



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

9<sup>TH</sup> WORLD WATER FORUM DAKAR 21 TO 26 MARCH 2022 INTERNATIONAL CONFERENCE CENTER ABDOU DIOUF, DAKAR

# **Swiss Pavilion Program**

Innovation & Technologies Peace & Cooperation Youth & Inclusion

## Schedule

Mon 21 March	2:30 pm – 3:30 pm	Switzerland and Swiss Water Partnership Inauguration of the Swiss Pavilion
	4 pm – 5 pm	<b>City of Lausanne, City of Nouakchott</b> An innovative multi-stakeholder partnership to improve sustainable access to drinking water and sanitation in the outlying districts of the city of Nouakchott
	5 pm – 6:30 pm	<b>Geneva Water Hub</b> Promoting local voices for water cooperation in the Sahel crisis
Tues	9 am - 9:30 am	Links to Water Development Presentation of The Drop® experiences in Medina Gounass
22 March	9:30 am – 10:30 am	<b>The Blue Miracle</b> Do we need more Water Ambassadors?
	10:30 am – 11:30 am	Canton of Geneva, Geneva Water Hub Transboundary cooperation – How to share successful tools?
	11:30 am - 12:30 pm	<b>UNHCR, SDC</b> Valorisation of groundwater in Chad
	1:30 pm – 2:30 pm	World Vision International Harnessing technology for decision making in water supplies
	2:30 pm – 3:30 pm	Access to Water Foundation A free drinking water access program for the population in rural areas victim of water stress
	3:30 pm – 4:30 pm	Eawag Informed Sanitation System and Technology Choice
	4:30 pm - 6:30 pm	Watalux, Hycon & Swiss Fresh Water Waterpreneur – from products to services

Wed 23 March	9 am - 9:30 am	Links to Water Development Presentation of The Drop® experiences in Medina Gounass
	9:30 am – 10:30 am	<b>Eawag</b> The EOOS NEXT Open Design Toilet allows for a simple separation of urine from faeces using surface tension
	10:30 am – 11:30 am	<b>Eawag</b> Dewatering & use of conditioners for Fecal Sludge
	11:30 am - 12:30 pm	ETH Zurich, OST, FHNW Network for Water and Life (NEWAL) in West Africa
	1:30 pm – 2:30 pm	<b>Geneva Water Hub</b> Legal and institutional mechanisms to promote cooperation on dams in transboundary watercourses: the Euphrates and Tigris case
	2:30 pm – 3:30 pm	Blue Peace Funding and Financing Blue Peace
	3:30 pm – 5 pm	Helvetas, World Vision International Building to Scale: Strengthening Local Governments for WASH Systems at scale in West and East Africa
	5 pm – 6:30 pm	Eawag, HEKS, SDC, Swiss Water Partnership Water Flow Diagrams: a tool for more sustainable and inclusive water resource management at the local level
Thu 24 March	9 am - 9:30 am	Links to Water Development Presentation of The Drop® experiences in Medina Gounass
	9:30 am – 10:30 am	Swiss Water and Sanitation Consortium Blue Schools – Practical, contextualized learning to inspire a generation of water and environment champions
	10:30 am — 11:30 am	ETH Zurich, OST, FHNW Network for Water and Life (NEWAL) in West Africa
	11:30 am – 12 pm	Eawag, Swiss Universities Studying in Switzerland
	12 pm – 1:30 pm	Swiss Youth Reception at Swiss Pavilion
	1:30 pm – 3 pm	<b>ZHAW, Eawag</b> Closing cycles in the water-energy-food-nexus
	3 pm – 4:30 pm	Helvetas WAPRO: Private Sector Engagement in Water Challenges
	4:30 pm - 6:30 pm	Sanitation and Water Entrepreneurship Pact Supporting WASH Entrepreneurs in West Africa – An Informal Networking Event
Fri 25 March	12 pm – 1:30 pm	Swiss Water and Sanitation Consoritum WASH in Health Care Facilities – transformative methods and technologies
	1:30 pm – 2:30 pm	Youth, Blue Peace Water Wish Wall Make Way for Peace and Development





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### MON 21 MAR 2:30 pm - 3:30 pm

### Switzerland and Swiss Water Partnership Inauguration of the Swiss Pavilion

Switzerland and Swiss Water Partnership invite to the official Swiss Pavilion inauguration.

