



WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION

HOT NEWS

Issue 04, 2018



WASWAC HOT NEWS No. 04, April, 2018

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<http://www.keaipublishing.com/en/journals/international-soil-and-water-conservation-research/>

WASWAC Website: www.waswac.org

Prepare your travel for the upcoming 2nd IYFSWC



➤ Invitation letter application

Most registered participants have finished the application of the invitation letter. This will be the last reminder to the participants who is going to attend this forum but have not submitted the application yet, please make your submission as soon as you can. As the application for visa invitation submitted by participants from Finland, Sweden, Norway, Iceland, Denmark, Germany, France, Netherlands, Italy, China etc. will be proceed by Moscow State University international office (within 1-2 weeks). Applications for visa invitation submitted by participants from most of non-Shengen countries (including USA, Canada, UK etc.) will be transferred to Russian Migration Service who prepare an invitation letter (within the expected period of 1 month after submission the application). In addition, for the participants from some of non-Shengen countries including USA, Canada, UK according to the requirements of the Russian Federal Migration Service, to proceed with your invitation LOC will have to pay tax (state duty) which costs 800 Rubles (approximately 12 EUR) (IMPORTANT: obtaining invitation for citizens of China is free of charge). As far as these expenses are not included into registration fee, we kindly ask you to get ready to reimburse us this cost in Moscow. You can do it on the registration desk by cash in Rubles (you will get the receipt of payment).

Any problems about your invitation letter please contact Daria at iyfswc-2018@geogr.msu.ru.

Visa application form available here:

<http://www.eng.geogr.msu.ru/IYFSWC/visa/>

➤ **Book your accommodation**

The organizing committee offers you an accommodation in hotels list, please make your reservations in advance. **Reservation deadline is August 11, 2018, after this date you will be able to make a reservation but without any guarantee of your first choice.**



Radisson Slavyanskaya Hotel ****

Hotel address: Moscow, Europe Square 2

Hotel reservation is available:

- via Hotel website: <https://www.radissonblu.com/en/slavyanskayahotel-moscow>
- via Hotel reservation department: reservations.moscow@radisson-hotels.ru
- via telephone call: +7 495 941 8020, 3200

Promotional code: IYFSWC (Booking will be available since the beginning of 2018).



Hotel Korston ****

Hotel address: Moscow, Kosygina str., 15

Hotel website: <https://club.korston.ru/booking/en/>

The nearest metro stations: "Leninskiy prospect", "Universitet" and "Vorobiev Gory". How to get from metr stations: take a taxi (Uber service is available) or public transport.

Promotional code: IYFSWC



Hotel Salut ****

Hotel address: Moscow, Leninskiy prosp., 158

Hotel website: <http://www.hotelsalut.ru/en/>

The nearest metro stations: "Yugo-Zapadnaya".

How to reach the place where the conference is held: Take a train from "Yugo-Zapadnaya" metro stations up to «Universitet» metro station.

To book rooms at special price You have to send a letter to an email: service@hotelsalut.ru which includes **promotional code IYFSWC**

BOOKING DEPARTMENT CONTACTS: (+7495)234-92-52 (from 9 a.m to 9 p.m)

Or using link on the website the Hotel Salut <http://www.hotelsalut.ru/en/booking/>

- 1) Enter your check-in and check-out dates
- 2) Choose the option «I have a promotional code» and enter promoword IYFSWC
- 3) Push the button «Check availability»

➤ Arrange your visit plan

The forum will be lasting from August 27 to 31, 2018. Please arrange your visit plan while considering the following things:

- ✚ **Registration:** August 27, 09:00-10:30
- ✚ **Opening Ceremony:** August 27, 10:30-11:30
- ✚ **Scientific Tour:** August 29
- ✚ **Closing Ceremony:** August 31, 13:30-15:00

➤ Training course

A training course “Water-related natural hazards: measurement and modeling” will be provided during this forum. It will include 2 days of lectures, seminars, as well as a rich workshop program. Experts with different background, including but not limited to, fluvial geomorphology, soil science, climate change, hydrology and

sedimentology, give unique practical lectures and seminars.

