



water
ACADEMY

UNITAR Global Water Academy

Annual Report 2023-2024



UNITAR Executive Director's Note



On behalf of the United Nations Institute of Training Research, we are pleased to reflect on the inaugural year of the UNITAR Global Water Academy (UGWA), and I am delighted to share with you our accomplishments and milestones achieved during 2023-2024. It has been a year of significant progress and collaboration, marking the beginning of our journey towards addressing the global water crisis.

In our first year, we laid the foundation for the UGWA, defining its structure, vision, and mission. We forged key partnerships and established ourselves on the global stage by launching our online platform (www.globalwateracademy.org) on

World Water Day in Geneva, a momentous occasion that symbolized our commitment to global cooperation in tackling water-related challenges.

Our outreach efforts were met with enthusiasm, as we hosted 10 events that reached participants from over 90 countries. From virtual panels to in-person exhibitions, we engaged diverse audiences and facilitated crucial discussions on water security, resilience, and governance.

Central to our mission is the development of online training programs to empower learners worldwide. We have made significant strides in this area, with plans to launch our flagship course on UN SDG 6 and additional courses by the end of 2024.

None of this would have been possible without the dedication and support of our partners and collaborators. I extend my heartfelt gratitude to H.E. Amb Csaba Kőrösi, former President of the United Nations General Assembly for his support in launching the UGWA, and his continued engagement with the UGWA to ensure its success. In addition, I would like to thank York University as the academic leads of the UGWA, in particular President Dr. Rhonda Lenton, Dr. Amir Asif, Dr. Sapna Sharma, and all individuals who have contributed their expertise and resources to the progression of the UGWA.

Looking ahead to 2024, we are committed to furthering our outreach efforts and expanding our network of partners. With a focus on training, research, and knowledge mobilization, we aim to make meaningful contributions toward ensuring universal access to clean water for all.

I invite you to join us in this important journey and explore our online platform at www.globalwateracademy.org. Together, we can make a difference in addressing one of the most pressing challenges of our time.

Warm regards,

Mr. Nikhil Seth

United Nations Assistant Secretary-General,
Executive Director

United Nations Institute for Training and Research



Message from President and Vice-Chancellor, York University



The water crisis is a devastating reality that affects every living thing on the planet. When populations around the world do not have equitable access to clean water, it not only impacts human health and hygiene it also deepens political and social divides, contributing to greater inequality and conflict.

As a visionary institution with a long-standing reputation for being forward-looking, York University recognizes that the global water crisis is urgent, and bold action and advocacy is urgently needed. Over a year ago, UNITAR launched the first of its kind UNITAR Global Water Academy (UGWA) in partnership with York and others. The UGWA shares York's vision to drive positive change by fostering training and capacity development, empowering community-based networks, weaving traditional knowledge and co-creating sustainable water solutions to ensure equitable access for all.

York University is honoured to serve as the Academic Lead for the UNITAR Global Water Academy and has decades of experience in providing the kind of global leadership, educational and training programs the Academy and the global crisis requires. Our commitment to supporting sustainable water is evident in everything we do, including:

- Our call to action to advance the United Nations Sustainable Development Goals (SDGs) enshrined in our academic plan;
- Our excellence in water-related research, including One WATER, one of York's unique and interdisciplinary Organized Research Units which brings together experts in fields like water management, AI, technology, education and sustainability to find holistic solutions to water-related issues.
- Research leading to innovative new solutions from Dr. Satinder Brar's progress in valorizing wastewater to Dr. Syed Imran Ali's Safe Water Optimization Tool (SWOT) for humanitarian responders to Dr. Sylvie Morin's research into algal blooms, and many others who have worked across multiple disciplines and collaborated with academia, industry and NGOs to devise solutions.

Over the last year, York University, UNITAR and the Academy's many partners have made substantial progress in fulfilling the Academy's primary objectives, including building the kind of capacity in skills and knowledge needed to ensure sustainable water management practices that can be replicated and scalable in the future.

I look forward to seeing the positive impact that will come from Academy's flagship course on access to clean water and sanitation, along with several other courses on water security that will start this year, and I invite you all to be part of the Academy's global classroom. This education platform for online, offline and immersive learning is a result of the hard work and dedication of many, including UNITAR's Executive Director Mr. Nikhil Seth, York's leading water researchers such as Dr. Sapna Sharma, who also serves as the inaugural Director for the UNITAR Global Water Academy, and the many leading organizations and several other academic institutions with whom we collaborate on this transformative initiative.

I would like to express my sincere appreciation to you all for the connections that you have forged, for catalyzing positive change, and making this project a beacon of hope for everyone who strives to realize a more sustainable future.

Sincerely,

Rhonda Lenton, PhD
President & Vice-Chancellor, York University

UNITAR Global Water Academy Director's Note



On behalf of the UNITAR Global Water Academy (UGWA) at York University, I am pleased to provide this annual report on the activities undertaken in our inaugural year. 2023-2024 was an exciting time for the UGWA. We conceived of its structure, vision, and mission and established our first key partnerships. To spread the word on our progress, we successfully developed, built, and launched an online platform for the UGWA, which was made public on World Water Day in Geneva on March 22 2024, in commemoration of our first anniversary. We see this as an important early step to establishing the global reach we are striving for in tackling the global water crisis.

At the same time, we made significant strides in our global outreach by hosting 10 outreach events in 2023-24, including virtual panels associated with World Water Day 2023, the High-Level Political Forum on Sustainable Development, the Sustainable Development Goals (SDG) Summit, and the High-Level Committee on Programs. Our in-person, virtual, and hybrid programs were viewed by hundreds of participants, representing over 90 countries!

We additionally made significant progress in the development of our online training programs, reaching out to partners for established courses we can offer on our online platform, and developing original courses set to launch in the summer of 2024. We have established the structure of the UGWA Flagship Course on the United Nations Sustainable Development Goal 6: "Clean Water and Sanitation for All", with a planned 9 modules, and have compiled a list of topics for additional courses that leverage the expertise of our diverse academic partners.

We are grateful to all our collaborators and partners for their support, ideas, advice, and hard work. In particular, the United Nations Institute for Training and Research (UNITAR) and students, staff, faculty, and upper administration at York University have been incredibly gracious in supporting our work in all aspects. I would particularly like to thank Mr. Nikhil Seth, Mr. Alex Mejia, Mr. Julio Andrade, Mr. Stephen Joyce, Mr. Daniel Nazarov, and Mr. Israel Ledesma from UNITAR for their leadership and support. This work would also not have been possible without the dedication and support of Dr. Rhonda Lenton, Dr. Amir Asif, Dr. Sylvie Morin, Dr. Stephanie Gora, Dr. Usman Khan, Dr. Imran Ali, Dr. Shooka Karimpour, Dr. Satinder Brar, Dr. Dolleen Manning, Dr. Mary Bunch, Dr. Ellie Perkins, Dr. Adeyemi Olusola, Dr. Richard Vogt, in addition to Ms. Jessica Keeshig-Martin, Ms. Barbara Edwards, Mr. Corey Allen, and Ms. Tina Sposato. Clearly the UGWA is a collaborative effort, and I am indebted to so many for providing their time and expertise to launch our academy.

We are looking forward to an eventful 2024, where we plan to continue our out-reach efforts with in-person, virtual, and hybrid events around the world. My hope is that we can continue our important work towards ensuring universal access to clean freshwaters for all in the not-so distant future.


Dr. Sapna Sharma
Professor, Department of Biology,
York University

A handwritten signature in blue ink that reads "Sapna Sharma". The signature is written in a cursive, flowing style.



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Executive Summary

The UNITAR Global Water Academy is a multi-stakeholder collaboration between academic institutions and private sector partners, with York University as Academic Lead. The Global Water Academy tackles diverse aspects of the water sustainability crisis through training, capacity building, research, and knowledge mobilization, ultimately to inform decision-making and public policy.

Our Vision

The UGWA fosters training and capacity development, empowers community-based networks, weaves traditional knowledge, and co-creates innovated sustainable water solutions to ensure equitable access to water for all. Through building community based networks and co-creating innovative solutions, we aim to further develop a dialogue that contributes to identifying capacity gaps that hinder the effective implementation of SDG 6 targets.



Our Mission

The UNITAR Global Water Academy (UGWA) empowers learners all over the world with the knowledge and skills to respond to the global water sustainability crisis by providing hybrid training and online courses developed by global leaders in water research, resource management, and policy development; developing scientific and two-eyed water solutions to water sustainability; and by building the capacity and international partnerships necessary to achieve the objectives of UN Sustainable Development Goal 6.

Main Achievements for 2023-2024

In line with the performance indicators outlined in the concept paper “UNITAR Global Water Academy: A new initiative launched under the auspices of the President of the 77th UN General Assembly”, the UGWA made significant gains within four pillars of progress in its first year: operationalization and governance, training, research, and knowledge mobilization. The main achievements in the first year of the UGWA are outlined as follows:

1. Designed the concept and structure of UGWA - conceptualized the overall structure of the UGWA and formalized the mission statement, aims, objectives, and governance of the organization.

- The UGWA was conceived within the context of the global water sustainability crisis as a means of empowering policy and decision makers, government officials, industry, and the communities most affected by water security with the knowledge, expertise, and capacity to ameliorate its most serious consequences.
- Was proposed as a multi-stakeholder collaboration between academic institutions and private sector partners.
- York University was established as the Academic Lead with Dr. Sapna Sharma serving as Director.
- UGWA was designed with three key pillars in mind: training, research, and knowledge mobilization.

