Rural Water Initiative for Climate Action (RWICA) aims to advocate for the human basic right to clean water while building community assemblies to support willingness among community stakeholders to improve water quality to achieve socio-economic development.

A case of Uganda.
In 2018, the United Nations estimated that roughly 3.6 billion people live in areas vulnerable to water scarcity and that number could reach 5.7 billion in 2050.

Global warming (climate change), over-extraction of water from aquifers, and contamination of surface and groundwater all threaten ecosystems and freshwater availability. In nearly every part of the world, water is being polluted at a scale that threatens human health, animal health and economic development for this and future generations.

Water is an essential need for all life. For human beings, communities that have safe and adequate water and sanitation access are more likely to thrive economically, without it, many do suffer from disease outbreak, poverty and even displacement due to water scarcity.

Globally, women and girls carry the primary responsibility for domestic water supply, are at increased risk of violence due to poor access to water and sanitation, often have limited ability to sustain services due to poor purchasing power and have limited rights over water resources and decision making authority concerning water use. Women are disproportionately affected by natural and manmade disaster in a host of ways. At the same time, women also play a crucial but often un recognized role in managing water for livelihoods and food security, where women in Uganda account for 43% of the agriculture workforce.

Through 2021, RWICA continues to strive to achieve its vision by empowering this stewardship in 3 thematic areas:

1. Water Equity - Water source facility development and rehabilitation, while pollution prevention and water reuse are modeled after nature’s processes for sustainable landscape and resilient socio-economic development ensuring equitable access to safe water and sanitation for the very poor and vulnerable and diseases media,

2. Empowering women with access to safe water or sanitation, transforming families, for millions, funds stand between them and safe water and sanitation in their homes. Our solutions break down financial barriers and help people get safe water at home

3. Innovative, scalable, adaptable, resource-neutral, and gender-responsibility water, sanitation, and hygiene (WASH) services are delivered across the humanitarian to development continuum; and to reach scale, RWICA supports improved governance of local systems to be more equitable and inclusive, while leveraging financial resources from diverse sources.

4. To contribute to our water security for all vision, we support and align with global effort, including the UN World Water Quality Alliance, UNEP to catalyze transformational change at scale for the world’s poorest, most vulnerable and marginalized.
OUR APPROACH
LOCAL WATER FORUM
For scale and sustainability

To achieve RWICA's community water security ambitions, we recognize that a project-level view of development is limiting; instead, we operate through approaches, designed for scaling. We work through partnerships, improve systems, strengthen capacity, reinforce strong leadership, coordinate efforts, and promote gender equality.

Partner with local partners and the International initiatives
At our core RWICA's partnership model is founded on long-term relationships with local partners—frequently RWICA at local and national levels, local leaders, and other partners. In many ways, these partnerships provide RWICA a reach unparalleled in the development space. They build grass-roots relationships and favor local solutions that enable immediate action when responding to disasters while allowing long-term commitments that extend beyond any funding stream.

To contribute to achieving the UNWWQA Local water forum vision, RWICA also engages a variety of other partnerships to form consortiums, guide research and learning, and implement high quality programs. Examples include local and international non-government organizations (NGOs), farmers, village cooperatives, research institutes, universities and many others.

Capacity strengthening, leadership, and coordination.
Through community-level planning, RWICA recognizes the many capacity strengthening needs required to achieve water security for all; while technical skills transfer is central to our work, problem-solving is also a strong focus. We aim to empower and catalyze individuals, community leaders and decision makers to become agents of change.

Good leadership begets good governance, and RWICA along with its partners like WWQA, will help create transformational leadership at all levels to multiply our efforts. Leaders understand the role of water security plays in their community successes and are empowered to make changes to this end.

Gender mainstreaming
Astute awareness of and action to address gender disparities and dynamics are essential for achieving and sustaining
results. RWICA’s water security programming recognizes that structural violence and inequalities faced by women and girls and other special interest groups like Persons with disabilities (PWDs) undermine human development, and we adopt a gender mainstreaming approach, to ensure that attention to the goal of gender equality is embedded in all activities. RWICA strives to enable equitable access to water resources, empower women in decision making and management, and ensures male engagement to achieve gender equality and security.

**STRATEGIC GOAL**

To achieve our Local water forums and water security aims, RWICA’s overarching goal is to ensure that vulnerable communities and households achieve water quality in ways that contribute to saving lives, improve human and animal health, protecting the environment, ending poverty, preserving dignity and promoting gender equality and building peaceful societies.

All activities in the Local Water Forum space undertaken by RWICA are driven by this goal.

**PRIORITY AREA 1**
Water In Sustainable Landscapes

Strategic objective
Communities, individuals, and groups conserve, restore and sustainably manage their water resources.