### MON 21 MAR 4 pm – 5 pm

### **City of Lausanne, City of Nouakchott**

An innovative multi-stakeholder partnership to improve sustainable access to drinking water and sanitation in the outlying districts of the city of Nouakchott

In 2009, following a meeting at the 5<sup>th</sup> World Water Forum, Lausanne and Nouakchott initiated a partnership to improve access to water and sanitation in the outlying districts of the Mauritanian capital. The partnership is financed via the solidarity cent principle promoted by Solidarit'eau Suisse. 13 years later, more than 40 Swiss municipalities are involved in the partnership. Then new actors joined the partnership: the RIF in 2011–2016, the AIMF since 2018 and in 2022 the cities of Metz and Bordeaux.

### MON 21 MAR 5 pm - 6:30 pm

### **Geneva Water Hub**

# Promoting local voices for water cooperation in the Sahel crisis

Water is at the heart of socio-economic development and is an important driver for peace and security. In water-stressed regions, such as the Sahel, access to water is the key to enabling rural productive activities and defining possible land uses. In fragile contexts, access to water conditions territorial occupation and military movements by armed forces and non-state armed groups. Forced displacement places the burden of ensuring access to water for all on host communities. Local actors have a crucial role to play in defining solutions to the crisis. In many fragile areas, they have proven their ability to manage basic services in the absence of central state actors. Promoting a bottom-up approach is crucial to rebuild the relationship between social groups and between citizens and public institutions. Best practices such as those implemented by the Haute Autorité pour la Consolidation de la Paix in Niger could inspire other interventions to deliver development results when they add value to social cohesion in fragile areas.



### TUE 22 MAR 9 am - 9:30 am

### Links to Water Development Presentation of The Drop® experiences in Medina Gounass

The scientific study carried out by LATEU in collaboration with ADED (a Swiss association committed to the development of technical solutions to encourage sustainable development in disadvantaged regions), aims to demonstrate the effectiveness of Links to Water Development's The Drop® tap from a bacteriological, socio-economic and epidemiological perspective.

Links to Water Development, ADED and LATEU will have the pleasure to share during the different sessions the results obtained with the different targets in Medina Gounass, as well as their perspectives for the future.

### TUE 22 MAR 9:30 am - 10:30 am

### The Blue Miracle Do we need more Water Ambassadors?

Water and Blue Peace Ambassador Ernst Bromeis will present the work of a Water Ambassador and expedition swimmer. Throughout the World Water Forum he will ask the participants of the forum and outside at the streets of Dakar: "Do we need more Water Ambassadors?"



### TUE 22 MAR 10:30 am - 11:30 am

### Canton of Geneva, Geneva Water Hub Transboundary cooperation: How to share successful tools?

The recent publication of "Cross-border management tools of water resources and use – Greater Geneva area", published together by the Canton of Geneva and the Geneva Water Hub analyses a comprehensive catalogue of 39 transboundary management tools. On this occasion, a web interface is being developed and will be presented at the session on the Swiss Booth with the objective of launching an international dialogue on public policy instruments for transboundary water management.



### TUE 22 MAR 11:30 am - 12:30 pm

### UNHCR, SDC Valorisation of groundwater in Chad

The session is about groundwater in Chad and intends to demonstrate how a better knowledge of hydrogeology allows to develop and exploit this resource in an optimal way. The ResEau project, which started in 2012 and is supported by the Swiss Cooperation, should enable the complete hydrogeological mapping of the Chadian territory. A better knowledge of water resources, the strengthening of national capacities for water resource management, as well as the provision of technical and scientific information will help increase Chad's resilience to climate variations. UNHCR provides water to refugee camps. Solar pumping represents a revolution in water supply for people in a country like Chad.



### World Vision International Harnessing technology for decision making in water supplies

How do you map what you cannot see? Technology use has gained momentum and hence its application in the WASH sector to demonstrate how resources can be allocated and prioritized particularly in the vulnerable communities. World Vision is addressing this issue with the application of evolving technologies, specifically, high-resolution population maps to better monitor progress and understand the geography of "water for all." To ensure no one is left behind in terms of access to safe water, our team will share how they are working to fill relevant data gaps with the use of machine learning; high-resolution satellite imagery; and geographic information systems. Focusing on Rwanda and Zambia, the three sources of high-resolution population data are visualized in maps that feature building locations, estimations of populations, development indicators, population distribution, topography, land cover, and other statistics.