2. Launch of online platform – March 2024 – globalwateracademy.org with key details of UGWA, repository of online training and publications, community forum, and partnership details.

- Web hosting and website design spearheaded by UNITAR with the collaboration of a team from York University.
- Includes key information about the organization as well as a dynamic events page, community forum, and repository of online training materials and research output from partners.
- Launch coincided with events of World Water Day 2024.

3. Key Partnerships Established – Forged international partnerships with universities in Europe, Asia, and Australia.

- Goals were to establish partners across disciplines and with broad geographic distribution of institutions.
- Agreements have been reached among 10 member institutions with a goal to add to this list in year 2.

4. Outreach events – UGWA hosted 10 events that were held in-person, hybrid, and virtual panels, as well as an art exhibition at the Aga Khan Museum, Toronto, Canada.

TABLE 1 **Summary of UGWA Events during 2023-2024**

DATE	EVENT	DELIVERY MODE	# OF REGISTERED PARTICIPANTS
March 2023	UN World Water Day 2023 – “Promoting a Water Culture Through Learning and Action”	Hybrid	>100
March 2023	UN World Water Day – “Water Security, disasters, and resilience in a changing climate: challenges, opportunities, and solutions”	Hybrid	>100
June 2023	UN Water Conference - “Engineering Solutions to Water Insecurity”	Hybrid	64
June 2023	UN Water Conference – “Water Security, Climate Change, and Resilience”	Hybrid	64
July 2023	High-Level Political Forum on Sustainable Development – “Humanitarian Responses to emerging water crisis as a result of extreme climatic events”	Hybrid	232 (160 attendees from 22 countries)
September 2023	SDG Summit – “Harnessing the power of big data, novel technologies, and international collaboration to address global water insecurity”	Hybrid	437 (160 attendees from 83 countries)
March 2024	Coinciding with High-Level Committee on Programs – “Global Challenges in Water Access, developing governance solutions, and applications for alleviating water security”	Virtual	420 (150 attendees from 91 countries)
March 2024	World Water Day Artistic Exhibition: Resonance	Exhibition at Aga Kha Museum	Hundreds of museum visitors
March 2024	World Water Day (Geneva) – “The role of capacity building in water governance and conflict and humanitarian settings”	Hybrid	120 online/ virtual participants
March 2024	World Water day (Aga Khan Museum) = “Exploring traditional indigenous and Islamic relationships to water through storytelling and the arts”	Hybrid	140 in-person and virtual participants



5. Development of Online Training program – Hired personnel to begin development of Flagship Course on SDG, available by the end of 2024.

- UGWA hired Dr. Richard Vogt in February 2024
- Designed the structure of UGWA Flagship Course on SDG 6, to soft launch summer 2024.
- In collaboration with academic partners, began development of additional course offerings to be published at globalwateracademy.org, starting in Summer 2024.

Goals for UGWA Year Two, 2024-2025



- **Training** – Continue to develop content for training page of online platform.
 - Launch a selection of 3-5 additional courses on selected topics, leveraging the expertise of UGWA members (summer 2024).
 - Collaborate with partner organizations to publish existing courses and training material on UGWA platform.

- **Outreach Events** – we anticipate participation in the following events in 2024:
 - May 2nd – in concert with the Intergovernmental Negotiating Committee on plastic pollution (4th session, Ottawa), convene a virtual panel: “From source to sea: Tracking the journey and effects of plastic pollution.”
 - May 18 -24 – Application submitted for official side event at the World Water Forum in Bali: “Enhancing Transboundary Water Management and SDGs: A collaborative approach.”
 - May 27-30 – Application submitted for official side event at the 4th International Conference on Small Island Developing States: “Empowering sustainable economic growth in Small Island Developing States amidst heightened freshwater insecurity and extreme climatic events.”
 - July 8-17th – Planned side-event for The High-Level Political Forum on Sustainable Development: “Sustainable, resilient, and innovative solutions to the global water quality crisis.”
 - Sept 22-23 – United Nations Summit of the Future in 2024 – side event in development
 - Nov 11-24 – COP 29 – side event/virtual classroom in development. o Nov 19, 2024 – World Toilet Day – Virtual event in development.



- **Fundraising** – Plan to reach out to international industry and governments for sponsorship opportunities to create a UGWA operating budget.
- **Partnerships** – Expand network of partners to include additional academic, government, and community groups.
 - Meeting in April 2024 with new Canadian Freshwater governmental agency.
 - Forge relationships with additional academic and community-based partners, particularly in the Global South.

Conceptualizing the UNITAR Global Water Academy

The “UNITAR Global Water Academy” was proposed to be created as a multi-stakeholder collaboration between the United Nations, academic institutions and private sector partners, with York University (Canada) as Academic Lead. In this first year, we transitioned the UNITAR Global Water Academy from an idea to a hybrid training and capacity building platform.



The three key pillars of the UNITAR Global Water Academy aim to tackle diverse aspects of the water sustainability crisis: training, research, and knowledge mobilization, ultimately used to inform decision-making and public policy. Specifically, the UNITAR Global Water Academy aims to:

1. Promote international knowledge transfer and capacity sharing among students, researchers, government, non-governmental organizations, industry, knowledge keepers, and community members.
2. Offer a hybrid way of learning that incorporates in person and online activities that will enable students to engage and collaborate across borders and disciplines.
3. Develop scientific-based and two-eyed water solutions that inform water policies and programs.
4. Measure and monitor impact and promote replicability of innovative and proven water management practices .
5. Facilitate conversations and partnerships between researchers, government, non-governmental organizations, industry, and community members to enhance understanding of water issues.
6. Support equitable capacity building in sustainable water management, especially in distressed areas, for Indigenous communities and marginalized/equity-deserving groups.

Launch of the Online Platform

On March 22, 2024, we launched our online platform at globalwateracademy.org



This was a tremendous effort with the web design and web hosting spearheaded by UNITAR with intensive direct collaboration on content from a team at York University. On our platform, we summarize important details of the UGWA, host a repository of online training and publications, and provide a community forum to develop and engage a virtual community, which we welcome you to visit today at www.globalwateracademy.org



Annexes





HIGH-LEVEL POLITICAL FORUM
ON SUSTAINABLE DEVELOPMENT



unitar
United Nations
Institute for Training and Research



YORK 
UNIVERSITÉ
UNIVERSITY

CONCEPT PAPER

UNITAR GLOBAL WATER ACADEMY

*A new Initiative launched under
the Auspices of the President of the
77th UN General Assembly*



Background to the water sustainability crisis

The survival of humans, and indeed, all life, depends upon access to clean freshwater. Humans rely on water for hydration, food production, sanitation, hygiene, and transportation. The United Nations has declared that access to clean water and sanitation is a basic human right in Sustainable Development Goal 6. Specifically, Sustainable Development Goal Target 6.1 calls for “equitable access to safe and affordable drinking water by 2030” (United Nations 2015). Nevertheless, over 2 billion people worldwide do not have access to safe drinking water in their homes, contributing to 3.5 million deaths annually (United Nations Children’s Fund and World Health Organization 2019).

Freshwater is in limited supply on our blue planet. Less than 1% of the world’s freshwater supply is available for human use in lakes, rivers, and groundwater (Sharma et al., in press. *Wetzel’s Limnology*). Global environmental degradation further increases the risk of water scarcity, deterioration in water resources, and declines in biodiversity (i.e., Woolway, Sharma, and Smol 2022. *Bioscience*). For example, climate change and human demand have decreased freshwater storage in 53% of lakes and reservoirs around the globe in the past three decades (Yao et al. 2023. *Science*). A combination of factors including warming temperatures, increased evaporation, alterations in precipitation patterns, and increased human consumption have contributed to a declining freshwater supply for over 2 billion people who live within these watersheds (Yao et al. 2023. *Science*). Concurrently, water quality in freshwater systems is deteriorating in response to global environmental degradation (Yang et al. 2022. *Geophysical Research Letters*). Algal blooms, which can have severe effects on environmental and human health, are becoming more widespread across the globe, in particular in Asia and Africa where freshwater demand is already high (Hou et al. 2022. *Nature Geoscience*). Continued climate change and global environmental degradation will even further exacerbate the water crisis. Mitigation, adaptation, the implementation of integrated water resource management, social and technological innovation, and education will be essential to reverse the water sustainability crisis.

The UNITAR Global Water Academy will empower policy and decision-makers, government officials, industry, and the communities most affected by water insecurity, with the knowledge, expertise, and capacity to ameliorate the water crisis. We aspire to foster training and capacity development, empower community-based networks, weave traditional knowledge, and inspire innovation to co-create sustainable water solutions and ensure equitable access to water for all.



