



Lessons from National Climate Compatible Development Planning in Rwanda



EXECUTIVE SUMMARY

Background

With the support of the Climate and Development Knowledge Network (CDKN), four countries in Eastern and Southern Africa including Ethiopia, Kenya, Mozambique and Rwanda participated in the “Lesson Learning from National Climate Compatible Development (CCD) Planning” project. The project aim was to capture institutional memory and experiences in climate change development, and reflect on recommendations to support future planning. Rwanda’s country-level study was undertaken through literature review and a semi-structured interview (and questionnaire) process involving over 30 stakeholders from September 2013 to February 2014. A stakeholder’s workshop was held in February 2014 to validate the key lessons and results. As a function of national priorities, Rwanda structured inquires around 5 key themes:

- *Theme 1:* Governance and institutional arrangements;
- *Theme 2:* Policy, strategic and legal frameworks;
- *Theme 3:* Planning and budgeting processes;
- *Theme 4:* Funding/financing mechanisms;
- *Theme 5:* Knowledge generation and evidence base.

Governance and Institutional Arrangements

Prior to and following the colonial era, Rwanda’s unique country features, climatic setting and population density have been drivers behind the emergence of environmental governance. However, a formal environment and climate governance framework did not evolve until recently. Prior to this, management was fragmented across different pieces of legislation, and as small components in different departments, with very few dedicated staff and little budget. To address this and increasingly evident issues of unseasonal rains, flooding, landslides and drought, the Government of Rwanda (GoR) established the Ministry of Environment and Natural Resources (MINIRENA) in 2003 under a new Constitution. Subsequently, the Rwanda Environment and Management Authority (REMA) was established in 2006 and the Rwanda Natural Resources Authority (RNRA) in 2011, with a view to achieve a more sustainable and integrated management of natural resources, as well as improved technical support from national to sub-national levels.¹ In 2009, the GoR established a new department in charge of climate change (Climate Change and International Obligations) in REMA to provide dedicated technical assistance to climate related policy and mainstreaming. Legal backing was critical to the effectiveness of institutional mandates.

Key innovations in Rwanda’s institutional arrangements were developed to improve coordination of environment and climate as crosscutting development issues. These include the Sector Wide Approach (SWAp) Secretariat in MINIRENA, the Environment and Climate Change Sub-Sector Working Group and Natural Resources (ENR) Sector Working Group, which serve as key multi-stakeholder forums to discuss environment and CCD issues across sector representatives and donors. In the case of the ENR SWAp, its creation was motivated by the lesson that implementation of the environment and climate change strategic plans requires broader partnership and institutional responsibility (especially between donors and the GoR). In addition, institutionalisation of the Single Project Implementation Unit (SPIU), which

¹ Environment and climate change priorities are implemented by REMA whereas Land, Forestry, Water Resources Management and Mining priorities are executed under the mandate of RNRA.

consolidates project implementation within government agencies (e.g. REMA), helps streamline reporting and gain efficiencies across projects.

However, ownership and coordination of environment and climate activities across sectors remain challenges. To address these, creation of a 'Green Economy Steering Committee' is under consideration to support implementation of Rwanda's Green Growth and Climate Resilience Strategy (GGCRS) and EDPRS II Green Economy transformation objectives. The idea for a Committee was developed from strategic collaboration between REMA and MINECOFIN. The enduring partnership between these agencies continues to directly contribute to the strengthening of CCD institutional arrangements and mainstreaming activities in Rwanda through the budgeting/planning process, and implementation of GGCRS and EDPRS II. Another key challenge remains the low institutional capacity and limited specialised civil society and private sector organisations in the environment and climate sector. Efforts to address this include a REMA internship programme that places talented young graduates with relevant experience as environment and climate focal points in key ministries (and all Districts).

A strategic recommendation is to institutionalise the internship programme and consider creation of a 'Green Economy Steering Committee' to improve coordination of cross-sector implementation of CCD strategies and plans, and overall effectiveness of institutional arrangements.

While Rwanda has increasingly strong CCD related institutions at the national level, sub-national levels still struggle from a lack of institutional arrangements for CCD and capacity to implement national policies and plans. This highlights the important bridging role that needs to be played by the Ministry of Local Government (MINALOC) and technical ministries to strengthen sub-national institutions' capacity to plan for and implement CCD activities. Having good CCD related policies and laws at the national level are meaningless for implementation if compliance and enforcement are not undertaken sub-nationally. Collaboration of institutions (central and decentralised entities) and involvement of communities from planning to implementation are critical to the success, ownership and sustainability of these activities.

An effective mechanism which ensures there is good communication and flow of information on environment and CCD issues between MINALOC and technical government ministries, institutions and organisations to District and sub-District levels is needed. This should be supported through strengthening District institutional arrangements for CCD and capacity to implement national plans, e.g. through expanding and institutionalising the internship programme, which has already had significant impacts to improve national and District capacity in environment and climate issues.

Legal, policy and strategic frameworks

Legal backing of key environment and climate legislation created a foundational political and legal enabling environment for CCD institutional arrangements, policies and strategies to be developed and implemented (e.g. 2003 National Constitution, 2005 Organic Law on the Environment, 2012 FONERWA Law). In the case of the FONERWA Law establishing Rwanda's Green Fund, debates around the need for an extra budgetary fund, as well as institutional arrangements were key challenges to the Law's passage – which took 7 years. These challenges were overcome in large part by strong strategic partnerships between REMA and MINECOFIN.

Regarding CCD policy milestones and strategic frameworks, the majority of these have come about in the last 5 years and are embedded in Rwanda's overarching development frameworks. In the case of Vision 2020, its revision in 2012 was informed in part by the increasing burdens of climate related impacts (e.g. flooding, landslides). Similarly, Rwanda's newest 5-year development framework and

poverty reduction strategy (EDPRS II) also seeks to enhance cross-sectoral collaboration and coordination on environment and climate issues, and adopts a green approach to economic transformation.

Among other documents, EDPRS II's green economic transformation objectives were directly informed by the National Climate Change Adaptation and Low Carbon Development Strategy (known as the Green Growth and Climate Resilience Strategy, GGCRS), adopted in 2011. The successful elaboration of this strategy was possible due to intensive cross-sectoral consultations and ownership of the process at the highest level (i.e. Office of the President). Challenges of implementing the GGCRS strategy are its cross cutting nature, meaning that it is the responsibility of various sectors to implement the programmes of actions, making the monitoring and coordination very challenging.

As is the case with GGCRS, policy and legal framework development is a continuous iterative process and political will and active GoR champions are the main driver behind their success. This is illustrated by the support of 'Climate Smart Agriculture' concepts by leadership in the Ministry of Agriculture (MINAGRI) sector plans and strategies, particularly after sector engagement in GGCRS formulation. Furthermore, the Decentralisation Policy and sub-national institutional arrangements such as Joint Action Development Forums (JADFs) have laid the ground for home grown solutions and innovations, but also enhancement and use of local knowledge to address climate change and environmental issues. This interface and institutional arrangement is complimented further by Development Advisory Committees at the Cell level², environment committees from Cell to district levels, community development committees at all levels, and through Umuganda – the mandatory, nation-wide community work programme held monthly to support community service projects that often have environment and resilience benefits (e.g. sustainable land management). These represent unique Rwandan policies that support top-down and bottom-up flows of CCD information and knowledge. These flows further inform policy and strategic decision making at the national level.

CCD mainstreaming in planning and budgeting

The GoR has made significant progress towards mainstreaming environmental sustainability and climate issues into policies, strategies, planning and budgeting processes to address risks posed to key sectors³. This is in large part a function of the strategic development and use of a growing evidence base for CCD. However, there is need for improvement, particularly in terms of the availability of adequate capacity and financing to factor complex, cross-cutting environment and climate change issues into sectors' strategic planning and implementation.

Key achievements in mainstreaming environment and climate change issues in Rwanda include:

- Sector-specific tools such as environment and climate change mainstreaming guidelines for planning and budgeting, including a required annex in the Budget Call Circular (BCC) in which sectors must detail environment/climate related activities;
- Piloting of Strategic Environmental (and Climate) Assessments, e.g. agriculture sector;

² A 'Cell' is the second smallest politico-administrative unit in Rwanda, above a village.

<http://www.minaloc.gov.rw/index.php?id=450>

³ Mainstreaming in this context is defined as the informed inclusion of relevant environment and climate related concerns into the decisions of institutions that drive national, local and sectoral development policy, rules, plans, investment and implementation.

- Check-lists and indicators to integrate environment and climate change issues into national sectoral strategic plans and district plans;
- Training on environment and climate integration and reporting for Sector and District technical staff and NGOs;
- Capacity building through an internship programme for sector focal points;
- Environmental Education for Sustainable Development (EESD), e.g. in schools and environment clubs;
- Successful pilots of rural ‘climate proofed’ settlements;
- Including environment and climate results into performance contracts (Imihigo) and District Development Plans (DDPs);
- Mainstreaming of climate change issues into Action Plans of the Women’s National Council.

Despite the extensive work and achievements to date, awareness of CCD and the GGCRS remain patchy below the highest levels, particularly in Districts. As a result, translation of CCD (e.g. GGCRS) principles/objectives into sector and District plans – let alone implementation – is limited despite the inclusion of GGCRS language in EDPRS II. To address this, REMA and MINIRENA are involving District stakeholders from the start of planning processes for annual budgets and projects. Excellent project results have in turn attracted attention of District mayors and planners, who then ensure their inclusion and scale up in development plans and budgets (e.g. the Poverty Environment Initiative’s work developing a ‘green and climate resilient’ village in Rubaya Cell in Northern Rwanda).

To address awareness and capacity challenges, there is need to establish a clear implementation framework that further facilitates coordination of different initiatives around green economy and sustainable development. This will address low-levels of awareness of GGCRS sub-nationally, and supports its integration into Sector strategic plans, District Development Plans (DDPs) and Imihigo Performance Contracts.

While plans establish a policy framework and desired outputs and outcomes, they must be translated into realistic budgets. For Environment and CCD planning, Rwanda’s **Budget Call Circular (BCC)** is the key budgetary tool used to guide the budgeting process. Following a successful pilot to mainstream environment and climate considerations into three sector’ BCCs, and with the buy-in of MINECOFIN, the BCC annex for 2012/2013 budget preparation required all sectors to ensure environment and climate change priorities are appropriately reflected in their budget submissions. This enabled MINECOFIN to move environment and climate change objectives from simply planning documents to ensuring sufficient resources are allocated to achieve these objectives.

The BCC mainstreaming programme was a success, but also uncovered significant knowledge and capacity gaps for CCD planning and budgeting within sectors. Continuous and strong support from MINECOFIN has been and will remain instrumental to the mainstreaming and integration of CCD into the planning and budgeting processes. This includes the willingness of MINECOFIN to listen and understand the need for contingency resources in the event of climate related disasters (e.g. as demonstrated by provision of contingency resources by MINECOFIN to support recovery from 2012 flooding events).

Funding/financing mechanisms

CCD implementation is key, and sourcing finance continues to be a priority. Nevertheless, in a short period of time, Rwanda has demonstrated that a lot can be accomplished with minimal resources and strong national commitment. Funding for the implementation of climate compatible development

activities in Rwanda is mobilised from four principle sources including: 1) Internal public investment resources, 2) External development partner resources, 3) the FONERWA Green Fund and 4) Non-public sector resources (e.g. NGOs, private sector). By way of example, this study estimates that programmed CCD related expenditures in Rwanda for a single fiscal year (2013/14) totals to approximately USD 111 million – though this is not an exhaustive estimate and excludes external finance through FONERWA. Moreover, the Government of Rwanda has committed to financing CCD expenditure across line agencies, though certain ministries continue to receive relatively low levels of support, leaving room for increased financing (e.g. MINIRENA, Ministry for Disaster Management and Refugee Affairs (MIDIMAR)).

Trends indicate that overseas development assistance (ODA) to Rwanda from external development partners for environment and climate related activities are rising. Note that 36% of these investments are off budget and 71% provided through programmes, projects or basket funds. See the Public Environment Expenditure Review report (PEER, 2013) for further information. Further information on contributions from non-public sources (e.g. NGOs, private sector) is not available due to data limitations.

Despite rising ODA trends and as a response to low resource allocations directly available for environment and climate sector, in 2012 the GoR established the Environment and Climate Change Fund – FONERWA, now known as Rwanda’s Green Fund. FONERWA is the vehicle through which additional environment and climate change finance is channeled, programmed, disbursed and monitored in Rwanda. As a national basket fund, it is both an instrument to facilitate direct access to international environment and climate finance, as well as to streamline and rationalise bilateral aid and domestic finance. FONERWA is intended to be a Government of Rwanda managed fund. The FONERWA Law formed the primary basis for the design of the Fund and can be accessed by line ministries, Government agencies, Districts, civil society organisations (including academic institutions) and the private sector.