Participants will get official internationally recognized diploma of Moscow State University (1 ECTS point). Additional fee (90 euro) is required for registered participants of the 2nd IYFSWC and ICCE symposium which includes training course proceedings and documentation, attending to all training course activities, certificate.

Registration for training course can be done during your abstract submission or by filling the additional form this page

<http://www.eng.geogr.msu.ru/IYFSWC/training/>

Detailed introduction about this course:

"Digital modeling of erosion soil cover patterns". This course is aimed at analyzing approaches to studying the soil cover patterns on the plowed land in connection with the erosion-accumulation processes. We will show the method of applying of the erosion model (WaTEM/SEDEM) in common with the field data of soil properties for digital modeling of erosion soil cover patterns and also discuss the advantages and disadvantages of digital modeling and traditional mapping of combinations of eroded soils.

"Soils of the World": practical course on the unique collections of soil profiles which are deposited in the Earth Sciences museum of Moscow State University. Collection includes over 30 different soil profiles. The workshop includes detailed insights and explanations on soil formation processes in various environmental zones.

"Field study on soil erosion phenomena in the Central part of East European plain": the field study will be help on the areas of former cultivated lands of steep slopes of Klinsko-Dmitrovskaya moraine ridge where since the 1991 considerable reduction of agricultural activities have been observed due to economical reason. This lead to the serious reduction of the total soil losses and to increasing forested area. Results of long-term monitoring of soil erosion, quantitative assessment of the soil erosion rates and consequences of the cultivated land reduction will be discussed during field excursion.

➤ Post conference tour (September 1 – 3, 2018)



St. Petersburg



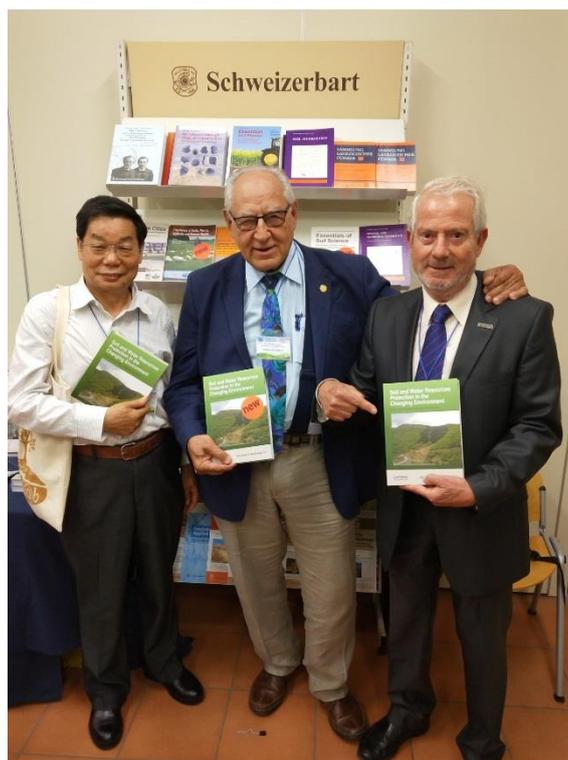
Kazan

Any further questions please contact: iyfwc-2018@geogr.msu.ru

Details here: <http://www.eng.geogr.msu.ru/IYFSWC/home.php>

President LI Rui visited Italy

At the invitation of European Society of Soil Conservation (ESSC) and Joint Research Centre (JRC), Professor Li Rui, the President of WASWAC, and the delegation of Global Soil Erosion Assessment Project (GSEAP) from the Institute of Soil and Water Conservation (ISWC) visited Italy on 4-13 of June, 2018.



Group photo of WASWAC attended councilors

(left: LI Rui, middle: Ildefonso Pla Sentis, right: Jose Luis Rubio)

During this visit, they participated the International conference of ESSC, investigated soil erosion and conservation of north/central Italy, visited JRC and had a workshop on global soil erosion with JRC Soil Team.

✚ To participate to the international conference on *Soil and Water Security: Challenges for the next 30 years*, to celebrate 30 years of activities of ESSC in Imola, Italy. President LI Rui made an address to congratulate on the ESSC 30th anniversary and the opening of the international conference on behalf of WASWAC.

