



Strategic Programme for Climate Resilience (SPCR)

Rwanda

December 2017





OBJECTIVE

The objective of Rwanda's Strategic Programme for Climate Resilience (SPCR) is to enhance integrated, economy-wide, multi-sectoral climate resilience and to drive climate-responsive investment in Rwanda.

Overall vision (in Rwanda's SPCR logical framework):
To mainstream climate change response in priority sectors of the economy that are most vulnerable to climate change.

The SPCR aims at transformative impact through:

- Increased resilience of households, communities, businesses, sectors and society to climate variability and climate change (PPCR Results Framework: country level outcome)
- Strengthened climate responsive development planning (PPCR Results Framework: country level outcome).





ABOUT RWANDA: GEOGRAPHY AND ECONOMY

- Five provinces; 30 districts; 416 sectors
- **6.9% GDP growth rate (2015); averaged 8% p/a (2001 - 2015)**
- HDI rank 159 out of 188 countries (2016) – improved by 100% between 1990 and 2015.
- 41 out of 190 countries (2018) in WB's Ease of Doing Business.
- 23 of 80 countries (2016) in Global Green Economy Index.
- **Economy is heavily based on natural resources (2016: services 50.3%, agriculture 34.6%, industry 15.1%).**



Figure: Administrative Map of Rwanda (Nations Online, n.d.)



ABOUT RWANDA: ENVIRONMENT AND NATURAL RESOURCES

- **29% of land is covered by forests;** forests increased 8% p/a (2000 – 2009)
- **Rwanda uses 2% of its renewable freshwater;** 90% urban and 83% rural households have improved water access
- Part of the Congo and Nile River basins. **95% of Rwanda's water resources originate within its territory**
- **Watersheds have been degraded in recent years.** Problems: siltation, sedimentation, industrial effluents, agricultural waste, drying streams, reduced flows, water shortages



Figure 2: Level 1 Catchments (Adapted from MINIRENA, 2014)



ABOUT RWANDA: CLIMATE VARIABILITY AND CLIMATE CHANGE

- Cooler and wetter in the West, warmer and drier in the East
- Annual average rainfall: 1500 mm in West, 700 mm in East
- Average temperature has risen 1.4 degrees C since 1970
- Rains becoming shorter and more intense; **increase in heavy rainfall events observed and projected.**
- Rwanda already experiences **erosion, landslides and flash floods**, which are expected to increase with **climate change.** **Water stress and drought** expected to increase in the East.