Water insecurity for vulnerable communities

Water insecurity is inequitable around the world. Gender, racial, socioeconomic, and cultural inequalities are readily apparent in patterns of access to clean freshwater worldwide. Targets 6.1 and 6.2 of UN SDG 6 highlight the importance of equitable access to water and sanitation. The inequitable distribution of freshwater amplifies inequitable access to freshwater. Freshwater is distributed unequally on the planet and the majority of the available freshwater is found in northern regions (Verpoorter et al., 2014. *Geophysical Research Letters*; Messenger et al. 2016. *Nature Communications*), although the majority of people live within the Global South. The Global South is vulnerable to increased water scarcity, with fewer available freshwater resources and poorer water quality conditions. Pressures from high human demand, climatic changes, alterations in land use, population growth, and extractive processes, all contribute to the decline in freshwater availability and degradation of water quality



(Jenny et al. 2020. *Journal of Great Lakes Research*). Inadequate water and sanitation contribute up to 80% of illnesses in the developing world and approximately 3.5 million deaths annually. Women and girls, in addition to poor and marginalized groups, are disproportionately impacted by water insecurity. The UNITAR Global Water Academy will emphasize training, capacity building, research, and knowledge activities for the communities most affected by water insecurity.

Water scarcity affects vulnerable communities around the world, even in regions where freshwater is abundant. For example, Indigenous Peoples all over the world experience water insecurity and lack of access to clean drinking water. Indigenous territories that have been colonized have faced degradation due to resource exploitation and extractivism for capital interests, in addition to the adverse impacts caused by climate change. Indigenous stewardship practices have also been eroded by colonization. However, the ways of knowing and being that are contained within Indigenous philosophies and practices promote protection of the lands, waters, and all life on earth. Indigenous scholars and activists call for a reorientation in how humans think about water, shifting from resource to relation. That is, water is a relative that we have responsibilities toward, through stewardship, and with whom we engage in relations of reciprocity (Chiblow 2019. *Water*; McGregor 2010 in *Speaking for Ourselves: Environmental Justice in Canada*). The protection of relationships between Indigenous Peoples and water is very important. Indigenous Peoples have deep and profound connections to the earth that are based in their spirituality, and in natural law and teachings from the Ancestors. Projects that are “For us by us” with regard to Indigenous Nations are key to sustainable and transformation change and internal capacity building. Our initiative prioritizes “two-eyed seeing,” an approach that brings together Indigenous and western ways of knowing, understanding and responding to water issues and solutions to these problems (Bartlett, Marshall and Marshall, 2012).

Scope

The “UNITAR Global Water Academy” is proposed to be created as a multi-stakeholder collaboration between academic institutions and private sector partners, with York University (Canada) as Academic Lead. The three key pillars of the UNITAR Global Water Academy will tackle diverse aspects of the water sustainability crisis: training, research, and knowledge mobilization, ultimately used to inform decision-making and public policy. Specifically, the UNITAR Global Water Academy aims to:

1. Promote international knowledge transfer and capacity sharing among students, researchers, government, non-governmental organizations, industry, knowledge keepers, and community members.
2. Offer a hybrid way of learning that incorporates in person and online activities that will enable students to engage and collaborate across borders and disciplines.
3. Develop scientific-based and two-eyed water solutions that inform water policies and programs.
4. Measure and monitor impact and promote replicability of innovative and proven water management practices
5. Facilitate conversations and partnerships between researchers, government, non-governmental organizations, industry, and community members to enhance understanding of water issues.
6. Support equitable capacity building in sustainable water management, especially in distressed areas, for Indigenous communities and marginalized/equity-deserving groups.



Vision

The UNITAR Global Water Academy will foster training and capacity development, empower community-based networks, weave traditional knowledge, and co-create innovative sustainable water solutions to ensure equitable access to water for all.

The objective of the UNITAR Global Water Academy is to deliver a global virtual education training and capacity building platform on water. The Academy will build on our focus on social justice, diversity, and the public good to create a training program that is uniquely focused on disadvantaged communities.

We will provide training and develop skills on global water issues, generate risk assessments of water insecurity, and build strategies for resilience, mitigation, and adaptation measures in response to global environmental degradation, including climate change, to ultimately safeguard our water resources. Moreover, we will engage with global leaders, including in the private and public sectors, to develop effective and scalable water management practices and create a water culture based on just sustainability.

We will incorporate Indigenous perspectives and sustainable development principles into the UNITAR Global Water Academy from the outset. Uniquely, we will weave traditional Indigenous knowledge within our program to further our understanding of practices in caring for water. Our commitment to social justice and Decolonization, Equity, Diversity, and Inclusion (DEDI), is at the heart of all of our activities.

Potential Partners

The UNITAR Global Water Academy will be a highly collaborative international academy with partners across disciplines and institutions. A few of the identified key partners include:

Institutions: UN-Water; Global Water Partnership

Academic partners: Georgia Tech, United States; Nova School, Portugal; University of Victoria, Canada; and University of Philippines, Philippines

Commercial partners: AB InBev, Diageo, Danone, Heineken, Pernod Ricard

Key Performance Indicators and Goals for Year One

Within the first year, progress will be made within four pillars: operationalization and governance, training, research, and knowledge mobilization (Figure 1).

Operationally, the major goals will be to co-create the organizational and governance structure and build an engaged and active collaboration with academic partners. Building capacity and membership across academia, government, industry, and affected communities will be a central goal for knowledge mobilization. We will work closely with our international academic, industrial, and United Nations partners to build our network and launch the UNITAR Global Water Academy.

We will develop and launch the UNITAR Global Water Academy. We will plan curriculum with academic partners. The themes of courses that we will envision offering within the first year, simply based on our expertise at York University, include: i) Humanitarian Water Engineering; ii) Complexity and challenges of detecting and addressing contaminants of emerging concern; and iii) Perspectives and practices in caring for water through the lens of traditional Indigenous knowledge.



With respect to research, building interdisciplinary collaborations with academic and industrial partners will be an integral component of the first year. We can already envision a suite of interdisciplinary projects including: i) Understanding the responses of our freshwater supply to climatic changes; ii) Building an artificial intelligence-enabled flood forecasting tool; iii) Elucidating emerging contaminant trends within a climate change context; iv) Optimising water and wastewater treatment plants using data-driven methods; v) Building green technologies for wastewater, drinking water, and stormwater treatment; vi) Weaving traditional knowledge and Indigenous perspectives and practices for caring for water; vii) Storying water with music, media arts and performance; and viii) Understanding and improving water safety in humanitarian settings and in remote communities. Building diverse, collaborative, and international research teams will enable us to tackle these and other important research projects.

Figure 1. Summary of key performance indicators in Year One for the UNITAR Global Water Academy.



Water Expertise at York University

The lands and waters of the area where York University is located, also known as Tkaronto (Toronto) have been cared for by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat since time immemorial. The area is part of the Dish with One Spoon Covenant, an agreement between Indigenous Peoples to peaceably share and care for the Great Lakes region. The current treaty holders are the Mississaugas of the Credit First Nation and the British Crown (including its successor state Canada). York University recognizes the harmful impacts of Western colonization on Indigenous lands, waters and Nations. York University is working toward the protection of Indigenous and Treaty Rights, the implementation of the United Nations Declaration on the Rights of Indigenous Peoples and the implementation of the Truth and Reconciliation Calls to Action.

York University is a leading international teaching and research university with a large and diverse student body of approximately 55,000 students enrolled in our undergraduate and graduate programs at our Keele and Glendon campuses situated in Toronto, Ontario, Canada. Ontario is home to over 300,000 lakes and borders four Laurentian Great Lakes, which hold approximately 20% of the world's freshwater supply. Although freshwater is abundant and extensively studied, there continue to be marginalized communities, particularly remote and Indigenous communities, who do not have safe and easy access to clean water on their reserves within the province of Ontario. Marginalized communities around the world continue to lack access to clean water. Promoting social justice within and beyond our community remains a cornerstone of our university.

As an institution, we are committed to advancing our contributions to the United Nations Sustainability Development Goals across our research, teaching, and service activities. We are one of two universities in Canada and 25 worldwide who are part of the United Nations Institute for Training and Research's (UNITAR) global network of training centres for knowledge-sharing, training, and capacity-building for leaders, local authorities, and civil society. In July 2021, the United Nations Economic Commission for Europe (UNECE) established the Toronto Centre of Excellence on Youth Homelessness Prevention, the first Geneva UN Charter Centre of Excellence in North America at York University. We have a strong record of institutional support for water research across faculties. For example, we have supported the development of a water-focused Organized Research Unit (ORUs) called One WATER. Our Organized Research Units serve as synergistic hubs, supporting innovative, interdisciplinary and collaborative research taking place beyond traditional academic units. One WATER strives to understand and develop solutions to the ongoing water sustainability crises, attract and train future leaders in the field, educate the public on water issues in Canada and around the world, and build industrial partnerships to identify key problems and solutions for safe access to clean water.

We work at the forefront of fundamental, applied, community-based, and policy water related research. Within the policy and humanitarian sphere of water-related research, we recruited Dr. James Orbinski as the inaugural Director of York University's Dahdaleh Institute for Global Health Research. The Dahdaleh Institute for Global Health Research focuses on three main pillars: Planetary Health, Global Health and Humanitarianism, and Global Health Foresighting. The Dahdaleh Institute regards ecological integrity as a determinant of health worldwide, human activity as pushing ecological limits to a breaking point, and climate change as a fundamental threat to human life. They work with organizations within the humanitarian field to identify operational challenges and collaboratively build and implement innovative and practical solutions, including linkages between poor water quality and malnourished child health, and developing tools to provide clean water in refugee camps.

