



WORLD
METEOROLOGICAL
ORGANIZATION



WMO HydroHub Youth Symposium

12 October 2022

Final Report



With the participation of:





Table of Contents

Opening.....	3
Introduction	3
Segment 1: Sustainable water resources management and the role of youth	3
1 st Panel Discussion	3
2 nd Panel Discussion	7
Segment 2: Role of water monitoring in delivering hydrological services	12
Presentations	12
Segment 3: Crowdsourcing and career perspectives in the field of water.....	13
Presentations	13
Testimonials from young water professionals.....	13
Segment 4: Youth Statements	14
Closing.....	14
Participants Statistics	15
Evaluation Survey.....	17

Opening

Beatrice Giovinazzo (World Meteorological Organization) gave her opening remarks. In her speech, she presented the objectives of the Symposium. Also, she highlighted the importance of youth being part of decision-making processes around sustainable water resources management, and of taking immediate action to ensure access to water and sanitation for future generations worldwide.

Introduction

Lindsey Blodgett (Water and Climate Coalition Youth Leader) gave her introductory remarks encouraging young people to raise their voice, share innovative ideas and proposals, and insist on pushing their messages when advocating for the water sector. The introductory video by Lindsey Blodgett is available [here](#).

Segment 1: Sustainable water resources management and the role of youth

1st Panel Discussion

Noémie Plumier from the World Youth Parliament for Water (WYPW) moderated the 1st Panel Discussion.

- **Claudia Taboada** (Ministry of Foreign Affairs, Dominican Republic) gave her insights on how youth can influence decision-making and help to achieve the goals of water and sanitation. She shared her personal experience in going from being an activist to being in the position of taking important decisions. The main highlights from Claudia's intervention are:
 - When she first started being an activist in the water sector there were not many spaces allowing youth meaningful participation. Nowadays we are certainly progressing in creating these spaces for youth and for their meaningful participation in decision-making processes.
 - Youth need to be positive and patient on the changes they can make.
 - It's not easy to increase youth participation in discussion forums and have their voices heard, or to have budgeting for youth but it's possible with preparation and determination.

- What makes youth different from older generations is that we, the youth, are our best allies.
- **Daniella Bostrom Couffe** (UN-Water) gave her insights on how the energy of youth can be harnessed for a once-in-a-generation opportunity at the UN 2023 Water Conference. The main highlights from Daniella’s intervention are:
 - The psychological concept of “tension of the opposites” can be useful when considering how youth spark both ‘shame’ and ‘motivation’ in the older generation. As an example, Greta Thunberg’s speech at the UN in 2019 created a feeling of “shame” in older generations. At the same time, her initiative to demonstrate every Friday generated “motivation” within adults to do better for future generations.
 - What this example of opposites shows is that youth remind the older generation of what they are not and what they could be. In a way, it displays a mirror of shortcomings and potential at the same time.
 - To generate change, it’s important not to fall into either of these feelings, as they both result in passiveness, but rather to hold the tension of these two opposite feelings to harness the energy that can be found when the balance is struck.
 - To harness the youth energy in view of the UN 2023 Water conference, we can focus on three types of energy: the energy around the dissatisfaction (telling the stories of the unacceptable and showing what we’re doing); the energy around being heard and having a conversation; and the energy of creativity.
 - Youth need a space to share their ideas.
 - Youth need to be listened to with empathy and with the openness that holds the tension of the opposites of “shame” (for our shortcomings) and “motivation” (for our potential).
- **Fabrice Fretz** (Swiss Agency for Development and Cooperation) gave his insights on how development agencies can help create the conditions for youth to express their full potential. The main highlights from Fabrice’s intervention are:
 - Development agencies have a responsibility to empower youth, because young people represent around half of the world population and live mostly in developing countries.



- Youth in developing countries are usually the primary victims of water-related challenges, but they're not yet an integral part of development efforts.
 - There are structural barriers which youth face in the water sector, such as donors and policymakers' distrust, cultural bias and administrative procedures that generate constraints and lock the potential of many young people to drive change in their communities and countries.
 - The way to overcome these barriers from a development agency's point of view is by attracting youth in the water sector, both business- and political-wise, offering entrepreneurial support, capacity building, providing support to youth organizations, and giving youth a voice.
- **Elysa Vaillancourt** (International Secretariat for Water (ISW)) explained how we can best collaborate to foster synergies and collaboration between youth organisations and civil society. The main highlights from Elysa's intervention are:
 - The ISW has been working with youth for over three decades, and in the past its main objective was to densify the youth movement in the water sector. Nowadays there are plenty of youth organizations involved in the sector, and the challenging part is to bring their voices together to collaborate and to exchange.
 - Youth need to embrace the power of collectivity to have a unified stronger voice.
 - Alongside the Swiss Agency for Development and Cooperation and the Executive Secretariat of the 9th World Water Forum, the ISW launched the Global Youth Movement for Water, to create a space to better collaborate and build synergies between youth organizations. This Movement now counts over 150 youth-led organisations.
 - The ISW is working on three pillars on the road towards the UN 2023 Water Conference: mobilizing and empowering youth; influencing decision-makers; representing new voices and priorities during the conference itself.
- **Theresa Schutz** (Inter-American Development Bank) introduced the HydroBID Support Center for Latin America, which is working to create opportunities for young professionals and students as a tool to ensure the sustainability of the efforts to guarantee water security in the Latin American and Caribbean region. The main highlights from Theresa's intervention are:



- As part of its commitments to assist countries, the IDB has developed a set of simulation tools for water resources planning and management: a water balance model; a water allocation model; and a third tool for flood modeling, infrastructure, design, and urban drainage.
- The HydroBID Support Center was created in 2016 to provide free access to the above-mentioned models and support countries in activities related to water-resources management.
- One of the main challenges faced in the region when engaging with youth is the lack of capacities. To address this challenge, the Center not only supports member countries with capacity development, but also students and young professionals which are agents of change and agents of sustainability.
- To ensure active youth participation in the water field we need to create an enabling environment and employment opportunities. For this, the Center has been working in collaboration with universities in the region to provide youth with trainings, learning opportunities and feedback tools.
- The Center created a community of practice where students and young professionals can collaborate.
- **Natasha Carmi** (Geneva Water Hub) explained how the Geneva Water Hub engages with youth on the advancement of the agenda of water for peace. The main highlights from Natasha's intervention are:
 - The role of youth is not yet properly recognized in most international discussions.
 - Youth are a key partner in implementing the water and peace agenda.
 - The Geneva Water Hub signed a charter with the ISW and the WYPW to formalize a collaboration on youth engagement, and jointly organized a series of intergenerational dialogues to foster youth engagement on the thematic of water and peace.
 - Within the framework of the Geneva Peace Week, the Geneva Water Hub participated in dialogues with the youth around topics related to peace and conflict prevention e.g. water in contemporary warfare from a civilians perspective; fostering water cooperation; the role of water in environmental peace building; how generations from local communities could drive peace and cooperation.

- Within the research and education field, the Geneva Water Hub organizes summer courses and prioritizes scholarships for professionals below thirty-five years of age. Also, it engages in mentorship of young professionals.

After the panel discussion, a Q&A session with participants was carried out. The main point highlighted is that despite the efforts made, young people still face difficulties in accessing opportunities and high-level discussions because of entry-level barriers, such as lack of sponsorships (funding) and accreditation.

Finally, Noémie Plumier asked to the panellists the question *“Could you please tell us something you have learnt or have been impressed from youth recently and what advice would you give to them?”*. The main highlights from this discussion are:

- **Daniella Bostrom** introduced the IT Global initiative and explained that it inspired her because the young people behind it are unafraid to do new things and they recognize each other's strengths, complementing each other in carrying out different tasks. She advised the youth to be unafraid and stepping out of the box.
- **Natasha Carmi** mentioned that in the first intergenerational dialogue she moderated, she was impressed by a young woman that said *“We are not future leaders. We are today's leaders”*. Also, she is impressed by youth ability to mobilize quickly, to stay true to their values, their level of maturity and their geopolitical understanding. Her advice to youth is to gain skills and knowledge, and anchor their positions with evidence, and stay the course.
- **Fabrice Fretz** introduced the story of Annabelle Rayson, Canadian student who won the Stockholm Junior Water Prize for her project. His advice to her would be to reach out to her government to be present in different global policy forums and not being confined to a one-time event, allowing her to go from problem solving to real transformation.

2nd Panel Discussion

Rokhaya Ba from the World Meteorological Organization (WMO) moderated the 2nd Panel Discussion.

- **Ahmed Fathy** (Youth Loves Egypt (YLE) Foundation) gave his insights on raising awareness among youth when it comes to water and climate resilience issues, and on how to increase their engagement. The main highlights from Ahmed's intervention are:
 - YLE Foundation is working with youth at the local level.



