



NEWSLETTER

Reporting global SWC news to you quarterly since 1983

In English, Spanish, French, Chinese, Portuguese, Bahasa, Russian & Vietnamese

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WASWC Vision: A world in which all soil and water resources are used in a productive, sustainable and ecologically sound manner.

WASWC Mission: To promote worldwide the application of wise soil and water management practices that will improve and safeguard the quality of land and water resources so that they continue to meet the needs of agriculture, society and nature.

Conserving soil and water worldwide – join WASWC

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The WASWC Newsletter seeks to keep conservationists worldwide informed of new developments in the field of soil and water conservation and land management issues. Please send editorial contributions to the editor at sombatpanit@yahoo.com.



Acting President's Message

Samran Sombatpanit

New Year Message for 2006

I thought we had entered 2006 rather nicely, without major catastrophes like last year: the Annus Horribilis for natural disasters, with the tsunami in South and Southeast Asia, Hurricane Katrina in US and the huge earthquake in Pakistan. However, sporadic disaster events like the mudslide in Java, demise of a dozen miners trapped in an



exploded US mine in West Virginia did occur. This relatively safe start to the year did not prevail long; just after Valentine's Day a huge landslide in the Philippines buried the whole village of Guinsaugon on the island of Leyte and wiped it off the map. Over one thousand souls perished. This landslide has become the greatest disastrous event that we have witnessed in the first quarter of 2006. We pray that all those lost at Guinsaugon safe circumstances for the whole world for the rest of the year. See more details in the Short News section.

village have peaceful, eternal rest and wish for the rest of the year. See more details in the

Achievements in 2005

Following the accomplishments of the last Council (WASWC Newsletter issue 21/1) the present Council has followed them up and has fine-tuned some of them further. Also we have added some more activities that will enable our association to reach the goal as a member-for-member association sooner. Following is a summary of what we achieved in the year 2005.

1. Newsletter in 7 languages (English, Spanish, French, Chinese, Portuguese, Bahasa and Russian), to be followed with Vietnamese and, possibly, Arabic – all to be posted on the web.
2. All publications will be posted on the website, making WASWC a fully online association from now.
3. We continue to support meetings in various fields of natural resource management and conservation.
4. Expansion of WASWC: Appointment of 12 more National Representatives; and one more country has joined the Decentralization Program: Kyrgyzstan.
5. A new fee structure has been established to distinguish the difference in economic levels of developing and developed countries more clearly.
6. Categories of Awards have been increased to five, i.e. Norman Hudson Memorial Award, Honorary Membership Award, Researcher Award, Young Researcher Award, and SWC Extensionist Award.
7. An auditing system has been established, where an auditing committee in Japan will check the financial account of WASWC once a year.
8. The Constitution has been amended to increase the number of Councilors from five to nine, to represent all habitable continents.
9. We have started to do Group Discussion by e-mail, the first issue being sharing of information on the issue of laws and policies, etc.
10. We have started deliberating about what activities WASWC should do to have niche products and services.

The probable formula for running the WASWC

Running the Association without sufficient funding is not an easy task but it is, however, NOT impossible. There are a number of components that had enabled us to succeed in working up to now:

- a. Products and services that we have been providing association members have obtained good reception, especially the multi-language newsletter.
- b. Internet has been wisely and widely used since 2001 and up to full scale this time.
- c. All councilors and officers, and some others, have been doing the work on a voluntary basis. In WASWC, every councilor always has a second task to do.
- d. Innovation has been created constantly by our officers and members, the good examples being the Country chapter, Decentralization Program, Group membership and the translation of newsletter into many languages.
- e. The very essential element that has nurtured the WASWC is the institutional support, and more support is being sought from more institutions, mainly in the form of Organization membership.

The keywords for running an association of this type at this time would be: **volunteerism, internet, quality, innovation and institutional support.**

Where are we now?

WASWC as an organization. Our organization is unique as we are working to cover the whole world – and it is justified because the world's natural resources are deteriorating in every region. We are unique in that we work with people of all economies.