In 2012, the UK International Climate Fund (ICF) provided initial seed capital of **GBP 22.5 million** to FONERWA. Domestic capitalisation commitments were critical to securing bilateral support. As of January 2014, the GoR has committed counterpart funding of approximately **USD\$ 3.7 million**. In addition, FONERWA has successfully supported the GoR in accessing approximately **USD 15 million** in external finance, including USD 10 million from the Adaptation Fund, with approximately **USD 15 million** pending approval from other sources. In the short to medium term, performance-based grants and concessional loans are the primary financial instruments. FONERWA is currently finalising a memorandum of understanding with the Rwanda Development Bank (BRD) for a concessional lending facility for eligible private sector applicants. The BRD partnership is groundbreaking in the Rwandan context, as Rwandan financial institutions consider environment and climate investments high risk in nature, offering limited financing options.

Key strengths of FONERWA include the national orientation and ownership of the fund, and its ability to pool and attract additional resources. Potential weaknesses include heavy reliance on donor resources for capitalisation, and management sustainability. Based on experience to date, keys lessons from the fund’s design and implementation process included the need for:

1. A strong fund design basis, preferably with legal backing (e.g. FONERWA Law);
2. Sufficient time for the design, operationalisation and transfer of management process (e.g. 3 + years);
3. Close stakeholder engagement in the design process;
4. Integration with national policy, planning and budgeting processes;
5. Sector and donor buy-in on thematic financing windows and entry points;

6. Strong trust relationship with development partners to harness bilateral (and government) contributions for capitalisation;
7. Phased approach to financial structure and instruments, starting with grants and building towards concessional loans and possibly guarantees;
8. An inclusive governance structure featuring cross-sectoral representation, CSOs and private sector;
9. High standards of fiduciary management/transparency;
10. Continuous capacity building and outreach – particularly to sub-national (Districts) and private sector applicants.

Important challenges FONERWA has faced so far include initial capitalisation delays of 6 months, limited availability of GoR staff to assume management of the fund and low levels of capacity to submit high-quality proposals. In the first round of applications (September 2013), 679 eligible project profile documents were received. Among these, only 11 went on to full Project Document (PD) stage, and among these 3 received funding approval. No private sector applicants advanced to PD stage despite a high number of applications, which were of low quality. A further 2 proposals were approved from a selective funding round requested by the Fund Managing Committee (FMC). However, there are indications that the situation is rapidly improving as applicant capacity and awareness increases through Fund Management Team (FMT) outreach activities and technical assistance. During the second funding round (January 2014), although only 126 eligible proposals were received, 15 went on to PD stage, 10 of which are from the private sector.

Despite strong trust relationships between the GoR and key development partners, and positive performance of FONERWA to date, further mainstreaming efforts to tap into District and Ministries' budget requests, as well as influencing private sector and individual investments decisions, are important steps towards sustainable, long-term financing of CCD in Rwanda.

Knowledge generation and evidence base

Rwanda has strategically developed a strong and growing evidence base to support CCD. An integral driver behind knowledge generation is the need for raising awareness of the importance of CCD in Rwanda of the general public, as well as supporting evidence-based decisions of policymakers. Awareness raising activities range from regular radio and TV programming, competitions, training modules for schools, police and District environment officers, as well as extensive studies, projects and programmes.

Seminal reports and studies have been some of the most influential and valuable contributions towards CCD knowledge generation and policy making in Rwanda. If not for this work, EDPRS 2 would not centrally feature green growth nor Vision 2020 be revised to include climate change, among many other achievements. Important international reporting includes UNFCCC National Communications and Rwanda's National Adaptation Programs of Action (NAPA) development, which in turn informed FONERWA fund design along with the GGCRS. A recurring challenge to UNFCCC reporting includes the continued need to establish a comprehensive baseline of Rwanda's emissions (i.e. fill existing data gaps) and an MRV system to support future reporting. This is exacerbated by the costs of data collection and staff capacity and availability.

Weather and climate related disasters (particularly flooding) have resulted in significant economic damage in Rwanda, resulting in heightened awareness of climate change risks and the demand for

economic studies on the impacts of events and costing of adaptation measures. The 2009 *Economics of Climate Change in Rwanda* study provides a valuable economic basis to the need for adaptation interventions in Rwanda. 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. These results – putting numbers to climate change in Rwanda – captured the interest and support of MINECOFIN that climate change is not just an environment issue, but an economic development issue as well.

Linked with this, commissioned Public Environment Expenditure Reviews (PEERs) (2009, 2013) have been extremely useful in supporting lobbying efforts to increase budget allocations to the sector, as well as capturing overall environment and climate related expenditure across government agencies. For example, when an 'Environment Protection' functional classification was applied to the consolidated budget, the percentage of government budget for environment/climate related activities rose from 1.4% in 2009/2010 to 2.5% in 2012/2013. PEER 2013 findings also indicate that despite limited capacity, Rwandans are climate proofing many of their interventions (e.g. through weather index insurance and relocation of settlements from flood-prone areas). The study also finds that overall there is still outcry for adequate funds, and especially at the District level.

A large body of influential work exists in terms of CCD projects and programmes in Rwanda. These range from the UNEP/UNDP supported Poverty Environment Initiative (PEI) to the GoR's flagship Vision Umerenge Programme (VUP) under Vision 2020, and the UNDP-supported Integrated Development Programme (IDP), among others. Programmes such as the PEI provide a practical approach and tangible tools to build government capacity to mainstream and include environment and CCD concerns in policy, planning and budgeting. PEI is embedded within and in many ways operates as an extension of REMA. Close engagement with REMA, the leadership of Rwandan staff and long-term UNEP/UNDP commitment period (recently extended to 2018) has allowed the PEI programme to have a consistent and deep impact on environment and climate activities in Rwanda. This work includes economic impact assessments of wetland restoration and piloting of a '**Green and Climate Resilient Village**' in Rubaya Cell in Northern Rwanda. The next phase of PEI is planning development of green **and climate resilient** village toolkits to support the Ministry of Local Government request that each District is enabled to implement a green **and climate resilient** village.

The African Adaptation Programme (AAP)/Least Developed Country Fund (LDCF) project is another example of an influential project that contributes to CCD knowledge and capacity in Rwanda. Between 2011 and 2014, the project helped 10 districts in Rwanda address their diverse adaptation needs, and laid the foundations for an Early Warning System (EWS) in Rwanda. Close involvement with communities was critical to project success and sustainability, as income generation activities for communities kept activities going after project end. These practical livelihoods benefits also helped to convince District planners to incorporate project activities into DDPs. Moreover, when lives improve, communities continue the intervention and neighbours copy.

With increased unreliability of weather patterns, accurate local weather information is a central input for planning and monitoring of climate sensitive sectors at all levels. Key achievements in terms of strengthening weather and climate data infrastructure range from strengthening meteorological data collection through installing more automatic weather and hydrological stations and climate model training, to building capacity of Meteo Rwanda staff in forecasting and maintaining a 24-hr weather watch over Rwanda in partnership with the UK Met Office. In line with GGCRS strategy

recommendations, plans are also underway to establish an *Environment and Climate Change Innovation Centre* in Rwanda. However, despite improvements to date, most of the data related to environment and climate change remains somewhat scattered and requires a more centralized database for easy access by potential users. Plans to establish an *Environment and Climate Change Innovation Centre* in Rwanda are an opportunity to address this.

Recommendations:

Governance and institutional arrangements:

- Institutionalise the REMA internship programme and consider creation of a ‘Green Economy Steering Committee’ to improve coordination of cross-sector implementation of CCD strategies and plans, and overall effectiveness of institutional arrangements. It was noted in the stakeholder workshop that the functions and modalities of this newly proposed committee need to complement existing institutional arrangements (e.g. SWAp, sector and sub-sector working groups).
- Complete establishment of Rwanda’s *Environment and Climate Change Innovation Centre*.
- Establish an effective mechanism to ensure good communication and flow of information on environment and CCD issues between MINALOC and technical government ministries, institutions and organisations to District and sub-District levels. This should be supported through strengthening of District institutional arrangements for CCD and capacity to implement national plans, e.g. through expanding and institutionalising the internship programme.

Policy frameworks:

- The national policy on environment has a main gap in terms of considering climate change issues. This was because, in 2003, climate change issues had less momentum as in recent years. The revision of this policy to address this gap was a recommendation of the stakeholders’ workshop validating results of the lesson learning project.

CCD mainstreaming in planning and budgeting:

- Establish an operational framework that further facilitates coordination of different initiatives around green economy and sustainable development. This is a nascent concept that has not been fully developed, but was promulgated at the stakeholder/validation workshop for the lesson learning project. This will aim to address challenges of low-levels of awareness of CCD (GGCRS) sub-nationally, and supports its integration into Sector strategic plans, District Development Plans (DDPs) and Imihigo Performance Contracts.

Funding/financing mechanisms:

- Further strengthen mainstreaming efforts to tap into District and Ministries’ budget requests, as well as influencing private sector and individual investments decisions to further enhance sustainable financing of CCD in Rwanda.

Knowledge generation and evidence base:

- Establish a more centralised database for environment and climate data and information for easy access by potential users. Plans to establish an *Environment and Climate Change Innovation Centre* in Rwanda are an opportunity to address this.

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Great appreciation is also extended to various stakeholders from different sectors (Government, Development Partners, Private Sector and Civil Society) as their information access and sharing have been instrumental to achieve this important step in climate compatible development planning for our country.

We are also grateful to our colleagues in Rwanda Environment Management Authority (REMA) and of course the whole team different who collaboratively provided the needed leadership in this endeavour.

REMA is confident that this report is a timely and useful contribution, which will add significant value in support of sound sustainable management of natural resources as it lays a firm foundation for sustainable green growth in Rwanda.

We look forward to your continued involvement towards the implementation of the recommendations reflected in the present report.

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Director General of REMA

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ACRONYMS AND ABBREVIATIONS

AAP: The African Adaptation Programme
AfDB: African Development Bank BCC: Budget Call Circular
BRD: Rwanda Development Bank
CBD: Convention on Biodiversity
CDKN: Climate Development knowledge Network
CDM: Clean Development Mechanism
CIDT: Center for International Development and Training
CCD: Climate Compatible Development
CoP: Conference of the Parties to the United Nations Framework Convention on Climate Change
CPAF: Common Performance Assessment Framework
CWIQ: The Core Welfare Indicators Questionnaire
DDPs: District Development Plans
DG: Director General
DHS: Demographic and Health Survey
DNA: Designated National Authority
DPAF: Donors use the Donors Performance Assessment Framework
EAC: East African Community
EDPRS II: poverty reduction strategy
EESD: Environmental Education for Sustainable Development
EESD: Environmental Education for Sustainable Development
EIA: Environmental Impact Assessment
EICVs: Integrated Household Living Conditions Surveys
EMIS: Education management information system ENR: Environment and Natural Resources
ENSO: El-Nino southern Oscillation
EWS: Early Warning System
FMC: Fonerwa Managing Committee
FMC: Fonerwa Management Committee
FONERWA: Fonds National pour l'Environnement au Rwanda, Fund for Environment and climate change
FTC: Fonerwa Technical Committee
GBP: Get British Pound
GDP: Growth Development Product
GGCRS: Green Growth and Climate Resilience Strategy
GoR: Government of Rwanda
HLCS: The Household Living Conditions Survey (also known by its French acronym EICV).
HMIS: Health management information system
IDP: Integrated Development Programme
IDP: Integrated Development Programme
INEAC: Institut National pour l'Etude Agronomique du Congo Belge
ISAR: Institute des Sciences Agronomiques du Rwanda
JADFs: Joint Action Development Forums
JSRs: Joint Sector Reviews
LDCF: Least Developed Country Fund

LL: Lesson Learning Leader for the CDKN lesson learning project
MCA: Multi-Criteria Analysis
MICS: Multiple Indicator Cluster Survey
MIDIMAR: Ministry of Disaster Management and refugees Affairs
MINAGRI: Ministry of Agricultural and Animal Resources
MINALOC: Ministry of Local Government
MINECOFIN: Ministry of Finances and Economic planning
MINICOM: Ministry of Commerce
MININFRA: Ministry of Infrastructure
MINEDUC: Ministry of Education
MINELA: Ministry of Lands and Environment
MINETO: Ministry of Environment and Tourism
MINIRENA: Ministry of Natural Resources
MINITERE: Ministry of Lands, Environment, Forestry, Water and Mines
MRV: Measurement, Reporting and Verification
MSG: Meteosat Second Generation
MTEF: Medium Term Expenditure Framework
NAMA: National Adaptation and Mitigation Actions
NAPA: National Adaptation Programmes of Action
NCCC: National Committee for Climate Change
NDE: National Designated Entity
NFPs: National Focal Points
NGOs: Non Governmental Organisation
NISR: National Institute of Statistics of Rwanda
PD: Project Document
PEERS: Public Environment Expenditure Reviews
PEI: Poverty Environment Initiative
PERs: Public expenditure reviews
PETS: The Public Expenditure Tracking Study
PPA: Participatory Poverty Assessment
PSTA: Strategic Plan for the Transformation of Agriculture in Rwanda
RAB: Rwanda Agriculture Board
REMA: Rwanda Environment MANAGEMENT AUTHORITY
RMS: Rwanda Meteorological Service
RNRA: Rwanda Natural Resources Authority
RWH: Rain Water Harvesting
SECA: The Strategic Environment and Climate change Assessment
SEI: Stockholm Environment Institute
SoER: State of the Environment Report
SPIU: Single Project Implementation Unit
SSPs: Sector Strategic Plans
SWAp: Sector Wide Approach Secretariat
UNCDD: United Nations Convention on Combating Desertification and soil degradation
UNDP: United Nations Development Programme
UNEP: United Nations Environment Programme (UNEP)
UNFCCC: United Nations Framework Convention on Climate Change (UNFCCC)
VUP: Vision Umerenge Programme

CHAPTER 1. INTRODUCTION AND BACKGROUND

1.0. General background

Climate compatible development (CCD) asks policy makers to consider ‘triple win’ strategies that result in low emissions, build resilience and promote development simultaneously.

