

#### Highlights of Space4Water Activities in 2022

Nina Kickinger

Assoc. Information Systems Officer, Space Applications Section

United Nations Office for Outer Space Affairs nina.kickinger@un.org www.space4water.org www.unoosa.org





## The Partners







Prince Sultan Bin Abdulaziz International Prize for Water







#### Agreement until 2026



www.space4water.org







Portal



#### Community



Conferences



# 2022 Highlights

- I. Events organised
- II. The Space4Water Portal
- III. Reports





## **Events organised**

#### UNITED NATIONS | GHANA | PSIPW

# TH INTERNATIONAL CONFERENCE ON THE USE OF SPACE TECHNOLOGY FOR WATER RESOURCES MANAGEMENT

#### 10<sup>th</sup>-13<sup>th</sup> May, 2022 Alisa Hotel, North Ridge **GHANA and ONLINE**





MINISTRY OF FOREIGN AFFAIRS AND REGIONAL INTEGRATION REPUBLIC OF GHANA

MINISTRY OF EDUCATION REPUBLIC OF GHANA







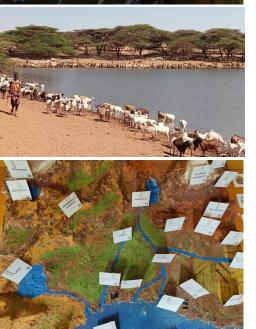


United Nations/Ghana/PSIPW – 5<sup>th</sup> International Conference on Space Technologies for Water Resource Management

- High-level participation
- 838 registrations
- 29% women
- Participants from 99 countries
- 24h of content presented
- 107 speakers, with 76 males and 31 females
- Participant rating: 4.48 of 5 points







# Participatory workshop for Indigenous women on their roles and responsibilities related to water



#### Objectives:

- Active exchange on the ways Indigenous communities relate to water
- Capacity building: what can be done using space-based solutions
- Identification of user needs towards the space sector
- Bringing identified user needs to the Space4Water stakeholders
- Deriving from that requirements for the space sector to develop applications by which Indigenous communities can be supported

# Indigenous voices & water related challenges



Nokubonga Nokwanda Mazibuko-Ngidi Commissioner for the Commission on Khoi-San Matters at the South African Department of Traditional Affairs



Melody Lepine Director, Mikisew Cree First Nation



Cadence Kaumoana Chair, Te Huia & Rangiwherowhero Trust











		Moderation state Draft	Change to	Log message	_
			Ready for Publication 🐦		Apply

#### 23 views

The Samburu community in Kenya are pastoralists as they keep animals which is their main source of livelihood. They move from place to place in search of adequate pasture lands and water. Oue to the recent dry spell, were sources are dry and there is no water. Boilt women and gris are waitaing long distances of about 20 kilometres per day to search for water. This search chosually grees on from day until night. In order to save the water they bring back home, some women and grils bath wherever they find the water. The long journeys they paradet bein wellbeing as some of them are suffering from Mackaches. In addition, the water they collect is not so clean to be suitable for drinking, but because they have no other options, they consume this water resulting in them suffering from water-related linesses. School children have to bring their own water in one or two litre bottles from their homes to school because there is no water is not.

#### Success crtieria

Access to safe drinking water sources for the Samburu tribe within a five kilometre of the villages or communities.

Challenge-ID





Tania Eulalia Martinez Cruz Research Associate at Free University of Brussels

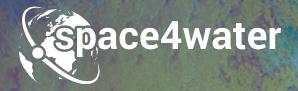


Alicia Simón Sisimit Staff at the Press Department of the Ministry of Foreign Affairs of Guatemala; Kaqchikel journalist and activist



Lilian Nguracha Balanga Founder of Women .conserve at Samburu women







27-28 October 2022 Vienna International Centre



# First Space4Water Stakeholder Meeting

■ 80 registrations, ~ 25% women

 16 participants representing Space4Water stakeholders, professionals and young professionals, 37.5 % women, 4 Space Agencies