- ✚ To visit some sites of soil and water conservation in north and central regions of Italy, ranging coast area, mountain and hills areas. The exploitation and conservation of wetland and slope land have given a deep impression which is naturally and ecologically restoration and to make the impacts of human to the least.



Field tour

- ✚ A special workshop focused on Global soil erosion was successfully hold on 11-12, June in Ispra. There were 8 presentations from JRC and ISWC to introduced the research achievements and progresses covering soil erosion modeling, soil erosion survey and assessment, global and regional soil erosion factors calculating, soil carbon and soil biodiversity. JRC soil group has developed suitable models for Europe soil erosion investigation and mapping and made great contribution to the global soil erosion research. In JRC the nice database of soil and related environmental factors has been established. The research projects on soil erosion, soil carbon and soil biodiversity has made many enviable progresses. In ISWC, the project on Global Soil Erosion Assessment, which initiated by WASWAC, has been launched in 2017. The group has made some obvious progresses on soil erosion factor data collecting and extracting, method developing and improving, data gathering and analysis. Also a concomitant Pan-Third Pole project, which belongs to the Key project supported by CAS (Chinese

Academy of Sciences) covering 65 countries. The data from sampling and field investigation from this project will make a great contribution to the global soil erosion research. Both sides are very interested in the global soil erosion and very keen to do the cooperation on the very important topic. Based on the discussion, the preliminary work plan for the cooperation project has been proposed.



Visit Joint Research Center

Necessity to pay more attention to watershed health assessment

by Zeinab Hazbavi

Former Ph.D. Student, Watershed Management Sciences & Engineering, Faculty of Natural Resources, Tarbiat Modares University (TMU), and Member of Watershed Management Society of Iran

Natural and anthropogenic activities affect the watershed health and leading to a watershed function loss. Towards to increasing trend of land degradation, the United Nations adopted the Sustainable Development Goals (SDGs) in 2016 in which the protection of land resources is an important topic. To achieve this, it is of important to understand the complex interactions among different parts of a watershed, which will be accomplished by watershed health modelling. A good perception of linkages among watershed processes is a vital input to develop sustainable natural resources management strategies. Towards this issue, the concept of watershed health assessment could be considered to target the effective watershed adaptive management, realize the sustainability and land degradation neutrality (LDN) concepts and achieve the main objectives of United Nations Convention to Combat Desertification (UNCCD) eventually leading to SDGs.

Assessing the watershed health could be useful in:

- ✚ providing an interactive tool to view information pertaining to the health of the watershed,
- ✚ identifying the priorities in resources management,
- ✚ developing a strategy with specific actions to improve the health of the watersheds,
- ✚ providing an indication of the quality of a land management decision,
- ✚ facilitating the modification in land management decisions for the future to improve watershed function and structure and
- ✚ reducing the future risk of watershed threats.

According to Jones et al. (2002) definition: “the watershed health is a state in which resource management activities sustain human needs and uses of the watershed while ensuring that ecological function is maintained”. With respect to the health of the watersheds, it is vital to manage the human use of natural resources to absorb any adverse impacts. As depicted in Figure 1, the watershed management fulcrum plays an important role in watershed health maintaining. If the management favors either human uses or environmental issues, the watershed health is declining, while if the status of health is illustrated here, with the watershed management fulcrum in a central position.

