

Rwanda's Green Growth and Climate Resilience Strategy

Mainstreaming Climate Resilience into National Planning Systems: Lessons from Rwanda's Green Growth and Climate Resilience Strategy

Rwanda's Green Growth and Climate Resilience Strategy (GGCRS) integrate climate resilience into national planning in response to rapid urbanisation and environmental risk. It embeds climate considerations across sectors such as land use, infrastructure and energy, supported by strong national coordination. The strategy demonstrates how policy-led approaches can drive system-wide integration and long-term transformation. For Commonwealth countries, it highlights the importance of mainstreaming resilience within planning systems while strengthening coordination, policy coherence and institutional capacity.



Integrated planning, Kigali

1. Overview and Challenge

Rwanda faces the combined pressures of rapid urbanisation and high climate vulnerability, particularly in Kigali and surrounding peri-urban areas. The country's topography, characterised by steep slopes and intense rainfall, heightens exposure to flooding, landslides and environmental degradation. These risks are exacerbated by urban expansion into environmentally sensitive areas, driven by population growth and land scarcity.

Historically, development planning and environmental management operated through separate institutional and policy frameworks, resulting in fragmented decision-making. Urban planning processes often prioritised land use and infrastructure provision without adequately accounting for climate risks, while environmental policies remained disconnected from spatial planning systems. This separation limited the ability of institutions to respond effectively to interconnected challenges.

A further challenge has been the gap between national policy ambitions and local implementation. While resilience and sustainability were embedded in national strategies, translating these priorities into practical planning and investment decisions at the city level remained difficult. Institutional capacity constraints, including limited technical expertise, data gaps and weak integration of climate information, compounded these challenges.

These dynamics are highly relevant across many Commonwealth contexts, where climate risks intersect with rapid urbanisation. Rwanda's Green Growth and Climate Resilience Strategy (GGCRS) was developed to address these systemic challenges by embedding climate resilience within national planning and development systems.

2. Urban Context and Approach

The GGCRS adopts a system-wide, policy-led approach to integrating climate resilience into Rwanda's development trajectory. Rather than treating climate as a standalone issue, the strategy embeds resilience across key sectors including land use, infrastructure, energy and agriculture.

At the national level, climate resilience is integrated into broader development frameworks, ensuring that it informs policy, planning and investment decisions across government. This is underpinned by strong political leadership and long-term commitment, which has been critical in maintaining policy coherence and driving cross-sector alignment.

A defining feature of the approach is cross-ministerial coordination. Institutions responsible for environment, infrastructure, finance and local government operate through formal coordination mechanisms, aligning policies, budgets and implementation priorities. This reduces fragmentation and ensures that climate considerations are consistently embedded across sectors.

At the operational level, the GGCRS is supported by practical tools and processes that enable integration, including:

- Climate risk assessments to inform land use and infrastructure decisions
- Planning and design guidelines that embed resilience into development projects
- Integration of environmental and spatial data into planning systems

In urban areas, particularly Kigali, these approaches have translated into tangible outcomes which was nationally defined but locally applied, namely:

- Improved flood risk management through drainage systems and land use controls
- Protection and restoration of wetlands as part of green infrastructure strategies

- Integration of environmental considerations into urban expansion and zoning

The strategy also promotes adaptive and long-term planning, recognising that both climate risks and urban dynamics evolve over time. This supports iterative planning processes that can respond to new data and changing conditions.

Capacity building is central to the approach, with efforts focused on strengthening technical expertise (through a combination of targeted training, on-the-job learning, the use of standardised tools, cross-sector collaboration and ongoing institutional support embedded within planning and implementation processes), improving access to data and tools, and enabling knowledge exchange across sectors and levels of government.

Despite these advances, implementation challenges remain. Translating national policy into local action requires sustained coordination, adequate financing and continuous institutional support. In Rwanda's centralised system, local governments rely heavily on national fiscal transfers, which can constrain implementation where resources are limited, but also provide a lever to incentivise alignment with national climate priorities. Data limitations and technical constraints can further affect the ability of local authorities to fully operationalise climate-informed planning (Niyonsaba, 2025).

3. Insights and lessons

Rwanda's GGCRS provides several key lessons for integrated and climate-resilient planning:

- 1. National leadership is critical for system-wide integration:** Strong political commitment and institutional alignment are essential to embed cross-cutting priorities such as climate resilience across sectors.
- 2. Policy frameworks must be linked to implementation:** Strategic direction alone is insufficient. Effective integration requires tools, financing mechanisms and institutional capacity to translate policy into action.
- 3. Integration must be operationalised through planning tools:** Climate risk assessments, spatial data and planning guidelines are essential to embed resilience into everyday planning and investment decisions.
- 4. Multi-level governance coordination is essential:** While national frameworks provide direction, local governments play a critical role in implementation. Strong vertical coordination is therefore key.
- 5. Capacity building must be continuous and embedded:** Strengthening technical capacity through applied, practice-based approaches is essential for sustained impact.

