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MINISTRY OF INFRASTRUCTURE

National Water and Sanitation Policy



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Foreword

Water resources management, water supply and sanitation services play a significant role in social and economic development, public health and environmental protection. Therefore, the Government of Rwanda has made well-managed, sustainable water and sanitation services among its priorities for the National Development Agenda and is establishing supportive policies and legislation.

The National Water and Sanitation Policy was developed to provide clear direction for the implementation of activities related to water resources management, water supply and sanitation. The Policy outlines initiatives to overcome challenges and exploit existing opportunities in an integrated manner and will effectively contribute towards achieving the goals of the National Development Agenda.

The Government of Rwanda will ensure proper management of water resources, increased sustainability and access to safe and clean water and sanitation through improved operations and maintenance of the existing water supply and sanitation infrastructure to ensure smooth service provision. The Government is also encouraging the active participation of local private service providers and operators in water supply and sanitation and will ensure that the principles advocated by the Policy are adhered to throughout the process of providing water supply and sanitation services.

Furthermore, the Government strongly recognizes the initiatives of local, international and regional programmes and partners and will continue to cooperate with them to achieve the Sustainable Development Goals under the

2030 Agenda.

Dr. Jimmy GASORE

Minister of Infrastructure

Executive summary

The National Water and Sanitation Policy provides a strategic direction and responses to the water resources, water supply and sanitation sectors. The Policy actions address the challenges faced by the water and sanitation sector: the increased negative impact of climate change on water resources, water supply and sanitation; limited monitoring and reporting systems for water and sanitation projects and programmes; inadequate human and technical capacity within institution; and insufficient sanitation infrastructure, especially waste treatment facilities for both solid and liquid wastes.

The Policy is designed within the context of national, regional and global development commitments including the medium and long-term national development agenda the National Strategy for Transformation (NST 1), the Green Growth and Climate Resiliency Strategy (GGCRS), the Nationally Determined Contribution (to cut emissions and adapt to climate impacts) the Rwanda Vision 2050, the Sustainable Development Goals (SDGs), the East Africa Agenda 2063 and national sector policies).

This harmonized water and sanitation policy document is a result of comprehensive desk review of key sector documents and a broad stakeholder consultation process led by a dedicated task force from key ministries and other relevant institutions.

The primary objective of this Policy is to establish a framework for the sustainable management and equitable use of water resources, concurrently facilitating accessible, reliable and cost-effective provision of safe drinking water and sanitation services to all. This endeavour makes a pivotal contribution towards enhancing the overall quality of life, fostering socioeconomic advancement and safeguarding environmental protection.

The Policy brings together several objectives related to water resources, water supply and sanitation. To implement it, a series of policy statements and policy actions have been identified. The policy objectives and associated policy actions will only be achieved with clear institutional arrangements including definition of the roles and responsibilities of all institutions in coordination, monitoring and evaluation.

The Policy will be executed by implementing partners and stakeholders within existing implementation frameworks through district development strategies (DDS), sector strategic plans (SSPs), annual imihigo targets and action plans. These include action plans of development partners, civil society organizations (CSOs) and the private sector. The existing coordination mechanisms in the water and sanitation sector (such as joint sector reviews, thematic working groups, and governance cluster meetings at both central and local levels) will also support the implementation of the Policy.

Abbreviation and acronyms

ABAKIR Autorité du Basin du Lac Kivu et de la Riviere Rusizi/Ruzizi

CBEHPP Community-based environmental health promotion programme

CoK City of Kigali

CSO Civil society organization

DDS District Development Strategy

FONERWA Rwanda Green Fund
GESI Gender and Social Inclusion

GGCRS Green Growth and Climate Resiliency Strategy

IWRM Integrated water resources management

LODA Local Administrative Entities Development Agency

LVBC Lake Victoria Basin Commission

M&E Monitoring and evaluation

MINAFFET Ministry of Foreign Affairs and Cooperation

MINAGRI Ministry of Agriculture and Animal Resources

MINALOC Ministry of Local Government

MINEDUC Ministry of Education

MINICOM Ministry of Trade and Industry
MINICT MININFRA Ministry of ICT & Innovation
MININFRA

MIS Management information system

MOH Ministry of Health

MoE Ministry of the Environment

NBI Nile Basin Initiative

NGO Non-governmental organization

NRW Non-revenue water

NST National Strategy for Transformation

O&M
Operation and maintenance
PPP
Public-private partnership
PSF
Private Sector Federation
RAEB
RWanda Atomic Energy Board
RBC
Rwanda Biomedical Centre
RDB
Rwanda Development Board
REG
Rwanda Energy Group

REMA Rwanda Environment Management Authority

RFA Rwanda Forestry Authority
RSB Rwanda Standards Board

RURA
RWanda Utilities Regulatory Authority
RWB
Rwanda Water Resources Board
SDG
Sustainable Development Goal
WASAC
Water and Sanitation Corporation
WASH
Water, sanitation and hygiene
WRM
Water resources management

REG Rwanda Energy Group

1. INTRODUCTION

1.1. Background

The Government of Rwanda adopted the National Policy for Water Resources Management in December 2011 and the National Water Supply and Sanitation Policies in December 2016. These national policies have been harmonized in the current Policy, with the aim of unifying the national water and sanitation sector. Harmonization addresses the challenges encountered when implementing standalone policies, and it requires the existing policies to be reviewed and updated. The new Policy takes sector dynamics into consideration and is aligned with national medium and long-term development agendas (including NST 1, Vision 2050, GGCRS and the SDGs). Due consideration is given to the current context, emerging issues, best practices and lessons learnt.

In terms of water resources, the policy revision emphasizes and strengthens national capacity to forecast and plan to meet future demands for water while promoting the wise use of ground- and surface-water resources. It also addresses the issues of pollution and water quality to deliver a quality of life recommended by both Vision 2050 and the SDGs, at the same time creating resilience (of both landscapes and infrastructure) against climate-related disasters. In terms of water supply, the revision focused on the current delegated management of rural water supply. For sanitation, the emphasis is on the implementation, coordination and management of special wastes such as healthcare waste, electronic waste, industrial waste and nuclear/radioactive waste. The roles and responsibilities of the institutions in charge of Sanitation have been clearly highlighted in the Policy.

1.2. Rationale for a harmonized policy

Rwanda's water and sanitation context has changed considerably since the adoption of the three policies mentioned above. First, Vision 2020 (with which the three policies were aligned) has been succeeded by Vision 2050. Second, several issues emerged during implementation, including harmonization gaps when moving towards a sector-wide approach (SWAp), the sustainability of water, sanitation and hygiene (WASH) services, financing gaps and challenges in human resources and institutional capacity.

The Policy breaks into concrete principles, objectives and statements and calls for effective coordination among all key players.

1.3. Consultation process

The consultation process for developing the harmonized policy document was inclusive and participatory, encompassing a diverse array of stakeholders and partners. It involved several phases: reflecting on past experiences and identifying future challenges; reaching a consensus on the direction for the water and sanitation sector; and formalizing and implementing this consensus. A series of activities was organized to ensure the perspectives and inputs of stakeholders and partners were comprehensively captured – task force meetings, provincial consultation workshops and a national validation workshop. All were tailored to facilitate engagement and to promote dialogue and collaboration.

2. POLICY CONTEXT

Rwanda's National Water and Sanitation Policy is aligned with existing government positions, including the Constitution of the Republic of Rwanda, NST 1, Vision 2050, the updated nationally determined contribution (to cut emissions and adapt to climate impacts), GGCRS and various sectoral policies. The Policy is also linked to regional and global commitments such as the SDGs, African Union Agenda 2063, East Africa Vision 2050, and the East African Community Climate Change Policy 2050.

2.1 Status of water and sanitation

Rwanda has already achieved several strategic actions set out in the existing policies.

2.1.1 Water resources status

According to the National Land Use Development Master Plan (2020–2050), 2,068 km² are wetlands (8 per cent of the national territory), including buffer zones, and 1,637 km² (6 per cent of the national territory) are water bodies, also with buffer zones. Rwanda has two hydrological basins: the Congo basin drains around 33 per cent of the national territory and receives approximately 21 per cent of the country's water; the Nile basin drains around 67 per cent of the national territory, with 79 per cent of the country's water. The country uses approximately 4 per cent of its renewable freshwater with the largest share being allocated to irrigation.¹

On average, Rwanda receives total annual rainfall of 27.6 billion m³ (Bm³). The difference between these large inflows and 'losses' to the atmosphere is total renewable water resources (TRWR), which is about 8.7 Bm³ per year. TRWR is related to the term blue water availability (BWA) used by the Water Security for All study² as a proxy for internal renewable water availability (IRWA). The total water demand in 2050 by households, industry, crops, livestock, irrigation and power is estimated to be 3.6 Bm³, with irrigation accounting for more than two-thirds of overall demand. The water supply will represent around 12 per cent of future demand by 2050.