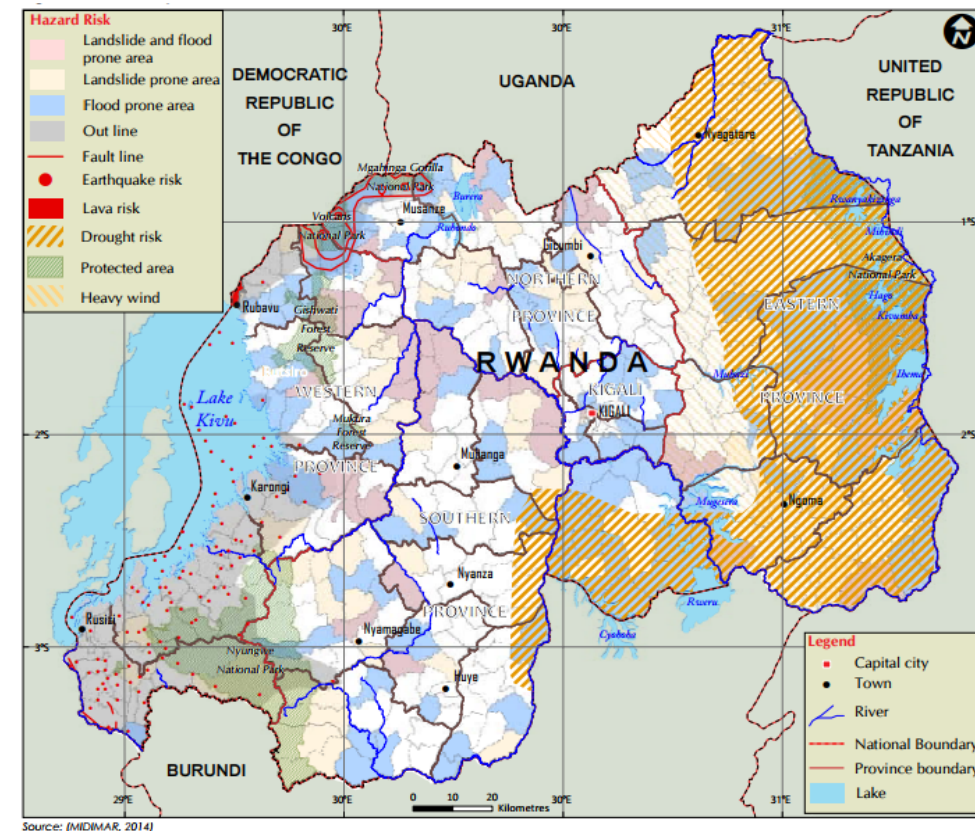


Figure: Hazard Prone Areas of Rwanda (2015)



FRAMING THE SPCR: NATIONAL POLICY AND PLANNING CONTEXT



Vision 2050

The SPCR is embedded in Rwanda's policy landscape



National Strategy for Transformation



NDCs; SDGs; NAMAs; NAPAs



Annual Budgets

The SPCR has emerged from Rwanda's complex and robust governance framework. It is guided by the Rwandan government's priorities signalled across broader development planning processes and instruments



DEVELOPING THE SPCR – THE PROCESS



Rwanda's SPCR has emerged from an extensive consultative process, with a series of stakeholder engagements, field visits, briefings, numerous individual expert interviews, technical working group sessions, and presentations

- Multi-sectoral
- Consultative
- Iterative
- Series of stakeholder engagements
- Reconciling different priorities

Government officials, think tanks and non-profits, donor agencies, multilateral institutions, and community representatives.

Over 100 stakeholders engaged directly.

Widespread buy-in and stakeholder ownership.

17% female participation



ORGANIC EVOLUTION FROM GGCRS TO SPCR PRIORITY PROGRAMMES

SPCR is rooted in the Green Growth and Climate Resilience Strategy (GGCRS).

Priority themes emerged from 8 of the 14 GGCRS Programmes of Action (related to adaptation; excludes forestry, which is housed in FIP)

