



WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION

HOT NEWS

Issue 03, 2019



WASWAC HOT NEWS No. 03, March, 2019

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Editor: Dr. DU Pengfei.



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(Where the Secretariat of WASWAC is located)

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For ISWCR paper submission:

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

WASWAC Website: www.waswac.org

Just 5 days left to submit abstract for WASWAC World Conference IV

Soil and Water Resources Management for Climate Smart Agriculture
and Global Food and Livelihood Security

At New Delhi, India, November 5th-9th, 2019



Just **5 days left** to make the abstract submission for WASWAC World Conference IV. The deadline is **May 15, 2019**, please make sure your abstract can be submitted before this date. The abstracts should not exceed 500 words, should be typed in double space leaving 2.5 cm margin on all sides on A-4 paper. Three to five key words should be given below the abstract in italics. The font should be Times New Roman in 12 pt. size. The full papers of accepted abstracts shall be evaluated, edited and may be in the conference proceeding book. The full papers must be restricted to 10-12 pages typed in double space, 12 pt size A-4 paper in Times New Roman font including tables and illustrations. The abstract should be sent through e-mail aticscsi2019@gmail.com (WASWAC members please also send to waswac@foxmail.com) in MS word format.

A committee will review the abstracts and decide about the nature of presentation (oral/poster). Author(s) will be intimated regarding the acceptance of the papers by **June 15, 2019**. Awards will be given for the best paper and poster presentation in each thematic area.

Information contained in the circular and all updates are available at the website of SCSi <http://scsi.org.in>, Conference Website: <http://soilconservation.org>, and WASWAC official website: www.waswac.org

WASWAC awards (2019) nomination are open

WASWAC Awards (2019) Nomination



According to the BASIC RULES FOR WASWAC AWARDS, the Award Committee (WASWAC AC) issued the Announcement of WASWAC Award (2019) as following:

1. Types and number of awards

- (1) Norman Hudson Memorial Award (NHMA): no more than 3 awardees for this time. (No more than one for very year, between 2017 to 2019.)
- (2) Distinguished Research Award (DRA): no more than 3 awardees for 2019.
- (3) Distinguished Extension Award (DEA): no more than 3 awardees for 2019.
- (4) Special Contribution Award (SCA): no more than 2 awardees for 2019.

2. Criteria of Awards

(1) WASWAC Norman Hudson Memorial Award

- The candidates should be a member of WASWAC.
- The candidates have made outstanding achievements in soil and water conservation research.
- The candidates have a great reputation over the world.

(2) WASWAC Distinguished Research Award

- The candidates should be a member of WASWAC.
- The candidates have gained distinguished research achievements in soil and water conservation research.

(3) WASWAC Distinguished Extension Award

- The candidates should be a member of WASWAC.
- The candidates have rich extension experiences and great impacts of promoting new technology application.

(4) WASWAC Special Contribution Award

- 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 appraisal and choose

(1) Nomination (the deadline is June 30, 2019)

- 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 or ndh@mwr.gov.cn 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 fourth World Conference on Nov. 5-9, 2019, on the Hot News, and the official website of the Association as well.



April 19, 2019

Recommendation Form of WASWAC Awards (2019)

Referrer name:
(with signature)

Date of submitting:

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

Notes:

- (1) Only WASWAC members could be nominated for NHMA, DRA and DEA.
- (2) The WASWAC councilor, advisor and region 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.
- (3) 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.**
- (4) SCA candidate only be recommended by WASWAC councilor/advisor/vice president.
- (5) Brief introduction about the achievements of the nominator are necessary to provide.
- (6) Please submit this form and relative documents to waswac@foxmail.com or ndh@mwr.gov.cn by June 30, 2019. And please mark the subject of your email with "WASWAC award nomination".


The Recommendation Form of WASWAC Awards (2019) is available here:

<http://www.waswac.org/waswac/LatestNews/webinfo/2019/04/1552621427329287.htm>

IWHR international postgraduate application

DEGREE PROGRAMS IN ENGLISH

8 programs for master's degree and doctoral degree

	Geotechnical engineering		Hydrology and water resources
	Hydraulics and river dynamics		Hydraulic structure engineering
	Hydraulic and hydropower engineering		Hydro-environment
	Hydro-informatics		Water disaster and security

The applicants must satisfy one of the following language requirements:

- Graduates from universities of English-speaking countries;
- Graduates from universities where English is the official language;
- TOEFL: 68 (internet-based test)/ IELTS: 5.5.

Duration of study:

3 years for both the master's degree and doctoral degree.

FEES

Application Fee Free in 2019	Annual Tuition CNY 26,000-CNY 39,000
Annual Accommodation CNY 12,000-CNY 24,000	Annual Insurance CNY 800

SCHOLARSHIPS

IWHR outstanding international student scholarship

In 2019, scholarships of up to **CNY 93,800** per year are available for outstanding applicants, including all or part of the following items:

- Waiver of the fees of tuition, accommodation and medical insurance;
- Living stipend of up to CNY 42,000 per person per year.