Several notable achievements have been realized in the management of water resources, including the establishment of an effective governance framework. This was further bolstered by institutional reforms culminating in the creation of the Rwanda Water Resources Board (RWB). The adoption of a Water Resources and Development Master Plan and the development of management plans for selected catchments have contributed significantly. Efforts to rehabilitate critical watersheds and catchments to restore their basic ecological functions have been successful. An efficient and equitable water allocation and utilization framework has been implemented through a permit system, with active monitoring of water users and usage.

Robust mechanisms for water-related disaster management and climate change mitigation and adaptation have been put in place. Research, documentation and information dissemination have received substantial support, and the hydrological infrastructure network has been enhanced to ensure reliable water data. Rwanda actively engages in transboundary water cooperation through regional and global institutions such as the Nile Basin Initiative (NBI), the Lake Victoria Basin Commission (LVBC), the Autorité du Basin du Lac Kivu et de la Riviere Rusizi/Ruzizi (ABAKIR) and the African Ministerial Council on Water.

¹ Using the data from the Water User and Use Assessment in Rwanda (2020) funded by FAO in collaboration with RWB and the Integrated Strategic Water Resources Planning and Management for Rwanda, funded by FONERWA (Rwanda Green Fund) in collaboration with RWB (2023).

² Integrated Strategic Water Resources Planning and Management for Rwanda, funded by FONERWA in collaboration with RWB (2023).

2.1.2. Water supply status

According to the 2022 National Population and Housing Census, access to water supply is at 82 per cent and piped water within dwellings/yard is at 18 per cent. Water access rates are higher in urban areas (96 per cent) than in rural areas (77 per cent). To improve planning and service delivery while strengthening monitoring and evaluation (M&E), several initiatives have been taken in water supply programmes, including the development of a National Integrated Water and Sanitation Master Plan, the Kigali Water Supply Master Plan, district WASH investment plans, a WASH financing strategy and the development of a WASH management information system (MIS). Private sector engagement has been strengthened.

2.1.3. Sanitation status

As reported in the 2022 National Population and Housing Census, overall access to improved sanitation services is at 92 per cent while access to basic services is at 72 per cent (rural 78 per cent and urban 56 per cent). In terms of solid waste disposal by private households, the most common mode is household compost dumping (51 per cent at national level); just 10 per cent have access to waste collection services. In wastewater, 45 per cent of private households dispose of their sewage water in the courtyard. This mode is less used in Kigali (17 per cent of households) than in the provinces (more than 42 per cent).

3. WATER AND SANITATION SECTOR CHALLENGES AND OPPORTUNITIES

3.1. Water and sanitation sector challenges

Despite the remarkable achievements summarized above, the sector faces several challenges including:

- i. Increasing negative impacts of climate change and variability in weather that adversely affect water resources, water supply and sanitation infrastructure.
- ii. Inadequate human and technical capacity within the institutions responsible for water resources, water supply and sanitation.
- iii. A financial gap in the implementation of water supply and sanitation programmes to increase sustainable access to WASH services.
- iv. Poor sustainability of WASH services, mostly in rural areas, which slows the achievement of universal access.
- v. A significant threat of depletion of water resources, water-related disasters and soil erosion due to land degradation.
- vi. Lack of data and information for decision-making at both national and transboundary levels.
- vii. The need to consolidate and strengthen institutional responsibilities in terms of waste management.
- viii. Environmental pollution that affects water quality.
- ix. Increased water demands due to urbanization, population growth and socio-economic development.

3.2. Water and sanitation opportunities

Despite diverse challenges, the water and sanitation sector present opportunities that can contribute to national socioeconomic development:

- i. Political commitment to the proper management and sustainable utilization of water resources, supply and sanitation in Rwanda.
- ii. Well-defined and well-articulated flagship national policies that guide and provide strategic direction for national economic development and are closely interlinked with other development sectors, natural resources management, and adequate water supply and sanitation services.
- iii. Well-defined sector-specific policies and an overall strategic plan for the management of environment, natural resources, agricultural development, energy, water supply and sanitation.
- iv. An institutional framework with mandates and functions covering various sectors and subsectors relevant for the management of water resources, water supply and sanitation.
- v. The establishment by Presidential Order, where applicable, of an institution with a mandate to coordinate natural resources management across the sub-sectors of land, forests, water, mines, water supply and sanitation.
- vi. Growing synergies and partnership between government agencies and other stakeholders, including water users, water supply and sanitation services, non-governmental organizations (NGOs) and development partners.

- vii. An evolving regional cooperative framework for the management, where applicable, of shared water resources, water supply and sanitation services based on common interest and shared values.
- viii. Good climatic conditions with high rainfall and a dense hydrological network.
- ix. The existence of national and district land-use plans.

4. WATER AND SANITATION MISSION AND VISION

The vision of the Water and Sanitation Policy is to:

Facilitate sustainable management and equitable use of water resources, while ensuring sustainable, reliable and affordable access to safe drinking water and sanitation for all Rwandan citizens, as a contribution to improving the quality of life, socioeconomic transformation and sustainable environmental management.

The Water and Sanitation Policy mission is to:

Ensure the protection, conservation, restoration and rational use of water resources as well as promote, plan, build and operate water supply and sanitation services in a sustainable, efficient and equitable manner.

5. POLICY GUIDING PRINCIPLES

Several policy principles guide the harmonization of this Policy, including:

- i) **Integrated management** of water resources within a catchment, considering the interests of all water users, land, other natural resources and related ecosystems.
- **ii) Transboundary water resources cooperation:** Rwanda, as a riparian country within the Nile and Congo River basins, has a reciprocal obligation to utilize its shared water resources sustainably and equitably. Therefore, account must be taken of established international principles for the management of shared water resources. They will be given effect on the basis of reciprocity and in the spirit of regional cooperation.
- iii) Human rights to water and sanitation: International and regional human rights instruments, including the International Covenant on Economic, Social and Cultural Rights and the African Charter on Human and Peoples' Rights, recognize the right to water as a fundamental human right which must progressively be realized by all countries. This means that in allocating water resources, account must be taken of the needs and demands of all water users.
- **iv) Precaution:** Activities considered or suspected to have negative impacts on water resources will not be implemented even if such impacts have not yet been scientifically proved. Scientific uncertainty must not be taken into consideration for the benefit of destroyers of water resources, but it may be used in the conservation of water resources.
- v) Priority to basic and safely managed services: Each person and community has equal rights to access basic and safely managed water and sanitation services. To address the disparities in service levels, priority will be given to areas having low levels of service.
- vi) Decentralization: The responsibility for water and sanitation development is vested at both national and decentralized levels. The water and sanitation sector is committed to building and strengthening decentralized planning and implementation. The responsibility for service delivery is vested at the decentralized level.
- **vii) Community participation:** The beneficiaries of water supply and sanitation services will be actively involved in planning, decision-making and oversight throughout project implementation. They will choose the service level that responds to their needs and capacities.
- viii) Cost recovery and financial sustainability: Operation and maintenance (O&M) costs of water and sanitation infrastructure will be borne by the users. Affordability will be addressed by the choice of appropriate technologies and by enhancing efficiency, not only by granting subsidies.
- **ix) "User-pays and polluter-pays" principles:** Water users must pay for the water they use. Polluters must pay a significant part of the costs of prevention, pollution reduction and restoration of water resources in quality and in quantity. Subsidiarity, whereby development and protection.
- x) Sector-wide approach (SWAp): The water and sanitation sector aim to develop a consistent, national approach, harmonizing financing and implementation modalities and optimizing stakeholder coordination under the lead of the sector working group. The SWAp will consider all stakeholders including NGOs, development partners, CSOs and the private sector and will examine the sector's capacity-building efforts.
- xi) Private-sector participation: The water and sanitation sector will continue to promote private sector engagement, a key strategy to enhance sustainability. The private sector will also be encouraged and supported to develop capacities for investment, construction and service delivery in water resources, water supply and sanitation.

- xii) Results-based management: M&E systems will be strengthened in conjunction with planning and budgeting procedures, involving decentralized actors (the districts), to ensure that the activities and investments are in line with the defined sector objectives and priorities. Water and sanitation interventions will continue to be monitored; the WASH MIS and other new information and communication technologies will be used for real-time monitoring to allow evidence-based decision making.
- xiii) Gender equity and social inclusion (GESI): Implementation will integrate gender equality and social inclusion considerations within WASH programmes and policies. This approach ensures that these programmes are designed and implemented in ways that consider the specific needs, roles and perspectives of all individuals, regardless of their gender, age, disability, socioeconomic status or other factors, to promote equal access to and benefits from water and sanitation services.
- **xiv) Circularity:** Water resources, water supply and sanitation will be designed to minimize waste, recover valuable resources from waste water and reduce environmental impact. It involves closed-loop processes, resource recovery, water conservation, sustainable sanitation and community engagement. Circular systems prioritize efficient resource use, pollution reduction and resilience to climate change, aiming to create sustainable, socially inclusive and environmentally friendly solutions for water and sanitation challenges.