The Climate and Development Knowledge Network (CDKN) defines CCD as development processes including national level objectives, policies and strategic plans that safeguard development from climate impacts (climate resilient development) and reduce or keep emissions low without compromising development goals (low emissions development). Climate change is one of the greatest challenges affecting humanity in this century, Rwanda being no exception. Even conservative estimates (i.e. not including the costs of extreme events such as droughts and floods) indicate that climate change could result in annual economic costs to Rwanda of around 1% of GDP by 2030 (SEI, 2009). Appropriate policy actions have been taken in order to tackle the negative impacts of climate change through integration of climate change in all socio-economic sectors toward sustainable green growth. This includes developing a Green Growth and Climate Resilience Strategy (GGCRS) for Rwanda in 2011, and operationalising a national green fund (FONERWA) in 2012.

It is in this context that Rwanda has elected to conduct a study on “Lesson Learning from National Climate Compatible Development Planning” process in order to capture institutional memory and experiences in climate change development, and reflect on recommendations to support policy development in future planning in Rwanda.

Three other governments in Eastern and Southern Africa are participating in the project: Kenya, Mozambique and Ethiopia. In these countries, those who have been instrumental in planning and delivering climate compatible planning at the national level had the opportunity to discuss both lessons learned and the potential for lesson learning, in a collegial environment with experienced facilitators. A national “Lesson Learning Leader (LLL)” led the project in each country, supported by an advisor from CIDT, as well as a National Focal Points (NFP) and key civil servants from Rwanda.

1.1. Introduction

There is no escaping the fact that we live off the environment. However, the downside of this dependency is that, as a continent, we are extremely vulnerable to sudden changes to the environment – particularly climate change resulting in rising sea levels and the destruction of fragile ecosystems.

– H.E. President Paul Kagame

Environmental degradation and climate change have been recognised at the highest political level in Rwanda as some of the main barriers to realising the country’s medium and long-term development aspirations enshrined in the EDPRS 2 and Vision 2020. This realisation has been translated into a resolve of the Government of Rwanda (GoR) to effectively control pollution, conserve biodiversity and restore productive ecosystems, mainstream environment and climate change issues into development planning as well as reduce its impacts, as highlighted by H.E. President Paul Kagame in 2009 when addressing the African Ministers of Finance and Environment.

1.2. Background to lesson learning

The “lesson learning” project commenced in April 2013 with an overall objective to capture, synthesise and share country solutions and best practice emerging from national-level climate change planning in selected countries in Africa, in order to support learning, policy development and possible replication of efforts among participating and in other countries.

The lesson learning process of CCD planning began with an inception workshop from 16th – 18th July 2013 held in Nairobi, Kenya. There were 18 principal participants comprised of:

- (1) Four Lesson Learning Leaders from Ethiopia, Kenya, Mozambique and Rwanda,
- (2) Government Officers dealing with national policy relating to climate compatible development planning,
- (3) Support partners from CDKN and CIDT.

The lesson learning project carried out:

- An inception period including a workshop in July 2013, initiating sharing between participating officials of all countries, and scoping known lessons ready to be shared and refined.
- An inception report including a scoping study.
- Individually-designed national processes, in which lessons have been drawn out, discussed and triangulated with a number of stakeholders.
- Validation workshops in each country in February and March 2014 where the lessons drawn out from the above processes were discussed.
- Each country process produced a ‘nationally-owned’ country report of lessons.
- ‘Inside Stories’ for CDKN publication.
- Encouragement of national stakeholders to get involved and be credited with their part in producing the national lesson learning reports.

1.3. Selected themes

The rationale for the lesson learning project is that busy professionals rarely have the time to reflect on what has happened in their practice. This project creates the space to pause and reflect, in order to record what has been learned at individual, organisational and institutional levels.

The following report is articulated around the following five themes as selected by Rwanda during Inception work:

- *Theme 1:* Governance and institutional arrangements – structure of institutional arrangements, mainstreaming, flexibility, and adaptability and leadership considerations.
- *Theme 2:* Policy, strategic and legal frameworks instrumental to shaping CCD in Rwanda.
- *Theme 3:* Integration of climate change and environment in planning and budgeting processes that have emerged over time.
- *Theme 4:* Funding/financing mechanisms including development of an environment and climate change fund (FONERWA).
- *Theme 5:* Knowledge generation and evidence base. This encompasses both the scientific and local knowledge systems that may have been incorporated – or not – into the planning regime.

1.4. Methodology

The methodology used to gather data informing this report was participatory in the sense that opinions from key stakeholders in sustainable development in Rwanda were collected and documented. The study was undertaken through literature review and a semi-structured interview

(and questionnaire) process involving over 30 stakeholders from September 2013 to February 2014. A stakeholder's workshop was held in February 2014 to validate the key lessons and results. As a function of national priorities, Rwanda structured inquires around 5 key themes:

Mapping CCD in Rwanda. The process of setting up of an interactive map that is aimed at giving an overall context to the CCD narrative of Rwanda was the first step in understanding how policies and institutions evolved in Rwanda. This was conducted through discussions with individuals who participated in the process including the Lesson Learning Project National Focal Points and others within the Climate Change Unit of the Rwanda Environment Management Authority (REMA) in order to tap their institutional memories. The map helped set the context and scope for subsequent interviews. It also provided a valuable visual orientation tool for interviewees. Figure 1 represents the final version of the mind map, which was iteratively updated throughout the consultation process.

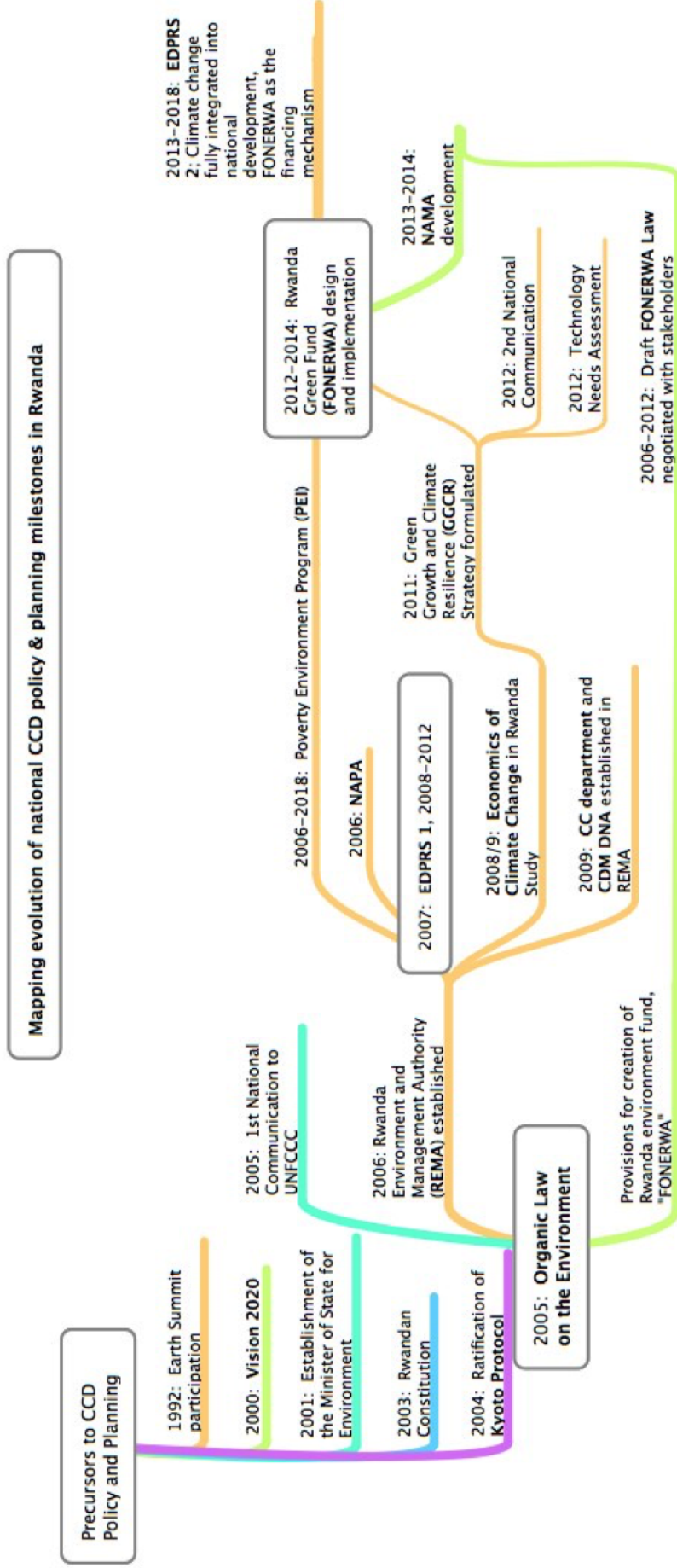


Figure 1. Mapping evolution of national CCD policy and planning milestones in Rwanda. Note that figure line colours are not meaningful.

There were three sources of information: interviews, literature review and focused group discussions through a stakeholder's workshop.

Interviews. At the initial stage, the process involved meeting with REMA and key climate related programmes in order to jointly identify the institutions and contact people to interview. This was followed by tailoring questions to each identified stakeholder's role and position on the CCD mind map. The interviews were conducted one-on-one with relevant government officers, coordinators of climate change projects under implementation and consultants involved in the CCD process using a semi structured questionnaire. In some cases, stakeholders sent completed questionnaires via email. A list of people interviewed is enclosed in Annex 1.

Literature review. Additional information was obtained from literature review and internet research. Some of the documents that were reviewed include: *The National Environment Policy, Organic Law on the Environment No 04/2005 of 08/04/2005, Vision 2020*, EDPRS II's economic transformation thematic area (priority area 5) and the *National Green Growth and Climate Resilience Strategy (GGCRS)*, adopted in 2011.

Rwanda's first and second communications to United Nations Framework Convention on Climate Change (UNFCCC), a report on economics of climate change (SEI, 2009), the REMA's state of environment report, Environmental policy, Environment organic law, papers and government presentations and reports on drought management, among others were also consulted.

Stakeholder's workshop. A workshop was organised to validate lessons generated through interviews and literature review held on 20 February 2014 in Kigali, Rwanda. The workshop was important in consolidating the lessons and results to date, ensuring they were representative of consultations. A list of attendants is enclosed in Annex 2. The workshop was well attended and featured thematic breakout groups to discuss key themes assessed in the study. The Director General of REMA, among other high-level staff, was an active participant throughout the workshop, providing critical guidance to discussions.

CHAPTER 2. GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS

2.1. Historical background

Environment and climate progress in Rwanda was the result of governance gradually established and strengthened over time. Awareness of environmental issues in Rwanda goes back to the colonial period when actions aimed at the protection and conservation of environment were undertaken at different periods and different scales. Some of the activities include the following with regards to reforestation started in 1920:

- The creation of national parks between 1933 and 1935,
- A vast campaign for soil conservation initiated by INEAC (later known as the Institute des Sciences Agronomiques du Rwanda (ISAR)) since 1937 first in research stations, before extending it to the whole country,
- Soil conservation activities made compulsory by colonial law in 1947.

However, these activities were discontinued after independence because they were considered burdensome. After independence and particularly since 1977, action programmes of an environmental nature were launched under annual themes such as: human settlement (1977), stockbreeding (1978), soil protection and conservation (1980), water supply in rural areas (1981), erosion control (1982) and reforestation (1983).

Driver: Issues of high population growth and density, soil erosion, and deforestation playing out across on Rwanda's small, hilly and land-locked topography have been historic drivers of environment governance and human development in the country.

In 1983, a Division of Hygiene and Environment was created in the then Ministry of Health and Social Affairs. The same Ministry organised the first national seminar on environment in 1985. This seminar recommended the development of a national environment strategy that was completed in 1988-1989; and Cabinet adopted this in May 1991. The strategy aimed mainly to enable the country to strike a dynamic balance between population and resources, and to contribute to sustainable and harmonious socio-economic development.

