



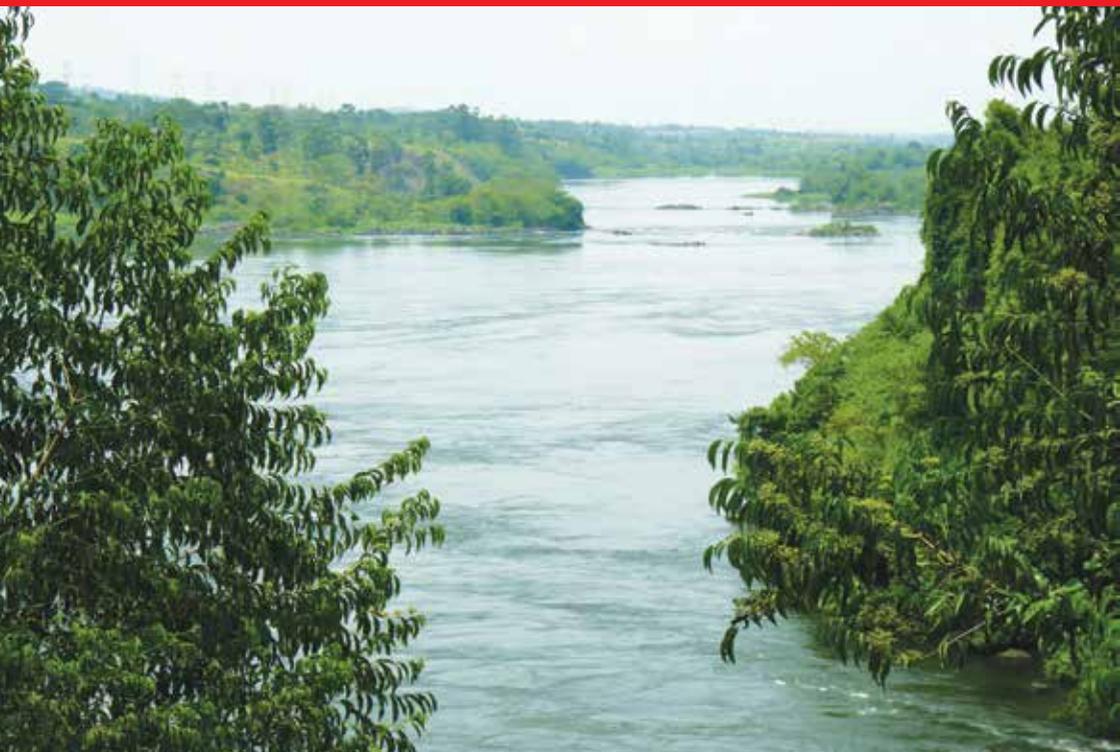
THE REPUBLIC OF UGANDA

MINISTRY OF WATER AND ENVIRONMENT

WATER RESOURCES INSTITUTE

OPERATIONAL FRAMEWORK

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Contents

Acknowledgement.....	3
Introduction.....	4
Background.....	4
Rationale for Establishing the WRI.....	7
Vision.....	8
Mission.....	8
Values.....	8
Functions of the WRI.....	9
Objectives.....	9
Thematic Focus.....	10
Applied Research.....	10
Applied Training.....	11
Sector Dialogue.....	12
Outreach.....	13
Institutional Set Up of the WRI.....	15
Strategic partnerships and collaborations.....	16
Financing for the WRI.....	17

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Introduction

The Water Resources Institute (WRI) has been established as part of implementation of the Water Sector Reforms and in response to wide consultations that pointed out the need to address water resources related issues such as pollution, climate variability, and reduction in water availability, and to balance water needs for agriculture, energy, industry and households in the country.

The Institute is intended to bridge the gap between theory and practice. It will profile the central position of water resources in national development with a vision of ensuring that Uganda's water resources are utilised optimally. Its core business is to be a centre of excellence that provides cutting edge applied research and training; delivers continuous professional skills development across all levels in water resources management and development, and serves as a neutral place for dialogue and outreach.

Background

Water resources are finite and vary in quantity and quality across the country. Coupled with the multiple use and demands from an increasing population, this situation calls for better planning, efficient use, and protection and management of water resources for sustainability. Competition for water resources is increasing amidst climatic change. There is a need for a neutral forum in which the various stakeholders can interface and engage on these issues, ranging from the water and energy nexus, water and food security nexus, water and agriculture, etc. The Uganda water and environment sector is rich in terms of experience, however; much of this experience is not adequately documented and shared. There is also minimal dissemination of applied research findings to the end users for application.