Within the applied field of water research, we provide extensive support to the Lassonde School of Engineering to build the capacity to develop solutions for all aspects of water research, including water, wastewater, stormwater, and groundwater resources. Particular strengths lie in water treatment and bioremediation, emerging contaminants, light-based technologies for water purification, flood forecasting, and water management in Arctic communities and in humanitarian settings. For example, we recruited Dr. Satinder Kaur Brar as the James and Joanne Love Chair in Environmental Engineering within the faculty of Civil Engineering. Dr. Brar is an international leader in the field of environmental engineering whose portfolio covers aspects of water security, sustainable groundwater sources, smart environmental technologies for renewable energy and climate change adaptation, green infrastructure, and environmental protection and sustainability.



York University is also committed to supporting fundamental water research across disciplines. For example, Dr. Sapna Sharma from the Department of Biology was awarded a Provostial Fellowship and a York Research Chair to further our understanding of the impacts of global environmental change on water quality and water availability in lakes around the world. Dr. Sharma founded the Aquatic Research Group at York University, a pan-university seminar and networking series, to build collaborations with students, faculty, and staff across the university. Moreover, Dr. Deborah McGregor (Anishinaabe), a professor within the Osgoode Hall Law School, Canada Research Chair in Indigenous Environmental Justice and Director of York's Center for Indigenous Knowledges and Languages, focuses on Indigenous knowledge systems to issues surrounding water and environmental governance, environmental justice, and sustainable development. Additionally, Dr. Ellie Perkins, a lead author for the 6th Assessment Report of the United Nations Intergovernmental Panel on Climate Change, addresses global inequities while advancing the energy transition, particularly considering water security.

A university with a strong track record in supporting interdisciplinary research, there are also numerous researchers with the arts and humanities who bring their methodologies and epistemologies to understanding water as a vital, storied presence, with diverse, and deeply impactful meanings in different cultures around the globe and throughout history. In the Faculty of Art, Performance, Media and Design, for example, media artist and Canada Research Chair Mary Bunch works closely with her co-creator, Anishinaabe philosopher Dolleen Tisawii'ashii Manning, to create media arts worlds that imagine water worlds that instantiate Anishinaabe ontology. In the department of music, Stephanie Martin's Composition *WATER: An Environmental Oratorio*, imagines a fantastical world, in which Water is personified, surrounded by singing spirits. These are just a few examples of individuals committed to promoting a world of clean water at York University, with a more comprehensive list of researchers working in this area along with their research interests available in Appendix 1. York University has mobilized an entire community working towards equitable access to clean freshwater in Canada and abroad. We have an engaged student, faculty, and staff body committed to understanding and developing scientific, technological, natural, health, and social solutions to water security in a changing climate.



Launch of the Online Platform

On March 22, 2024, we launched our online platform at globalwateracademy.org

This was a tremendous effort with the web design and web hosting spearheaded by UNITAR with intensive direct collaboration on content from a team at York University. On our platform, we summarize important details of the UGWA, host a repository of online training and publications, and provide a community forum to develop and engage a virtual community.

We provide a few snapshots of our website below.

The screenshot shows the homepage of the Global Water Academy website. At the top left is the logo for Water Academy, featuring a colorful globe icon and the text "water ACADEMY". To the right of the logo is a navigation menu with links for HOME, ABOUT US, EVENTS, COMMUNITY FORUM, TRAINING, and CONTACT US. The main banner features a photograph of two people performing a traditional dance move on a beach at sunset. Overlaid on the image is the text "World Water Day: Exploring Indigenous and Muslim Water Stories through the Arts" and a "Know more" button. Below the banner are logos for UNITAR (United Nations Institute for Training and Research) and YORK UNIVERSITY. The lower section is a blue background with the heading "Did you know?" and five infographic boxes containing statistics:

- 2.3 BILLION** PEOPLE LIVE IN COUNTRIES EXPERIENCING HIGH WATER STRESS ISSUES (UN-WATER, 2021).
- 3.2 BILLION** INDIVIDUALS ARE AFFECTED IN WATER-SCARCE AGRICULTURAL AREAS, WITH 1.2 BILLION IN SEVERELY CONSTRAINED REGIONS (FAO, 2020).
- 2.2 BILLION** LACK SAFE DRINKING WATER, AND 4.2 BILLION LACK SAFE SANITATION, REPORTED BY THE WORLD HEALTH ORGANIZATION AND THE UNITED NATIONS CHILDREN'S FUND (WHO/UNICEF 2023).
- 80 PERCENT** OF WASTEWATER FLOWS BACK INTO THE ECOSYSTEM WITHOUT BEING TREATED OR REUSED (UNESCO, 2017).
- 90 PERCENT** OF NATURAL DISASTERS ARE WEATHER-RELATED, INCLUDING FLOODS AND DROUGHTS (UNISDR, 2015).

At the bottom of the blue section, there is a link: "Learn more about the need for learning on water sustainability crisis in our [About Us](#) section."

Selected highlights

Link to SDGs, how efforts to co-create innovative sustainable water solutions are linked to the achievement of the Agenda 2030.

Here's an overview of how SDG 6 (Clean Water and Sanitation) relates to the other Sustainable Development Goals (SDGs)
Click on each SDG

Click on each SDG



Start learning today

This platform gathers information on online course offered by UN entities.



[More COURSES](#)



[HOME](#) [ABOUT US](#) [EVENTS](#) [COMMUNITY FORUM](#) [TRAINING](#) [CONTACT US](#)

About The UGWA

Mission Statement

The **UNITAR Global Water Academy (UGWA)** empowers learners all over the world with the knowledge and skills to respond to the global water sustainability crisis by providing hybrid training and online courses developed by global leaders in water research, resource management, and policy development; developing scientific and two-eyed water solutions to water sustainability; and by building the capacity and international partnerships necessary to achieve the objectives of UN Sustainable Development Goal 6.

Upcoming Events



World Water Day: Exploring Indigenous and Muslim Water Stories through the Arts

Past Events



UNITAR at the SDG Summit



UGWA 1st Event on Humanitarian Response to Resilient Water Control



Launch of the UNITAR Global Water Academy

Online Courses



Engage with a network of experts in Water and Sanitation

UGWA Community Forum

Enrol

LOGIN

ENROL

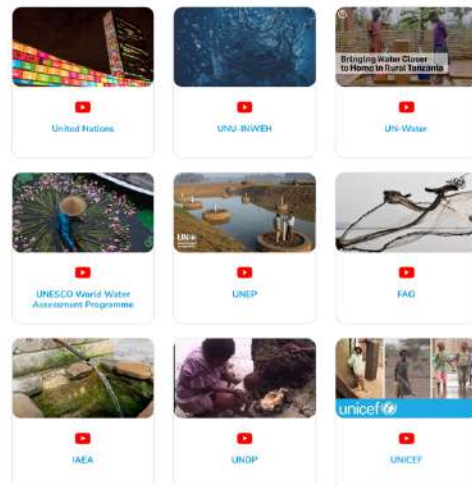


Publications

This section includes documents that could be useful for learning, such as courses, guidelines, information to learn through stories, how mechanisms work, stories or education events, topics related about the UN's efforts and academic authors' publications about a variety of the water sustainability issues.



Videos



Contact us



We are located at the Headquarters of the United Nations Institute of Training and Research in Geneva, Switzerland.

First Name Last Name

E-mail

Subject

Message

Key Partnerships Established

Within the first year, we forged many collaborations with institutions around the world. Our goals were to establish partnerships with institutions across a broad geographic range, including North America, Europe, Asia, and Australia. In the coming year, we hope to develop partnerships with institutions in South America and Africa. We have reached partnership agreements with 10 member institutions.



UNITAR

The United Nations Institute for Training and Research (UNITAR) provides innovative learning solutions to individuals, organizations, and institutions to enhance global decision-making and support country-level action for shaping a better future.

UNITAR's Vision:

The vision for which the Institute aims reflects a drive for results and programming to develop the capacities of individuals, institutions, and organizations with a view to overcoming global challenges.

UNITAR's Mission:

- Providing high-quality learning solutions to address the capacity development needs of individuals, organizations and institutions;
- Advising and supporting governments, the UN and other partners with knowledge services, including those that are technology-based;
- Facilitating knowledge and experience sharing through networked and innovative processes; and
- The vision for which the Institute aims reflects a drive for results and programming to develop the capacities of individuals, institutions and organizations with a view to overcoming global challenges. Integrating innovative strategies, approaches and methodologies into our learning and related knowledge products and services.



York University

The York University is a top international teaching and research university and a driving force for positive change. Located in Toronto, Canada, York is empowered by a welcoming and diverse community with a uniquely global perspective, and preparing their students for their long-term career and personal success. Together York is making things right for our communities, our planet, and our future.

York University's growing area of strength in water research, strong local and global relationships, and commitment to positive change has resulted in the University being named academic lead in UNITAR's Global Water Academy.



UNU-INWEH

United Nations University Institute for Water, Environment, and Health (UNU-INWEH) is one of the United Nations University (UNU) institutes, an academic arm of the UN. The University's 13 research and training institutes are located in 12 countries and address a range of global development challenges. UNU-INWEH specializes on water for development, working, primarily, with countries in the Global South, and addressing water issues of global significance. Water is the entry point to all UNU-INWEH's activities, including environment and health.

The Institute addresses primarily continental water resources challenges. UNU-INWEH works to bridge the gap between the wealth of evidence and research that exists on water resources, and the practical needs that political leaders and decision makers in low- and middle-income countries have. UNU-INWEH is linked to key processes in the UN system, and represents the entire UNU in UN-Water – a cross-agency group in the UN and international partners working on water and sanitation issues globally.