At the same time, the case highlights ongoing constraints, including uneven local capacity and persistent data gaps, which can limit the effectiveness of climate-informed planning.

4. Key Lessons and Transferable Insights

- National policy frameworks can drive system-wide integration of climate and planning
- Cross-ministerial coordination is essential for aligning policy and investment
- Climate resilience must be embedded within planning systems, not treated separately
- Strong leadership and long-term vision enable sustained transformation
- Implementation depends on institutional capacity, resources and coordination
- Practical tools are essential to translate policy into action

5. Strategic Significance

This case study demonstrates that climate resilience can be effectively mainstreamed into national planning systems through strong policy alignment, institutional coordination and sustained leadership. The GGCRS illustrates how cross-cutting priorities can be embedded across sectors, linking environmental management, spatial planning and economic development.

For Commonwealth countries, the case highlights the importance of:

- Integrating climate resilience into core planning frameworks
- Aligning policies, budgets and institutions across sectors
- Strengthening governance systems to support long-term transformation
- Ensuring that national strategies are supported by implementation mechanisms

6. Implications for Integrated and Rapid Planning Systems

The GGCRS provides important insights for advancing integrated and rapid planning approaches in climate-vulnerable contexts.

First, it demonstrates that integration at scale requires policy-driven alignment, where national frameworks provide a clear mandate for embedding cross-cutting priorities such as climate resilience across all sectors.

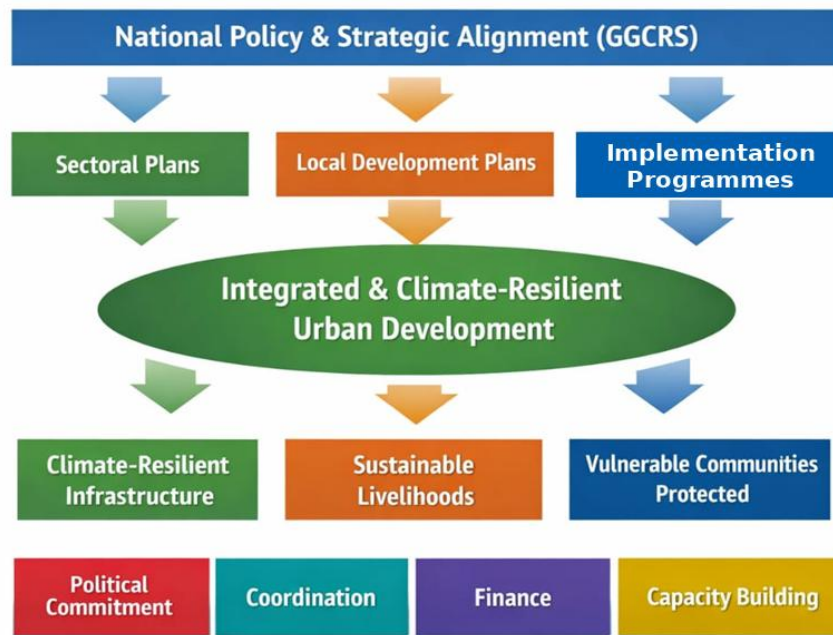
Second, the case highlights that speed and effectiveness in planning depend on the ability to translate policy into practice. This requires not only strategic direction, but also practical tools, financing mechanisms and institutional capacity to support implementation.

Third, it underscores the importance of multi-level governance coordination, ensuring that national priorities are effectively translated into local planning and investment decisions.

Fourth, the strategy reinforces that resilience must be embedded within core planning systems, rather than treated as an additional layer. This shifts planning from reactive risk management towards proactive and integrated development.

Finally, the case illustrates that adaptive and iterative planning approaches are essential in responding to evolving climate risks and urban dynamics.

Together, these insights position the GGCRS as a strong example of how planning systems can become more integrated, forward-looking and implementation-oriented, offering valuable lessons for the refinement of tools such as the Rapid Planning Toolkit and for broader Commonwealth urban policy agendas.



Integrating Climate Resilience into Development Planning Systems (Rwanda – GGCRS)

Figure 1: Integrating Climate Resilience into Development Planning Systems (Rwanda – GGCRS). Political commitment, coordination, financing and capacity building function as foundational, cross-cutting enablers that underpin all levels of integrated and climate-resilient urban development.

This Case Study was prepared by Prof. Jua Cilliers and Kudakwashe Intauno, University of Technology Sydney, by way of contributing to the work of the CSCC Integrated Planning Action Group, 27 March 2026.

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