The Water Resources Management (WRM) reform study (2003 to 2005), recommended the establishment of a Water Resources Institute to “address current and emerging water resources related issues in the country and globally.” Further to the reform studies, broad stakeholder consultation and benchmarking with similar water resources institutions at the national, regional and international level, the WRI is set up to address a number of challenges and gaps in the sector

- Low prioritisation, fragmentation, and limited use of research undertaken in the implementation of activities across the sector
- Inadequate innovations in water and environment management to improve approaches that are being overtaken by increasing industrialisation.
- A noticeable disconnect between the theoretical training from the academia and the skills required to adequately serve in the work environment.
- A disconnect between the academia and the practice in content and delivery at different levels of training, as courses at some of the universities do not provide the comprehensive package of knowledge and skills required in the sector. The WRI will therefore undertake applied training to minimise this gap.
- Ad hoc-applied research in the sector with no specifically organized research programs, no delegated staff for applied research, and no outreach activities within the MWE, and the related Government and private institutions. The WRI will provide coordination of all efforts by serving as a central clearinghouse.
- Lack of deliberate succession planning of both managers/ leaders and the specialist personnel upon retirement.

The WRI shall address this by providing personnel with the required training, skills and expertise to ensure continuity.

- Lack of a structured mechanism for regular multi-disciplinary and multi-sectoral policy dialogue to inform sector processes that allow those outside of the mainstream sector (private sector, academic institutions, religious institutions, etc.) to contribute to sector developments.

The Sustainable Development Goals (SDGs), Vision 2040 and the second National Development Plan (NDPII) set ambitious targets for the country in general and specifically to the various sectors that make up the economy. The actions required to meet the targets will put increased pressure on the existing water and environment resources.

To meet Uganda's 2040 economic growth targets, the current level of water delivery must be tripled, which will require substantive investment in environment and water management.

This calls for a forum in which water and environment issues can be objectively discussed, and innovations for optimal use of the water resources can be explored, agreed upon and pursued in a holistic manner.

Rationale for Establishing the WRI

The challenges of the sector today require a strategic and integrated approach in order to accelerate the realisation of desired social, environmental and economic aspirations of the country. The Water Resources Institute (WRI) will be a one stop centre for water resources information and knowledge in the country. WRI shall specifically make the following contribution to the sector:

1. Raise the profile and the central position of water resources in the economic development of Uganda and its contribution to the achievement of the national vision, plans and the SDGs.
2. Promote integration of the sector for efficient utilisation of available resources and skills.
3. Provide a forum in which the various users of water have an opportunity to work together, share information and dialogue.
4. Harness lessons from various studies undertaken.
5. Provide a systematic feedback mechanism of lessons learnt to influence policy and practice through updating of policies, guidelines, manuals and curriculum improvement.
6. Coordinate applied water resources research that communicates results of studies and projects for action.
7. Provide a systematic mechanism to follow up on graduate trainees and facilitate them to fit in the work environment.

Vision

The Vision of the WRI is Uganda's water resources are optimally utilised for all uses.

Mission

The mission of the WRI is to be a centre of excellence that provides cutting edge applied research and training; a neutral place for dialogue and outreach; for professional skills development across all levels on water resources management and development to influence practice and policy for sustainable social economic development in the country.

Values

Professionalism: Acting with integrity at all times, providing quality service, being reliable and responsible. Taking pride and ownership in all that is done and said.

Innovation: Act with courage, challenging the status quo, finding new ways to solve water resource challenges, and providing a culture that nurtures and supports creativity.

Collaboration: Providing support to one another, working co-operatively with stakeholders, respecting one another's views, and making the work environment fun and enjoyable.

Client focused: Clients are the priority since they are the reason the Institute exists, and so they deserve a service that is timely, responsive, proactive, meeting their needs and aiming to delight.

Stewardship: We take ownership of our responsibilities and carry out our work with diligence, pride, efficiency and transparency. We ensure use and care for water resources is done responsibly, for both the short term and long term.

Diversity: We recognise and serve various interests of people, institutions, flora and fauna in water resources to ensure sustainable development.

Functions of the WRI

The WRI is envisaged to undertake the following functions:

1. Develop policy, legal, social, technological, and scientific expertise in the water resources sector;
2. Plan, facilitate, and conduct research responsive to national and regional needs;
3. Promote technology transfer and the dissemination and application of research results to appropriate users;
4. Provide for education and training of scientists, engineers, and students as water resources professionals;
5. Assist public and private interests in the planning, regulation, conservation, development, and utilization of water resources through outreach program; and
6. Provide opportunities for research grants to be awarded by organizations under national, bilateral, multilateral, and international arrangements.