UNU-INWEH's research has a diverse range of partners and stakeholders, including politicians and policymakers in developing countries, concerned with water, health and environment issues; donors and implementing agencies from the North and the South; scientific community in water-related research institutions and academia; UN agencies and other international and regional organizations and networks; host country and national partners in Canada, media; and civil society. UNU-INWEH was established in 1996, as a public service agency and a subsidiary body of the UNU. Its operations are secured through long-term host-country and core-funding agreements with the Government of Canada. The Institute is located in Hamilton, Canada; its facilities are supported by McMaster University. UNU-INWEH is the only Institute in UNU that focuses entirely and solely on water issues. It is also the only entirely water-focused UN entity in Canada.



Nova SBE

Nova School of Business & Economics (Nova SBE) is a business school located in Portugal that offers a wide range of academic programs. Founded in 1978, the school has approximately 3,000 students from over 70 different countries. Nova SBE is a dynamic business and economics school. They are engaged in searching for highly-qualified professionals who thrive in a fast-paced institution.



University of Victoria

The University of Victoria (UVic) is one of Canada's leading research-intensive universities. We are located in Victoria, on the BC coast. At UVic, they combine three main elements: dynamic learning, vital impact, and their extraordinary academic environment. Together, these three elements nurture an environment of discovery innovation, and creativity.

This fortifies their work in sustainability and healthy societies. It shapes UVic's worldview with diverse perspectives, including those from Indigenous and international communities. It fuels their commitment to economic well-being, technological advances, and social justice.



University of Public Service

The University of Public Service (UPS; Nemzeti Közszerológati Egyetem) is a higher educational institution in Budapest, Hungary. Established in 2012, it is one of the youngest universities in Central and Eastern Europe; however, its faculties as former independent colleges look back much earlier.

The university was officially founded on 1 January 2012 through the merger of the Zrínyi Miklós National Defence University (becoming the Faculty of Military Sciences and Officer Training), the Police College (becoming the Faculty of Law Enforcement) and the Faculty of Public Administration of Corvinus University of Budapest (becoming the Faculty of Public Administration at UPS). In addition to these faculties, UPS includes institutions that function as educational organs and think tanks and is initiating its fourth faculty of European and international studies.

The university's primary goal is to educate future public administration officials, military and law enforcement officers (through BA and MA programmes) and to develop the skills and know-how of current members of public service (through further training programmes). Moreover, UPS also functions as a think tank for public service (through PhD programmes, joint conferences, and individual research activities of lecturers).



NangTang Technological University

Nangtang Technological University (NTU, Singapore): A research-intensive public university has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Medicine, Humanities, Arts, & Social Sciences, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute and Energy Research Institute @ NTU (ERI@N). Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world's top universities, the University's main campus is also frequently listed among the world's most beautiful. Known for its sustainability, NTU has achieved 100% Green Mark Platinum certification for all its eligible building projects. Apart from its main campus, NTU also has a medical campus in Novena, Singapore's healthcare district.



Asian Institute of Technology

The Asian Institute of Technology (AIT) is an international English-speaking postgraduate institution, focusing on engineering, environment, and management studies. AIT's rigorous academic, research, and experiential outreach programs prepare graduates for professional success and leadership roles in Asia and beyond. Founded in 1959, AIT offers the opportunity to study at an institution in Asia which possesses a global reputation.

Going forward, AIT will be stressing its global connections, injection of innovation into research and teaching, its relevance to industry, and its nurturing of entrepreneurship, while continuing to fulfill its social impact and capacity building role. Sitting on a beautiful green campus located just north of Bangkok, Thailand, AIT operates as a multicultural community where a cosmopolitan approach to living and learning is the rule.

You will meet and study with people from all around the world. Today, AIT's internationally recognized engineering, environment, and management graduates are highly sought after by employers in their home country and elsewhere. Across many walks of life in Asia, AIT alumni have distinguished themselves as CEO's of private and state enterprises, as business owners, as well-respected researchers and faculty, and as senior university and government officials.



Global Water Partnership

The Global Water Partnership (GWP) is a global action network with over 3,000 Partner organisations in 180 countries. The network has 77 accredited Country Water Partnerships and 13 Regional Water Partnerships. The network is open to all organisations involved in water resources management: developed and developing country government institutions, agencies of the United Nations, bi- and multi-lateral development banks, professional associations, research institutions, non-governmental organisations, and the private sector.

GWP's action network provides knowledge and builds capacity to improve water management at all levels: global, regional, national and local. GWP does not operate alone. Its networking approach provides a mechanism for coordinated action and adds value to the work of many other key development partners in government, civil society, and the commercial sector to engage with each other to solve water problems.



The University of Newcastle Australia

The University of Newcastle Australia is a comprehensive university of and for our regions, we have delivered superior education and world-class research since 1965. We are based in the Hunter Valley and the Central Coast in New South Wales, and our purpose is to deliver an exceptional student experience, preparing graduates for life in an increasingly interconnected society.

We serve our regions by taking research that matters to the world and bringing our global expertise home. Recognising water is a basic component of human existence and the support system on which people, economies and ecosystems depend. Our academics study the importance of water to ecosystems and humans, its use and management as a resource and its modification through contamination and pollution. The University of Newcastle focuses on monitoring, understanding and dealing with the impacts of climate variability and change in the Asia-Pacific region.

The impacts on indigenous and developing communities in the region are a particular focus. We work with water authorities and universities in the region to achieve our goals in research and training.

The major water challenges we address are:

1. Managing the impacts of climate variability and change on the quality and quantity of water resources and water redistribution within rural, urban and natural landscapes;
2. Modelling, restoring and/or rehabilitating rivers and catchments.
3. The water and energy nexus, health and food security. Other areas of expertise include industrial water reuse, extreme event (flood, drought, bushfire) risk analysis, hydrological and stochastic modelling, and water resources management. We have identified that the broad priority areas for the global water industry are; improving service resilience, water efficiency, community engagement, climate change adaptation, decision making, safeguarding drinking water and environmental improvement.

Outreach Events

The UNITAR Global Water Academy hosted 10 outreach events in our first year, including in-person, hybrid, and virtual panels, as well as an art exhibition at the Aga Khan Museum, Toronto, Canada. We reached almost 2000 people from over 90 countries. Details of each of the events follow.



unitar
United Nations Institute for Training and Research



UN
2030 WATER
CONFERENCE

NEW YORK
22-24
MARCH
2023



Side Event

PROMOTING A WATER CULTURE THROUGH LEARNING & ACTION



22 MARCH
2023



9:30 am
(NY time)



Room 7, UN HQ
New York, USA



Background

The UN 2023 Water Conference is a historic opportunity for the world community. It is the first UN conference on water in almost 50 years after the 1977 UN Water Conference and comes at a time when there are urgent needs for water action. The world is facing unprecedented challenges, including the devastating impacts of climate change, the looming food crisis and the on-going battle against the COVID-19 pandemic.

A main outcome of the Conference will be the Water Action Agenda. The Water Action Agenda is the collection of all water-related voluntary commitments to accelerate progress in the second half of the Water Action Decade 2018-2028 and second half of the 2030 Agenda.

The key building blocks of the Water Action Agenda are:

- 1. Commit to action:** Mobilizing voluntary commitments to action across countries, sectors and stakeholders, aimed at accelerated implementation and improved impact towards achieving SDG 6 and other water-related goals and targets.
- 2. Sustain and scale up implementation:** All stakeholders have a role to play to drive the implementation of the Water Action Agenda and to ensure follow up with partners on what works for replication and scaling up.
- 3. Follow-up and review processes:** Showcasing successes and learning from what works and what does not.

Through the virtuous cycle of committing, implementing and reviewing, and through peer-learning among actors, the Water Action Agenda will enable replication and scaling up of what works and bring successful solutions to global scale.

Overview: Side event “Promoting Water Culture through Learning & Action”

By bringing together business executives from the five largest beverage companies in the world, the **side event “Promoting Water Culture through Learning & Action”** seeks to provide a venue for a collaborative partnership focused on delivering innovative training and building human capacities on pressing water related issues at a large scale.

In line with the UN 2023 Water Conference call to contribute with concrete and measurable contributions that can be implemented immediately, with a view to greater efficacy and efficiency, a key outcome of UNITAR’s side event is the creation of the **“UNITAR Global Water Academy”**.