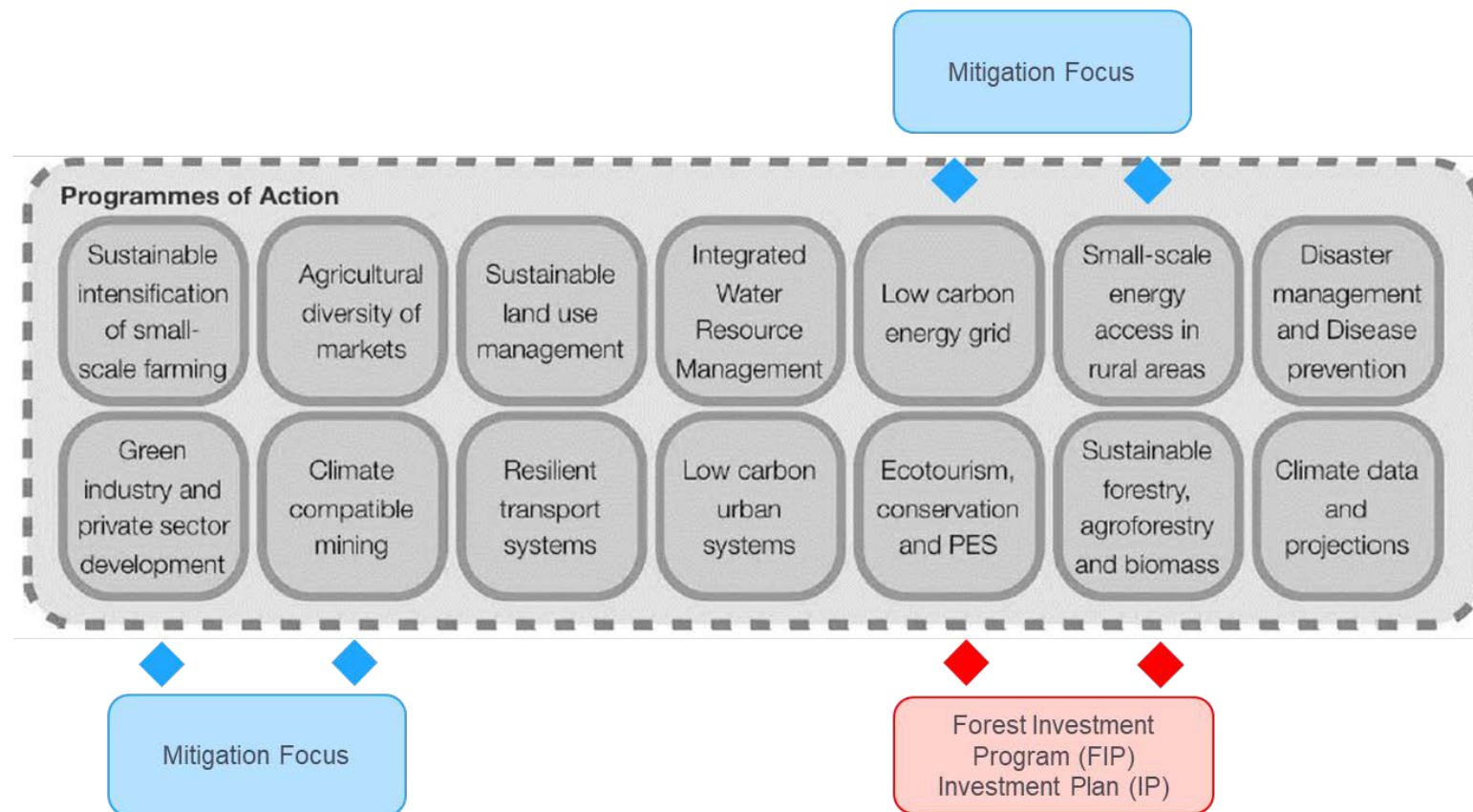


Figure: GGCRS Programme Areas of Relevance to the SPCR



EMERGENCE OF MULTI-SECTORAL, CROSS-MINISTERIAL PROGRAMMES

If Rwanda is to safeguard its hard-fought development gains and not lose them incrementally to climate change, it must ensure that its entire development apparatus is climate-resilient, lest the system as a whole or any critical part thereof be straitjacketed by the damaging impacts of climate change.

Need to move away from a combination of disparate, once-off adaptation projects towards a programmatic approach