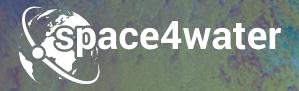
Very interactive meeting

Exchange on water challenges and space-based solutions
 Event rating by participants: 4.8 of 5
 Decisions included

- □ Host regular stakeholder meetings 2x/year
- Develop good practices
- Work on water user needs towards the space sector
- Matching challenges and solutions









Portal



# **Portal Content Statistics**

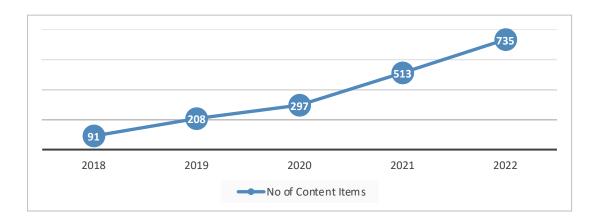
Type of Content / Number of Content published	As at 31 Dec 2018	As at 31 Dec 2019	As at 31 Dec 2020	As at 31 Dec 2021	As at 31 Dec 2022
Stakeholders	23	37	48	62	87
(Young) Professionals	-	4	11	24	34
Articles	6	16	22	35	46
Interviews	-	3	10	23	33
Activities /Opportunities		1	10	25	42
Publications	10	25	43	77	130
Software	4	15	18	21	22
Projects	6	6	10	12	17
Training Material	6	22	33	79	89
Events	36	79	92	155	235
TOTAL	91	208	297	513	735

25

new Stakeholders

>200

new Resources



# **User Access Statistics**

Oct - Dec 2018

2019

2020

2021

2022

Users
684
570.6%

Users **10,230** 1,225.1%

Users **37,623** ± 157.3%

Users 67,138 <sup>\*</sup> 78.4% Sessions **1,017** 295.7% Sessions **13,020** 913.2% Sessions

18,788 ± 44.2%

Sessions 48,270 ± 157.3%

Sessions 82,684 171.3% Page Views 2,763 \$ 53.4%

Page Views 25,394 ± 450.4%

Page Views 30,215 19.0%

Page Views 76,235 152.6%

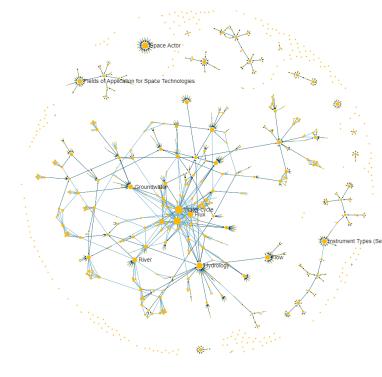
Page Views 120,414 \$ 58.0%

# Space4Water Portal – 2022 Portal Features

- □ Interactive graphic of the hydrological cycle
- Actors Map & Local perspectives and case study map

In progress:

- Water challenges and space-based solutions
- **Explorable body of knowledge (Glossary see graphic on right side)**
- Migration to the cloud better scalability and security
- French version (most important resources – Articles 50% translated)
- Podcast
- □ Indigenous Voices (including new interviews and profiles ready for publication)