- YLE Foundation started to raise awareness on water-related issues more than 7 years ago, carrying out several activities including clean-up campaigns. Other initiatives it carries out at the local and national level in Egypt are e.g. the Green Churches Project and the Environmental Pioneers Program aimed at raising awareness on climate issues, water and biodiversity.
- YLE Foundation led the largest clean-up campaign ever in the world in thirteen different locations (governorates of Egypt) acting as facilitator.
- The aim of all of these activities is not only the short-term achievement (e.g. cleaning a location) but changing the people's long-term behaviour and spread awareness.
- Both youth and big organizations need to be involved to create change.
- **Michel Frem** (UNESCO Groundwater Youth Network (GWYN)) gave his insights on the importance of groundwater monitoring, and the crucial role it has when it comes to sustainable management of water resources from a youth perspective. The main highlights from Michel's intervention are:
 - The GWYN main goal is to enhance youth engagement and address water security issues.
 - Some of the objectives of GWYN are e.g. create a network of groundwater ambassadors of change; empower young groundwater professionals and support their development; involve youth in decision-making processes; promote youth participation in international groundwater activities.
 - GWYN carried out a survey collecting feedback on groundwater monitoring from young people worldwide. More than 100 responses were collected from young professionals in 45 countries. The data collected were related to monitoring scale, availability of groundwater monitoring guidelines, youth involvement, most important groundwater variables and most pressing groundwater-related issues (according to the opinions of the youth).
 - The study showed that the main issues reported by youth are groundwater level decline and groundwater contamination, noting that 73% of the young respondents mentioned groundwater quality as one of the most important groundwater variables to be monitored (while this is an overlooked issue by several decision/policy makers). The survey also showed that, in many countries, there is lack of transparency in sharing information to different stakeholders.



- The youth who took part into the survey made their suggestions on the importance of groundwater education and training; modernizing groundwater monitoring; involving all stakeholders; advocating for more funding in the groundwater sector.
- GWYN will keep working to empower youth and unlock their potential to create a better future for all.

The presentation of Michel Frem is available [here](#).

- **Jan Kairrel Guillermo** (United Nations International Federation of Youth for Water and Climate (UN1FY)) focused on the role of organizations in including the voices of those who are off grid the water and climate advocacies. The main highlights from Jan's intervention are:
 - The role of youth organizations is to create platforms, spread information, and create opportunities.
 - Youth organizations need to identify the different gaps, challenges, and issues that need to be addressed in different ways in various countries, because we can't just create a top-down approach to be applied in the same way everywhere.
 - UN1FY, which is mandated to consolidate youth inputs for the UN 2023 Water Conference, created a survey collecting responses from around four thousand young people worldwide, which showed how perceptions of young people differ from region to region.
 - There are different stages of youth advocacies, e.g. being aware, participate, taking action, being in leadership positions. Addressing these kinds of stages requires different policies, projects, programs, and activities.
 - The starting point for youth organizations to involve young people should be sharing information and knowledge and raising awareness.
 - Governments, funding agencies, NGOs should be ready to provide opportunities to capacitate youth, let them lead other young people and implement their own projects, programs and activities.
- **Carolina Tornesi MacKinnon** (World Youth Parliament for Water (WYPW)) gave her insights on how to promote meaningful participation of young people in the climate and water world, and high- and low-level events. The main highlights from Carolina's intervention are:



- To have meaningful participation of young people in the climate and water world, organizers and leaders must have a holistic, outreach-oriented and capacity building approach.
- Young people should be included from start to finish: from the conception, to building a strategy, to the implementation and through the end. This facilitates legitimate intergenerational partnerships and collaborative thinking.
- Young people need to be supported by all the organizations they are related to, being them universities, employers, or youth networks.
- Young people need to be enabled to participate in events, in terms of e.g. being supported when leaving their workplace or their studies for one or two weeks.
- It's very difficult for youth to join already established groups. These groups should support young people to make them feel included and valued and help them in adapting to the norms of the new space they're being added to.
- Youth should be included because there is a serious urgency to take bold action on water-related matters. Also, it is important to have diversity in age, gender, ethnicity, etc. in water-related discussions.
- **Isabela Espíndola** (International Water Association (IWA)) gave her insights on how to prepare young water professionals to face challenges in the water sector. The main highlights from Isabela's intervention are:
 - The IWA is a membership-based association, where scientists, researchers, technology companies and other stakeholders involved in water management from all over the world came together to strive for a world in which water is wisely, sustainably, and equitably managed.
 - Our society faces great challenges in achieving a sustainable and water-wise world, and these challenges are transboundary, transgender, and transgenerational. This means that they are independent from borders, gender and generations.
 - One challenge in the sector is the lack of adequately skilled staff, able to meet the growing demand for services. In low-, middle-, and high-income countries, there is a common need to attract and retain qualified personnel to design, view, operate, manage, and maintain water resources and wastewater services.



- It's important to attract and educate young water professionals. Also, youth should be assisted in fulfilling their potential through capacity development, investments, consistency, and stakeholders' participation.
- Stakeholder participation is at the core of effective water management and governance, and youth is among the stakeholders. If we are aiming to solve the challenges in our society, we need to have youth on board at all times and levels.

After the panel discussion, a Q&A session with participants was carried out. The main point highlighted by participants in this section is that young people need to connect to youth networks/organizations to make their voices heard. Also, they need to focus their efforts not only on the UN 2023 Water Conference but on the overall water agenda.