This has caused us to be quite flexible in most of the things we are dealing with. We have to deal with farmers/ landusers, extensionists, researchers, instructors, administrators, policymakers, etc. The most striking feature among them is the economy level – low and high. That's why we have to offer our service to them at different tariff rates. In this way, most people can benefit from our work equally and consistently.

WASWC products. Our products are important, as they are the medium between us and our members, and they are considered – at least partly – essential for furthering our member's careers. For example, getting to know some of the publications announced in our newsletter (many of which can be requested for free) can have a value in itself. It is therefore important that we produce products with relevant content, and that we deliver our products to members in the best possible form – and in a unique way: by posting them on our websites. With frequent communications and by regularly sending news about conferences, training courses, sponsorship, etc., we can develop close relationships with our members. This should keep most members with us, and encourage them to work with us in the foreseeable future.

WASWC services. We have stated from the beginning that we would make ourselves a forum for worldwide soil and water conservationists. A forum essentially means a place where people can exchange ideas and information through various means. The ideas expressed by our members will be shown on the pages of the WASWC Newsletter in the column 'Members' Forum' and the space for it will never run short. This is a unique situation for WASWC that does not exist anywhere. Our members are from many countries and are able to furnish data and information from their area to other areas very easily and quickly. Many highly learned professionals are members in our association. With the use of the internet, one can contact a person living anywhere on earth through only one mouse click! The gathering of many people with different backgrounds in our association is therefore a great asset that benefits members more than anything else – but it remains to be better utilized.

My vision of WASWC

A colleague of mine told me a few years ago, "If you want to keep members with you year after year you need to show what you are doing is useful or interesting to them, that they do not want to miss." I believe him; what he said is a clue to the success of a society/association, not just that you charge them very little and they will stay forever.

Introduction of the National Representative (NR) system and Decentralization Program (DP) has helped with the membership drive for each country. But this depends very much on how active the person is: a straightforward logic. Two major duties for the NRs are to send articles to publish and to recruit new members. Beyond that, they are urged to set up WASWC chapters and do SWC activities in their country, as well as to organize technical meetings when feasible – WASWC may provide institutional support (and sometimes cash support, but this is rare!).

Since the number of countries that are active in the DP is small, as is the rate of growth, we have tried to attract large numbers of people at one time, with some modest revenue to accompany this. That is, we are trying to strengthen our Organization membership. I believe that if we all help each other by attracting many groups of people that we know (universities, research institutions, government agencies, NGOs, societies, associations), we should get a good number of groups to join us.

If the trend continues, students, academics and professionals will soon get used to consulting our products to learn the latest news or current SWC practices, and many more.

But I can say we are only at the foot of a hill; we still need to climb up further. I can foresee that once we have large numbers of members in various categories, we will have to manage our products very well and have to be 'awake, aware and alert' to how our members feel about the products. Not only the existing products, we should also look for other things to answer more of their needs.

I would like to elaborate on this a bit. Since I entered my presidency 4 years ago, I have put all my efforts into the generation of basic products/services in SWC and have recruited new members through various means. What I have not yet done is to touch on new subjects in modern SWC. The question is, what subjects should we consider? There seems to be a large number of them coming up at this time: Carbon issues, Global warming, Farm subsidies, Laws and policies, and Conservation agriculture, to mention just a few.

My vision about running WASWC at this time is that, by using various strategies our association should be able to help many people of all wealth levels to solve problems concerning management and conservation of their basic resources: soil, land, water, forest, etc. The strategies to make this wish realized would be:

1. Good and timely creation of products and services, as well as the practical mechanisms to transfer them to the users – which should always be in a participative manner; and
2. Inviting potential members, mainly from various conferences, to join us for a period as Guest members, with the hope that they will get acquainted and join as full members later.

At the beginning of this year, on behalf of the WASWC Council, I would like to wish all of our members, officers and colleagues, Happy New Year 2006, with good success in your life and work for the whole year and beyond.

