



WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION

HOT NEWS

Issue 06, 2018



WASWAC HOT NEWS No. 06, June, 2018

Contents

See you in the upcoming 2nd IYFSWC	1-3
4 per 1000'Initiative, Agricultural soils for food security and climate	4-5
Coming meetings	6-8
1st Young Researchers' Conference Erosion and Torrent Control ETC 2018	6-7
Preventing and Remediating Degradation of Soils in Europe	8
New World Atlas of Desertification	9-10
International Science Council holds first General Assembly in Paris	11-12
New Publication: Managing soil health for sustainable agriculture	13-15
Soil Atlas of Latin America	15-17
WASWAC MEMBERSHIP APPLICATION/RENEWAL FORM	18

Editors: Dr. DU Pengfei, Contributors include Dr. Amir Kassam and Dr. Panagos Panos.



IRTCES Building

(Where the Secretariat of WASWAC is located)

The Secretariat of WASWAC

No. 20 Chegongzhuang Road West, Beijing 100048, P. R. China

Tel: +86-10-68786579

Fax: +86-10-68411174

Email: waswac@vip.163.com

For ISWCR paper submission:

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

WASWAC Website: www.waswac.org

See you in the upcoming 2nd IYFSWC



The second International Youth Forum on Soil and Water Conservation will be held in two days. It is time to arrange your trip in details. Before departure, we would like to let you know the following things:

✚ Please make sure that you have already made the hotel reservation

Please do it if you have not! We have provided you with some choices on the previous announcement, the link for such hotels are as follows:

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

✚ Please make sure that you have already prepared enough clothes

The temperature in Moscow for the following a week will be between 13 – 28 °C, and it will be raining for some days, you are kindly asked to prepare enough clothes to keep warm.



✚ Please make sure that you have brought enough cash

If you have not paid the registration fee yet online, and you are going to make the payment while make registration on desk, please make sure that you have already prepared cash rather than card, cheque, etc. As we have already announced that only cash can be accepted while making payment during the forum. Three kinds of cash, such as EUR, USD, or RUB are all fine to be accepted. The fees are with following rates: Standard participant 350 EUR, student participant with student certificate 200 EUR, any accompanying person 170 EUR.