6. POLICY OBJECTIVES

PART 1: POLICY OBJECTIVES FOR WATER RESOURCES

The Water Resources Policy statement is based on the concept of integrated water resources management and has the following policy objectives:

Policy objective 1: To improve the knowledge base, foresight and forecasting capacity of the nation's water resources planning for sustainable management, development and protection.

Currently, there are too few gauging stations for comprehensive water monitoring. Many hydrological stations are out of order, created data gaps and poor coverage. The absence of commonly agreed standards that define the content, format and quality of information affects the usability of the data at both national and regional levels.

Policy statement 1.1: Strengthen the national capacity to collect, store, process and disseminate hydrological information in terms of quantity and quality.

Policy actions:

- 1. Improve the coverage of gauging stations for hotspots and each major drainage catchment of the country to monitor the quality and quantity of water resources.
- 2. Develop standard and specifications for the installation of hydrological stations.
- 3. Provide equipment, facilities and training to strengthen institutions involved in collecting, storing, processing and disseminating of hydro-meteorological data.
- 4. Develop manuals, guidelines and formats on the collection, recording and storing of hydrometeorological and groundwater data.
- 5. Set up and operationalize water information systems.
- 6. Facilitate training in hydrological and hydro-geological assessment tools.
- 7. Enhance education and career development opportunities in the water sector.
- 8. Enhance water quality monitoring systems and frameworks.
- 9. Build both the infrastructure and human capacity to investigate water pollution and quality of water bodies.
- 10. Establish a strong framework for the enforcement of water quality regulations and standards.

Policy statement 1.2: Conduct a groundwater inventory to assess the main aquifers and groundwater potential.

Policy actions:

- 1. Collect and compile all existing dug or drilled well information from drilling and contracting companies.
- 2. Undertake a groundwater inventory to inform future investment, regulations and conservation.
- 3. Undertake groundwater quality monitoring and create groundwater data sharing frameworks.

Policy statement 1.3: Ensure effective and efficient water pollution control and water quality management.

Policy actions:

1. Develop and disseminate water pollution control and water quality preservation guidance tools

(technical guidelines, best practice, etc.) for various sectors and water uses.

- 2. Develop and implement water quality monitoring plans and collaborate with institutions with similar objectives.
- 3. Strengthen national technical, infrastructure and skills capacity to monitor water quality and enforce water quality regulations.
- 4. Conduct water quality assessment and monitoring on national and shared transboundary water bodies and disseminate the findings.
- 5. Conduct water pollution investigations where polluting activities are suspected and recommend remedial or corrective measures.
- 6. Collaborate with national, regional and international stakeholders in water quality management.
- 7. Establish mechanisms to preserve the quality of groundwater and to prevent and control groundwater pollution.

Policy statement 1.4: Strengthen foresight and forecasting capacity to enable the sustainable management, development and protection of water resources.

Policy actions:

- 1. Develop knowledge products and technologies to inform short-, medium- and long-term plans for water resources management, development and protection.
- 2. Build capacity to use these technologies.
- 3. Establish a knowledge repository and knowledge-sharing platform to facilitate foresight and the development of forecasting products.

Policy objective 2: To raise Rwanda's involvement in dialogue, data sharing, management and development of transboundary water resources.

Transboundary water cooperation has the potential to serve as a catalyst, both directly and indirectly, to enhance international trade, foster economic development, facilitate navigation, support energy generation, promote wildlife conservation and foster broader regional integration. Collaborative arrangements also create an environment conducive to investment by establishing a stable and reliable legal and institutional framework.

Policy statement 2.1: Enhance the institutional and human resources capacity of water resources management institution and other key stakeholders to undertake tasks and strengthen Rwanda's active involvement in transboundary water issues.

Policy actions:

- 1. Establish a new unit/administration with the mandate to deal with transboundary water issues.
- 2. Manage demand based on a comprehensive study on regional, bilateral and international agreements etc., negotiate transboundary water issues and recommend the appropriate path for Rwanda to secure an equitable share.
- 3. Establish cooperation frameworks on transboundary waters.
- 4. Increase stakeholder participation in the water governance for transboundary water resources through capacity building and creating an enabling environment.

Policy objective 3: Rehabilitation of degraded catchments and catchment protection to improve

ecosystems.

Given the magnitude of the problem associated with land degradation, seeking appropriate solutions in an acceptable manner involves working at catchment level with the community at the centre. Catchment management plans provide a long-term strategy for sustainable development and utilization of water and related resources. Catchment-based water resources planning and management is in line with the integrated water resources management (IWRM) paradigm, which ensures that land, water and related resources are developed and managed in a coordinated manner without compromising the sustainability of vital ecosystems.

Policy statement 3.1:To control soil erosion by involving local community and institutions.

Policy actions:

- 1. Implement soil erosion control activities that include terracing and afforestation.
- 2. Involve landowners, local communities and their institutions and build their capacity in soil erosion control activities.
- 3. Coordinate soil erosion control activities implemented by different stakeholders and partners.
- 4. Establish a national soil erosion monitoring information system.
- 5. Produce national annual reports and maps on soil erosion status.
- 6. Create and implement catchment management plans.
- 7. Mobilize funds for catchment restoration.
- 8. Support the functioning of catchment committees.
- 9. Establish payment for schemes that protect ecosystems.

Policy statement 3.2: Introduce adaptive planning at different catchment levels for sustainable management and effective implementation.

Policy actions:

- 1. Develop catchment management plans for all level-1 and level-2 catchments.
- 2. Develop technical tools to support adaptive planning at catchment level.
- 3. Build capacities and ensure skills development to all people involved in catchment planning including catchment committees and decentralized entities.

Policy statement 3.3: Develop appropriate awareness campaigns focused on catchment protection and management.

Policy actions:

- 1. Conduct awareness campaigns for soil erosion control.
- 2. Support the implementation of catchment education and public outreach.

Policy objective 4: To promote equitable water allocation.

Water is used by different sectors. Every sector that uses water needs to be registered. To avoid water-use conflicts, the mandated institution will make allocations to different water users.

Policy statement 4.1: All water users will be mapped and be given water use permits.

- 1. Identify the water-use potential of the various water bodies (lakes and rivers).
- 2. Develop master plans for water bodies to guide the issuance of water-use permits.
- 3. Issue water-use permits and monitor compliance.

Policy statement 4.2: Develop national capacity (human and institutional) to develop laws, regulations, standards and procedures that facilitate appropriate decisions on water allocation and use.

Policy action:

1. Provide training to build professional capacity to perform appropriate and effective decisions on water allocation and use.

Policy objective 5:To ensure the management of water-related disasters to reduce communities' vulnerability.

Recently, the frequency and occurrence of water-related hazards (including flooding, thunderstorms and droughts) have been increased due to climate change. There has been significant damage to the environment and to the livelihoods in both urban and rural communities. Poor land use practices, deforestation and catchment degradation have further increased the effects of flooding and drought. This objective is directed towards reducing risk by developing better awareness and understanding of the drought and flood hazards and the underlying causes of community vulnerability.

Policy statement 5.1: Prevent and mitigate water-related disasters.

Policy actions:

- 1. Develop hazard risk maps of water-related disasters.
- 2. Implement mitigation measures, including infrastructure and nature-based solutions, for floods, landslides and drought.
- 3. Enhance early warning systems for water-related disasters in different river catchments.
- 4. Raise community awareness of water conservation and cultural practices that can reduce vulnerability to disasters.
- 5. Train local emergency responders and volunteers in disaster response and recovery techniques.

Policy objective 6: Increased availability of water resources through prioritization of multiple use storage infrastructure.

Policy statement 6.1: Develop artificial storage and capacity in response to projected need for water abstraction and other use for the horizon 2032.

- 1. Promote resilient multi-use of natural and artificial water storage.
- 2. Promote foresight of water-resource supply, demand and storage.
- 3. Promote cost-effective rainwater harvesting and associated building guidelines.
- 4. Develop an appropriate business model for storage development, operation and maintenance to attract the private sector.
- 5. Improve guidelines to mitigate conflict between uses (consumptive and non-consumptive) such as water supply, irrigation and hydropower.

6. Increase sectoral coordination and collaboration on water development.

Policy statement 6.2: Promote technologies that increase multi-scale water circularity and resilience.

Policy actions:

- 1. Support technologies for leakage detection and sustainable infrastructure management.
- 2. Support technologies to reduce domestic use.
- 3. Support technologies for water use efficiency in agriculture, industry and institutions.
- 4. Support technologies that store water in situ and in soils such in-situ rainwater harvesting, terracing, trenches, ridges, agro-ecology, regenerative agriculture and conservation agriculture.
- 5. Support technologies for rainwater, grey and black water filtering and re-use in households and neighbourhoods.
- 6. Promote rainwater harvesting at both private and public establishments and enhance their potential to mitigate floods and soil erosion.
- 7. Promote individual and private-sector investment in rainwater harvesting facilities for multiple uses.
- 8. Conduct rainwater quality assessments and promote its multiple uses.