In 1989, the National Environment Unit was created in the Ministry of Planning, a springboard for the establishment of the Ministry of Environment and Tourism (MINETO) in 1992. During the same year, Rwanda took part in the Rio de Janeiro World Earth Summit and institutionalised the National Environment Week, in addition to other initiatives such as the establishment of Water Day (22nd March), Meteorology Day (23rd March), Biodiversity Day (22nd May), etc. The year was also marked by the signature of the three Rio Conventions: United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biodiversity (CBD) and United Nations Convention on Combating Desertification and soil degradation (UNCDD). Most importantly, 1992 was marked by the drafting of the Law on Environment. This process was interrupted by the 1994 genocide against the Tutsis, and revived by the Government of National Unity after stopping the genocide and rehabilitation of the country.

In 1996, the National Agenda 21 and the National Environment Strategy and Action Plan were updated. After 1996, environment was successively placed under the Ministry of Agriculture, Animal Breeding,

Environment and Rural Development, where most of the environment issues were overshadowed by the need to secure food for Rwandans. Later, environmental roles and responsibilities were also given to the Ministry of Lands, Resettlement and Environment.

Challenge: Although good progress was being made as far as environmental governance was concerned, the shifting of the Environment Unit/Sector from one Ministry to another, due to successive government reshuffles, was a significant challenge for sustainable implementation of environmental protection in the country and CCD planning.

To address this challenge, the government put in place the Minister of State for Environment in 2001. His principal mission was to formulate the policy and law relating to the protection of environment. Subsequent institutions have been established following the provisions of the national constitution voted in June 2003. The Ministry in charge of environment (Ministry of Lands, Resettlement and Environment (MINITERE) in 2003) is the one which undertook all climate change related activities to date, despite the fact that the name has change from MINITERE to the Ministry of Environment and Natural Resources MINIRENA, then Ministry of Environment and Lands (MINELA) and back to the MINIRENA. The 2005 Law on the Environment stipulated the establishment of Rwanda Environment Management Authority (REMA), which was operationalised in 2006 with the responsibility for the implementation and enforcement of the environment related policies and laws. REMA is at the core of the tremendous environmental progress saluted by many inside and outside the country.

Driver: After realising the increasing issues and impacts related to climate change, in 2009, the Government decided to establish a new department in charge of climate change (Climate Change and International Obligations) in REMA.

REMA activities to support this included Rwanda's hosting a 'Climate Change and Human Rights' conference in 2008, conducting economics and climate impacts studies, supporting the drafting of Rwanda Green Growth and Climate Resilience Strategy (GGCRS) in 2011 and operationalisation of the Rwanda Green Fund (FONERWA), among numerous other activities. The decision to establish the climate change department in REMA dedicated to climate change issues can be considered as a best practice as climate change was given deserved attention and the agency a clear mandate, enabling CCD coordination and planning at the national level.

Above and beyond this, the strong and unwavering support for good environmental governance and CCD at the highest levels of government through the President of Rwanda has contributed to Rwanda's distinguished reputation as a leader in sustainable development policy and practice.

The political will to adapt to emerging challenges sets Rwanda apart.

– DG REMA

2.2. Institutional arrangements

A clear institutional framework is critical for effective CCD at national and sub-national levels. It facilitates implementation and coordination across stakeholder institutions, and ultimately strengthens CCD governance.

As mentioned, a formal climate and environmental governance framework did not evolve until recently. Prior to this, management was fragmented across different pieces of legislation and as small components in different departments, with very few dedicated staff and little budget. The concerns about environmental degradation and climate change impacts that were undermining the efforts towards sustainable economy and society motivated the Rwandan Government to develop more focused policies and create specialised institutions to address environment and climate change issues. As Ministries are more involved in policy development, there was a need of technical institutions to support implementation of policies and laws. This led to the establishment of the Ministry of Environment in 2003, REMA in 2006 and the Rwanda Natural Resources Authority (RNRA) in 2011, with a view to achieve a more sustainable and integrated management of natural resources, as well as improved technical support from national to sub-national levels.

MINIRENA. As the ministry responsible for environment, climate change and natural resources, MINIRENA provides overall political direction and policy oversight, guides the preparation of the sector budget and defends it in cabinet. Implementation of sector priorities is undertaken by the sub-sectors organised under two national agencies. Environment and climate change priorities are implemented by REMA whereas Land, Forestry, Water Resources Management and Mining priorities are executed under the mandate of RNRA. MINIRENA is the lead sector in resource mobilisation within the ENR Sector Wide Approach (SWAp). The SWAp is a partnership forum between the GoR and key donors that aims to strengthen inter/intra sectoral coordination and rationalisation of donor initiatives to avoid duplication of efforts.

Lesson: The creation of an **ENR SWAp** was motivated by the lesson that implementation of the environment and climate change strategic plans requires broader partnership and institutional responsibility. SWAp provides an opportunity to realise this requirement, with strategic leadership of MINIRENA, key sectors, donors and CSOs in order to facilitate the programming and resource deployment.

The adoption of the SWAp by the Government and its development partners reflects the desire to ensure that all resources, whether domestically or externally, are utilised in a manner that is coherent with the objectives set out in the relevant vision, policy and strategy documents.

– Minister Kamanzi (MINIRENA)

MINIRENA proactively engages and influences other ministries to make environmentally and climate compatible policies, focusing primarily on those sectors that have a direct bearing on the environment. MINIRENA is also the National Implementing Entity for the Adaptation Fund, and recently received the maximum funding ceiling of USD 10mn (See Chapter 5).

REMA. REMA, a mandated national regulatory body, has facilitated various initiatives to ensure sustainable environmental management and to cope with climate change impacts beyond providing regulatory oversight. REMA hosts a number of key institutional structures with regard to CCD planning. These include the:

- Department of Climate Change and International Obligations
- Department of Environmental Education and Mainstreaming
- Designated National Authority (DNA) for the Clean Development Mechanism (CDM)
- Secretariat of the FONERWA environment and climate change fund, which is currently being operationalised
- REMA was also nominated as National Designated Entity (NDE) for climate technology centre and network established by UNFCCC to facilitate the technology transfer.

REMA is endowed with a Single Project Implementation Unit (SPIU), which coordinates the implementation of CCD and other related projects. The SPIU facilitates, through a feedback mechanism, the inter- and intra-linkages between projects and programmes. The overall coordination is undertaken through the leadership of the General Directorate office. This arrangement has increasingly proven to be a seamless structure through which REMA engages national partners in environment protection, conservation, promotion and overall management to ensure effective contribution towards national sustainable development.

Lesson: The establishment of the **SPIU** in REMA has helped to reduce transaction costs and duplication of efforts across the many donor project REMA supports. This can be considered a best practice institutional arrangement for other countries to learn from.

Other Line ministries. Line ministries tend to focus on their core technical functions. However, in one way or another, all line ministries are involved in some aspects of environmental and climate change management. Most central are those concerned with land, water, energy, minerals, industry, transport, tourism, urban development, public health, agriculture and livestock, forestry and wildlife. Yet, coordination between these line ministries is often challenging. Moreover, these line ministries will not be effective as environment/climate managers with a shared vision and responsibility if they do not have the required capacity to work together to do so.

Challenge: Low institutional capacity and limited specialised civil society and private sector organisations in the environmental management and climate resilience sub-sector constrain implementation of the national strategy and mainstreaming work across sectors.

Institutional mainstreaming of environmental and climate change issues takes time and is usually the result of several processes. As part of stakeholder engagement, REMA works closely with key ministries namely: MINALOC, MINECOFIN, MINAGRI, MINICOM, MINIRENA, MINEDUC and MININFRA. This engagement is being extended to other sectors especially the social sectors like Education and Health.

Challenge: CCD is crosscutting, therefore requires strong institutional arrangements and coordination mechanisms for planning, implementation, monitoring and evaluation. This is particularly true for the implementation of GGCRS and EDPRS 2 green economy objectives, which pose coordination challenges.

To address coordination challenges, MINIRENA and REMA established mechanisms that maintain linkages and work in harmony with cross-sectoral stakeholders, supporting a strong collaborative framework. These mechanisms include ENR Sector Working Group and Environment and Climate Change Sub-Sector Working Groups that serve as cross-sectoral coordination and management forums that meet monthly and address issues related to policy formulation and implementation of programmed projects and activities. They include representatives from relevant sectoral ministries, CSOs, academic and research institutions and the private sector.

Lesson: Established structures including the ENR Sector Working Group and Environment and Climate Change Sub-Sector Working Group address issues of environment and CCD and enables participation from representatives of each major sector ministry. This is also supported by an internship programme placing an environment and climate focal point within key ministries, as well as districts. However, ownership and coordination challenges remain.

Ministry of Local Government (MINALOC). Special mention is due to the Ministry of Local Government. Among other areas, this ministry leads to the process of decentralisation and social protection. In this regard, MINALOC coordinates the Vision Umerenge Programme (VUP) activities⁴ – a flagship programme under Vision 2020 – and Integrated Development Programme (IDP)⁵, among others, which provide resilience and green development support to vulnerable households and communities. In the case of VUP, the aim is to create social protection programme targeting poor people in VUP Sectors.

VUP activities are done mainly through public works - these are the activities that are contributing to scale up communities resilience to climate change. - MINALOC

MINALOC has a crucial role to play in decentralised environmental and climate change management, and providing an official channel between sectoral ministries and decentralised authorities (e.g. Districts, Cells). The revised Social Protection Strategy (SSP) emphasises strengthening linkages between social protection and disaster risk reduction in an effort to mainstream climate resilience in collaboration with local communities. For example, this supports emerging work on Early Warning Systems (EWS) that enable timely and high quality information to flow to vulnerable areas.

⁴ VUP activities: Ecosystem rehabilitation, land productivity, access to drinking water, watershed management including planting trees, terraces, irrigation plots, feeder/access roads, as well as construction of different types (classrooms, health facilities, training centres, business workshops, and village settlements).

⁵ IDP is one of the pillars of EDPRS I and aims to reinforce capacity of poor producers and communities for sustainable economic development through activities including: specialisation of cultures, land consolidation, post harvest processing, sustainable land management, rain water harvesting, sustainable land management, etc.

Lesson: Having good CCD related policies and laws at the national level are meaningless for implementation if compliance and enforcement are not undertaken sub-nationally. Collaboration of institutions (central and decentralised entities) and involvement of communities from planning to implementation are critical to the success, ownership and sustainability of CCD activities.

The above lesson emerged from stakeholder workshop discussions. While Rwanda has increasingly strong CCD related institutions at the national level, sub-national levels still struggle from lack of institutional arrangements for CCD and capacity to implement national policies and plans. This highlights the need to strengthen sub-national institutions in this regard.

Recommendation: An effective mechanism which ensures there is good communication and flow of information on environment and climate between MINALOC and technical government ministries, institutions and organisations to District and sub-District levels is needed. This should be supported through strengthening of District institutional arrangements for CCD and capacity to implement national plans.

Ministry of Finance and Economic Planning (MINECOFIN). A key role of MINECOFIN is to ensure planning and budgeting for environment and CCD contribute to enhanced and sustainable productivity of all sectors. This objective has only emerged in actual practice in recent years, following initiatives from REMA such as the UNDP/UNEP Poverty Environment Initiative (PEI), informational studies highlighting economic linkages to environment and CCD investments (e.g. PEER, 2010, SEI, 2009), requirements for environmental impact assessments (EIAs) for public and private capital investments, and the development of FONERWA, among others.

Lesson: Strategic collaboration between REMA and MINECOFIN has directly contributed to the strengthening of CCD institutional arrangements and mainstreaming activities in Rwanda.

With regards to MINECOFIN institutional support to key CCD initiatives, examples include:

- FONERWA fund governance structures – MINECOFIN contributes key technical staff for quarterly meetings of FONERWA the Technical and Managing Committees (FTC, FMC). See Chapter 4 for more information on the role of MINECOFIN in mainstreaming CCD into planning and budgeting.
- MINECOFIN was co-chair on the PEI steering committee, which helped increase ownership and the consolidated budget for the ENR sector and CCD activities.

CHAPTER 3. LEGAL, POLICY AND STRATEGIC FRAMEWORKS

Commendable CCD results have been realised through development and enforcement of legal and regulatory instruments with regards to environmental management and climate change. These have in turn provided a critical enabling environment for CCD related policies, strategic and supporting institutional arrangements to come about.

Lesson: The legal backing of key environment and climate legislation created a foundational political and legal enabling environment for CCD institutional arrangements, policies and strategies to be developed and implemented (e.g. 2003 National Constitution, 2005 Organic Law on the Environment, 2012 FONERWA Law).

3.1. Legal frameworks

The National Constitution 2003, in its article 49, guarantees the right to a clean environment for every citizen and other people living in Rwanda, and imposes on the state and population the responsibility for keeping the environment clean and pollution-free. With this article, and taking into account that the constitution is above all other laws, the government made environment a fundamental issue to be addressed by all sectors of the country's life.