Category	Scholarship Grade	Waiver of Tuition	Waiver of Accommodation	Waiver of Medical Insurance	Living Stipend	Total
Master (3 years)	I	26000	12000	800	36000	74800
	II	26000	12000	800	18000	56800
	III	26000	12000	800	26000	26800
Ph.D. (3 years)	I	39000	12000	800	42000	93800
	II	39000	12000	800	21000	72800
	III	39000	12000	800	39800	39800

Unit: CNY (USD=6.72CNY)

HOW TO APPLY

General Information

Application is open only to non-Chinese citizens who are in good health.

Educational Background and Age Limit

- The applicant for a master's program must be under the age of 35 and has a bachelor's degree.
- The applicant for a doctoral program must be under the age of 40 and has a master's degree.

Application Methods

- Email to iwhrgraduateoffice@163.com.
- Post or submit in person application documents to the Office of International Student Affairs of IWHR Graduate School.

Required Application Documents

See details at <http://www.iwahr.com/IWHR-English/index.htm>.

Application Deadline

No later than **30th June 2019**.

Admission Notice Time

Between **20th July** and **10th August**.

Beginning of the Next Semester

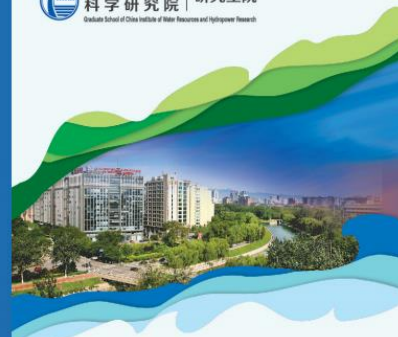
In early October (See the specific date on the admission notice).



CONTACT US

Office of International Student Affairs, Graduate School
China Institute of Water Resources and Hydropower Research
20 Chegongzhuang West Road, Haidian District, Beijing, P.R.China
Zip Code: 100048
Telephone: +86-10-68785988
Fax: +86-10-68785988
E-mail: iwhrgraduateoffice@163.com

中国水利水电科学研究院 研究生院
Graduate School of China Institute of Water Resources and Hydropower Research



2019 Application Brochure for International Students

中国水利水电科学研究院
China Institute of Water Resources and Hydropower Research (IWHR)

www.iwahr.com
April, 2019

ABOUT IWHR

IWHR was established in **1958** and is a national water and hydropower research institute under China's Ministry of Water Resources with its headquarters in **Beijing**.

It has about **1400** employees. **58%** are senior engineers.

6 Chinese academicians of sciences or engineering.

Total value of annual contracts has exceeded **CNY 1.5 billion...**



China Institute of Water Resources and Hydropower Research
中国水利水电科学研究院



GRADUATE EDUCATION

IWHR started its graduate education in the 1950s and has excellent research facilities and equipment, a large number of cutting-edge research projects, adequate research funding, numerous literature resources, and a top-notch team of graduate supervisors (175 master's supervisors and 91 doctoral ones). After more than 6 decades of exploration and development, IWHR has established a complete and unique system of graduate education.



EXPERIMENTAL FACILITIES



GLOBAL EXCHANGE

Partners with Cooperative Agreement



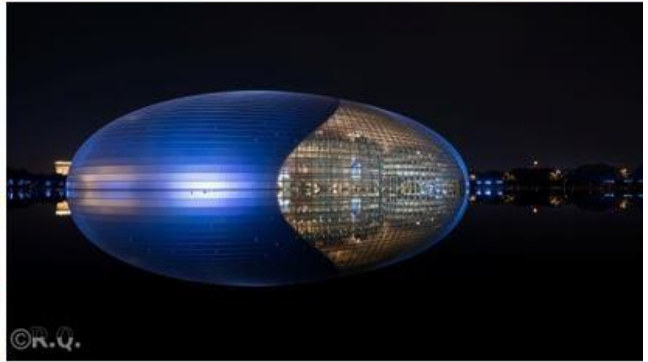
Hosting of International Organizations



The Brochure is also available here:

<http://www.waswac.org/waswac/uploadfile/2019/04/19/20190419154224711.pdf>

Welcome to IWHR! Welcome to Beijing! Good luck for your application!