14th ISCO Conference in Morocco, May 14-19, 2006

One of the most important meetings this year, and we have been involved from its start, is the 14th ISCO conference, to be held in the historical city of Marrakech, Morocco in May. Prof. Mohamed Sabir, the ISCO President and our WASWC Councilor representing the African continent, promises that the event will be highlighted by a

good number of features concerning soil and water management in this dry part of the planet, and those who participate will earn a lot of unique experiences that have not been available during the last 13 conferences. See details at www.isco.org.

WASWC and ISCO started their existence in the same year, 1983, and they always support each other in various ways. This time, there will be a number of WASWC members who will attend the conference and we will hold our usual 1-hr WASWC Forum one afternoon, right after the conference sessions. WASWC President, Prof. Miodrag Zlatic and myself (Acting President) will attend this meeting and we will co-host the Forum together. Prof. Zlatic will resume his Presidential duty from July 1, 2006 up to December 31, 2007. We expect that our presence at this ISCO conference will help boost the reputation and recognition of WASWC among professionals and academics in the northern and other parts of Africa – certainly with lots of help from Prof. Sabir.

One important function that WASWC performs during ISCO conferences is the presentation of the Norman Hudson Memorial Award to an outstanding soil and water conservationist of international level, to be followed

immediately by a Norman Hudson Memorial Lecture by the Awardee. The name of the Awardee has been selected by the Awards Committee of WASWC and will be announced at the conference.

FYI: The Norman Hudson Memorial Awardee for 2004 was Prof. Calvin Rose of Griffith University, Queensland, Australia and for 2005 was Mr. Rolf Derpsch, a Paraguayan consultant specializing in no-tillage agriculture. The names of recipients and related presentations/ceremonies will be posted on our website, on the page AWARDS.

At this stage we would appreciate knowing which WASWC members will be attending the 14th ISCO conference, so that we can plan some activities at the venue. Please contact me at sombatpanit@yahoo.com and let me know if you will be attending.

WASWC awarded the Norman Hudson Memorial Award 2005 to Rolf Derpsch, WASWC Vice President, at IIIWCCA, Nairobi, Kenya, October 3, 2005



Another important activity recently started by WASWC is the Norman Hudson Memorial Award, given to one outstanding international soil and water conservationist annually. In 2004, Prof. Calvin Rose of Griffith University, Queensland, Australia was the recipient (WASWC Newsletter 20/3). In 2005 the Award went to Mr. Rolf Derpsch, a SWC consultant who specializes in No-Tillage Agriculture. The WASWC presented the Award to him at the 3rd World Congress of Conservation Agriculture (IIIWCCA) in Nairobi last October where he was invited to give a keynote speech. In the



photo at left, Rolf receives the Award (a plaque) from Mr. Mundia Sinkatana, Zambian Minister of Agriculture. The plaque reads: *NORMAN HUDSON MEMORIAL AWARD 2005 is presented to Rolf Derpsch, a pioneer in Conservation Agriculture during IIIWCCA in Nairobi, Kenya, October 3-7, 2005, as one of the first to research no-tillage technology in Latin America since 1971, who has made an outstanding contribution to soil and water conservation internationally.*

Nomination of Rolf Derpsch by David Sanders and Francis Shaxson (Read at the venue by James O. Owino, WASWC NR for Kenya)

Arguably, the most important technical innovation in soil and water conservation in modern times has been 'conservation agriculture' (broadly encompassing no-tillage, minimum-tillage, etc.).

Conservation agriculture has proved to be a very effective and economical way of preventing erosion, improving the hydrological characteristics of catchments and improving the soil while increasing crop yields in a sustainable way. Conservation agriculture has spread rapidly from a few million hectares 30 years ago (nearly all of which was in the USA) to more than 90 million ha by 2001/02. However, the most rapid growth has been in Latin America, where by 2001/02 45 percent of all conservation agriculture worldwide was being practiced on some 40 million ha.