✚ The program was arranged preliminary as following

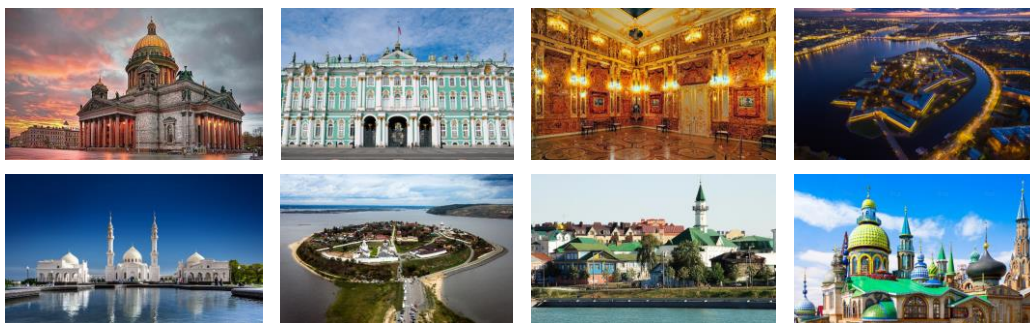
- Registration: 8:00-10:00, August 27

- Opening ceremony: 10:00-10:40, August 27
- Keynote lecture: 11:00-13:00, August 27; 10:00-11:00, August 28; 10:00-11:00, August 29
- Session - "Challenges/actions of soil and water management in the changing world": 14:00-16:00, August 27
- Session - "Mechanism/processes and modeling of soil degradation": 11:30-13:00, August 28
- Session - "Ecological restoration and regional sustainable development": 11:30-13:00, August 28
- Session - "Mechanism/processes and modeling of soil degradation": 14:00-16:00, August 28
- Session - "Ecological restoration and regional sustainable development": 14:00-16:00, August 28
- Session – "Challenges/actions of soil and water management in the changing world": 11:20-13:00, August 29
- Session – "Mechanism/processes and modeling of soil degradation": 14:00-18:10, August 29
- Session - "Mechanism/processes and modeling of soil degradation": 11:20-13:00, August 31
- POSTER SECTION – 16:30-18:00, August 27; 16:30-18:00, August 28
- Training Courses – 8:30-9:45, August 28 (P. Strauss – How can we measure erosion at plot scale, field scale and small watershed scale – what are the challenges for these different scales of measurement and which types of equipment exist); 8:30-9:45, August 29 (V. Moreido – ECOMAG: catchment-scale streamflow assessment for world's large rivers); 18:30-20:00, August 29 (Master-class "Digital modeling of erosion soil cover patterns" (by Zhidkin A.P., Lozbenov N.I., Kozlov D.N.)); 8:30-11:15, August 30 (Dr. J. Poesen – Quantitative assessment of soil and gully erosion rates; Dr. Helmut Habersack – Bed load measurements techniques in river monitoring); 8:30-

9:45, August 31 (M. Zlatic — Social-economical factors of soil and water conservation in the different landscape zones)

- Closing ceremony and the Outstanding Youth Paper Award ceremony: 13:00-15:00, August 31

✚ If you have planed to take part in the post-conference tour, please make sure you visa is still valid in that time: September 1-3. This is a valuable chance to enjoy the beautiful scenery after this forum for visiting St. Petersburg and Kazan visiting.



**WE WISH YOU A VERY SAFE
AND PLEASANT JOURNEY!**

**SEE YOU IN MOSCOW
VERY SOON!**

'4 per 1000' Initiative, Agricultural soils for food security and climate



It is a great honor to write these first words of the first editorial of the first newsletter of the "4 per 1000" Initiative. Here we are finally! After more than two years of existence and in the middle of this third year, as requested by the Consortium of the members of the Initiative, we are launching the newsletter, essential link with the partners and the members of the "4 per 1000 " Initiative. It is true that time is running out, and yet we know that to meet the commitments made in Paris during the COP 21 to limit global warming to less than 2 °C and even 1.5 °C in 2050, we must not lose a single minute. Now that the awareness of the Initiative is established, and the governance essential to its operation is in place, we must resolutely turn to action.

Support those who, on a daily basis, act in the field to increase the amount of sequestered carbon in agricultural and forest soils, support decision-makers to develop and implement ambitious policies for soil organic carbon sequestration, encourage companies to develop value chains that respect the objectives of our initiative, continue advocacy to strengthen the collective awareness of the imperative need for a global action for the storage of carbon in the soil of the planet... these are the numerous actions we must take. But contributing to each of these components is not enough, it must also be known and shared with other actors at all levels.

This is the ambition we are pursuing through the implementation of the "4 per 1000" collaborative platform, already in operation and tested by the Scientific and Technical Committee and the Executive Secretariat. Its opening to partners and members is scheduled for September 12 to 14, 2018, at the Global Climate Action Summit to be held in San Francisco at the initiative of the Governor of California, Mr. Jerry BROWN. This Summit will be one of the highlights of the year regarding collective action against climate change. We will report on this in a future edition of this newsletter.

And precisely this newsletter is also a link within the network of many actors who are mobilized everywhere to catalyze change. This letter is yours, it will exist only for you and by you, and thanks to your contributions, whatever their nature. You will thus find in the body of this first edition, the composition of the Executive Secretariat and the functions of each one, in order to allow you to identify more easily an interlocutor. So, if you wish to suggest articles, relay local or global news, press articles, publicize the actions that you lead or that others lead and that seem to you in line with the objectives of the "4 per 1000" Initiative, do not hesitate to contact us at the following address: communication@4p1000.org.

This newsletter will reflect your actions and our joint efforts. In advance, be thanked for your commitments, your concrete actions, your projects and your ideas, because before things happen in the field it is necessary that an idea arises, and a seed germinates... and without fertile soil, no seed...