The Organic law No 04/2005 determining the modalities of protection, conservation and promotion of environment in Rwanda. As part of the operationalisation of the organic law on environment, a number of subsidiary legislations have been enacted, important among others being the laws establishing REMA and the FONERWA funding mechanism for environment and climate change.

The Law No. 16/2006 (revised in 2013) gave REMA the legal mandate for ENR management and climate change activities. Responsibilities included advising the Government on all matters pertaining to environment and climate change, as well as oversight and guidance on regional and global partnerships and commitments including around 14 international conventions, treaties and protocols as well as other obligations to which the GoR must subscribe and observe. Among these conventions is the United Nations Framework Convention on Climate Change (UNFCCC).

From participation in climate change negotiations, Rwanda is getting negotiation skills first of all. Negotiations are then a channel where Rwanda raises its climate change priorities at multilateral and bilateral levels. Participating in the negotiations is an occasion for Rwanda to network with the world. Indeed, many climate change activities in the country are implemented according to decisions agreed upon during negotiating meetings and UNFCCC Conferences of the Parties (CoPs).

- Faustin Munyazikwiye,
Director of Department of Climate change & International obligations, REMA

FONERWA Law, 2012: As mentioned, the FONERWA law is one of the legal instruments to operationalise the Organic Law on the Environment. One of the biggest challenges in advancing the environment agenda and building climate resilience is financing. Rwanda realised that having good policies, political will and adequate environmental governance is not sufficient, further external finance was required to achieve its CCD vision. However, the passage of the FONERWA Law was a challenge in itself, taking 7 years to be approved by Parliament. This was due in part to debates regarding institutional arrangements as well as the justifications for needing a separate fund for environment and climate change when the GoR had stated goals of mainstreaming these activities within the consolidated budget. The finalisation of the FONERWA Law illustrates the iterative process of key CCD frameworks in Rwanda.

Lesson: Debates around the need for an extra budgetary fund, as well as institutional arrangements were key challenges to the passage of the FONERWA Law. These challenges were overcome by strong strategic partnerships between REMA and MINECOFIN.

Driver: Policy and legal framework development is a continuous iterative process and political will is the main driver behind its success.

3.2. Policy and strategic frameworks

Vision 2020: Adopted in 2000, the key pillars of vision 2020 include the protection and management of environment. The objective set out is to significantly reduce pressure on natural resources, particularly on land, water, biomass and biodiversity, and reverse the process of environmental pollution and degradation. Thus, the vision seeks to have a nation in which the management and protection of the environment and natural resources is rational and well regulated in order to preserve and bequeath to future generations the basic wealth necessary for sustainable development.

Vision 2020 seeks to transform Rwanda into a knowledge-based, middle-income country with per capita GDP of 1240 USD by 2020. The national aspirations in the Vision 2020 that have direct implications for climate and environmental management:

- Transforming from an agrarian economy into a knowledge-based economy. This would imply alleviation of the pressure on arable land; and
- Reducing the proportion of people earning their livelihoods from agriculture from 80% in 2000 to 50% by 2020.

Lesson: The revision of Vision 2020 in 2012 was informed by challenges and lessons from post-genocide reconstruction, implementation of EDPRS I (2008-2012) as well as from increasing burden of climate related impacts (e.g. flooding, landslides). The revised Vision 2020 emphasised areas such as climate change and environment by including clear indicators and targets, and considering them as cross-cutting issues. This can be considered as a best practice.

The Economic Development and Poverty Reduction Strategy (EDPRS II 2013-2018): The EDPRS – Rwanda’s third comprehensive national strategy for poverty reduction and economic transformation – focuses on emerging priorities to ensure achievement of the ambitious targets set out in the revised

Vision 2020. These priorities are captured under four thematic areas namely: economic transformation, rural development, productivity and youth employment, and accountable governance.

The key challenge observed during implementation of EDPRS I was to achieve cross-governmental and cross-sectoral collaboration and coordination in order to address the key issues of environment and climate change, which are cross-sectoral in nature.

Lesson: Unlike its predecessor, EDPRS II seeks to enhance environment/climate collaboration and coordination. It also recognises that a failure to consider potential future impacts of climate change could seriously undermine Rwanda's ability to achieve other EDPRS II priorities, chief among them being adopting a green approach to economic transformation.

Among other documents, EDPRS II's green economic transformation thematic area (especially Priority Area 5 on green economy), was directly informed by the National Climate Change Adaptation and Low Carbon Development Strategy (known as the Green growth and Climate Resilience Strategy, GGCRS), adopted in 2011.

The Green Growth and Climate Resilience Strategy (GGCRS). The vision of Rwanda regarding climate change is to be a climate-resilient and low-carbon economy by 2050. The strategy seeks to achieve the following objectives: (i) Energy security and a low carbon energy supply that supports the development of green industry and services; (ii) Sustainable land use and water resource management that results in food security, appropriate urban, development and preservation of biodiversity and ecosystem services and (iii) Social protection and disaster risk reduction that reduces vulnerability to climate change impacts.

GGCRS has 14 programmes of action including: Sustainable intensification of small scale farming; Agricultural diversity of market; Sustainable land use management; Integrated Water Resource Management; Low Carbon Energy Grid; Small-scale energy access in rural areas; Disaster Management; Green industry and private sector development; Climate compatible mining; Resilient transport systems; Low carbon urban systems; Ecotourism, conservation and PES; Sustainable forestry, agroforestry and biomass and Climate predictions.

The successful elaboration of GGCRS was possible due to intensive cross-sectoral consultations and ownership of the process at the highest level (Office of the President). The strategy has been adopted as national document.

Challenge: The challenges of implementing the GGCRS strategy are its cross cutting nature, meaning that it is the responsibility of various sectors to implement the programmes of actions, making the monitoring and coordination very challenging.

Even if the implementation framework of this strategy (who is doing what and when) is well articulated in the document, sectors have their own priorities and targets. These sectors focus meagre resources to get quick results without necessarily aligning them with the strategy or striving for sustainable achievements. This demonstrates that incorporation of national CCD policy into sector strategies takes time. Moreover, adopting the GGCRS strategy was only the first step towards sector-level ownership of its programmes, and much more work is needed to embed the strategy at sector and sub-national levels.

To date, the consultative development approach, awareness and mainstreaming programme of this strategy revealed to be very useful, as some sectors have adopted strategic approaches, e.g. agriculture, energy and water (See Box for example).

MINAGRI and Climate Smart Agriculture:

In the case of the agriculture sector, MINAGRI, the issue of climate change has been tackled in different agricultural strategies, plans and monitoring documents. The Strategic Environmental Assessment (SEA) of the Agricultural sector in Rwanda has emphasised climate variability and climate change. Moreover, the recently developed PSTAIII has taken into consideration the issue of climate change as the sector is highly vulnerable to climate change. This strategy has different climate smart agriculture actions such as land protection structures, agroforestry, improving the understanding of Rwanda's soils, irrigation, integrated watershed management, etc. - Raphael RURANGWA, Directorate of Planning, MINAGRI.

The National Environment Policy, the first ever comprehensive policy on environmental conservation and management in Rwanda, was formulated in 2004. This policy is the outcome of wide consultations carried out by the then Ministry in charge of Environment. The preparation of the policy document involved government institutions, United Nations Agencies, Non-Governmental Organisations and Civil Society at every stage.

In line with the Vision 2020, this policy is premised on principles of sustainable growth, participation, decentralisation, intergenerational equity and fairness, emphasis on prevention, polluter pays, and recognition of regional and international environmental inter-connectedness. It clarifies in detail Government priorities and strategies for protection and conservation of the environment in Rwanda, including the creation of an institutional framework.

Recommendation: The national policy on environment has a main gap in terms of considering climate change issues. This was because in 2003, climate change issues were not yet growing in momentum as in recent years. The revision of this policy to address this gap was a recommendation of the stakeholders' workshop validating results of the lesson learning project.

The Seven Year Government Plan (2011-2017): The sixth programme of this Government Plan targets sustainable management of environment and natural resources with a focus on increasing the climate resilience capacity of the country and engaging in green growth as well as raising awareness on climate change issues.

The National Decentralisation Policy 2001 (and subsequent adjustments) transferred planning and execution of service delivery from the central to local government levels, leaving the central authorities with responsibilities for policy formulation, resource mobilisation and capacity building support of local levels. This policy has provided an enabling interface for raising awareness, capacity building and tackling of environment and climate change related issues where they occur, with involvement of impacted local communities. However, financing challenges remain (See Chapter 5 below).

Lesson: The Decentralisation Policy has laid the ground for home grown solutions and innovations, but also enhancement and use of local knowledge to address climate change and environmental issues.

For example, the Joint Action Development Forums (JADFs) are one of the key mechanisms for the implementation of the Decentralization Policy. The JADF is designed to achieve improved service delivery and economic development at both District and Sector levels, bringing together civil society, local government and the private sector⁶. This interface and institutional arrangement is complimented further by Development Advisory Committees at the Cell level⁷, environment committees from Cell to district level⁸, community development committees at all levels and the nation-wide Umuganda community work programme held monthly. These represent unique Rwandan policies that support top- down and bottom-up flows of CCD information and knowledge. These flows further inform policy and strategic decision making at the national level.

Environment and Climate Change Sector Strategic Plan: the five-year Strategic plan (2013 – 2018) provides priority programmes for the achievement of sustainable environmental management as well as for addressing the climate change impacts. This plan guides the work of REMA to mainstream and provide technical assistance and awareness to key sectors and stakeholders on CCD – including other sector strategic plans – and is central to planning and budgeting considerations.

The East African Community policy on climate change is one of the key frameworks that aim at guiding Partner States and other stakeholders on the preparation and implementation of collective measures to address climate change in the sub-region while assuring sustainable social and economic development. Rwanda was actively involved in the drafting of the EAC climate policy through national consultation.

⁶ For further information on the JADF, see <http://www.rgb.rw/main-menu/special-programmes/jadf.html>

⁷ A 'Cell' is the second smallest politico-administrative unit in Rwanda, above a village.
<http://www.minaloc.gov.rw/index.php?id=450>

⁸ Environment Committees created by a PM Order n°008/16.01 of 26/11/2010 determining the responsibilities, organisation and functioning of committees in charge of the environment conservation and protection(O.G. no 45 of 8 November 2010) from Cell to district Level.

CHAPTER 4. CCD MAINSTREAMING in PLANNING AND BUDGETING

4.1. Environment and climate change mainstreaming

The GoR has made significant progress towards mainstreaming environment sustainability and climate issues into policies, strategies, planning and budgeting processes to address climate risks posed to key sectors. This is in large part a function of strategic development and use of a growing evidence base for CCD (See Chapter 6). However, there is need for improvement, particularly in terms of the availability of adequate capacity and financing to factor complex, cross-cutting environment and climate change issues into strategic planning and implementation.

Key achievements in mainstreaming environment and climate change issues in Rwanda include:

- Sector-specific tools such as environment and climate change mainstreaming guidelines for planning and budgeting, including a required annex in the Budget Call Circular (BCC) in which sectors must detail environment/climate related activities;
- Piloting of Strategic Environment (and Climate) Assessments, e.g. agriculture sector;
- Check-lists and indicators to integrate environment and climate change issues into national sectoral strategic plans and district plans;
- Training on environment and climate integration and reporting for Sector and District technical staff and NGOs;
- Capacity building through an internship programme for sector focal points;
- Environmental Education for Sustainable Development (EESD), e.g. in schools and environment clubs;
- Successful pilots of rural 'climate proofed' settlement;
- Including environment and climate results in performance contracts (Imihigo);
- Mainstreaming of Climate change issues into Action Plans of the Women National Council.

Lesson: The mainstreaming internship programme was created due to the limited staff of REMA (especially its department of environmental education and mainstreaming), who were not able to conduct thorough sector and district engagement.

It is evident that there is need for institutionalising the internship programme given the capacity challenges across sectors. Most of the productive sectors do not have environmental officers or experts. District Environment Officers are also accountable to the District Authorities, not to REMA, thus they deal with assignments which are not always related to environmental and climate change management.

4.2. Planning process

Climate change, through floods, landslides and drought, is likely to exacerbate economic impacts as Rwanda's economy depends on its natural resources. To achieve sustainable economic growth will require a prudent use of natural resources, ensuring that climate resilience is built into economic planning.

- MINECOFIN

Planning consultations at the beginning of each fiscal year are a key feature of the planning and budgeting process in Rwanda. This is intended to improve cross-sectoral coordination and collaboration to foster more efficient use of financial resources. Sectors have to talk to each other, and agree on who will do what especially when it comes to integration of cross cutting issues like environment and climate change. This process enables the Ministry in charge of environment and climate change to monitor whether related policies and laws are implemented through sectoral plans.

To reach the ambitious objectives set out by the Government of Rwanda in its Vision 2020 and EDPRS II requires careful planning and coordination within and across Ministries, Districts and Agencies including REMA. The Government of Rwanda has produced environment and climate mainstreaming guidelines in order to ensure that mainstreaming issues are understood and within the overall planning framework and followed by all government institutions, integrated with budget and delivery responsibilities. It intends to provide practical information to government staff involved in planning and budgeting in Ministries, agencies and local government. All government institutions at all levels – central and local – have a duty to engage with and follow this guidance as per the budget law and MINECOFIN instructions.