© World Vision International/ OpenStreetMap





### TUE 22 MAR 2:30 pm – 3:30 pm

### **Access to Water Foundation**

# A free drinking water access program for the population in rural areas victim of water stress

This project is implemented in collaboration with health points, schools and Women's groups. The sustainability of the project is based on the financing of the maintenance by the community. The connectivity of the technical solution is provided by a Swiss nanosatellite network Objective 2022: 80'000 people with 2 liters of drinking water per day.

### TUE 22 MAR 3:30 pm - 4:30 pm

### Eawag

### Informed Sanitation System and Technology Choice

In this session, we will present resources co-developed by Eawag to assist in the making of informed sanitation system and technology choices. First, participants' knowledge about sanitation systems and technologies will be tested, followed by the introduction of key documents and online tools that can support sanitation decision-making. Participants will then have the possibility to ask questions and receive hands-on advice on how to use these different tools for their specific contexts.



### TUE 22 MAR 4:30 pm - 6:30 pm

### Watalux, Hycon & Swiss Fresh Water Waterpreneur – from products to services

Sustainable and reliable water supply in rural areas is an ongoing challenge. Margins on essential goods are low and complications are numerous, leading businesses to reinvent themselves frequently. Setting up a business in these conditions require a very clear picture: Who are the customers and who are the beneficiaries, what are suitable business model, how is the cashflow established may be core topics, but there are others. We provide insights on the good and bad of being a Waterpreneur with three companies at different stages of maturity.



### WED 23 MAR 9 am - 9:30 am

### Links to Water Development Presentation of The Drop® experiences in Medina Gounass

The scientific study carried out by LATEU in collaboration with ADED (a Swiss association committed to the development of technical solutions to encourage sustainable development in disadvantaged regions), aims to demonstrate the effectiveness of Links to Water Development's The Drop® tap from a bacteriological, socio-economic and epidemiological perspective.

Links to Water Development, ADED and LATEU will have the pleasure to share during the different sessions the results obtained with the different targets in Medina Gounass, as well as their perspectives for the future.

### WED 23 MAR 9:30 am - 10:30 am

### Eawag

# The EOOS next Open Design Toilet allows for a simple separation of urine from faeces using surface tension

In this session, we present the EOOS NEXT Open Design Toilet that is based on urine separation. Urine contains most nutrients from human waste, but creates pollution and overfertilization when released into the environment. At the same time, soil depletion and rising fertilizer prices are putting pressure on food production. The EOOS Next Open Design Mould can be made by any local craftsperson to produce concrete toilet pans integrating urine separation, using local materials. Recovering the urine for fertilizer production reduces wastewater generation and enhances resource recovery. The design has been tested with manufacturers in Nepal, and five toilets are now being field-tested there.



### WED 23 MAR 10:30 am - 11:30 am

### Eawag

### **Dewatering & use of conditioners for Faecal Sludge**

In this session, we will introduce the dewatering of faecal sludge, a linchpin in achieving sustainable Citywide Inclusive Sanitation. Topics of discussion will include what dewatering is and why it is important, the current state of knowledge and problems associated with dewatering. Next, research being conducted at the Department of Sanitation, Water and Solid Waste (Sandec) in order to scaleup innovative solutions will be presented. This session will be facilitated by Stanley Sam, PhD student at Eawag-Sandec.



### WED 23 MAR 11:30 am - 12:30 pm

### ETH Zurich, OST, FHNW Network for Water and Life (NEWAL) in West Africa

NEWAL is a network of education and research partners in West Africa and Switzerland that promotes scientific exchange on topics of water and life. Cooperation and collaboration are achieved through practical schools for university students, data collection and sharing, exchange events, and the use of e-tools. The session highlights the 2022 practical school that took place at in Ghana. Students from Switzerland and 5 West African countries participated in field excursions, discussions with NGOs, design thinking exercises, and group work activities in an effort to better understand challenges facing local communities. The overarching aim was to encourage the students to use their research to create a positive impact on sustainability and livelihoods.

### WED 23 MAR 1:30 pm - 2:30 pm

### **Geneva Water Hub**

### Legal and institutional mechanisms to promote cooperation on dams in transboundary watercourses: the Euphrates and Tigris case

Large dam construction is experiencing a renaissance worldwide. Damming a river is an opportunity for energy production and agriculture development. It can however create conflicts between sectors across multiple scales. Focusing on these challenges and on existing dynamics at play, the Geneva Water Hub and IUCN's Environmental Law Centre launched the initiative "Dams: water flows regulation in a fragmented world".