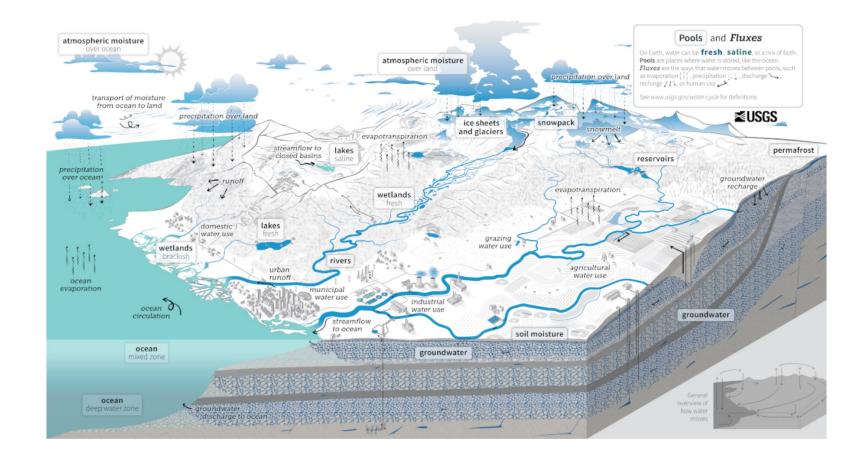




#### Hydrological cycle

"The water cycle – technically known as the hydrological cycle – is the continuous circulation of water within the Earth's hydrosphere, and is driven by solar radiation. This includes the atmosphere, land, surface water and groundwater. As water moves through the cycle, it changes state between liquid, solid, and gas phases. Water moves from compartment to compartment, such as from river to ocean, by the physical processes of evaporation, precipitation, infiltration, runoff, and subsurface flow." (European Environmental Agency, 2019). "Water moves at very small scales too. It is in us, plants, and other organisms. Human activities impact the water cycle, affecting where water is stored, how it moves, and how clean it is." (USGS, 2022).

By clicking any of the pools and fluxes below, you will get redirected to the Space4Water glossary term, learn about terminology and see what Space4Water actors including stakeholders, professionals and young professionals have on the Portal and what content is available.



# Interactive Maps -Stakeholders and Professionals

# Local perspectives and case studies





# Reports

## □ <u>A/AC.105/C.1/2022/CRP.15</u>

The Space4Water Project: Community building

### □<u>A/AC.105/1268</u>

Report on the United Nations/Ghana/Prince Sultan bin Abdulaziz International Prize for Water Fifth International Conference on the Use of Space Technology for Water Management

## □<u>A/AC.105/1272</u>

Report on the first Space4Water Stakeholder Meeting



# **UN 2023 Water Conference**

UN Assembly President urges Governments to send top leaders to Water Conference



13 February, NEW YORK – The United Nations General Assembly President urged Governments today to send their top representatives to the upcoming <u>UN 2023 Water Conference</u>, stressing the urgency of tackling the water crisis while calling for the establishment of a global water information system.

"Of the 17 [Sustainable Development] Goals, perhaps none are more urgent than <u>SDG 6</u> on water," said Csaba Kőrösi in his <u>remarks</u> to the annual hearing of the Interparliamentary Union, which was held under the theme "Water for People and Planet: Stop the waste, change the game, invest in the future."

He said that the water crisis will inevitably get worse, pointing out that nearly all climate change is felt through water and describing the scourge as "too much water," "not enough water", or "water that is too dirty to use, and too unsafe to drink".

"If we do not get the global water crisis under control, we will not be able to make progress on the Sustainable Development Goals," he emphasized, warning that the planetary boundaries for water have already been breached for the first time in human history.

By the end of this decade, the demand for water is expected to exceed supply by 40 per cent, he added, urging all Governments to come to the Conference at the highest possible level and bring concrete proposals for action and transformation.

He also highlighted the need for integrated data, calling for a global water information system that would change the game.

He expressed hope that the Water Conference, taking place at the UN Headquarters in New York from 22 to 24 March, will create "the Paris moment" of the <u>water action</u>.

#### 22-24 March 2023 UN Headquarters, NYC

https://sdgs.un.org/conferences/water2023

Send top representatives to the conference.

The water crisis will inevitably get worse [...] climate change is felt through water [...] too much - too little – too dirty

Csaba Kőrösi, President of the General Assembly





#### Thank you

Nina Kickinger

Assoc. Information Systems Officer, Space Applications Section United Nations Office for Outer Space Affairs <u>nina.kickinger@un.org</u> <u>www.space4water.org</u> <u>www.unoosa.org</u>

