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MINISTRY OF ENVIRONMENT

Rwanda's Climate Adaptation Monitoring, Evaluation, and Learning in the Human Settlements and Transport Sectors:

Proposals for sharing information

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Briefing Note

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1. Introduction

Effective dissemination of information about adaptation outcomes across key sectors is essential for enhancing resilience against climate change, facilitating informed decision making, and replicating best practices. This proposal outlines strategies for sharing information on adaptation outcomes in Rwanda's agriculture, human settlement, and transport sectors. These strategies are based on specific indicators and potential outcomes, using existing data management systems to provide comprehensive and actionable insights.

2. Agriculture Sector

2.1 Indicators

1. Number of developed climate-resilient crop varieties.
2. Percentage of farmers adopting climate-resilient crop varieties.
3. Percentage of crossbreed livestock in the national herd species.
4. Capacity of constructed storage, in millions of metric tons.
5. Number of farmers using surveillance tools (e.g., fall armyworm database; banana Xanthomonas wilt app).
6. Area of land under erosion control measures and optimally used.
7. Percentage of arable land (as a percentage of the total land area).
8. Number of hectares under irrigation within the integrated water resources management framework.
9. Hectares of crops covered by insurance.
10. Number of insured cows.

2.2 Potential Outcomes

1. Increased productivity, nutritional value, and resilience through crop, livestock, and fish production systems that are sustainable, diversified, and integrated.
2. Use of improved seeds to enhance the climate resilience of local communities.
3. Enhanced agricultural production, yields, and household incomes through the planting of pest- and disease-resistant and drought-tolerant crops.
4. Improved yields, reduced vulnerability to droughts, and enabled multiple cropping practices using solar irrigation systems.
5. Mixed outcomes from initiatives to increase storage capacity, use surveillance tools, and implement erosion control measures.
6. Improved food security, reduced post-harvest losses, and better market access through the expansion of storage capacity and the use of effective surveillance tools.

2.3 Strategies for Sharing Information

1. **Strengthening the agricultural Management Information System (MIS)**
 - a) **Objective:** Enhance the existing MIS hosted by Ministry of Agriculture and Animal Resources to track and disseminate comprehensive adaptation data.
 - b) **Components:**
 - Integrate new indicators to capture long-term adaptation outcomes.
 - Develop user-friendly dashboards for real-time data access.
 - Ensure regular updates and maintenance of the system to improve data reliability.
2. **Farmer-focused outreach programs**
 - a) **Objective:** Directly engage with farmers and disseminate adaptation knowledge.
 - b) **Components:**
 - Establish farmer field schools and extension services to train them on climate-resilient practices.
 - Use mobile technology to share information on improved seeds, irrigation techniques, and pest management tools.
 - Organize community meetings and workshops to discuss adaptation outcomes and share success stories.
3. **Policy and stakeholder engagement**
 - a) **Objective:** Ensure that adaptation outcomes inform policy decisions and involve all stakeholders.
 - b) **Components:**
 - Publish policy briefs and reports summarizing key adaptation outcomes.
 - Conduct stakeholder forums to discuss challenges and opportunities.
 - Collaborate with research institutions to continuously improve adaptation practices.

3. Human Settlements Sector

3.1 Indicators

1. Percentage of the urban population living in informal settlements and percentage of the rural population living in clustered settlements.
2. Average share of the built-up area of cities that is open and green space for public use.
3. Access to water and sanitation services.
4. Percentage of the urban population in areas covered by master plans with stormwater considerations.

3.2 Potential Outcomes

1. Progress in developing clustered settlements and enhancing resilience to climate impacts.
2. Improvements in living conditions and communal benefits.
3. Varying progress in access to water and sanitation services, indicating infrastructure challenges.
4. Reduced vulnerability of roads to natural disasters through improved infrastructure planning.

3.3 Strategies for Sharing Information

1. **Enhancing urban dynamic maps**
 - a) **Objective:** Improve the effectiveness of urban dynamic maps in monitoring informal settlements.
 - b) **Components:**
 - Expand coverage to all districts and update regularly.
 - Integrate data on informal settlements and climate resilience measures.
 - Develop a public portal to share data with stakeholders.
2. **Establishing a rural settlement information system**
 - c) **Objective:** Create a dedicated MIS for rural settlements.
 - d) **Components:**
 - Collect and integrate data from National Institute of Statistics of Rwanda and other sources.
 - Track indicators related to clustered settlements and infrastructure resilience.
 - Provide accessible reports and dashboards for policymakers and communities.
3. **Community and policy engagement**
 - a) **Objective:** Raise awareness and inform policy decisions.
 - b) **Components:**
 - Conduct community workshops on climate risks and adaptation measures.
 - Develop educational programs for schools on climate resilience.
 - Publish policy briefs and engage with local governments to integrate adaptation data into planning.

4. Transport Sector

4.1 Indicators

1. Development of environmental and engineering guidelines for climate-resilient road infrastructure.
2. Reduction in the length of roads vulnerable to floods and landslides.
3. Increase in the number of passengers using public transport each year.

4.2 Potential Outcomes

1. Development and implementation of guidelines for climate-resilient road infrastructure.
2. Decreased vulnerability of roads to natural disasters.
3. Increased use of public transport, leading to reduced emissions and improved resilience.

4.3 Strategies for Sharing Information

1. **Developing the road asset management system**
 - a) **Objective:** Complete and operationalize the road asset management system.
 - b) **Components:**
 - Integration of data on road conditions, climate impacts, and maintenance needs.
 - Provision of real-time updates on road vulnerabilities and resilience measures.
 - Development of public dashboards for transparency and stakeholder engagement.
2. **Public and stakeholder engagement initiatives**
 - a) **Objective:** Engage the public and stakeholders in adaptation efforts.
 - b) **Components:**
 - Organization of public forums and stakeholder meetings to discuss adaptation strategies.
 - Development of an online platform for reporting and feedback on infrastructure issues.
 - Collaboration with transport operators to implement and refine adaptation measures.

3. Policy integration and legislative support

- a) **Objective:** Incorporate adaptation outcomes into transport policy and legislation.
- b) **Components:**
 - Development of policy recommendations based on adaptation data and best practices.
 - Advocacy for legislative changes to support climate-resilient infrastructure.
 - Collaboration with international organizations to align local efforts with global standards.

5. Conclusion

Sharing information about adaptation outcomes in the agriculture, human settlement, and transport sectors is crucial for building resilience and achieving Rwanda's nationally determined contribution targets. The proposed strategies focus on data integration, community engagement, policy influence, and leveraging technology to facilitate effective information dissemination. By implementing these strategies, Rwanda can enhance its adaptive capacity and serve as a model for other sectors and countries facing similar challenges.

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