Such spectacular growth in this new technology can be attributed to a number of factors but high among them has been the dedicated work of a small band of scientists who have provided the scientific support and who have helped to promote what has been a revolutionary change in farming practices. Outstanding among these scientists is Rolf Derpsch. The experimental work which he and colleagues undertook at the Instituto Agronômico do Paraná (IAPAR) in Brazil between 1977 and 1985 compared the effects of three forms of land preparation for crop production – (a) conventional tillage with disc-equipment, (b) reduced tillage with tined equipment, (c) no-till methods with purpose-built direct-drilling equipment – on a range of physical, chemical and biological soil conditions as they affected soil erosion under conditions of intense and erosive rainfall. These results, published by GTZ in a book (Derpsch, R., Roth, C.H., Sidiras, N., Köpke, U. 1991. Controle da erosão no Paraná, Brasil: Sistemas de cobertura do solo, plantio direto e preparo conservacionista do solo. Eschborn, Germany: GTZ), provided the scientific underpinning to our understanding of how the benefits of residue-based no-till agriculture, as perceived by practicing farmers and communities, actually arise. From this understanding, the principles of effective no-till agriculture have been derived and applied both in Brazil and in other countries.

Born in Chile in 1937, Rolf Derpsch has Chilean and German nationality. He studied agronomy at the Universidad de Chile in Santiago and the Instituto Superior de Agricultura Adolfo Matthei in Osorno, Chile, and obtained a MSc degree from the University of Reading, UK. He worked for GTZ, the German Agency for Technical Cooperation, from 1966 to 2001. He was Team Leader from 1977 to 1985 of the Soil Conservation Project at the Research Institute of Paraná in Londrina, Brazil. From 1993 to 2001 he worked as Senior Adviser to the MAG-GTZ Soil Conservation Project, a joint venture between the Ministry of Agriculture and Livestock of Paraguay and GTZ. Since September 2001 he has worked as a freelance consultant. He was among the very first to research no-tillage technology in Brazil and other Latin American countries in 1971. His areas of specialization are conservation agriculture/ no-tillage, green manure crops and crop rotations. He has authored and co-authored 45 publications and is generally acknowledged to be one of the leaders in his field internationally.

He strongly believes that in warmer climates sustainable agriculture can only be achieved without tilling the soil and by leaving a permanent cover on the soil surface. He also believes that the WASWC has an important part to play in promoting this and other new technologies throughout the world.

Rolf Derpsch is an enthusiastic soil and water conservationist who has traveled extensively and worked in a number of countries. In the process, he has done much to develop and promote conservation agriculture internationally. His knowledge of the practicalities of farming – working with practitioners on both large and small farms – has enabled him to bring together both the scientific and farming communities he has been serving. He is the WASWC's Regional Vice President for Latin America and, for some years, has taken an active role in international soil and water conservation meetings and conferences, including ISCO Conferences.

Rolf Derpsch has made an outstanding contribution to soil and water conservation internationally over many years and we have no hesitation in highly recommending him for the prestigious Norman Hudson Memorial Award.

**Norman Hudson Memorial Lecture
October 3, 2005, Nairobi, Kenya by Rolf Derpsch**

Dear ladies and gentlemen,

It is a great honor for me to be awarded the Norman Hudson Memorial Award 2005 today, the highest honor to be bestowed upon an individual by the WASWC. Norman Hudson was one of the greats of modern soil and water conservation and land husbandry. He was one of the founders of ISCO and WASWC and first made his name as Senior Research Engineer in Rhodesia and Nyasaland in Africa. Between 1951 and 1964, he was a pioneer of research on soil conservation in the tropics. Since then he dedicated all his life to a better land husbandry. He is probably best known by his classic textbook "Soil Conservation".



At this occasion I would like to thank the organizers of this event for allowing time for this short ceremony to take place at this Opening Plenary Session of the III World Congress on Conservation Agriculture. My special thanks to David Sanders and Francis Shaxson for proposing my name to the WASWC for this award. I would also like to thank the president of the WASWC Dr. Samran Sombatpanit and the board members of WASWC for seconding and accepting the nomination.