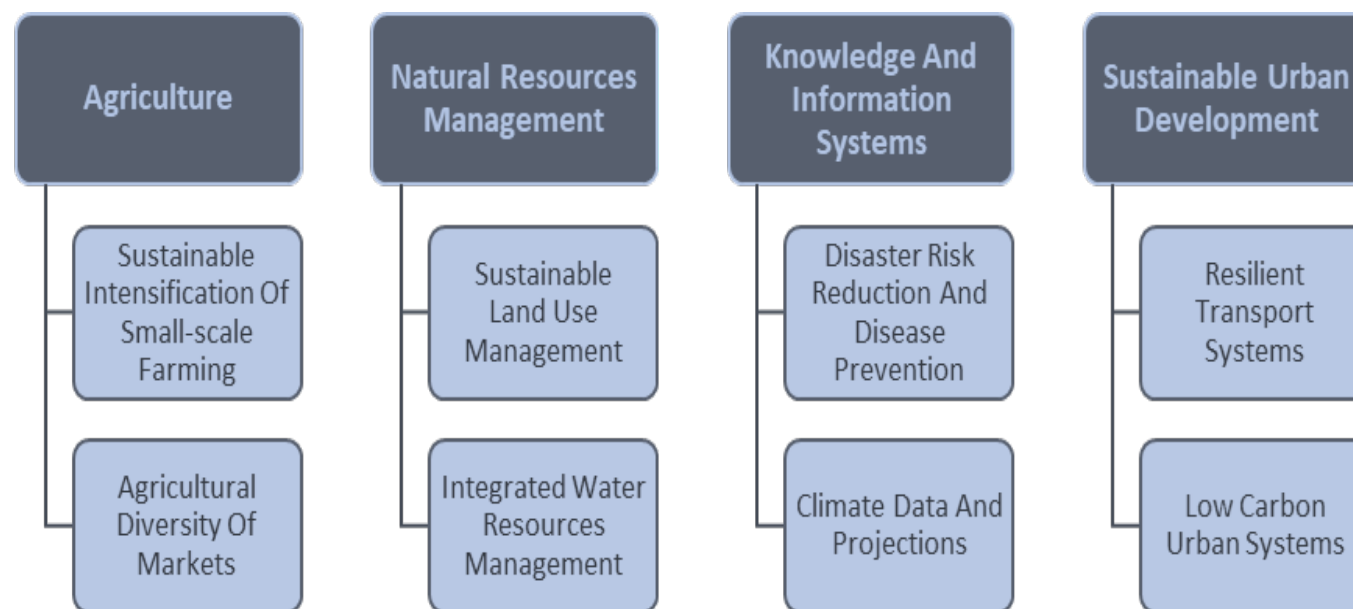


Figure: Moving from the GGCRS to the SPCR



PRIORITIZATION CRITERIA FOR PROGRAMMES AND CROSS-CUTTING PRIORITIES

- *Paradigm Shift Potential*
- *National Ownership*
- *Economic Efficiency*
- *Gender and Vulnerable Peoples Impact*

Informed by strategic planning documents
and government policy guidance!
Aligned with Rwanda's priorities!!

*3 key building blocks of climate change resilience
have been chosen as **cross-cutting priorities** in
Rwanda's SPCR.*

CROSS-CUTTING PRIORITY 1: Technical Capacity
Building and Strengthening Institutional Coordination

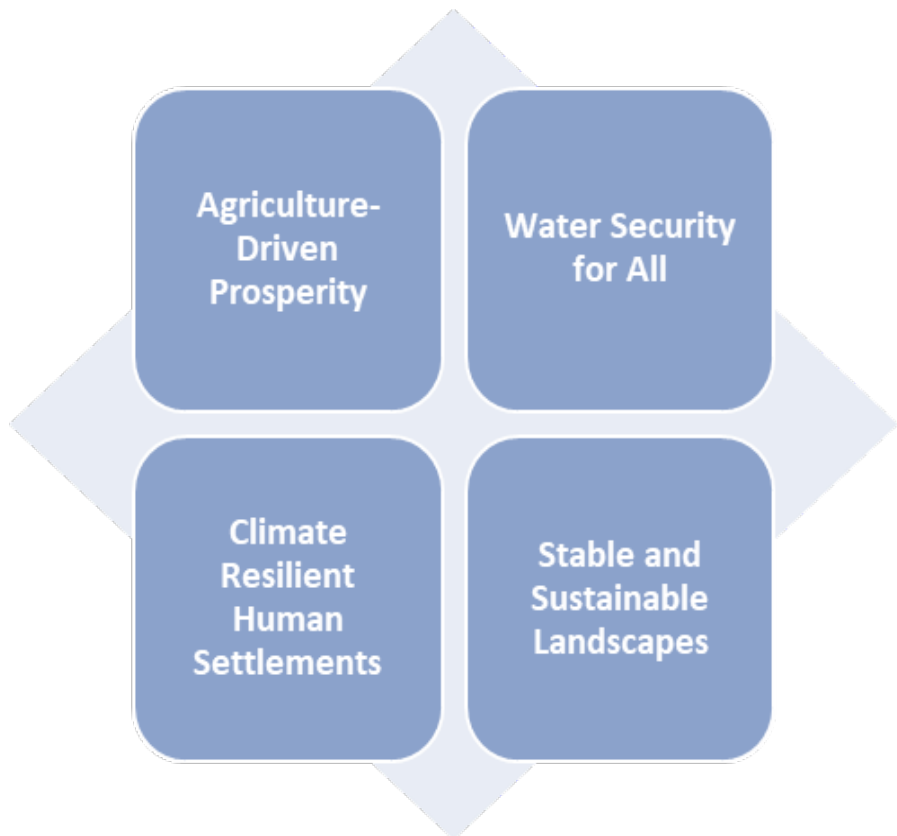
CROSS-CUTTING PRIORITY 2: Integrated Land Use
Planning and Spatial Planning

CROSS-CUTTING PRIORITY 3: Climate Services and
Disaster Risk Reduction / Disaster Risk Management



SPCR OVERVIEW: FOUR INVESTMENT PROGRAMS

Total cost: \$534 316 750



AIMS of the four Investment Programs of the SPCR

PROGRAMME 1 - Agriculture Driven Prosperity: To provide climate-smart strategic support to Rwanda’s agriculture and agroforestry sectors, while implementing participatory adaptation and climate resilient infrastructure in targeted areas.