Background: The International Initiative "4 per 1000" was officially launched on December, 1st, 2015 by Mr. Stéphane Le Foll, then French Minister of Agriculture, Agri-Food and Forestry, during the COP 21 of UNFCCC which took place in Paris. Countries, international organizations, local authorities, groups of farmers and foresters, institutions of research and education, and other economic actors, mobilized in favor of the initiative which is part of the agenda of solutions (LimaParis Agenda for Action) during that COP.

COMING MEETINGS

1st Young Researchers' Conference

Erosion and Torrent Control ETC 2018



1st Young Researchers' Conference - Erosion and Torrent Control
ETC 2018
BELGRADE, 28-30 NOVEMBER 2018

On behalf of the Faculty of Forestry of Belgrade University, Republic of Serbia and the Organizing Committee, we are pleased to invite you to attend the "1st Young Researchers' Conference - Erosion and Torrent Control" (ETC 2018). The Conference will be hosted in Belgrade, Republic of Serbia, from 28 to 30 November 2018.

Young researchers (master and PhD students), as well as young doctors/assistant professors and young engineers are invited to present the results of their research and their practical work.

Main goal of the conference is to give an opportunity to young researchers and young engineers to share their research and knowledge in the field of erosion and torrent control and to bring them all together in order to contribute to preservation of the soil and water resources.

The official language of the conference is English. Power Point presentations should be in English.

The Conference is organized by University of Belgrade, Faculty of Forestry, under the auspices of Republic of Serbia, Ministry of Agriculture, Forestry and Water Management.



Универзитет у Београду
Шумарски факултет



Министарство пољопривреде,
шумарства и водопривреде
Ministry of agriculture,
forestry and water management

Topics:

1. Soil erosion assessment – Mechanism/Processes, Modeling and Mapping
2. Torrential floods – Genesis, Impacts, Risk, Management
3. Natural Resources Management Conservation and Preventions Measures/ Techniques and Their Effects
4. Socio-economic, Legal and Institutional Aspects of Erosion and Torrent Control

ABSTRACTS AND PUBLICATIONS

The Abstracts will be refereed by Scientific Committee and style of presentation (oral or poster) will be assigned by the relevance of topics and authors' preferences. Presentation is not compulsory for participation. Accepted Abstracts will be published in A BOOK OF ABSTRACTS prior to Conference. Conference abstracts will be published in the OFFICIAL BOOK OF ABSTRACTS from the Conference. The Organizing Committee will publish selected papers in The Bulletin of the Faculty of Forestry and in the Scientific Journal of erosion and torrent control "EROSION". The participation of early career scholars and postgraduate researchers is positively encouraged.

Important dates:

Registration deadline: 05 September 2018

Abstract submission deadline: 15 September 2018

Early bird registration deadline: 30 September 2018

Notification of abstract acceptance: 25 September 2018

Venue: Building of the Faculty of Forestry, University of Belgrade, Serbia

We are looking forward to welcoming you in Serbia in November 2018 at "1st Young Researchers' Conference – Erosion and Torrent Control"

Conference Secretariat: ekoloski.inz@sfb.bg.ac.rs

Preventing and Remediating Degradation of Soils in Europe

Soils in European Union are a vital environmental resource in need of better protection. Despite the wide recognition of the importance of soils, soil protection efforts in European Union have been partial, fragmented and insufficient to halt their degradation. Calls for improving this situation have increasingly come from scientists, policymakers, non-governmental organisations and citizens. The discussions and negotiations around the design of European policies for post-2020 period offer the opportunity to improve the current situation.

What is the best way forward for soil protection in the EU? How can we improve EU policies to secure the delivery of soil ecosystem services?

These questions will be at the core of the Final Conference of the RECARE project to take place on 27 September 2018 in Brussels, presenting project findings on:

- ✚ effective strategies for prevention and remediation of soil threats and their uptake among land managers
- ✚ the impacts of European policies, and
- ✚ options for future policy responses

The event will offer an opportunity to discuss how RECARE results can influence the design of future European policies on soil protection.