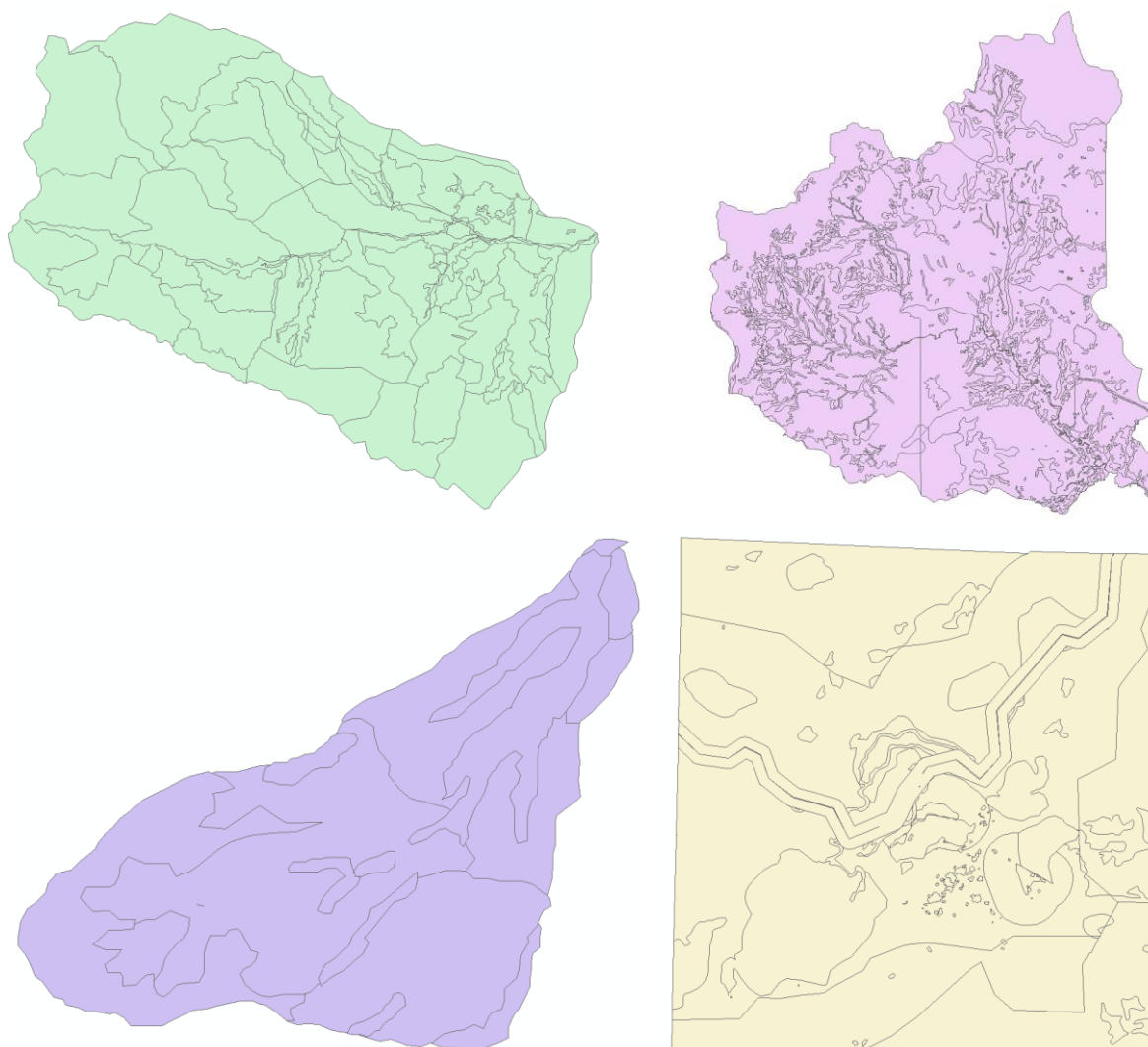
Beautiful Beijing

To learn more about IWHR, you can scan following QR Code to follow IWHR on WeChat or to visit IWHR Website <http://www.iwahr.com/IWHR-English/index.htm>



WOCAT-LADA land degradation and SLM mapping datasets

The mapping database, developed in 2009, is now offline and all documented maps. Here you can find an overview of all data as an excel file documented with the Questionnaire for Mapping from the old mapping database. More than 40 areas in various countries are available. Both Excel and Shapefile files could be downloaded freely, some examples from Bolivia, Botswana, Cambodia and Cape Verde are listed below:



Three related files including “Defining the base map units”, “Description of simple queries and map attributes” and “Explanation of aggregated attributes in data from WOCAT questionnaire on maps” are also available, this will be very helpful for your understanding.



WB1.2: Mapping degradation and conservation ("WOCAT map")

Defining the Base map units:

The basic unit of evaluation: The Land Use System (LUS)

Before the degradation and conservation mapping exercise along the WOCAT/LADA/DESIRE mapping guidelines (QM) can start, a map with base units to be evaluated is required. The starting point for mapping degradation and conservation is land use. This is one of the main drivers of degradation / conservation and the basis for identifying the units for which subsequently the information on land degradation and conservation is to be filled in. FAO has prepared a global LUS map but at low resolution (5°). This map – though referred to in the WOCAT/LADA/DESIRE Mapping manual (QM) is therefore not practical for using within the DESIRE study sites.

We hence propose a hierarchical system for defining LUS-mapping units. Information that is contained in that specific unit will be displayed in the [online system](#) and contains the mapping unit delineations and a number of ecosystem and socio-economic attributes. The following steps should be followed to delineate the base map units.

1. First, delineate the main Land Use Type (please use definitions according to WOCAT, below):
 - a) Cropland
 - b) Grazing land
 - c) Forest/woodland
 - d) Mixed
 - e) Other
 2. These main Land Use Types can be split up into subcategories: e.g. for Cropland: annual, perennial cropping; extensive or intensive Grazing land, etc. Rainfed and irrigated land will also need to be separated (see also below)
 3. Further subdivisions, if needed and sensible, can be made on basis of:
 - a) Major physiographic / geomorphologic criteria: plain / hillslope / mountain / plateau; slope types: flat-gentle / medium slopes / steep slopes, etc.
 - b) Watersheds / catchments
 - c) Administrative units: districts, village etc.
 - d) Access: / land use rights: e.g. access: land proximity to village/ watering points (on grazing land); or land use rights: individual, communal
- The order of importance of these additional criteria depends on local situations: where in some sites physiography plays a determining role rather than socio-economic criteria, this may be the contrary in other sites. In other words: LUS are classified first on the land use subtypes and additional criteria for subdivision on basis of physiography, administration, soil, slope etc.