PROGRAMME 2 - Water Security for All: To enhance climate resilience of Rwanda’s surface water and groundwater systems, promoting sustainable access to water, and reducing vulnerability in the face of increasing uncertainty in runoff.

PROGRAMME 3 - Climate Resilient Human Settlements: To build Rwanda’s population resilience to shocks and stresses, by securing more reliable infrastructure and service delivery, and integrating climate change considerations into urban development

PROGRAMME 4 - Stable and Sustainable Landscapes: To safeguard Rwanda’s most fragile and disaster-prone landscapes, to reduce communities’ vulnerability to floods and landslides and to enhance preparedness for a wide range of climate change impacts

Figure: The Four Investment Programs of the SPCR



FOUR CLIMATE RESILIENCE INVESTMENT PROGRAMMES

PROGRAMME 1	PROGRAMME 2	PROGRAMME 3	PROGRAMME 4
Agriculture Driven Prosperity	Water Security for All – Strengthening Resilience in the Water Sector	Climate Resilient Human Settlements	Stable and Sustainable Landscapes
Components			
(1) climate-resilient value chain development; and (2) climate-smart agriculture and agroforestry.	(1) integrated strategic water resource planning and management; (2) catchment restoration; and (3) climate resilient water infrastructure.	(1) mainstreaming climate resilience into urban land use planning; (2) climate resilient stormwater management and drainage; (3) climate resilient waste management; and (4) sustainable, resilience-building transport	(1) and landslide flood prevention, control and management in high-risk locations; (2) implementation and rollout of Rwanda’s National Framework for Climate Services; and (3) landscape conservation in the context of fuelwood production and collection
Total Estimated Cost			
US\$ 44.4 million	US\$ 310.5 million	US\$ 150.7 million	US\$ 28.7 million
Lead Ministry			
MINAGRI	MoE	MININFRA	MINILAF



INVESTMENT PROGRAMME 1: AGRICULTURE-DRIVEN PROSPERITY

Programme: Agriculture-Driven Prosperity			
No.	Component	Project	Estimated Cost (USD Million)
1	Climate Resilient Value Chain Development	<ol style="list-style-type: none"> Providing Investment to New Climate Resilient Value Chains; Unlocking Barriers to Investment in Agriculture; and Building Climate Resilient Post-Harvest Facilities and Infrastructure. 	\$ 34.2 mill
2	Climate Smart Agriculture and Agroforestry	<p>Component 2a</p> <ol style="list-style-type: none"> Climate Smart Insurance; and Linking Climate Smart Agriculture Research to Projects. <p>Component 2b</p> <ol style="list-style-type: none"> See Forestry Investment Plan 	\$ 10.07 mill
Total Programme Cost			\$ 44.3 mill

Implementation Arrangements:

The Project Management Unit will be **chaired by MINAGRI**, supported by the following institutions: MoE; MINILAF; MINICOM; MINALOC; RWFA; Meteo Rwanda, NAEB; RAB; MIGEPROF; District Governments.



INVESTMENT PROGRAMME 2: WATER SECURITY FOR ALL - STRENGTHENING RESILIENCE IN THE WATER SECTOR

Programme: Water Security for All - Strengthening Resilience in the Water Sector			
No.	Component	Project	Estimated Cost (USD Million)
1	Integrated Water Resource Planning and Management	1. Strategic catchment planning for all level one catchments	\$ 19.6 mill
		2. Groundwater Study and Mapping Exercise	
		3. Complete and automated hydrological network	
2	Catchment Restoration	1. Catchment Rehabilitation through Agriculture	\$ 38.2 mill
		2. Implementing the Water-Energy-Food Nexus through Hydropower	
3	Climate Resilient Water Infrastructure Planning and Development	1. Large-scale resilient water storage	\$ 252.5 mill
		2. Small-scale water infrastructure	
		3. Rainwater Harvesting	
Total Programme Cost			\$310.4 mill

Implementation Arrangements:

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The Project Management Unit will be **chaired by MoE**, supported by the following institutions: MINILAF; RWFA; MINEACOM; MININFRA; MINALOC; Meteo Rwanda, NAEB; RAB; MIGEPROF; District Governments.