Objectives

The objectives of the WRI are developed with the aim of demonstrating how water resources development and management translate into the realisation of sustainable economic development: These are to:

1. Contribute to achievement of sustainable development and growth in Uganda through positioning water resources as a catalyst for transformational development and growth;
2. Guide the development and management of water resources while navigating its complexity; including enhancement and preservation of ecological integrity, social wellbeing, and water security;
3. Facilitate the creation of multi-dimensional thinking on the interdependencies among natural, social, and economic systems in the use of water resources.

Thematic Focus

The WRI is set up to address the current and future water resources and environment related issues affecting the country. These will be addressed through conducting applied scientific research, providing tailor made applied training, promoting and facilitating policy dialogue and dissemination of research results through systematic outreach activities. The core business has been determined in view of the existing gaps relating to lack of organized programs, infrastructures, and delegated staff for applied research, training, and outreach activities within the MWE. The core business of the WRI is elaborated as follows:

Applied Research

Applied research is a practical problem-solving process that applies innovation to existing water resources and environment challenges faced by the country. The WRI shall coordinate the planning, implementation and application of applied scientific research. This will also include supporting the application of innovative knowledge and technologies. The institute shall harmonise and set up a research agenda that feeds directly into the sector strategy in order to improve policy and practice.

Applied research shall be central to development and delivery of applied capacity building training, dialogue and outreach leading to a more formalised process of generation and evidence-based decisions in policy formulation and review. Applied research shall be undertaken following a systematic process:

1. **Establishing the research needs** for the Water and Environment Sector.
2. **Defining the research agenda for the sector** – based on the sector knowledge needs, the WRI will establish a systematic and well-coordinated research agenda.
3. **Responding to the research needs** through designing and supporting implementation of innovations or action learning projects to address these needs.
4. **Designing relevant applied capacity building interventions** for the sub sector based on findings from applied research processes.
5. **Promoting policy dialogue** using research experiences to communicate and disseminate information - the processes from the action learning projects and share information generated.

Applied Training

Applied training is an approach to learning and teaching that utilises practical methods in the application of knowledge and skills to address real issues in society. The Water Resources Institute shall offer innovative programs and hands-on learning to help fill the national need for relevant, accessible training for sector professionals and other stakeholders, to address the sector capacity building holistically and strategically.

The applied capacity building training shall focus on the following:

- **Policy and practice linkages:** Imparting knowledge on sustainable management and use of water resources, highlighting what is working in terms of policy and practice
- **Continuous professional development:** Use existing and new knowledge on water resources and environment management for new sector entrants and on the job training for practitioners in the public, private and NGO sectors to build and develop professionalism in water

development projects. Short and long term courses on diverse disciplines will be delivered online and through workshops, seminars.

- **Knowledge into action:** Build capacity of sector actors to address water resources challenges by facilitating development and adaptation of appropriate projects that meet the multi-dimensional needs of water resources management.
- **Making use of retired professionals:** Retired sector professionals and academia shall be continuously identified and utilised to offer mentoring and guidance, and contribute to development and revision of training modules, making them more practical and applicable.

Sector Dialogue

Dialogue is a process of discussing complex issues and differing viewpoints with the aim of creating understanding and arriving at a decision. Dialogue shall aim at supporting effective policy-making that protects and improves water resources management and development while predicting and preventing emerging risks.

Effective and respective dialogue shall involve providing accessible and actionable information for policymakers and water and environment practitioners through channels such as publications, briefing notes, invited presentations and workshops. The interventions for dialogue include:

1. **Community of Practice (COP):** A COP refers to a group of people who share a concern or a passion for something they do. Based on defined themes the COP shall hold regular discussions on different issues, the results of which shall be consolidated and packaged into different information products and used to inform different sector processes.

2. Multi-stakeholder and multi-sectoral dialogues: The WRI will provide space to engage and share experiences and to develop strategies that address system wide challenges in water resources management, promoting integration with ministries that use and rely on water resources. The results of these dialogues will feed into policy processes, strategies, standards and guidelines.

3. The Annual Uganda Water Week: The WRI will on annual basis organise the Uganda Water and Environment Week, an event that brings together key stakeholders in the Water and Environment sector to show case and discuss strategic issues regarding water and environment resources in the Uganda.

Outreach

Outreach in the context of the WRI is the process through which linkages will be created with other organisations, specific groups of people such as politicians, students, the private sector and development partners, academics, students, media and the general public, to increase sharing of experience, new concepts, innovations and practices in water and environment related issues. WRI will utilize relevant technologies to create and provide accessible and innovative resources that meet a broad range of individual, sectoral and national needs.