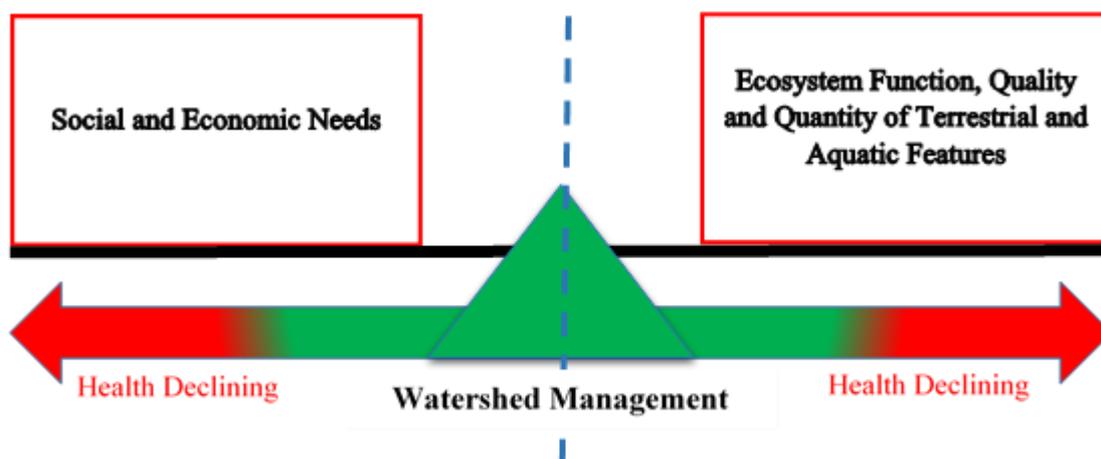


Figure 1. Watershed health balancing (Adapted from Jones et al., 2002)

There are different frameworks for watershed health assessment including:

- ✚ Thermodynamic analysis
- ✚ Network analysis
- ✚ Multi-metric approach
- ✚ Predictive model approach
- ✚ Healthy watersheds initiative (EPA Protocol)
- ✚ Watershed health assessment framework (WHAF)
- ✚ Reliability-resilience-vulnerability (RRV)
- ✚ Vitality (Vigor)-organization force-recovery force (VOR)
- ✚ Pressure-state-response (PSR) and its new versions

✚ Health distance (HD)

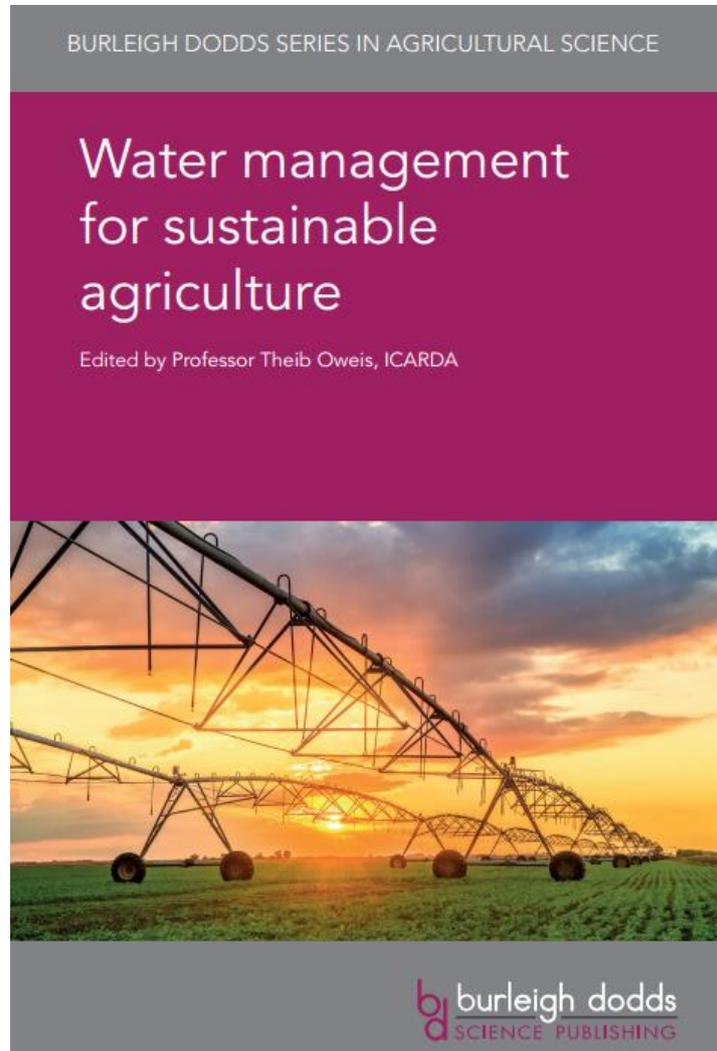
✚ Proper functioning condition (PFC) assessment

Nevertheless, there is still to improve these frameworks and therefore conducted more in depth studies on the watershed health context. From the present short article, it can be concluded that the watershed health assessment approach is an efficient and effective strategy to alleviate existing issues dealing with the whole resources at the watershed scale. It cannily establishes a bilateral supporting approach considering all stakeholders' demands as well as ecosystem cravings leading to sustainable conservation of basic resources of soil, water, fauna and flora.

