (EIAS) MONITORING & ENFORCEMENT

Along with the creation of FONERWA, Organic Law No. 4/2005 mandated the performance of Environmental Impact Assessments (EIAs). Public and private projects requiring EIAs were then stipulated in a Ministerial Order and guidelines set out by REMA.63 These guidelines cover capital projects and require the creation of an environmental management plan following an EIA, subject to project approval.

Although these guidelines have been elaborated and project developers cover the costs of actual EIAs, a recurrent challenge for the Government of Rwanda is the limited resources available to monitor the implementation of environmental management plans after projects have been approved, or to conduct environmental audits. Moreover, Window 4 on *Environmental Impact Assessment (EIAs) Monitoring & Enforcement* is proposed, along with key entry points for monitoring environmental management plans and environmental auditing (Table 10). As discussed in Section 5 below, the 0.1% of capital project costs (minus operating costs) is mandated as Function 5 of the FONERWA Law, and *these funds earmarked solely for Window 4 financing.*

TABLE 10 Entry points for Window 4: Environmental Impact Assessments

Proposed entry points	Aligns with FONERWA?	Reflects national character/ priorities?
1. Monitoring and implementation of environmental management plans	Function 5	> Vision 2020, EDPRS, ENR SSP, Env/CC SSSP
2. Environmental auditing	Function 5	> Vision 2020, EDPRS, ENR SSP, Env/CC SSSP

Note that currently there is no core budget allocated for EIA monitoring of public and private capital projects within REMA. MINECOFIN, which is in charge of all public projects screening, will be determining the total allocation per year to REMA for this monitoring. To supplement this, a formula has been given to determine a fee

63 Republic of Rwanda, 2008. Ministerial Order No. 003/2008 of 15/08/2008 relating to the requirements and procedure for environmental impact assessment.

for monitoring environmental management plans (EMPs) resulting from accepted project EIAs in the FONERWA Law as 0.1% of the total budget of capital projects, minus operational costs. This amount will be transferred to FONERWA and subsequently be allocated under window 4 as its core funding stream. For private sector projects, RDB will be charging each private sector project formulator the same fee for EMP monitoring.

4.6 THEMATIC WINDOW & ENTRY POINT FINANCING GAPS

As discussed above, demonstrated financial need is a key criterion upon which overall design considerations of FONERWA's priority results and investment areas are based. This section presents an analysis of financing gaps in 2010/11 in sectors related to the environment and climate change, and is drawn from the above analysis of the FONERWA Law and national priorities. *Moreover, the purpose of this analysis is to demonstrate the relative need for financing across priority areas, drawn from the FONERWA Law and national priorities, rather than to carry out a complete costing of financing requirements across sectors or cost a pipeline of proposed projects*.

The analysis of financing gaps in 2010/11 utilised two sources of information: (1) actual budget submissions from various line ministries (provided by the National Budget Team at MINECOFIN), and (2) the 2010/11 (revised) Finance Law.64 The headings under each of the entry points are crosscutting in nature and do not belong to a single budget agency. For example, budget items under Window 1, Entry Point 1 for Ecosystem Rehabilitation were drawn from the requests from MININFRA and MINICOM – in addition to the ENR sector. As a result, budget lines were reviewed on a line-by-line basis to ensure they were allocated to entry points accurately. Some budget lines could be included under more than one entry point. For example, the large Land Husbandry, Hillside Irrigation and Water Harvesting project could be included under Irrigation, Land Management, or Integrated Water Resource Management. To avoid double counting, such budget lines were included under a single entry point—generally considered to be the most relevant.

The financing gap analysis reviews financial need under the first three thematic windows of FONERWA, summarised in Table 11 and Figure 4 below. The detailed analysis of financial needs by Window 1-3, and their respective Entry Points can be found in Annex 3.65 It is to be noted that the financing gap is only highlighted for the Public Sector due to limited availability of information in the private domain, including civil society organisations. A recent study on Civil Society Mapping, (2011, UNDP) shows that total investment in Environmental Protection (excluding environmental promotion and climate change activities) was only US$ 6,170,642, which is 1.44% of the total investment made by the CSOs (both national and international) in Rwanda in the FY 2009-10. This suggests that the financing gap among CSOs is also substantial.

While the aim of FONERWA is not to fill up the entire financial gap evident in the public sector, it is nevertheless expected to make significant contribution in the range of 20-30% in allocating resources geared towards reducing the gap. Given the Fund's moderate initial capitalisation, only those projects and programmes that offer maximum value for money will be selected for financing through FONERWA based on pre-agreed and published set of criteria and procedures.

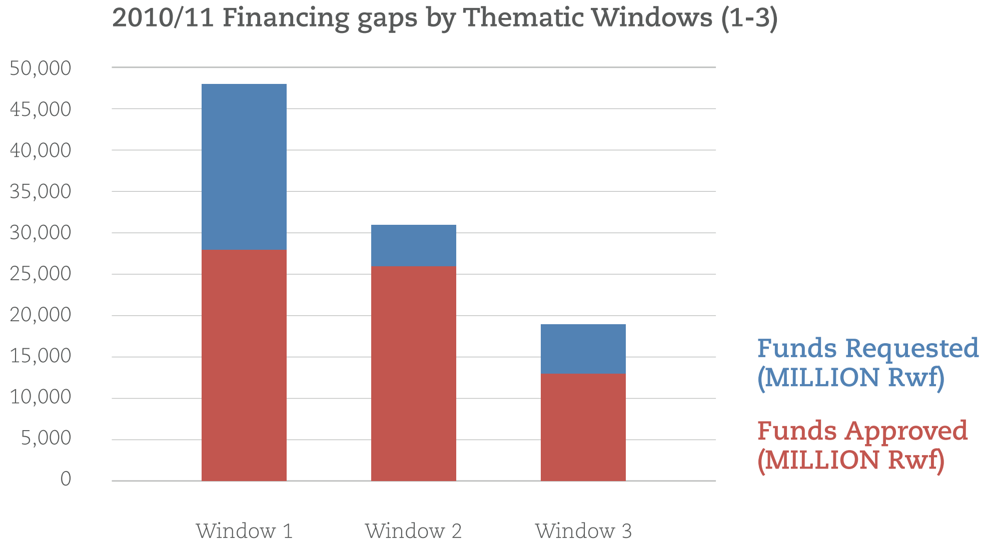
64 Fiscal year 2010/11 was considered as a proxy year for conducting the financing gap assessment. Outlier effects, such as one off large scale investment, was omitted in order to make sure the assessment is consistent with other fiscal year budgetary situation.

65 Although Strategic Environment Assessment (SEA) is part of Window 3, since this type of intervention is only being pilot tested in the Agriculture Sector with support from EU, no separate financing gap was assessed under the key entry point of SEA. Once the cost of conducting SEA in three key spending ministries (i.e. MINICOM, MININFRA, MINALOC), the total cost will be considered as the total financing gap for the SEA. Window 4 did not require a separate financing gap exercise as the total resources generated from the 0.1% of the total capital budget of projects minus the operational cost will be ear-marked for this specific window.

TABLE 11 Financing Gap by Entry Point (RWF mn)

Thematic Window & Entry Points	Funds Requested (Rwf mn)	Funds Approved (Rwf mn)	Financing Gap(Rwf mn)
W1: Ecosystem Rehabilitation; Sustainable Land Management, Integrated Water Resource Management (IWRM), Forestry, Mines and Quarries)	47,160	28,009	19,151 (41%)
W2: Renewable Energy and Energy Efficiency; Pollution Management, Irrigation Technology, Applied and Adaptive Research in Agro-Forestry, Waste, & Urban Planning.[66]	30,636	26,417	4,219 (14%)
W3: Support to implementation of Cross-Sectoral Integrated Planning (e.g. IDP, VUP)[67].	18,591	12,403	6,187 (33%)

FIGURE 4 Financing gaps across Thematic Financing Windows 1-3 Entry Points, as a function of Requested versus Approved 2010/11 Budget.



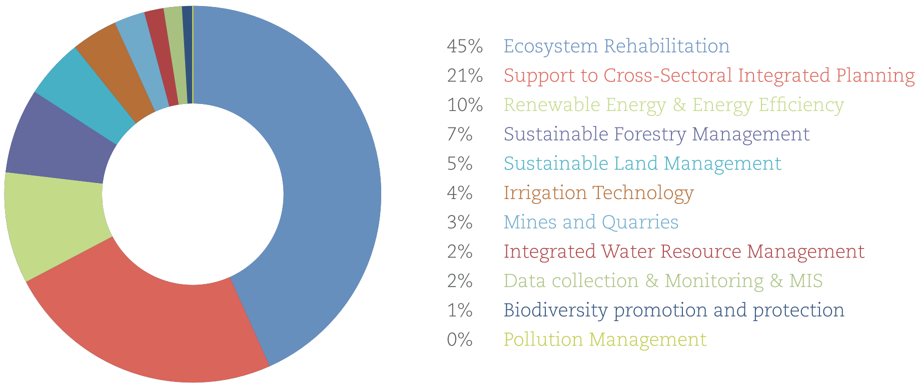
As demonstrated in Table 11 and Figure 4, Window 1 covering Conservation & Sustainable Management of Natural Resources shows the largest financing gap across all thematic windows in absolute terms: roughly 19 Billion RWF. Equally, Entry Point 1 under Window 1 covering Ecosystem Rehabilitation demonstrates the largest financing gap (over 13 billion RWF) relative to all other windows' entry points. Window 3, Entry Point 3, supporting Implementation of Cross-Sectoral Integrated Planning, represents the second largest entry point financing gap at 6 Billion RWF. Figure 5 below illustrates a breakdown of entry points based on associated proportions of the total financing gap across Windows 1-3 (roughly 29 Billion RWF).

66 Note: Entry Point 5 (Disaster Risk Reduction) under Window 2 is not included in the financing gap analysis given the ministry in charge (MIDIMAR) was not yet in function during 2010/11.

67 There is no separate sector-specific adaptation and mitigation budget heading in the 2010/11 and subsequent budgets so it was not possible to take this entry point into consideration

FIGURE 5 Percentage of total financing gap across Windows 1-3 by entry points.

% total financing gap



Note: Entry Point 4 (Applied & Adaptive Research in Agro forestry, Waste & Urban Planning) under Window 2 shows a small surplus of 42 Million RWF. This small surplus can be explained by overfunding of Urbanisation plans. This surplus is almost offset by a deficit in the budget line for Solid Waste Management.

The above analysis demonstrates the overall financing gap prevalent across the proposed FONERWA Thematic Financing Windows and their respective Entry Points. This provides an estimated indication of relative financing needs, rather than complete costing of financial requirements across sectors. Besides, the use of this information needs to be treated with caution given results are based on a single fiscal year.

Since the concerned sectors submit their budget based on already constrained scenarios (i.e. sectoral ceiling allocated by MINECOFIN), the above methodology does not provide the full extent of the financing gap. Therefore, in order to have a more comprehensive picture, a second stage of financial gap analysis was conducted using the Sector Strategic Plan (SSP) costing vs. the approved budget. The results of the analysis are provided in Annex 10.

SECTION 5

FINANCING MECHANISM OF FONERWA

SECTION 5 - FINANCING MECHANISM OF FONERWA

This section is concerned with projecting domestic and external sources of financing for FONERWA. It also proposes steps that can be taken to ensure that revenue ear-marked for FONERWA is indeed transferred to the Fund. As presented in section 2.3, patrimony of the Fund specified in the FONERWA Law aims to consolidate and attract multiple sources of domestic public and external revenue to promote its sustainable capitalisation. According to the draft FONERWA Law, the sources of funding shall be:

1 Grants and aid;
2 Grants and special aid aiming at the management of climate change and its impacts;
3 Donations and bequests;
4 Fines emanating from penalties determined by different laws aiming at environmental, water and forestry protection and laws on mining and quarry exploitation;
5 0.1% of the total project cost whose environmental impact assessment has been carried out minus the operating cost;
6 Other revenues determined by laws.

Based on these stipulations, Section 5.1. below explores legally mandated domestic capitalisation sources including: (1) Environmental fines & fees, (2) EIA fees, (3) Forestry and Water Funds, (4) Other environmental revenue and (5) Seed financing from domestic stakeholders (line ministries). Section 5.2. explores external capitalisation sources including: (1) Donor contributions estimated based on per capita contributions to other national climate funds (Indonesia, Bangladesh and Ethiopia), (2) International environment and climate funds and (3) Innovative private sector financing.

Finally, Section 5.3.combines the results of sections 5.1. and 5.2. by presenting baseline (Low), Medium and High financing scenarios for Fund capitalisation.

Note regarding private sector capitalisation

Capitalisation from private sector sources (i.e. investment) was not considered in any of the scenarios presented below, given that it is difficult to find an appropriate "proxy" taking FONERWA's key operational features into consideration. Furthermore, neither the overall GoR nor MINECOFIN anticipate private sector "investment" to capitalise FONERWA in the short to medium-term. The market appetite for investment for such a fund which is primarily public in nature is yet to be tested in Rwanda. It is therefore imperative to ensure that market demand (or lack of demand) for private investments can be gauged after Fund operationalisation, based on the type of proposals received. This can then guide the decisions of FONERWA Governance bodies as to whether private sector investment can realistically be considered in the long term; and capitalisation scenarios can be altered accordingly.

EXPECTATION OF FINANCIAL RETURNS ON CAPITALISATION INVESTMENTS FROM THE PRIVATE SECTOR:

1 Hurdle rate: The minimum rate that a PE funds promises to generate after all expenses.

2 USD prime rate: This index represents the interest rate that banks charge their most creditworthy customers quoted on an Actual/360 day basis. This index is also the base rate on corporate loans.

At present, to be competitive with other commercial ventures – and to satisfy private sector investors – the *financial return from any FONERWA investment has to be around 15% for domestic and at least 10% for international investors.*

Domestically, Rwanda's inflation rate hovers around 10% (MINECOFIN, March 2012) and unless the return is 15%+, it is unlikely that there will be much interest from domestic financiers/investors. As for international private sector financing (mostly from Emerging Market Private Equity Funds (EMPEs)), the rate has to be above 10%. Generally the average (for US/Europe based PE funds) hurdle rate is 8%. On a risk adjusted basis, international investors will be looking for at least 10-12% annually. Another way to look at it is the current USD Prime Rate is 3 to 4% then to add to country risk, FX (foreign exchange) risk; even the international banks will be looking at a return of 10% or above.

More importantly, there is a need for private investors to be assured that the business models are viable both from regulatory and economic angles. They will want to see how the funded projects generate sustainable revenue streams. *It would therefore be important for FONERWA to demonstrate over the initial 3 to 5 years of operation that financially viable business models related to environment and climate change can be developed.*

Nevertheless, FONERWA is open to capitalisation proposals from private sector investment sources. Any such proposal with an "investment return prospect" will have to be analysed by the FMT on a case by case basis and consequently be approved by FONERWA Managing Committee.

5.1 DOMESTIC CAPITALISATION SOURCES

The Organic Law on Environment and FONERWA Law have established several sources of financing for FONERWA. As mentioned, these include: environmental fines and fees, a percentage of capital projects' budget to finance the monitoring of EIAs (minus operating costs), existing funds (Forestry and Water), other future environmental revenue and domestic seed financing from key sector ministries. One unique element of FONERWA, compared to all other funds in Rwanda, lies in the fact that it has the ability to disburse the proceeds of special taxes (including Payments for Ecosystem Services) across windows.

These capitalisation sources make up a baseline domestic capitalisation scenario, presented in Table 12 and Figure 6. Two additional scenarios were then developed. Scenario 2 considers the impact of the introduction of new environmental taxes68 and Scenario 3 considers the magnitude of seed financing from domestic stakeholders.

TABLE 12 Domestic Capitalisation Scenarios (RWF mn)

Scenarios (1-3)	2012-13	2013-14	2014-15
S1: Baseline	793.4	307.1	339.7
Environmental Fines	20.0	21.0	22.1
EIA Fees	68.4	175.9	201.9
Forestry Fund	700.0	105.0	110.3
Other Revenue	5.0	5.3	5.5

68 Scenario 2 projects the revenue that could be earned from the introduction of three new environmental taxes: a supplemental tax on used motor vehicles, a supplemental levy on water usage (payment for ecosystem services), and a hotel tax for non-EAC residents.

TABLE 12 Domestic Capitalisation Scenarios (RWF mn)

Continued

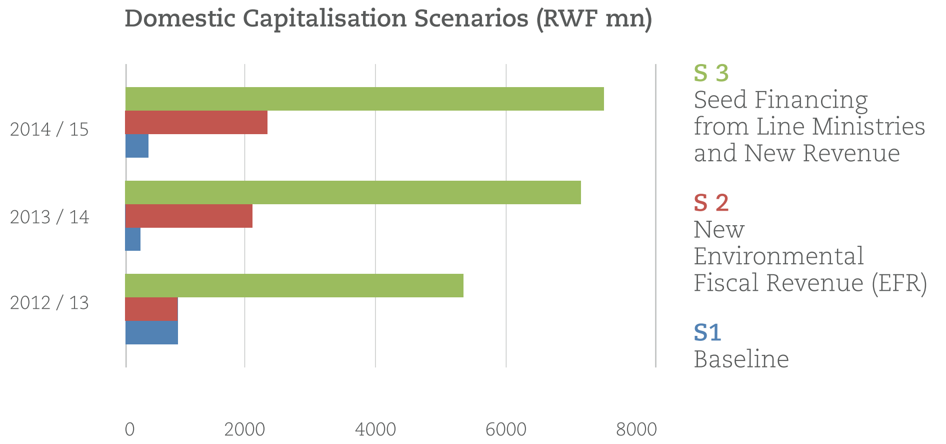
Scenarios (1-3)	2012-13	2013-14	2014-15
S2: New Environmental Fiscal Revenue (EFR)*	793.4	2,082.4	2,291.0
Proposed EWSA Water Levy	-	452.0	523.2
Proposed Hotel Fee	-	946.6	1,051.4
Proposed Old MV Fee	-	376.7	376.7
S3: Seed Financing from Line Ministries and New Revenue	5,277.1	7,146.9	7,399.0

** New EFR is not expected to generate revenue before the 2013-14 fiscal year.*

As detailed in Table 12 and Figure 6, baseline domestic capitalisation is extremely low across the three-year projection. This is due to the low levels of currently collected environmental fines, fees and other revenue. Notably, capitalisation in the first year (2012-13) is high due to the influx of accumulated capital under the Forestry Fund, subsequently replenished at a rate of around RWF 100mn. The need for domestic seed financing from sector ministries is high in order to help maximise domestic contributions (Scenario 3).

Nevertheless, **overall domestic capitalisation is projected to be low, ranging between RWF 793.4mn to 5.3bn (US$1.3 to 8.7mn) in 2012-13 and RWF 339.7mn to 7.3bn (US$549,000 to11.9mn) by 2014-15**, largely depending on seed financing from ministries. Below sub-sections explore each of these domestic revenue sources.

FIGURE 6 Baseline (Low), Medium (with introduction of new taxes) and high (with domestic seed financing) domestic capitalisation scenarios.



Environmental fines & fees

"Fines emanating from penalties determined by different laws aiming at environmental, water and forestry protection and laws on mining and quarry exploitation" – FONERWA Law, Article 8 (provisional copy).

At present, there is limited coordination and consistency on the enforcement of environmental regulations and the management of environmental fines (as detailed in the Organic Law on the Environment, see Annex 4). The Rwanda Revenue Authority (RRA) receives some environmental fines enforced by REMA and the courts at the national level, and combines these with other 'non-fiscal revenue'. The majority of environmental fines, however, are collected by Districts in an unorganised fashion. Districts have set their own environmental fines and fees structures within the thresholds set by the Organic Law on the Environment. Districts, however, do not have authorisation to use the environmental revenue that they collect, and once FONRWA is established, the revenue collected should be transferred to the fund.

Preliminary estimates of revenue generated by fines and fees suggest that RRA collects roughly RWF 1mn per year, and that fines and fees collected by districts is between RWF20mn to RWF30mn. Assuming that 75% of the environmental fines collected by Districts will be transferred to FONERWA (with 25% of revenue from environmental fines earmarked for

Districts to incentivise collection and to finance local environmental management activities), then a reasonable baseline scenario assumption is that **fines and fees will generate roughly RWF 20mn (US$ 32,900) in 2012/13 (Table 13).**

TABLE 13 Domestic Capitalisation – Projection of Environmental Fines (RWF mn)

	2012-13	2013-14	2014-15
Baseline Scenario	20.0	21.0	22.1

Several steps need to be taken before the fines and fees will accrue to FONERWA. These are reflected in the plan of action in Annex 8.

Environmental Impact Assessment (EIA) fee

According to the Organic Law on the Environment, a fee should be levied on projects that are required to conduct an Environmental Impact Assessment (EIA), and this should be used to capitalise FONERWA. The Organic Law on the Environment states that an EIA should be conducted prior to policies and programmes that could have a negative impact on the environment. The Organic Law provided some rules to determine whether a project requires an EIA, and a Ministerial Order went into effect in 2008 establishing a comprehensive list of project categories (see Annex 5).69 The requirement to conduct an EIA will apply to such projects regardless of the promoter. In other words, private sector and public sector projects (both donor-funded and GoR-funded projects) will be responsible for conducting an EIA.

The Organic Law states that an additional fee should be levied on projects that conduct an EIA to provide funding to monitor Environmental Management Plans and to ensure compliance with environmental regulations. According to the FONERWA Law, the levy on projects that conduct an EIA is 0.1% of the total project cost minus operating costs. This EIA fee will ensure that REMA has the resources to monitor Environmental Management Plans.

As the 2012-13 budget formulation process is well advanced at the time of the establishment of FONERWA, these levies on the public sector capital budget (both government-funded and donor-funded) are not assumed to capitalise FONERWA until the 2013-14 financial year. The private sector's payment of the EIA fee should, however, begin during the upcoming financial year. From Table 14, **projected baseline scenario totals of EIA fees rises from RWF 68.4mn (US$ 112,700) in 2012-13 to RWF 201.9mn (US$326,000) by 2014-15**. The proposal and methodology for levying the EIA fee are detailed in the Annex 6.