Its first endeavour is to elaborate an assessment of the legal tools applicable to dams planning, developing and monitoring. This assessment includes a compendium of references grouping and analyzing the main frameworks and principles to be considered when addressing the challenges of dams in general and large dams in particular.

In the context of this Geneva Water Hub and IUCN initiative, this session aims to discuss the challenges and opportunities for cooperation in the Euphrates and Tigris basin. After presenting the lessons learnt from the joint regime on dams in the Senegal river and the Practical Guide for the Development of Agreements or Other Arrangements for Transboundary Water Cooperation, the speakers will exchange on the need to establish a legal framework on the Euphrates and Tigris basin based on the principles of international water law.



### WED 23 MAR 2:30 pm - 3:30 pm

### Blue Peace Funding and Financing Blue Peace

The sustainable and cooperation management and development of transboundary water resources is crucial for access to water, economic growth sustainable development. This session focuses on key challenges when it comes to financing transboundary water-related projects in a transboundary basin and on approaches to address these challenges. It will also explore means to enhance cooperation at the basin, national and sub-national municipal level, address the crucial elements around funding and financing that contribute to improving cooperation (joint basin planning, infrastructure management, data and information sharing, capacity building).



### Helvetas, World Vision International Building to Scale: Strengthening Local Governments for WASH Systems at scale in West and East Africa

The sustainability of WASH services is an inherent challenge faced by many local governments. They are the first line responsible for providing sustainable WASH services to the rural communities and institutions. Strengthening local ownership and capacities is the groundwork for achieving SDG6. Projects with international funding apply different approaches to come alongside local governments and facilitate the partnerships they need. Helvetas and World Vision look forward to sharing with you their approaches and to jointly reflect on the challenges met in practice and options to bring them to scale in the West and East African context.



Water Flow Diagram of Rio Pardo de Minas



### WED 23 MAR 5 pm - 6:30 pm

### Eawag, HEKS, SDC, Swiss Water Partnership Water Flow Diagrams: a tool for more sustainable and inclusive water resource management at the local level

In this session, we present the "Water Flow Diagram", a tool created to better visualise water flows. The aim of the "Water Flow Diagram" is to improve decision-making regarding water, how it is used and distributed, and to promote a dialogue about water between industry, civil society and the public domain. With this, we aim at linking Integrated Water Resource management (IWRM), Water Sanitation and Hygiene (WASH), circular economy (CE) and the human right to water and sanitation (HRWS) and contribute to the Sustainable Development Goals (SDGs). Join us at this session to learn about the "Water Flow Diagram" and how to use it, and to help us improve it for the future.

# Problem Reference and the refe

### THU 24 MAR 9 am - 9:30 am

### Links to Water Development Presentation of The Drop® experiences in Medina Gounass

The scientific study carried out by LATEU in collaboration with ADED (a Swiss association committed to the development of technical solutions to encourage sustainable development in disadvantaged regions), aims to demonstrate the effectiveness of Links to Water Development's The Drop<sup>®</sup> tap from a bacteriological, socio-economic and epidemiological perspective.

Links to Water Development, ADED and LATEU will have the pleasure to share during the different sessions the results obtained with the different targets in Medina Gounass, as well as their perspectives for the future.



### THU 24 MAR 9:30 am - 10:30 am

Swiss Water and Sanitation Consortium (SWSC) members: Caritas Switzerland, Fastenaktion, HEKS/EPER, Helvetas, Swissaid, Swiss Red Cross and Terre des hommes together with the Swiss Federal Institute for Aquatic Science and Technology

Blue Schools – Practical, contextualized learning to inspire a generation of water and environment champions

Through simple technologies and practical exercises, Blue Schools enables learning about water for drinking and sanitation and water in our environment. The stepby-step approach starts with WASH in schools and progresses to locally relevant land and water management techniques. School stakeholders develop Blue Schools activities that align with subjects anchored in national curriculum. Child-led activities help youth to influence their families and communities, building their leadership capacities as future water and environment champions and policy makers.

Our project teams from Africa and Asia will share stories of how Blue Schools is inspiring students, teachers and local governance actors, including a case study on the contextualization of the Blue Schools Kit in collaboration with the Ministry of Education in Cambodia.