INVESTMENT PROGRAMME 3: CLIMATE RESILIENT HUMAN SETTLEMENTS

Programme: Climate Resilient Human Settlements			
No.	Component	Project	Estimated Cost (USD Million)
1	Climate-sensitive Integrated Land Use Planning and Spatial Planning	<ol style="list-style-type: none"> Update of National Land Use Master Plan to integrate future climate change. Development of climate-responsive city-scale Spatial Development Master Plans 	\$11.4 mill
2	Climate resilience through storm-water and drainage management	<ol style="list-style-type: none"> Climate-smart Storm-water Management and Drainage Initiative in secondary cities 	\$ 41.5 mill
3	Climate resilience through improved waste management	<ol style="list-style-type: none"> National Waste Management Flagship Project, including infrastructure development in secondary cities 	\$ 49.8 mill
4	Sustainable, climate-resilient roads and bridges	<ol style="list-style-type: none"> Strengthening climate resilience in Rwanda's district road network, and integrating climate-robustness into the Nyabarongo Bridge design and construction 	\$ 47.8 mill
Total Programme Cost			\$ 150.7 mill

Implementation

Arrangements:

The Project Management Unit will be **chaired by MININFRA**, supported by the following institutions: MININFRA; RTDA; RHA; WASAC; MIDIMAR; MoE; MINILAF; Meteo Rwanda; MINALOC; MIGEPROF; District governments.



INVESTMENT PROGRAMME 4: STABLE AND SUSTAINABLE LANDSCAPES

Programme: Stable and Sustainable Landscapes			
No.	Component	Project	Estimated Cost (USD)
1	Flood and landslide prevention, control, and management in high flood risk locations	1. Integrated Flood Risk Management Project in North-western Rwanda 2. Land stabilization and landscape restoration in areas affected by mining	\$20.3 mill
2	Implementation and rollout of the National Framework for Climate Services	1. Technical and management capacity development for institutional transition to a climate services delivery agency and trainings to facilitate end-user orientation	\$ 8.3 mill
3	Landscape conservation in the context of fuelwood production and collection for biomass use	See Forestry Investment Plan (FIP)	--
Total Programme Cost			\$28.7 mill

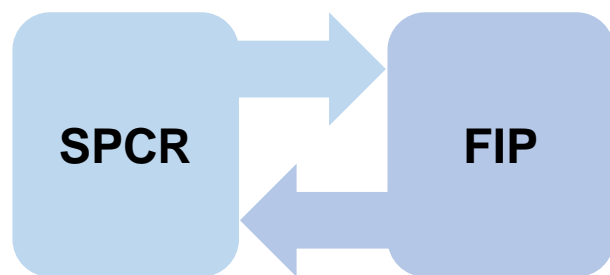
Implementation

Arrangements:

The Project Management Unit will be **chaired by MINILAF**, supported by the following institutions: MoE; REMA; RWFA; MIDIMAR; Meteo RWANDA; MININFRA; MINAGRI; MINALOC; MIGEPROF; District Governments.



FORESTRY INVESTMENT PLAN (FIP) FOR RWANDA



1. Development of Agroforestry and Sustainable Agriculture
2. Sustainable Forest and Landscape Management
3. Wood Supply Chain, Improved Efficiency, and Added Value

**FIP Funding
Request:
\$ 95 million**

Agriculture Driven Prosperity: Strong linkage - Component 2, Climate Smart Agriculture and Forestry, with a standalone project entitled *Development of Agroforestry and Sustainable Agriculture*.

