













### WSCC 2023 - Platform for Exchange

The SDG<sup>nexus</sup> Network, the Centers for Natural Resources and Development (CNRD), the International Network on Sustainable Water Management in Developing Countries (SWINDON), the Food Security Center (FSC) and the Asian Institute of Technology (AIT) are pleased to invite the community of renowned water and climate change experts to propose abstracts for the Water Security and Climate Change Conference (WSCC), 21 - 23 November 2023 in Cuenca, Ecuador.

Achieving water security under climate change conditions is one of the major challenges faced by society today – both globally and locally. By building bridges between disciplines, sectors and different stakeholders, the conference provides a platform for international exchange. Consequently, interdisciplinary links are revealed and synergies between scientific evidence and societal and political decisions are released. The conference thus contributes to the formulation of sustainable strategies for water resource management in the face of climate change.

The WSCC 2023 is supported by the Exceed program (Higher Education Excellence in Development Cooperation) and follows a successful series of conferences implemented in Thailand, Germany, Kenya, Mexico, Vietnam, and Thailand between 2016 and 2022.

# **Topics**

Climate change and climate variability pose many challenges worldwide, as well as affecting the environment in which we live. Strategies to cope with climate change, risk assessment and the willingness of states and societies to bear the risks and consequences are heterogeneous and divergent. However, these solutions and strategies are often not adapted to the respective political economic and social requirements and are more reactive than preventative. Ideally, all decisions and interventions should be based on an integrated, well-considered and rational way of acting, with the aim of sustainable protection of nature and its resources.

The WSCC strives to offer a platform for international exchange, to uncover interdisciplinary linkages and to release synergies between scientific evidence and both societal and political decision strategies. We kindly invite contributions of creative and practical approaches with relevance for water security and strategies to cope with climate change considering technical ecologic, economic, and societal dimensions. This includes concrete examples dealing with hazards, risks, vulnerabilities, and disasters as well as decision making regarding the investment in infrastructure development to achieve water security, the delivery of relevant services and cost analyses.

The conference themes focus on the following broad subject areas: (a) from scientific knowledge and knowledge transformation to solution-oriented implementation, (b) inclusive and participatory approaches for adaptation, (c) cross-sectoral implementation of SDG 6, and (d) Al and the design of future water supply and resilience infrastructure in urban areas and agriculture.

We seek to contribute to a significant social change. In this regard, abstracts that focus on one of the following three main themes are welcome:



#### Water and Climate: Challenges, Opportunities, and Innovative Solutions

Water and climate change are inextricably and intricately linked. Rising sea levels and shrinking ice fields are a growing threat. Floods, wildfires, heat waves, and droughts have become more frequent and intense in recent decades. These impacts throughout the water cycle threaten sustainable development, biodiversity, hydropower generation, and people's access to water and sanitation. In other words, climate change is primarily a water crisis. Sustainable water management is central to building the resilience of societies and ecosystems and to reducing carbon emissions. Rainwater harvesting, nature-based solutions, flood control, and climate regulation in urban areas through so-called evaporation surfaces and evaporation facades are just some examples where further research is needed.

This theme will address SDG6 and SDG13 synergistically for building resilience in the present climate and adapting to future climate with focus on five broad subject areas: (a) Understanding water and climate risks and linkages, (b) Risk-informed decision and action planning, (c) Sustainable, affordable, and scalable water solutions for climate-resilient development, (d) Inclusive, participatory and without-border approaches for adaptation and (e) Innovative water management to achieve water and climate goals.



#### Theme 2:

#### Water & Climate Resilience in Agri-Food Systems

Agri-food systems encompass agricultural production systems from cultivation, harvesting, transport, storage, and processing to the marketing of agricultural products and their consumption or use. This includes value chains of food or non-food agricultural products originating from crop, livestock, forestry, fisheries, or aquaculture. Agri-food systems are diverse and include, for instance single-crop, large scale systems (such as banana plantations) to multi-crop small scale systems (such as indigenous mountain irrigation systems). They are exposed to various crises and shocks that threaten food security and nutrition as well as the environment and natural resources. Among the most impacting threats are certainly effects of climate change in combination with water scarcity and the trend to increasing extreme events. In view of these various challenges, several innovations, concepts, and approaches have been discussed to improve and accelerate a sustainable transformation of agri-food systems thereby directly addressing SDG 1, 2, 6, 12, 13, and 15. We welcome cross-sectoral contributions from basic and applied science, education, extension, society, and economy that address agri-food systems or their components towards an improved resilience and adaptation capacity.



#### Theme 3:

#### Water Security: Science-Policy-Society Dialogue (Priorities & Implementation)

In the 2030 Agenda, water is a crucial link for achieving various Sustainable Development Goals (SDGs). Failure to adapt to climate change will jeopardize the achievement of SGD 6, as well as most of the other SDGs. Given its part in climate change, water plays a central role in the SDG network as well as in other policy frameworks such as the Paris Agreement. The water issue is an integrative part of a chain of responsibility that links science, politics, and society. Unfortunately, this chain of responsibility has still too many gaps (mostly at political level), which hinder a real implementation of the goals in reality. Water security requires incorporating water sector development priorities into national strategies worldwide to adapt to climate change. Science and policy makers need to work closely with civil society to adapt and implement measures, which effectively solve the majority of water and climate-related problems. According to UN Water, more than 3/4 of the world's population will live in urban areas and megacities by 2050. Artificial intelligence (AI) and machine learning (ML) have the potential to support the management of water resources, water distribution, and water management in urban areas more effectively, but their application in this field is relatively little studied.