VENUE

The conference will take place at:

Les Ateliers des Tanneurs, Rue des Tanneurs 60A, 1000 Bruxelles, Belgium

<https://www.ateliersdestanneurs.be/>

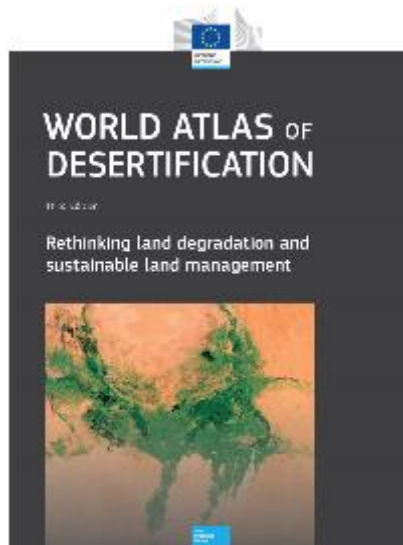
REGISTRATION

To register for the conference, please, fill in our registration form:

<http://registration.ecologic-events.eu/recare-policy-conference>

Details here: <http://recare-hub.eu/tools-and-outputs/final-policy-conference>

New World Atlas of Desertification



Twenty years have passed since the last atlas of desertification was published. Within that short period, the environment has undergone enormous global changes due largely to human activities. Fortunately, because of the massive increase and growth in the availability of global and regional datasets – and the tools necessary to analyse them – significant progress has been made in understanding humanenvironment interactions.

WAD3 thus begins at a very different place than WAD2 in terms of scientific information and understanding. That said, we are also confronted by the rapidly growing appreciation of the complexity of the land degradation phenomenon and all the human factors that both drive it and are derived from it. As a consequence, WAD3 offers an approach that accommodates and embraces these complexities and provides an information framework from which to pursue solutions that fit specific local situations.

Although ‘desertification’ remains in the title, this atlas represents a significant departure from the first two editions of the World Atlas of Desertification because deterministic maps on global land degradation are not presented. Rather, land degradation is considered to be a global problem of human dominance involving

complex interactions between social, economic and environmental systems, which is not amenable to mapping at a global scale.

This third edition of the World Atlas of Desertification focuses on land degradation and global environmental change under five major subject headings:

Global Patterns of Human Domination. Highlighting the role of Homo sapiens as the major driving force of global environmental change;

Feeding a Growing Global Population. The ability to feed 10-12 billion humans by the end of the century is one of the great challenges facing humanity, creating enormous burdens on the land;

Limits to Sustainability. The Brundtland Commission defined sustainable development as “development which meets the needs of the present, without compromising the ability of future generations to meet their own needs”. There are numerous obstacles that must be overcome to achieve this goal;

Convergence of Evidence. Many of the anthropogenic-induced environmental changes can be measured and their combined effects are indicative of the multiple stresses humans exert on the land. WAD3 draws on this complexity by adopting the concept that evidence or signals from multiple sources may “converge”, thus leading to the development of testable hypotheses and/or conclusions that are supported by data. Convergence of evidence maps replace the ‘maps of desertification’ of WAD1- WAD2; and

Solutions. Potential solutions to land degradation need to be identified and implemented within the context of local social, economic and political conditions.

Generally, the Atlas provides the first comprehensive, evidence-based assessment of land degradation at a global level and highlights the urgency to adopt corrective measures. You can download the atlas from <https://wad.jrc.ec.europa.eu/> or order from the EU Bookshop

International Science Council holds first General Assembly in Paris



International Science Council

The International Science Council, formed from the merger of two organizations representing the natural and social sciences, held its inaugural General Assembly in Paris on July 4. In a historic meeting hosted by the French Académie des Sciences, the International Council for Science (ICSU) and the International Social Science Council (ISSC) merged to form the International Science Council, a unique global non-governmental organization representative of both the natural and social sciences.



The meeting opened with addresses from Catherine Bréchignac, Secrétaire Perpétuel of the French Académie des Sciences, and Prince Albert II. of Monaco.