A base map unit is not necessarily confined to a single closed polygon, but may include many larger and smaller polygons (see example in QM, page E1 and E3), together forming a map unit for which degradation and conservation need to be assessed.

The sizes/ scales of the different study sites vary between several km² and several thousand km². It is proposed that for the larger study sites one or several representative area(s) covering an area of up to a few hundred km² is (are) selected, for which the mapping is carried out. Later the whole study site might be addressed at a different scale. This will help in sharing experiences between the different study sites. Even though the mapping method is scale-independent, the accuracy and level of information of course vary with the scale.

The number of mapping units should be more or less similar for all study sites. Each study site should have in the order of 30-100 units for which information needs to be filled in on the matrix tables. The size of the study area and the variability within the area will determine the scale of the mapping exercise and the size of the mapping units.

Explanation of aggregated attributes in data from WOCAT 'Questionnaire on Maps' (QM)

1. Map units

Map units are identified by a unique combination of Land Use System (LUS) and at least one other subdivision unit (subdiv). Examples of such subdivisions can be slope classes or administrative borders. The map units are numbered. Each number represents a single map unit but such a map unit can contain several polygons.

For more information about map units, please consult the introduction section of Questionnaire on Maps (QM).

2. Excel sheet

In the excel sheet you can find all recorded data of a single map. There are three different sub-tables corresponding to three different sections of QM:

- Land use system

Lists all the map units and their characterisation.

- Land degradation

Lists all recorded degradation information per map units

- Land conservation

Lists all recorded conservation measures per map units

- Expert recommendation

Lists all expert recommendations per map units

All attributes correspond to questions in the QM. For more information consult the Questionnaire on Maps.

3. Shapefile

The shapefile contains an attribute table.

Each row contains attributes for one single map unit. Feature type is MULTIPOLYGON, which means that a single map unit can contain several polygons.

All related documents could be found here:

<https://www.wocat.net/library/media/168/>

Sustainable management of the natural resource base is one of a very few, truly fundamental issues that the international community will be obliged to address effectively over the next two decades. The last twenty years have seen an emphasis on global and national economic management; the next twenty will need to address environmental management effectively.

This needs to follow a globally structured approach, based on adequate, reliable, up-to-date data and knowledge, and governed by appropriate international strategies and agreements.

One key product sorely lacking to reach this goal is an overview of where land degradation takes place at what intensity and how land users are addressing this problem through sustainable land management. In order to fill this knowledge gap, three projects (WOCAT, LADA, DESIRE) have come together to establish the current status, while mapping out a route forward.

Questionnaires with different language including English, French, Spanish, Arabic and Russian could be found here:

<https://www.wocat.net/library/media/18/>

A brief introduction on WOCAT:

The World Overview of Conservation Approaches and Technologies (WOCAT) is a global Network that was established in 1992. The WOCAT Network launched efforts to compile, document, evaluate, share, disseminate, and apply sustainable land management (SLM) knowledge. It was far ahead of others in recognizing the vital importance of SLM and the pressing need for corresponding knowledge management. In early 2014, WOCAT's growth and ongoing improvement culminated in its being officially recognized by the UNCCD as the primary recommended Global SLM Database for best practices. The work of WOCAT is guided by the WOCAT Strategy which is a product of experiences gathered in the WOCAT programme since its launch.

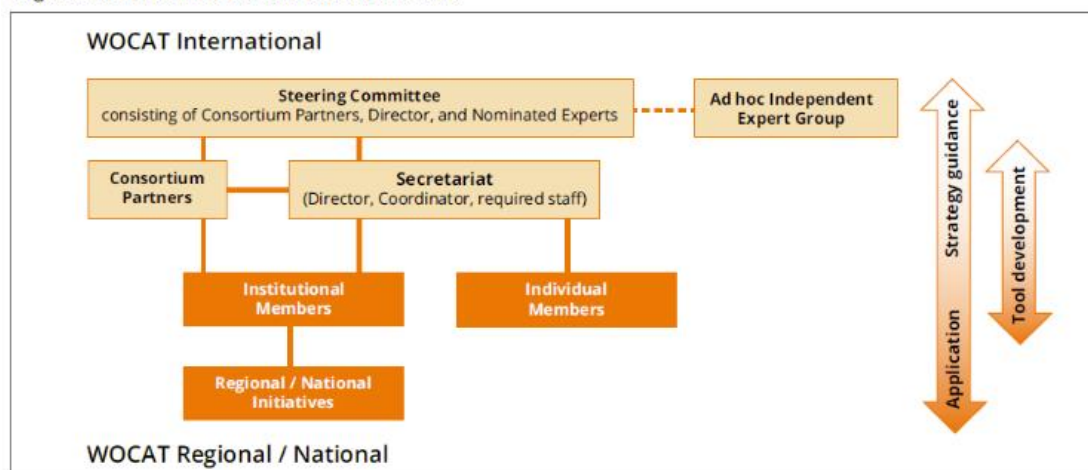
The vision and mission of WOCAT:

The vision of WOCAT is to improve land resources and ecosystems (including soils, water, flora, and fauna) and people's livelihoods by sharing, enhancing, and using knowledge on sustainable land management (SLM).