At District level, performance contracts (Imihigo) are a very useful planning tool that allows the Districts to ensure that planned activities are addressing local and national priorities. These contracts have facilitated progress delivery of a range of development results, e.g. gender mainstreaming (MINECOFIN 2011). Some projects such as the Africa Adaptation Programme (AAP)-Least Developed Country Fund (LDCF) project (See Chapter 6) attempted to include CCD considerations in some District Imihigos, but found that hands-on work with planning and budgeting officers was critical and more effective.

Lesson: The use of Imihigo contracts and other planning guidance is critical given awareness of CCD and the GGCRS are patchy below the highest levels, particularly in Districts. As a result, translation of CCD (GGCRS) principles/objectives into sector and District plans – let alone implementation – is limited despite the inclusion of GGCRS language in EDPRS II.

To address the above challenge, REMA has learned valuable initial lessons from District and community engagement in the annual planning/budgeting process. Training and awareness-raising on mainstreaming alone are not enough to influence the planning process – active, hands-on engagement in the planning/budgeting process are required. REMA and MINIRENA are doing this by involving District stakeholders in the planning process from the start of planning stages of annual budgets and projects.

Engaging Districts and communities at the project/activity conceptualisation stage helps target planning, and ensures sustainable livelihoods outcomes, which contribute to the overall sustainability of interventions beyond the funding period. These results in turn attract attention of District mayors and planners, who ensure inclusion of activities in development plans and budgets. See Chapter 6 on the benefits of a strong evidence base for CCD.

Direct consultation with local communities is critical since they are on the front lines of climate change. Therefore, the most sustainable adaptation and mitigation plans and actions are community driven and owned.

-Alphonse Mutabazi, REMA

Lesson: Despite significant progress to date including project work to improve communication and hands-on outreach for mainstreaming of CCD activities and standardised environment and climate change indicators within Sector Strategic Plans (SSPs) and some District plans, further work remains to ensure sector and district plans incorporate national CCD objectives. This is being directly addressed by innovations within Rwanda's budgeting processes (See below section).

Recommendation: There is need to establish an operational framework that further facilitates coordination of different initiatives around green economy and sustainable development. This is a nascent concept that has not been fully developed but was promulgated at the stakeholder/validation workshop for the lesson learning project. This will aim address challenges of low-levels of awareness of CCD (GGCRS) sub-nationally, and supports its integration into Sector strategies, District Development Plans (DDPs) and Imihigo Performance Contracts.

4.3. Budgeting process

While plans establish a policy framework and desired outputs and outcomes, they must be translated into realistic budgets, which are very constrained in Rwanda.

After planning consultations and setting of initial ceilings provided to each sector and affiliated agencies, budget consultations follow between Budget Agencies and MINECOFIN. Negotiations address budget and Medium Term Expenditure Framework (MTEF) proposals based on National, Sectoral and Agency priorities in order to arrive at a final allocation of expenditures for the budget proposal and MTEF. This allows Ministries to negotiate for an increased envelope, providing all necessary justifications for any increase through their Strategic Issues Papers, which beside strategic priorities also include an action plan.

For environment and CCD planning, the *Budget Call Circular (BCC)* is the key budgetary tool used to guide the budgeting process. Under REMA and the PEI programme, an Annex template for environment and climate change mainstreaming was provided as part of the budget call circular for three pilot sectors including Agriculture, Energy and Trade and Industry for the fiscal year 2011/2012. The activity involved providing awareness and technical support to each of the sectors in order to detail environment and climate related activities planned and budgeted for the year.

The programme was a successful in that sectors (and MINECOFIN) responded with interest, but it also uncovered the significant knowledge and capacity gaps for CCD planning and budgeting within sectors. With the buy-in of MINECOFIN, the BCC annex for 2012/2013 budget preparation included a requirement that all sectors ensure environment and climate change priorities are appropriately reflected in their budget submissions in accordance with the environment mainstreaming guidelines⁹. This has enabled MINECOFIN to move environment and climate change objectives from simply planning documents to ensuring sufficient resources are allocated to achieve these objectives.

Lesson: Continuous and strong support from the Ministry of Planning and Finance has been and will remain instrumental to the mainstreaming and integration of CCD into the planning and budgeting processes. Rwanda can share the innovative approach of mainstreaming these considerations into the Budget Call Circular (BCC) as a best practice regionally.

The REMA/PEI pilot has strengthened interest of MINECOFIN to engage and provide critical support for CCD through active green economy promotion under EDPRS II, as well as emerging green accounting frameworks which are under development (e.g. greening GDP) and conducting EIAs (these do not include climate considerations) on public and private capital projects.

Lesson: A notable CCD related appeals process for the budget is provided for in the event of natural disasters such as floods/droughts. For example, in the middle of FY 2012/13 (November) Rwanda experienced unexpected flooding in Nyabugogo. Despite the fact that the execution of the financial budget had already started, the government decided to allocate a special budget for flood relief. This required the willingness MINECOFIN to listen and understand the need for contingency resources to be available for these events.

4.4. Budget allocation and accountability tools

The main instruments for priority setting, actual financial allocation and accountability are listed below. These tools are used throughout the Government of Rwanda's fiscal year for planning and M&E. Forward and backward-looking JSRs are particularly important opportunities to brainstorm (forward- looking) on what activities are needed and reflect (backward-looking) on what was accomplished and how future activity planning and implementation can be improved. This includes CCD related activities.

- **Medium term expenditure framework (MTEF)** – a three year rolling plan adopted by the GoR since 2003. MINIRENA and REMA provide technical support and guidance to the Environment and Climate Change sub-sector Technical Working Group, and wider sector actors within the SWAp and ENR Sector Working Group.
- **Joint Sector Reviews (JSRs)** – Conducted on a biannual basis, JSRs review sector performance based on both the sector log-frame and the annual action plans and budgets;
- **Annual Action Planning (AAP)** – is the basis for priority re-setting and budget allocations with strategic guidance of the MTEF. The annual action plans are guided by the JSRs.

⁹ Note there is not percentage requirements for environment/climate related budget allocations within sectors.

- **Public expenditure reviews (PERs)** – are mechanisms for tracking the flow and utilisation of resources within the sector, and analysing sector performance based on both the funding and results. The first detailed PER for the environment and climate change sector has been prepared and it has sufficient baselines for setting realistic targets – both for financial mobilisation.

All the above mechanisms adhere to overall mutual accountability frameworks; tools for the government and donors to hold each other accountable for development results. For the GoR, this is known as the Common Performance Assessment Framework (CPAF). Donors use the Donors Performance Assessment Framework (DPAF). Frameworks apply to all sectors, not only to the environment and natural resources sector.

CHAPTER 5. FUNDING/FINANCING MECHANISMS

5.1. Existing financing mechanisms

CCD Implementation is key, and sourcing finance continues to be a priority. – DG REMA

Funding for the implementation of climate compatible development activities in Rwanda is mobilised from four principle sources:

- 1) Internal public investment resources: this entails national budget allocation to the environment and climate change through ministries, agencies and districts, through the consolidated budget, and contributions to the FONERWA fund;
- 2) External development partner resources: Donor funds support on-going climate change activities through direct project support, budget support, sector budget support, and FONERWA contributions;
- 3) FONERWA Green Fund: This demand-based, GoR-Donor basket fund aims to generate sustainable financing for environment and climate change projects and programmes, build capacity for managing climate finance and supports access to international climate funds, among other initiatives.
- 4) Non-public sector resources: Additional funds are drawn – directly and indirectly – from non-state actors, e.g. the international NGOs, CSOs; local NGOs and the private sector.

The below sub-sections provide details on internal and external resources, as well as the FONERWA fund. Further details on the extent of non-public sources are not available due to limited data availability.

5.2. Internal public investment resources

Climate compatible development is mainstreamed in activities across GoR line agencies through a range of embedded activities in projects and programmes (See below table). As a result, a complete picture of domestic financing on CCD expenditure requires full public expenditure reviews, which have been conducted in recent years (See Chapter 6). For the 2013/14 budget towards CCD expenditure, a sample of related programmes and budget line items are listed in Table 1 below.

Table 1. Sample Detailed Expenditure by Budget Agency – 2013/14 Approved Budget (MINECOFIN).

Line Ministry	Programme	Budget Item	2013/14 Budget (RWF)
MINEDUC	Education, Science and Technology R&D	Research and climate change observatory	375,00,000
MININFRA	Meteorological Operations	Weather/Climate Services	3,394,480,230
	Fuel and Energy	Alternative Energy Sources Promotion	1,399,742,537
		Energy Efficiency and Supply Security	9,579,452,941
MINIRENA	Environmental management and climate change resilience	Environmental education and mainstreaming	1,284,747,202
		Climate change vulnerability	791,275,210
		Pollution management	2,562,929,39
		Environmental research and planning	334,926,000
	Land Administration and Land use Management	Land tenure regularisation	931,400,000
		Land use planning and management	
	Integrated water resource management	Water resource monitoring	1,094,684,173
		Watershed rehabilitation and management	
	Terrestrial Ecosystems and forest resource management	Forest plantation management and agro-forestry	2,998,283,935
		Mineral and quarry exploration and exploitation	

MINAGRI	Agriculture and Animal Resource Intensification	Soil conservation and land husbandry	23,596,409,033
		Irrigation and Water Management	27,029,012,677

Source: MINECOFIN, http://www.minecofin.gov.rw/uploads/media/ANNEX_II-1_01.pdf

Based on the above categorisation of selected programmes, Rwanda’s CCD related expenditure for a single fiscal year (2013/14) totals to approximately **USD 111 million** – and this is not an exhaustive estimate. Moreover, it is clear that the Government of Rwanda has committed to financing CCD expenditure across line agencies, with a focus on resilience of ecosystems and agriculture, alternative energy and energy efficiency, improved climate information and disaster risk reduction and response, among other areas.

Lesson: The above itemised expenditure illustrates that even through Rwanda is a country with a relatively small national budget that heavily relies (39%) on donor finance (source: Budget Speech 2013/14), it has prioritised a large number of CCD related investments. However, it is also clear that certain ministries continue to receive relatively low levels of support, and there is room for increased financing (e.g. MINIRENA, MIDIMAR).

5.3. External development partner resources

Table 2 below captures a snapshot of trends in overseas development assistance (ODA) to Rwanda from external development partners for environment and climate related activities. Note that 36% of these investments are off budget and 71% provided through programmes, projects or basket funds. See the Public Environment Expenditure Review report (PEER, 2013) for further information.

Table 2. Trends in environmental and climate change ODA to Rwanda, 2007-2010 in USD.

	2007	2008	2009	2010
Environment-Principal and significant	20,708,196	23,200,287	23,371,926	37,529,677
Environment-only principal	20,708,196	17,195,794	15,686,015	10,474,708
Climate change mitigation-Principal and significant	20,708,196	22,382,377	25,445,037	8,023,514
Climate change mitigation-only principal	0	234,985	8,786,324	7,6494
Climate change adaptation-Principal and significant	0	0	0	53,915,074
Climate change adaptation-only principal	0	0	0	76,494

Source: Adapted from PEER, 2013; data from DAC/OECD Aid Database for development aid as reported in PEER, 2013.

Note that the PEER report stresses one should never make totals by year from the above table in order to avoid **double counting**, i.e. some projects have the same intersection for principal and significant objectives. Nevertheless, overall trends of all ODA to Rwanda, and that for *significant* activities for environment and climate change are rising (PEER, 2013).

5.4. FONERWA – Rwanda’s Green Fund

In part as a response to the consistently low resource allocations directly available for environment and climate sector, in 2012 the Government of Rwanda established the Environment and Climate Change Fund – FONERWA. FONERWA (a French acronym¹⁰) is the intended vehicle through which additional environment and climate change finance is channeled, 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 bilateral aid and domestic finance. FONERWA is intended to be a Government of Rwanda managed fund. However, full transfer of management to the GoR will take place following an operational period (2012-2015), during which a Fund Management Team establishes Fund resource facilities and management systems.

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. Establishment of FONERWA has catalysed interest and engagement across key sectors, which are represented in the Fund governance structures. The FONERWA Law formed the primary basis for the design of the Fund. Providing further momentum to the passage of the FONERWA Law was Rwanda’s Green Growth and Climate Resilience Strategy, developed in 2010/11, which recommended fund operationalisation as an immediate national priority.

FONERWA Fund design was a 7-month-long process that began in February 2012 and was completed in August 2012. Key stakeholders included the Rwanda Environment and Management Authority (REMA), Ministry of Finance and Economic Planning (MINECOFIN) and the Climate Change focal point of the DFID-Rwanda office, among others. It is important to emphasise that the ease of a Fund design process was a function of high levels of buy-in and sophistication of related environment and/or climate strategies. Core attributions or functions of the Fund (stipulated in the FONERWA Law) were used as the basis of an overarching framework for proposed FONERWA thematic financing windows and entry points. See Figure 2 below.