Reference:

1. Cowie, A.L., Orr, B.J., Castillo Sanchez, V.M., Chasek, P., Crossman, N.D., Erlewein, A., Louwagie, G., Maron, M., Metternicht, G.I., Minelli, S., Tengberg, A.E., Walter, S. and Welton, S., 2018. Land in balance: the scientific conceptual framework for land degradation neutrality. *Environmental Science and Policy*, 79, 25-35.
2. Jones, C., Palmer, R., Motkaluk, S., Walters, M., 2002. *Watershed health monitoring: emerging technologies*. Lewis Publishers, CRC Press, ISBN: 142001014X, 9781420010145, 248 p.
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4. Hazbavi, Z., Sadeghi, S.H.R., 2017. Watershed health characterization using reliability-resilience-vulnerability conceptual framework based on hydrological responses. *Land Degradation and Development*, 28, 1528–1537.
5. Sadeghi, S.H.R., Hazbavi, Z., 2017. Spatiotemporal variation of watershed health propensity through reliability-resilience-vulnerability based drought index (case study: Shazand Watershed in Iran). *Science of the Total Environment*, 587–588, 168–176.

Book release: Water management for sustainable agriculture



"This book provides excellent source material, covering a range of important topics for sound and sustainable water management practices for agriculture. This is an urgent need as food production is the major consumer of water resources. This book will hold the keys to help unlock the potential for improved water management. The editor and author are to be applauded in taking this issue side by side with issues of sustainability." *David Molden, Director General - International Centre for Integrated Mountain Development, Nepal (formerly Deputy Director General for Research at the International Water Management Institute)*



SOILS ACROSS LATITUDES

2018-2019 International Soils Meeting | January 6-9, 2019 | San Diego, CA



Fostering collaboration with other North American Soil Science Societies, The Soil Science Society of America will host scientists, professionals, educators, and students at the SSSA International Soils Meeting. "Soils Across Latitudes" will be held **Jan. 6-9, 2019, in San Diego, California** in collaboration with the Canadian Society of Soil Science and the Mexican Society of Soil Science.

Registration: <https://www.sacmeetings.org/register>

Abstract submission: <https://www.sacmeetings.org/submit>

Early abstract deadline: July 24, 4:00 PM CDT

Final abstract deadline: August 7, 4:00 PM CDT

Program published online: Early October

2019 KEYNOTE SPEAKERS

Opening Keynote



Tom Vilsack

Closing Keynote



David Batker

Details: <https://www.sacmeetings.org/>



World Mountain Forum 2018

The University of Central Asia's (UCA) Mountain Societies Research Institute is pleased to announce that registration is now open for the World Mountain Forum (WMF) 2018, to be held in Bishkek, Kyrgyzstan, October 23rd to 26th 2018. To contribute to the discussion, UCA invites the submission of contributions addressing one of four core themes of the Forum:

1. Climate Change Affecting Water and Energy in Mountain Areas
2. Poverty, Food Systems and Agrobiodiversity
3. Resilience and Transformation in Mountain Communities and Ecosystems
4. Investing in Mountains - Securing the Future

This Forum is the fourth in a series of WMF events and will be hosted by the Government of the Kyrgyz Republic, with the support from the Government of Switzerland, the University of Central Asia, and the Aga Khan Foundation.