Created as a multi-stakeholder collaboration with York University (Canada) as Academic Lead, the “UNITAR Global Water Academy” seeks to tackle diverse aspects of the water sustainability crisis by innovating with academic institutions and private sector partners to:

- 1) Promote knowledge transfer and capacity sharing
- 2) Offer a hybrid way of learning
- 3) Develop scientific based water solutions that inform water policies and programmes
- 4) Measure and monitor impact and promote replicability of water management practices
- 5) Facilitate conversations and partnerships to enhance understanding of water issues
- 6) Support capacity building of sustainable management of water especially in distressed areas and for Indigenous communities and marginalized/equity-deserving groups

Agenda

09:20

Guests arrivals

09:30 - 09:40

Roundtable discussion begins

09:30 - 09:35

Welcome by the Chair



Dr. Rhonda Lenton

President and Vice-Chancellor, York University,
Canada

09:35 - 09:40

Opening remarks



H.E. Mr. Nikhil Seth

UN Assistant Secretary-General
Executive Director, United Nations Institute
for Training and Research (UNITAR)

09:40 - 10:40

Moderated roundtable discussion by President Lenton -
Intervention from speakers

[Responses should be less than 5 minutes each]



Mr. Andre Fourie

Global Vice President Sustainability, Anheuser-Busch InBev,
USA



Mr. Jayant Kairam

Vice President Sustainability and Society 2030, Diageo,
United Kingdom



Mr. Ambroise Veillon

Senior Vice President Sustainability and Transformation, Danone,
France



Mr. Wayne Emmerson

Chair and CEO, the Regional Municipality of York,
Canada



Dr. Pedro Oliveira

Dean, Nova School of Business and Economics,
Portugal



Dr. Jennifer Chirico

Associate Vice-President for Sustainability, Georgia Institute of Technology, USA



Ms. Sonia Thimmiah

Senior Director Global Sustainability, Heineken, Kingdom of the Netherlands



Ms. Noemi Bauer

Sustainable Business Director, Pernod Ricard, France

10:40 - 10:45

Wrap-up by the Chair

- o President Lenton announces the UNITAR Global Water Academy
- o Statement for the Presidential Summary of the UN General Assembly

10:45

Roundtable discussion ends and group photo

Attendees

Regional Municipality of York, Canada

1. Mr. Wayne Emmerson, Chair and Chief Executive Officer, the Regional Municipality of York
2. Mrs. Lina Bigioni, Chief of Staff
3. Mr. Stephen Maio, Senior Executive Officer, People Equity and Culture
4. Mr. Michael Rabeau, Director Capital Planning, Delivery, Public Works
5. Mr. Joseph Ryan Silva, Director, Strategies and Partnerships, Community and Health Services
6. Ms. Lois Davies-Hull, Manager, Inclusion Diversity Equity and Accessibility
7. Ms. Sonia Taurasi, Manager, Strategic Engagement and Emergency Management, Community and Health Services

York Regional Police, Canada

8. Chief Jim MacSween, York Regional Police
9. Deputy Chief Cecile Hammond, York Regional Police
10. Superintendent Ryan Hogan, York Regional Police
11. Ms. Karen Richards, Senior Manager, Stakeholder and Government Relations

York University, Canada

12. Dr. Rhonda Leona Lenton, President and Vice-Chancellor
13. Ms. Randy Ijade Maxwell Rodrigues, Chief of Government and Community Relations & Protocol
14. Dr. Amir Asif, Vice-President Research and Innovation
15. Dr. Ali Asgary, Director, CIFAL York
16. Dr. Idil Boran, Associate Director, CIFAL York
17. Mr. Francesco Daniel del Carpio, Senior Programme Engineer, Environment and Climate Change Canada
18. Dr. Susana Gajic-Bruyea, Vice-president Advancement
19. Dr. Julie Lafford, Assistant Vice-president, Alumni Engagement
20. Mr. Skandha Sunderasen, Associate Director, Global Engagement and Strategic Initiatives
21. Ms. Krista Anne Davidson, Director, Communications
22. Dr. Sapna Sharma, Associate Professor, Faculty of Science
23. Ms. Hibaq Gelle, Graduate Student, School of Public Policy
24. Dr. Susan Pamela Rogers Van Katwyk, Investigator, Global Strategy Lab
25. Dr. Satinder Kaur Brar, Professor, Lassonde School of Engineering
26. Ms. Jessica Keeshig, Graduate Student, Faculty of Liberal Arts & Professional Studies
27. Dr. Marina Freire Gormaly, Assistant Professor, Lassonde School of Engineering
28. Dr. Mary Jennifer Bunch, Assistant Professor, School of the Arts, Media, Performance & Design
29. Dr. Dolleen Rosemare Manning, Assistant Professor, QNS, Anishinaabe Knowledge, Language and Culture
30. Dr. Patricia Elaine Perkins, Professor, Faculty of Environmental and Urban Change
31. Dr. Dayna Nadine Scott, Associate Professor, Faculty of Environment and Urban Change

Nova School of Business and Economics (Nova SBE), Portugal

32. Dr. Pedro Oliveira, Dean
33. Dr. Luis Veiga Martins, Chief Sustainability Officer
34. Prof. Antonieta Cunha e Sá, Head, Environmental Economics Knowledge Center
35. Dr. Teresa Font Gonçalves, Sustainability Institute & CIFAL Cascais Coordinator

Permanent Mission of Canada to the United Nations in New York

36. H.E Robert Rae, Ambassador and Permanent Representative of Canada to the United Nations in New York



UN 2023 Water Conference Side Event

Water Security, Disasters, and Resilience in a Changing Climate: Challenges, Opportunities, and Solutions

March 24, 2023, 12:30-13:45, Room B, UN Headquarters

Organized by: York University OneWATER, CIFAL York,
Stockholm International Water Institute, mWater, Global Water
Promise, and Urban Water Toronto Metropolitan University

Background on the event

The impacts of global environmental degradation on freshwater security are felt by communities around the world limiting the availability, equitable access, and quality of freshwater supplies. These impacts are exacerbated by underlying social inequities and environmental stressors, including the increasing number and intensity of disastrous extreme weather events attributed to climate change. This side event aims to highlight some of the key challenges that water insecurity poses to communities in Canada and around the globe, including contextualizing legal, cultural, historical, political, scientific, technological, and Indigenous insights into: why hundreds of Indigenous communities in Canada continue to be unable to access clean drinking water in a country with over 9 million lakes and over 20% of the world's freshwater supply, how to develop sustainable management plans for resources in the Congo Basin, and how to manage the water crisis in the Colorado basin. Moreover, we offer scientific, technological, and natural solutions to improve the resilience of freshwater systems, including the use of UV, advanced oxidation processes, and nanotechnology applied to water purification and water treatment in remote and Arctic communities, machine learning and artificial intelligence to maintain water quality, empowering women and providing education for children to safeguard water supplies, and developing policies around water cooperation across stakeholders and sectors. Our aim is to use our side event as an opportunity to contextualize trans-disciplinary research and lived experiences to shed light on freshwater security against the backdrop of global efforts to boost ambition, transdisciplinary, and cross-boundary action on adaptation to the impacts of planetary stressors on freshwater security.

Water Action Agenda

We will continue to research, learn about, write about, and share our understandings of how ongoing colonialism endangers water security and ecosystems worldwide. We will work towards Indigenous sovereignty and decolonization -- First Peoples' self-determination over their land, cultures, governance, and economic systems – not only as a matter of justice, but for the water. We are also committed to pushing for greater environmental protections in tandem with greater protections for women, including those victimized by transactional sex through water resources. We will raise and champion the voices of the most affected by water insecurity. We will commit to sharing data freely to help address and understand the drivers of water insecurity globally.

Key Issues discussed

- Freshwater is distributed unequally and marginalized communities around the world are vulnerable to inequitable access to clean water.
- Young girls and women in Ghana are forced to trade sex for access to clean water and menstrual products. Addressing global water insecurity inevitably means bringing an end to period poverty.
- Indigenous communities in Canada continue to face water insecurity and boiling water advisories and we discussed some of the underlying issues and challenges.
- The importance of building relationships and collaborations with Indigenous communities to improve access to safe drinking water for Indigenous people in Canada.
- The importance of water governance and a free and open access platform for mapping and monitoring infrastructure, deploying mobile surveys for data collection, managing data, and displaying real time visualizations of data for collaboration and reporting.

Key recommendations for action

We call for all UN water initiatives to lead with water protectors—those who are Indigenous, elders, women, youth, and marginalized peoples. We urge the UN to commit to the following:

- That water be honoured, recognized, and celebrated with opportunities for cultural expressions and ceremonies.
- To follow the leadership of Indigenous peoples, to acknowledge water as a living entity/entities in interrelational accord with all existence, not as a resource for profit and extraction.
- To move beyond rights frameworks, toward responsibilities to protect water.
- To support self-determination of Indigenous peoples, including decisions about issues that may impact their territories and peoples.
- To respect indigenous knowledge. Indigenous peoples should lead research that affects them, and should own and have access to their data and information.

June 2023

Water Security, Climate Change & Resilience

Sharing Experiences from the UN Water Conference, March 2023 in New York

June 15th, 2023

OneWATER



YORK U

TOPIC:

Water Is Life

OneWATER



YORK U

Water Is Life PANELISTS



Jessica Keeshig Martin
Faculty of Liberal Arts and Professional Studies



Ellie Perkins
Environmental and Urban Change, York University



Mary Bunch
Faculty of Art, Media, Performance and Design, York University



Dolleen Manning
Queen's National Scholar of Anishinaabe Knowledge, Language and Culture

Water Security, Climate Change & Resilience

Sharing Experiences from the UN Water Conference, March 2023 in New York

June 15th, 2023

OneWATER



YORK U

TOPIC:

Water Engineering

OneWATER



YORK U

Water Engineering PANELISTS



Satinder Brar
Lassonde School of
Engineering, York
University



**Marina Freire-
Gormaly**
Lassonde School of
Engineering, York
University



Stephanie Gora
Lassonde School of
Engineering, York
University



Shooka Karimpour
Lassonde School of
Engineering, York
University



HIGH-LEVEL POLITICAL FORUM
ON SUSTAINABLE DEVELOPMENT



unitar
United Nations
Institute for Training and Research



YORK 
UNIVERSITÉ
UNIVERSITY

VIRTUAL PANEL

LAUNCHING THE UNITAR GLOBAL WATER ACADEMY

*Humanitarian responses to the emerging water crises
as a result of extreme climatic events*



14 JULY
2023



10:00 am
(NY time)



Aim: This virtual panel will be used as a platform to launch the UNITAR Global Water Academy. The President of the UN General Assembly, Executive Director of UNITAR, and the President of York University will provide opening remarks. A panel will follow on the topic of: "Humanitarian responses to the emerging water crises as a result of extreme climatic events."