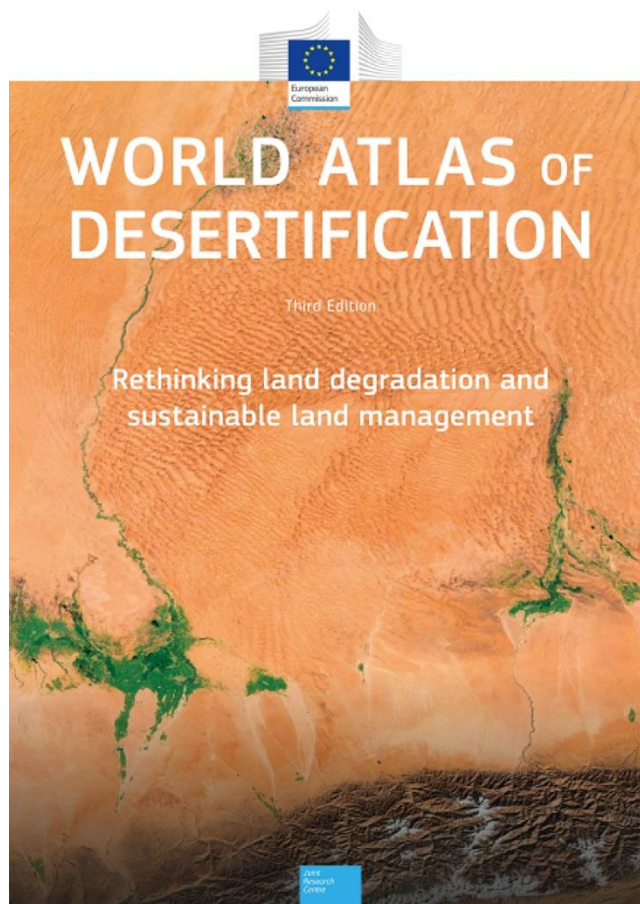
The mission of WOCAT is to support adaptation, innovation, and decision-making around SLM. This includes:

- + enhancing land productivity and water use efficiency
- + improving provisioning of ecosystem goods and services
- + promoting sustainable use of biodiversity
- + contributing to food security, and climate change adaptation/ mitigation
- + reducing disaster risks and land and water conflicts

Organizational structure of the WOCAT Network



World Atlas of Desertification is available for free



The 3rd edition of the World Atlas of Desertification (WAD3) illustrates the state of land degradation since 1998.

It was compiled by JRC scientists Michael Cherlet (main author), Melanie Weynants, Federico Gianoli, Pierlorenzo Marasco and Desirée Johansson.

This atlas including both printed and online version, the information is as follows:

Printed version

ISBN 978-92-79-75350-3

doi:10.2760/9205

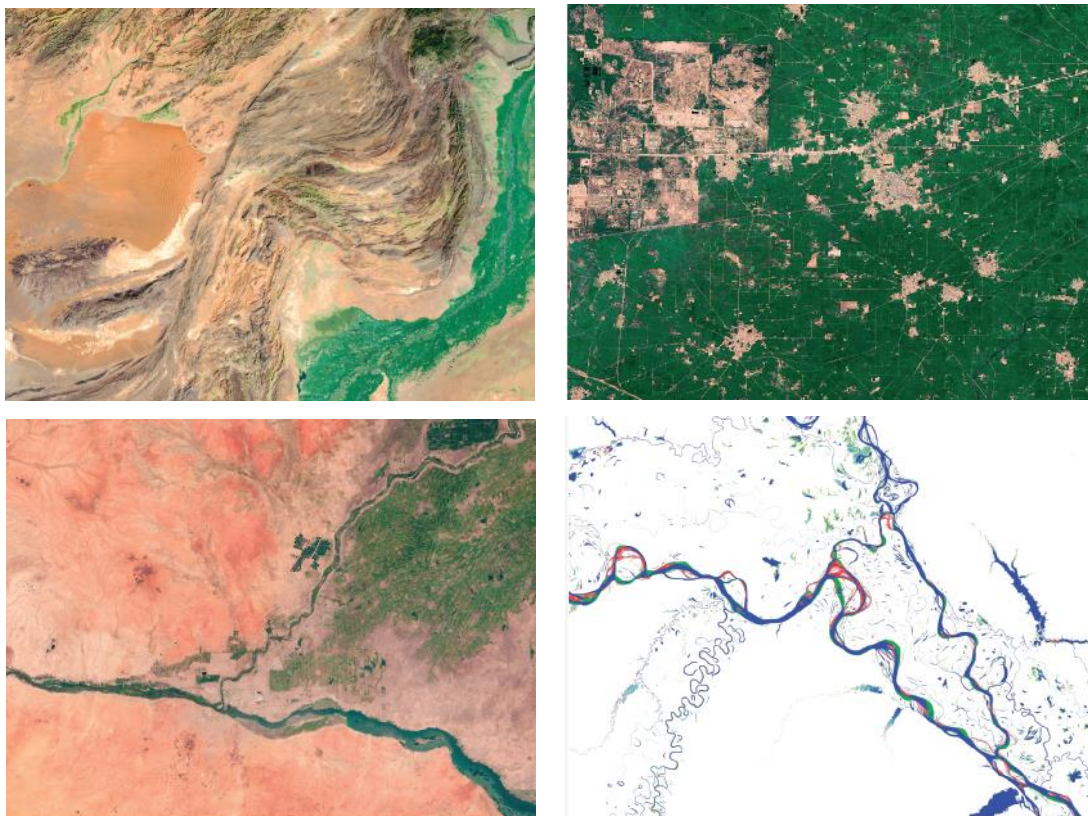
Catalogue number KJ-07-17-008-EN-C

Online version

ISBN 978-92-79-75349-7

doi:10.2760/06292

Catalogue number KJ-07-17-008-EN-N



Some questions you might be interested :

(<https://ec.europa.eu/jrc/en/news/world-atlas-desertification-interview-jrc-experts>)

Q: Michael, the Atlas is called World Atlas of Desertification, but you mentioned that it is really about land degradation. Why did you choose this title?

Michael: "We chose that title because the Atlas is a follow-up to two previous editions. The first two were published in 1992 and 1997 by UNEP (now UN Environment).

They reflected the understanding of desertification of the time. WAD3 appears 20 years after the 2nd edition, and it goes without saying that it begins at a very different place in terms of scientific information and understanding.

We think that it is currently not possible to capture 'desertification' or land degradation in global maps because of the complexity of it, and the new Atlas does not attempt to do that.

This Atlas calls for a 'rethinking of land degradation and sustainable land management' and although 'desertification' remains in the title, it uses a completely different approach with respect to the first two editions."

Q: In the WAD3, you discuss different forms of land degradation. Can you briefly describe them?

Michael: "In WAD3, we refer to land degradation as the long-term failure to balance the demand and supply of ecosystem goods and services. These services include, for instance, the capacity of the land to provide food, purify air and water, control agricultural pests, and moderate the weather.

If the land is degraded, it is not able to provide these services. This has a direct impact, for instance, on our capacity to grow crops and vegetables.

It is a global problem which however needs solutions that are adapted to specific local conditions. In WAD3, we present examples of sustainable land management practices that can halt or revert land degradation."

Q: Melanie, the Atlas shows land degradation almost everywhere. Is that really so?

Melanie: "The fact is that there is virtually no place on Earth that has not been impacted by humans. However, even if the human exploitation of the Earth cannot be avoided, we have a moral obligation to ensure that it is done sustainably, if only to preserve its productive capacity for future generations. If human activities lead to persistent degradation of the land, ecosystems won't be able to provide the services humans need for their survival. Indeed, the picture may seem daunting, but we also put forward solutions to halt and even revert land degradation. It is mostly a question of raising awareness among decision makers and the general public."



Michael Cherlet is the author of the WAD3. He works in the Sustainable Resources Unit in the Sustainable Resources Directorate



Melanie Weynants works as Scientific Project Officer on Land Degradation in the Sustainable Resources Unit in the Sustainable Resources Directorate

Online version is here: <https://wad.jrc.ec.europa.eu/download>

VACANCIES

1. Editor/Senior Editor (Books) Earth Sciences, Geography and Environment

SPRINGER NATURE

Introduction:

Springer Nature is one of the world's leading global research, educational and professional publishers. It is home to an array of respected and trusted brands and imprints, with more than 170 years of combined history behind them, providing quality content through a range of innovative products and services. Every day, around the globe, our imprints, books, journals and resources reach millions of people, helping researchers and scientists to discover, students to learn and professionals to achieve their goals and ambitions. The company has almost 13,000 staff in over 50 countries.

Location:

Dordrecht

Hours:






36

Salary grade:

H/I

The Editor/Senior Editor (Books) acquires and develops book products in the assigned area in order to achieve budgeted targets.

Minimal qualifications:

-  Education on an academic level (BA/MA/PhD).
-  Experience as an Editor in STM publishing.
-  Excellent English language skills.
-  Ability to travel regularly.
-  Knowledge of topics in Earth Science, Environmental Science, Geography (preferable)

Main result areas:

- + Acquires and develops new products that fit within the strategic objectives determined for the Publishing Unit in order to achieve BDP goals.
- + Works with a high degree of independence within the assigned Publishing Program.
- + Provides mentorship and support to junior members of the Publishing team.
- + Identifies and pro-actively responds to market trends and opportunities.
- + Maintains a broad network in their own and relating scientific areas.

Attends conferences and meetings to foster effective relationships with the scientific community in order to generate proposals and recommendations for new projects and to keep up-to-date with scientific developments.