Policy objective 7: Promote innovation and applied research and the dissemination of findings in support of sound water resources management.

Policy statement 7.1: Strengthen institutional framework and develop capacity to support innovative applied research in IWRM and exchange research information.

Policy actions:

- 1. Develop a communication and exchange strategy for information on water research.
- 2. Strengthen the human and institutional capacity of existing water research establishments.

Policy statement 7.2: Promote awareness of the importance of research and information exchange on water resources management.

Policy actions:

- 1. Organize forums and symposiums to sensitize senior officials and high-calibre professionals and to encourage young research professionals.
- 2. Organize forums and workshops targeting grassroot communities and civil servants where most of the information is needed.

Policy statement 7.3: Develop a communication system for proper information flow and to promote research capacity in the water sector.

Policy actions:

1. Establish an efficient and effective research information communication and exchange system

Policy statement 7.4: Support applied research to correct unsustainable practices in water resource management.

Policy actions:

- 1. Identify urgent and priority applied research needs.
- 2. Support the implementation of targeted applied research projects to address priority knowledge gaps.

Policy objective 8: Enhance storm water management to mitigate impacts on property, infrastructure, human health and the environment.

Storm water runoff causes a range of negative impacts, including damage to infrastructure, environmental health hazards and pollution of water resources. Storm water management is a crosscutting issue, so improvements need cooperation with other sectors – urban planning, erosion control and environmental health.

Policy statement 8.1: Build an institutional and regulatory framework for cooperation and support in storm water management.

This includes the clarification of responsibilities for preventive and emergency actions, the harmonization of laws and regulations, the identification of gaps and the initiation of joint planning and coordination mechanisms. Regarding enforcement, some measures for storm water and rainwater management will be incorporated into construction permit requirements, especially in the City of Kigali, secondary cities and other proved settlements, for special cases of public buildings and larger private buildings.

Policy actions:

- 1. Develop effective guidelines for storm water management.
- 2. Develop a master plan for storm water management.

PART 2: POLICY OBJECTIVES FOR WATER SUPPLY

The main objective of the Policy is to ensure sustainable water services for all, taking into consideration the water requirements of both rural and urban populations.

Policy objective 1: Provide universal access to safe water and increase basic and safely managed water services by fast-tracking strategic investment programmes.

The following policy statements focus on the investment planning, financing and implementation required to increase access to water supply services.

Policy statement 1.1: Implement projects identified by the water supply master plans based on investment needs.

Achieving universal access to safe water while increasing levels of water supply services is possible through infrastructure projects that are selected, financed and implemented according to criteria set out in master plans. The projects must have effective M&E.

- 1. Accelerate the implementation of projects identified under master plans and district WASH investment plans by mobilizing funds from Government and development partners.
- 2. Strengthen regular M&E to ensure effective implementation of water supply programmes and projects.

Policy statement 1.2: Develop production and distribution capacities.

The Government of Rwanda will continue its efforts to mobilize resources for investment in water production capacities and distribution systems.

Policy action:

1. Mobilize private investment for bulk water production to ensure private sector engagement through public-private partnerships (PPPs).

Policy statement 1.3: Review and accelerate implementation of a strategy to reduce non-revenue water (NRW) by lowering both technical and commercial water losses.

The sector will continue to implement climate-resilient projects and programmes to reduce NRW. This will be realized through the following policy actions.

Policy actions:

- 1. Implement already identified climate-resilient water supply projects and programmes.
- 2. Continue to implement NRW reduction strategy under WASAC Group

Policy statement 1.4: Strengthen districts for effective project planning, coordination and monitoring.

District authorities will be involved in planning, coordinating and monitoring the water supply projects within their districts. This will be achieved through the following policy actions

Policy actions:

- 1. Strengthen and build district capacities in terms of planning, coordination and monitoring of water supply infrastructure development supported by WASAC Group
- 2. Strengthen district WASH boards to carry out overall coordination at district level and ensure that water supply performance indicators are incorporated into district performance contracts.
- 3. Strengthen the monitoring of both project implementation and progress towards achieving the goal of universal access. To this end, the existing MIS needs to be improved.
- 4. Involve district WASH boards and water user associations/committees in the oversight arrangements to represent consumer interests and user rights.
- 5. Develop, disseminate and continuously update harmonized designs, implementation manuals and related guidelines for district water supply systems.

Policy statement 1.5: Promote household connections to improve basic and safely managed water supply countrywide.

- 1. Actively encourage the construction of private connections at the planning stage; consider one-off subsidies to make connection costs affordable.
- 2. Review policies regarding new connections and consider a 'social connection' for the poor and vulnerable.

Policy objective 2: Ensure sustainable functionality of water supply infrastructure countrywide by strengthening the management of operation and maintenance.

Policy statement 2.1: Cluster service areas to create economies of scale, professionalize service delivery and trigger private investment.

The delegated management model, which is based on management contracts with private operators, will be maintained with adjustments to promote economies of scale and create commercially viable units that are attractive to professional service-providers.

Policy actions:

- 1. Strengthen the management of water supply systems countrywide while encouraging private sector participation; WASAC Group will be responsible for overall management of water supply systems.
- 2. As a contracting authority, the WASAC Group will conduct regular financial and technical audits to improve service delivery.
- 3. The Water and Sanitation Corporation (WASAC Group) will manage water supply infrastructure by operating and maintaining boreholes and hand-pumps as temporary solutions to ensure service delivery to the community.

Policy statement 2.2: Strengthen coordination and the institutional and legal framework.

Policy actions:

- 1. Draft the water and sanitation legislation.
- 2. Implement and monitor WASH sectorial coordination programmes and projects through the SWAp coordination framework.
- 3. Strengthen the performance measurement framework through the existing WASH MIS.

Policy statement 2.3: Strengthen an operation and maintenance performance-monitoring framework, including a web-based information system.

The National Regulatory Utility will continue to strengthen the monitoring framework (indicators, reporting and benchmarking procedures) and will upgrade to a web-based information system.

Policy actions:

- 1. Strengthen monitoring and information systems to capture key information on operational performance, quality of service delivery, contract status, the achievement of performance targets, cost recovery and the condition of key assets. The systems should be web-based to make the information accessible from different locations.
- 2. Develop water safety plans and a water quality surveillance system for rural water supplies.

Policy statement 2.4: Develop water tariffs that take into account financial viability and affordability.

The regulator, in cooperation with main stakeholders, will prepare tariff guidelines that reflect the arrangements for O&M.

Policy actions:

- 1. Set tariffs taking into account both O&M costs and affordability considerations.
- 2. Regulate water sales prices at kiosks and public standpipes.
- 3. Define specific exemptions for extremely poor or vulnerable households, based on guidance from concerned institutions. The cost of this free service will be compensated for by other consumer categories.

Policy statement 2.5: Provide funds and financing mechanisms for capital maintenance, rehabilitation and renewal investments for existing schemes.

Many of the old piped-water schemes need substantial refurbishment and/or expansion. It is therefore essential for Government to provide adequate funding to maintain the functionality of the existing infrastructure. In cases where the National Utility contracts with the private sector, the service contract between two parties will determine the modalities and scope of the contribution.

Policy action:

1. The Government, through WASAC Group, will establish a funding mechanism and allocate budgets for rehabilitation, repairs, upgrades and extensions.

Policy objective 3: Ensure safe and reliable water supplies for schools, health facilities and other public places.

The sector will actively collaborate with relevant ministries, development partners and stakeholders to provide sufficient water supply services to essential facilities such as health facilities, schools and public spaces.

Policy statement 3.1: Extend water supply services for schools, health facilities and other public places to 100 per cent.

Water supply service providers will ensure sustainable water supply services for schools, health facilities and other public places.

Policy actions:

- 1. Collaborate with the Ministry of education, health and other sectors to undertake an assessment of water supply and demand.
- 2. Build inclusive public water supply facilities that meet norms and standards in busy places such as markets, car parks and local administrative offices.

PART 3: POLICY OBJECTIVES FOR SANITATION

Specific sanitation objectives are formulated in a way to be directly used for strategic planning and monitoring.

Policy objective 1: Raise and sustain household sanitation coverage to 100 per cent.

Individual on-site systems will remain the sanitary solution for most Rwandan households in reaching the overall coverage objective. Modern individual sanitation will be designed, made available, inclusive and affordable to all.

Policy statement 1.1: Enhance cooperation framework for a comprehensive inter-sectoral programme to promote basic household sanitation and behaviour change.

A cooperation framework will be strengthened to coordinate the interventions of different government institutions involved in individual sanitation and hygiene promotion activities: the Ministry of Health

(MOH), the Ministry of Infrastructure (MINIFRA), the Ministry of Local Government (MINALOC), the Ministry of Education (MINEDUC), WASAC Group, City of Kigali and the districts. MINALOC will continue to be the lead institution in individual household sanitation; MOH, with the involvement of MINALOC, will continue to be the lead in hygiene promotion and behaviour change at community level, through its national community-based environmental health promotion programmes (CBEHPP). WASAC Group will be responsible for the development, evaluation and support of adequate technical sanitation solutions.