Introduction to the Virtual Panel Event

The UNITAR Global Water Academy was announced at the UN Water Conference in March 2023 in New York City as a multi-stakeholder collaboration between the United Nations, academic institutions, and private sector partners, with York University (Canada) as Academic Lead. The three key pillars of the UNITAR Global Water Academy will tackle diverse aspects of the water sustainability crisis: training, research, and knowledge mobilization, ultimately used to inform decision-making and public policy. The UNITAR Global Water Academy aspires to foster training and capacity development, empower community-based networks, weave traditional knowledge, and inspire innovation to co-create sustainable water solutions and ensure equitable access to water for all. By doing so, the UNITAR Global Water Academy will empower policy and decision-makers, government officials, industry, and the communities most affected by water insecurity, with the knowledge, expertise, and capacity to ameliorate the water crisis.



At the launch of our first event, we will host a panel entitled: "Humanitarian responses to the emerging water crises as a result of extreme climatic events." Extreme climatic events, including heatwaves, droughts, and storms, are increasing in frequency and intensity over the past few decades, with consequences for freshwater. For example, extreme climatic events have been associated with changes in freshwater availability and degradation of water quality, including elevated concentrations of nutrients, contaminants of emerging concern, and potential for algal blooms, some of which may be toxic. As humans and wildlife rely on freshwater for life, alterations in the freshwater supply in response to extreme climatic events can have catastrophic impacts, particularly during humanitarian crises. This panel aims to explore the humanitarian responses, challenges, and solutions to alleviating the freshwater crisis, particularly in the face of global environmental degradation and extreme climatic events.



Program and Speakers

Welcome



H.E. Mr. Csaba Körösi (TBD)

President,
UN General Assembly



H.E. Mr. Nikhil Seth

UN Assistant Secretary-General
Executive Director, United Nations Institute for Training and Research (UNITAR)



Dr. Rhonda Lenton

President and Vice-Chancellor,
York University, Canada

Moderator



Prof. Sapna Sharma

Associate Professor and York Research Chair in Global Change Biology,
York University

Speakers

With the panelists, we hope to cover the role of climatic extreme events on freshwater and how this affects Indigenous and African women. We will then move to thinking about solutions, such as governance and AI tools to provide clean water in refugee camps.



Prof. Syed Imran Ali

Dahdaleh Institute for Global Health Research,
York University



Dr. Nicolas Jarraud

Global Water Partnership,
Sweden



Ms. Jessica Vandenberghe

Assistant Dean, Community and Culture,
University of Victoria



Ms. Swani Keelson

Founder,
Global Water Promise

Question and Answer Period

Closing Remarks



UNITAR GLOBAL WATER ACADEMY



SDG SUMMIT
2023 



SIDE EVENT @ THE 2023 SDG SUMMIT

Addressing Global Water Insecurity:

**HARNESSING THE POWER OF BIG DATA,
NOVEL TECHNOLOGIES,
AND INTERNATIONAL COLLABORATION**

 **18** SEPTEMBER
2023

 **15h30-17h00**
(EST)

 UN Headquarters,
Secretariat Building UNCA (S-301)
New York, USA

This hybrid panel will create a dialogue on how new technologies, large open-access databases, and inclusive international collaborations hold the potential to identify the extent and causes of global water insecurity, particularly in regions where data and resources can be limited.

Introduction to the Panel

Over two billion people do not have safe access to clean water. Yet, quantifying the extent of global water insecurity, particularly when incorporating indicators such as freshwater quality, quantity, value, and governance, can be challenging. Paucity of open-access data resources can often be a limitation in assessing progress. Here, we highlight the power of harnessing open data, novel technologies, and inclusive international collaborations to quantify water insecurity around the globe. Continual advances in remote sensing technologies, inclusive global networks, and increased accessibility of open-access data, offer exciting opportunities to further understand freshwaters around the world, including in regions that previously were relatively unexplored or suffer from insufficient access to resources. Remote sensing and open-access data platforms are revolutionizing the field of water sciences by capturing data from lakes and rivers worldwide, and openly sharing data and ideas through collaborations. The movement towards open-access data is essential to democratizing data. By developing inclusive, diverse, interdisciplinary collaborative teams, we will fuel the integration of research disciplines, incorporate new technologies, and spark creative solutions to safeguard our global freshwater resources and work towards a future of equitable access to clean freshwater worldwide.

Proposed Program and Speakers

15:30

Welcoming Remarks



Mr. Nikhil Seth

UN Assistant Secretary-General,
Executive Director, United Nations Institute for Training and Research (UNITAR)



Dr. Amir Asif

Vice-President Research and Innovation
York University

Moderator



Dr. Sapna Sharma

York Research Chair in Global Change Biology
York University



15:40

Proposed Speakers

15:45



Prof. Kaveh Madani

Director
United Nations University Institute for Water, Environment and Health

15:55



Dr. Lina Taing

Senior Researcher, Water and Health
United Nations University Institute for Water, Environment and Health

16:05



Dr. Michael Jasinski

Physical Scientist
Hydrological Science Laboratory
NASA Goddard Space Flight Center

16:15



Dr. Annie Feighery

CEO
mWater

16:25



Prof. Claire Walsh

Professor of Water Security
Newcastle University Centre for Water

16:35



Dr. Kathleen Weathers

Ecosystem Scientist
Cary Institute of Ecosystem Studies

16:45

Questions and Answers

16:55 - 17:00

Closing Remarks



Mr. Alex Mejia

Director, Division for People and Social Inclusion
UNITAR



Global challenges in

**WATER ACCESS,
DEVELOPING
GOVERNANCE
SOLUTIONS,
AND APPLICATIONS
FOR WATER SCARCITY
ALLEVIATION**



13 MARCH
2024



11:00AM (EST)/
5:00PM (CET)



Online

Aim: This panel aims to highlight specific challenges to water access and subsequently identifies strategies for water management and governance to improve universal access to clean water and sanitation.

Background

The impacts of global environmental degradation on freshwater security are felt by communities around the world, limiting the availability, equitable access, and quality of freshwater supplies. These impacts are exacerbated by underlying social inequities and environmental stressors, including the increasing number and intensity of disastrous extreme weather events attributed to climate change.

This panel aims to highlight some of the key challenges that water insecurity poses to communities around the globe, including contextualizing challenges in water access in communities across Kenya, in addition to Indigenous communities.

Disproportionately, women and girls face additional threats of violence without safe access to drinking water and sanitation in their homes. Moreover, we offer water governance solutions to improve universal access to freshwater.

Our aim is to highlight specific challenges to water access and subsequently identifies strategies for water management and governance to improve universal access to clean water and sanitation.

Join us!



Proposed Agenda

Opening Remarks



Mr. Nikhil Seth (Video Message)
UN Assistant Secretary-General,
and Executive Director, UNITAR

Panelists



Moderator: Prof. Sapna Sharma
Professor and York Research Chair in Global Change Biology
York University



H.E. Mr. Joseph Ole Lenku
Governor of Kajiado County,
Kenya



Prof. Deborah McGregor
Associate Professor and Canada Research Chair in Indigenous Environmental Justice,
Osgoode Hall Law School
York University.



Prof. Jida Wang
Associate Professor, School of Earth, Society & Environment, University of Illinois Urbana,
Champaign

Audience Questionnaire

Panel Discussion

Closing Remarks



Prof. Sapna Sharma
Professor, Department of Biology,
York University



UNITAR GLOBAL WATER ACADEMY




SIDE EVENT @ UN WORLD WATER DAY

Addressing Water for Peace:

WATER GOVERNANCE IN CONFLICT AND HUMANITARIAN SETTINGS

 **22** MARCH
2024

 15:00-16:30
(CET)

 Building A, Room V,
Palais des Nations,
Geneva, Switzerland

Aim: This panel will explore the multilateral and environmental drivers that amplify water insecurity in the face of conflict and disasters, in addition to offering capacity-building solutions to improve water diplomacy, governance, and ultimately safe access to communities ravaged by war and disasters.

Background

Water is intrinsically linked to conflict. Inequitable access to safe drinking water is further exacerbated within a rapidly changing climate as potable water sources become scarcer. Global environmental change, including climate change and alterations in land use, is driving water insecurity across rural, agricultural, and urban settings. Disruptions to food production and urban development arising from water scarcity can be a source of great tension and potential conflict when access to essential resources is limited. Further, water insecurity may intensify political and social tension, particularly during times of crisis. Working together across borders and disciplines to safeguard our freshwater supply during conflict and disasters, provides opportunities to not only enhance water security, but also foster climate action, food security, environmental sustainability, and ultimately, peace.