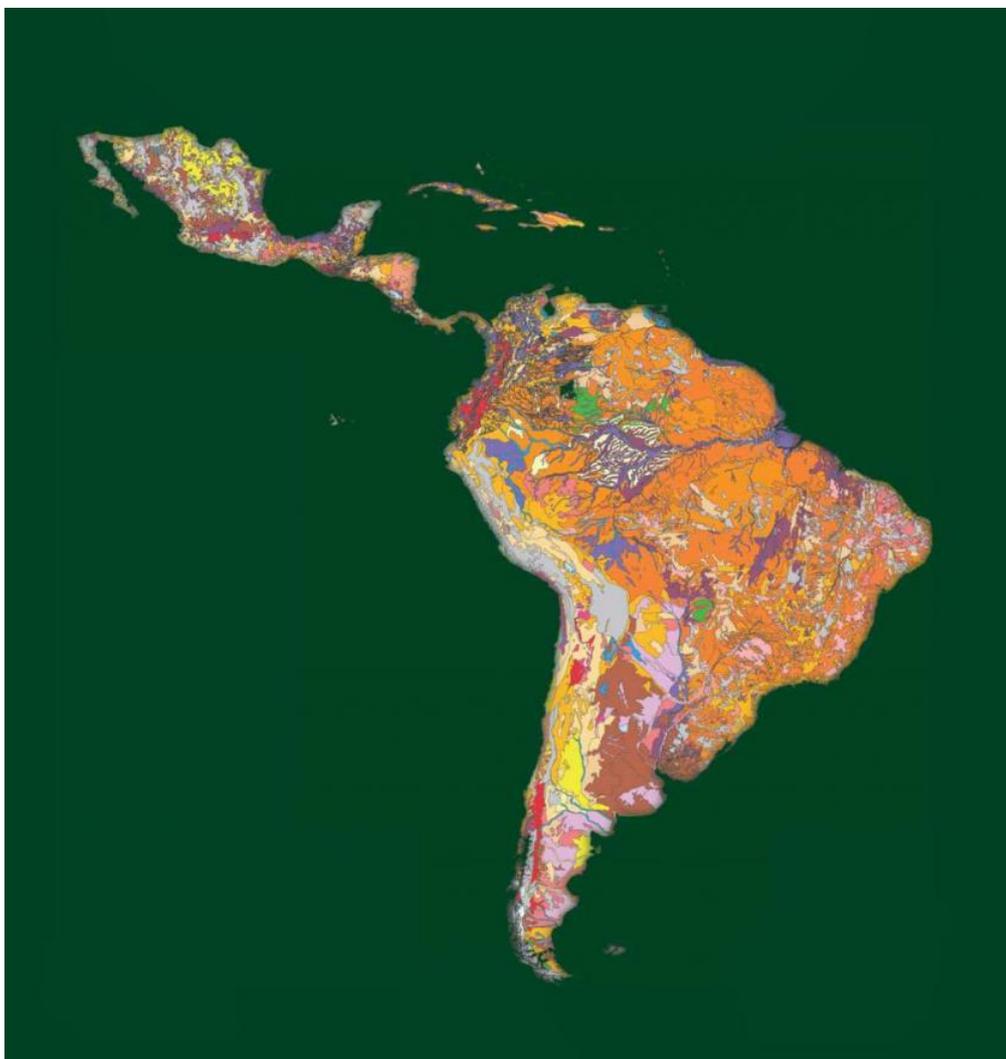
Registration is now also open. Please register your attendance for the WMF 2018 **by Sunday July 29th 2018 at 11:59 pm (GMT +6)**.

Contribution proposals (350-400 words) can be submitted using the conference website. They should address one of four core themes of the WMF 2018. The deadline is also **Sunday July 29th 2018 at 11:59 pm (GMT +6)**.

Details at: www.wmf2018.org

EU-CELAC summit: launch of the JRC Soil Atlas of Latin America and the Caribbean

On 10-11 June the EU is holding a high level summit with the Community of Latin American and Caribbean States (CELAC) under the title “Shaping our common future: working for prosperous, cohesive and sustainable societies for our citizens”. On this occasion, the English and Portuguese versions of the JRC Soil Atlas of Latin America and the Caribbean were launched. This publication was offered by the Commission President to the 61 heads of delegation, including more than 40 heads of state or government from CELAC and EU Member States taking part in the summit.



English and Portuguese versions of the JRC Soil Atlas of Latin America and the Caribbean were launched on the occasion of the EU-CELAC summit.