In a short period of time, Rwanda has demonstrated that a lot can be accomplished with minimal resources and strong national commitment. – DG REMA

¹⁰ 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.

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	
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 and Management Information Systems (MIS)		

Figure 2. Proposed thematic financing windows and entry points for Fund capitalisation and expenditure.

The primary source of FONERWA seed financing is bilateral Development Partners who can capitalise the Fund in the short-term (and long-term). DFID Rwanda provided initial seed capital of **GBP 22.5 million**. A secondary source is domestic capitalisation from the Government of Rwanda. As of January 2014, the GoR has committed counterpart funding of approximately **USD\$ 3.7 million**. FONERWA also seeks to facilitate access to multilateral financing sources, as well as internal and external private sector sources. Towards this, FONERWA has successfully supported the GoR in accessing approximately **USD 15 million** in external finance, including USD 10 million from the Adaptation Fund, with approximately **USD 15 million** pending approval from other sources.

In terms of financial instruments, FONERWA aims to utilise several instruments to achieve its objectives, phasing in more complicated instruments over time, depending on actual and emerging needs. In the

short to medium term, performance-based grants and concessional loans are the primary instruments. More complex instruments such as guarantees and equity investment will be considered in the medium to long-term. FONERWA is currently finalising a memorandum of understanding with the Rwanda Development Bank (BRD) for a concessional lending facility for eligible private sector applicants. See www.fonerwa.org for further information.

The FONERWA governance and institutional structure is overseen by MINIRENA, and is comprised of a Fund Managing Committee (FMC), Technical Committee (FTC) and Secretariat (REMA). The Governance structure allows the GoR, contributing Development Partners, the Private Sector and civil society oversight of projects/ programmes, in order to ensure maximum transparency and accountability. The FONERWA Secretariat and Fund Management Team are responsible for overall management of both public and private disbursement channels. Accordingly, publically oriented funds will be channeled through MINIRENA/REMA using existing GoR procedures, while the Rwanda Development Bank (BRD) will support private sector disbursement using its existing procedures in partnership with FONERWA.

Lesson: The latter partnership with BRD is particularly important in the Rwandan context, as Rwandan financial institutions consider clean tech investments highly risky in nature, and therefore, financing options are limited to this sector. In addition, interest rates are exorbitantly high compared to developed nations, ranging from 16% (offered by Rwanda's Development Bank) but often closer to 19-21%. Financial institutions primarily offer debt capital for hydropower projects. However, the line of credit available to such projects is also relatively small compared to the size and number of these projects.

FONERWA can be accessed by line ministries, Government agencies, Districts, civil society organisations (including academic institutions) and the private sector. 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.

Key strengths of the FONERWA Fund from a GoR perspective include the national orientation and ownership of the fund. Strengths from a donor perspective include national ownership and an opportunity to pool resources with other donors towards an extra-budgetary climate/environment fund. Weaknesses include heavy reliance on donor resources for capitalisation and long-term sustainability as well as risks of spreading limited resources too thinly and potential for poor fiduciary management. The latter risk is also a primary concern of private investors who prefer to invest in privately managed facilities.

Lessons: Based on Rwanda’s experience with FONERWA, keys lessons to success of the design and implementation process included the need for:

1. A strong fund design basis, preferably with legal backing (e.g. FONERWA Law);
2. Sufficient time for the design, operationalisation and transfer of management process (e.g. 3 + years);
3. Close stakeholder engagement in the design process;
4. Integration with national policy, planning and budgeting processes;
5. Sector and donor buy-in on thematic financing windows and entry points;
6. Strong trust relationship with development partners to harness bilateral (and government) contributions for capitalisation;
7. Phased approach to financial structure and instruments, starting with grants and building towards concessional loans and possibly guarantees;
8. An inclusive governance structure featuring cross-sectoral representation, CSOs and private sector;
9. High standards of fiduciary management/transparency;
10. Continuous capacity building and outreach – particularly to sub-national (Districts) and private sector applicants.

Challenges: There are questions regarding the sustainability of the FONERWA fund, particularly with regards to capitalisation and longer-term management. Important challenges the fund has faced so far include low levels of capacity to submit high-quality proposals.

In the first round of applications (September 2013), 679 eligible project profile documents were received by the FONERWA FMT. Among these, only 11 went on to full Project Document (PD) stage, and among these 3 received funding approval. No private sector applicants advanced to PD stage despite a high number of applications, which were of low quality. A further 2 proposals were approved from a selective funding round requested by the Fund Managing Committee (FMC).

However, there are indications that the situation is rapidly improving as applicant capacity and awareness increases. During the second funding round (January 2014), although only 126 eligible proposals were received, 15 went on to PD stage, 10 of which were from the private sector.

Despite strong trust relationships between the GoR and key development partners and positive performance of FONERWA to date, further mainstreaming efforts to tap into District and Ministries’ budget requests, as well as influencing private sector and individual investments decisions are important steps towards sustainable financing of CCD in Rwanda.

Rwanda needs to find internal financial solutions for CCD funding; to build good relationships and adapt to changing CCD financing landscapes. – Peter Katanisa,

MINIRENA

CHAPTER 6. KNOWLEDGE GENERATION AND EVIDENCE BASE

Rwanda has strategically developed a strong and growing evidence base to support CCD. This chapter provides an overview of important activities in knowledge generation in support of CCD policy and planning.

6.1. Public awareness

Driver: An integral driver behind knowledge generation is the need for raising awareness of the importance of CCD in Rwanda of the general public, as well as supporting evidence-based decisions of policymakers.

Public awareness and broad national sensitisation on environment and climate change has been successfully conducted across the country at central and decentralised levels, and within the private sector, civil society, NGOs, environment clubs and public schools. Key activities include: REMA developing a strategy to implement environment education for sustainable development; competitions; creating awareness materials and training modules; integration of national environment/climate priorities and commitments into sector planning, budgeting and implementation supported by mainstreaming check lists and guidelines targeting central and decentralised staff in charge of planning, EDPRS facilitators, and District environment officers and training the Rwandan police to support enforcement.

Lesson: Regular radio programming has proven an effective communication tool for raising public awareness and community knowledge exchange about best practice responses to climate related challenges in Rwanda.

These awareness raising activities, as well as key policy and planning decisions, have been directly influenced by a number of GoR initiatives including commissioning key studies and supporting long-term initiatives on CCD, development of important national communications, strategies and data sets, as well as piloting influential demonstration projects showcasing that CCD can work in practice in Rwanda.

6.2. Reports and studies

Seminal reports and studies have been some of the most influential and valuable contributions towards CCD knowledge generation and policy making in Rwanda. If not for this work, EDPRS 2 would not centrally feature green growth nor Vision 2020 revised to include climate change, among many other achievements. Important work to date and associated lessons and challenges are highlighted below.

UNFCCC National Communications. Since ratifying the Kyoto Protocol in 2004, the Government of Rwanda has consistently supported and participated in UNFCCC initiatives. This includes formulation of Rwanda's initial National Communication to the UNFCCC in 2005 and second National Communication in 2011. Benefits of this reporting include the process of producing the National Communications as much as the end product itself. This required coordination across a wide range of national stakeholders to gather and interpret relevant information, as well as assembling a national climate change steering committee to validate findings.

Challenge: Challenges to UNFCCC reporting include the continued need to establish a comprehensive baseline of Rwanda’s emissions (i.e. fill existing data gaps) and an MRV system to support future reporting. This is exacerbated by the costs of data collection and staff capacity and availability.

NAPA, 2006. Under the UNFCCC, Rwanda prepared 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). 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.**

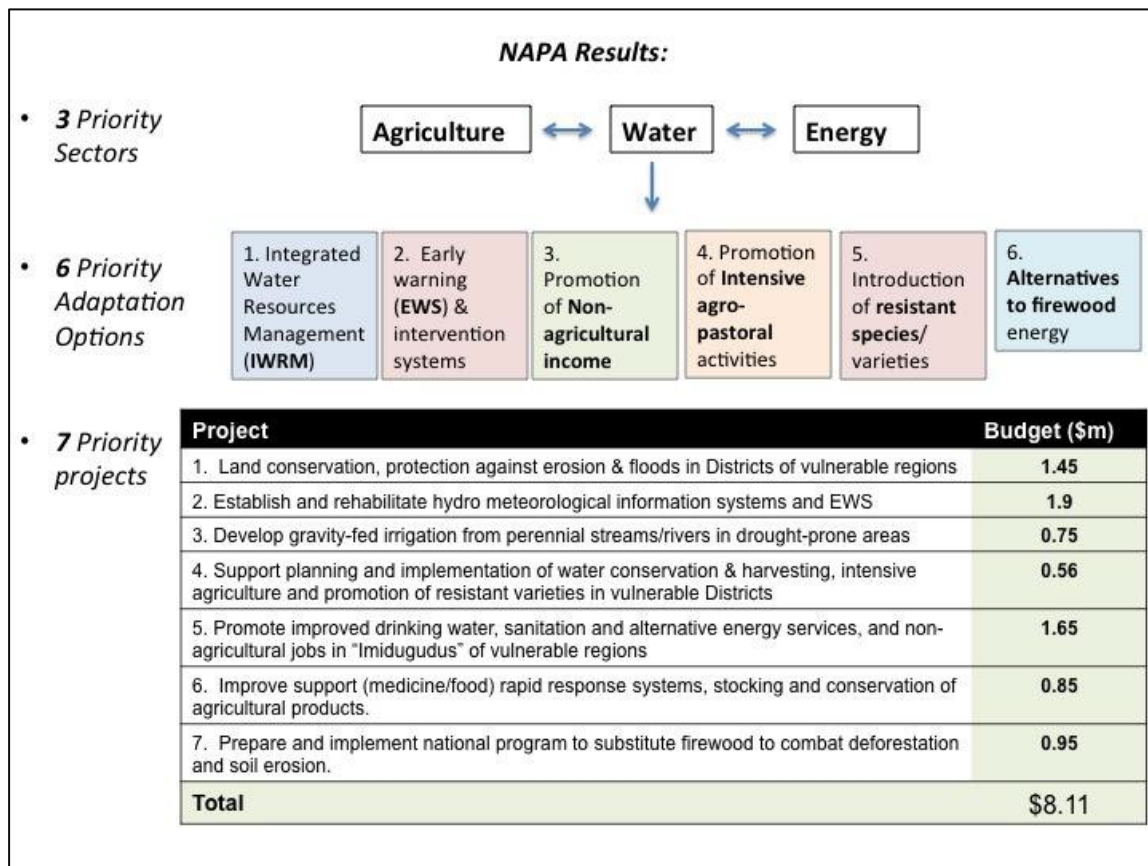


Figure 3. Results of Rwanda’s NAPA process.

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 2.¹¹ 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.

Lesson: The knowledge and recommendations of the NAPA have been invaluable resources for Rwanda's national CCD evidence base. Climate impacts information and priority adaptation options have gone on to directly influence both EDPRS I & II, sector and sub-sector strategic planning and budgeting, the design of the FONERWA fund and applications for international climate financing.

Economics studies. In 2009, DFID commissioned a study on the Economics of Climate Change in Rwanda, undertaken by the Stockholm Environment Institute (SEI) Oxford Office. The study covers the costs of climate impacts, adaptation and mitigation (low carbon growth) considerations. The study revealed the following key findings:

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 \$50 - \$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.

Lesson: The Economics of Climate Change in Rwanda study provides a valuable economic basis to the need for adaptation interventions in Rwanda. 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. These results – *putting numbers to climate change in Rwanda* - raised awareness of the MINECOFIN that climate change is not just an environment issue, but an economic development issue as well.

¹¹ Adapted from Republic of Rwanda, 2006. National Adaptation Programmes of Action to Climate Change.

The SEI study recommends that further work is needed to improve the initial estimates and to give a degree of confidence in the analysis. In line with this, REMA recently commissioned a similar study on economic impacts of the May 2012 floods that affected most parts in the country to showcase of economic effects of the flooding in Rwanda.

Lesson: Weather and climate related natural disasters (particularly flooding) have resulted in significant economic damage in Rwanda, resulting in heightened awareness of climate change risks and the demand for economic studies on the impacts of events and costing of adaptation measures.

PEER reports. A total of 2 Public Environment Expenditure Reviews (PEERs) have been commissioned in Rwanda (2009, 2013). The purpose of PEERs is to establish a baseline report covering expenditure for environment, natural resources and climate change of both public and non-state actors, thus serving as an important CCD evidence base. This aims to support capacity development, and evaluate the adequacy, efficiency and effectiveness of this expenditure. PEER reports have been extremely useful in supporting lobbying efforts to increase budget allocations to the sector, as well as capturing the overall environment and climate related expenditure across government line agencies. For example, when an 'Environment Protection' functional classification is applied to the consolidated budget, the percentage of government budget rose from 1.4% in 2009/2010 to 2.5% in 2012/2013.

Lessons.