Approach to Outreach

- **Linked and integrated outreach goals and targets:** The outreach will be guided and linked to the major focus of the institute, building on its applied research, capacity building and dialogues as well as consistent messaging for the different target audiences.

- **Establishing partnerships and collaborations:** The institute shall focus on building relationships with key stakeholders and institutions to strengthen collaborations. Partnerships with research institutions in Uganda and beyond will be established

to enhance its outreach capacity.

- **Library and information services:** The WRI will set up / improve existing library and information centre to serve as a knowledge hub for the sector.

- **Water Resources Museum:** A water resources museum will be set up at the WRI to highlight the importance, existence and evolution of water resources in Uganda.

- **Development and versioning of information and communication materials:** Basic communication materials shall be developed and disseminated widely to support WRI outreach such as brochures, exhibition materials and animations, newsletters, etc.

- **Demonstrations and field tours:** The Institute will facilitate the establishment of an onsite demonstration area for technologies such as simplified Climate Change science, real time weather monitoring, modelling theatre etc. to enhance learning for different stakeholders.

- **Workshops and seminar, special events and open houses:** These will be regularly organised to disseminate information and increase engagement and participation of key stakeholders.

- **Working with the media:** The WRI will work with the different media to enhance visibility and promote awareness and debate on water resources and environment management issues.

Institutional Set Up of the WRI

Legal status

In the short term, the institute shall be governed by the current sector legal and policy framework namely the Water Act (1995) and the Water Policy (1999). It shall be operated and funded as an entity within MWE. Possibilities of having a host agreement with a reputable organisations that could provide administrative and financial management services for resources received from outside the government will be considered. While the host organisation will provide administrative support to the institute the strategic, operational and programmatic functions shall remain the responsibility of the MWE.

In the medium and long term, the WRI shall transition into a semi-autonomous apex body for guidance and coordination of all water resources related applied research and applied training in the sector as part of the sector policy reform process.

Steering of the WRI

In the short term, a small multi-stakeholder steering committee shall be established by the Permanent Secretary of the Ministry of Water and Environment to provide strategic guidance and oversight to the Institute. However, day to day work of the institute that be coordinated by a Team Leader / Coordinator from within MWE. Key staff to serve as thematic leads shall be designated and will support the operationalization process of the WRI.

In the medium term, the steering committee shall be broadened to include all key stakeholders within the sector. This will include key senior staff of MWE, a number of line ministries and agencies, civil society; Universities, Research Institutions; and the Private Sector.

The institute shall be hosted and housed in current premises of the Directorate of Water Resources Management in Entebbe. The current premises will be remodelled to meet the needs of the Institute in terms of space for conferences, training, and dialogue including amenities for sanitation and hygiene and sufficient office space.

Strategic partnerships and collaborations

The WRI will operate through partnerships with other agencies. Strategic partnerships and collaborations will be established with key stakeholders to leverage financial resources and technical expertise. These will include government ministries and agencies, national and international universities, research institutions, the private sector, development partners, Civil Society Organisations (CSOs), regional networks and intergovernmental entities, bi-lateral agencies, retired professionals and individuals with relevant expertise and interests.

The WRI establishment process has been undertaken through a number of partnerships that include FAO and WaterAid. New partnership are being created with Korean research and training institutions with funding from Korea Trust Fund through the World Bank.

In the short term the partnership shall be expanded to include engaging other relevant agencies undertaking work related to the WRI such as the i) the National Water and Sewerage Corporation - International resource Centre (NWSC-IREC, ii) Nyabyeya Forest College and iii) Appropriate Technology Centre (ATC), and other line ministries (Ministry of Agriculture Animal Industries and Fisheries, Science, Technology and Innovation) to collaborate on setting up and running activities.

In the medium and long term, a more robust partnership frameworks for the institute shall be developed. The institute shall progressively develop partnerships with international agencies on a bilateral and multilateral basis to support the functioning of the institute.

Financing for the WRI

In the short run, the WRI will be funded through available resources for activities already planned under the MWE; partnerships with academic institutions and relevant other agencies, and support from Development Partners.

In the medium to long term the WRI will derive resources by offering consultancy services, accessing long term public funds from government; fees and levies; setting up a research fund, accessing grants from Development Partners and Non-Governmental Organisations.

The current financial requirements for the WRI in the short term (2 to 3 years) are UGX 16.3 billion, for the medium term (4 to 7 years) its UGX 18.4 billion, while for the long term (7 to 10 years) it is UGX 26.2 billion.

For more information, find us at the following address:

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