The Soil Atlas of Latin America and the Caribbean was developed in close partnership with the Commission's Directorate-General for International Cooperation and Development (DEVCO) as part of EUROCLIMA, a regional cooperation programme between the European Union and Latin America, focused on climate change. Contributions were provided by the UN Food and Agriculture Organization (FAO) as well as scientific partners from across the CELAC region and Europe. The atlas, published in 2014 in Spanish, highlights the importance of soil, a precious non-renewable resource which provides food, fodder and fuel for more than 500 million people.

The JRC has been increasingly working with the scientific institutions of the CELAC countries in the areas related to soil, water, climate change, deforestation, disaster risk reduction and the bioeconomy. Many of these projects are carried out together with EuropeAid, the Commission's Directorate-General for International Cooperation and Development.

In 2014, to enhance collaboration with the region, the JRC launched a dialogue with the CELAC group of ambassadors in Brussels. The visit of CELAC ambassadors to the JRC site in Ispra, Italy in December 2014 provided the opportunity to identify new collaboration opportunities of mutual interest. As a result, dedicated webinars were organised in May 2015, focusing on human settlements mapping and media monitoring.

Further examples of CELAC-JRC cooperation on water resource management, flood detection, remote sensing imagery to monitor deforestation and forest degradation, capacity building in the area of GMO testing, smart grids deployment, nuclear safety or offshore oil and gas safety can be found here.

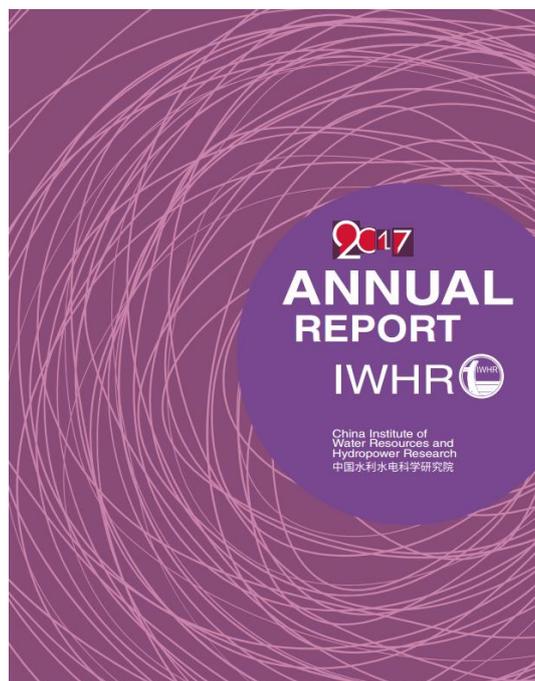
Further information

Download the pdf version of the Soil Atlas of Latin America and the Caribbean (EN, ES & PT) from the EU Soil Portal at <https://esdac.jrc.ec.europa.eu/>

Details at:

<https://ec.europa.eu/jrc/en/news/eu-celac-summit-launch-jrc-soil-atlas-latin-america-and-caribbean>

IWHR annual report 2017 released



IWHR, China Institute of Water Resources and Hydropower Research, a national research institution under the Ministry of water Resources of China, and is engaged in almost all the disciplines related to water resources and hydropower research.

In 2017, IWHR accomplished great breakthroughs in R&D, attaining overall progress in flood control and disaster mitigation, water resources management and eco-environment improvement, efficient irrigation drinking water safety, intelligent water technology, as well as the construction, operation and management of key water projects. Newly signed contracts in 2017 totaled CNY 1.343 billion, among which about 30.9% are sponsored by the state. Throughout the year, IWHR had 655 papers, 59 monographs, 166 patents, 26 standards and 45 major awards (including 3 national prizes) added to its accomplishments.




KUANG Shangfu, Ph.D.
President of IWHR

Highlights of 2017

- ✚ IWHR hits a record high of innovative achievements by winning 3 national prizes for progress in science and technology and 42 provincial-level awards.