Finally, Rokhaya Ba asked the panellists the question: *"How do you think your network/foundation/association can contribute to sustainable water resources management from a youth perspective?"*. The main points highlighted in this discussion are:

- **Ahmed Fathy:** YLE Foundation is leading the Egyptian Coalition for Climate Change and will participate in COP 27 with around 20 youth delegates. Also, YLE Foundation is launching a project on raising awareness on water security, to collect ideas from young people to be funded as start-ups.
- **Carolina Tornesi MacKinnon:** WYPW can help bringing like-minded people together in a friendly and learning environment, to work hand in hand on projects or plans that they come up with as a team or independently. WYPW provides a place where the youth voice can be heard and projected. WYPW also works with other youth groups to amplify their voices.
- **Michel Frem:** GWYN is organizing the Groundwater Youth Forum, in which several topics will be discussed, such as: groundwater education, financing, capacity development and readiness for the job market. Covering all these topics and giving the floor to youth to share their ideas is a step further to highlight the importance of groundwater globally, and its relation to surface water. There will also be a youth declaration that will feed into the UN 2023 Water Conference, which is an indirect way to contribute to the discussion.
- **Isabela Espindola:** IWA is incorporating the youth perspective in all its activities. One of the IWA initiatives is the IWA Steering Committee, which includes young professionals under 35 years old. The Committee is enhancing IWA's way to engage new generations of water leaders, supporting the professional development of members and activities that the Secretariat has at the national and international



level. Another group is the IWA Country Chapter, a voluntary network of young water professionals at national level that endorses the vision and mission of IWA. Under the guidance of these two groups IWA is investing in youth professional and leadership development. IWA is also providing professional development and leadership opportunities and collaborating with sector organizations to enhance support for new emerging talents.

- **Jan Kairiel Guillermo:** UN1FY is pushing Member States and International Organizations on the governance side and working with partners and different UN Organizations to support youth.

Segment 2: Role of water monitoring in delivering hydrological services

Presentations

- **Nick Everard** (UK Centre for Ecology & Hydrology) gave a presentation on the importance of water data to address environmental challenges, in which he explained why hydrometry is important given the current global water crisis. The presentation is available [here](#).
- **Salvador Peña Haro** (WMO HydroHub Think Tank) presented on “Innovative methods of doing hydrology and the role of youth”. In his presentation he spoke about innovative water monitoring methods and the role of the WMO HydroHub, why it is important to collect data and involve young people in water monitoring and how this can be done. The presentation is available [here](#).
- **Tania Jeannette Llamas Franco** (Group on Earth Observations) gave a presentation on “GEO AquaWatch and its Early Career Society”. She explained how young people can get involved in GEO AquaWatch activities and opportunities. She talked about the GEO AquaWatch initiative, its main goals and how the people can get involved through the working groups, trainings, workshops, seminars and other activities related to water data and monitoring. She also explained how GEO AquaWatch is supporting projects related to water monitoring at a global scale. Finally, the Early Career Society was introduced highlighting the activities that are gathering young professionals around the world, to work together for water management and decision making. The presentation is available [here](#).



Segment 3: Crowdsourcing and career perspectives in the field of water

Presentations

- **Mirjam Scheller** (CrowdWater, Switzerland) gave a presentation on “Citizen Science in Hydrology – The CrowdWater Project”. Mirjam spoke about the project “CrowdWater” and the smartphone app for water monitoring, its functioning and how young people can access it. The presentation is available [here](#).
- **Rajaram Prajapati** (SmartPhones4Water (S4W), Nepal) presented on “SmartPhones4Water – Leveraging Citizen Science, Young Researchers and Mobile Technology for Sustainable Water Monitoring”. Rajaram explained the functioning of the project S4W in collecting water data, and how citizens get involved from all over the world. The presentation is available [here](#).
- **Axel Laurel Tcheheumeni Djanni** (Cheikh Anta Diop University of Dakar (UCAD), Senegal) gave a presentation on “Career prospects for hydro(-geo)logists in West Africa: Opportunities and challenges for recent graduates”. He spoke about the Hydrogeology Program at UCAD, highlighting opportunities and challenges students face, and proposed recommendations. The presentation is available [here](#).
- **Graham Jewitt** (IHE Delft Institute for Water Education, Netherlands) gave a presentation on “Careers perspectives in the field of water”, focusing on future careers in the water field and key career development points. The presentation is available [here](#).

Testimonials from young water professionals

In this segment, three young professionals gave their testimonials on their water-related professional journey.

- **Maria Mercedes Kuri** (UN1FY) described her background experience highlighting the importance of having access to opportunities, as well as discovering oneself true passion and not being influenced by financial constraints when undertaking a study path.
- **Awa Diagne** (Cheikh Anta Diop University of Dakar, Senegal) spoke about her academic background and the trainings and learning opportunities she had. She also highlighted the challenges that students in Senegal might face (e.g lack of materials for field work, lack of field practices, lack of support for student integration in

companies etc.). Finally, she made some proposals for improvement. The presentation is available [here](#).