The main item of business for the meeting was the election of a new President and a new Governing Board to lead the Council for the next three years. Representatives

of the Council's members elected Daya Reddy, a mathematician from South Africa, to be the first President. Peter Gluckman, the former Chief Science Adviser to the Prime Minister of New Zealand, became the President-elect, and will assume the Presidency at the next General Assembly in 2021.

The other officers of the Board are Elisa Reis (Vice-President), Jinghai Li (Vice-President), Alik Ismail-Zadeh (Secretary) and Renée van Kessel (Treasurer). The ordinary members of the Board will be Geoffrey Boulton, Melody Burkins, Saths Cooper, Anna Davies, Pearl Dykstra, Sirimali Fernando, Ruth Fincher, James C. Liao, Natalia Tarasova and Martin Visbeck.

In his acceptance speech, Reddy spoke about the importance of inclusiveness, of involving all regions of the world in the work of the new Council. He called for the involvement of early career scientists in partnerships and agenda setting.

“We have set ourselves an ambitious goal to be a powerful, visible, credible voice for science. There's no time to waste. Let's get to work!”

Participants also voted for the location of the next General Assembly of the Council, choosing between two bids, one from Montreal, Canada, one from Oman. The bid by the city of Muscat, Oman, carried the vote and it will host the 2nd General Assembly in 2021.

Earlier in the day, President-Elect Gluckman spoke about his vision for the Council in remarks to participants before the vote.

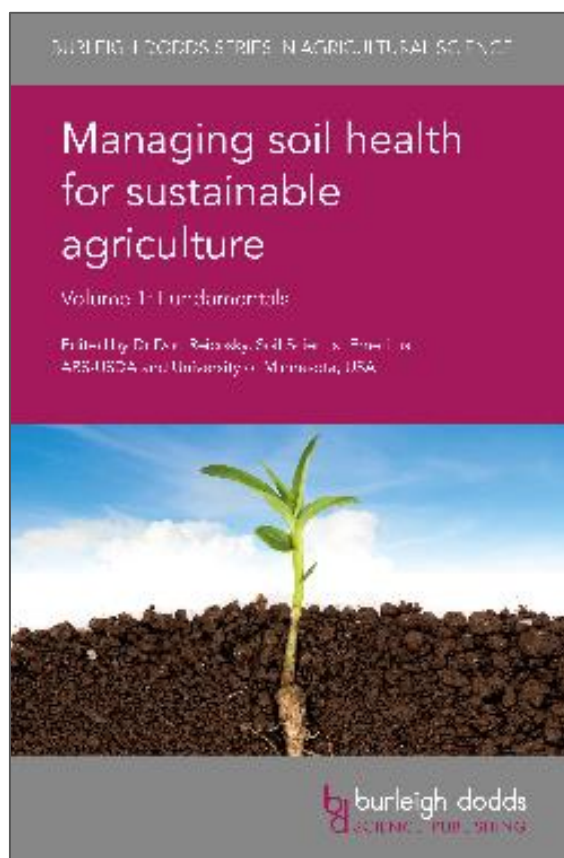
He stressed that “The International Science Council must work to become the leading voice of science in leading fora of policy-making.” He added that “this requires a coherent and focused strategy asking where the Council is uniquely positioned — asking what the council should do, and what it should not do.”

The inaugural events concluded on July 5 with a public launch event at the Maison des Océans in Paris, with keynote addresses by Cédric Villani, Esther Duflo, Ismail Serageldin, Craig Calhoun and many others.

Details at: <https://mailchi.mp/icsu/l55rfn3vbl-699877?e=95903252eb>

New Publication: Managing soil health for sustainable agriculture

Volume 1: Fundamentals



BASIC INFORMATION:

Edited by Dr Don Reicosky.

Dimensions:

229x152mm
6x9"

Publication date:

06 August 2018

Length of book:

352 pages

ISBN-13: 9781786761880

● **Hardback**

There has been growing concern that both intensive agriculture in the developed world and rapid expansion of crop cultivation in developing countries is damaging the health of soils which are the foundation of farming. At the same time we are discovering much more about how complex soils are as living biological systems. This volume reviews the latest research on soil science.