Background
Rapid population growth and industrialisation in the past years has accelerated the demand for water for agricultural production, for energy consumption and for industrial production.

Food is at the center of this picture; in the past 30 years, food production has doubled, but the amount of water used for irrigation has tripled. One of the greatest challenges we face today is to increase food production to meet the demand of the future population as our water resources are increasingly limited.

In Uganda 80% of agricultural land relies on rain-fed production systems, while 70% of freshwater is pumped and diverted from rivers and ground water for irrigation. Unsustainable agriculture (including crop production, livestock grazing, and managed forests) erodes soils, reduces water recharge, and degrades water quality, all which have negative consequences for people who depend on water and land resources. At the same time, an overinvestment in blue water (e.g., irrigation) versus green water (e.g., nature-based, rain-fed) solutions has left many behind.

Our work
SDG6 emphasizes applying the principles of integrated water resources management (IWRM) for achieving economic development, social equity, and environmental sustainability by managing water, land, and related resources together.

RWICA recognizes and prioritises the foundational role that water plays for resilience and human development. We work at the One Health nexus of 1) sustainable animal husbandry health, 2) watershed management, and 3) drinking water supply to support governments, partners, communities, and all stakeholders to adopt and apply integrated and improved, gender-responsive and water resource management practices for more resilient and equitable agriculture systems and improved water security. We promote and apply gender-responsive water- and climate smart agriculture practices, deploying soil restoration and agriculture techniques that maximise water efficiency and productivity at both...
farm, schools and landscape scales, while emphasizing and advocating for investment in rain-fed agriculture systems.

**PRIORITY AREA 2:**
**Wash In Humanitarian And Rural Development Contexts.**

Strategic objectives
Vulnerable and disaster-affected communities and individuals benefit from equitable, safe, and sustained WASH services to stay healthy, to improve well-being, and to live in safe and dignity enhancing environments.

Background
WASH practices are central to saving lives and upholding human dignity. The goal of WASH is to contribute to the reduction of morbidity and mortality by addressing the basic survival needs of communities and vulnerable populations, eliminating risks of WASH-related preventable diseases and building populations’ resilience to future crises. Inadequate access to WASH services for billions of people remains a global challenge that is rooted in poverty, inequality, and poor governance. This leads to environmental degradation and undermines a variety of human development outcomes, including health and nutrition, economic empowerment, and ultimately, just and peaceful societies.

RWICA approaches WASH with an innovative and integrated vision that operates across the humanitarian to development continuum. We work through both rapid and long-term approaches by responding to natural and manmade disasters, slow onset and protracted crises, as well as working on preparedness, mitigation, resilience building, good governance, technical support, financial access to water and sanitation, climate change adaptation, and productive use of water. Because of RWICA’s wide community presence on-the-ground through long-term partnerships, we are accompanying communities and partners transitioning from immediate and protracted emergency responses to sustainable WASH service delivery.

**Our work**
In humanitarian contexts, RWICA’s WASH programming strives to respond to the immediate- and longer-term needs of affected populations in gender-responsive and equitable ways. Our interventions complement or integrate with other sectorial programming such as shelter, health, nutrition, and livelihoods.
To achieve our aims, we:

1. Coordinate and align with Core Humanitarian Standards, Sphere Minimum Standards for WASH, RWICA’s Protection Mainstreaming guidelines, RWICA’s Minimum Standards for Mainstreaming Gender Equality, Global/ National WASH Cluster standards, and local codes and regulations;

2. influence WASH and water security policies and practice;

3. prioritize social and gender equity, dignity, and protection;

4. mitigate against possible negative unintended consequences, including gender-based violence

5. Deploy market-based approaches where and when appropriate;

6. Engage and communicate with affected communities, peer actors, and national institutions at all times with relevant information;

7. Engage in WASH information management and sharing data on systems;

8. Engage in WASH monitoring and accountability systems;

9. Mainstream WASH disaster risk reduction (DRR) approaches within multi-sectoral preparedness plans that support populations to develop resilient WASH solutions, including outbreak preparedness; and deploy a water security lens across all WASH interventions, in recognition that environmental degradation and sustainable natural resource management are increasingly critical issues in emergencies for both affected and host communities.