- **Tania Imran** (FutureWater, The Netherlands) spoke about her journey in the water field highlighting the fact that the water sector is huge, and all its components are equally critical. Sanitation, governance, protection, or sustainable consumption are all intertwined, and working in one of these sectors means helping to progress in the others as well.

Segment 4: Youth Statements

In this section, Noémie Plumier introduced the objectives of the Youth Statements and gave an overview on the road to the UN 2023 Water Conference.

Claudia Ruz Vargaz (International Groundwater Resources Assessment Centre (IGRAC)) introduced the proposals for the three youth statements, the inputs needed from the participants during the discussions, and the modalities of breakout groups.

The in-person and online participants were split in three Breakout Groups, each one focusing on a specific topic:

1. **Breakout Group 1:** Youth engagement in crowdsourcing and citizens science (moderated by Claudia Ruz Vargas).
2. **Breakout Group 2:** Youth engagement in decision-making processes around water resources management (moderated by Jan Kairrel Guillermo).
3. **Breakout Group 3:** Youth role in innovation for water monitoring through academia and careers (moderated by Noémie Plumier).

Each group carried out a discussion on the proposed statements, which were further edited and finalized according to inputs and suggestions received from the participants.

The final Youth Statements from the WMO HydroHub Youth Symposium will be used as a contribution to youth inputs at the UN 2023 Water Conference, COY17/COP27 and the UN-Water Summit on Groundwater 2022.

The final Youth Statements are available [here](#).

Closing

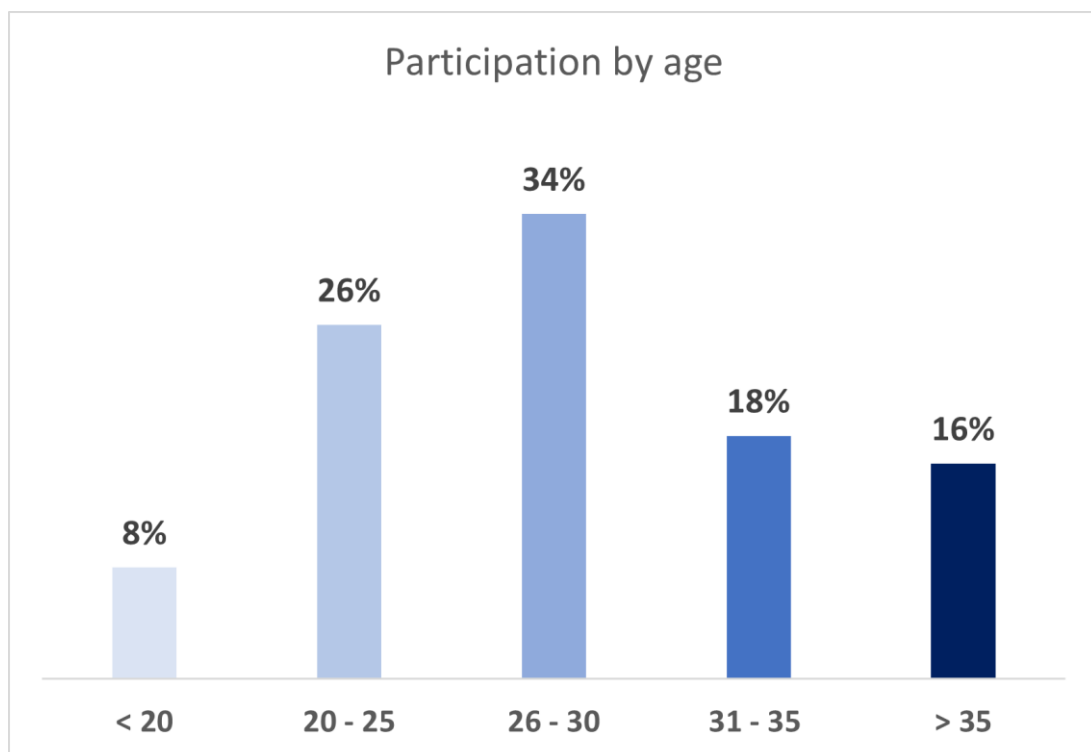
Sophia Sandström (World Meteorological Organization) gave her closing remarks highlighting the outcomes of the event and the milestones achieved during the day, namely:

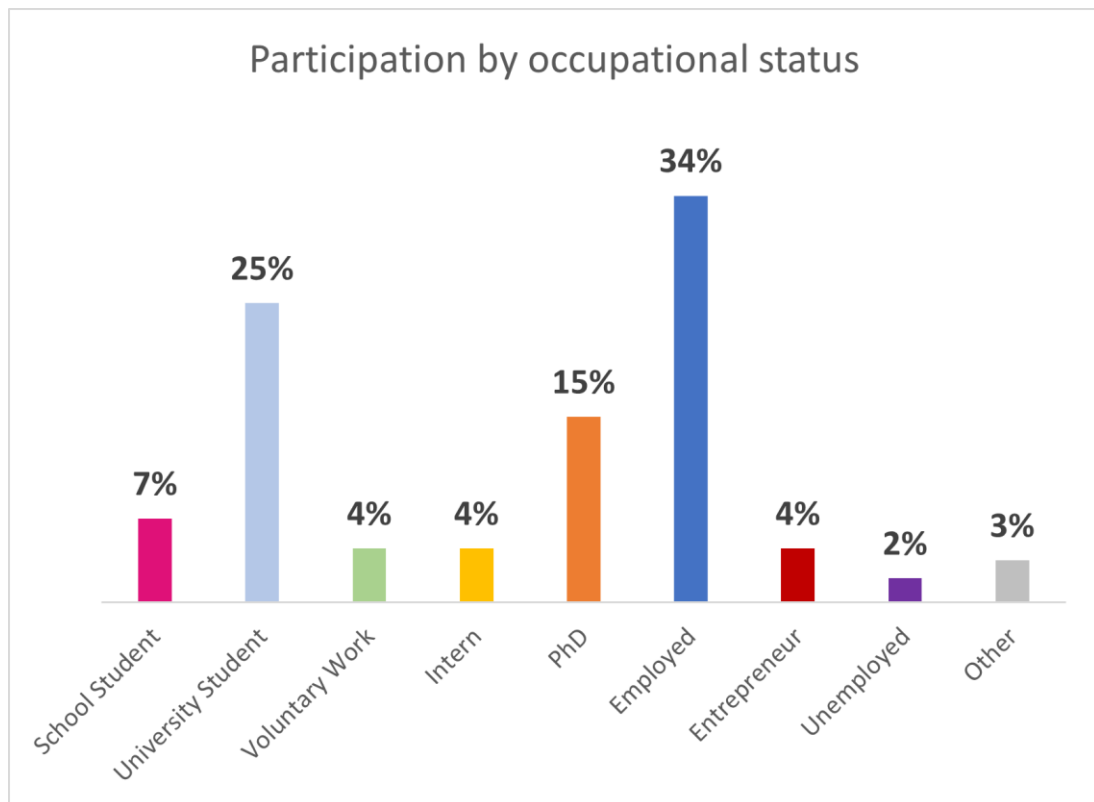
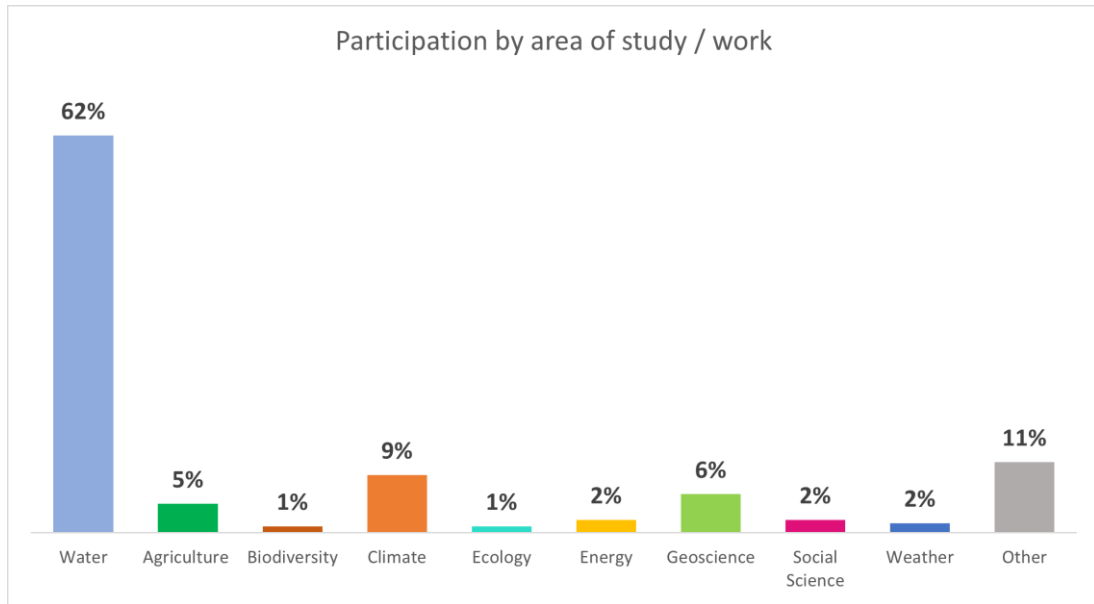
- Raising awareness among youth regarding their role on sustainable water resources management, water monitoring, and delivery of hydrological services, what does this mean for their future, safety and well-being but also for their career opportunities.
- Preparing the Youth Statements, which highlight some key aspects on youth engagement in crowdsourcing, innovation for water monitoring, and decision-making processes around water resources management.