- ✦ IWHR reaps a bunch of awards for its talented human resources, winning the first National Prize for Innovation and Advancement, the National Science Fund for Distinguished Young Scholars for the third time, the 2017 Netafim Award for Advancements in Microirrigation, and the Special state-sponsored Program for high-level Talents.
- ✦ IWHR Wins 4 national key special research projects and another 34 projects funded by the Natural Science Foundation of China.
- ✦ IWHR receives IHAS 2017 Mosonyi Award for Excellence in Hydropower, hosts the permanent secretariat of the International Conference on Flood Management, and organizes Asia Water Council's 4th Board of Council meeting in Beijing.
- ✦ IWHR becomes one of the 44 national pilot research institutions for more autonomy in personnel, income and management Organizational reform is also introduced to merge the Research Center on Sustainable Hydropower Research and the Department of Structures and Materials, and to upgrade the Division of Postgraduate Education to Graduate School.
- ✦ IWHR increases the total amount of its newly- signed contracts by 8. 36% to CNY 1.343 billion in 2017, its revenue Up 9. 77% to CNY 1. 606 bilion compared to the previous year.
- ✦ IWHR pushes ahead its organizational cultural development and capacity building that are centered around the national policies and industrial expertise.
- ✦ IWHR, via its enterprises, wins awards for multiple research projects, constantly enhancing the capability of independent and innovative research and development.
- ✦ IWHR continues to improve its research, office and residential infrastructure, upgrading facilities buildings and services.
- ✦ IWHR enhances its competence in academic journals, hosting the Working Group on Journals of Chinese Hydraulic Engineering Society, editing the Journal of Hydraulic Engineering that is among 2017 Excellent Chinese Academic Journals with International Influence, as well as the Journal of Ecohydraulics, co-launched by IWHR and IAHR.



WASWAC MEMBERSHIP APPLICATION/RENEWAL FORM (Issued 120501)
(For applicants from all countries)

Name: (Ms./Mrs./Mr./Prof./Dr.)..... Gender: F M
 Institution:.....
 Postal address:.....
 State/Province:..... Zip/Postal code:..... Country:.....
 Phone:..... Fax:.....
 Emails (Please give at least 2 addresses to ensure uninterrupted contact): (1).....
 (2)..... (3).....
 My specialized field(s):.....
 Please sign me up for the WASWAC membership in category*: 1(IM)2(LM)3(OM)4(SM&GM)
 Membership for the year(s).....@US\$..... = US\$
 Donation for developing country membership, etc. US\$
 Donation to the Moldenhauer Fund US\$
 Total US\$

***Membership categories & rates** from July 18, 2005, amended March 3, 2007 and March 4, 2010.

- 1.** IM (Individual membership): US\$20 for 5 years for developing countries **(In China, members pay 130 yuan RMB)**; US\$40 for 5 years for developed countries and persons working in international organizations worldwide.
- 2.** LM (Life membership): US\$80 for developing countries **(In China, members pay 520 yuan RMB)**; US\$160 for developed countries and persons working in international organizations worldwide. Persons who have passed their 60th birthday pay only half of these LM rates.
- 3.** OM (Organization membership): For universities, research and implemental institutions, government agencies, NGOs, societies, associations and international organizations, etc. Persons belonging to an Organization member will receive the same online products and services as the other two above categories: \$100/year for an organization with up to 150 persons; \$150/year for an organization with up to 300 persons; \$200/year for an organization with up to 500 persons; and \$10/year for an additional 100 persons or part thereof.
- 4.** SM&GM (Student membership & Gift membership): US\$5/year worldwide, to be purchased to give to colleagues, friends, students, etc.

For sending money by foreign wires through a bank, please give the following information to your bank:

Name of Receiver (A/C Holder's Name): World Association of Soil and Water Conservation

Bank Name and Address: China Construction Bank, Shoutinanlu Branch, Beijing, China, No. 9 Shoutinanlu Street, Haidian District, Beijing, P R China

A/C NO.: 1100 1042 7000 5301 6996

Message to write on the Bank Sheet: WASWAC Membership due for Ms./Mrs./Mr./Prof./Dr., Country

NOTE: 1. Do not deduct the bank fee from the amount of money to send. **2.** For sending money by wire/bank transfer or check please add US\$7 per transaction to compensate for the charge at the receiving bank in Beijing. This additional charge does not apply for **WESTERN UNION** or any payment of US\$50 or more.