TABLE 14 Domestic Capitalisation – Projection of EIA Fees (RWF mn)

	2012-13	2013-14	2014-15
Government EIA Fees	-	83.8	93.8
Donor EIA Fees	-	40.5	40.5
Private Sector EIA Fees	68.4	51.6	67.5
Baseline Scenario Total	68.4	175.9	201.9

Forestry Fund

The National Forestry Fund (NFF) was created under the Forestry Law of 1988 and operationalised in 1989. The NFF is capitalised by proceeds from forest exploitation, related charges and taxes and contributions from the central government. Under the 1988 Forestry Law, the cutting of trees on more than two hectares of land for other than familial use requires a permit, the fee for which capitalises the NFF. In addition, a 1% fee levied on cut products from such land, according to the law, also finances the NFF.

According to the Organic Law on the Environment, FONERWA is mandated to support activities that protect Rwanda's forests, and the Law instructs the merger of the Forestry Fund with FONERWA. According to

69 Annex to the Ministerial Order 004/2008 of 15/08/2008.

MINECOFIN, **the NFF account has an estimated balance of RWF 600mn (US$ 988,000) and is capitalised at a rate of roughly RWF 100mn (US$ 165,000) per year** (Table 15). It is important to note that although the NFF is being consolidated under FONERWA, *funds will continue to be collected and earmarked for activities related to sustainable forest management under FONERWA*.

TABLE 15 Domestic Capitalisation – Projection of the Forestry Fund (RWF mn)

	2012-13	2013-14	2014-15
Baseline Scenario	700.0	105.0	110.3

Water Fund

"A specific law shall establish a national water fund outlining its responsibilities, organisation and functioning." – Water Law 62/2008, Article 72.

The Water Fund is not yet operational, and the amount of capitalisation is, therefore, not known. The Water Fund (as with the NFF) is expected to be merged with FONERWA. There are several important potential sources of revenue to capitalise the water fund; in particular, payment for ecosystem services (PES). For example, Rwanda's Energy, Water and Sanitation Authority (EWSA) makes a commercial gain from ecosystems restored by the GoR, so it would be reasonable to expect EWSA to pay a fee for this water usage benefit. One proposal would be to apply an additional levy on top of water usage charges to pay for watershed management, and this is reviewed under "other environmental revenue" and a detailed proposal is provided in Annex 11).

Other Environmental Revenue

According to the FONERWA Law, "other environmental revenues determined by laws" will also be used to capitalise the Fund. *This should be considered to be the primary source of sustainable financing for FONERWA: the introduction and collection of targeted, environmental taxes.*

Aside from the usefulness of environmental taxation for purposes of ensuring sustainable stewardship over Rwanda's natural resources, environmental taxation is also a valuable economic instrument. Environmental taxation embeds a portion of the environmental cost of consumption into the price of consumption, in accordance with the 'polluter-pays' and 'beneficiary-pays' principles. In other words, environmental taxation internalises the true economic costs of an activity and consumption, in contrast to a situation where the state is responsible for compensating for negative externalities resulting from misuses, overuses, and abuses of Rwanda's environment and natural resources by individuals and businesses.

There are several potential sources of environmental taxation that can be instituted by the GoR to capitalise FONERWA, and to offset the environmental impact of economic growth:

- Taxation of older motor vehicle imports and emissions taxation;
- International air passenger departure tax;
- A tourist tax, applied at hotels;
- Additional levies on fuel (particularly high sulphur fuels), electricity, and water;
- Additional levy on dumping of solid waste in landfills;
- Taxation of older generation light bulbs, refrigerators and other inefficient technologies that have a short lifespan before they will be dumped in landfills; and,
- Fees for the use of natural resources and payment for ecosystem services (mineral royalties, tourism tax).

Currently, REMA earns revenue from the sales of confiscated plastic bags to industry.70 This will generate an estimated RWF5mn in 2012/13, according to REMA. In addition, a scenario was included which projects the revenue that could be earned from the introduction of three proposed new environmental fees: (1) a supplemental tax on used motor vehicles (8 years or older), (2) a supplemental levy on water usage (payment for eco-system services), and (3) a hotel tax for Non-EAC citizens or residents. Detailed proposals for each of these new environmental fees can be found in Annex 11.[71]

TABLE 16 Domestic Capitalisation – Projection of Other Revenue (RWF mn)

	2012-13	2013-14	2014-15
Baseline Scenario (sales of plastic bags)	5.0	5.3	5.5
Introduction of new Environmental Fiscal Revenue	-	1,775.3	1,951.3
Proposed EWSA Water Levy	-	452.0	523.2
Proposed Ecotourism Hotel Fee	-	946.6	1,051.4
Proposed Old Motor Vehicle (>8 yrs) Fee	-	376.7	376.7

Note: Details of the proposed fees can be found in Annex 11.

Table 16 details projections for baseline scenario revenues generated from the resale of collected plastic bags, ranging from RWF 5mn to 5.5mn between 2012-15 ($8,000-9,000). The second scenario looks at the impact of the three proposed environmental fees (EWSA Water Levy, Ecotourism Hotel Fee, and old motor vehicle fee). *The new fees are not expected to generate revenue until 2013-14, when they can generate as much as RWF 1.8bn in 2013-14 (US$ 2.9mn) and RWF 2bn in 2014-15 (US$ 3.2mn).*

Seed financing from public domestic stakeholders (line ministries)

FONERWA will be a useful mechanism for line ministries to leverage additional public finance to realise crosscutting environment and climate change initiatives. As a result, there is a convincing argument (put forward by MINECOFIN), for stakeholders to help capitalise the Fund with the understanding that they will have access to larger shares of financing in the future (e.g. leveraging matching donor contributions) and assistance with proposal development. *In order to avoid any "free riding", sectors who provide seed funding will be given priorities in terms of project screening and approval process.*

Table 17 projects the level of contributions from domestic stakeholders according to the fiscal projections in the approved 2011-12 budget. This assumes that public domestic stakeholders in the form of line ministries provide seed funding equivalent to 2% of their domestically financed capital budgets over a three-year period. *The projected capitalisation is the largest source of domestic contributions identified so far, ranging from RWF 4.5 to 5.1bn between 2012-15 (US$ 7.4 to 8.2mn).* The impact of this contribution can be seen in Scenario 3 of the summary of all domestic capitalisation scenarios in Table 12 and Figure 6 above.

TABLE 17 Domestic Capitalisation Projection of Seed Funding (RWF mn)

	2012-13	2013-14	2014-15
Baseline Total	4,483.7	5,064.5	5,108.0
MINAGRI	1,270.8	1,453.8	1,663.0

70 In 2005, Rwanda proposed a ban on single-use plastic bags, which came into effect in 2008.

71 There is momentum for PES related revenues in particular, and planning has been ongoing for this. There is no precedent for vehicle or hotel taxes in Rwanda, and these are areas that the Fund Manager will need to spearhead in the first year. Adequate quantitative data and recommendations have been provided in this document to kick start the process. The relevant stakeholders including the Rwanda Revenue Authority (RRA) and Rwanda Development Board (RDB) were engaged throughout this exercise. Considering the time it would take to set up the system, revenue projections for such new environmental fiscal instruments were included from year two in the capitalisation projections to reflect this.

TABLE 17 Domestic Capitalisation Projection of Seed Funding (RWF mn)

Continued

	2012-13	2013-14	2014-15
MINICOM	35.9	49.0	66.9
MINEDUC	561.8	988.7	775.3
MININFRA	2,449.3	2,456.6	2,463.8
MINIRENA	61.6	13.7	37.7
MINALOC	104.1	102.6	101.1
MIDIMAR	0.2	0.2	0.3

SUMMARY OF DOMESTIC CAPITALISATION

Key Finding: There is need for sources additional to domestic financing to capitalise FONERWA.

Results of the above assessment of legally mandated sources of domestic capitalisation for FONERWA clearly reveal that the initial and projected domestic capitalisation is expected to be minimal during the first 3 years of operation. *Overall, domestic capitalisation is projected to range between RWF 793.4mn to 5.3bn (US$ 1.3 to 8.7mn) in 2012-13 and RWF 339.7mn to 7.4bn (US$549,000 to 11.9mn) by 2014-15 (See Table 12 and Figure 6 above)*. This demonstrates the need for external financing sources such as bilateral donor contributions, international environment and climate finance and innovative private finance, explored below. However, given current levels of aid flow, DP interest in the Natural Resources sector and potential of creating new revenue sources, scenario 2 can be considered as the most realistic source for external capitalisation.

5.2 EXTERNAL FINANCING

External financing for Fund capitalisation

Rwanda's Development Partners and other international stakeholders are expected to play an important role in capitalising FONERWA. This is particularly important given the limited current and projected domestic capitalisation estimated to be available for the Fund (See 5.1.).

Engagement with Rwanda's in-country Development Partners (DPs) revealed that many have the scope to capitalise FONERWA within their current or upcoming country programs, while other DPs (without in-country flexibility) have HQ-level commitments to support climate change and the environment through HQ level facilities (See Annex 7 for review of current DP support for the ENR sector). In addition, vertical environment and climate funds, as well as private foundations and NGOs, have been involved in capitalising FONERWA-type funds in other countries (See Annex 2 for vertical climate funds).

In order to forecast **hypothetical support** from Rwanda's DPs, per capita endowment funding of other recent green development funds (Bangladesh, Ethiopia, and Indonesia) was reviewed to establish three indicative baseline scenarios (Table 18).

TABLE 18 Review of Initial Capitalisation of other FONERWA-like Funds

	Indonesia		Bangladesh		Ethiopia
	Indonesia Climate Change Trust Fund (ICCTF)	Indonesia Green Investment Fund (IGIF)	Bangladesh Climate Change Resilience Fund (BCCRF)	Bangladesh Climate Change Trust Fund (BCCTF)	Strategic Climate Institutions Program (SCIP)
Donor	UNFCC, GEF, Adaptation Fund, DfID, AusAid	France, DFID, Japan, Korea, Islamic Development Bank	Switzerland, SIDA (Sweden), DFID (UK), EU, Denmark	None	DFID
Donor Capitalisation	US$9.5mn	US$100mn	US$125.5mn	None	US$24mn
Donor Capitalisation per capita	4.13 cents	43.48 cents	77.36 cents	N/A	26.41 cents
Domestic Capitalisation (country contribution)	15% match of its own resources, on receipt of other pledges	US$400 million to the fund	None	Allocation of $100m each year for 3 years	None

From Table 18 results show the Bangladesh Climate Change Resilience Fund (BCCRF) – established by DPs – has the largest external capitalisation in absolute and per capita terms, with US $125.5mn or 77.36 US cents per capita, compared to Indonesia and Ethiopia's funds. On average, per capita contributions across the three countries is 39.7 US cents per person.

This average was used to create the first hypothetical estimation of DP contributions to FONERWA under the baseline scenario presented in Table 19. The baseline scenario assumes support of roughly US$4.3mn per year, based on a Rwandan population of 11.35mn (the average growth rate to the latest household survey72 (39.7 US cents multiplied by 11.35mn) was applied). However, the full level of endowment support will begin from the second financial year (2013-14) under the baseline scenario, with support in 2012/13 being limited to the indicative support from DFID for the operationalisation of the fund: £1.5mn. This is a practical assumption given the time required for contributing donors to mobilise resources.

Scenario 2 in Table 19 considers a situation where more DPs provide funding in the first year of operationalisation. Given Rwanda's strong governance and economic development records, the highest per capita capitalisation is assumed (77.36 US cents), based on DP contribution levels to the Bangladesh Climate Change Resilience Fund. Scenario 3 considers matching seed funding, rather than per capita support, to other funds, and is linked with the domestic capitalisation by line ministries (Table 17).

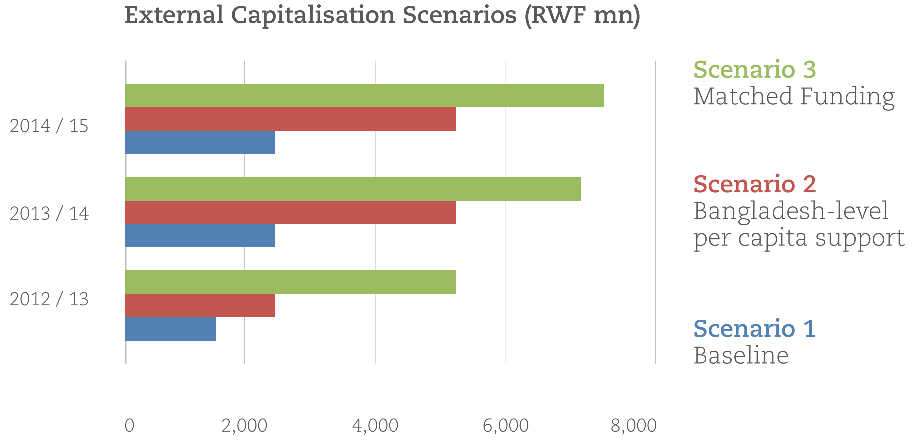
72 EICV3, 2012.

TABLE 19 External Capitalisation Scenarios (RWF mn)

Scenario	2012-13	2013-14	2014-15
S1: Baseline	1,456.8	2,633.6	2,660.0
S2: Bangladesh-level per capita support	2,691.7	5,383.4	5,437.3
S3: Matching of GoR funding	5,277.1	7,146.9	7,399.0

Figure 7 below presents the three external capitalisation scenarios. Results show that the hypothetical per capita contribution scenario (S2), **based on levels given to Bangladesh yields RWF 5.4bn ($8.8mn) from 2013-14 onwards**. The level of support under the one-for-one matching scenario (S3), yields capitalisation of RWF 5.3 to 7.4bn between 2012 and 2015 (US$ 8.7 to 12mn) (As above in Table 17). The baseline scenario (S1) based on average per capita contributions to Indonesia, Bangladesh and Ethiopia yields the lowest capitalisation, RWF 2.7bn by 2014-15 (US$4.3mn).

FIGURE 7 External capitalisation scenarios 2012-15.



Potential modalities for channelling bilateral and multilateral Development Partner support to FONERWA are detailed in Table 20. These include two options for earmarking for specific financing windows and entry points, with suggested minimum investment levels, in addition to non-earmarked support for pooling in a basket fund for use across all thematic financing windows.

However, it is important to note that extensive earmarking is discouraged to some extent, as it is not the favoured aid modality as per the Government of Rwanda's Aid Policy, 2008.

TABLE 20 Modalities for channelling Development Partner support

Type of Support	Description	Minimum Investment
Non-earmarked Support	This can be used across all 4 financing windows	No minimum investment
Earmarked Support (option 1)	Support for specific window/s	No minimum investment
Earmarked Support (option 2)	Support for specific key entry points	Minimum investment of US$ 1 million

Note: Earmarking for specific beneficiaries including public and private recipients (e.g. CSOs, private sector, etc.) will be accommodated.

SUMMARY OF EXTERNAL CAPITALISATION

Key Finding: External capitalisation from bilateral Development Partners provides much needed resources to domestic capitalisation.

Results of the above assessment external capitalisation for FONERWA show there is a wide range of possible scenarios for DP support, depending upon how donors' commitments evolve over time. However, this support is within roughly the same range as domestic support. **Scenario estimates indicate that overall external capitalisation from bilateral DPs is projected to range between RWF 1,456.8 to 5,277.1mn (USD$ 2.4 to 8.7mn) in 2012-13 and RWF 2,660 to 7399mn (USD$ 4.3 to 12mn) by 2014-15 (See Table 19 and Figure 7 above).**

This demonstrates the need for strong support of Rwanda's bilateral Development Partners for FONERWA capitalisation, and commitments of multi-year support to help ensure sustainable and predictable external financing. The per capita estimations for DP contributions provide a useful tool for engaging in-country donors.

GOR procedures, as set in Rwanda Aid Policy Manual of Procedure (2011), published by MINECOFIN will be used as the main basis for such resource mobilisation. Resources from DPs will be mobilised with the aim to seek support for Fund objectives, in line with the FONERWA Law, GoR priorities/strategies and demonstrated need. This approach is consistent with the recent international research/negotiations, which highlights that funds should use existing country systems.

Building on GoR's strong performance in Public Financial Management (PFM) as the basis for resource mobilisation: As highlighted by the recent Public Expenditure and Financial Accountability (PEFA report, the introduction of the Medium Term Expenditure Framework (MTEF) in 2001 has strengthened the links between policy and budgets and made the budget more transparent; the SMARTGOV and cash budget systems have enabled Government to exercise greater control over expenditure and prevent the build up of excessive arrears. These reforms have led to a significant improvement in oversight. Expenditures have generally been in line with budgets. A policy of zero-tolerance on corruption has been implemented, through the active role of the Ombudsman. In fact, Rwanda has constantly improved its performance in all PEFA indicators since 2007.

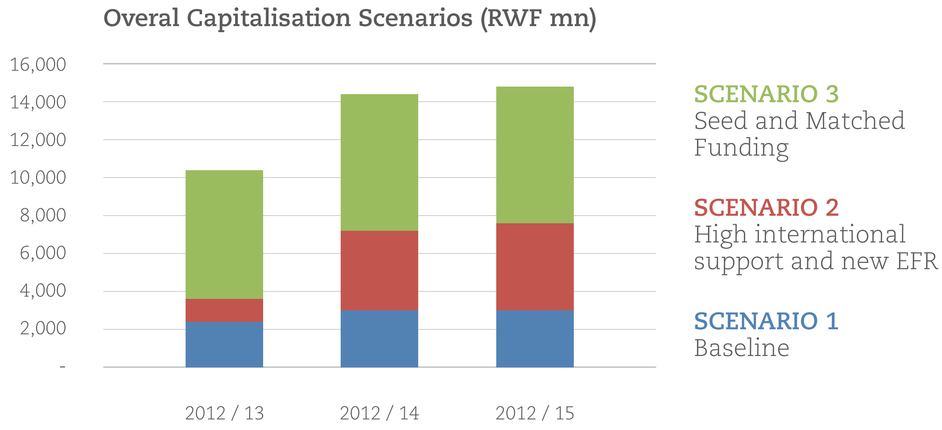
5.3 OVERALL CAPITALISATION (DOMESTIC & EXTERNAL)

Optimistic and pessimistic cases for 2012-15

Based on findings from sections 5.1. and 5.2. regarding potential domestic and external (bilateral and multilateral) capitalisation, three combined financing scenarios were developed. Figure 8 presents the scenario projections for the overall capitalisation of FONERWA.

The baseline scenario (SI) takes the baseline assumptions for domestic and external capitalisation, and the second (S2) and third (S3) scenarios take assumptions for the corresponding scenarios in domestic and external capitalisation sections (See Tables 12 and 19 for summary domestic and external capitalisation scenarios, respectively).

FIGURE 8 FONERWA Capitalisation Scenarios (RWF mn)



Under the most optimistic case – supposing all scenarios come about across each of the three years – overall capitalisation increases from RWF 10.6bn in the first year (2012-13) to RWF 14.8bn in the third year (2014-15) or USD$ 17.4 to 23.9mn, respectively. Under the most pessimistic case (S1 baseline only), capitalisation increases from RWF 2.3bn in the first year to RWF 3bn in the third year, or US$ 3.7 to 4.8mn, respectively. Under the middle Scenario (S2), capitalisation ranges from RWF 3.5bn to RWF 7.7bn from the first year to the third year, or US$ 5.7mn to 12.5mn.

Considering current levels of aid flow to the environment and natural resources sector by Development Partners, *Scenario 2 is considered the most likely capitalisation prospect for FONERWA*. This is attributed to the high potential for generating new environmental revenue through payments for ecosystem services (PES) – a framework which has been developed – and the expectation that DPs will invest at equivalent levels in Rwanda (77.36 cents/capita) as those invested in the Bangladesh Climate Change Resilience Fund (BCCRF). In the short to medium-term, Scenario 1 is considered overly pessimistic and Scenario 2 more likely than Scenario 3, the latter of which assumes investment from key line ministries and the prospect of matching funds from DPs. However, it is to be noted that considering the large gap in overall financing to the sector, even in the most optimistic scenario, FONERWA will not be able to finance the entire sector gap. The aim, therefore, should be to finance only those projects/programmes that are fully compatible to FONERWA's objectives and bring maximum value for money.

It is up to the FONERWA Managing Committee, which has representation from the GoR, DPs, the private sector and civil society, to further prioritise key entry points of each of the windows based on the resource ceiling available every year. Such decisions will have to be based on emerging priorities, the nature of investments from various sources and associated conditions. For example, DPs may decide to focus on their own priorities while engaging in negotiations regarding which specific window/entry point or even broader themes (climate change or environment) they would like to support. As a result, further prioritising of entry points (based on S1 or S2 or S3) can be counterproductive and potentially misleading at this stage in Fund design.

As mentioned, although private sector capitalisation through investment options is a possibility, this is not anticipated to materialise in the short to medium-term, and therefore has not been considered in capitalisation projections. FONERWA does not yet have a proven track record for domestic project/programme innovation to satisfy expectations of high rates of return of international/national private investors. Given FONERWA's largely "public goods" orientation, focus on financial returns on investment from inception for the short to medium term may undermine the core focus of expenditure targeting social and environmental returns, yet likely yielding very low actual financial returns on investment.

5.4 OTHER EXTERNAL FINANCING

External financing for project and/or programmatic support

The below analysis assesses major sources and levels of external financing for project and/or programme level support to Rwanda, and Sub-Saharan Africa (SSA) from international public sources for environment and climate change. Although quantification of such support for future FONERWA activities is not possible due to the unpredictable nature of these funding sources (funds are provided on a project by project basis), it is important to highlight these sources for Fund design considerations.

On the whole, Rwanda has received an estimated USD $31 million to date, with the Global Environment Facility (GEF) as the leading source (See Table 21).