Core skills:

- + Good communication, interpersonal and networking skills.
- + Strong negotiating ability.
- + Ability to establish effective working relationships both internally and externally.
- + Good organizational and time management skills.

For further information about the position, please contact:

Robert Doe, Executive Editor Books: robert.doe@springernature.com

Apply here: <http://www.earthworks-jobs.com/environs/springernat19052.html>

2. Assistant Professor or Lecturer - Geography and Environmental Studies

University
of Regina

The Department of Geography and Environmental Studies invites applications for a one year term position at the Assistant Professor or Lecturer level effective 1 July 2019.

Anticipated date of commencement is 1 July 2019.

The Department seeks candidates with expertise in physical geography to strengthen the existing core in this area. Candidates with specific research expertise in hydrology and the ability to teach

across the physical geography curriculum are especially sought. The successful candidate will teach undergraduate courses in the following areas: Introductory Physical Geography, Hydrology, and Geomorphology. There is also an opportunity for the successful candidate to teach another course in their specialty area. The normal teaching load for this position is four courses in one year and the candidate must be committed to teaching within the framework of the Department's undergraduate (BA/BSc) programs.

The Department seeks an outstanding individual with demonstrated commitment to excellence in research and teaching. The successful candidate will have a PhD in Geography or related Earth Sciences or ABD with a firm completion date. Preference will be given to candidates who have demonstrated excellence in teaching at the university level.

Review of applications will begin on 1 June 2019 and will continue until the position is filled.

Application packages are to be completed online and should include: a cover letter summarizing your teaching and research expertise and a statement of your teaching interests. Letter of references and original transcripts will be requested for those candidates who are contacted for an interview.

Information about the department is available at

<http://www.arts.uregina.ca/geography>

Our collegial department is one where individual voices are heard and where personal contributions make a difference.

Academic enquiries may be addressed to:

Dr. Ulrike Hardenbicker, Head, Department of Geography and Environmental Studies;

phone: (306) 585-4222;

email: ulrike.hardenbicker@uregina.ca

Submit your application online at

<http://www.uregina.ca/hr/careers/opportunties.html>

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Details: <http://www.earthworks-jobs.com/geography/regina19051.html>

Conventional models for glacier melt calculation may not work in High Mountain Asia environments

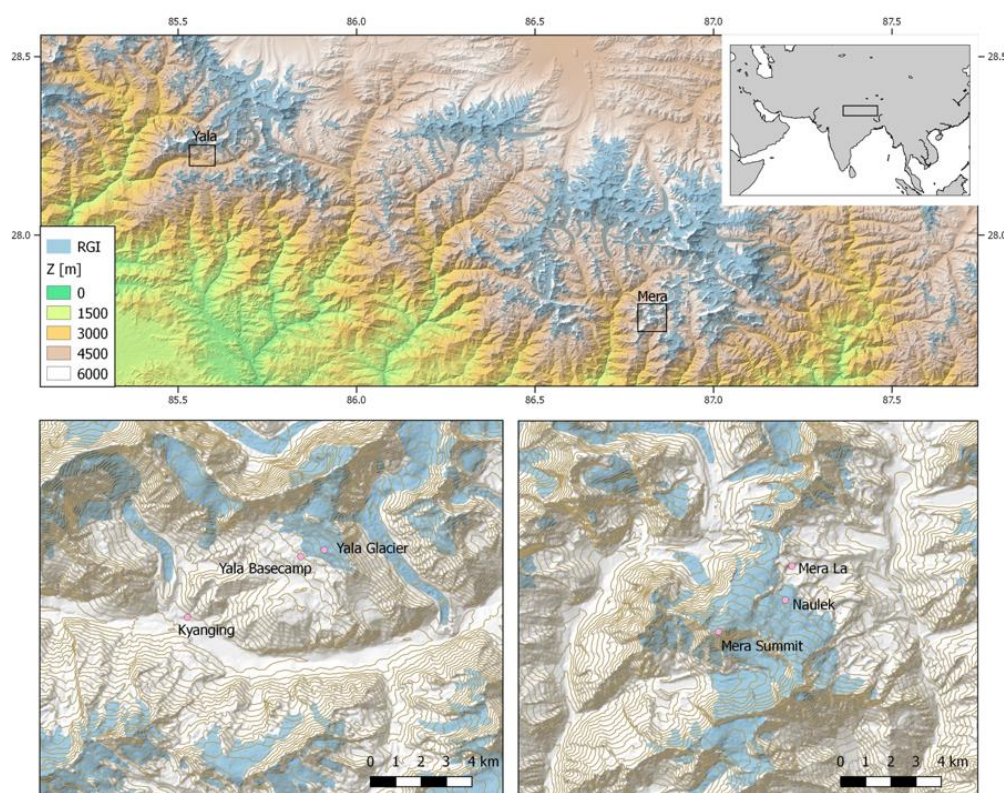
A recent research undertaken by ICIMOD and partners in central Nepal between 2013 and 2017 provides a guideline for ablation modelling in High Mountain Asia (HMA) environments. Maxime Litt, lead author of the study, said, “We show that the conventional models do not consider a number of important drivers of glacier mass loss at high altitudes and such approaches have to be handled with care.”