In rural-development contexts, RWICA’s WASH work includes gender-responsive stand-alone activities, such as municipal sanitation and community water service delivery, as well as multi-sectoral programs in which WASH components contribute to other objectives (e.g., nutrition, health, livelihood, or food security), all in support of achieving SDG6. In water, we work towards universal, equitable, and sustainable access to safe and affordable drinking water services. In sanitation, we target universal and sustainable access to improved facilities and services (including safe management of Emerging organic water contaminants human excreta, wastewater, vector control, and solid waste) along the chain from containment to disposal or transformation, treatment, and reuse. We are tackling these needs in communities, at households, and in key institutions (e.g., health facilities and schools). These WASH results in development contexts can only be achieved when we

1. Prioritize the needs of the most vulnerable and marginalized populations, including women and girls and people with disabilities;

2. Address the requisite hygiene practices required to achieve health gains;

3. Engage and give agency to all stakeholders—including government, civil society, private sector (for market-based solutions), communities, individuals, etc.—to plan for and deliver sustainable water quality outcomes;

4. Support systems strengthening, improved governance, and coordination across sectors;

5. Install appropriate and sustainable infrastructure and services; and Support government policies, strategies, and plans related to water quality.
RWICA’s focus on Water Quality Monitoring
By 2050, an estimated 68% of the world’s population will live in urban areas; Pollution and water contamination kill millions every year and the stress put on the economic sector by urbanization and population growth has only increased the trouble in Uganda. Estimates show that 21 percent of Ugandans lack access to safe water and nearly 87 percent donot have sufficient sanitation facilities, thus increasing the risk of disasters and outbreaks (e.g., cholera). Though RWICA is focused on rural water security, Capacity building, and socio-economic development, increasingly our WASH efforts use a rural development and partnership for advanced technology lens to help achieve SDG6. WASH service provision in secondary cities, small towns and peri-urban settlements and slums is a core part of our work in both humanitarian and development programs.

PRIORITY AREA 3: Water Financing And Governance

Strategic objective
Communities and individuals engage with relevant stakeholders (government, civil society, private sector, and others) to plan, deliver, monitor, and mobilize financing for water resources management and WASH services

Background
In 2016, the World Bank estimated the cost of achieving SDG6 at $1.7 trillion. Official Development Assistance (ODA) currently committed to the water sector, including water/sanitation services and water resources management, amounts to less than 20% of that figure. Yet, financial resources are not the only barrier to reaching SDG6. Water management is inherently “a political process, because it deals with reallocating water, the allocation of financial resources, and the implementation of environmental goals. Leveraging sufficient finance and stewardship resources is not possible without strong governance and enabling conditions. In order to achieve SDG6, we must address the gaps at local levels.

Our work
Because water is a public good, ensuring sustainable water security requires systems change; it requires fostering an enabling environment and supporting communities and local institutions to own resources effectively. In Kammengo subcounty the necessity to foster policies and institutions that address issues holistically. However, good water governance is not just institutions; it also requires social capital and increased voice and agency of traditionally disadvantaged groups to enable communities like women to resolve problems related to public goods such as water. For RWICA and our partners, water governance is our entry point for systems strengthening and scale. All water development incorporates a suite of approaches designed to advocate for and support accountability, responsiveness, gender equity, transparency in institutions, and participation by communities. We carry out this work at watershed and landscape scales, working with multiple stakeholders impacted by water resource use across a range of rural development.

To help address the gap in funding needed to achieve SDG6, RWICA catalyzes and mobilizes diverse financial support to Alleviating water
Women and Children bear the biggest burden of water scarcity, women don't concentrate on income generating activities in search for clean water, walking long hours and long distances i.e 2 hours per 1 kilometer in search for water. Children don't attend to classes, school going girls are raped in search for clean water.

According to Butoro local health center iii in Kamengo sub county, 9/10 children die due to diarrhea and other water bone related illnesses.

Furthermore, according to the district production officer 2/3 businesses operate successfully in the presence of effective water supply.

However, women lack of access to financial credit facilities, this lowers their capacity to successfully stay in business hence increasing poverty that hinders affordability of clean water as well as water source infrastructure maintenance and operation. Statistics reveal that poverty is a driver for rural water facility breakdown and non functionality. We give small affordable loans to rural women in business through self help groups called “Water Credit Clubs” to empower women afford clean water for themselves and their families.

Indicators for drinking water, sanitation, and hygiene are clearly defined and accepted across the sector via the GEMS (JMP’s) service ladders for WASH. Global indicators for water in landscapes, water governance/finance, and gender inequality are less harmonized, and RWICA contributes its voice and experience to refine how best to measure and improve this integration. Because SDG indicators are measured at the country level, RWICA is a grass root organisation that engages in country-level monitoring systems to report results at the global level.

In the SDG era, individual project reporting matters less than tracking achievement of transformational change. To achieve greater water security, our measurement systems inform understanding of how approaches and programs succeed or fail at scale, while also driving continual improvement. They always seek to do better.