TABLE 21 Overview of major sources of international public environment and climate finance accessed to date (not comprehensive)

Source	Amount (USDmn)	Purpose	Timeframe
GEF	$20	Multiple; 12 projects	To date
GCCA	$6mn (€4,555)	Ensuring food security through land tenure reform	2010-2012
AAP	$2.9mn	Building a comprehensive national adaptation approach	2010-2012
World Bank	$2.28	Carbon offsets	2009-2019
Estimated Total	$31		

*Source: GoR. Global Environment Facility (GEF), Global Climate Change Alliance (GCCA), Africa Adaptation Programme (AAP). *Note: The above table presents an indicative total of international public environment and climate finance Rwanda has accessed to date, and is not comprehensive.*

Global Environment Facility (GEF) project/programme external financing to Rwanda. The Global Environment Facility has consistently been one of the largest supporters of environment and climate activities in Rwanda – and SSA. To date, Rwanda has received an estimated USD$ 20 million (with $80 million in co-financing) from the GEF for 12 projects in total. 73

These projects cover themes ranging from biodiversity and trans-boundary waters to climate change and persistent organic pollutants (POPs). In terms of climate finance, project support has gone to the development of Rwanda's NAPA and National Communications, reducing vulnerability to climate change (executed under UNDP) and sustainable energy development (executed under the World Bank), among other enabling activities. Rwanda has also benefited from East Africa regional GEF projects such as climate related initiatives of "Greening the Tea Industry" and "Promoting Energy Efficiency in Buildings in Eastern Africa", both implemented by UNEP.74

The GEF is currently implementing its 5th replenishment cycle (GEF-5), between 2010-2013 (with $4.34 billion in approved resources). An interview with a GEF representative indicated that some of these resources have been allocated for use in Rwanda and, in this context, there is scope for project-level engagement with FONERWA.75 The extent to which GEF endowment funding is possible for Rwanda remains to be seen. However, GEF has capitalised environment and conservation oriented funds around the world, e.g. Mexico's National Environment Fund (FMCN) being considered a best practice case.76

73 Watanabe, Y., 2012. Global Environment Facility: its policies and strategies, and opportunities in Rwanda. GEF Secretariat presentation, 20 April 2011, Kigali, Rwanda.

74 Watanabe, Y., 2012.

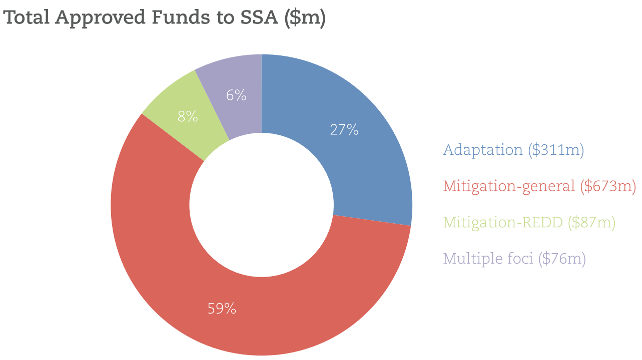
75 Watanabe, Y., Program Manager & Senior Biodiversity Specialist, GEF Secretariat. Telephone interview conducted 6 March 2012.

76 Watanabe, Y., 2012.

Regional climate investment trends. From 2004 to 2011, a total of USD$ 1.15 billion in international climate finance was approved for Sub-Saharan Africa (SSA) towards adaptation and mitigation projects and programmes. However, only $ 370mn, or one third of the total approved funds, has been disbursed/received (See Figure 10). The majority (67%, including Reduced Emissions from Deforestation and forest Degradation, REDD finance) of these funds have gone towards mitigation related activities, with 27% towards adaptation and 6% towards multiple foci investments (See Figure 10).[77]

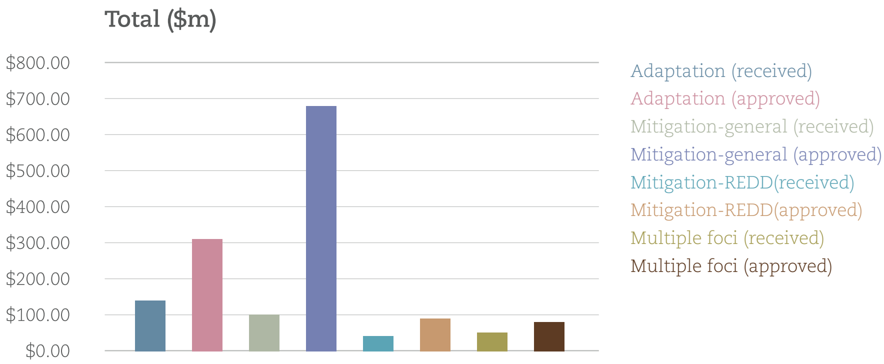
The distribution of climate adaptation and mitigation funding is unequal across SSA countries, with $493 million approved for South Africa as of January 2012. Morocco is the next highest with $335 million approved, followed by Egypt with $178 million approved – all primarily towards mitigation. In contrast countries such as Angola, Zimbabwe, Uganda and Chad have received less than $1 million each to date for both mitigation and adaptation combined. *Rwanda fairs somewhat better than other Sub-Saharan neighbours with $16.47 million approved, and $11 million received to date.* [78]

FIGURE 9 Total approved climate adaptation funds to Sub-Saharan Africa. Reduced Emissions from Deforestation and forest Degradation (REDD).



Source: Data from Climate Funds Update (CFU) website as of February 2012.

FIGURE 10 Status (approval, received) of various adaptation and mitigation funding themes for Sub-Saharan Africa.



Source: Data from Climate Funds Update (CFU) website as of February 2012.

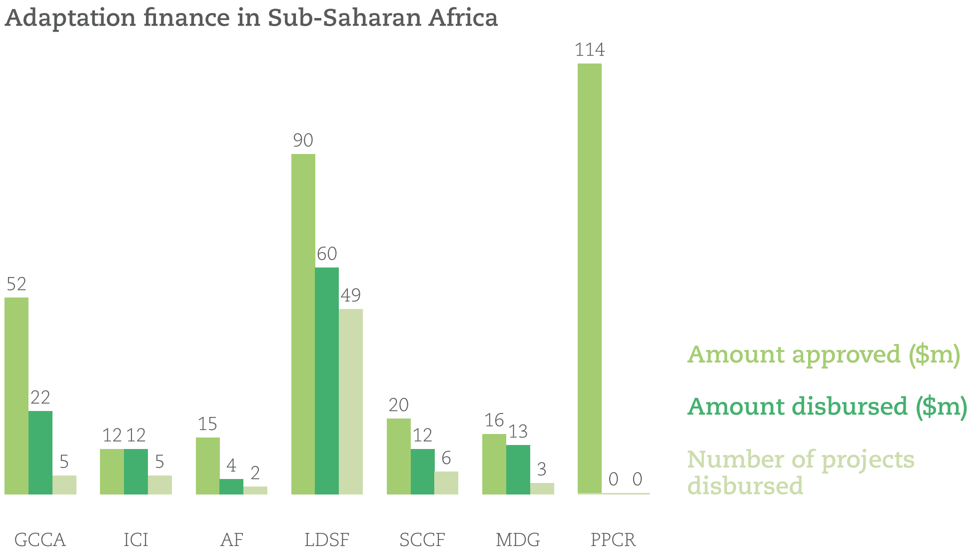
As shown in Figure 10, low levels of disbursed/received funds against approved funds makes countries' climate related adaptation and mitigation planning challenging. This situation is exacerbated by the highly uncertain and unpredictable landscape of future international climate financing (particularly related to funds such as the GCF, See 3.3.). *Moreover, overreliance on such international finance for project or programme-level support to FONERWA is not sustainable.*

Adaptation financing. Based on CFU data, Nakhooda et al. finds that although adaptation financing for SSA has been historically low relative to global levels, this trend appears to be changing in absolute terms. *Around $132 million of pledged $328 million has been disbursed between 2004 and 2011 to SSA, representing about 30% of adaptation finance disbursed for adaptation globally ($439 million)* as of November 2011. A total of 5 of the 31 adaptation projects financed globally in 2011 were in SSA, reflecting limited overall investments in adaptation both in SSA and globally. Based on CFU data, there are 7 major sources of adaptation finance for SSA (See Figure 11 below).

77 Climate Funds Update (CFU), 2012. Climate Funds Update website visited 4 March 2012.

78 CFU, 2012.

FIGURE 11 Adaptation financing in Sub-Saharan Africa (US$mn). Source: Nakhooda et al, 2011, based on CFU data. Global Climate Change Alliance (GCCA), International Climate Initiative (ICI), Adaptation Fund (AF), Least Developed Countries Fund (LDCF), Special Climate Change Fund (SCCF), Millennium Development Goal Fund (MDG), now closed, and the Pilot Program for Climate Resilience (PPCR).



While the Least Developed Countries Fund under GEF has disbursed financing for the largest number of projects in SSA (49), the Pilot Program for Climate Resilience (one of the World Bank's Climate Investment Funds, CIFs) has approved the largest amount of finance ($114mn), *which has yet to be disbursed or implemented*. The primary projects funded by the LDCF are those supporting the development of National Adaptation Programmes of Action (NAPAs).

The largest adaptation project in the SSA region to date is a Global Climate Change Alliance supported project with the Government of Mozambique ($14 million). Rwanda received €4,555 in *GCCA support towards the environment and natural resources sector for ensuring food security through land tenure reform (2010-2012)*.

The global Adaptation Fund under the UNFCCC has approved the least adaptation finance, largely because it started in 2010. Rwanda has since registered its National Implementing Entity (NIE) within the Ministry of Environment and Natural Resources (MINERENA) to begin accessing the Adaptation Fund. As mentioned in 3.3., *Rwanda is one of only four accredited NIEs in Africa, along with Benin, Senegal and South Africa, and seven globally – lending Rwanda some degree of early mover advantage against a limited field of accredited NIEs.*

Mitigation financing. Although twice as much financing has been approved for mitigation ($645 million) in SSA as adaptation ($328) to date, roughly the same amount has been dispersed for mitigation ($156 million, across 42 projects) as adaptation ($132 million).79

Analogous to adaptation financing, the GEF has been the largest source of mitigation finance to SSA, disbursing $92 million under its 4th replenishment period. In 2011, under the GEF 5th replenishment period, $18 million was approved in support of the 1000 MW African Rift Geothermal Development Facility, as part of a UNEP Technical Assistance program in partnership with Ethiopia, Eritrea, Djibouti, Kenya, Uganda and Tanzania. *This is potentially relevant to future mitigation financing for Rwanda, as geothermal exploration and power development are part of national energy security and green growth goals.80*

Clean technology financing for mitigation is also available through the World Bank's Clean Technology Fund (CTF), under the CIFs, a partnership between regional development banks, developed and developing countries, and other development partners.81 The African Development Bank (AfDB) is the implementing entity for CTF/CIF projects in Africa, which are largely focused on emissions reductions in middle-income African countries (e.g. South Africa and Nigeria). The Scaling Renewable Energy Program (SREP) is another World Bank CIF targeting deployment of renewable energy and energy efficiency technologies in lower income countries (e.g. Mali).82 Each of these is potential financing sources for FONERWA projects/programmes.

79 Nakhooda et al., 2011.

80 Republic of Rwanda, 2012. Climate Resilience and Green Growth Strategy.

81 World Bank, 2008. Clean Technology Fund. Background paper.

82 Nakhooda et al., 2011.

Mitigation financing – Reduced Emissions from Deforestation and forest Degradation (REDD). For REDD activities in SSA, Climate Fund Update data indicates that there are around 40 projects worth $119 million approved, with $47 million for 32 of these projects disbursed as of November 2011. Two funds are the primary sources of finance for REDD projects including the Congo Basin Forest Fund (CBFF) and the World Bank CIF, the Forest Investment Program (FIP). The CBFF accounts for 13 projects ($14 million), managed and implemented by AfDB, while FIP investments are the largest to date with $32 million in Burkina Faso and $60 million in the Democratic Republic of Congo. Other funds include the World Bank's Forest Carbon Partnership Facility (FCPF) and the UN-REDD Programme both working actively in the SSA region.

Although Rwanda qualifies as a Congo Basin country, technically eligible to such funds, Rwanda is not currently a priority country for the above REDD funds, given the small size and relatively stabilised condition of its primary forests (i.e. limited deforestation or degradation of primary forests).83

KEY FINDINGS AND DESIGN ELEMENTS:

Disbursements from major external project/programme financing sources for environment and climate adaptation and mitigation have been limited in both Sub-Saharan Africa and Rwanda to date. On the whole, Rwanda has received an estimated USD $31 million to date from major international public sources of environment and climate change finance. The Global Environment Facility has been a leading contributor to Rwanda and SSA for both environment and climate project/programme-level finance, contributing around $20 million to Rwanda to date. In the short-term, Rwanda stands to benefit from its early mover advantage to attract Adaptation Fund support due to the limited number of accredited NIEs at present.

In terms of access to international public funds, there are many multilateral and bilateral sources, each with different procedures and requirement criteria, some of which are not yet known (e.g. GCF). To address this, the Fund design works to broadly align with these in the following ways:

1 The Fund is aligned with Rwanda's environment and climate change related legal commitments, strategies, plans assessments based on present and anticipated future needs. Windows and entry points showcasing these demonstrate that it is a country led process addressing Rwanda's specific needs and sustainable development priorities.
2 The Fund will work closely with the already established institutions such as Rwanda's recently accredited National Implementing Entity (NIE) under the Adaptation Fund, housed in MINIRENA. This will help promote institutional alignment and synergies that are already in compliance with international funds (the AF in this case).
3 Further, Adaptation Fund NIE eligibility criteria of (1) Fiduciary management and integrity, (2) Institutional capacity, (3) Transparency, (4) Self-investigative powers and (5) Anti-corruption measures are critical considerations for FONERWA design.
4 Sustainability criteria established by the GoR for the Clean Development Mechanism are taken into account for proposal screening purposes.

FONERWA will apply for resources directly from international public funds and other financing facilities supporting environment and climate change, as and when deemed appropriate by the Fund management team. Any additional resources required to facilitate the process (external support) will have to be approved by the FMC. FONERWA will also provide technical support to line ministries/districts/private sector to write proposals to access finance from these international financing facilities.

83 Republic of Rwanda, 2012. Climate Resilience and Green Growth Strategy.

SECTION 6

FINANCIAL STRUCTURE AND INSTRUMENTS

SECTION 6 - FINANCIAL STRUCTURE AND INSTRUMENTS

6.1 FINANCIAL STRUCTURE

The financial structure of FONERWA refers to the profile of disbursements of the Fund over time. Since various sources of resources from the GoR, DPs, and other external climate finance are expected to be pooled to the Fund every year it is appropriate to consider FONERWA as a **basket fund**. This follows from consideration of other types of financial structures including endowment funds, revolving funds, sinking funds and investment funds.

Endowment funds, for example, are investment vehicles that are established with a large initial capitalisation, but generally have no major subsequent replenishment apart from "interest earned." Endowment funds are invested in financial markets, and a pre-determined mix of the interest earned and principle of the endowment fund are used during pre-determined financial years to conduct activities consistent with the fund's mission. FONERWA does not fall into this category. It is also noted that some Development Partners (e.g. Netherlands) cannot contribute to this type of financial structure due to their foreign aid policy.

Another financial structure considered is **revolving fund**. According to the Global Environment Facility (GEF) definition, revolving funds provide for the receipt of new resources on a regular basis – for example, proceeds of special taxes designated to pay for conservation programs – which can replenish or augment the original capital of the fund, and provide a continuing source of money for specific activities.84 Although the GoR's own revenue streams are expected to be added to the Fund every year, this is only a partial feature of the fund. In addition, FONERWA funds will not be exhausted each financial year, as under **sinking funds**, and the Fund (in the short to medium-term) is not expected to generate sufficient financial returns (profit) for investors, as under an **investment fund** structure.

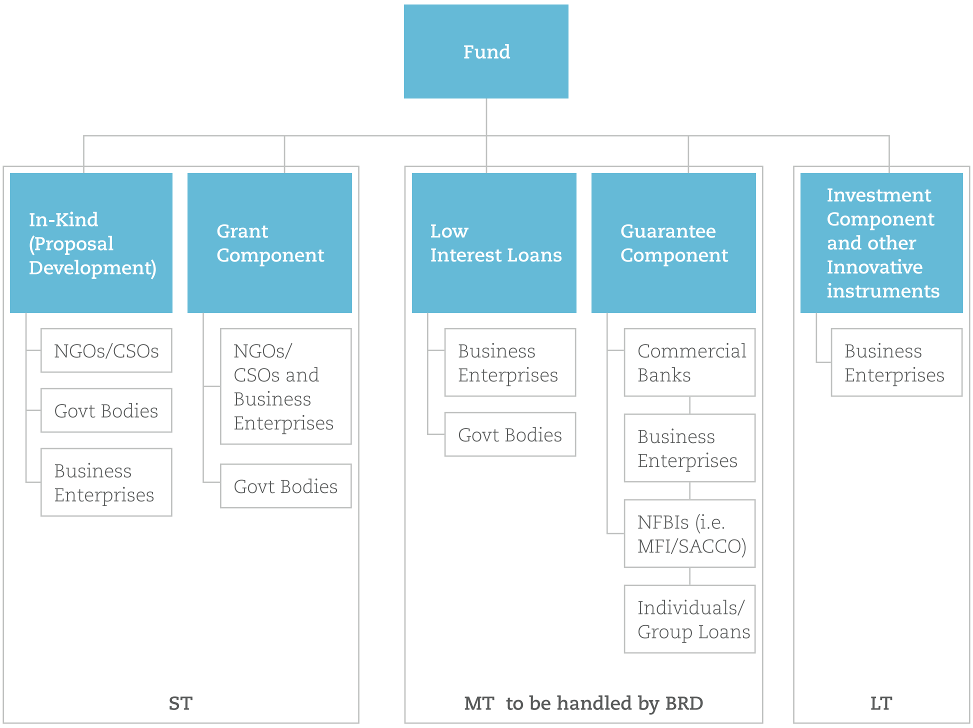
However, as the Fund starts demonstrating adequate return potential (which has been taken into consideration in project screening procedures), the structure of the Fund or a portion of the Fund can be changed to "venture capital", to provide the private sector with an investment option. Subject to approval by the FONERWA Managing Committee, this option should only be explored in the long-term, given the key priorities and focus of FONERWA Law.

6.2 FINANCIAL AND NON-FINANCIAL INSTRUMENTS AND BENEFICIARIES

The FONERWA fund will utilise several financial instruments to achieve its objectives, phasing in more complicated instruments over time. Figure 12 presents the financing instruments in the short term (ST), medium term (MT), and long term (LT), and targeted beneficiaries, which includes national (line ministries) and sub national (e.g. Districts) Government bodies. Research institutions are also considered as non-governmental organisations.

84 "Any particular environment fund can combine these features depending on its sources of capital." The Global Environment Facility (GEF), 1998. "Evaluation of Experience with Conservation Trust Funds," pg. 4. Online: http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.12.Inf_.6.p

FIGURE 12 FONERWA's Financial and Non-Financial Instruments.



Short-Term Instruments (to be active from 0-1 year)

Two primary financial instruments are proposed for operationalisation by FONERWA's FMT in the short-term (0-1 year): (1) In-kind support for proposal development and (2) Grants, a component of which will be co-financing (e.g. for private sector beneficiaries).

In-kind support (Technical Assistance). FONERWA's single, non-financial instrument, and the tool through which FONERWA is expected to leverage the largest amount of additional (external) financing, will be in-kind support for the development of project proposals. The screening process (7.3.) will determine whether a project proposal could potentially attract financing from external sources: global environment or climate funds, private sector equity and private foundations, among others. If the screening process determines that FONERWA will provide a project with in-kind support, then the FMT will assist project promoters with identification of the most appropriate source of finance, the development of proposals and, in some cases, offset the cost of proposal development through grants (discussed in the next sub-section). In-kind support will be available to all domestic stakeholders: NGOs/CSOs, GoR institutions, and the private sector.

In order to avoid conflict of interest, it is recommended to adopt a 'Chinese wall' model so that that the proposal development advisors (and any embedded technical advisor that participated in proposal development) do not take part in the screening process. This will be closely monitored by the FTC.

Grants. Grants are a transfer of money from the Fund to NGOs/CSOs, government and research institutions for the funding of a specific project or programme. Grant money is not a loan, and does not have to be repaid, but it does have to be spent according to FONERWA's operational guidelines for the particular grant.

Grants may be offered for 100% of a project cost, but will generally be provided on co-financing or "top-up" terms, whereby the Fund provides a grant for a proportion of the overall cost of a project on the condition that the promoter provides the remaining funding. Grants may also be given to offset the costs of proposal development for government projects or high-priority civil society projects, particularly in cases where specialist expertise is required that is beyond the capacity of the FMT or project promoter.

Grants will also be provided in the form of environment and climate change awards to reward innovation, an approach highlighted in the FONERWA Law. Prizes will primarily be engineered to stimulate and showcase R&D or technology development for climate change mitigation and adaptation, and for improving resource efficiency. Note: prizes will not exceed more than RWF 1mn and their award will be decided by the Fund Managing Committee.

Medium-Term Instruments (to be active from 2-5 years)

The medium-term instruments of the Fund are slightly more complicated financial instruments that will require the Fund Management Team to establish a relationship with a financial institution. The Rwanda Development Bank (BRD) is the most suitable financial institution to offer such instruments given its comparative advantage in managing such GoR funds (compared to other commercial banks) targeting the private sector, and is open to such an arrangement in principle.85 The FMT will have to work with BRD to develop, pilot test and roll out these products – **based on market signals**. BRD has substantial experience in developing such products (guarantee, co-financing, low interest/concessional loans – see comparative advantage analysis, Section 7), and has its own Special Purpose Vehicle model (i.e. the Rwanda Development Fund) for private investment.

Low-Interest and/or Concessional Loans. A low-interest and/or concessional loan is financing that offers repayment terms that are more lenient (in net present value terms) than prevailing terms offered by domestic financial institutions. Low-interest loans will also generally have fixed interest rates to provide project promoters with greater predictability of their repayment profile. Such financial support is generally considered to be appropriate for projects that are unlikely to be commercially viable if they were to rely on commercially available interest rates or for projects without sufficient collateral to obtain financing from domestic financial institutions.