I am proud to receive this award and I would like to receive it on behalf of all farmers practicing no-tillage worldwide! At this special occasion I would like to thank all those who shared their knowledge and exchanged ideas on no-tillage (NT) and Conservation Agriculture (CA) with me.

Many of you present at this conference have shared your knowledge with me. Let me mention just a few names of some colleagues in this audience.

Thanks are due

to Ademir Calegari from IAPAR Research Institute in Londrina, Brazil, who started with me to study and research cover crops in no-tillage in 1977,

to Patrick Wall from CIMMYT, who laid the foundation for the unprecedented growth of NT in Paraguay and Bolivia, and has researched NT in many other countries (now stationed in Zimbabwe),

to the team of colleagues from FEBRAPDP, the Brazilian Federation of No-till Farmers Association present in this meeting for their continuous support of my work,

to John Landers from APDC (Associação de Plantio Direto no Cerrado) in Brazil, for the enriching discussions on NT/CA on a global basis,

to John Ashburner and Theodor Friedrich from FAO, Rome, for their support of my activities worldwide,

to Leandro Wildner from EPAGRI Research Institute in Santa Catarina, Brazil, for his valuable research in the NT system and sharing his knowledge with me,

to Kurt Steiner from GTZ, Germany, for his efforts to spread NT/CA in all corners of Africa and exchanging knowledge and experiences with me.

And finally I would like to express my special thanks to GTZ, the German Development Aid Organization for supporting my research, development and extension activities in no-tillage continuously for 30 years from 1971–2001, especially in Brazil and Paraguay. In Paraguay I would like to thank the Ministry of Agriculture for their unconditional support in researching, developing and spreading the no-tillage system with cover crops from 1988 to 2001.

I am aware that I have not mentioned everybody who deserves to be mentioned here and there is a long list to follow of those not present at this Congress, but given the time constraints I hope everyone will understand this and forgive me.

Before I finish I would like to give you a message to take home.

- Probably most of you will agree that

Education is a lifelong process of learning, but please remember that also

No-tillage and Conservation Agriculture is a lifelong process of learning! You do not learn it once and then you know it. NT/CA is a holistic approach to a new type of agriculture that puts sustainability as its first and highest goal. I can assure you that with my 34 years in research, development and extension in NT, I am learning new things about NT every day and I am sure that I will learn many new things during this Congress.

- And please do not forget that

No-tillage and CA without cover is nothing!

Continuous and full soil cover is the key factor for successful NT/CA and sustainable agriculture.

Sustainable agriculture is the basis for sustaining life on earth and for improving the livelihood of people in rural areas. God has meant the soil to be covered! In nature bare soil does not exist, except in deserts or after catastrophic events. So let us imitate nature and keep the soil covered.

Finally I would like to encourage everybody to promote Conservation Agriculture in every corner of this globe, to the benefit of present and future generations.

Thank you very much for your attention.

NEW OFFICERS

Annie Melinda P. Alberto, Central Luzon State University, Munoz, The Philippines. National Representative for the Philippines. ralbrtco@mozcom.com



Annie is a Professor at the Department of Biological Sciences, College of Arts and Sciences and at the Departments of Biology and Environmental Management, Institute of Graduate Studies (IGS), Central Luzon State University, as well as the Director of the Environmental Management Institute since 1997 up to the present.

She was formerly the Chair of the Department of Biological Sciences, College of Arts and Sciences, Chair of the Department of Science Education, Institute of Graduate Studies (IGS) and Dean, College of Arts and Sciences, Chair of the Department of Environmental Management, IGS. She is the proponent of the establishment of the Environmental Management Institute and the offering of the MS Environmental Management in 1997 at CLSU and the creation of the Department of Environmental Management at IGS in 2001.