Policy actions:

- 1. Implement CBEHPPs.
- 2. Develop, evaluate and provide support for adequate technical sanitation solutions.

Policy statement 1.2: Raise basic and safely managed sanitation by enhancing the demand for sanitation.

Households are currently the primary financial contributors to the sanitation sector in Rwanda, dedicating significant resources to the construction of their own on-site sanitation facilities. Therefore, fostering ownership and catalysing behaviour change are pivotal prerequisites for the sustainable expansion of sanitation coverage and the enhancement of hygiene practices. This encompasses the correct use and maintenance of latrines, handwashing with soap at key junctures, the safe storage and handling of water, and the facilitation of improved access to local materials and services.

Policy actions:

- 1. Conduct awareness campaigns related to visible and non-visible health impacts of poor sanitation, aiming at behaviour change.
- 2. Marketing an adequate sanitation offer (supply side), targeting people's expectations and preferences such as comfort, status, health benefits, value or safety.
- 3. Provide incentives or targeted subsidies for selected materials to support poor and vulnerable households to accelerate the improvement, construction or replacement of sanitary facilities.

Policy statement 1.3: Develop private-sector capacities for improved sanitation, mixed use of financing, and demonstrate a range of individual sanitation technologies.

- 1. Attract external investment into water and sanitation including bilateral, multilateral and other international funding cooperation frameworks.
- 2. Foster an enabling environment for the private sector.
- 3. Promote systematic research and the development of affordable and inclusive hygienic on-site individual sanitary solutions.
- 4. Prioritize waterless excreta disposal solutions in households without water connections.
- 5. Set up practical demonstrations, construct sanitary showrooms, disseminate knowledge and hold district-level sanitation markets.

Policy objective 2: Provide basic and safely managed sanitation for schools, health facilities and other public institutions and locations.

To ensure schools, health facilities, and other public institutions and locations have access to proper sanitation facilities, more efforts will be dedicated to providing fundamental sanitation infrastructure. This is aimed at improving hygiene, health and overall wellbeing within essential community spaces.

Policy statement 2.1: Implement a joint programme to provide hygienic sanitary facilities to promote hygiene in all schools, health centres and other public institutions.

All educational and health infrastructure projects and programmes will include a sanitation element addressing both structural and non-structural (soft) elements.

Policy actions:

- 1. Construct inclusive public toilets meeting norms and standards in health facilities and schools.
- 2. Construct public toilets in business centres and shopping malls that are accessible and visible for everyone.

Policy objective 3: Develop safe, well-regulated and affordable sanitation services countrywide.

Sanitation services will combine infrastructure elements (e.g., user interface, sewerage systems, containment, treatment plants) as well as service functions (e.g., sludge collection from septic tanks and pit latrines) that involve public and private actors across different sectors (infrastructure, and environmental health).

Policy statement 3.1: Establish an enabling environment for sewer and non-sewer sanitation systems.

Policy actions:

- 1. Develop an effective regulatory framework for sewer and non-sewer sanitation systems.
- 2. Promote viable, low-cost approaches for sanitation services (sewer and non-sewer).
- 3. Establish a cost recovery framework for sanitation services.

Policy statement 3.2: Establish sanitation facilities for both wastewater and faecal sludge treatment as identified by the master plans.

Policy actions:

- 1. Construct collective sewer networks in urban areas.
- 2. Construct treatment facilities (wastewater and faecal sludge treatment plants).

Policy objective 4: Implement integrated solid waste management.

Policy statement 4.1: Follow the waste hierarchy approach for maximum impact and cost efficiency.

Solid waste management will follow a waste hierarchy approach aimed at extracting the maximum practical benefits from products and generating the minimum amount of waste.

- 1. Prioritize minimization of solid waste and enhancement of solid waste management.
- 2. Facilitate solid waste collection, transportation, recycling and reuse.
- 3. Construct appropriate waste disposal and management facilities.

Policy objective 5: Ensure safe management of e-waste, industrial waste, nuclear/radioactive waste and healthcare waste.

The safe management of diverse waste types to protect environmental and human health entails proper disposal, recycling and control measures. It requires regulatory frameworks, awareness campaigns and collaboration among stakeholders to ensure responsible waste management that protects public health and preserves the environment. Involved institutions will develop individual strategies and tools to provide detailed directions on managing such wastes.

Policy statement 5.1: Establishment of e-waste collection and management framework.

Policy actions:

- 1. Develop a national e-waste management strategy.
- 2. Develop legislation for e-waste collection and management, adopting the waste management hierarchy approach.
- 3. Sensitize and encourage private-sector engagement in transforming e-waste into business opportunities under the circular economy principle.
- 4. Establish e-waste management facilities to ensure proper collection, transportation, dismantling, disposal and recycling of e-waste.
- 5. Raise public awareness on the sustainable management of e-waste.

Policy statement 5.2: Reinforce the industrial waste management framework to minimize environmental pollution and eliminate dangers to human health.

Policy actions:

- 1. Industrial waste treatment facilities will be established at industrial premises by the developers/operators.
- 2. Enforce industrial effluent standards and legislation regarding discharge into a public sewer and the environment.
- 3. Develop a national industrial waste management and pollution prevention strategy.
- 4. Promote circular economy principles through private sector engagement.
- 5. Support research and innovation to develop new technologies and methods for industrial waste and pollution management.

Policy statement 5.3: Develop a radioactive/nuclear waste management framework.

Policy actions:

- 1. Develop a national strategy for the management of radioactive/nuclear waste.
- 2. Develop legislative instruments for the safe management of nuclear and radioactive waste.
- 3. Establish radioactive/ nuclear waste management facilities.

Policy statement 5.4: Strengthen the framework for the management of healthcare waste.

- 1. Develop a national healthcare waste management strategy.
- 2. Establish healthcare waste management facilities.
 - Develop legislative instruments for healthcare waste management

7. WATER AND SANITATION CROSS-CUTTING ISSUES

Cross-cutting issues in water and sanitation encompass societal and environmental factors that that require much attention in implementing this policy. They include gender equality, social inclusion, climate change resilience and sustainable development. Addressing these issues ensures that water and sanitation programmes are equitable, environmentally sustainable and aligned with broader development objectives. This Policy takes the following cross-cutting issues into account:

7.1. Environment and climate change

All water and sanitation projects and programmes will adhere strictly to the applicable environmental regulations and safeguards, with a strong commitment to climate resilience. This approach ensures that our initiatives not only comply with legal requirements but also proactively contribute to environmental protection and are well-prepared to withstand the challenges posed by climate change.

7.2. Social inclusion

Water and sanitation development implies social responsibility, as access to safe water and basic sanitation concerns human rights and affects the living conditions of all. Water and sanitation projects and programmes will endeavour to ensure that all population groups, including vulnerable households, children, the elderly and disabled persons benefit from its interventions. Due attention will be given to the specific needs of these disadvantaged population groups.

7.3. Gender

A gender-conscious approach assumes special significance in the water and sanitation sector because, according to the traditional division of labour, women are responsible for providing water in the household, and for hygiene and healthcare. Women are therefore most affected when water supply fail and sanitation is poor.

Gender mainstreaming in water and sanitation will continue to be a priority.

The water and sanitation sectors will ensure that:

- a) Women's participation in committees and in the management of water catchments and water supply schemes, including in high-level positions, is promoted.
- b) The policy ensures that the needs, priorities and interests of women are considered in the design, planning and implementation processes and strategies.

7.5. Capacity building

Although short-term training and targeted courses are important for skills and managerial development, long-term training in specific areas enhances specialization and better service delivery.

The water and sanitation sector will continue to invest in capacity development of its implementing institutions and partners. The Government therefore undertakes to:

- 1. Support and promote the development of expertise in government agencies, the private sector and civil society organizations (CSOs) in various areas of water and sanitation through targeted short and long-term courses and awareness creation.
- 2. Develop a wide range of training opportunities and modules in the field of water and sanitation for different levels, taking into account gender equity and social inclusion, emerging issues in the sector and decentralized institutions.
- 3. Enhance networking between centres of excellence in water and sanitation management at national, regional and international levels.

7.6. Funding mechanism

Sound water resources protection and management, water supply and sanitation services provision require sustainable financing mechanism. The Government will continue to:

- 1. Promote the participation of individuals and PPPs through fiscal incentives and voluntary agreements pegged to sectoral performance indicators.
- 2. Broaden the revenue and funding base to ensure the financial sustainability of water and sanitation management institutions.
- 3. Continue attracting external investment into water and sanitation including bilateral, multilateral and other international cooperative funding frameworks.

8. INSTITUTIONAL FRAMEWORK

This Policy will be implemented through collaboration between government institutions, development partners, the private sector and civil society. Table 2 indicates the roles and responsibilities of key actors.

The private sector, CSOs and communities will be responsible for supporting the Government to implement, monitor and evaluate the Policy. It will be implemented through ministerial and district development strategies, sector strategic plans, and annual imihigo targets and action plans.