The conventional approach of using temperature index models for modelling glacier ablation requires few input variables and relies on simple empirical relations. The approach is assumed to be reliable at lower elevations below 3,500 metres above sea level (masl), where the air temperature relates well to the energy inputs driving glacier melt.

At the high-elevation glaciers in the HMA, the scientists involved in the research observed that incoming shortwave radiation is the dominant energy input and a full surface energy balance model relates only partly to daily mean air temperature.



An automatic weather station on Mera Glacier, one of two ICIMOD research sites in Nepal. Researchers used data from six automatic weather stations installed on the two glaciers. (Photo: Emmy Stigter/Utrecht University).



During monsoon in HMA environments, surface melt dominates ablation processes at lower elevations between 4,950 and 5,380 masl. As net shortwave radiation is the main energy input at the glacier surface, albedo and cloudiness play key roles while being highly variable in space and time. For these cases only, ablation can be calculated with a temperature index model or an enhanced temperature index model that includes a shortwave radiation scheme and site-specific ablation factors. In the ablation zone during other seasons, and during all seasons in the accumulation zone, sublimation and other wind-driven ablation processes are important for mass loss and remain unresolved through the use of temperature index or enhanced temperature index methods.

The research article concludes that empirical models using only one set of parameters for modelling the observed ablation at different sites and periods demonstrate limited performance. The lack of consistency in temperature index or enhanced temperature index parameters between sites and periods is similarly problematic. Furthermore, ablation modeled with a surface energy balance model can diverge from the observations, but since sublimation is important, a suitable value for surface roughness can solve the issue, acting as a tuning parameter.

Details at: <http://www.icimod.org/?q=35121>

China signs hydropower agreement with UN

China's top water resources and standardization administration authorities on Friday signed a memorandum of understanding with the United Nations Industrial Development Organization (UNIDO).

The memorandum deals with an international standard for small hydropower (SHP) development, and was signed on the sidelines of the ongoing second Belt and Road Forum for International Cooperation.

The standard will help China contribute more of its wisdom and rich experiences in SHP development to the world, especially the Belt and Road countries, according to a Ministry of Water Resources press release.

By the end of 2018 China had built in rural areas 46,500 SHP stations, which annually generate more than 230 billion kilowatt hours of electricity.

Thanks to this development more than 300 million rural residents have gained access to electricity and have seen their infrastructure conditions improved with accelerated poverty alleviation, according to the ministry.

It said the country has accumulated rich experiences in the construction of these stations and has developed a complete standard system on planning, designing, construction and management.

The ministry and its affiliated institutes have carried out fruitful cooperation with UNIDO on clean and renewable energies and small hydropower development, according to the release.

Some of these projects - including the SHP Lighting-up Rural Africa initiative and China's National SHP Capacity Expansion Project - have not only promoted green SHP development, but have also contributed to sustainable development of the economies and societies of developing countries, the release said.

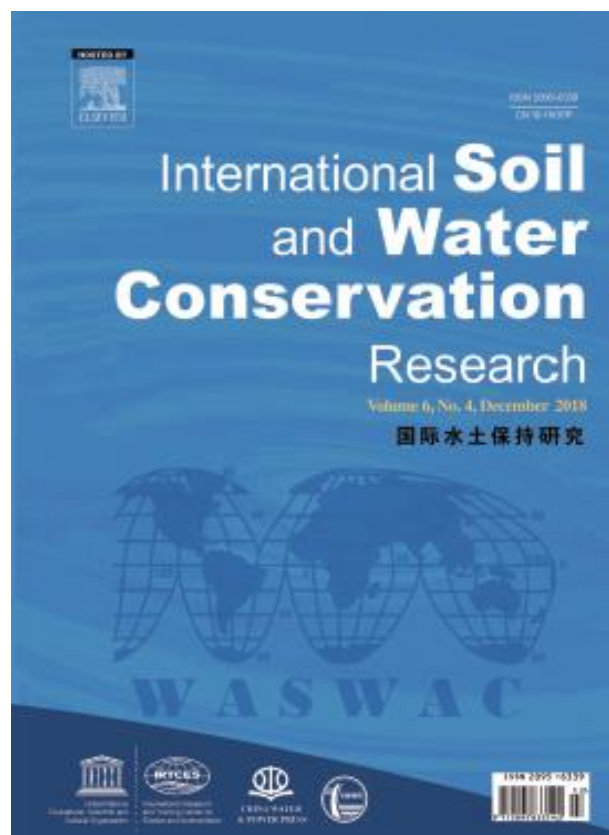
With small investment and short construction time, SHP stations play an important role in addressing power shortages, promoting social and economic development in rural areas, and also in poverty alleviation.

While enhancing SHP development capability in developing countries, and also green SHP development globally, the draft and implementation of an international SHP standard will also help promote the application of Chinese SHP technologies and experience, it said.

It will also create favorable conditions for the Chinese SHP sector's overseas investments and facilitate its participation in industrial cooperation under the Belt and Road Initiative, according to the release.

Source: China Daily

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