



HOT NEWS

ISSUE 02, 2023



HOT NEWS

ISSUE 02 2023



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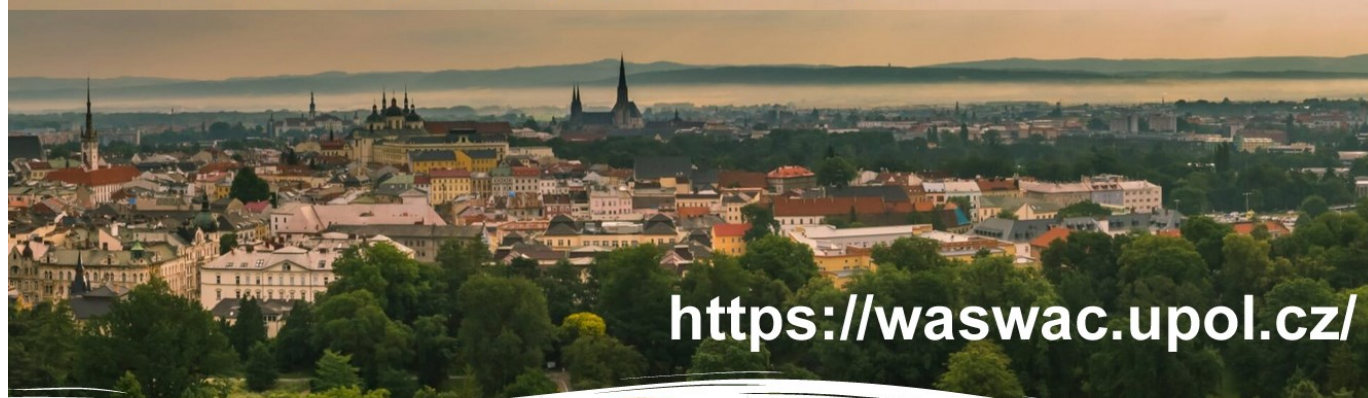
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Remember to Complete Your Registration for Attending the 5th WASWAC World Conference

The 5th WASWAC World Conference
ADAPTATION STRATEGIES FOR SOIL AND WATER CONSERVATION IN A CHANGING WORLD
19. – 23. 6. 2023, at Palacký University, Olomouc, Czech Republic



Only few days left to the deadline of registration, remember to complete it!

Important deadlines:

Registration and abstract submission: **by 26 March, 2023**

Abstract acceptance announcement: **by 31 March, 2023**

Fee payment: **by 30 April, 2023**

Accommodation booking: **by 30 April, 2023**

Please complete your registration and abstract submission via the official conference website here: <https://waswac.upol.cz>

If there is difficulty in accessing the above website, registration can be completed through filling out the registration form (download here <http://www.waswac.org.cn/waswac/uploadfile/2023/02/20/20230220152227433.pdf>) and emailing it to soilsciencecz@gmail.com along with the abstract in Word format (template of abstract download here <http://www.waswac.org.cn/waswac/uploadfile/2023/02/20/20230220152323352.doc>).

For conference details please go to: <https://waswac.upol.cz>

<http://www.waswac.org.cn/waswac/LatestNews/webinfo/2023/02/1676141370590982.htm>

<http://www.waswac.org.cn/waswac/rootfiles/2023/03/01/1676142158168903-1676142158196690.pdf>

WASWAC Awards (2022) Nomination are Open



According to the BASIC RULES FOR WASWAC AWARDS, the Award Committee (WASWAC AC) issued the Announcement of WASWAC Award (2022) as following:

1. Types and number of awards

No.	Award Type	Number
1	Norman Hudson Memorial Award (NHMA)	no more than 3 awardees for this time. (No more than one for every year, between 2020 to 2022.)
2	Distinguished Research Award (DRA)	no more than 3 awardees for 2022.
3	Distinguished Extension Award (DEA)	no more than 3 awardees for 2022.
4	Special Contribution Award (SCA)	no more than 2 awardees for 2022.

2. Criteria of Awards

WASWAC Norman Hudson Memorial Award (NHMA)

The candidates should be a member of WASWAC.

The candidates have made outstanding achievements in soil and water conservation at global or regional scale.

The candidates have a great reputation over the world.

WASWAC Distinguished Research Award (DRA)

The candidates should be a member of WASWAC.

The candidates have gained distinguished research achievements in soil and water conservation.

WASWAC Distinguished Extension Award (DEA)

The candidates should be a member of WASWAC.