Low-interest and/or concessional loans will be provided for the private sector and some government institutions (where applicable). Such loans could also be provided for project and proposal development costs, with the repayment conditional on successful project or proposal execution.

CASE 1: CONCESSIONAL LOANS UNDER RWANDA'S SMALLHOLDER CASH OR EXPORT CROP DEVELOPMENT PROJECT (PDCRE).

Source: IFAD, 2011. http://www.ifad.org/evaluation/public_html/eksyst/doc/profile/pf/rwanda_79.htm

PDCRE is an externally financed project under the International Fund for Agricultural Development (IFAD). IFAD's assistance in Rwanda amounts to a total of $120mn in 12 concessional loans. The first three projects were started in the early 1990s, and disrupted during the 1994 war, and reactivated in 1996. The PDCRE was approved and implemented in 2003 and completed in 2012. The total contribution to this project was $25.09mn with IFAD providing a highly concessional loan amount of $16.26. The goal of the project was to maximize and diversify the income of poor smallholder producers of coffee, tea, and other crops. The program was designed and implemented on the following 5 components; (i) coffee diversification; (ii) tea development in two districts; (iii) credit scheme for smallholder tea and coffee producers; (iv) development of new cash and export crops; and (v) project coordination.

Concessional loans play a role in multilateral and bilateral climate change funding initiatives and arrangements. They are particularly appropriate for a mitigation activities, whereas grant based financing is more useful for adaptation and capacity building measures. Multilateral funds, such as the Clean Energy Investment Framework, the Pilot Program for Climate Resilience (PPCR), Scaling up Renewable Energy Program (SREP), the Strategic Climate Fund (SCF) and Clean Technology Fund (CTF) all use concessional lending as a financing instrument (See 5.4.)

Relevance to FOWNERWA? Concessional lending offers an important instrument for FONERWA support to private sector initiatives in particular that has been successfully applied in Rwanda's PDCRE programme. Similar to multilateral funds (e.g. PPCR, CTF) that successfully utilise this instrument, concessional lending is also an attractive mechanism for private sector initiatives related to green growth and promotion of renewable/clean technologies.

Guarantees. A loan guarantee is a promise by a third party (guarantor) to pay a lender some (or rarely) all of the balance on a loan if the recipient is unable to pay. The loan guarantee is a contingent liability that remains off the guarantor's balance sheet if the borrower repays the loan; otherwise, the guarantee is moved onto the guarantor's balance sheet according to its contractual obligations to cover repayment.

85 Rwanda Development Bank (BRD). Interview conducted 13 March 2012.

Loan guarantees targeting the private sector will typically cover 50–80% of the value of outstanding loans (to ensure that the lender has an incentive to monitor repayment). Guarantees are a common tool for providing access to financing for high-risk, private sector projects, e.g. in low-carbon technologies and energy efficiency. *It is critical to note that MINECOFIN has indicated, as per Rwanda's Debt Sustainability Strategy, that GoR revenues are not used for guarantees in the short to medium term of FONERWA operationalisation before a track record and adequate market demand is better known*. Furthermore, FONWERA projects/programmes are not anticipated to achieve sufficient scale (e.g. projects greater than US $50mn) to justify the provision of guarantees from GoR revenues.86

CASE 2: RWANDA'S AGRICULTURAL GUARANTEE FACILITY (FGA)

Source:
1) IFAD, 2008. A guide for financing agriculture input procurement and output marketing in Rwanda.
2) MINECOFIN, 2012.

The Agricultural Guarantee Facility was formed by the Rwandan government and managed by the central bank as an instrument to boost investment into the agricultural sector. It provides financing to rural projects that cannot provide sufficient collateral for loans, and/or are deemed too risky by banks. It aims to reduce bank risks and overcome the lack of guarantees for economically cost-effective and financially viable projects that do not have a negative impacts on the environment. The initial grant for this facility was RWF 2.9 billion, where RWF 1.1 billion is allocated from the national budget and RWF 1.76 billion is from the Netherlands Cooperation, through the Dutch Embassy in Kigali[1]. Applicants send their loan application to the BPR, which undertakes analysis and sends this to the intermediary bank. There are seven intermediary financial institutions with 81% of the loans submitted by the Rwanda Development Bank (BRD).

The Intermediary bank undertakes financing of the project once the National Bank of Rwanda (BNR) accepts to cover perceived risks of the guarantee fund. Typically, beneficiaries pay 0.75% to 1.25% in bank fees, and up to 17.25% in interest rates, with between 6-10 months to repay the loan. They must also provide collateral worth up to 70% of the loan, such as offices, farming fields and storage units, among others. As of 2008, 167 borrowers have benefited from the AGF, with 54% of borrowers requesting funds to invest in coffee agriculture. Approximately 20% of borrowers invest in agricultural output marketing, and 5% invest in agricultural input procurement activities. The average loan size is RWF 68 million (RWF 54 million for short term funds and RWF 54 million for investment loans). The BNR has guaranteed approximately 41% of all loan requests under the AGF[2].

Relevance to FONERWA? The FGA demonstrates guarantee facilities have precedent in Rwanda and provides a useful model which guarantee instruments under FONERWA might adopt and adapt for financing environment and climate change related activities in the private sector. However, it is important to note that it has been the express interest of MINECOFIN, as per Rwanda's Debt Sustainability Strategy, that GoR revenues are not used for guarantees in the short to medium term of FONERWA operationalisation before a track record and adequate market demand is better known.

Long-Term Instruments (to be active >5 year)87

FONERWA does not yet have a proven track record for domestic project/programme innovation to satisfy expectations of high rates of return of international/national private investors. Given FONERWA's largely "public goods" orientation (see FONERWA Law), focus on financial returns on investment from inception (i.e. the short to medium-term) may undermine the core focus of expenditure primarily targeting social and environmental returns, yet likely yielding very low actual financial returns on investment. For example, a preliminary screening

86 MINECOFIN, 2012.

87 The longer-term financial products are purely hypothetical, and are not immediately relevant to the design and operationalisation of FONERWA. They are included to give a flavour of the potential for the Fund, assuming a stable foundation and track record is built in the short to medium-term. As per recommendations from MINECOFIN, it is suggested to leave such future instruments open ended, so that the Fund can evolve with the needs of its stakeholders and corresponding market signals. It is important to focus on the "basics" and "essentials" in line with FONERWA Law in order to build confidence of investors first.

of the potential projects88 that may be supported by FONERWA show a rate of return on investment varying between negative to maximum 5%. In addition, these projects by their very nature may be too risky for private sector to invest on.

In terms of national mobilisation of private capital, Rwanda attracts less than US $200mn in Foreign Direct Investment (FDI) on average, and only US$106.2 million in 2010. Private domestic investment in terms of GDP is less than 15%, with majority of investment in construction and manufacturing sectors.89 With FONERWA's initial capitalisation projected to be US $22mn (even in the most optimistic case), demonstrating economies of scale to ensure satisfactory return in FONERWA envisaged small-scale projects will be a significant challenge. This is not to say that the Fund is not open to potential private investment for capitalisation. In fact, if such opportunities arise, these will be analysed on a case by case basis by the FMT and approved by both the FONERWA Managing Committee and MINECOFIN. Note, however, that *project-level co-financing from the Fund to the private sector will be an integral part of the Fund from an early stage*. It is important not to conflate such mechanisms with Fund capitalisation from the private sector.

Although the private sector is considered as a beneficiary category, expecting capitalisation investment from the sector in the short run is highly ambitious. A number of challenges or barriers to investment include: Low levels of human and institutional capacity, some limited access to banking, undiversified insurance products, a cash-based informal economy, high tax burden on few, and a narrow and shallow financial sector by sub Saharan African levels. Funds of this nature (without exception, start with capitalisation from Government and Development Partners' contribution before evolving into a structure with capitalisation from private financing or complex financial instruments (see Indonesia case study in Section 3.3.).

As a result, possible capitalisation and more complicated financial instruments targeting the private sector are expected to be introduced several years into the operationalisation of FONERWA, and subject to the Fund's performance and private sector demand. The makeup and sequencing of these phased developments will be determined by the evolution of the fund and the FONERWA Managing Committee.

An indicative description of some instruments for possible consideration is presented below (See Annex 9 for other innovative instruments).

Investment/Equity Finance. One of the primary long-term instruments envisaged is direct project investment. Investment and equity financing would generally be characterised by FONERWA injecting capital into an existing business in exchange for equity in the company. For example, this may be appropriate for businesses that develop clean cooking stove technology or sustainable substitutes for single use plastic bags.

Before FONERWA could offer an investment or equity instrument, financial analysis and legal capacity would have to be upgraded to ensure a reasonable assessment of return on investment. In addition, FONERWA will need to ensure that potential contingent liabilities, conflicts of interest and other risk factors are accounted for. Sufficient capacity also needs to be built for the private sector to access and successfully utilise any longer-term, more complex instruments. Capacity requirements will depend on the nature of the instruments offered, which will in turn depend on the Fund's total resource envelope and expressed needs of the private sector in the medium to long-term. A **capacity needs assessment**, therefore, needs to be conducted (and acted upon) by the FMT – recommended for year 1. See **Capacity Building Plan** for further details.

The integration of an investment instrument could be associated with the separation of FONERWA into two funds, one focusing on government and civil society and the other acting more as a publicly-focused venture capital fund for environment and climate change activities. This 'hybrid' institutional arrangement is discussed in Section 7 below.

88 REMA, 2012.

89 MINECOFIN Recent Economic Developments and Outlook Presentation, Development Partners' Retreat, 2012.

SECTION 7

GOVERNANCE AND INSTITUTIONAL STRUCTURE

7.1 COMPARATIVE ADVANTAGE ANALYSIS OF FUND MANAGEMENT AGENCIES

The Ministry in charge of environment and climate change (presently MINIRENA) is stipulated in the FONERWA Law (Article 6) as the national institution responsible for the fund oversight. REMA is the national authority mandated with environment and climate change management and, upon delegation by MINIRENA, will host a Fund Management team to carry out day-to-day operations. To further consider the rationale of this organisational arrangement, a comparative advantage (CA) analysis was conducted in order to assess the institution best suited to facilitate management of the fund over the short to medium term (0-5 years).

Comparative Advantage (CA) is an assessment of expertise and value added that an institution/agency could provide vis-à-vis other players at the national level, towards the daily operations of the Fund. Criteria were applied to explore the actual comparative advantage in managing the fund across three institutional managers: REMA, MINECOFIN, and the Rwanda Development Bank (BRD) (See Table 22). Illustrated in Figure 13 below, these criteria include:

1 **Mandate to act –** Assessment of the coherence of fund day-to-day management against each of the proposed institutions' mandates.
2 **Position to act –** Institutions' positioning considering their: 1) Priorities, 2) Activities record in the country (past and present) vis-à-vis others (revealed CA) and the 3) Perception that the relevant stakeholders have about their CA (perceived CA).
3 **Capacity to act –** Assessment of each institutions': 1) Delivery capacity (human/technical & financial), 2) Capacity to influence key decision makers for results' sustainability and 3) Potential to develop synergies and joint activities with other stakeholders to strengthen impacts.

FIGURE 13 Elements of institutional Comparative Advantage analysis.

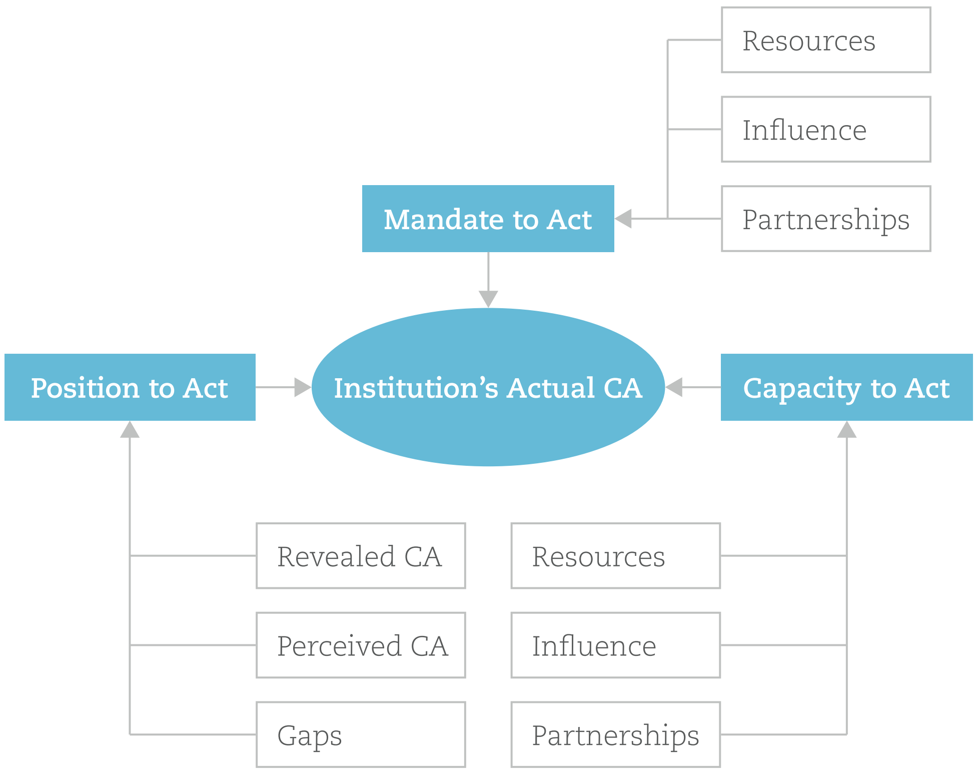


TABLE 22 FONERWA institutional management comparative advantage analysis

	Actor 1: MINIRENA/ REMA	Actor 2: MINECOFIN	Actor 3: BRD
Mandate to Act			
Overall Mandate	Stipulated in the FONERWA Law, REMA has the mandate to act to ensure the day-to-day management of the Fund, and MINIRENA with oversight. Resource mobilisation, climate change and environment mainstreaming, promotion and protection are within the remit of MINIRENA/REMA's core institutional mandate, therefore directly fitting with the objectives of the Fund. REMA also houses the GoR's Climate Change Unit, including the CDM DNA.	Taking responsibility of managing a fund on a day-to-day basis in an area that does not directly contribute to the Core Functions of MINECOFIN (as reflected in its Strategic Plan). Therefore, management of FONERWA is beyond the scope of MINECOFIN's mandate.	FONERWA management is directly relevant to BRD's Mission, which considers BRD as the Government of Rwanda's investment arm that finances the nation's development objectives, with a focus on the priority sectors of the economy.
Position to Act			
Revealed Comparative Advantage	MINIRENA/REMA have consistently pursued the operationalisation of the Fund and active in providing guidance or direct demonstration for activities in almost all the key entry points of the proposed Fund Financing Windows, in addition to working as a regulatory authority, therefore demonstrating significant knowledge and expertise in the subject area.	MINECOFIN is in charge of co-ordination, collaboration, monitoring and allocating resources rather than getting engaged in direct technical guidance or implementation of FONERWA related activities.	BRD's main focus is on "private financing" in the areas of agriculture & livestock, manufacturing, education and health care, energy and water, hotel and tourism, ICT, exports, real estate and microfinance. Although these components are directly relevant to the Fund, BRD lacks comparative advantage relative to REMA from the perspective of public sector (since BRD primarily deals with the private sector) and technical support to develop Fund proposals, build capacity, etc.

TABLE 22 FONERWA institutional management comparative advantage analysis

Continued

	Actor 1: MINIRENA/ REMA	Actor 2: MINECOFIN	Actor 3: BRD
Position to Act			
Perceived Comparative Advantage	Although REMA started its operation as an authority, over the years it, alongside MINIRENA, has been directly involved in implementing more than 12 multi-million dollar projects in the areas of climate and environment mainstreaming, awareness raising and ecosystem rehabilitation, among others. It also holds the national mandate and acts as the lead in the Environment & Climate Change Sub-Sector.	MINECOFIN has no perceived comparative advantage in areas of environment and climate change.[90]	BRD's knowledge and expertise in the areas of climate change and environment is rather limited compared to REMA. BRD indicated that technical assistance in FONERWA project screening would be required to compensate for these knowledge gaps[91].
Gaps	No experience in providing "public" or "private" financing facilities through a basket fund model.	No direct experience in managing a financing facility targeted towards environment or climate change activities.	No experience in providing environment or climate change related financing facility to public sector. Private sector financing is limited to the above-mentioned areas.

90 MINECOFIN. Interview conducted 25 February 2012.

91 MINECOFIN, 2012.

TABLE 22 FONERWA institutional management comparative advantage analysis

Continued

	Actor 1: MINIRENA/ REMA	Actor 2: MINECOFIN	Actor 3: BRD
Capacity to Act			
Resources	As an authority for Environment & Climate Change, any revenue generated related to environmental fines and fees fall within the management of REMA, with MINERENA oversight. Fines, fees and human capacity could be redirected to manage the Fund in order to mobilise additional resources. REMA also demonstrates strong financial management, fiduciary risk management, and integrity with forward and backward-looking financial plans and budgets, including good practice financial management and external audits.	MINECOFIN resources both human and financial are already far stretched.[92] Demonstrates high standards of fiduciary management and integrity.	BRD has no dedicated resources to manage the Fund on a day-to-day basis, however, it strongly demonstrates the (human resource) ability to manage financial instruments targeting the private sector. It also has outreach centres beyond Kigali. BRD indicated in particular the experience and capacity to manage 1) Concessional loans, 2) Guarantees and 3) Investment related instruments. Note: Guarantees cannot be made with GoR resources[93]. Demonstrates high standards of fiduciary management and integrity.
Influence	MINIRENA/REMA's influence, as a dedicated agency to implement the low carbon growth and climate change strategy, which is a directly linked to the activities of the fund, is considered to be very high.	MINECOFIN has significant influence in co-ordinating cross cutting issues through access to all line ministries.	No significant demonstrated influence in the areas of climate change and environment. Strongly demonstrated influence in areas of financial management and private lending.
Partnership	Strong partnership with the public sector, Development Partners and CSOs. MINIRENA/REMA has accumulated experience and expertise in mainstreaming environment and climate change in other economic sectors, thereby enhancing cross-sectoral partnerships towards sustainability.	Strong partnership with public sector organisations and Development Partners.	Strong partnership with private sector organisations and Development Partners.

92 MINECOFIN, 2012.

93 BRD, 2012.

Recommended Fund Management Scenario

Based on the results of the above comparative advantage assessment, the combination of Actor 1 (MINIRENA/REMA) and Actor 3 (BRD) appear to be the most effective management option bringing maximum value for money in the short to medium term. This 'hybrid' scenario plays on REMA's strengths to house the FONERWA Secretariat, including its technical expertise in managing and implementing environment and climate related activities, and strong public sector capacity, while harnessing the comparative advantage of BRD to manage and promote medium-term financial instruments (low interest/concessional loans and guarantees) targeting private sector beneficiaries. BRD will essentially act as a custodian of 20% of the total FONERWA resources and channel them to the private sector, following approval by the FONERWA Managing Committee.

The FONERWA Secretariat and FMT will be responsible for overall management of both disbursement channels. Accordingly, publically oriented funds will be channelled through MINIRENA/REMA using existing GoR procedures, while the Rwanda Development Bank (BRD) channels private sector disbursement using its existing procedures. It is important to note that both MINIRENA/REMA and BRD have expressed willingness to carry out these functions. Allocation amounts and disbursement efficiency will be closely reviewed against FMC decisions by the Secretariat (and Fund Management Team), which will produce quarterly reports to be submitted to the FMC (See M&E Procedures of the **Operational Manual**).

The FONERWA Secretariat will be housed in REMA, as delegated by MINIRENA. However, in line with the overall governance structure and project approval process through the Technical and Managing Committees, this will afford REMA no unfair advantage in terms of resource allocation or disbursement. The same applies to BRD. Planning, co-ordination and budgetary oversight of the Fund will be ensured by the Ministry of Finance and Economic Planning (MINECOFIN), along with other relevant ministries that are part of the Governance structure.

A Fund Management Team will be recruited for the first two years of operation to build the capacity of MINIRENA/REMA and BRD, as well as targeted beneficiaries, in preparation for the full handover of responsibility of fund management to the Secretariat, therefore ensuring sustainability and full national ownership of FONERWA processes and systems.

As noted above, due to BRD's comparative advantage of working with the private sector, the private financing portion (20% of Fund resources) of FONERWA will be disbursed through BRD using financing instruments such as concessional loans and guarantees. BRD already has substantial experience in applying these instruments. The FMT will be providing necessary technical support as and when required (See FMT ToR in the Operational Manual). Functionally, REMA and BRD will be connected by the FONERWA Secretariat , but will otherwise operate separately as per an MoU.[94]

Handing over the responsibility of the fund management to the private sector (i.e. commercial banks, other private entities) at this stage is neither viable nor recommended. The Fund is "not for profit" and due to the nature of the interventions in the social-economic and environment sector, the internal rate of return is likely to be negative, therefore leaving no incentive for the private sector to manage this. If the fund is handed over to a Commercial Bank to manage, the interest will be higher than BRD. In the long term, however, as the fund grows in its scope and usage of financial instruments, a Special Purpose Vehicle (SPV) may be established as part of Public Private Partnership (PPP) initiative following the Indonesian IGIF Fund model (See 3.3. and Annex 2).

7.2 GOVERNANCE STRUCTURE

The Governance structure of FONERWA has been developed to allow oversight and GoR control of its projects/programmes. The majority of day-to-day Fund management will be conducted within the FONERWA Secretariat, while creating institutional arrangements that provide adequate oversight, transparency and accountability.

94 An MoU between BRD and MINIRENA/REMA will be drafted by the Technical Committee (assisted by the Fund Manager) and approved by the Fund Managing Committee to execute operationalisation of the hybrid institutional arrangement.