### THU 24 MAR 10:30 am - 11:30 am

### ETH Zürich, OST, FHNW

### Network for Water and Life (NEWAL) in West Africa

NEWAL is a network of education and research partners in West Africa and Switzerland that promotes scientific exchange on topics of water and life. Cooperation and collaboration are achieved through practical schools for university students, data collection and sharing, exchange events, and the use of e-tools. The session highlights the 2022 practical school that took place at in Ghana. Students from Switzerland and 5 West African countries participated in field excursions, discussions with NGOs, design thinking exercises, and group work activities in an effort to better understand challenges facing local communities. The overarching aim was to encourage the students to use their research to create a positive impact on sustainability and livelihoods.



### THU 24 MAR 11:30 am – 12 pm

### Eawag, Swiss Universities Studying in Switzerland

In this session, we will provide an overview of the academic opportunities in the water sector in Switzerland, ranging from short courses to PhD programmes. We will also highlight scholarship and fellowship opportunities in Switzerland for students from Africa. This session will be facilitated by Christoph Lüthi (Eawag) together with former students from Senegal and Ghana.



### THU 24 MAR 12 pm - 1:30 pm

### **SWP Youth Reception at Swiss Pavilion**

Do you want to know more about how youth in Switzerland is engaged to address water issues all over the world? The Swiss Water Partnership and SWP Youth are inviting you to a youth reception at the Swiss booth. Youth representatives will present how they are addressing decision-makers through art and will highlight best practices to ensure youth inclusion in water diplomacy. The presentations will be completed through a video, showing interviews with World Water Forum participants to find out if more Water Ambassadors are needed. After the presentations you are invited to an intergenerational networking lunch.



### THU 24 MAR 1:30 pm – 3 pm

## ZHAW, Eawag

### Closing cycles in the water-energy-food-nexus

The session will present our research and teaching activities that are focused on using local resources and establishing decentralized infrastructure systems to create self-sufficient, off-grid communities in terms of water, energy and food. Following the idea of a circular economy, all waste products become resources and create potential for new value chains and income generation. The session will outline the full scope of our circular vision and present selected projects and case studies, including decentralized technologies for greywater treatment and food production.



### THU 24 MAR 3 pm – 4:30 pm

### Helvetas

### WAPRO – Private Sector Engagement in Water Challenges

Through a multi-stakeholder partnership, the WAPRO (Water Productivity) project applies a 'Push-Pull Policy' approach in several countries of Asia and Africa. After a brief presentation of critical learnings on the private sector's engagement in water challenges, the participants will share their experience and insights to identify key success factors, limitations and pitfalls. The event will be run as a 'World Café' allowing participants to address the topic from 3 different perspectives interactively: public sector, private sector and civil society/NGO. The key highlights will nurture the reflection on how to best collaborate with the private sector when addressing various water challenges.



### THU 24 MAR 4:30 pm - 6:30 pm

### Sanitation and Water Entrepreneurship Pact Supporting WASH Entrepreneurs in West Africa – An Informal Networking Event

WASH entrepreneurship is on the rise in West Africa, but many challenges persist. Entrepreneurs are notably in dire need of a stronger support system, which will require bridging the gap between the many different stakeholders within the WASH ecosystem. In this networking session, we offer a platform for all actors to meet. Join us to meet and mingle with WASH entrepreneurs, investors, enablers, policy makers and other experts. Learn more about the SWEP's work and help us build a strong ecosystem for WASH entrepreneurship in West Africa. And because it's also our 5<sup>th</sup> anniversary, we offer food and drinks, come celebrate with us!



### FRI 25 MAR 12 pm – 1:30 pm

Swiss Water and Sanitation Consortium (SWSC) members HEKS/EPER, Helvetas, Swissaid and Terre des hommes together with WATALUX and Gravit'EAU WASH in Health Care Facilities – transformative methods and technologies

In this session Swiss Water and Sanitation Consortium members will spotlight WASH commitments and investments made by local government authorities and facility management committees to prevent health care acquired infections. Project leads from Africa and Asia will relate how the WASH in Health Facility Improvement Tool (WHO, UNICEF) is catalyzing change. They will also welcome other Swiss partners to present promising, climate-smart technologies in health care facilities. These include the Gravit'eau water recycling systems that enable handwashing without water supply and energy and WATA's robust electro-chlorinators rolled out in 550 health facilities since 2018.

### FRI 25 MAR 1:30 pm - 2:30 pm

### Youth, Blue Peace Water Wish Wall Make Way for Peace and Development

We hope that by the end of the Forum, many of us will have experienced important eureka moments. This workshop is your chance to share your wishes and pledges for a water-secure future for peace and sustainable development. It will be facilitated by the artist Kalonji, with the participation of young water professionals from across the world.