The Policy will also be implemented through the action plans of development partners, CSOs and the private sector who will translate policy into action. However, effective implementation is conditional on the support of international stakeholders – the implementation of policy actions assumes the continued use of existing and planned national and international financial sources from development partners.

Existing key coordination mechanisms will support policy implementation. These include: (1) the inter-ministerial steering committee for the Policy; (2) the economic cluster forum; (3) sector working groups; (4) joint sector reviews; (5) thematic working groups; and (6) governance cluster meetings at central and local levels.

These platforms will ensure Sector Wide Approach participatory joint planning. They will also provide accountability and ensure the inclusion of water and sanitation infrastructure, environmental considerations, climate services and climate change targets into sector and district priorities to foster ownership and accountability.

To fully implement the above policy actions, the clear roles and responsibilities of all institutions are indicated in the table below.

Annex 1 presents an implementation plan and timeline for the Policy with an indicative budget. The detailed implementation plan, indicators and targets will be prepared separately to support smooth implementation.

Table 1: Government institutions and development partners' roles and responsibilities

Institution	Roles and responsibilities
Ministry of Infrastructure (MININFRA)	Formulates national policies and strategic planning, sector oversight, budgeting and resource mobilization. Coordinates legal and regulatory framework and overall sector performance monitoring. Responsible for M&E of all infrastructure related to water supply and sanitation except for strategic planning for electronic waste, industrial waste and healthcare waste.
Ministry of Finance and Economic Planning (MINECOFIN)	Leads and coordinates the national budgeting, planning, M&E, financing framework, with a strong role in related aspects of the water and sanitation services sub-sector. Resource mobilization to support water and sanitation investment and related financing requirements. Ensures the fiduciary framework to manage grants, loans and other concessional finance from development partners.
Ministry of Trade and Industry (MINICOM)	Leads, establishes and enforces the industrial waste management framework to minimize environmental pollution, enforces compliance with water and sanitation regulation, ensures collection from generation to the treatment points, develops implementation strategy for industrial waste management. Conducts risk profiling of potential consumers from public and private institutions to enhance e-waste collection process, planning and monitoring
Ministry of Environment (MoE)	Leads and provides overall policy guidance and supervision and monitors how the water-resources-related components of the Policy are implemented in relation to other national policies. This is done with the advice of and in consultation with the arms of Government responsible for overall national policy and with other relevant sectors.

Institution	Roles and responsibilities
Ministry of Education (MINEDUC)	Builds the competency and human-resources base for sector development. Helps to link sector policies and strategies to research, technology development, innovations. Conducts awareness campaigns for school hygiene clubs in collaboration with MININFRA
Ministry of Local Government (MINALOC)	Responsible for the decentralization approach and matters related to local government planning, finance and administration related to implementation of the water and sanitation policy.
Government agency –Water Resources Board (RWB)	Designated implementing agency for water resources management. Takes the leading role in enforcing regulations related to water resources management, responsible for coordination, technical operations and implementation in collaboration with other agencies and all relevant stakeholders.
Ministry of ICT & Innovation (MINICT)	Leads e-waste sub-sector and develops strategies that elaborate specific roles, responsibilities and procedures for proper e-waste management. Will establish an e-waste collection and management framework and conduct M&E on the value chain process.
Rwanda Development Board (RDB)	Leads investment mobilization and promotion of water and sanitation sector, acting as a gateway and facilitator for local financial institutions and foreign direct investment. Will issue environmental impact assessment certificates and is expected to host a central agency for PPPs across government.
Rwanda Utilities Regulatory Authority (RURA)	Regulation of water and sanitation sector, ensuring tariff setting and enforcing implementation.
Ministry of Agriculture (MINAGRI)	Coordinates and partners with other stakeholders to ensure smooth implementation of this Policy while complying with water abstraction standards.
Rwanda Environment Management Authority (REMA)	Coordinates, oversees and implements environmental policy. Mandated to enforce environmental compliance in water and sanitation development.
Rwanda Standards Board (RSB)	Develops, disseminates and publishes national technical standards for water and sanitation sector.
Districts, City of Kigali (CoK)	Plan and coordinate water and sanitation projects/programmes, ensure sustainable services to the community.
Agency in charge of implementing water supply and sanitation policy (WASAC Group)	Implements water supply and sanitation programmes/projects, mobilizes resources, provides technical expertise to districts, O&M of urban water supply network, contracts private operators for rural water supply O&M.
Ministry of Health (MOH)	Leads development of healthcare waste strategy, promotes household sanitation and hygiene.
Energy sector	Connects the pumping stations and water treatment plants to the electricity grid.
Communities	Will be involved in project identification, planning and commissioning; will form user committees to represent consumer interests; will oversee the O&M of certain water infrastructure (community management).
Development partners	Support sector development in accordance with the principles agreed for the SWAp; contribute to financing sector projects through a variety of aid modalities.

Institution	Roles and responsibilities
Private sector	Participate in the execution of projects (consulting firms, contractors) as well as in infrastructure operation and maintenance (private operators, through delegated management, contracted by the districts). The informal sector and small/medium enterprises provide sanitation services (sludge emptying), carry out most of the individual sanitary improvements throughout the country and are active in solid waste management (collection, recycling). The Rwanda Private Sector Federation (PSF) has an important role in technical and vocational training and in business development support
CSOs and NGOs	Support sector development in accordance with the principles agreed for the SWAp; contribute to financing sector projects through a variety of aid modalities.

Annex 1: Implementation plan

A. Water resources

Policy actions (water resources)	Estimated budget (millions Rwf)	Timeline	Responsibility
Improve the coverage of gauging stations for hotspots and each major drainage catchment of the country to monitor status of water resources in quality and quantity	1,500	2023-2032	RWB
Develop standards and specifications for acquiring and installation of hydrological stations.	150	2023-2026	RWB, RSB
Provide equipment, facilities and training to strengthen institutions involved in collecting, storing, processing and disseminating hydro-meteorological data.	800	2023-2032	RWB, Meteo Rwanda
Develop manuals, guidelines, formats on the collection, recording and storing of hydro-meteorological and groundwater data.	150	2023-2026	RWB, Meteo Rwanda
Set up and operationalize water information systems.	850	2023-2032	
Facilitate training in hydrological and hydro-geological assessment tools.	180	2023-2027	MoE, RWB, Meteo Rwanda, RISA
Enhance education and career development opportunities in the water sector.	450	2023-2032	RWB, MINEDUC, MoE, Rwanda Higher Education Council
Enhance water quality monitoring systems and frameworks.	600	2023-2032	RWB, MoE
Build both the infrastructure and human capacity to investigate water pollution and quality of water bodies.	1,200	2023-2032	RWB, REMA
Establish a strong framework for water quality regulations and standards enforcement.	200	2023-2028	RWB, REMA & RSB
Collect and compile all existing dug or drilled well information from drilling and contracting companies.	120	2023-2028	RWB, WASAC Group, Living Water International Rwanda, MINAGRI
Undertake groundwater inventory to inform future investment, regulations and conservation.	1,300	2023-2032	RWB, RSA, NBI
Undertake groundwater quality monitoring and create groundwater data sharing frameworks.	800	2023-2032	RWB
Establish mechanisms for groundwater quality preservation and groundwater pollution prevention and control.	600	2023-2032	RWB, REMA, MoE
Develop and disseminate water pollution control and water quality preservation guidance tools (technical guidelines, best practices, etc.) for various sectors and water uses.	350	2023-2028	RWB, REMA
Develop and implement water quality monitoring plans and collaborate with institutions with similar missions and objectives in their implementation.	600	2023-2032	RWB, REMA, MoE
Strengthen national technical, infrastructure and skills capacity to monitor water quality and to enforce water quality regulations.	600	2023-2028	RWB, REMA
Conduct water quality assessment and monitoring on national and shared transboundary water bodies and disseminate findings.	900	2023-2032	RWB, REMA
Conduct water pollution investigations where polluting activities are suspected and recommend remedial or corrective measures.	800	2023-2032	RWB, REMA, MoE, NBI, ABAKIR, LVBC
Collaborate with national, regional and international stakeholders in water quality management.	300	2023-2032	RWB, REMA, MoE, NBI, ABAKIR, LVBC
Develop knowledge products and technologies to inform the short-, medium- and long-term water resources management, development and protection plans.	400	2023-2032	RWB, MININFRA, MINAGRI, MoE
Build foresight and forecasting capacity for sustainable water resources development plans.	1,000	2023-2028	RWB, MoE, MININFRA, MINAGRI
Establish a knowledge repository and knowledge sharing platform to facilitate foresight and forecasting products development.	200	2023-2026	RWB, MoE, MIININFRA, MINAGRI
Establish a new unit/administration within mandates of transboundary water issue	350	2023-2027	MoE, Ministry of Foreign Affairs and Cooperation (MINAFFET), RWB