Water Security for All: Moderate linkage - Component 2, Catchment Restoration, which can take advantage of the forest restoration to be undertaken through the FIP-IP in the most vulnerable landscapes, and - in particular - on degraded watercourses.

Climate Resilient Human Settlements: Minimal linkage - opportunities to apply technologies developed under the FIP in human settlement areas

Stable and Sustainable Landscapes: Strong linkage - Component 3, Landscape Conservation in the Context of Fuelwood Production and Collection - linked to the FIP's Project 2, *Sustainable Forest and Landscape Management*.



IMPLEMENTATION ARRANGEMENTS

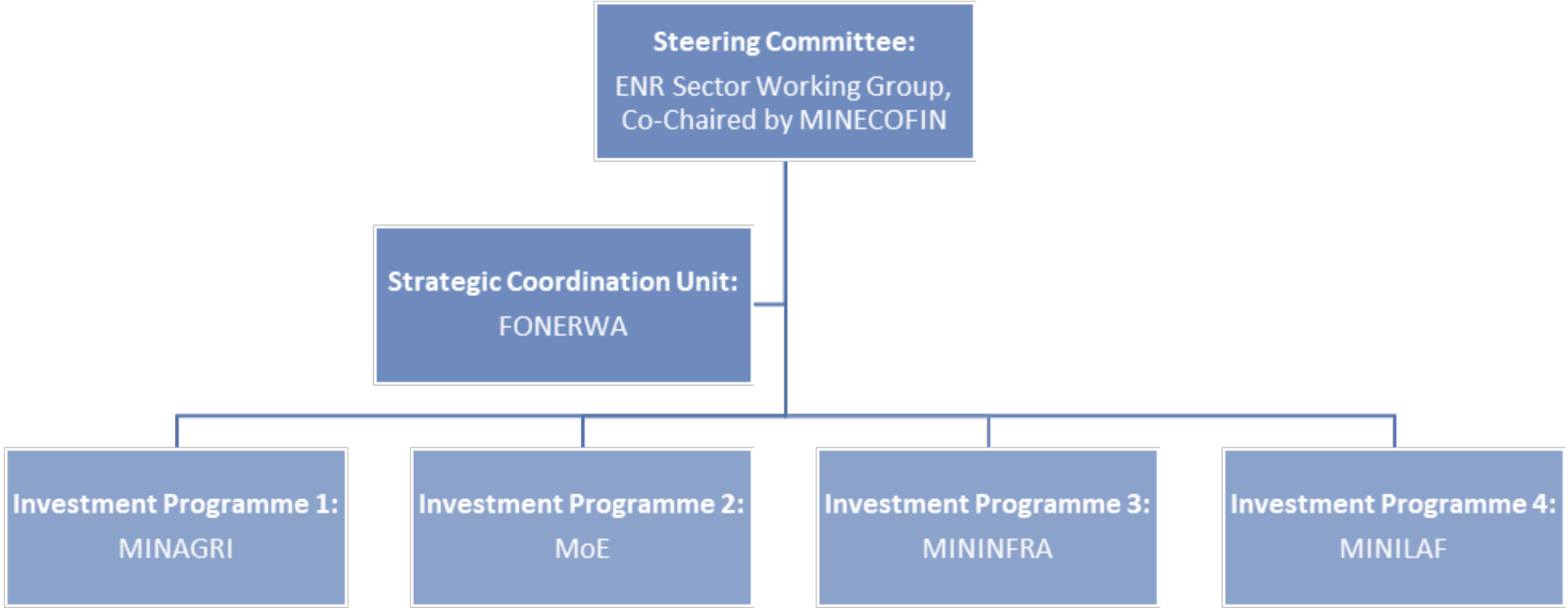
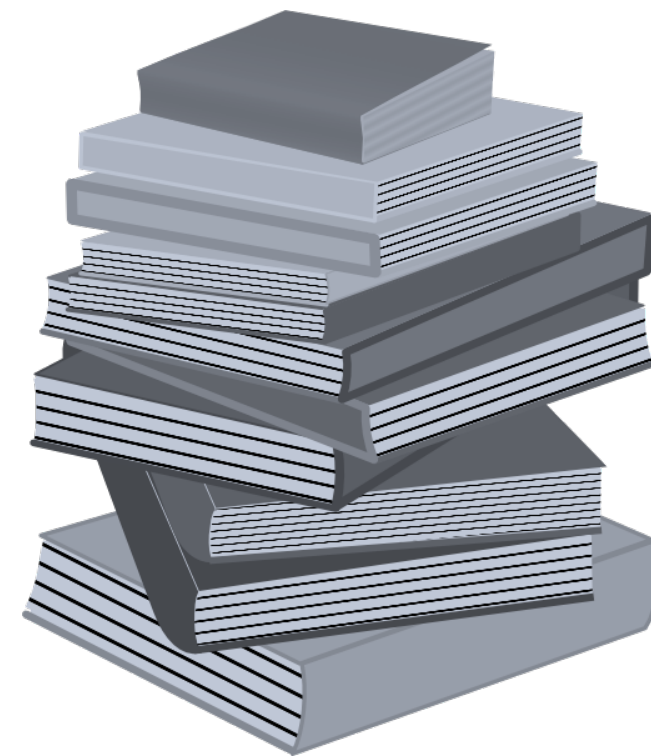