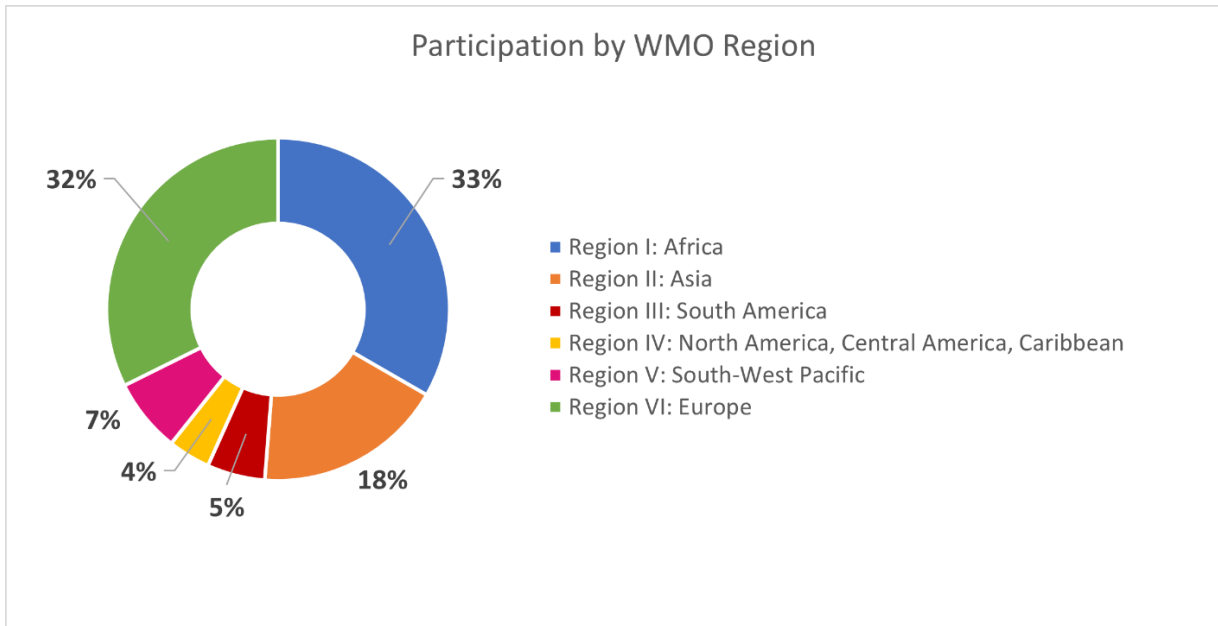
Sophia proceeded explaining that the WMO HydroHub will strive to support youth and continuing the dialogue with young people. Sophia concluded stating that youth perspective and contribution are a source of inspiration.

Participants Statistics

Around 270 participants attended the WMO HydroHub Youth Symposium, online and in-person. The participants' statistics are available below.