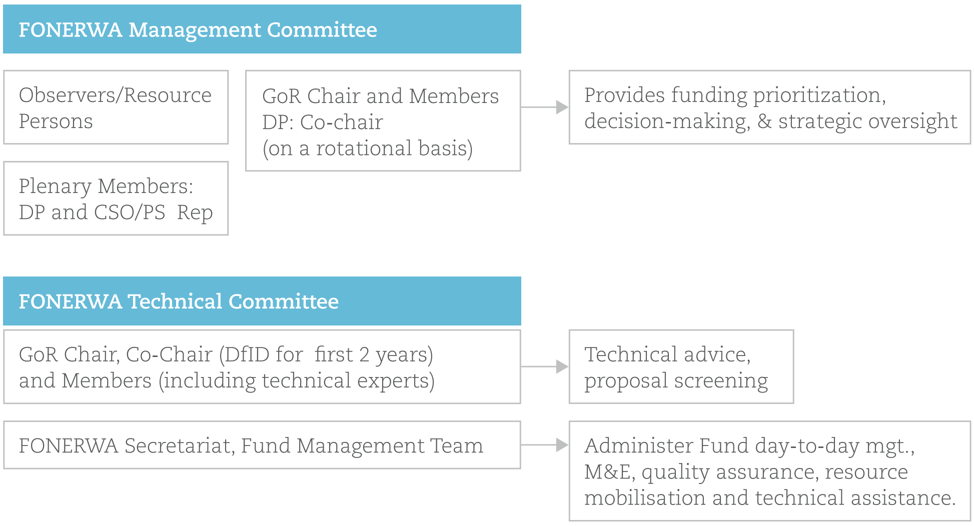
SECTION 7 - GOVERNANCE AND INSTITUTIONAL STRUCTURE

The principles that guide the design of FONERWA institutional arrangements are summarised as follows:

a- FONERWA Law (Chapter III & iv, Articles 3-9);
b- No unnecessary addition of new or parallel management structures;
c- Tried and tested governance structure based on other successful basket fund models (i.e. Public Financial Management, Public Sector Capacity Building Funds);
d- Direct participation at the highest levels of Government;
e- Coordinating role for the Technical Committee/Secretariat in terms of both FONERWA functions and management;
f- Emphasis on cross-sectoral oversight and decision making in project evaluation, approval and overall management that demonstrates the national character of the fund;
g- Promoting direct engagement of Development Partners (DPs) to achieve sustained support.

In line with the FONERWA Law, and drawing from other international environment and climate funds, Figure 14 below illustrates the proposed FONERWA governance structure consisting of a Managing Committee, Technical Committee and Secretariat, with the latter working in partnership with a FMT for the first 1-2 years of operation.

FIGURE 14 Proposed FONERWA governance structure.



Note that while both REMA and BRD are indicated in the Fund Governance structure (see below), the hybrid institutional structure in the recommended Fund management scenario above represents an implementation arrangement that is separate from governance. Hence, the arrangement is not highlighted in Figure 14.

Fund Managing Committee (FMC)

The FONERWA Managing Committee (FMC) will be responsible for the monitoring and directing of the Fund's activities. It is the highest organ in the Government of Rwanda for FONERWA management and oversight.

FMC composition & assembly. The Permanent Secretary of MINIRENA, who is also the Chief Budget Manager for the Fund, will chair the FONERWA Managing Committee as the FONERWA law stipulates that the Fund is operational responsibility of MINIRENA. Chair responsibilities include calling for meetings in orderly and timely fashion, and agenda preparation and dissemination. DPs and other FMC members may make proposals for the agenda (See Table 22). It is recommended that the FMC be Co-chaired by a DP on a rotational basis. The Co-chair will be identified and nominated by the DPs before the first quarterly meeting every year, for an initial period of one year. Table 23 details the composition of the Fund Managing Committee.

TABLE 23 Composition of FONERWA Fund Managing Committee.

FONERWA Fund Managing Committee (FMC)		
> Permanent Secretaries: Chair-MINIRENA (also act as the Chief Fund Manager) MINECOFIN MINAGRI MIDIMAR MININFRA MINICOM MINALOC MINISANTE MINEDUC	Development Partners: > Co-chair- Heads of all contributing DPs on a rotational basis	Private Sector/CSOs: > CEO of Private Sector Federation > CEO Rwanda Development Bank > Chairperson of Rwanda Civil Society Platform

The FONERWA FMC involves participation from a cross-section of stakeholders including Government at Central and District (through MINALOC) levels, civil society organisations (CSOs), the private sector and development partners. The FMC may co-opt any other person to Committee on a needs basis. See Operational Manual for proposed FMC ToR.

Technical Committee

The FONERWA Technical Committee (FTC) will be responsible for ensuring strong ownership of FONERWA-supported activities, and enhancing their sustainability.

FTC Composition. The FONERWA Technical Committee will be comprised of a Chair and Co-chair, the latter represented by a Development Partner on a rotational basis, Director Generals from key environment and climate related sectors, and the FMT as Secretary (Table 24).

TABLE 24 FONERWA Technical Committee Composition.

FONERWA Technical Committee Composition:		
Chair: > Chair- DG REMA > Co-chair- (on a rotational basis-e.g. DFID)	Membership: > DG National Budget Directorate, MINECOFIN > DG-Planning and Research Directorate, MINECOFIN > DG Planning: MINIRENA, MINAGRI, MININFRA, MINICOM, MINALOC, MIDIMAR, MINISANTE, MINEDUC, CEO/Relevant Directors of Rwanda Natural Resources Authority (RNRA) > Deputy CEO-Rwanda Development Bank > One representative of all contributing DPs	Secretary: > FMT

FTC Responsibilities. The Technical Committee will meet at least once every quarter to review progress of FONERWA. Its core responsibilities will include reviewing action plans and budget allocations, procurement plans, as well as to screen and develop a shortlist of projects/programmes that have met basic criteria at the Secretariat level, for the approval of the FMC. See Operational Manual for proposed FTC ToR.

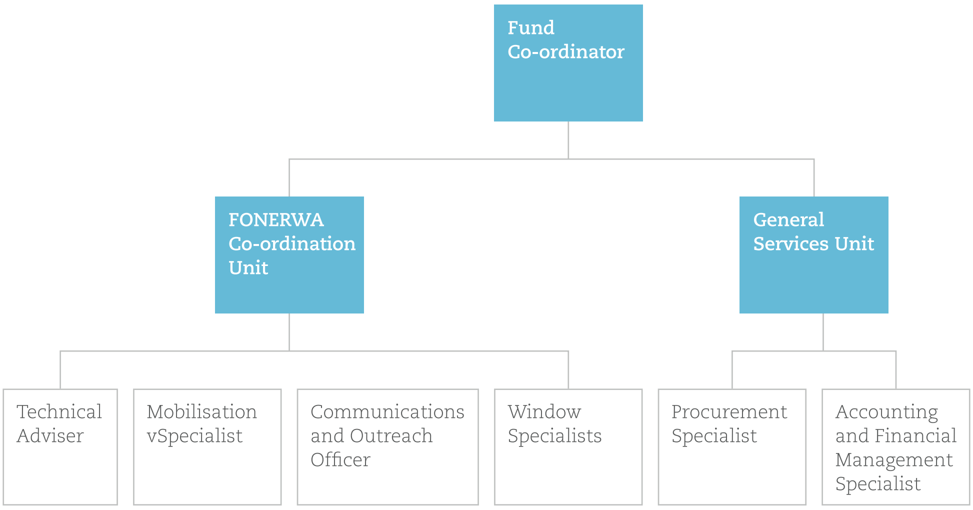
FONERWA Secretariat

The Secretariat will provide facilitation for the central coordination of FONERWA. The Fund Management Team (recruited by DFID for a period of two years) will initially lead and staff the Secretariat. The Secretariat will be responsible for day-to-day management of the Fund. The FMT, among others, will be responsible for preparing and submitting the work plan for forthcoming financial year indicating potential resource availability. The final work plan will also include details of all the approved projects/programmes by the FMC, and their key performance indicators and milestones/target. This will be considered as the basis of ongoing monitoring. See the Monitoring and Evaluation Procedure of the Operational Manual for further details.

The Fund Management Team, through the Secretariat, will be responsible to build the capacity of MINIRENA/ REMA and BRD for direct management of the fund beyond the 2-year period. The Fund Management Team will include technical (international and national) experts associated with the thematic windows on a call down basis. See the Operational Manual for further details of the FMT's roles and responsibilities related to resource mobilisation, outreach services, knowledge sharing and capacity building. Note: the FMT ToR is synonymous with the Secretariat's ToR in the first 2 years of Fund operation, subject to approval by the Fund Managing Committee.

It is recommended that the FMT's Secretariat support team be comprised of a Fund Coordinator, under whom a FONERWA Co-ordination Unit and General Services Unit will operate, detailed in Figure 15 below.

FIGURE 15 **Proposed structure of the FONERWA Secretariat.**



Although the FMT/Secretariat will operate initially on a standalone basis, staff members of the Secretariat will be incorporated into the REMA SPIU organogram after a period of two years, or will be absorbed by a Special Purpose Vehicle created through a PPP model, in order to ensure sustainability. The latter is subject to market demand and emerging opportunities which have to be assessed carefully by the FONERWA Managing Committee, with the structure elaborated accordingly. However, the ultimate decision to adopt such a model in the medium to long-term must be approved by MINECOFIN.

The projected recurrent expenditure of the Secretariat for the first 3 years is detailed in the Operational Cost of FONERWA section of the Operational Manual.

There are some pending issues that would require finalisation and approval of the FMC/FTC before the fund is fully established.

TABLE 4 Adaptation recommendations from the Second National Communication

Pending Issues	Task Guidance
Prioritise the financing windows and key entry points for fiscal year 2012/13 based on value for money considerations	> Review of 4 Thematic Areas for EDPRS II(> Consultation with MINECOFIN overarching priorities for EDPRS II > Review of the cross cutting areas > Review of emerging needs and priorities as reflected in the draft Sector Strategic Plans > Consultation with ENR Sector Working Group and DFID-Rwanda and other key Development Partners on further prioritisation of FONERWA Thematic Windows/ Key Entry Points based on the outcome of the above discussion > Assessment on how best to use Value for Money criteria for FONERWA prioritisation and preparation of a methodology accordingly
Review the membership in the Governance structure	> Further legal assessment of the Governance Structure > Review the Governance Structure further to ensure it meets the needs of the Private Sector (i.e. possibility of creation of investment sub-committee) > Propose changes based on the above
Review the ToR of the Technical Committee and the Managing Committee	> Further joint consultation with MINIRENA/REMA and the Development Partners for changes as well as BRD and Private Sector Federation
Approve funding and decision rounds	> Review and submit a methodology/final list of criteria for FMC to make funding decisions > Assess possibility of initiating “Call for Proposals” particularly for key entry points for which demand is seen/perceived to be low > Assess opportunities for pro-acting proposal development based on the priorities of international financing schemes
Review results framework as per the FONERWA Logical Framework	> Discuss with concerned SWGs and NISR on the feasibility of collecting baseline information for proposed indicators > Propose new indicators where feasible > Refine indicators based on the above > Assessing total costing for collection of baseline information
Review financial instruments and beneficiaries to be targeted for 2012/13 fiscal year	> Assess performance based grant scheme for the private sector > Asses and advice if private sector grants should be handled by BRD rather than MINIRENA/REMA
Determine methodology for measuring performance of the Fund Management Team (FMT)	> FMT to submit their management specific log frame with clear indicators to measure performance > Review and approve the log frame as the basis of measuring performance

The projected recurrent expenditure of the Secretariat for the first 3 years is detailed in the Operational Cost of FONERWA section of the Operational Manual.

SECTION 8

PROPOSAL SCREENING

SECTION 8 - PROPOSAL SCREENING

The FONERWA project/ programme proposal screening will be carried out in a fair and transparent, multi-step process.[95] This will be overseen by the FMT and Technical Committee; with the ultimate funding decision made by the Management Committee. Figure 17, and their descriptions below, details the 4 key steps of the proposed screening process: (1) Submission of a Project Profile Document, (2) Technical Appraisal, (3) Strategic Appraisal and (4) Final Decision Making. These steps are derived from the Government of Rwanda's Public Investment Procedures (PIP) applied by MINECOFIN.

Step 1: Submission of Project Profile Document (PPD). Line Ministries/private sector/civil society[96] should complete Project Profile Documents (PPDs) for proposals to be considered by the FONERWA Secretariat, in conformity with the FONERWA Financing Windows and their key entry points. Submission of PPDs will be on a rolling basis.

Step 2: Review for Eligibility Criteria. PPDs will be screened by the **Fund Management Team** against eligibility criteria:

1 The project matches one of the FONERWA thematic windows (conservation and sustainable management of natural resources, R&D and technology transfer and implementation, or environmental and climate change mainstreaming).
2 Sustainability: Benefits (social, environmental, economic) from the project will be sustained after the lifetime of project activities.
3 The project offers good value for money and activities are carefully designed to deliver results.
4 Stakeholders, particularly local communities, have been consulted and there is a plan in place to communicate and consult with stakeholders throughout the lifetime of the project.
5 The project can be linked with international, national and local strategies related to climate change and environmental management. If appropriate, the project builds on existing activities.
6 The project conforms to existing legislation. In particular, there is no involvement or complicity in corruption.

A **Traffic Light system** will be used to guide proposals at the PPD stage:

1 **Red:** If a red light is given then there is no scope for revision by the project formulator. A brief explanation for the rejection will be provided to the project formulator within 10 working days. To ensure transparency, all PPDs that are marked as red will be provided to members of the Fund Management Committee for review on a quarterly basis alongside the comments provided to the project formulator.
2 **Amber:** If an amber rating is given it would indicate that the project has potential for funding, but that comments will have to be incorporated before re-submission. An amber rating is always associated with detailed feedback, which will be provided within 10 working days, in order for the project formulator to revise their proposal during the same round, if possible. At maximum, project formulators can resubmit only once per quarter. If an amber PPD is resubmitted and does not receive a green light to proceed to the full project document stage, then a red rating is given and the project formulator must wait until the following cycle to resubmit the PPD.
3 **Green:** If a green is given the project concept note would require no revision; project formulator in this case will be given a go ahead to develop a full proposal

Step 3: Preparation and Submission of Full Project Document (PD).
If successful, applicants will be asked to submit full proposals, and (if appropriate) advice and support from the FMT to elaborate or improve the proposal as needed – in particular for applications targeting other international and regional climate change and environment funds.

95 Although the Fund Manager and Secretariat are based in REMA, REMA (and MINIRENA) will not have any undue advantage throughout the screening process. Like others, REMA will have to submit proposals which will have to be screened by both Fund Manager and the FONERWA Technical Committee. If shortlisted, final approval must be given by the FONERWA Managing Committee.

96 At least 15% of the total FONERWA resources will be allocated for Private Sector and CSOs in the form of grants, concessional loans and guarantees [TBD with stakeholders and Core Design Team].

Step 4: Technical Appraisal and Short-listing of PDs
Full proposals will undergo a technical appraisal by the **Fund Management Team**. The FMT will assess each PD according to four technical appraisal criteria:

1 Desirability:
- a- Does the project conform well with
  - > National, and
  - > Sectoral strategies related to environment, climate change, and economic development?
- b- Will the benefits of the project be sustained after the lifetime of the project activities?
- c- Does the project support strategic economic activities and/or poverty reduction?
- d- Will the project result in skills development and/or technology transfer?
- e- Do the budget and impacts of the project indicate high value-for-money?
- f- What is the degree of risk that the objectives of the project are not met?

2 Viability:
- a- Does the project implementer have sufficient experience to execute the project?
- b- Have the project management arrangements been confirmed?
- c- Is an appropriate Monitoring and Evaluation (M&E) framework in place?
- d- Have stakeholders been consulted and involved in the project formulation?

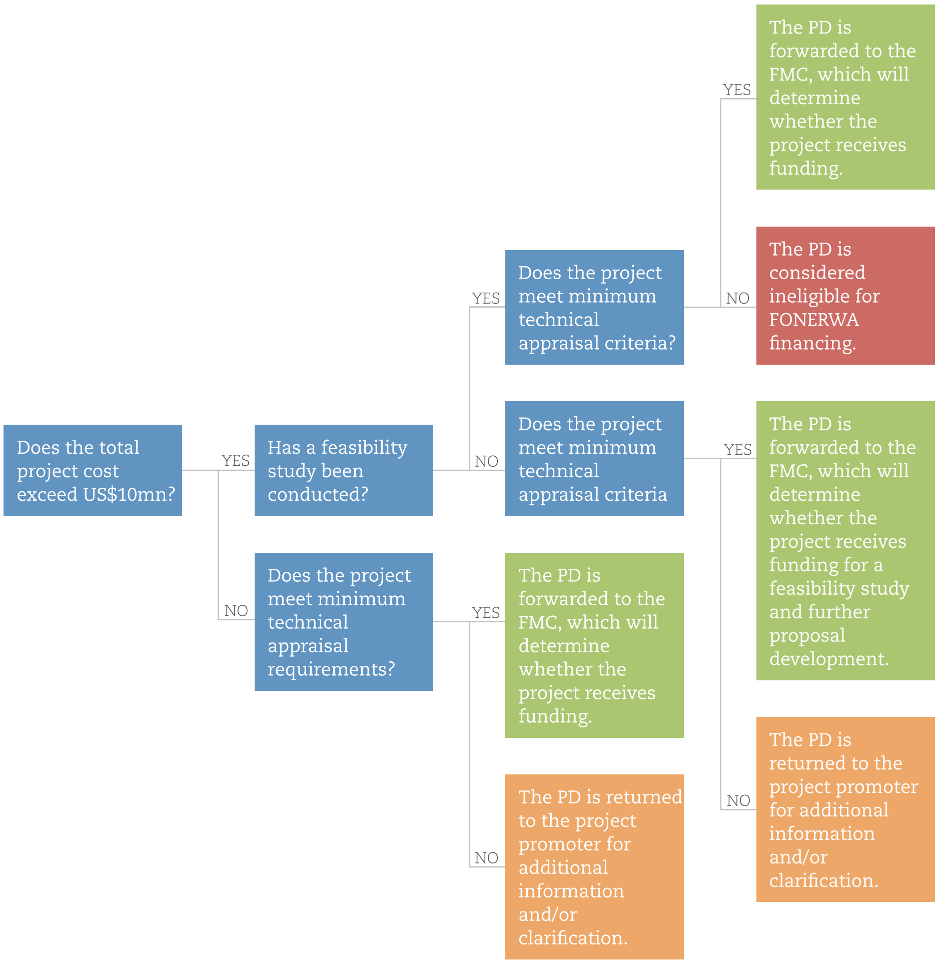
3 Feasibility:
- a- Has a feasibility or pre-feasibility study been conducted?
- b- Have all legal requirements (relating to access to land, planning consent, or use of new technologies) been met?
- c- Has funding from other expected sources been approved?
- d- Has an Environmental Impact Assessment been completed?
- e- Are there any potential negative impacts on the environment? If so, have the risks been mitigated sufficiently?

4 Capacity to Leverage Additional Resources:
- a- Does the project satisfy the criteria for international climate change or environment financing facilities, and is the project likely to attract additional international funding?
- b- Does the project proposal demonstrate that the project has potential for income generation?
- c- Is the project likely to attract private sector investment?

The feasibility criteria will be a simple yes/no assessment regarding whether the criteria have been met, according to the Fund Manager. Only projects that have conducted a feasibility study will be considered for funding in excess of US$1mn (See related decision tree in Figure 16 below).

The FMT will follow a **decision tree** to appraise, direct and respond to Full PDs:

FIGURE 16 Decision tree for project/ programme proposal screening.



Shortlisted full proposals that meet technical appraisal criteria[97] will be given priority ranking and submitted to the FONERWA Technical Committee by the FMT. The FM, at this stage, will again test whether a project might be suitable for targeted international finance or procurement under a Public-Private Partnership or a Joint Venture. PPP and JV procurements should be used wherever possible in order to leverage FONERWA's own resources with private finance, and help to accelerate the overall rate of project implementation. The FMT will be responsible to identify *the optimal financing structure* – e.g. whether grant, concessional loans, guarantee.

Step 5: Strategic Appraisal. Following proposal approval at the Technical Appraisal step, the FONERWA Technical Committee will apply a strategic appraisal. The strategic appraisal will assess how well the proposal fits in the environment and climate change policy sustainability context, including whether it duplicates existing efforts. The latter consideration is a key function of the FTC as DG participants possess the most detailed and up-to-date knowledge of public sector initiatives in particular.