**Contributing to global monitoring**

Achievement of RWICA’s water quality for all vision requires its monitoring systems to feed into global efforts that track SDG6.

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**Measure And Do Better**

In line with RWICA's agency strategy, water monitoring work will feed into agency-level indicators to track progress on achieving priority water-humanitarian and development outcomes. It engages in participating a
measurement system that captures above project-level outcomes and delivers value for money, including enabling improved learning, decision making, evidence-based storytelling, and accountability to stakeholders. Performance monitoring is essential for RWICA to develop and improve deliverables; to assess, reflect, and strengthen approaches; and to deliver high-quality and impactful results.

**Sustainability measurement**

Sustainability is embedded in all measures. While a wide variety of methods are available, the following five key factors in measuring sustainability drive RWICA’s approaches: capacity building (local water forums), Citizen Science and advanced technology engagement, policies/institutional, financial support services (Water Credit Clubs) technical, and environmental. Measuring coverage and project outcomes is sufficient; RWICA interventions strive to evaluate the level of service over time, including performance of key technical, financial, and management indicators to better inform both local and International planning and decisions for delivery of safely managed water quality services for all.

**Environmental due diligence**

All water interventions at RWICA, be they agriculture, health, or emergency-related, incorporate environmental impact and risks in their monitoring. Individual water production points are monitored and evaluated based upon potential impact on the natural environment, effect on water scarcity, and impact on other users. Likewise, agricultural practices incorporate measurements of water quality and change, as well as downstream impact, like pestcide herbiscides, industrial waste disposure, pharmacetucal waste exposure, oil and gas exploration can have significant effect on ground water, RWICA, carries out Enviroment impact assessment reports.

**Information and Communications Technologies for Development (ICT4D)**

RWICA seeks strategic partnerships of technology advancement to achieve and contribute to global water monitoring aims. We participate and contribute to novel technologies and efforts (e.g. Stir Bar Sorptive Extraction GERSTEL Twister, digital water dispensers, satellite monitoring tools, data collection systems, water meters, leakage sensors, and water point data exchanges) to improve our services and those of our partners. Where necessary, we continue to innovate (e.g., Community Drinking Water Filtration Centers) that provide ready to drink tap affordable water solutions in low income communities.
Cross-Cutting Themes
Recognizing that vertical silos create barriers for achieving transformational change, we are breaking out of these silos through a One Health approach by integrating a variety of cross-cutting themes across our programs. To achieve global water monitoring goals, our water team works with colleagues across gender, youth, partnerships, disability and inclusion, conflict and peacebuilding, agriculture and climate change, protection, emergency response, and other sectors and sub-sectors. Access to water, whether limited by natural disasters, climate change, urbanization, pollution, or over-extraction, can cause or exacerbate conflicts.35 This water insecurity can lead to civil unrest and localized violence. Combining water insecurity with a growing youth population that encounters higher unemployment and economic pressures can result in

RWICA accepts the interconnectedness of these themes and understands that achieving our vision requires working across them, whether through innovation for water and sanitation social impact, protection mainstreaming to ensure the safety of women, children, and the elderly, or inclusion mainstreaming so that people living with disabilities receive the same access to water and sanitation that others do.

OUR TEAM
At RWICA, water is a nexus that connects our agency, our programs, and our people. We rely on this network of people to ensure water is available for people, plants, animals and production. Water monitoring is the job of everyone. If you work at RWICA, you work in water.

It is also a partnership. We can only achieve our mission of providing water monitoring and citizen science engagement for all—every day, and in every community—when our partners (WWQA Social Engagement Platform, UNEP, GIZ)thrive. As such, our team is not any individual or small group of individuals. Rather, it is the collective of One Health experts, Sociologists, agro- economists, water engineers, health practitioners, accountants, operations managers, Community leaders, soil scientists, nutritionists, geographers, gender specialists, Forest scientists, behavioral scientists, entrepreneurs, and so many more. We are thoughtful. We think outside the box. We embrace the big questions and seek answers to them with a bottom-up approach. We are change-makers and leaders. We are committed. We are bold, selfless team working with millions of others to build a better and more water secure tomorrow.

For more information, please go to www.rwica.org or contact us at info@rwica.org.
Find us on Twitter @RWICA-Water
ENDNOTES


15. Laudato Si, w2.vatican.va/content/francesco/en/encyclicals/documents/papa francesco_20150524_enciclica-laudato-si.html.

16. Laudato Si, w2.vatican.va/content/francesco/en/encyclicals/documents/papa francesco_20150524_enciclica-laudato-si.html, paragraphs #27-31, and #185.
29. Sophie Edwards, “WASH advocates call for political support ahead of majomeet