She is the Regional Coordinator in Central Luzon of the Philippine Association of Tertiary Level Educational Institutions in Environmental Protection and Management (PATLEPAM) from 1996 to present. She is the author and co-author of various laboratory manuals, modules, monograph, handbook, brochures and other instructional materials in Biology, Botany, Ecology, Environmental Science, Biodiversity and Environmental Impact Assessment. Her brilliant performance and her various accomplishments in research, academic and extension works has earned her various awards.

Ghorban Ali Roshani, Golestan Agricultural and Natural Resources Research Center (GANRRC), Gorgan, Iran. WASWC National Representative for Iran. gh_roshani@yahoo.com



Born in 1969 in a farmer's family in Yasaghi Village, Kordkoy City, in northern part of Iran, Dr. Roshani is Associate Professor of Soil Science and Agricultural Chemistry at the GANRRC. He received his BSc degree in Soil Science from the Isfahan University of Technology in 1989 and MSc in SWC from the Tehran University in 1992. He obtained his PhD degree in Soil Science and Agricultural Chemistry from the Indian Agricultural Research Institute (IARI), New Delhi in 2004.

Dr. Roshani started his career as a scientist at the Soil and Water Research Institute of Iran at Gorgan in 1992. He has had 14 years of experience of working in Teaching and Research projects of the state and the Agricultural Research and Education Organization of Iran and has actively engaged in the research on practical SWC program, management of salt-affected soils, soil physics and micro- and macro-nutrients in soils and crops. He is the Chief of Soil and Water Research Department in Golestan

Province, one of the most important agricultural production provinces in Iran. He has published 25 papers and is an elected Member of the Soil Science Society of Iran.

Adama Ly, Coordonnateur du PGIES. Parc Forestier et Zoologique de Hann, BP 17 313, Dakar, Liberté. Dakar, Senegal. adama@refer.sn



Adama holds an Engineering diploma from Ecole Nationale du Genie Rural des Eaux et de Forets of Nancy, France (1984) along with a Land Management and Planning diploma from the Pan African Institute for Development of Ouagadougou, Burkina-Faso (1988) and an MSc on Renewable Natural Resources Studies from The University of Arizona, Tucson, Arizona, USA (1996). He has 21 years of experience in community based natural resource management for sustainable human development and ecosystems conservation. He contributed to the Senegal forestry code amendment recognizing for the first time legal individual and community right on forests. He developed and evaluated several biodiversity conservation and land degradation control projects under consultancy contracts.

Since October 2002, he has coordinated a UNDP/GEF Integrated Ecosystem Management Project. The results so far include assistance to Senegal herders to get legal land rights access, developing (for the benefit of 176 villages) a set of 3 Pastoral Units and 15 Community Natural Reserves covering a total land area of 260,000 ha around protected areas, and initiating a sub-regional transboundary biological corridors ecosystems conservation project for the benefit of Senegal, Guinea, Guinea-Bissau, Mali and The Gambia.

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Full Professor of Agronomy and Crop Production at the College of Agriculture, University of Teramo, Prof. Michele Pisante is coordinator of the "Viticulture and Oenology" Degree Course, and also of the Master of Science in "Production, Transformation and Marketing of Olive Oil". Head of the agronomy and crop sciences research unit of University of Teramo, Dept. of Food Science, he gives much attention to the development of better concepts for interdisciplinary research for adoption of crop production and soil conservation practices, in cooperation with FAO. He is a member of many professional organizations. He is leading several research projects concerning agricultural systems and is conducting research on soil erosion, land degradation and integrated SWC strategies.

He has published over 90 scientific publications. He has been an active participant in numerous conferences, is a co-publisher of FAO and ECAF publications, and a referee for some national and international journals on agriculture, water and soil management and environmental quality aspects.

He is going to organize the next Training – Workshop – Study Tour on "Drought Resistant Soils" in Teramo, Bologna, Florence, Perugia, Rome, from May 8-12, 2006. See more details in the Announcement section.