The candidates have rich extension experiences and great impacts of promoting new technology application in soil and water conservation.

WASWAC Special Contribution Award (SCA)

The candidates have made a great contribution to soil and water conservation in management, study or technique service at global or regional scale.

The candidates have made a great contribution to WASWAC or ISWCR (International Soil and Water Conservation Research) in association's development, member's attracting, paper's review, academic activities promotion, financial supports, etc.

3. Procedures of appraise and choose**(1) Nomination (the deadline is April 15, 2023)**

The WASWAC councilor, advisor and regional representatives (vice president) could make the nomination for all four awards. Each councilor/advisor/vice president can recommend at most one candidate for each award including NHMA, DRA, DEA, SCA.

The WASWAC members could make the nomination for NHMA, DRA and DEA. Each member could recommend at most one candidate for each award including NHMA, DRA and DEA. To produce a valid nomination, it is necessary to have at least five recommendations from members.

SCA candidate only be recommended by WASWAC councilor/advisor/vice president.

A formal recommendation form with handwritten signature and brief introduction about the achievements of the recommended candidate are necessary to submit to waswac@foxmail.com and lirui@ms.iswc.ac.cn or liruicas@126.com Please mark the subject of your email with "WASWAC award nomination".

(2) Primary Selection

Primary selection will be made by WASWAC AC based on the results of nomination. The number of official candidates cannot exceed 3 times of the number of final awardees.

(3) Final Evaluation

The official candidates will be submitted to WASWAC Council for voting to reveal the final awardees.

(4) Publicity

The award results will be publicized at the WASWAC fifth World Conference in June 19-23, 2023, in the Hot News, and in the official website of the Association as well.

Please get back the recommendation form to Award Committee office via:

waswac@foxmail.com and

lirui@ms.iswc.ac.cn (or liruicas@126.com)

before April 15, 2023. The form is available in our official website:

<http://www.waswac.org.cn/waswac/LatestNews/webinfo/2023/03/1681045841810290.htm>

Award type		Recommended Candidate	
		Name	Recommendation reasons
Norman Hudson Memorial Award (NHMA)			
Distinguished Research Award (DRA)			
Distinguished Extension Award (DEA)			
Special Contribution Award (SCA)			

Notes:

- Only WASWAC members could be nominated for NHMA, DRA and DEA.
- The WASWAC councilor, advisor and region representatives (vice president) could make the nomination for all four awards. Each councilor/advisee/vice president can recommend at most one candidate for each award including NHMA, DRA, DEA, SCA.
- The WASWAC members could make the nomination for NHMA, DRA and DEA. Each member could recommend at most one candidate for each award including NHMA, DRA, DEA. To produce a valid nomination, it is necessary to have at least five recommendations from members.
- SCA candidate only be recommended by WASWAC councilor/advisee/vice president.
- Brief introduction about the recommended candidate are necessary to be provided (Template see attached file).
- Please submit this form and relative documents to waswac@foxmail.com and lirui@ms.iswc.ac.cn or liruicas@126.com by April 15, 2023. And please mark the subject of your email with "WASWAC award nomination".

Necessary Information	
Name	
Gender	
Date of Birth	dd.mm.yyyy
Nationality	
Affiliation	
Position/Title	
Research fields	
Main Achievements	The most important part, to be provided in details.
Contacts	Address: Email: Tel.: Webpage:
Education Background	Including undergraduate, master, PhD and Postdoctoral stages.
Received Other Awards	Award title of "XXX" was issued by XXX in XXX (year).
Representative Publications	Please just provide less than ten papers/books/patents/projects altogether.

For more information about the WASWAC awards, please go to:

http://www.waswac.org.cn/waswac/Awards/A5905index_1.htm

A brief report on 17th National Conference on Watershed Management Sciences and Engineering of Iran



Prepared by:

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The 17th National Conference on Watershed Management Sciences and Engineering of Iran, with the main theme of "Watershed Management & Sustainable Food Security," was held on February 28 & 29, 2023, with the cooperation of the University of Jiroft, Watershed Management Society of Iran in Jiroft, Kerman Province and the World Association of Soil and Water Conservation (WASWAC). The following themes were announced by the conference organizers:

- ◇ Watershed Management and food security
- ◇ Watershed management and conservation agriculture
- ◇ Watersheds health and sustainability
- ◇ Watershed management and water transfer challenges
- ◇ Watershed management and reduction of natural hazards

- ◇ Monitoring, assessment, and evaluation in watershed management
- ◇ Integrated watershed management and water and soil conservation

More than 145 papers were initially submitted to the conference, of which about 25 papers were selected for oral presentations, and 120 posters were accepted. Several committees, including the organizational, executive, and student committees, have organized the conference.