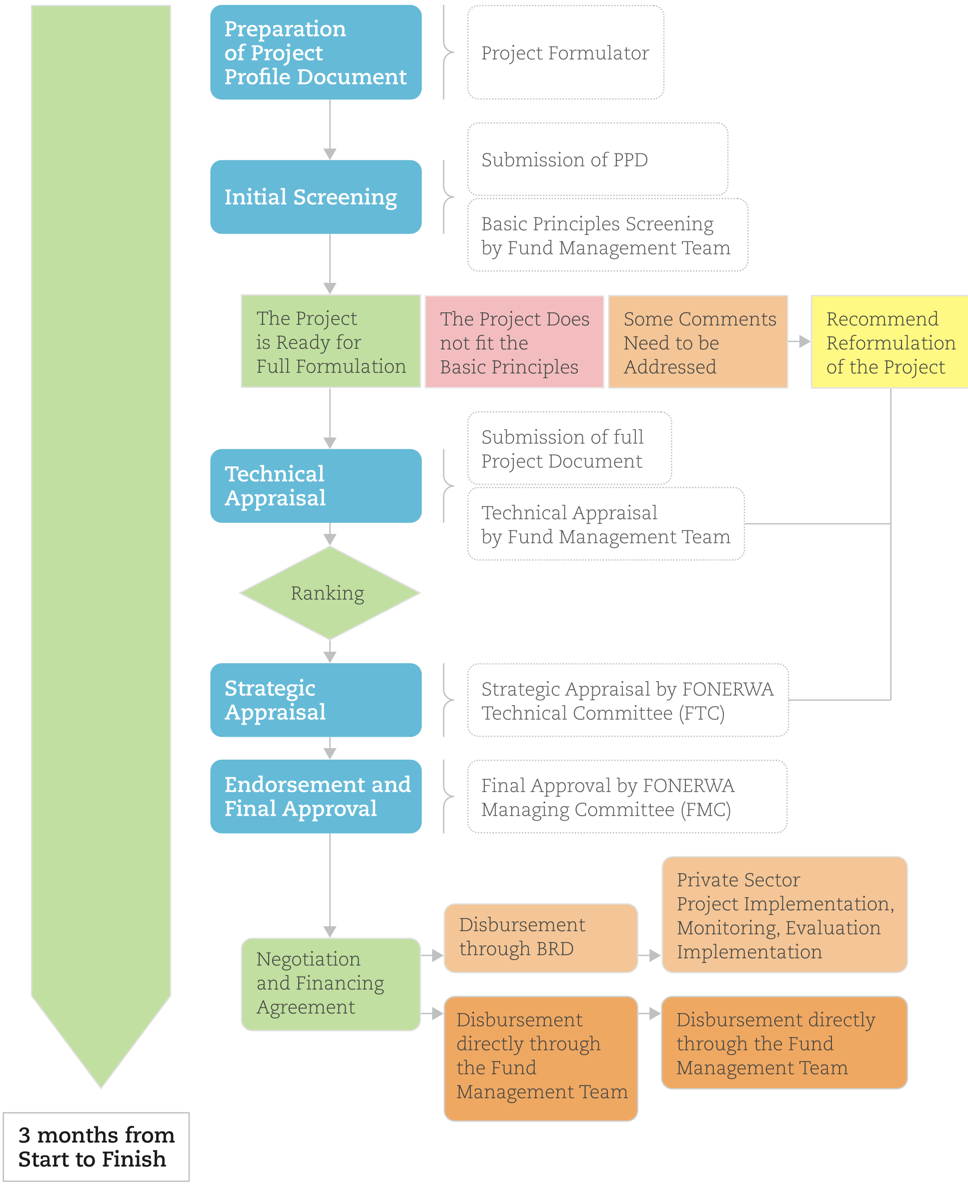
Step 6: Decision Making. The FONERWA Management Committee will be solely responsible for approval of final funding decisions. There will be at least (quarterly meetings by the FMC to speed processing of applications, and to ensure that FONERWA is responsive to stakeholders' needs. The FMC will be expected to only support high-quality proposals. For projects with a total cost exceeding US$1mn, the FMC can only provide project financing or co-financing if the project has a feasibility study. For projects exceeding the threshold without a feasibility study, the FMC will determine whether to support the cost of conducting a feasibility study and other proposal development support.

97 The technical appraisal will assess the viability and appropriateness of the proposed activity. This will examine the likelihood of activities proposed delivering the desired objectives of FONERWA. This will also include an assessment of sustainability criteria, including distributional issues.

Post-approval procedures

Once a project is approved, the FMT will enter into negotiations (together with BRD for relevant private sector applicants) with the promoter to complete project finance and execution plans. Once the negotiation process has been completed, and initial funding approvals secured with approval by the Chief Budget Manager (i.e. Permanent Secretary of MINIRENA), the project will proceed to implementation. See Procurement, Financial and Accounting Procedures as well as the Monitoring and Evaluation (M&E) framework in separate FONERWA Design Project deliverables for further details. Principles of performance-based financing will be followed for disbursement procedures, with up-front payment of no more than 40% of the total project cost; subject to change by the FONERWA Managing Committee in exceptional cases.

FIGURE 17 Proposed FONERWA screening process.



FMT technical support function

The FMT will have a 'support function' to help potential applicants with their proposals. This can be triggered before or after a submission of proposals. The support function will involve advice on eligibility, along with help in drafting/designing proposals. *At least 40% of the Fund Management Team's time will be spent on proposal development*. This includes regular communication and outreach efforts across public and private beneficiaries in order to raise awareness, build capacity and meet express needs of priority sectors and groups. If technical assistance requires specialist inputs that cannot be serviced by the FMT, further experts may be hired on a call down basis. Decisions on financing of expert inputs, which must not exceed 10% of the total estimated project cost, can only be given by the FONERWA Managing Committee (FMC) on a case by case basis.

In order to create a level playing field for all applicants, and ensure equitable distribution of resources, the following are proposed:

- At least 40% of the FMT's time will be spent on providing technical assistance for proposal development;
- At least 20% of total FONERWA resources will be earmarked for the private sector for each of the core financing windows (excluding Window 4);
- At least 10% of the total FONERWA resource will be earmarked for Districts.

Schedule for application cycle

Project Profile Documents will be accepted throughout the fiscal year (1st July – 30th June) on a rolling basis. For full proposals, the following application and decision deadlines will apply (Table 25). Project implementation will adhere to the planning and budgeting cycle of the Government of Rwanda, wherever possible.

TABLE 25 Suggested application rounds for full proposals.

Round of Application	Technical Appraisal and Ranking by the FMT	Strategic Appraisal by the FTC	Decision by the FMC
Last Friday of January	10th of February	By end of February	By mid-March
Last Friday of April	10th of May	By end of May	By mid-June
Last Friday of July	10th of August	By end of August	By mid-September
Last Friday of October	10th of November	By end of November	By mid-December

SECTION 9

FUND RISK ASSESSMENT

SECTION 9 - FUND RISK ASSESSMENT

Good management practices such as upholding established standards of fiduciary management and mitigation of capacity and governance related risks are important for building confidence within the GoR, stakeholders and potential donors and financiers to support FONERWA.

The following risk assessment identifies potential risks associated with the design, implementation, establishment and operational stages of FONERWA development. These risks are crosscutting in nature and are therefore combined in an assessment of the Fund's implementation (years 1-2) and ongoing management (years >2) phases. Table 27 details in tabular form key issues, challenges and areas of uncertainty associated with these two phases, reflecting associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Given the likelihood of identified risks materialising and their possible impacts differ. An assessment was conducted to characterise risks of High, Medium or Low likelihood and impact (Table 26). The following risks were identified and considered in the below sub-sections (See Table 27 for further details on designated risks A through P).

Overall, risks associated with FONERWA implementation and ongoing management demonstrate low to medium likelihood, corresponding with medium to high impacts.

- The early stage implementation risk: Stakeholder engagement (A1, A2); Donor & private sector buy-in (B1, B2)
- Capitalisation risk (C1, C2)
- Management capacity (D)
- Credit (E1, E2) and market risk (F)
- Governance (G1, G2) capacity (N1, N2) and corruption risk (L)
- Operational (H) and enforcement risk (M1, M2)
- Reputational risk (I)
- Sector-specific risk (J)
- Uncertain climate and environmental change (K)
- Lack of stakeholder support (Q) and continuity (O1, O2)
- Lack of civil society and private sector participation (P).

TABLE 26 Overall assessment of the likelihood and impact of risks associated with FONERWA implementation and ongoing management.

LIKELIHOOD \ IMPACT	HIGH	MEDIUM	LOW
HIGH			
MEDIUM	B1, B2, C1, H, O1	A1, A2, C2, F, I, D	
LOW	L, O2, Q, G1, G2, M1, M2,	E1, E2, N1, N2	J, K, P

Note that project-specific risk assessment is not possible at the FONERWA Fund design stage given the demand-based orientation of the Fund. Considerations of project-specific risks are the responsibility of project promoters to assess and report as per the Proposal Application and Appraisal Procedures covered in FONERWA Design Project deliverables, separate from this report.

TABLE 27 - PARTE 1
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

FONERWA Phase	Issue/ challenge/ uncertainty	Risk from GoR perspective	Risk from Investor perspective
	A) Stakeholder engagement	A1. Needs/priorities not reflected	A2. Insufficient stakeholder engagement
	B) Donor & private sector buy-in	B1. Capitalisation risk; lack of aid predictability/ additionality	B2. (Private) crowd out effect of public funds distorting markets
	C) Capitalisation risk	C1. Lack of sufficient funds (domestic, including sector seed financing/external); GoR reducing support to the Fund as donor/other contributions increase; delayed disbursement. Lack of clarity or failure of the Green Climate Fund (GCF) and /or other international public funds to operationalise; excessive earmarking by development partners	C2. Project/programme disintegration; limited capital due to global financial crisis
	D) Management capacity	D. Too few or under qualified staff appropriated to Fund and risks; project/ programme disintegration; loss of confidence. Lack of buy-in/commitment by staff, high staff turnover	

TABLE 27 - PARTE 1
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Continued

FONERWA Phase	Issue/ challenge/ uncertainty	Possible mitigation activities	Key assumptions
	A) Stakeholder engagement	Maximise in-country presence, consultation opportunities	Project has high-level buy-in and engagement
	B) Donor & private sector buy-in	Phased approach; robust risk management process in place	Aid flows will be maintained at current levels.
	C) Capitalisation risk	Devise internal revenue generation mechanisms to offset shortfall between 'committed' and 'realised' funds from investors. Partner closely to MINECOFIN to mobilise sector seed financing. Diversify sources of capitalisation to spread risk of overreliance on certain funds. Use influence in General Budget Support Group to encourage budget lines for Environment and climate change. Raise awareness of the Fund amongst other bi- and multi- donors. Apply to ICF or other international public funds for finance to capitalise the Fund.	Bilateral/multilateral financing will supplant international public funds, should the latter fail to operationalise/disburse.
	D) Management capacity	Strong capacity building policy; adequate resources dedicated to capacity building	Sufficient incentive mechanism is in place to retain capacity, use contractual terms and performance contracts

TABLE 27 - PARTE 2
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

FONERWA Phase	Issue/ challenge/ uncertainty	Risk from GoR perspective	Risk from Investor perspective
	E) Credit risk	E1. Country credit rating restricts borrowing; increasing debt burden	E2. Risk of capital repayment for commercial/social ventures
	F) Market risk	F. Risk posed by changes in markets (including carbon market prices) where project costs escalate & returns fail to match expectation/projections	
	G) Governance risk	G1. Breakdown of governance	G2. Lack of transparency, accountability and lack of intra-government coordination
	H) Operational risk	H. Misappropriated use of funds resulting in project/ Programme disintegration, overspending delays in project, ministerial influence on project selection; fund supports proposals that have negative environment and climate change impacts	

TABLE 27 - PARTE 2

FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Continued

FONERWA Phase	Issue/ challenge/ uncertainty	Possible mitigation activities	Key assumptions
	E) Management capacity	Strong due diligence; devise guarantee system with development partners in the medium to long-term	Macroeconomic performance is stable; favourable external credit rating
	F) Market risk	Strong due diligence; possibly devise guarantee system with development partners; diversify across carbon markets	International negotiations and country commitments will continue to support carbon/other markets
	G) Governance risk	Ensure strong governance system with checks and balances; representation from various interest groups	A zero-tolerance for corruption policy continues to underlie GoR fiduciary management
	H) Operational risk	Strong, results-based management approach with targets, M&E; capacity building for management efficiency. Efficient distribution among programmatic windows, coordination of activities with stakeholders for required fiduciary oversight; ensure that screening procedures are followed as part of design phase	Projects undertaken are realistic and achievable based on sound proposals

TABLE 27 - PARTE 3
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

FONERWA Phase	Issue/ challenge/ uncertainty	Risk from GoR perspective	Risk from Investor perspective
	I) Reputational risk	I. Failure to select appropriate projects/programmes may alienate stakeholders, including public perception, jeopardising long-term sustainability of Fund	
	J) Sector-specific risks	J. Cross-cutting technical, social, environmental, political, etc. risks specific to priority sectors. Not prioritising sector-specific needs.	
	K) Uncertain climatic/ environmental change	K. Under/over investment, maladaptation or loss of opportunity from positive impacts not realised; high damage costs	
	L) Corruption risk	L. Weak institutions. Corruption of local collection of funds. Weak institutions, fund and resource constraints, corruption at different phases or areas of the project, lack of accountability at district levels	

TABLE 27 - PARTE 3
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Continued

FONERWA Phase	Issue/ challenge/ uncertainty	Possible mitigation activities	Key assumptions
	I) Reputational risk	Strong public/private engagement, outreach and awareness raising through a systematic approach and programmes. Transparency & external communication management will be helpful.	Public/private partnership framework & GoR public investment procedures are adhered to
	J) Sector-specific risks	Risk assessment and feasibility studies before project approval. Cross-sectoral coordination mechanisms will be key.	Sectoral risk assessment/ feasibility work is undertaken to ensure investment success
	K) Uncertain climatic/ environmental change	Adaptive management practices and short-term (annual) portfolio reviews	Climate & environment issues will continue to affect Rwanda
	L) Corruption risk	Strong capacity building in collection fees systems. Strong system of checks & balances at all phases of the project cycle.	GoR has a zero tolerance for corruption. Assignment of an independent FMT, who will comply with international financial management standards and accounting procedures.

TABLE 27 - PARTE 4
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

FONERWA Phase	Issue/ challenge/ uncertainty	Risk from GoR perspective	Risk from Investor perspective
	M) Enforcement Risk/Deficit for the collection and appropriation of funds	M1. Lack of expertise, mechanisms and facilities for enforcement. Inadequate resources to monitor projects	M2. Absence of consultation/ communication among agencies. Conflict of interest.
	N) Capacity risk	N1. Lack of in-house skills at initial stage, limited availability of capable staff	N2. Limited investment in capacity building measures
	O) Lack of continuity	O1. Difficulty to access climate funds. Lack of stability and support by key institutions and officials could affect the momentum of the project, impacting the ability to secure continuous donor funding.	O2. Lack of local buy in by ministries and agencies.
	P) Lack of civil society and private sector participation	P. Lack of engagement of civil society and private sector in governance of fund as well as potential beneficiaries of project.	
	Q) Lack of support from key stakeholders	R. Institutional positioning within REMA may discourage active participation of other departments	

TABLE 27 - PARTE 4
FONERWA risk assessment. The following table lists issues/challenges/areas of uncertainty associated with FONERWA's implementation and ongoing management phases, associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions.

Continued

FONERWA Phase	Issue/ challenge/ uncertainty	Possible mitigation activities	Key assumptions
	M) Enforcement Risk/Deficit for the collection and appropriation of funds	Ensure re a strong management and accounting system for the collection of funds. Strong programme Management, including financial management, procurement, monitoring and evaluation and audits.	GoR adheres to strict policy enforcement. Independent FMT will audit fiduciary management
	N) Capacity risk	Create awareness, advocacy and carry out training.	FMT will provide technical assistance in capacity building and knowledge management.
	O) Lack of continuity	Managing expectations. Exploring synergies with various financing sources and remaining open in the international architecture of assistance in climate change. Exploring potential innovative sources of finance.	GoR commitment to climate change and environment to be streamlined into Vision 2020, EDPRS II and sector policies.
	P) Lack of civil society and private sector participation	Strong ministerial and sectoral support for the fund with broad ownership, involving sustained engagement of a number of stakeholders. Understanding and communicating climate change priorities in Rwanda. Civil society and private sector memberships in the Fund Governance structure.	General willingness of the civil Society and Private Sector take part in the Governance of the Fund.
	Q) Lack of support from key stakeholders	Involve key ministries and representatives of other stakeholders (donors, CSOs, private sector) in the Managing Committee and technical committee to ensure continued participation. Proposed procedures will help to avoid delays and will assign clear governance roles, including oversight of REMA by MINIRENA as per the FONERWA Law	Governance structure to include key agencies and stakeholders, and REMA oversight by MINIRENA.

SECTION 10

CONCLUSION

SECTION 10 - CONCLUSION

FONERWA is a fund mandated by Rwandan Law to support the achievement of Rwanda's objectives of sustainable environmental management, reliance to climate change and green economic growth through sustainable financing focused on national priorities and ownership. The fund can be accessed by line ministries, Government agencies, Districts, civil society organisations (CSOs) including academic and research institutions and the private sector, as long as the proposed activities are in compliance with Fund eligibility criteria, and the project/ programmes are screened through various steps as discussed in the project screening section of this document. At least 20% of total FONERWA resources will be earmarked for the private sector for use across core financing windows (excluding Window 4), and at least 10% of the total FONERWA resource will be earmarked for Districts.

The overall design of the FONERWA Fund works to reflect the above objectives, drawing on the basis of three key considerations: (1) National environment and climate commitments and development priorities, namely the FONERWA Law, (2) National, cross-sectoral environment and climate assessments, and sectoral plans and strategies, and (3) International climate and environment finance architecture and emerging best practice.

These considerations resulted in the recommendation to structure the Fund around four Thematic Financing Windows and associated Entry Points. Informed by a financial needs assessment (gap analysis), the components of these windows and entry points were developed in partnership with the GoR and validated through stakeholder workshops to reflect Rwanda's priorities related to environment and climate change.

In order to capture levels of financing available to capitalise the Fund, both domestic and external sources were considered in detailed scenario projections (baseline, medium and high) to estimate potential capitalisation. *Scenario 2 is considered to be the most likely capitalisation prospect for FONERWA*. Scenario 2 ranges from RWF 3.5bn to RWF 7.7bn from the first year to the third year, or US $5.7mn to 12.5mn. The relatively higher likelihood of scenario 2 is attributed to the high potential for generating new environmental revenue through payments for ecosystem services (PES) – a framework for which has been developed – and the expectation that DPs will invest at equivalent levels in Rwanda (77.36 cents/capita) as those invested in the Bangladesh Climate Change Resilience Fund (BCCRF). In the future, contributions from line ministries and new environmental revenues are expected to increase capitalisation.

Capitalisation from private sector sources (i.e. investment) was not considered in any of the scenarios presented, given that it is difficult to find an appropriate "proxy" taking FONERWA's key operational features into consideration. To be competitive with other commercial ventures – and to satisfy private sector investors – the financial return from any FONERWA investment has to be around 15% for domestic and at least 10% for international investors. It would therefore be important for FONERWA to demonstrate over the initial 3 to 5 years of operation that financially viable business models related to environment and climate change can be developed. Nevertheless, FONERWA is open to capitalisation proposals from private sector investment sources. Any such proposal with an "investment return prospect" will have to be analysed by the FMT on a case by case basis and consequently be approved by FONERWA Managing Committee.

Given resources will be pooled from various sources to provide a continuing source of money for specific pre-agreed activities across fiscal years, it is appropriate to consider FONERWA as a **Basket Fund**. This recommendation for the fund structure is made on the basis that some DPs are unable to contribute to **endowment funds** (e.g. the Netherlands), FONERWA funds will not be exhausted each financial year, as under **sinking funds**, and the Fund (in the short to medium-term) is not expected to generate sufficient financial returns (profit) for investors, as under an **investment fund** structure. *However, as the fund evolves, the Managing Committee can opt to change this structure.*

Two primary financial instruments are proposed for operationalisation by FONERWA's FMT in the short-term (0-1 year): (1) In-kind support for proposal development and (2) Grants, a component of which will be co-financing (e.g. for private sector beneficiaries).

Recommended medium-term instruments for the Fund include low interest, concessional loans. The Rwanda Development Bank (BRD) is the most suitable financial institution to offer such instruments given their comparative advantage of already managing such GoR funds (compared to other commercial banks) targeting the private sector, and is open to such an arrangement in principle. In the long-term, possible capitalisation and more complicated financial instruments targeting the private sector (e.g. investment/equity finance) are expected to be introduced, and subject to the Fund's performance and private sector demand. The makeup and sequencing of these phased developments will be determined by the evolution of the fund and the FONERWA Managing Committee.

SECTION 10 - CONCLUSION

The Governance structure of FONERWA has been developed to allow GoR, Development Partners, Private Sector and civil society oversight of projects/ programmes, and to ensure maximum transparency and accountability. The Ministry in charge of environment and climate change (presently MINIRENA) the national institution responsible for Fund oversight, while REMA, as instructed by MINIRENA, is the authority appropriate for hosting a Fund management team charged with day-to-day operations.

Results of a comparative advantage assessment indicate that the combination of MINIRENA/REMA and the Rwanda Development Bank appears to be the most effective management option, bringing maximum value for money in the short to medium term. This hybrid scenario plays on MINIRENA/REMA's strengths in the public sector and BRD's strengths in managing and promoting financial instruments targeting private sector beneficiaries. A Fund Management Team (recruited and funded by DFID for a period of two years) will initially provide support in the form of technical to MINIRENA/REMA and BRD, as well as priority line ministries (MINAGRI, MININFRA, MINALOC, MINICOM), the private sector and Technical Committee.

The FONERWA Managing Committee will be responsible for monitoring and directing the Fund's activities. It is the highest organ in the Government of Rwanda for FONERWA management and oversight and involves participation from a cross-section of stakeholders including the GoR at central (Permanent Secretaries) and district levels (through MINALOC), civil society, the private sector and development partners. The FONERWA Technical Committee will be responsible for ensuring strong ownership of FONERWA-supported activities, and enhancing their sustainability, and will consist of Director Generals from key environment and climate related sectors as well as Development Partners.

The FONERWA project/programme proposal screening will be carried out in a fair and transparent, multi-step process, the guidelines for which will be made public. This will be overseen by the FMT and Technical Committee; with the ultimate funding decisions made by the Managing Committee. The 6 key steps of the proposed screening process include: (1) Submission of a Project Profile Document, (2) Review for Eligibility Criteria, (3) Preparation and Submission of Full Project Document (PD), (4) Technical Appraisal and Short-listing of PDs, (5) Strategic Appraisal and (6) Decision Making. During the screening process, it will be ensured that any project submitted is aligned with the relevant Sector Strategic Plans (SSPs) and overarching goals of the GoR related to environment, climate change and development. Transparency throughout the screening process will be ensured by providing feedback to project promoters in each of the steps. In cases, where projects are not approved, adequate justification will be provided. At least 40% of the FMT's time will be spent on providing technical assistance for proposal development to both public and private sector project promoters.