After an overview of the role of soil as a provider of ecosystem services and in conservation agriculture, the book reviews soil structure and chemistry as well organic matter, soil microorganisms and fauna. The second part of the book discusses soil dynamics, from water and nutrient cycles to carbon capture and erosion mechanisms.

With its distinguished editor and international team of expert authors, this will be a standard reference for soil scientists and agronomists as well as the farming community and government agencies responsible for monitoring soil health. It is accompanied by a companion volume looking at soil monitoring and management.

Key features

- ✚ Puts soil health in the broader context of ecosystem services, conservation and climate change
- ✚ Summarises current research on soil structure and composition
- ✚ Reviews latest developments in understanding nutrient and other cycles in soil

Volume 2: Monitoring and management



BASIC INFORMATION:

Edited by Dr Don Reicosky.

Dimensions:

229x152mm
6x9"

Publication date:

06 August 2018

Length of book:

462 pages

ISBN-13: 9781786761927

● **Hardback**

There has been growing concern that both intensive agriculture in the developed world and rapid expansion of crop cultivation in developing countries is damaging the health of soils which are the foundation of farming. At the same time we are discovering much more about how complex soils are as living biological systems.

This volume reviews the latest research on soil monitoring and management.

Part 1 starts by reviewing soil classification, sampling and ways of monitoring soil dynamics. Part 2 surveys key techniques for managing soil, from irrigation and fertiliser use to crop rotations, intercropping and cover crops. The final part of the book discusses ways of supporting smallholders in maintaining soil health in regions such as Africa, Asia and South America.

With its distinguished editor and international team of expert authors, this will be a standard reference for soil scientists and agronomists as well as the farming community and government agencies responsible for monitoring soil health. It is accompanied by a companion volume looking at developments in soil science.