- **PEER 2013 findings indicate that despite limited capacities, Rwandans are climate proofing many of their interventions.** Notable examples include weather indexed insurance for the poor in agriculture, irrigation, crop intensification and diversification, relocating settlements and industries from the flood prone fragile ecosystems, and offering social protection to the poor under the auspices of Vision 2020 *Umurenge*, among others.
- **Overall, there is still outcry for adequate funds, and especially at district level.**
- **PEERs provide invaluable tools for ENR/climate sector engagement with MINECOFIN for increased budget allocations.**

Summary PEER, 2013 recommendations include:

1. The ENR sector needs to exert itself on the policy and financing agenda through its sector working group to make a comprehensive sector plan that has inbuilt strategies for capacity development and partnership building
2. MINECOFIN and MINALOC should hasten to support the districts in their strategies for revenue generation from the environment and natural resources.
3. Government should build the capacities of MINECOFIN and FONERWA to tap climate change financing opportunities for all stakeholders
4. MINECOFIN should broaden the 'Environmental Protection' functional classification to influence direction for innovation, EDPRS II implementation and collective responsibility to adapt to climate change
5. Development Partners need to consider ENR sector for its cross-sectoral benefits to support environmental and climate change issues even when the sectoral Division of Labour (DoL) fully takes effect.

State of Environment reports. Other important sources of Rwanda's growing CCD evidence base and knowledge generation are annual State of Environment Reports produced by REMA and partners. These serve as a running record of climate and environment status updates across sectors, progress against objectives and programmed interventions. Rwanda produced its first ever National State of the Environment Report (SOER) in May 2009. The SoER was produced by REMA in partnership with United Nations Environment Programme (UNEP) and the African Development Bank (AfDB)-funded project on Institutional Capacity Building for Environmental Management. The second SoER was produced in form of the *Atlas of Rwanda's changing Environment (2011)* and focused on implications for climate change resilience.

6.3. Projects and programmes

Although far from exhaustive, the below section highlights two influential programmes supporting CCD in Rwanda: PEI and AAP-LDCF. A large body of influential work exists, including the GoR's flagship Vision Umerenge Programme (VUP) under Vision 2010, and the UNDP-supported Integrated Development Programme (IDP), among others.

PEI (2005-2018). Programmes such as the UNEP/UNDP supported Poverty Environment Initiative (PEI) provide a practical approach and tangible tools to build government capacity to mainstream and include environment and CCD concerns in policy, planning and budgeting. PEI is embedded within and in many ways operates as an extension of REMA.

Lesson: Close engagement with REMA, the leadership of Rwandan staff and long-term UNEP/UNDP commitment period (recently extended to 2018) has allowed the PEI programme to have a consistent and deep impact on environment and climate activities in Rwanda.

In addition to providing significant institutional capacity building to REMA and other line ministries, PEI has supported a number of critical studies including PEERs, Environment and Fiscal Reform (EFR) reviews as well as assessments and demonstration pilots that are critical to Rwanda's CCD evidence base. For example, with PEI support, REMA conducted a study on Pilot Integrated Ecosystem Assessment of Bugesera (REMA, 2009). This report indicates that climate induced drought is a driving factor of food insecurity in the Bugesera region. According to the same report, the region of Bugesera has faced chronic food insecurity since 1999 linking with El-Nino southern Oscillation (ENSO) of 1997-2000, i.e. current climate variability.

PEI Case Study 1: Rugezi Wetland restoration – linking resilience and green growth

REMA-PEI work underscores the importance of good natural resources management to secure Rwanda's increased resilience to climate change and green growth objectives. This linkage was illustrated in the 2007 study work on the impact of the degradation of the Rugezi wetland ecosystem. The study highlighted 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 Rwanda's electricity utility company 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. The work built capacity of local communities in watershed management, and restored power to schools and hospitals.

PEI Case Study 2: Rubaya Cell, Northern Rwanda: Kabeza, "Green and Climate Resilient Village of Reference"

Overview: To showcase how environment, climate and poverty issues are interlinked in Rwanda and that practical solutions are possible for the sustainable development. Beneficiaries include 43 families; 196 people. Site selection was based on high levels of vulnerability as a function of poverty and: 1) land over-cultivation and soil erosion, 2) destruction of wetlands, 3) reducing pasture and livestock production, 4) limited integrated land management practice (e.g. agroforestry), 5) absence of water harvesting, 6) inadequate opportunities for income generation.

Intervention areas:

- High-breed Friesian cows for: milk (income, nutrition)/biogas (light, cooking)/ fertiliser
- Biogas digesters: Human and domestic waste contribute
- Land consolidation and erosion control (radical terracing)
- 15 water reservoirs constructed: channel heavy rain, supply irrigation
- Communal settlements for more efficient provision of services
- Modern farming and livestock practices
- 'self contained village'
- Rain Water Harvesting (RWH)
- Rabbits – for access to meat, which is expensive
- Reduced need for: dangerous kerosene lighting through biogas, and fuelwood gathering/tree felling for cooking
- Sustainable finance: Cooperative account with contributions from Umudugadu members to keep activities going after project end.

Lessons: The power of demonstration in Rubaya has resulted in the Ministry of Local Government requesting that all districts have at least one green and climate resilient village demonstration project.

[YouTube: https://www.youtube.com/watch?v=j6RN6_FaUBY]

In reference to case study 2 in the box above, the next phase of PEI is planning development of green village toolkits to support the Ministry of Local Government request that each District is enabled to implement a green village.

The essence of having a demonstration project was we wanted people to upscale it. – Fred Sabiti, PEI

AAP/ LDCF. The African Adaptation Programme (AAP) and Least Developed Country Fund (LDCF) project “Reducing Vulnerability to Climate Change by Establishing Early Warning (EWS), Disaster Preparedness Systems and Support for Integrated Watershed Management in flood prone areas” is another example of an influential project that contributes to CCD knowledge and capacity in Rwanda. Between 2011 and 2014, the project helped 10 districts in Rwanda address their diverse adaptation needs, in partnership with UNEP, UNDP and RAB (Rwanda Agriculture Board). YouTube: <https://www.youtube.com/watch?v=KCYPI0zlgr0>

Project achievements included: laying the foundation for Early Warning Systems (EWS) in Rwanda in partnership with Meteo Rwanda, supporting environment and climate change mainstreaming in EDPRS II and sector strategies and establishing sustainable climate adaptation pilot projects in close partnership with district communities. The latter work with communities was critical to the success of the AAP/LDCF interventions as the project found it important to come up with sustainable activities and finance.

Lesson: Income generation activities for communities has been key to keep activities going after project ends (e.g. fruit, fodder, RWH using local materials, skills transfer), and to convince district planners to incorporate them into DDPs. When lives improve, communities continue the intervention and neighbours copy.

By improving the livelihoods, we are sure that the population will continue what we started.
– Alphonse Mutabazi, AAP/LDCF, REMA

6.4. Data and information

With increased unreliability of weather patterns, accurate local weather information is a central input for planning and monitoring of climate sensitive sectors at all levels. Key achievements in terms of strengthening the data infrastructure include:

- Improving meteorological data collection by installing a network of automatic weather stations country wide and also making that information available regularly and reliably across the country.
- Rehabilitating hydrological stations and installing new ones to provide data needed.
- Rehabilitating climatic and agro-meteorological stations.

- The Meteosat Second Generation (MSG) run by the University of Rwanda since 2006 has been used to provide timely geo-information databases, allowing operational and near real time applications.
- Meteorological radar is planned and will improve the prediction in terms of climate change.
- Capacity building of RMS technical staff has been built in analysis of weather data and information and forecasting, including a 24-hr weather watch over Rwanda. This training was through a strategic partnership with the UK Met Office.

This training will allow Meteo Rwanda to take advantage of recent advances in weather and climate science to develop a comprehensive approach to support decisions of stakeholders in all sectors, for the social-economic transformation. This will contribute in creating an environment for improved weather and climate service delivery to serve the entire population.

-John Semafara, Director, Meteo Rwanda

- Involvement of First responders, Head of villages, Cells and Districts Disaster management Committees in Early Warning System has created a direct link between Meteo Rwanda/MIDIMAR to beneficiary's community for easy transmission of information and getting feedback. Getting feedback from communities will push Meteo Rwanda to regularly make forecast evaluation and improve provided information.

In line with GGCRC strategy recommendations, an *Environment and Climate Change Innovation Centre* will be established in Rwanda. The centre will have a mandate to promote transformational green innovation in the industrial and private sectors. The scope of the centre will include: 1) supporting research and development through links to industry and academia in Rwanda and internationally; 2) promoting technology transfer in priority sectors through business advice and training; 3) linking innovation with finance through identifying international funding sources, supporting proposal development and providing seed funding (FONERWA will play an instrumental role in this area); and 4) providing analyses and information on market and sector trends. This will build on and link to existing institutions – specifically the National Industrial Research and Development Centre, the Cleaner Production Centre.

Overall, the National Institute of Statistics of Rwanda (NISR) has the mandate to generate and manage data that inform the policy design and implementation. This includes carrying out important Integrated Household Living Conditions Surveys (EICVs) which are critical for understanding vulnerability hotspots in Rwanda as a function of poverty and high-risk environments. However, the data needed in this area is yet to be strongly considered by the database being developed by the Institute.

Recommendation: Most of the data related to environment and climate change is somewhat scattered and require a more centralised database for easy access of such information by potential users.

In Rwanda, and in this particular sector, there are many well established main sources of data. However, data may be not sufficient for climate change adaptation and green growth implementation. These data are available through the following national surveys:

- Demographic and Health Survey (DHS): This gathers data on women’s fertility and health and the health of their children. The most recent one was carried out in 2005 and the results released in late 2006; National Institute of Statistics of Rwanda.
- The Household Living Conditions Survey (HLCS), National Institute of Statistics of Rwanda, (also known by its French acronym EICV).
- Participatory Poverty Assessment (PPA). It was undertaken to develop a comprehensive and fairly accurate poverty profile; diagnose and stratify poverty from a social, economic, cultural and spatial dimension; and to generate and evaluate the policies proposed for addressing the identified poverty concerns.
- The Core Welfare Indicators Questionnaire (CWIQ). It collects data on households’ living conditions and use of public services, and is conducted annually by National Institute of Statistics of Rwanda.
- Multiple Indicator Cluster Survey (MICS). It collects data on further aspects of education, water supply and nutrition, from a subset of the households covered in DHS.
- Agricultural surveys. This is done annually but mainly covers crop production and marketing, with limited information about access to land, the poor’s share of the agricultural production, and land degradation.
- The Food Security Survey. It gathers detailed information on crop production from a subsample of households from the sample used for the EICV.
- The Public Expenditure Tracking Study (PETS). It examines the flow of funds to various sectors. PETS is currently limited to health and education sectors but would be extended to other sectors as well.
- Other systems that are sector-based include:
 - Health management information system (HMIS), which is currently being enriched with community health information;
 - Education management information system (EMIS) which covers water, sanitation and feeding in schools. It would be better if energy use was included (particularly as it relates to intensive use of firewood).

CHAPTER 7. RECOMMENDATIONS

Governance and institutional arrangements:

- Institutionalise the REMA internship programme and consider creation of a 'Green Economy Steering Committee' to improve coordination of cross-sector implementation of CCD strategies and plans, and overall effectiveness of institutional arrangements. It was noted in the stakeholder workshop that the functions and modalities of this newly proposed committee need to complement existing institutional arrangements (e.g. SWAp, sector and sub-sector working groups).
- Complete establishment of Rwanda's *Environment and Climate Change Innovation Centre*.
- Establish an effective mechanism to ensure good communication and flow of information on environment and CCD issues between the Ministry of Local Government (MINALOC) and technical government ministries, institutions and organisations to District and sub-District levels. This should be supported through strengthening of District institutional arrangements for CCD and capacity to implement national plans, e.g. through expanding and institutionalising of the internship programme.

Policy frameworks:

- The national policy on environment has a main gap in terms of considering climate change issues. This was because in 2003, climate change issues were not yet growing in momentum as in recent years. The revision of this policy to address this gap was a recommendation of the stakeholders' workshop validating results of the lesson learning project.

CCD mainstreaming in planning and budgeting:

- Establish an operational framework that further facilitates coordination of different initiatives around green economy and sustainable development. This is a nascent concept that has not been fully developed but was promulgated at the stakeholder/validation workshop for the lesson learning project. This will aim to address challenges of low-levels of awareness of CCD (GGCRS) sub-nationally, and supports its integration into Sector strategic plans, District Development Plans (DDPs) and Imihigo Performance Contracts.

Funding/financing mechanisms:

- Further strengthen mainstreaming efforts to tap into District and Ministries' budget requests, as well as influencing private sector and individual investments decisions to further enhance sustainable financing of CCD in Rwanda.

Knowledge generation and evidence base:

- Establish a more centralised database to environment and climate data and information for easy access by potential users. Plans to establish an *Environment and Climate Change Innovation Centre* in Rwanda are an opportunity to address this.

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