A risk assessment was conducted to identify potential risks associated with design, implementation, establishment and operational stages of FONERWA development. These risks are crosscutting in nature and therefore combined in an assessment of the Fund's implementation (years 1-2) and ongoing management (years >2) phases. The risk assessment took into consideration key issues, challenges and areas of uncertainty associated with these two phases, reflecting associated risks from both GoR and investor perspectives, possible mitigation activities and key underlying assumptions. Given the likelihood of identified risks materialising and their possible impacts differ, identified risks were assigned High, Medium or Low likelihood and impact. *Overall, risks associated with FONERWA implementation and ongoing management demonstrate low to medium likelihood, corresponding with medium to high impacts.*

In order to realise FONERWA operationalisation, the Fund Managing Committee (once configured) will need to make a number of critical decisions regarding the above recommendations in relation to the finalisation and approval of:

- Overall Fund structure;
- Investment priorities;
- Capitalisation sources for further development;
- Financial structure and priority financial instruments;
- Institutional arrangements and
- Governance modalities.

SECTION 10 - CONCLUSION

The role of the FMT will be critical in facilitating the implementation of these decisions and – most importantly – building capacity and awareness across Rwanda's public and private sectors to generate demand through development of high-quality project/programme proposals.

Following the 2-year appointment of the Fund Management Team, FONERWA should be well placed as a fully Rwandan owned and managed Fund. At this time, there will also be more clarity in the context of bilateral/multilateral capitalisation as Development Partners are able to include contributions to FONERWA in programming country commitments, in addition to the development of international public funds (e.g. GCF). These and other developments will enable FONERWA to start building a solid, performance-based track record of results in achieving Rwanda's environment and climate change objectives, in turn building confidence of potential public and private investors as well as Fund beneficiaries at national and sub-national levels.

ANNEXES

ANNEX 1 STAKEHOLDER LISTS

Name	Title	Institution
Sarah Love	Climate Change and Low Carbon Development Advisor	DfID
Rose Mukankomeje	Director General	REMA
Jean Ntazinda	Coordinator	DNA Secretariat
Lars Johansson	First Secretary	SIDA
Kobayashi Hiroyuki	Resident Representative	JICA
Ndayisaba Alexis	Program Coordinator	JICA
Flavia Busingye	Legal Advisor	RRA
Amin Budiarjo	National Project Manager, PREP-ICCTF	ICCTF Secretariat
Joanne Manda	Climate Change and Environment Advisor	DFID- Bangladesh
Elias Baingana	Director General of National Budget	MINECOFIN
Caroline Rwiwanga Kayonga	Permanent Secretary	MINIRENA
Amb. Stanislas Kamanzi	Minister	MINIRENA
Jacqueline Musoni	Environmental Analyst	RDB
Dusabeyezu Sebastien	UNFCC National Focal Point and Environmental Analyst	RDB
Diego Zurdo	2nd Secretary, Rural Development	Delegation of the European Union
Benon Talemwa	Senior Investment Promotion Officer	RDB
Remy Norbert Duhuze	Director, Environmental Regulation and Pollution Control Unit	REMA
Venerable Ingabire	Environmental Economist	REMA
Clement Ncuti	Economist	MINECOFIN
Juliette Kabera		REMA
Ingrid Mutima	External Resources Mobilization Expert	MINECOFIN
Agnes Kanyangeyo	Director of Planning and Research	RRA

Name	Title	Institution
Mpunga Joseph	Head of Division - Investment Implementation	RDB
Michael Biryabarema	Director General	OGMR
Jack Kayonga	CEO	BRD
Mark Cyubahiro	Director General	RBS
Dismas Bakundukize	Director of Forestry Field Programs	NAFA
Johan Nieuwenhuis	Delegue de Cogestion (PAREF)	BTC
Eddy de Laethauwer	Technical Assistant (PAREF)	BTC
James Sano	Deputy Director General - Water and Sanitation	EWSA
Theoneste Minani	Water and Sewerage Utility Director	EWSA
Joel Rudasingwa	Tourism Research and Stats Officer	RDB
Dr. Christian Shingiro	Head-Poverty and Environment Unit & Programme Specialist	UNDP
Janvier Ntalindwa	Poverty and Environment Unit & Programme Specialist	UNDP
Steven Niyonzima	National consultant	Rwanda Resource Efficient and Cleaner Production Centre
Christope Nsengiyaremye	Fiscal Decentralization Coordinator	MINECOFIN

ANNEX 2
OTHER INTERNATIONAL (VERTICAL) CLIMATE FUNDS

	Indonesia Climate Change Trust Fund (ICCTF)	Indonesia Green Investment Green Fund (IGIF)
Inception Date	Sep-2009	2009/2010
Objectives	Promote coordinated action climate response. Low carbon economy and greater resilience.	Leverage private and market based finance for low emissions development projects.
Capitalisation		
Financing Mechanisms	National Budget, Bilateral and Multilateral Grants	National budget, multilateral/bilateral grants, institutional investors, concessional loans
Financing Structure	Expenditure fund	Revolving Fund; Public Venture Capital Enterprise that invests in a variety of asset classes with the aim to leverage private sources of finance for low carbon projects.
Government Commitment	15% match of its own resources, on receipt of other pledges	$400 million to the fund, and plans to allocate a further $100 million in 2010-2011 through its Special Purpose Vehicle (SPV).
Initial Capitalisation	$9.5m	$100m
Amount and Sources of Funds	TOTAL: $9.5m DFID ($7.5m), AusAID ($1.8m), SIDE ($0.166m),	France AFD (€300-500m) in the form of concessional loans. Commitments from DFID , JICA, Korea, and the Islamic Development Bank.
Governance		
Main Bodies	The Steering Committee, The Technical Committee and a Secretariat	Ministry of Finance under its Government Investment Unit and its Special Purpose Vehicle 'PT Indonesia Green Investment'
Implementation		
Project Implementer(s)/ Executing Agency(ies)	Ministries, Agencies, Local Gov, NGO's	

OTHER INTERNATIONAL (VERTICAL) CLIMATE FUNDS

Continued

	Bangladesh Climate Change Resilience Fund (BCCRF)	Bangladesh Climate Change Trust Fund (BCCTF)	Strategic Climate Institutions Program (SCIP)
Inception Date	May-2010	2010	May-2011
Objectives	To support and contribute to NAPA and Bangladesh's Climate Change Strategy and Action Plan (BCCSAP). BCCSAP aims to build a climate resilient and low carbon economy and society.		Climate adaptation and low carbon development. Short-term institutional capacity building.
Capitalisation			
Financing Mechanisms	National Budget, bilateral and multilateral grant contribution,	National Budget	Multilateral/ bilateral grants
Financing Structure		Block budgetary allocation by GoB in the form of an endowment.	Trust Fund
Government Commitment	None at present	Allocation $100m each FY in 2009-2010, 2010-2011, 2011-2012	None
Initial Capitalisation	$110m	$100m	£15m
Amount and Sources of Funds	TOTAL: $125.5m UK ($94.6m), Denmark ($1.8m), Sweden ($13.6m), EU ($11.7m), Switzerland ($3.8m),	GoB ($100m each FY in 2009-2010, 2010-2011, 2011-2012)	DFID (£15m)
Governance			
Main Bodies	The Governing Council, a Technical/Management Committee, a Secretariat and an expert panel (envisaged to be set up)	Board of Trust/Steering Committee (that is reportable to the President), Technical Committee (and sub-Technical Committee), Screening Committee (Climate Change Unit)	Fund Manager, Fund Management Committee (FMC), Innovation Centre (to support the private sector)
Implementation			
Project Implementer(s)/ Executing Agency(ies)	90% through Government Line Ministries, with technical support from World Bank and 10% through Palli Karma-Sahayak Foundation (PSKF), a microfinance institution	Climate Change Unit under the Ministry of Environment of Forests (headed by Secretary of MoEF)	Fund Manager and Innovation Centre

ANNEX 3 FINANCING GAP ANALYSIS FOR THEMATIC WINDOW (1-3) ENTRY POINTS PART 1

Head	Funds Requested (Million Rwf)	Funds Approved (Million Rwf)	Financing Gap (Million Rwf)
Ecosystem Rehabilitation	17,568	4,128	13,440 (77%) or 36% ignoring the outliers
Sustainable Land Management	20,026	18,416	1,609 (8%)
Integrated Water Resource Management	1,168	531	637 (55%)
Sustainable Forestry Management	6,540	4,419	2,120 (32%)
Mines and Quarries	900	125	774 (86%)
Renewable Energy and Energy Efficiency	16,503	13,513	2,990 (18%)

FINANCING GAP ANALISYS FOR THEMATIC WINDOWS (1-3) ENTRY POINT PART 1

Head	Funds Requested (Million Rwf)	Funds Approved (Million Rwf)	Financing Gap (Million Rwf)
Biodiversity Promotion and Protection	958	660	297 (31%)
Data Collection and Monitoring and Management of Information Systems (MIS)	2,179	1,583	595 (27%)
Pollution Management	196	153	43 (22%)
Irrigation Technology	4,060	2,832	1,227 (31%)
Applied and Adaptive Research in Agro-Forestry, Waste, and Urban Planning.	9,877	9,919	42 (SURPLUS)
Support to Implementation of Cross-Sectoral Integrated Planning	18,591	12,403	6,187 (33%)

FINANCING GAP ANALYSIS FOR THEMATIC WINDOWS (1-3) ENTRY POINTS PART 2

Continued

Head	Notes
Ecosystem Rehabilitation	1. Although the gap is seemingly massive, most of it is accounted for by MINICOM's budget line 'Mitigation of environmental deterioration and relocation of industries in an adequate location (away from Gikondo)' that requested 15 bn but was granted only 2.5 bn. 2. If we ignore the above, the gap in the sector comes down to around 900 million (on 2.53 billion), which is 35.6%
Sustainable Land Management	In analysing this gap, we note that MINAGRI's PAIGELAC programme had a large surplus (approximately 3.77 billion), and MINELA's Sustainable land management programme had an almost equivalent gap (3.69 billion). This shows that although the sector's financing gap as a whole does not appear large, some programmes were heavily underfunded while others overfunded
Integrated Water Resource Management	The major contributor to this financing gap is underfunding of the Ground Water Exploration and Exploitation Project by MINELA, which was only granted 50 million as against close to 500 million requested.
Sustainable Forestry Management	We need to note that under this head, one of MINALOC's budget line (District Forests Management) does not seem to have been requested in the MTEF. It is the mandate of MINECOFIN to provide funds for projects it deems important, even if they have not been requested by the relevant agency. Thus, the financing gap would be even greater were it not for the surplus of around 1 billion shown by MINALOC's budget line.
Mines and Quarries	Almost all of the activities/ programmes requested (related to mines/quarries) were left unfunded, and the 125 million was provided only towards the building of seismic stations.
Renewable Energy and Energy Efficiency	Two budget lines (Rehabilitation of two hydro power plants; Construction of 8 micro hydro power plants) were not requested in the budget submissions; however, it is the mandate of MINCOFIN to provide funds for projects it deems important even if they have not been requested by the relevant agency. If we discount these 2 projects, we are left with an even bigger gap of 4.29 billion (26%).

FINANCING GAP ANALISYS FOR THEMATIC WINDOWS (1-3) ENTRY POINTS PART 2

CONTINUED

Head	Notes
Biodiversity Promotion and Protection	The only biodiversity-related project approved in the budget was 'Protected Areas Biodiversity'. All other requests, such as taking inventory of biodiversity outside protected areas, developing a conservation strategy etc. Were left completely unfunded.
Data Collection and Monitoring and Management of Information Systems (MIS)	Most of the activities requested came from the budget of Meteo (under MININFRA), and focused on weather related data-collection.
Pollution Management	Most of this gap can be attributed to underfunding of the MINELA project 'Clean Development Mechanisms', which was allocated 29 million against requested 62.
Irrigation Technology	Immediate Action Irrigation Project (GFI) was underfunded by exactly Rwf 1 billion, thus accounting for almost the entire gap.
Applied and Adaptive Research in Agro-Forestry, Waste, and Urban Planning.	This small surplus can be explained by overfunding of Urbanisation plans; the 2 relevant budget lines show a surplus of 355 million Rwf. This is almost offset by a deficit in the budget line solid waste management (313 million), leaving behind a small surplus.
Support to Implementation of Cross-Sectoral Integrated Planning	Almost the entire financing gap comes from the underfunding of VUP.

ANNEX 4 ENVIRONMENTAL FINES AND PENALTIES UNDER THE ORGANIC LAW ON ENVIRONMENT

Infraction	Fines	
	Monetary (RWF)	Jail time (days)
Cutting a tree without permission or killing an animal in protected forest	300,000 - 2,00,000	60 - 728
Destruction of a public monument or damaging of a historical site	1,000,000 - 5,000,000	180 - 728
Obstruction of an inspection of a protected building	1,000,000 - 5,000,000	30 - 180
Failure to respect technical instructions for use of a protected building	200,000 - 2,000,000	30 - 364
Persistent use of an officially closed protected building	5,000,000 - 10,000,000	60 - 728
Conducting illegal research or commercial activities of valuable minerals	1,000,000 - 2,500,000	60 - 728
Dumping waste in an unaccepted manner	1,000,000 - 5,000,000	60 - 728
Pollution of inland water masses by dumping, spilling or depositing chemicals of any nature that may cause or increase water pollution	2,000,000 - 5,000,000	60 - 728
Importation of waste without authorisation	5,000,000 - 50,000,000	364 - 1,820
Handling of toxic waste in any unauthorised manner	50,000,000 - 200,000,000	3,640 - 7,280
Pollution of wetlands	5,000,000 - 50,000,000	364 - 1,820
Violation of regulations related to proximity to wetlands and other water sources	200,000 - 5,000,000	180 - 728
Dumping of waste in an inappropriate place by any treatment plant	1,000,000 - 10,000,000	0
Depositing, abandoning or dumping of waste or sewage outside of a designated place	10,000 - 100,000	0
Excessive noise	10,000 - 100,000	0
Burning of domestic waste, owning a car that emits noxious gases, and smoking in a public meeting place	10,000 - 50,000	0

Source: Organic Law 04/2005 of 08/04/2005, Articles 95-110.

ANNEX 5 PROJECTS THAT REQUIRE AN EIA

	Infrastructure
1	Construction and repair of international roads, national roads, district roads and repair of large bridges
2	Construction of industries, factories, and activities carried out in those industries
3	Construction of hydro-dams and electrical lines
4	Construction of public dams for water conservation, rain water harvesting for agricultural activities and artificial lakes
5	Construction of oil pipelines and its products, gases and storage tanks
6	Construction of terminal ports and airports, railways and car parks
7	Construction of hotels and large public buildings which house more than a hundred people per day
8	Water distribution activities and sanitation
9	Construction of public land fills
10	Construction of slaughter houses
11	Construction of hospitals
12	Construction of stadiums and large markets
13	Initial installation of communications infrastructure
	Agriculture and Animal Husbandry
1	Agriculture and breeding activities which use chemical fertilizers and pesticides in wet lands and large scale monoculture agricultural practices, such as team, coffee, flowers and pyrethrum, etc.
2	Works and activities that use biotechnology to modify seeds and animals
	Works in parks and in its buffer zone
	Works of extraction of mines

Source: Annex to the Ministerial Order 004/2008 of 15/08/2008.

ANNEX 6
PROPOSAL FOR LEVYING EIA FEES

Percentage of the Government-funded capital budget. In order to apply the levy to government capital projects, it is recommended that the government agree on a fixed percentage of the total capital budget that will be transferred to FONERWA. An analysis of the 2011-2014 PIP data on public sector capital projects suggests that roughly 38.5% of government-funded capital projects should be required to conduct an EIA. Applying a rule-of-thumb that 25% of the cost of public sector capital projects is for operating expenses, *it is proposed that 0.0289% of the GoR-funded capital budget is transferred to FONERWA* for the purpose of ensuring compliance with environmental regulations.

	0.10%	(of total project cost minus operating costs for projects that conduct an EIA)
x	75.00%	(to exclude operating costs)
x	38.50%	(percent of GoR-funded capital projects that require an EIA)
=	0.0289%	(levy on the GoR-funded capital budget)

Percentage of the Donor-funded capital budget. Donor-funded projects should also be liable to pay the EIA fee on their capital projects. Moreover, donor-funded capital projects should be responsible for conducting an EIA that complies with Rwandan legislation. It is recommended that a binary response question is added to the Donor Performance Assessment Framework, under the usage of government systems section, to track the compliance of Development Partners with the government's EIA requirement. The analysis of the PIP suggests that roughly 33.7% of the non-government-financed capital budget is allocated to projects that should conduct an EIA. Using the same rule of thumb methodology, *it is proposed that 0.0253% of the donor-funded capital project is transferred to FONERWA*.

	0.10%	(of total project cost minus operating costs for projects that conduct an EIA)
x	75.00%	(to exclude operating costs)
x	33.70%	(the percent of donor-funded capital projects that require an EIA)
=	0.0253%	(levy on the donor-funded capital budget)

Private Sector Fee. The purpose of the EIA fee on private sector investment is the same for public sector investment: to ensure that resources are available to ensure compliance with Environmental Management Plans. It is more difficult, however, to accurately calculate 0.1% of a private sector project's total cost minus operating costs. Therefore, it is proposed that a fixed fee be levied on all private sector projects that have to conduct an EIA.

Although data on private sector investment in Rwanda is not comprehensive, it is possible to establish a reasonable estimate. According to initial findings from an on-going RDB survey of capital spending, domestic private sector investment is equivalent to roughly 60% of total investment and Foreign Direct Investment accounts for the remaining 40%. Therefore, one can estimate total private sector capital investment based on the FDI projections in the GoR's balance of payments. Applying the above rule-of-thumb assumptions applied to publicly-financed capital projects—namely that approximately 35% of private sector investment would be required to conduct and EIA and that 25% of the investment will cover the operating costs—then the fee on EIA projects would have amounted to RWF23.6mn in 2011, or roughly RWF225,000 per EIA certificate that was granted. This report *proposes a fixed-rate fee of RWF225,000 on all private sector investment projects that conduct an EIA*. Such a fixed rate fee would obviate the need to conduct a costly and otherwise unnecessary audit of the investment plans of EIA projects to determine their project-specific levy.

ANNEX 7 DEVELOPMENT PARTNER SUPPORT TO ENR

	2009/10				
	US$ mn	% Disbursed as grant	% implemented by GoR	% using all GoR systems	% Disbursed for TA
AfDB	2.2	0%	100%	0%	0%
Belgium	1.1	100%	0%	0%	5%
EC	2.7	100%	100%	100%	0%
Germany	-	N/A	N/A	N/A	N/A
Japan	-	N/A	N/A	N/A	N/A
Sweden	-	N/A	N/A	N/A	N/A
UK	7.3	100%	100%	0%	24%
UN	5.0	93%	38%	0%	50%
World Bank	0.9	0%	100%	0%	46%
Total	19.2	82%	78%	14%	25%

	2010/11				
	US$ mn	% Disbursed as grant	% implemented by GoR	% using all GoR systems	% Disbursed for TA
AfDB	-	N/A	N/A	N/A	N/A
Belgium	1.1	100%	0%	0%	15%
EC	-	N/A	N/A	N/A	N/A
Germany	0.1	100%	0%	0%	0%
Japan	0.3	100%	100%	0%	16%
Sweden	2.5	100%	100%	100%	0%
UK	19.0	100%	100%	0%	0%
UN	7.4	97%	68%	0%	20%
World Bank	0.4	0%	100%	0%	52%
Total	30.6	98%	89%	8%	6%

Source: Donor Assistance Database (DAD). Accessed February, 2012.

ANNEX 8
PLAN OF ACTION TO ENSURE EFFECTIVE DOMESTIC RESOURCE MOBILISATION

Certain preconditions should be met in order to ensure maximise effective resource mobilisation. The following actions should be top priorities of a Fund Management Team:

ENVIRONMENTAL FINES –

Preconditions:

1 The Government has to create a new line for environmental revenue in the chart of accounts.
2 FONERWA must establish a mandate to share environmental fines and fees collected at the sub-national level.
3 A FONERWA special account must be set-up at BNR.
4 REMA, the FONERWA FMT, and the RRA should work together to establish a process for identifying environmental fines to ensure that it is earmarked for the fund.
5 Some fines, such as the penalty for conducting illegal research or commercial activities of valuable minerals are duplicated by other laws and regulatory regimes. The environmental regulatory regime should be rationalised to avoid duplication of efforts and revenue collection and to clarify roles and responsibilities.
6 The GoR should improve awareness of environmental regulations and enhance enforcement capacity.

ENVIRONMENTAL IMPACT ASSESSMENTS -

Preconditions:

1 Agree upon a proposal for public sector projects, such as in the Annex.
2 The procedures for applying the fee to the private sector should be discussed with private sector representatives to ensure that it is applied in such a way that it does not discourage investment.

FORESTRY FUND –

Preconditions:

1 A legal framework should be developed to merge the NFF with FONERWA.
2 In order to access finance from the NFF, it will be necessary to ensure that NAFA is a critical stakeholder at the technical and steering committee levels.

WATER FUND –

Preconditions

1 The Water Fund needs to first be established.
2 Agree on a proposal for EWSA payment for eco-system services.
3 A legal framework should be developed to merge the forthcoming Water Fund with FONERWA.

OTHER ENVIRONMENTAL REVENUE –

Preconditions:

1 Aside from the revenue earned from plastic bags, there is no other environmental revenue. There is a need to establish new taxes and fees, and to strengthen monitoring and enforcement.