Policy actions (water resources)	Estimated budget (millions Rwf)	Timeline	Responsibility
Conduct comprehensive study on regional, bilateral and international agreements for Rwanda to secure equitable share (demand management).	450	2023-2026	MoE, MINAFFET, RWB
Establish cooperation frameworks on transboundary waters.	1,200	2023-2030	MoE, MINAFFET, RWB
Increase stakeholder participation in the water governance for transboundary water resources through capacity building and creating an enabling environment.	300	2023-2032	MoE, MINAFFET, RWB
Implement soil erosion control activities that include terracing, afforestation.	380,000	2023-2032	RWB, MINALOC, MINAGRI, Rwanda Forestry Authority (RFA), Districts
Involve landowners, communities, institutions and build their capacity in techniques for soil erosion control activities.	80,300	2023-2032	RWB, MINAGRI, RFA, Districts
Coordinate soil erosion control activities implemented by different stakeholders and partners.	400	2023-2032	RWB, MINALOC
Conduct soil erosion control assessment and monitoring by establishing national soil erosion monitoring information system.	900	2023-2032	RWB, MoE, MINAGRI, RFA
Produce an annual national report and map on soil erosion status.	400	2023-2032	RWB, MINAGRI, RFA, Districts
Implement the catchment management plans.	800	2023-2032	RWB, MINAGRI, MINALOC, RFA, Districts
Mobilize funds for catchment restoration.	1,000	2023-2032	RWB, MINAGRI, RFA, Districts
Support the functioning of catchment committees.	650	2023-2032	RWB, MoE, MINALOC, Districts
Establish payment for ecosystem schemes.	600	2023-2032	RWB, MoE
Develop catchment management plans for all level-1 and level-2 catchments.	1,400	2023-2032	RWB, MoE, LMA
Develop necessary technical tools that support adaptive planning at catchment levels.	350	2023-2032	RWB
Build capacities and ensure skills development to all people involved in catchment planning including catchment committees and decentralized entities.	300	2023-2032	RWB
Conduct awareness campaigns for soil erosion control.	280	2023-2032	RWB, MINALOC, MINAGRI, RFA, Districts
Support the implementation of catchment education and public outreach.	350	2023-2032	RWB, MINALOC, MINAGRI, RFA, Districts
Identify different water use potential based on water bodies.	500	2023-2028	RWB, RSA, Districts
Issue water-use permits and monitor compliance with the conditions of the permit.	620	2023-2032	RWB, Districts
Develop master plans for water bodies (lakes and rivers) to guide the issuance of water-use permits.	560	2023-2028	RWB, MoE, LMA
Provide training to build professional capacity to perform appropriate and effective decisions on water allocation and use.	150	2023-2032	RWB, Districts, MoE
Develop water-related disasters hazard maps	420	2023-2027	MINEMA, RWB, RSA, LMA
Implement floods, landslides, drought mitigation measures including infrastructure, nature-based solutions.	450	2023-2032	RWB, MININFRA, RTDA, RHA, CoK
Enhance water related disasters early warning systems in different river catchments.	1,200	2023-2032	MINEMA, RWB, Meteo Rwanda, RNP
Conduct community awareness-raising programmes on water conservation and different cultural practices to reduce vulnerability to disaster.	200	2023-2032	RWB, MINALOC, MoE,
Train local emergency responders and volunteers in disaster response and recovery techniques.	200	2023-2032	RWB, MINALOC, MoE, MINEMA
Implement early warning systems in areas affected by water-related disasters	1,200	2023-2032	MINEMA, RWB, Meteo Rwanda, RNP
Conduct rainwater quality assessments and promote its multiple uses.	200	2023-2032	MoE, RWB
Build the institutional and regulatory framework for sectors' cooperation and support in stormwater management.	200	2023-2032	MoE, MININFRA, RWB
Promote resilient multi-use of natural and artificial storage.	200	2023-2032	RWB, MININFRA, MINAGRI, Rwanda Energy Group (REG)
Promote foresight of water resources supply, demand and storage.	300	2023-2032	RWB, MININFRA, MINAGRI, REG
Promote cost-effective rainwater harvesting and associated building guidelines.	200	2023-2032	RWB, MIMINFRA, RHA
Develop appropriate business model for storage development, operation and maintenance to attract the private sector.	450	2023-2032	RWB, MININFRA, MINICOM, RDB, PSF
Improve guidelines to mitigate conflict between uses (consumptive and non-consumptive) such as water supply, irrigation and hydropower.	200	2023-2026	RWB, MININFRA, MINAGRI, REG
Increase sectoral coordination and collaboration on water development.	200	2023-2032	MoE, RWB, MININFRA
Support technologies for leakage detection and sustainable infrastructure management.	500	2023-2032	RWB, MININFRA
Support technologies to reduce domestic use.	500	2023-2032	RWB, MININFRA
Support technologies for water use efficiency in agriculture, industry and institutions.	800	2023-2032	RWB, MININFRA, MINICOM, MoE, RHA

Policy actions (water resources)	Estimated budget (millions Rwf)	Timeline	Responsibility
Support technologies that store water in situ and in soils such in-situ rainwater harvesting, terracing, trenches, ridges, agro-ecology, regenerative agriculture and conservation agriculture.	800	2023-2032	RWB, MINAGRI
Support technologies for rainwater, grey and black water filtering and re-use at households and neighbourhood level.	800	2023-2032	RWB, MININFRA, RHA
Promote rainwater harvesting at both private and public establishments and enhance their potential to mitigate floods and soil erosion.	1,500	2023-2032	RWB, MININFRA, MoE, RHA, Districts
Promote individual and private sector investment in rainwater harvesting facilities for multiple uses.	1,000	2023-2032	PSF, RDB, RWB, MININFRA, MoE
Develop a water research information communication and exchange strategy.	200	2023- 2028	RWB, MoE
Strengthen water resources research capacity (human and institutional) of existing research institutes working on water-related issues.	500	2023-2028	RWB, MoE, REMA, MINEMA
Organize forums and symposiums to sensitize higher official and higher calibre professionals and to encourage young professionals in research.	800	2023-2032	RWB, MoE, REMA, MINAFFET, MINEDUC
Organize forums and workshops targeted at grassroot communities and civil servants where most of the information is needed.	300	2023-2032	RWB, MoE, MINALOC, MIFOTRA
Study and establish an efficient and effective research information communication and exchange system.	150	2023-2032	RWB, MoE, RISA, MINEDUC
Identify urgent and priority applied research needs.	150	2023- 2027	RWB, MoE
Support the implementation of urgent programmes targeted applied research projects to address knowledge gap in terms of their priorities.	600	2023-2028	RWB, RDB, MoE, MINALOC, MINACOFIN, PSF
Develop effective guidelines for stormwater management.	250	2023-2027	RWB, MoE, MININFRA, REMA
Develop master plan for stormwater management.	1,500	2023-2032	RWB, MoE, MININFRA, RHA, LMA, MINEDUC, CoK, RTDA
Sub-total 1	501,880		

B. Water supply

Policy actions (water supply)	Estimated budget (millions Rwf)	Timeline	Responsibility
Accelerate the implementation of projects identified under master plan and district WASH investment plans through fund mobilization from Government and development partners to ensure full access to water supply infrastructure and services.	619,000	2023-2032	MININFRA, MINECOFIN, WASAC Group, DPs, LODA, CoK, Districts
Strengthen regular M&E to ensure effective implementation of water supply programmes and projects.	300	2023-2032	MININFRA, WASAC GROUP, LODA, Districts, DPs
Mobilize private investment for bulk water production to ensure private sector engagement through PPPs.	200	2023-2032	MININFRA, RDB, MINECOFIN, WASAC Group
Implement climate-resilient water supply projects and programmes that have been identified.	40,000	2023-2032	MININFRA, MINECOFIN, WASAC Group, FONERWA, DPs
Continue to implement non-revenue water reduction strategy under WASAC Group	1,500	2023-2032	WASAC Group, MININFRA, MINALOC, DPs
Strengthen and build district capacities in terms of planning, coordination and monitoring of water supply infrastructure development, supported by the WASAC Group	200	2023-2032	MININFRA, WASAC Group, RURA, CoK, LODA, Districts, DPs
Strengthen district WASH boards to carry out overall coordination at district level and ensure that water supply performance indicators are incorporated into district performance contracts.	270	2023-2032	WASAC Group, MININFRA, DISTRICTS, CoK, DPs
Involve district WASH boards and water user associations/committees in the oversight arrangements to represent consumer interests and user rights.	500	2023-2032	RURA, WASAC Group, MININFRA, Districts, CoK, DPs
Develop, disseminate and continuously update harmonized designs, implementation manual and related guidelines for district water supply systems development	450	2023-2032	WASAC Group, MININFRA, MINALOC, DPs, Districts, CoK
Actively encourage the construction of private connections at the planning stage and consider one-off subsidies to make connection costs affordable.	200	2023-2032	WASAC Group, MININFRA, DPs, Districts, CoK
Review policies regarding new connections and consider a social connection to the poor and vulnerable.	50	2023-2028	WASAC Group, RURA, MINIFRA
Strengthen the management of water supply systems countrywide in partnership with private sector, where the WASAC Group will be responsible for overall management of water supply systems	400	2023-2032	MININFRA, WASAC Group, MINECOFIN
WASAC Group as contracting authority will conduct regular financial and technical audits for the improvement of service delivery.	500	2023-2032	WASAC Group, RURA, MININFRA