In this panel, we discuss multilateral and environmental drivers that amplify water insecurity, in addition to offering capacity-building solutions that improve water governance, particularly for those individuals who are most marginalized. Transdisciplinary collaboration is critical to ‘future-proof’ water governance by developing policies that improve water diplomacy, climate resilience, and transboundary cooperation.

UNITAR World Water Day Event

In its first annual celebration of the inauguration of UNITAR’s Global Water Academy, York University, and partners convene for World Water Day. This event will serve to engage wider stakeholders through the role of capacity building by creating a collaborative dialogue on the year’s thematic area of ‘**Leveraging Water for Peace**’ in relationship to training and education as a key solution. In promotion of the ethos of World Water Day, UNITAR will host the ceremony of the UNITAR Global Water Academy platform, and invite participants to engage directly with the shared United Nations, and academic resources that are providing training to upskill and change the blue economy we live in today.



Key messages for World Water Day 2024



Water for Peace



Water can create peace or spark conflict

When water is scarce or polluted, or when people struggle for access, tensions can rise. By cooperating on water, we can balance everyone’s water needs and help stabilize the world.



Prosperity and peace rely on water

As nations manage climate change, mass migration, and political unrest, they must put water cooperation at the heart of their plans.



Water can lead us out of crisis

We can foster harmony between communities and countries by uniting around the fair and sustainable use of water – from United Nations conventions at the international level, to actions at the local level.

“Without effective management of our water resources, we risk intensified disputes between communities and sectors and even increased tensions among nations. So far, water has historically proven to be a catalyst for cooperation not for conflict”.

Antonio Guterres
Secretary-General of the United Nations



Agenda

15:00

Opening Remarks



Mr. Alex Mejia
Director, Division for People and Social Inclusion
UNITAR



Dr. Rhonda Lenton
President and Vice-Chancellor
York University

15:15

Panel Discussion: Peace and Prosperity in Water Management



H.E. Amb. Sabri Bachtobji
Permanent Representative of Tunisia
to the United Nations Office at Geneva



H.E. Amb. Walid Khalid Obeidat
Permanent Representative of Jordan
to the United Nations Office at Geneva



Mr. Federico Properzi
Chief Technical Advisor,
UN-Water



Dr. Sangam Shrestha
Dean of the School of Engineering
and Technology,
Global Water Sanitation Center,
Asian Institute of Technology



Dr. Tamas Palvolgyi
Associate Professor,
Ludovika University of Public Service



Mr. Alan AtKisson
Executive Secretary,
Global Water Partnership



Dr. Rumina Dhalla
Director, Institute for Sustainable Commerce
Associate Professor, Organization Studies
and Sustainable Commerce
University of Guelph
Special Advisor, UNITAR

16:15

Questions & Answers Period

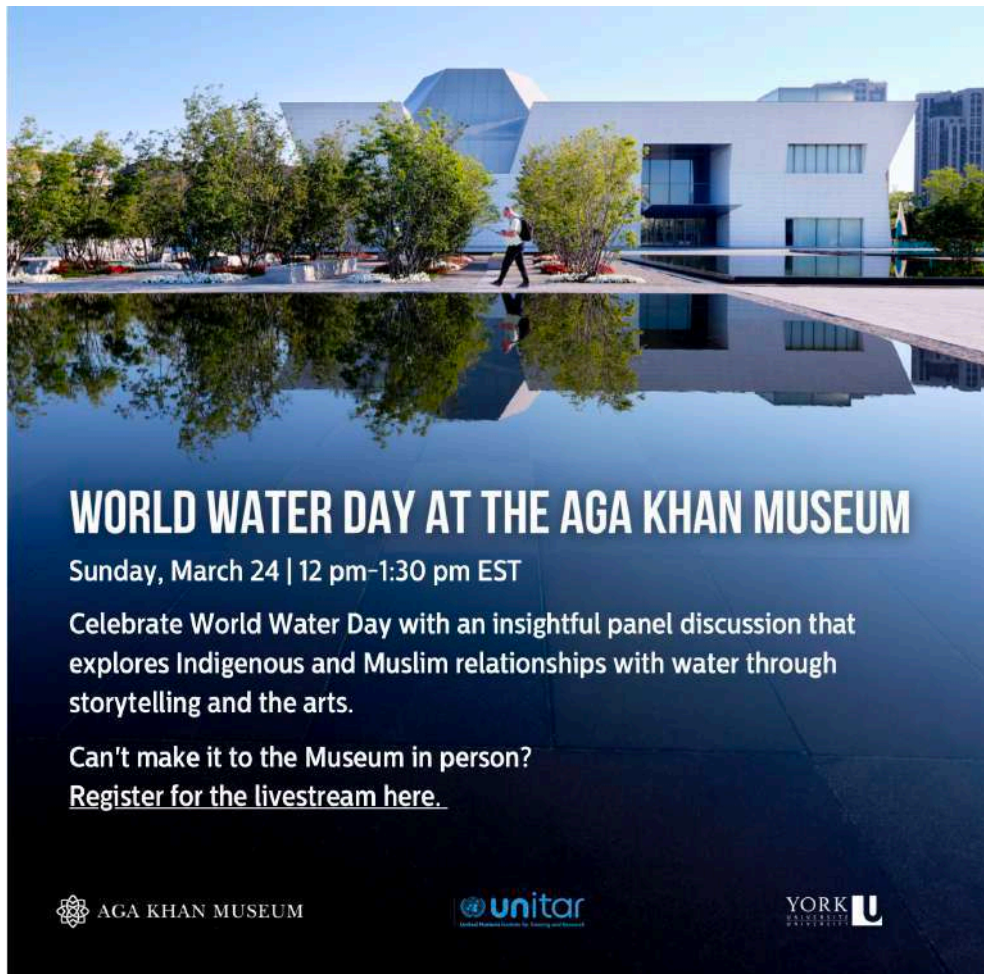
16:30

Closing Remarks



Dr. Amir Asif
Vice President,
Research & Innovation,
York University





World Water Day – Aga Khan Museum, Toronto - Exploring Traditional Indigenous and Islamic Relationships to Water Through Storytelling and the Arts

Date: March 24, 2024

Audience – 140 attendees online and in person.

- 11:00 am: Traditional Indigenous Water Ceremony with Grandmother Helena Joanne Keeshig (Bzaunibikwe)
- 12:00 pm: Panel discussion in the Auditorium
- 3:30 pm: Dance Performance and Artist’s talk, Sashar Zarif
- All day: Projection Installation and Virtual Reality Exhibit in the Atrium and Bellerive Room entitled: *Emerging from the Water*. Co-created by Professor Dolleen Manning, Queen’s University and Professor Mary Bunch, York University.

Agenda for the Panel Discussion

Opening Remarks:

Dr. Ulrike Al-Khamis, Chief Executive Officer and Director, Aga Khan Museum

Dr. Rhonda Lenton, President and Vice-Chancellor, York University

Mr. Alex Mejia, Director, Division of People and Social Inclusion, United Nations Institute for Training and Research

Panel:

Moderators: **Dr. Sascha Priewe**, Director of Collections and Public Programs, Aga Khan Museum and **Dr. Usman Khan**, Chair of the Department of Civil Engineering, Lassonde School of Engineering, York University

Elder Mona Stonefish, Doctor of Traditional Medicine and an international activist for peace, Indigenous, women's and disability rights. She is Senator of the Anishinaabemowin Teg – language preservation, a Keeper of Wisdom, and a Grandmother Water Walker.

Grandmother Helena Joanne Keeshig, Anishnaabe name Bzaunibikwe

Prof. Dolleen Tisawii'ashii Manning, Department of Philosophy, Queen's University, an interdisciplinary artist, scholar, and member of Kettle and Stoney Point First Nation

Ms. Jessica Keeshig-Martin, Faculty of Education, York University. Jessica is Anishnaabekwe and a member of the Chippewas of Nawash Unceded First Nation. Her research focus is in Anishnaabe philosophies and practices in earth care-taking systems.

Mr. Sashar Zarif, an internationally renowned performing artist, educator, and researcher. His work is steeped in the artistry and history of traditional, ritualistic, and contemporary dance and music of the Central Asian, Middle Eastern and North African regions, focusing on the Sufi and Shamanic practices within Muslim societies and beyond.

Question and Answer Period

Closing Remarks:

Dr. Amir Asif, Vice-President Research and Innovation, York University

Dr. Sascha Priewe, Director of Collections and Public Programs, Aga Khan Museum

Development of Online Training Program

The Online Training Program will be developed in Year 2. However, in Year 1, we began designing the structure of the UGWA Flagship Course on Sustainable Development Goal 6, in addition to the development of diverse course offerings.

For the UGWA Flagship Course on United Nations Sustainable Development Goal 6: “Clean Water and Sanitation for All”, we have planned 9 modules with the following topics:



Additional proposed courses for UGWA online platform:

- March 2024, initiated development of a selection of short-format courses that will leverage UGWA member expertise and build out UGWA course offering
- Topics of these courses include:
 - The cryosphere and global freshwaters
 - Controls on water quality in freshwater ecosystems
 - Water sustainability and the hydrogen economy
 - Drinking water sustainability
 - Humanitarian water engineering
 - Indigenous relationships to water
 - Governance for transboundary freshwater security
 - Water, sanitation, and hygiene (WASH)
- 3-5 courses targeted for launch in summer 2024



water
ACADEMY



www.globalwateracademy.org