ANNEX 9 INNOVATIVE FINANCIAL INSTRUMENTS PART 1

	Financing Instrument	Description
Debt	Loan Guarantee	A loan guarantee is a promise by a guarantor (often national bank) to assume the debt obligation of the borrower if they are unable to pay.
	Re-financing/Debt Relief	Debt relief is a tried and test mechanism for delivering development objectives and spending ODA budgets, notably through the HIPC and MDRI initiatives, but also through debt conversion programs.
	Carbon Finance	The Kyoto Protocol established a system in which developed countries, and companies in those countries, can reduce their carbon emissions by investing in Greenhouse Gas emission reduction projects in developing countries, which are tradable on the carbon market.
Carbon	Green bonds	A foreign exchange liquidity facility is similar to a line of credit, in that it can be drawn on when the project needs money and then repaid when the project has more money than expected.
	Cool Bonds	Five-year, AAA notes issued by the World Bank and linked to Certified Emission Reductions (CERs) set up under the Kyoto Protocol.
	Private equity funds	Private investment of risk capital in companies and projects
	Venture Capital Funds	Private investment of risk capital in technology innovations,

INNOVATIVE FINANCIAL INSTRUMENTS PART 1

Continued

	Financing Instrument	Example
Debt	Loan Guarantee	Brazil 2006: PROESCO, a risk-sharing credit line (that offers low interest rates) between BNDES, which assumes a maximum of 80% of the risk, and intermediary banks, earning a minimum of 20% of the risk, to offer financing for Energy Efficiency (EE) projects.
	Re-financing/Debt Relief	In 2006 France and Cameroon signed a C2D for €537m over 5 years (with €20m for environment) whereby Cameroon is to receive French grants to refinance its debt repayment.
	Carbon Finance	The African Programme for Solar Water Heating in Buildings uses the programmatic-CDM concept. Initially, a group of 4-5 projects are expected to yield savings of between 2,000 and 3,000tCO2e/year. Participants are expected to recover between 80%-90% of the revenues from carbon credits annually.
Carbon	Green bonds	In 2008, Swedish Bank, SEB, partnered with the World Bank to issue 'Green Bonds' in response to demand from investors, who sought an investment in climate change activities. By November 2009, 2 Green Bond issues had raised around $665 million.
	Cool Bonds	In 2008, the Daiwa Securities Group and the World Bank launched the market's first Certified Emission Reduction (CER) Linked Uridashi Bond. The issuer for the bonds is the World Bank.
	Private equity funds	In 2011, the Asian Development Bank (ADB), through the Seed Capital Assistance Facility (SCAF), supported an equity infusion of $60m to private equity fund managers who are investing in the clean energy/climate change in ADB's member countries.
	Venture Capital Funds	China Environment Fund (CEF) was established in 2002 as the first clean-tech venture capital fund in China, part of Tsinghua Holdings. The firm manages a series of four funds. CEF II and CEF III together have accumulated $300 million.

ANNEX 9 INNOVATIVE FINANCIAL INSTRUMENTS PART 2

	Financing Instrument	Description
Equity	Concessional (soft) Loans	Financing that offers lenient terms for repayment, and provides debt capital at concessional interest rates, usually at lower than market (fixed) interest rates
	Investment	The donor contribution is invested in perpetuity and the interest is used to finance operations and project activities. This type of investment is appropriate for long-term continuous funding needs.
	Project Development Funds	Grants that are essentially loaned without interest or repayment until projects are financially viable.
Innovative Grants	Inducement prizes	Prizes that stimulate R&D or technology development for climate change mitigation and adaptation.
	Index-based risk financing	A tool that uses contracts with global firms or banks to hedge against specific hazards or events. Data is regionally tracked and payouts are made when deviations from historic averages reach the pre-set level.

INNOVATIVE FINANCIAL INSTRUMENTS PART 2

Continued

	Financing Instrument	Example
Equity	Concessional (soft) Loans	In 2009, Niger was endorsed to participate in the Pilot program for Climate Resilience (PPCR). The PPCR provides financing through near-zero interest credits with a grant element of up to 75% through multilateral development banks (MDBs) to implement the SPCR . In Niger, $60m is provided in the form of a near-zero interest loan.
	Investment	In 1997, $16.48m from GEF went to creating the Natural Protected Areas Fund (FANP). The initial GEF endowment to FANP saw a 13.6% return. The FANP received contributions from 12 bilateral, corporate and non-profit donors, reaching $50m in 2008.
	Project Development Funds	Chilean Economic Development Agency launched the Production Development Corporation (CORFO) in 2005. It offers credit lines to commercial banks for lending of up to $5 million to renewable energy projects. CORFO also offers project preparation matching funds. Over100 projects have been supported.
Innovative Grants	Inducement prizes	The X Prize Foundation “Energy & Environment” prize group to drive breakthroughs in clean energy, climate change, energy efficiency and water management.
	Index-based risk financing	The Government of Ethiopia, with the support from the World Food Programme (WFP) and the World Bank, piloted weather risk financing and management mechanisms in 2006.

ANNEX 10 FINANCING GAP ANALYSIS BASED ON AVAILABLE STRATEGIC PLANS AND BUDGET REQUESTS.

Windows and Entry Points	Financing Request as per SSP	Estimated Approval	Financing Gap	% Gap	Mean Gap*
Window 1: Conservation & sustainable management of natural resources					
Ecosystems Rehabilitation[98]	17,880,416,000	8,790,296,297	9,090,119,703	51	64
Sustainable Land Management[99]	19,817,877,852	15,237,970,735	4,579,907,117	23	16
Integrated Water Resources Management[100]	3,639,740,999	2,125,149,200	1,514,591,799	42	49
Sustainable Forestry101	15,429,109,744	13,259,703,456	2,169,406,288	14	23
Sustainable Mines and Quarries102	1,296,994,551	500,637,632	796,356,919	61	74
Promotion and Protection of Biodiversity103	4,790,019,755	3,304,763,550	1,485,256,205	31	31
TOTAL FOR WINDOW 1	**62,854,158,901**	**43,218,520,870**	**19,635,638,031**	**31**	**36**

1 Five year estimate from 2010/11-2014/15 as per the Sub-Sector Strategy for Environment and Climate Change

2 Portion of the budget requested from GoR source from 2009/10-2013/14; estimated approvals calculated using 2010/11 approvals as an indicative base.

3 Five year strategic plan for the Environment and Natural Resources Sector (2009-13); estimated approvals calculated using 2010/11 approvals as an indicative base.

4 Forestry SSP, 2009-12, estimated approvals calculated using 2010/11 approvals as an indicative base.

5 Five year estimate from 2010/11-2014/15 as per the Sub-Sector Strategy for Environment and Climate Change, estimated approvals calculated using 2010/11 approvals as an indicative base.

6 In face of lack of definitive requests within the SSP, Requests and Approvals both estimated using 2010/11 data as an indicative base.

Windows and Entry Points	Financing Request as per SSP	Estimated Approval	Financing Gap	% Gap	Mean Gap*
Window 2[104]: R&D and technology transfer and implementation					
Renewable energy & EE technology105	66,102,000,000	54,052,000,000	12,050,000,000	18	18
Pollution Management	1,458,003,000	622,084,900	835,918,100	57	40
Irrigation technology106	145,914,000,000	49,933,915,800	95,980,084,200	66	49
Applied and adaptive research (AF, waste, urban planning) 107	42,595,000,000	39,679,271,036	2,915,728,964	7	7
TOTAL FOR WINDOW 2	**256,069,003,000**	**144,287,271,736**	**111,781,731,264**	**44**	**29**
Window 3[108]: Environment & climate change mainstreaming					
Support to implementation of cross-sectoral integrated planning (e.g. IDP, VUP) 109	168,742,200,000	81,701,400,000	87,040,800,000	52	43
TOTAL FOR WINDOW 3	**168,742,200,000**	**81,701,400,000**	**87,040,800,000**	**52**	**43**

**Mean calculated by averaging financing gaps from 2010/11 and from the SSP.*

In section 4.6, we estimated financing gaps seen under the three thematic windows and their respective entry points. For the sake of estimation, we used data from 2010/11 as a representative year. In this annex, we try and estimate the financing gaps by another methodology- we look at various Sector Strategic Plans, and delineate the funds requested under different budget heads. For some budget heads, such as Promotion and Protection of Biodiversity, the Sector Strategic Plan does not provide a separate head for funds requested; in such cases, our best guess is to still use 2010/11 as the base year for our estimates.

The above table summarises our findings. We see that our previous analysis done using 2010/11 as a representative year was justified, as our findings from the analysis of SSP financing gaps are broadly in line with the previous findings. For comparison, we have provided the average of the financing gaps seen from 2010/11 and from the SSP in the last column of the table above.

While we realise that arriving at definitive financing gaps is a tough task given the informational constraints and lack of clear data, we have attempted to use a rational and justifiable methodology. Rather than the exact magnitudes, the concern here is to demonstrate the general trend observed in the funding of issued related to environment and climate change in Rwanda. Both from Section 4.6 and this annex, we can see that financing gaps under most entry points are huge; to summarize, the mean gaps seen under Thematic Windows 1, 2, and 3 are 36%, 29%, and 43% respectively. Also, the biggest gaps are seen in Ecosystems Rehabilitation, Sustainable Mining and Quarries, Irrigation Technology, and Integrated Water Resources Management.

7 It was not possible to take Disaster Risk Reduction into consideration as MIDIMAR, the responsible Ministry, does not yet have a Sector Strategic Plan with costing. Data collection, monitoring & Management Information Systems (MIS) has not also been taken into account since it cut across ALL sectors.

8 This is a head cross-cutting across various institutions; hence, we use 2009-12 projections calculated using 2010/11 as the base year.

9 Agriculture Sector Investment Plan, 2009-12.

10 MININFRA SSP 2011-2015

11 SEA is being financing by EU only in 1 sector. It is not yet part of any sector strategic plan. There is also no separate budget heading for Sector-specific adaptation and mitigation.

12 National Social Protection Strategy Implementation Plan, 2011-2015

ANNEX 11 PROPOSED OTHER ENVIRONMENTAL REVENUE.

Instrument 1: EWSA Water Levy - Payment for Ecosystem Services (PES) scheme

Rwanda's 2010 State of Environment and Outlook recognises that "water resources have a direct influence on the quality of life of the people, their health and their overall productivity." However, despite Rwanda considering its water resources as abundant albeit unevenly distributed, the country suffers from water scarcity according to a recent analysis of Payment for Ecosystem Services (PES) in Rwanda.

As a result, there is a strong rationale for PES schemes focusing on water and electricity production and sales to ensure that natural resources are well managed and maintained. For example, a case study on the impact of the degradation of the Rugezi wetland ecosystem indicated that power generation at the Nturuka hydropower plant fell systematically between 2003 and 2007, as a result of falling water levels due to land degradation and siltation of turbines. Based on a weighted average price per kWh, the decline in production cost ELECTROGAZ (formerly the electricity utility before RWASCO and ELECTROGAZ were merged to form Electricity, Water and Sanitation Authority, EWSA) US$856,994 in revenue between 2003 and 2007. REMA and partners started restoring the ecosystem after the decline in water levels was noticed in 2005, and in 2008 there was a recovery in kWh worth US$149,670.

Water is a preferred entry point for PES in Rwanda because current water tariffs are competitive in the region (See Table 1a), and there is scope for raising tariffs—unlike with the electricity sector. Moreover, Rwanda's water tariff has not been adjusted since January 2007.

TABLE 1A
Cross-Country Comparison of Water Tariffs in 2010 (US$; excluding VAT)

	Rwanda (EWSA)	Uganda (NWSC)	Kenya (NCWSC)	Tanzania (DAWASCO)	Ethiopia (HWSA)	Malawi (BWB)	Tunisia (SONEDE)	Senegal (SDE)	Average
Domestic	0.51	0.67	0.34	0.54	0.48	0.65	0.16	1	0.54
Large Users	1.02*	1.01	0.66	0.62	0.96	0.89	0.56	1.58	0.90

Source: RWASCO Tariff Review Study, January 2011.
*Note: * The cross-country comparison in the RWASCO study presents the data differently.*

EWSA has six tariff bands for water consumers. Small-scale users and domestic users currently pay less than 50 US cents per cubic metre (cu.m) of water, and are subsidised by large users (Table 1b). The large users, consumers of more than 21 cu.m per month, account for 19% of the connections but 32% of the usage.

TABLE 1B
Comparison of Water Consumers in Rwanda by Tariff Bands

Tariff Bands		Domestic	Large Users			
	0-5 cu.m	6-20 cu.m	21-50 cu.m	51-100 cu.m	100+ cu.m	Industries
Current Tariff (RWF; excluding VAT)	240	300	400	650	740	593
Connections (%)	33%	49%	14%	3%	2%	N/A
Consumption (%)	24%	45%	15%	5%	12%	N/A
Proposed Tariff Structure (RWF)	240	300	450	700	790	643
Proposed Tariff Structure (US$)	0.40	0.50	1.07			

Source: RWASCO Tariff Review Study, January 2011 and FONERWA design team calculations.

Previous reports have recommended that EWSA pays a percentage of its gross revenue for a PES water scheme, such as its payments to the regulator, the Rwanda Utilities Regulatory Agency (RURA). However, this report recommends a progressive levy imposed on large users of water to pay for watershed management. The reasons for this are related to the fact that GoR is already subsidising EWSA, and EWSA will pass any payments for FONERWA onto its consumers. A usage-based fee on large users would also act as an incentive to conserve water, while maintaining low prices for the poorest consumers and small households to ensure equitable access. Table 1b, above shows the proposed tariff increase for large users, RWF50/cu.m, and the impact on the average price paid by large users, 5 US cents/cu.m or slightly less than 5% of the current tariff.

Adjusting the sales and revenue forecasts from the January 2011 review of RWASCO's tariff structure (RWASCO was formerly the water utility before it was merged with RECO (formerly ELECTROGAZ) to form EWSA) to fiscal years, one finds that estimated sales are expected to more than double between 2009-10 and 2014-15 (See Table 1c). In addition to reductions in non-revenue water (by improving efficiency and reducing loss), this will also be driven by increased production and thus greater pressures on Rwanda's existing water resources. The RWF 50/cu.m imposed on large users is expected to compensate somewhat for the pressures on Rwanda's wetlands and watersheds by financing rehabilitation efforts, awareness campaigns aimed at conservation, and other efforts. Assuming that the consumption pattern of tariff bands remains unchanged, **such a fee on large users would generate RWF 390mn in 2012-13 and RWF 523mn in 2014-15**. Given that the financing gap for ecosystem rehabilitation in 2010/11 was RWF 13.3bn, the contribution of the proposed water fee is still minimal compared with the country's needs.

TABLE 1C
Projection of EWSA Sales and Watershed Management Levy Revenue

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Estimated Sales (cu.m mn)	15.8	18.3	21.1	24.4	28.3	32.7
Estimated Revenue from water (RWF bn)	6.5	7.5	8.7	10.1	11.7	13.5
Projected Sales to Large Users (cu.m mn)				7.8	9.0	10.5
Proposed Watershed Management Levy on Large Users (RWF/cu.m)					50.0	
Forecast Revenue for Watershed Management (RWF mn)				390	452	523

Note: Projections were adjusted to fiscal year from the RWASCO Tariff Review Study. The average tariff is concerned with sales rather than with production as in the original RWASCO tariff review.

Sources:
> Final Draft Report: Review of Institutional Legal and Policy Frameworks for Developing Payment for Ecosystem Services in Rwanda, April 2012
> RWASCO Tariff Review Study, January 2011
> Existing and Potential Environmental Fiscal Reform in Rwanda, August 2010
> Operationalisation of FONERWA Report, August 2010

Instrument 2: Supplemental Fee on Used Motor Vehicle Imports

"Among potential EFR/EIs, environmental levy on imported used items should be considered. Owing to the high poverty levels in Rwanda and the region, and within the framework of trade liberalisation, many used items are being imported. They include domestic appliances like fridges, computers, kettles, flat irons and vehicles to mention but a few. There are two concerns related to those products. (Old fridges, computers with e-waste). They pollute the environment. Secondly, their life-span is short-lived, and they quickly turn into waste."

- Review of Existing Environmental Fiscal Reforms, August 2010.

In order for Rwanda to avoid being a dumping ground for used technologies, and to compensate for carbon emissions in the transport sector, there is a convincing argument for the GoR to tax imports of second-hand motor vehicles, among other used and old technological goods. Used motor vehicles are less fuel efficient than newer vehicles, emissions are likely to be much higher, and they have a much shorter life-span compared with newer vehicles, so they are destined for the landfill much sooner. In addition, topographic conditions in Rwanda's rapidly growing capital city, Kigali, are very hilly (and sunny), providing ideal conditions for the generation of ground-level ozone, which has detrimental public health impacts. A tax on used motor vehicles is a classic example of the polluter-pays principle to address these growing problems.

In 2006, the Ugandan Government instituted a 10% environmental levy on motor vehicles older than 8 years in order to discourage "environmentally hazardous used goods". Several categories of goods were subject to the environmental levy at differing rates, such as televisions, radios, refrigerators, cookers and other second-hand household appliances. The following year, the Government of Uganda extended the environmental levy to cover vehicle parts, used motorcycles and bicycles, all being critical components of the transport sector.

Owing to the inelasticity of used motor vehicle imports in Uganda (and we expect, Rwanda) as a result of purchasing power constraints and relative prices of used motor vehicles, the import of used cars did not decline as a proportion of total vehicle imports. However, the government exceeded revenue projections and raised the equivalent of US$8.6mn in the first two years after introducing the tax.

In Rwanda, the number of vehicle imports fluctuates widely from one year to the next. For example, imports of motor vehicles almost doubled in 2011, from 8,602 in 2010 to 16,703 in 2011. According to detailed import data provided by the Rwanda Revenue Authority (RRA), despite the large increase in motor vehicle imports in 2011, the proportion of motor vehicles 8 years and older remained roughly stable around 22%.

In order to establish a conservative estimate for used motor vehicles during the next three fiscal years, an average of the previous five calendar years was taken and the proportion of used motor vehicles was assumed to remain constant (Table 1d). **Applying a flat fee of RWF 150,000 per used motor vehicle, a conservative estimate of revenue would be RWF 377mn per fiscal year. If motor vehicle imports remained at or above their level in 2011, then revenue could even exceed RWF 500mn per year.**

TABLE 1D
Projection of Revenue from Supplemental Motor Vehicle (MV) Import Fee

	2005	2006	2007	2008	2009	2010	2011	Conservative Fiscal-year Forecast
MV imports	11,116	6,558	10,289	13,388	8,713	8,602	16,703	11,539
Number of MV imports older than 8 years						1,821	3,734	2,511
Percentage older than 8 years						21.2%	22.4%	21.8%
Proposed Fee (RWF/old MV)								150,000
Forecast FONERWA Revenue (RWF mn)								377

Source: RRA Import Files and Consultants' Projections

Sources:
> RRA Import Files, April 2012
> Existing and Potential Environmental Fiscal Reform in Rwanda, August 2010
> Operationalisation of FONERWA Report, August 2010

Instrument 3: Hotel Tax for non-EAC residents

Rwanda's tourists and visitors generally come to the country to enjoy its wildlife and natural resources. There are several ways of taxing tourists and visitors to the country for the purpose of financing environmental management activities in order to ensure that the country's natural resources continue to be a draw for visitors in the future.

A hotel tax is a common way of earning revenue from tourists in many countries, particularly in Latin America. Because the draft tourism bill will require all hotels to collect nationality and residency information on its patrons, hotels in Rwanda will have the information necessary to levy a tax on non-EAC residents (those with a lower elasticity of demand for hotel services in Rwanda).

Based on the most recent survey of tourist arrivals, conducted between November and December 2010, Table 1e provides information on average accommodation consumption patterns of visitors based on their purpose of visit. The table also provides hypothetical information about a proposed hotel tax towards FONERWA. If a RWF 1, 500/person hotel tax on non-EAC residents was imposed during the survey period, then each visitor would have paid an average of RWF 4, 550 to FONERWA. As demonstrated in the table, the majority of visitor categories would have paid less than 3% on their total spending on accommodation during their visit.

TABLE 1E
Tourism Survey and Proposed Hotel Tax

Purpose of Visit	Arrivals Surveyed in Category	Average Spend on Accommodation per Visitor	Under Proposed Hotel Tax	
			Average per Visitor Contribution to Hotel Tax	Hotel tax as a Share of Accommodation Expenses
Business Visitors	556	352,579	8,647	2.5%
Business	342	443,396	10,461	2.4%
Conference	140	205,247	4,114	2.0%
Exhibition/Trade Fair	4	318,375	2,250	0.7%
Other Work/Business	45	249,123	9,500	3.8%
Study	12	210,095	15,875	7.6%
Health Treatment	13	50,188	2,077	4.1%
Tourists	367	289,262	7,038	2.4%
Holidays	271	356,596	7,273	2.0%
Cultural Event	9	36,864	1,667	4.5%
Sports Event	10	211,535	11,550	5.5%
Shopping	2	-	-	N/A
Other Leisure, Recreation, Holiday	37	113,189	7,419	6.6%
Religion/Pilgrimage	38	75,968	5,447	7.2%
Transit	582	9,317	590	6.3%
VFR (Visiting Friends or Relatives)	315	35,109	1,738	5.0%
Visiting Friends/Relatives	312	35,408	1,750	4.9%
Second Home	3	3,967	500	12.6%
Total	1,820	175,096	4,550	2.6%

Source: RDB t-stats survey.

Adjusting the RDB's forecast for tourist arrivals to fiscal years and extrapolating from the 2010 T-Stats Survey of tourist arrivals, revenue generated from the imposition of a RWF 1, 500/person hotel tax for non-EAC residents was projected. Table 1e shows that the revenue generated from the hotel tax could surpass RWF 1bn by 2014-15.

TABLE 1E
Projection of Hotel Tax Revenue

	Estimates		Projections				
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Arrivals ('000)	682	680	787	926	998	1104	1226
Non-EAC residents ('000)	126	131	150	168	188	208	231
Estimated Revenue from Hotel Tax (RWF mn)	571	594	680	767	856	947	1,051

Source: RDB "Useful Tourism Stats" and Consultants' Projections.

Sources:
> - RDB t-stats online tourism statistics database, April 2012.
> - RDB "Useful Tourism Statistics", April 2012.
> - Existing and Potential Environmental Fiscal Reform in Rwanda, August 2010.

Photo Credits: Jllian Dyszynski and Rika Fontana.

Disclaimer: This document is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID or the members of the Climate and Development Knowledge Network*, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them

*The Climate and Development Knowledge Network ("CDKN") is funded by the Department for International Development and the Dutch Ministry of Foreign Affairs and is led and administered by PricewaterhouseCoopers LLP. PricewaterhouseCoopers LLP is assisted in the management of CDKN by an alliance of organisations comprising the Overseas Development Institute, Fundacion Futuro Latinoamericano, SouthSouthNorth, LEAD International, and INTRAC.

CDKN Climate & Development Knowledge Network

CIDT Centre for International Development and Training