More than 200 participants, including scientists, professors, researchers, students, and experts, participated in the conference and provided their latest research findings and enforcement actions in the watershed and natural resources management. In this conference effective managers and experts attended the conference from "The Watershed Management

of Iran", the Natural Resources and Watershed Management Organization of Iran at the national and provincial levels, the Ministry of Energy, the Ministry of Jihad-e-Agriculture, the Interior Ministry, the Management and Planning Organization, etc. The conference continued with four important professional

meetings and oral and poster presentations. In addition, during the pastimes of the conference, under Dr. Nizam Asgharipour Dasht Bozorg, all the participants made clay figurines, which showed the importance of soil in human life.



Speech of Prof. Dr. Seyed Hamidreza Sadeghi, Vice President of WASWAC



Speech of Dr. Mojtaba Soleimani Sardo, Secretary of the conference and head of the Faculty of Natural Resources, University of Jiroft (left), Dr. Farshad Soleimani Sardoo, Executive Secretary of the conference (middle), and Dr. Elham Rafiei Sardooii, Scientific secretary of the conference (right)

After presenting the oral and poster papers and the scientific discussions and challenges conducted parallel to the specialized meetings, the items were summarized as follows.

The conference was wrapped after two days of hard work, and ultimately, the participants summarized and approved the following declaration minutes.



A general view of participants and the place of the opening ceremony



Oral paper presentation (left) and poster presentation(right)



Clay figurines made by the participants

- 1) Application, development, and performance evaluation of the results of laboratory research at the executive and operational level of watersheds,
 - 2) Considering the necessity of design, implementation, and consistent application of watershed adaptative management approaches in the form of integrated management and watershed governance intending to ensure sustainable food security,
 - 3) Designing, planning, preparing, and implementing problem-based and goal-oriented watershed management projects with the ultimate goal of maintaining and creating ecological balance and improving the economic and social status of all stakeholders,
 - 4) Health-oriented monitoring and evaluation of the effectiveness of watershed management measures on the quantity and quality of all biological and non-biological resources of the watershed,
 - 5) Considering various regulatory, provisioning, control, and maintenance services in evaluating the productivity and valuation of watershed integrated services,
 - 6) Developing and utilizing indigenous knowledge and knowledge-based and scientific technologies to optimize the management of the agricultural industry in the fragile ecosystems of the Jazmurian Watershed and eventually emphasize the establishment of Jazmurian Wetland Restoration Headquarters in the University of Jiroft,
 - 7) Grounding and promoting a culture of broad and dynamic interaction with different water, soil, and plant resources in target communities and different education levels, emphasizing the education of children as the future generation of the country, and
 - 8) The necessity of approving the Watershed Management Constitution to design and implement the integrated management of watersheds at the country scale.
- Finally, the selected oral and poster papers were introduced through the conference's closing ceremony, and the thanksgiving ceremony was held.

Soil Mission Calls (2023) are Open



Under Horizon Europe, the European Commission funds research and innovation in order to protect and restore soils in Europe and beyond. This funding is in line with the EU Mission “A Soil Deal for Europe”. **The call for proposals for 2023 is open till 20.9.2023.** This includes the following 9 topics :

- ◇ Onsite digital technologies to monitor nutrients and chemical or biological stressors in soil and plants with relevance for food safety and nutrition
- ◇ Innovations to prevent and combat desertification
- ◇ Back to earth: bringing communities and citizens closer to soil
- ◇ Discovering the subsoil
- ◇ Soil-friendly practices in horticulture, including alternative growing media
- ◇ Soils in spatial planning
- ◇ Carbon farming in living labs
- ◇ Co-creating solutions for soil health in Living Labs
- ◇ Soil pollution processes – modelling and inclusion in advanced digital decision-support tools

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=HORIZON-MISS-2023-SOIL-01>

Soil Erosion Control in Shanxi Province, China

By Yuan Shenggao



Level terraces have been developed on the hills in the county of Yanggao to curb soil erosion.

Shanxi province, which used to suffer from severe soil erosion, has seen steady improvements after decades of efforts.

Shanxi is located in the middle reaches of the Yellow River and in the eastern part of the Loess Plateau. The region had been a victim of soil erosion for many centuries because of its terrain being dominated by mountains and hills with less vegetation coverage and loose soil.