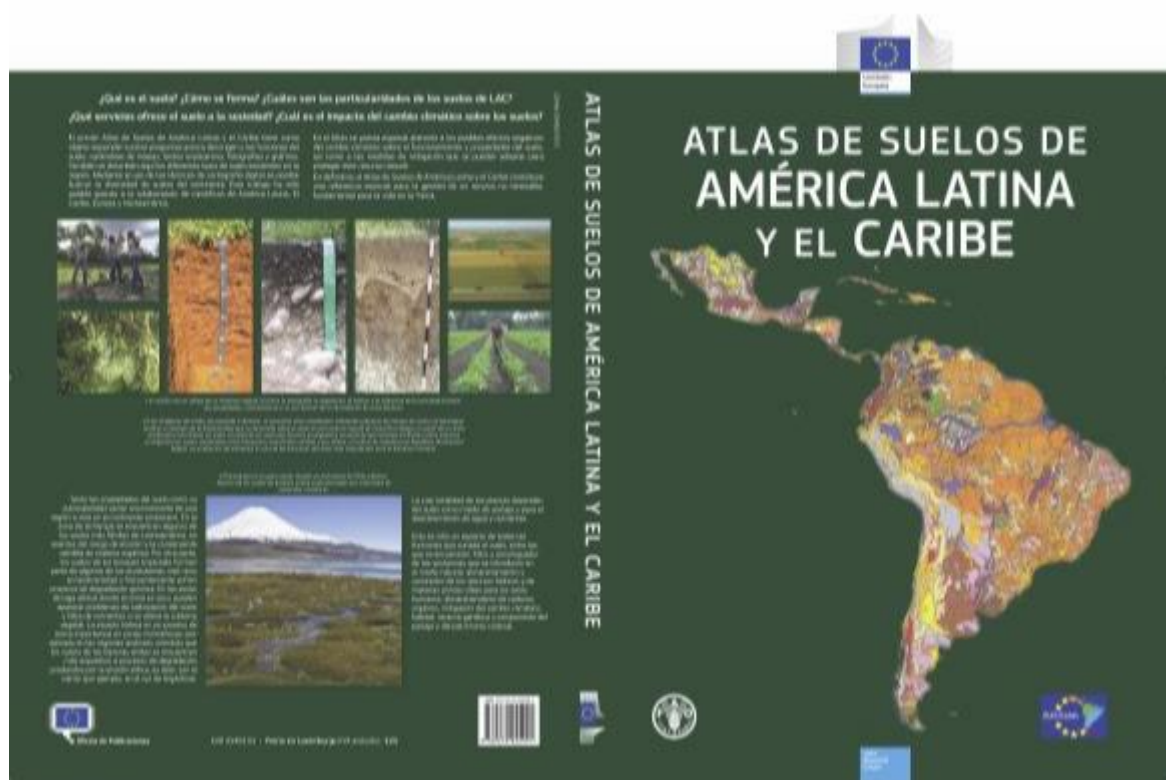
Key features

- ✚ Discusses key methods for monitoring soil health
- ✚ Comprehensive review of techniques to manage soil health from no-till and conservation tillage techniques to the use of rotations, intercropping and cover crops
- ✚ Case studies of ways of supporting smallholders in maintaining soil health in regions such as Africa, Asia and South America.

Soil Atlas of Latin America

The European Commission's in-house science service today publishes the first ever comprehensive overview of the soils of Latin America and the Caribbean. Through colourful maps and illustrations the atlas explains in a simple and clear manner the diversity of soil across Central and South America and the Caribbean. It highlights the vital importance of a natural non-renewable resource which provides food, fodder and fuel for 580 million people. The atlas shows the delicate relationships between soils and the functions that they provide. It raises awareness of the inter-relationships with climate and land use while illustrating the role of soil in food security, particularly in relation to climate change. Latin America's soils also support some of the world's most biodiverse ecosystems. In Latin America and the Caribbean,

soils have to meet the needs of a population that is in continuous and rapid growth. More than half of the 576 million hectares of arable land of Latin America are estimated to be affected by degradation processes, notably in South America and Mesoamerica. The main causes are change in land use (especially deforestation), over-exploitation, climate change and social inequality. The atlas presents a number of strategies for soil preservation and conservation.



The atlas is designed to reach the general public, the education sector and policy makers dealing with environmental, agricultural and social issues. The first edition entitled: el Atlas de suelos de América Latina y el Caribe is published in Spanish. Portuguese and English versions will follow.

Coordinated by the European Commission's Joint Research Centre (JRC), the Soil Atlas of Latin America and Caribbean is the result of a fruitful collaboration with leading soil scientists in Europe, Central and South America and the Caribbean. The first ever comprehensive overview of the soils of Latin America and the Caribbean, coordinated by the JRC, was presented at the 2014 Annual Meeting of the American

Association for the Advancement of Science (AAAS) in Chicago. This is the latest in a series of JRC soil atlases and the result of a fruitful collaboration with leading soil scientists in Europe, Central and South America and the Caribbean.

On 10-11 June 2015, 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. On 12-17 August 2018, the EU in collaboration with FAO is launching the ATLAS DE SOLOS DA AMÉRICA LATINA E DO CARIBE (Brazilian/Portuguese version of the Soil Atlas of Latin America and the Caribbean) in the 21st World Congress of Soil Science (Rio De Janeiro, Brazil).

English version: Download the PDF of Atlas of Latin America and the Caribbean - Size 444 MB.

https://esdac.jrc.ec.europa.eu/Library/Maps/LatinAmerica_Atlas/Documents/LAC_atlas_EN.pdf

Portuguese version Download the PDF - Atlas de solos da AMÉRICA LATINA e do CARIBE - Size 157 MB.

https://esdac.jrc.ec.europa.eu/public_path/shared_folder/LatinAmerica_Atlas/JRC_LAC_atlas_maps_PT_reduced.pdf

Spanish version: Download the PDF of Atlas of Latin America and the Caribbean (el Atlas de suelos de América Latina y el Caribe) - Size 127 MB.

https://esdac.jrc.ec.europa.eu/public_path/shared_folder/LatinAmerica_Atlas/JRC_LAC_atlas_maps_PT_reduced.pdf

Details here: <https://esdac.jrc.ec.europa.eu/content/soil-atlas-latin-america>



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.