Policy actions (water supply)	Estimated budget (millions Rwf)	Timeline	Responsibility
Ensure O&M of boreholes and hand-pumps to improve service delivery to communities.	500	2023-2032	WASAC Group, DPs, MINALOC, LODA, Districts
Elaboration of a water and sanitation law.	60	2024-2025	MININFRA, WASAC Group, RURA, RWB
Implement and monitor WASH sectoral coordination programmes and projects by SWAp framework.	500	2023-2032	MININFRA, WASAC Group, DPs
Strengthen performance measurement framework through the existing WASH MIS.	1,400	2023-2032	MININFRA, WASAC Group, Districts, MINALOC, MoH, MINEDUC, National Institute of Statistics of Rwanda (NISR), CoK, DPs
Strengthen monitoring and information systems to capture key information on operational performance, quality of service delivery, contract status and achievement of performance targets, cost recovery and the condition of key assets. The systems should be webbased to make the information accessible from different locations.	200	2023-2032	RURA, WASAC Group
Develop water safety plans for water quality surveillance system for water supply.	900	2023-2032	RURA, WASAC Group, MoH
Strengthen regulation of private water service providers and ensure adequate field monitoring and follow-up by regulator through licensing, monitoring of water supply tariff.	480	2023-2032	RURA, WASAC Group, CoK, Districts
Set tariffs taking into account both O&M costs and affordability considerations.	120	2023- 2032	RURA, WASAC Group, MININFRA
Regulate water sales prices at kiosks and public standpipes.	50	2023-2026	RURA, WASAC Group, MININFRA
Define specific exemptions to be offered for extremely poor or vulnerable households, based on guidance from concerned institutions. The cost for this free service will be compensated by other consumer categories.	50	2023-2025	MINALOC, RURA, WASAC Group, MININFRA
The Government, through WASAC Group to establish funding mechanism and allocate budget for scheme rehabilitation, repairs, upgrades and extensions.	1,608	2023-2032	WASAC Group, MININFRA, MINECOFIN, DPs
Collaborate with MINEDUC and MoH and other sectors to undertake an assessment of water supply and demand.	150	2023-2025	WASAC Group, MININFRA, MINEDUC, MoH, MINALOC, DPs
Ensure inclusive public water supply infrastructure facilities that meet norms and standards in busy public places such as markets, car parks and local administrative offices.	200	2023-2025	WASAC Group, MININFRA, MINALOC, CoK, DPs
Sub-total 2	669,788		

C. Sanitation

Policy actions (sanitation)	Estimated budget (Millions Rwf)	Timeline	Responsibility
Implement community-based environmental health promotion programmes (CBEHPPs).	1,300	2023-2032	MoH, MINALOC, CoK, Districts, DPs
Develop, evaluate and provide support for adequate technical sanitation solutions.	800	2023-2032	WASAC Group, DPS, CoK, Districts
Conduct awareness campaigns related to visible and non-visible health impacts of poor sanitation and behaviour change.	500	2023-2032	MoH, MINALOC, CoK, Districts, DPs
Marketing the adequate sanitation offer (supply side), targeting people's expectations and preferences such as comfort, status, health benefits, value or safety.	100	2023-2032	CoK, MININFRA, Districts, DPs
Provision of incentives or targeted subsidies for some selected materials to support poor and vulnerable households to accelerate the improvement, construction or replacement of sanitary facilities.	300	2023-2032	MINALOC, WASAC Group, CoK, Districts, DPs
Attract external investment into water and sanitation including bilateral, multilateral and other international cooperation funding frameworks.	50	2023-2032	MININFRA, WASAC Group, PSF, CoK, Districts, DPs
Foster enabling conditions for the involvement of the private sector.	120	2023-2026	MININFRA, WASAC Group, PSF, CoK, Districts, DPs
Prioritize waterless excreta disposal solutions in households without water connections.	80	2023-2032	MINALOC, WASAC Group, MININFRA, CoK, Districts, DPs
Hold practical demonstrations, construct sanitary showrooms, disseminate knowledge, scale up efforts and hold sanitation marts at the district level.	2,000	2023-2032	MININFRA, WASAC Group, MINALOC, PSF, CoK, Districts, DPs
Construct inclusive public toilets meeting norms and standards in health facilities and schools.	6,000	2023-2032	MININFRA, WASAC Group, MINEDUC, MoH, MINALOC, CoK, Districts, DPs

Policy actions (sanitation)	Estimated budget (Millions Rwf)	Timeline	Responsibility
Construct public toilets in business centres and shopping malls that are accessible and visible for everyone.	3,000	2023-2032	MININFRA, WASAC Group, MINALOC, PSF, CoK, Districts, DPs
Develop an effective regulatory framework for sewer and non-sewer sanitation systems.	150	2023-2032	RURA, MININFRA, WASAC Group
Promote viable, low-cost approaches for sanitation services (sewer and non-sewer).	100	2023-2032	MoH, MININFRA, MINECOFIN, WASAC Group, CoK, Districts, DPs
Establish a cost-recovery framework for sanitation services.	120	2023-2032	RURA, MININFRA, WASAC Group, MINALOC, CoK
Construct collective sewer networks in urban areas.	250,000	2023-2032	WASAC Group, CoK, MININFRA
Construct sewage treatment facilities (wastewater and faecal sludge treatment plants).	120,000	2023-2032	WASAC Group, CoK, MININFRA, Districts, MINALOC, MININFRA, DPs
Prioritize minimization of solid waste and the enhancement of solid waste management.	1,000	2023-2032	CoK, Districts, WASAC Group, MININFRA, DPs
Facilitate solid waste collection and transportation, recycle and reuse.	44,000	2023-2032	CoK, Districts, WASAC Group MININFRA, DPs
Construct appropriate waste disposal and management facilities.	144,000	2023-2032	WASAC Group, CoK, Districts, DPs
Develop a national e-waste management strategy.	300	2023-2025	MINICT, RISA, MINICOM, DPs
Develop legislative instruments for e-waste collection and management taking into account the waste management hierarchy approach.	80	2022-2032	MINICT, MINICOM, LODA, PSF, RDB, CoK, Districts, REMA
Sensitize and encourage private sector engagement in transforming e-waste into business opportunities under the circular economy principle.	100	2023- 2025	MINICT, MINICOM, RURA, MINPIP, RISA, RDB, REMA, DPs
Establish e-waste management facilities to ensure proper collection, transportation, dismantling, disposal and recycling of e-waste.	50,000	2022-2032	MINICT, MINICOM, MINECOFIN, PSF, RDB, MINPIP, CoK, Districts, DPs
Raise public awareness of sustainable management of e-waste and to adopt e-waste management.	70	2023-2032	MINICT, MINICOM, MINEDUC, Rwanda Polytechnic, University of Rwanda, RTB, CoK, Districts, DPs
Industrial waste treatment facilities will be established at industrial premises by the developers/operators of industrial parks.	450	2023-2030	MINICOM, PSF, MoE, REMA, RSB
Enforce industrial effluent standards and legislation instruments for discharge into a public sewer and the environment.	90	2023-2025	REMA, RSB, MoH, MINICOM, CoK, Districts
Develop a national industrial waste management and pollution prevention strategy.	300	2023- 2025	MINICOM, MoE, MINIFRA, WASAC Group, REMA, DPs
Promote circular economy principles through private sector engagement.	200	2023-2032	MINICOM, MoE, REMA, PSF, RDB, DPs
Support research and innovation to develop new technologies and methodologies for industrial waste and pollution management.	300	2023-2032	MINICOM, MoE, REMA, WASAC Group, PSF, MINEDUC, DPs
Develop a national strategy for the management of radioactive/nuclear waste.	300	2023-2032	MININFRA, Rwanda Atomic Energy Board (RAEB), RURA, MoE, REMA, DPs
Develop legislative instruments for the safe management of nuclear and radioactive waste.	300	2023-2032	MININFRA, RAEB, REMA, WASAC Group, RURA, MoE, DPs.
Establish radioactive/ nuclear waste management facilities.	7,000	2023-2032	MININFRA, RAEB, REMA, WASAC Group, RURA, MoE, DPs
Develop a national healthcare waste management strategy.	300	2023-2027	MoH, RBC
Establish healthcare waste management facilities.	50,000	2022-2032	MoH, RBC, MININFRA, WASAC Group
Develop legislative instruments for healthcare waste management.	50	2023-2032	MoH, RBC, CoK, Districts, PSF, DPS
Sub-total 3	683,460		
Total Indicative Budget	1,855,128		

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