In the early 1950s, the area of soil erosion in Shanxi was 108,000 square kilometers, of which 67,600 sq km was in the Yellow River drainage basin. The soil erosion-induced annual sediment in the Yellow River was 366 million metric tons during that period.

Shanxi began its initiative in curbing soil erosion in that period and the pace has been accelerated since 2012.

After years of continuous treatment, the area of soil erosion in the province has been reduced to 58,000 sq km at the end of 2021, a decrease of 12,300 sq km, or 17.5 percent, from the figure of 70,300 sq km in 2011. This also means that 63 percent of Shanxi's territory has been freed from soil erosion.

In Shanxi, the efforts in soil erosion are a combination of greening and engineering measures.

With regard to greening, Shanxi has seen an annual addition of nearly 270,000 hectares of forest in recent years on average.

The latest survey by the Shanxi Forestry and Grassland Administration shows that the province's forest coverage surpassed 25 percent at the end of 2020.

Engineering measures, such as building level terraces and works for gully head protection, also proved to be successful in erosion control. This is especially true in the areas of the Lyuliang and Taihang mountains, which feature steeper slopes.

The province has enhanced legislative efforts for curbing soil erosion, especially that caused by human activities.

Over the past few decades, Shanxi has released a number of regulations and laws for soil erosion control and has deployed special

task forces for law enforcement.

During 2020-21, for instance, the province implemented a special law enforcement campaign to curb activities that could lead to soil erosion.

Thanks to the use of the latest technologies like remote sensing, provincial law enforcement identified 1,155 projects with potential risks of soil erosion and ordered the related businesses to act.

The province will continue its efforts to curb soil erosion in the years to come. According to Shanxi's 14th Five-Year Plan (2021-25) for Soil Erosion Control, it plans to bring nearly 370 sq km of eroded land under control every year over the next three years.



Forest has been planted in the county of Yanggao to curb soil erosion.

<https://epaper.chinadaily.com.cn/a/202212/16/WS639ba593a31077768988542a.html>

UN Calls for Game-changing Action to Stem Global Water Crisis



UN
2023 WATER
CONFERENCE

NEW YORK
22-24
MARCH
2023

With mounting pressures on water from rising consumption demands, increased pollution and climate change, world leaders, civil society, businesses, youth and other stakeholders are gathering at the UN 2023 Water Conference from 22 to 24 March at the UN Headquarters in New York to make bold commitments to address the global water crisis.

“This is more than a conference on water. It is a conference on today’s world seen from the perspective of its most important resource,” said United Nations Secretary-General António Guterres in his opening remarks. “This conference must represent a quantum leap in the capacity of Member States and the international community to recognize and act upon the vital importance of water to our world’s sustainability and as a tool to foster peace and international co-operation.”

Access to safe water, sanitation and hygiene is the most basic human need for health and well-being, and a declared human right. But

some 2 billion people around the world still lack access to safe drinking water. More people have access to mobile phones than toilets and sanitation, with 80 per cent of wastewater discharged untreated into the environment. More than 90 per cent of disasters are water-related, with climate change adding to the pressure. And humanity’s demand for water keeps growing, with pressure on freshwater projected to increase by more than 40 per cent by 2050. Despite these challenges, a breakthrough to a water-secure planet is still possible. But urgent action is needed now. With this at the top of their minds, world leaders, together with over 6,000 registered civil society, business leaders, young people, and experts are attending the three-day Conference to present innovative solutions and bold commitments to accelerate transformational change for water. Coming from all sectors, the Conference is an opportunity to unite the global community around a common goal and trigger real action.

“During this conference, we want to get the water wheel spinning,” stated His Highness Willem-Alexander, the King of the Netherlands in his opening statement. “We won’t rest until water is given the place it rightly deserves on global agendas and policy programmes. We will bring all our commitments, pledges and actions together in a Water Action Agenda.”

The key outcome of the UN 2023 Water Conference will be the Water Action Agenda, a collection of commitments from Member States and other stakeholders that aims to present game-changing solutions to accelerate progress on SDG 6. To date, more than 500 commitments have been registered from Governments, UN agencies, business leaders and civil society, ranging from targeting open data sources and improving education around water, to scaling effective water management practices and mobilizing funds to drive action towards water. While many commitments are already available online, key announcements will be made throughout the three days of the Conference.