Figure: Illustrative Implementation Arrangements



KNOWLEDGE MANAGEMENT AND CAPTURING LESSONS LEARNT

- Knowledge generation through action: learning by doing
- Opportunity to integrate lessons in gender inclusion in SPCR implementation
- Capturing lessons learnt through knowledge products and best practice
- Knowledge management to be key responsibility of Steering Committee and PMU
- SPCR will offer lessons not only for Rwanda, but global efforts to build climate-resilience
- Examples: policy briefs, fact sheets, research and survey reports, data sets, posts on Rwandan ministry websites etc.





RWANDA'S SPCR AND THE PPCR RESULTS FRAMEWORK

SPCR OBJECTIVE

To mainstream climate change into key sectors and increase resilience of highly vulnerable communities and infrastructure in Rwanda.

EXPECTED OUTCOMES

- Increased **cross-sectoral collaboration** for building climate resilience and mainstreaming climate change into socio-economic development in Rwanda;
- Increased **resilience of vulnerable communities**, esp. gender responsive resilience, and key infrastructure to withstand effects of climate change and variability;
- Increased use of **climate information** by target groups (vulnerable communities, private sector, policy makers);
- Strengthened **government capacity** to coordinate, manage and implement Rwanda's SPCR;
- Improved **engagement of stakeholders** including NGOs, CSOs, youth groups, women, academia and private sector, in initiatives to reduce adverse consequences of climate change

Increased **sharing of best practices** for mainstreaming climate resilience within Rwanda, regionally, continentally and globally.



NEXT STEPS FOR RWANDA'S SPCR: RESOURCE MOBILIZATION

- Developing a comprehensive funding and fundraising strategy
- Refining project preparation costs and accessing project preparation finance
- Donor engagement to explore financing options and access project implementation finance
- Private sector engagement

Funding Request to CIF of \$?? million

**?? Million for Programme 2 – Water Security for All:
Building Resilience in the Water Sector**

**?? Million for Programme 1 – Agriculture-Driven
Prosperity**

- Key to unlocking public and private funding
- Paradigm shift potential; national ownership; economic efficiency; focus on vulnerable populations



RESOURCES MOBILIZATION: NATIONAL OWNERSHIP/EFFECTIVE PARTNERSHIP

Investment	MDB	PPCR	PPG	Co-Financing						CO-FINANCING	TOTAL
				GCF	GEF	AfDB	WB	GoR/FONERWA	NDF		
Agriculture-Driven Prosperity	AfDB	tbd	0.25	0	0	tbd	tbd	1.25	0.00	1.3	44.37
Water Security for All - Strengthening Resilience in the Water Sector	WB	tbd	1.9	50	6.2	tbd	tbd	2.50	0.00	58.7	310.48
Climate resilient human settlements	AfDB/ WB	tbd	0	0	0	tbd	tbd	0.00	0.00	0.0	150.73
Stable and sustainable landscapes	WB	tbd	0	0	0	tbd	tbd	1.25	tbd	1.3	28.75
Total		tbd	2.15	50	6.2	0	tbd	5	tbd	61.2	534.32