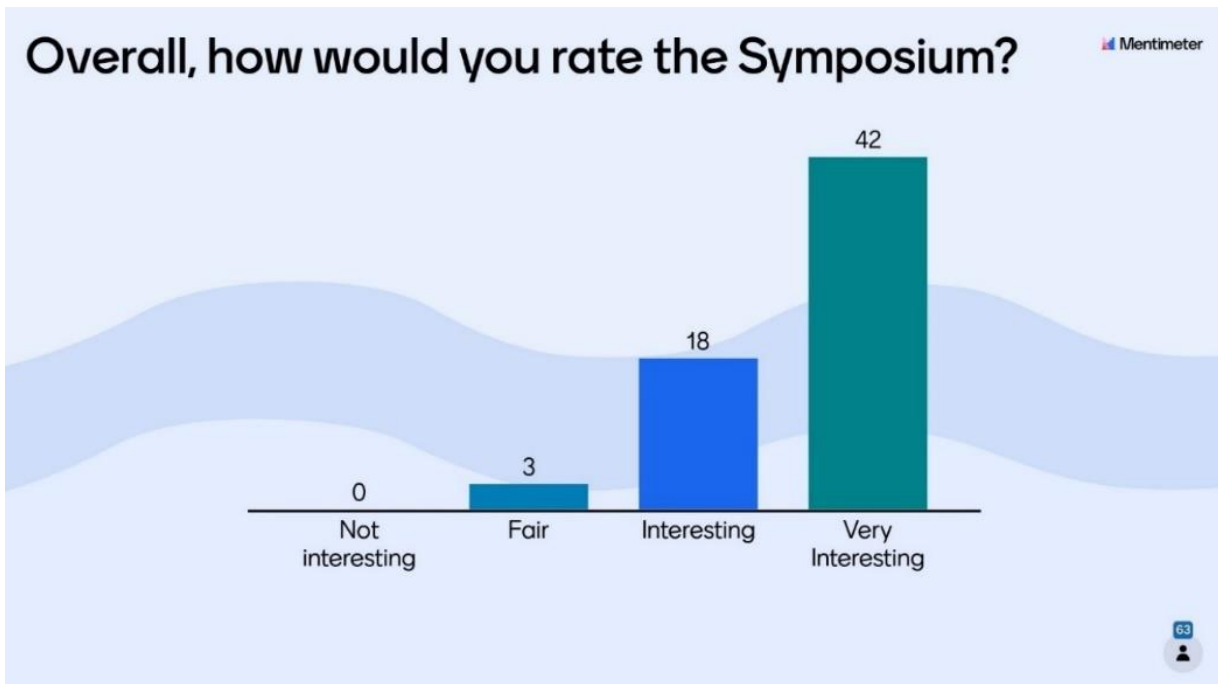


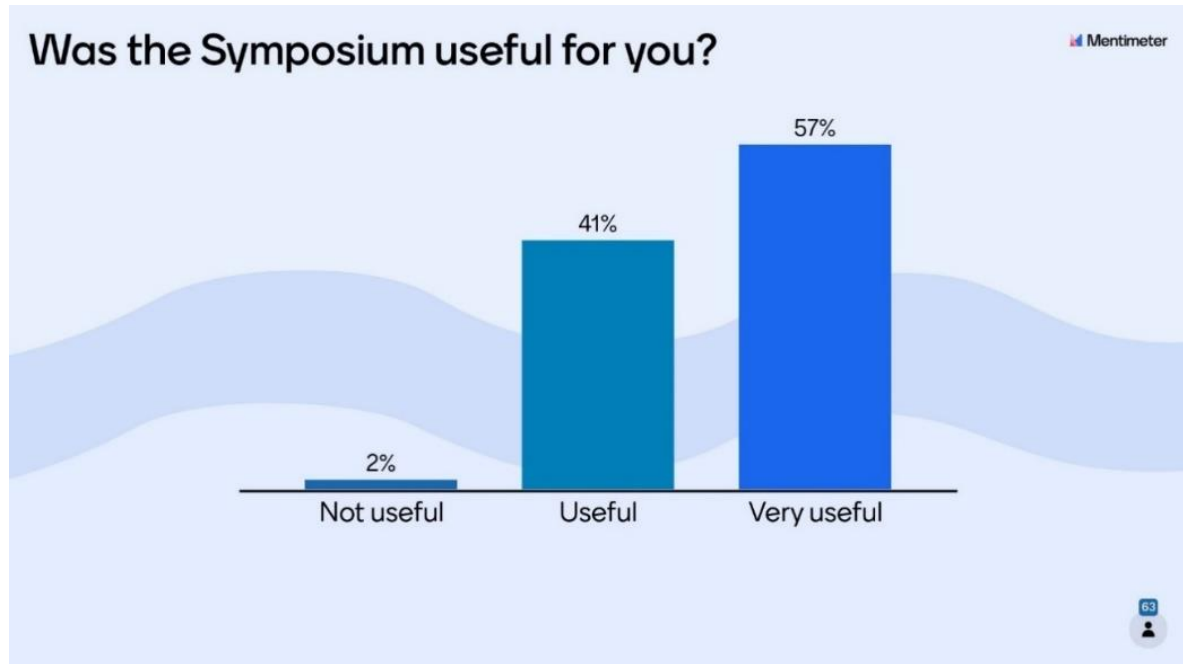




Evaluation Survey

Following the WMO HydroHub Youth Symposium, an evaluation survey was sent to all participants. The results of the survey completed by 63 participants are shown below.





The participants were also asked to provide their suggestions on what types of youth events would they be interested in. Some of the suggestions are as follows:

- Youth engagement events on specific topics (e.g. groundwater, hydrogeology, water contamination, wastewater, water resources management);
- Youth events on gender equality;
- Events on leadership and youth inclusion in decision-making;
- Events on SGDs and youth contribution;
- Events on climate change and youth perspective;
- Events for youth to identify opportunities e.g. for funding, internships and careers;
- Water hackathon;
- Youth Innovation on WASH;
- GIS and remote sensing applied to water monitoring / agrometeorology and synoptic data for youth;
- Events where young professionals can share their experience on how they entered the water sector;
- Events on innovative, community-based, nature-based solutions across the regions;
- Capacity building events including trainings, workshops and non-formal education;



- Events that bring funders and youth together;
- Events where young professionals can share their research projects, develop their ideas for improving the water and sanitation sector in their localities and have qualitative follow-up from experts;
- Experiences of youth in implementing nature-based solutions through involvement with the local communities for climate-resilience;
- Networking multidisciplinary events to showcase projects and meet people with different backgrounds;
- Interactive online/in-person sessions around water diplomacy, policy making and climate justice;
- Events on the role of youth in local resource management / youth actions to reduce the pressures of climate change on water management and agricultural production;
- Youth engagement events for energy transition.