About the Conference

Co-hosted by the Kingdom of the Netherlands and the Republic of Tajikistan, the Conference is a once-in-a-generation opportunity to advance the Water Action Agenda that seeks to deliver the internationally agreed wa-

ter-related goals and targets, including those contained in the 2030 Agenda for Sustainable Development.

In addition to the plenary sessions, there will be five interactive dialogues: 1) Water for Health; 2) Water for Sustainable Development; 3) Water for Climate, Resilience and Environment; 4) Water for Cooperation and 5) Water Action Decade. Four high-level special events and more than 500 side events will also be occurring during the Conference.

Water – a dealmaker for cooperation and the implementation of the SDGs

Water is fundamental to the Sustainable Development Goals (SDGs). Safe water and adequate sanitation for all – SDG 6 – are indispensable to support the achievement of all SDGs as they underpin poverty reduction, good health, economic growth and sustainable ecosystems.

While there are great challenges, solutions are possible as water management is key to building a green economy, climate resilience and a more sustainable and inclusive world for all. The science, financial resources and innovative solutions are available to address the water crisis. The Conference will be a key moment to advance those solutions and generate the political will to fast track progress and action on SDG 6 goals and targets.

“We need to think about how we value water.

We must consider both the role and impact of water in driving sustainable economic and social development, urban development, environmental protection, and peace. A close look at the water-energy-food nexus is also critical,” said UN Under-Secretary-General for Economic and Social Affairs and Conference Secretary-General, Li Junhua in his address at the opening.

SDG Media Zone

Through a live format of interviews and discussions, the SDG Media Zone for the UN 2023 Water Conference will bring together governments, UN agencies, influencers and industry leaders to talk about the global water crisis and innovative solutions to address current water issues. A daily session spotlighting the Water Action Agenda commitments will also be featured in the Zone.



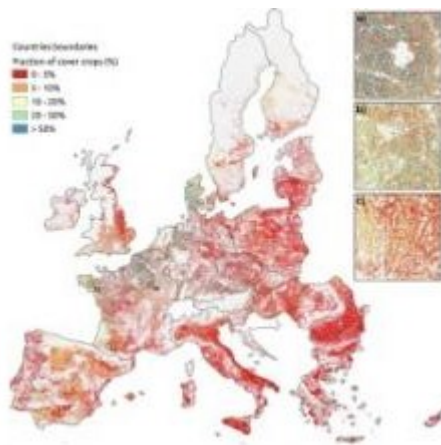
Key Links

UN 2023 Water Conference programme (<https://sdgs.un.org/conferences/water2023/programme>)

Website (<https://sdgs.un.org/conferences/water2023>)

Cover Crops across Europe

Despite the growing importance given to cover crops as a sustainable agricultural practice, the availability of spatial data about them is scarce. The best information available is regionally aggregated survey data, which, although indicative, hinders the development of spatially accurate studies. Using a disaggregation model, we combined satellite data (Sentinel-1) with aggregated survey data to generate a high-resolution map of cover crops for Europe and the United Kingdom for the reference year of 2016. The map was validated with parcel-level data in France, where overall good results were found, with regional variations.



Title: Disaggregated map of cover crops occurrence for Europe and the United Kingdom

Description: This dataset includes the median, standard deviation, 5th and 95th percentiles of the predicted cover crop fraction. Such

a fraction is assumed to vary between 0% (i.e., no cover crops in the pixel) to 100% (i.e., pixel completely covered by cover crops). The values in the raster files are multiplied by 100 to facilitate compression. For instance, a raster value of 1234 corresponds to a 12.34% cover crops fraction. The dataset aims to replace the practice commonly found in the literature of assigning aggregated values to agricultural pixels by randomly sampling them in space. It can be useful for researchers and practitioners requiring spatially explicit knowledge of cover.

Spatial coverage: EU & UK.

Pixel size: 100 m.

Projection: EPSG:3035

Temporal coverage: 2016

Reference: Fendrich, A. N., Matthews, F., Van Eynde, E., Carozzi, M., Li, Z., d'Andrimont, R., Lugato, E., Martin, P., Ciais, P., Panagos, P., 2023. From regional to parcel scale: A high-resolution map of cover crops across Europe combining satellite data with statistical surveys. *Science of the Total Environment*, pp.162300.

<https://doi.org/10.1016/scitotenv.2023.162300>

<https://esdac.jrc.ec.europa.eu/content/cover-crops-across-europe#tabs-0-description=0>

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(Names are arranged in alphabetical order)



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