This core theme focuses on the following broad subject areas: (a) from scientific knowledge and knowledge transformation to solution-oriented implementation, (b) inclusive and participatory approaches for adaptation, (c) cross-sectoral implementation of SDG 6, and (d) Al and the design of future water supply and resilience infrastructure in urban areas and agriculture.

The WSCC 2023 conference planning committee welcomes your abstracts for oral presentations and scientific posters.

The submission period is 01 June – 31 July 2023.

The WSCC aims to provide ample exchange opportunities. The conference consists of thematic sessions involving different stakeholders, tying the scientific community to policy, industry, and society. Innovating perspectives and dimensions in the current discourse on climate change and water security are particularly welcome, especially presentations combining academic and practical approaches. Besides, thematic, and interdisciplinary workshops as well as networking spaces will be provided. During high-level panel discussions and invited keynote presentations participants will have the opportunity to connect and discuss the latest challenges in the field.

Accepted contributions to the conference will be published in the WSCC book of abstracts. In addition, the conference organizers consider publishing a book in which the best submitted contributions (in the form of a full paper) will be published.

Each session will be hosted by prominent organizations, institutions, or experts in relevant fields. The conference will be held in English.

Limited funding is available to support selected presenters in particular from <u>DAC listed countries</u>. For selected presenters the WSCC2023 will cover, depending on the necessity:

- International travel (round-trip ticket) from the nearest international airport in the country of departure to Ecuador
- Airport transfer to/from the hotel in Cuenca
- The registration fee for the conference (see below)
- Four nights of accommodation (check-in 20th of November, check-out 24th of November) in a hotel selected by the conference organizing team including breakfast.
- The conference organizers will contact potential presenters eligible for funding after the submission deadline to determine the further proceeding.

Please note that the WSCC2023 will NOT cover the following. These are to be borne by the participant:

- Local transport from current place of residence to the nearest international airport in your country
- Airport taxes, if any
- Visa fee, if any
- Travel health insurance fees
- Daily allowance or boarding that exceeds the meals that are offered during the conference (coffeebreaks and lunches)

Spouses/Partners are not supported, but they can attend the conference as participants when paying the conference fee. Travel arrangements for spouses/partners need to be arranged by the participant and will not be organized by the conference organizers.

The registration fee is 100 USD and includes

- a book of abstracts,
- attendance at all conference sessions,
- · welcome reception,
- lunches on 21st 23rd of November,
- morning and afternoon tea/coffee breaks.

Submission

01 Jun 2023

Abstract submission portal opens

31 Jul 2023

Abstract submission deadline

15 Sep 2023

Notification of approved abstracts

Abstracts must be submitted online: www.watersecurity.info

#### **In-Person Conference**

The WSCC 2023 is planned as an in-person conference. An online participation for presenters is not foreseen. A recording of selected elements (e.g., keynote sessions, high-level panel discussion) will be provided at the conference website to reach a wider audience. All presenters should be prepared to be at the conference in Ecuador to present their content during the conference.

#### **Oral Presentations**

Oral presentations provide authors with the opportunity to present their work in a thematic session in a brief format. Oral presentations are selected and assigned to a thematic session by the committee based on the submitted abstract.

#### **Poster Presentations**

The poster sessions provide an interactive forum for authors to discuss their work. Presenters will be assigned pin boards to present their posters and are encouraged to bring one-page handouts to accompany their posters. Poster presentations are selected by the committee based on the submitted abstract.

#### **Participation**

Please note: If accepted, participation must be confirmed through registration by 01 October. A book of abstracts and conference program will be compiled and made available to the participants and through the WSCC website.

#### **Submission Instructions**

- All abstracts must be submitted online between 01 June and 31 July 2023
- Abstracts can be submitted as 'Oral or Poster Presentation' or 'Poster Presentation only'
- All abstracts must be submitted through the submission portal (<a href="https://t1p.de/wscc23abstract">https://t1p.de/wscc23abstract</a>) in text form
- The following information must be included in the submitted abstract: presentation title, all author(s)' identifying information (including names, degrees, and institutional affiliations),
  WSCC topics (see list of topics in the submission portal), three to five keywords and narrative text (limited to 1800 characters)
- The conference organization committee may propose an alternative presentation format (open space sessions), based on the available times in the conference program



#### **Criteria For Abstract Selection**

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Abstracts will be selected by the WSCC scientific committee on the basis of the need to organize a well-balanced program and according to the following criteria:

- Relevance of the presentation for the conference themes
- Potential of the presentation to link science, practice, and decision-making
- Quality of abstract, in terms of content and language
- Originality and innovation
- The introduction text should not exceed 25% of the total abstract. The methods, results, and problem-solving approach should denote 75% of the abstract.

# committee

SDGnexus Network: Björn Weeser, Rolando Célleri, Mario Córdova

CNRD: Lars Ribbe, Sven Tönsjost

AIT: Mukand Babel, Victor Shinde

SWINDON: Andreas Haarstrick

FSC: Heinrich Hagel, Daniela Gomez

Local Team at the University of Cuenca:

Rolando Célleri, Cristina Correa, Mario Córdova, Priscila Delgado

## Water Security and Climate Change Conference 2023

21–23 November 2023 Cuenca, Ecuador ontact

Please do not hesitate to direct any questions you may have regarding the conference to:

wscc\_2023@ucuenca.edu.ec



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