ASSOCIATION NEWS

WASWC Publications

<http://homepage2.nifty.com/waswc/journal.htm>

WASWC now publishes a refereed journal, a non refereed proceedings, plus special publications – all are posted on our website. The Land Journal will also be posted on the WASWC website. We will soon post the abstracts from various important meetings, starting with those from the symposium on Participatory Strategy for Soil and Water Conservation (2004, in Tokyo). There is little in terms of subject matter that will not be published if it is related to the WASWC mission and meets WASWC quality standards.

Papers submitted to the Journal of the WASWC (JWASWC) will be evaluated by a peer group of experienced scientists. Those submitted to Proceedings of the WASWC (PWASWC) will be edited and reviewed. Submitted papers to either publication may be accepted as is, returned to the author for revision, or rejected for reason. Authors are encouraged to include a number of pictures to illustrate the proposed publication.

The JWASWC is intended to be a repository of well conducted scientific work. The PWASWC is intended to be a repository for well conducted professional work that is of interest to WASWC members. This may include reports, unreplicated studies, preliminary results, and other works that may be of interest to WASWC members.

Presently, we have posted our first Journal article on the website, and have 6 submitted manuscripts that are being peer reviewed. We have now posted 4 Proceedings articles, with another 4 manuscripts in various stages of review. The WASWC publications are intended to represent the world, and the manuscripts submitted to date do that. Manuscripts have originated from Nepal, China, Great Britain, Brazil, Chile, India, Australia, Kenya, Thailand and the United States. Associate editors that manage the review process and the many reviewers also represent the world.

WASWC is committed to publishing all papers (including but not limited to research, development, and review papers) that are submitted to us that further our mission and meet our quality criteria, regardless of their location of origin. WASWC members are encouraged to submit manuscripts to the Editor-in-Chief (John Lafien, lafien@wctatel.net). All submissions and correspondence will be electronic; guidance for authors is on the WASWC website.

What's new in our websites

- Since early this year our three websites with servers located in Bangkok, Beijing and Tokyo have been operated in a seamless style, which will look the same wherever you access the site, with subpage titles that are orderly and easy to understand. Thanks to the following institutions: AIT for Bangkok site, MWR for Beijing site and ERECON for Tokyo site, which made this important and difficult function in WASWC possible. Following is the main page of the Bangkok site, which varies a little when going over to Beijing and Tokyo sites, respectively.

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- However, the webpage will be improved every now and then according to the increasing activities of WASWC. Now, with the success in web posting of Special Publication Nos. I and II, as well as the next one (No-Tillage Agriculture, to be soon published), our association has transformed itself into a totally online organization – thus fulfilling the plan that we had since early-2001 when the WASWC was at its most difficult time. Incidentally, this is the same time when we have finished sending our newsletter in print – sending to the last five members was done up to the end of last year.

- When you click each subpage as shown above, you will see what we have accomplished from our work during the last 5 years. One of the new subpages is the E-MAIL DISCUSSION, which we will start soon in order to serve our members. We will choose which digital discussion mechanism we should use, and then select subjects to discuss according to the need, and that should move on to the ones of more immediate need as time passes. Another new subpage is TAKE A BREAK, which shows something light that may not concern SWC but can be useful for readers to relax for a while. Presently, the files posted are: A small truth to make life 100%, Good Karma, Prayer before starting work, Happy friendship week, and Seven don'ts after a meal. Members who have good 'Take a break' topics are welcome to send them to us for posting.

- One subsubpage of the WASWC PUBLICATIONS will be about Abstracts from Meetings. This is a new service that we provide to our members at no cost. When you organize a meeting of a relevant subject, you may prepare a 'Meeting and abstracts book' after the event and send to us for posting – with good guarantee of readership worldwide. The book may contain 1) Introduction or rationale, 2) Photos from the meeting, some 6–10 of them (with appropriate captions) should be enough to show what has taken place, but should be with low resolution, 3) Abstracts or extended abstracts of all papers presented, with TNR, Arial or other easy-to-read fonts, and 4) Conclusions and recommendations. Contact the Editor if you intend to post your Meeting and abstracts book.

- The Webshots.com photo web company has generously increased the quota of photos to post on one site (domain) from 3,000 to 5,000 photos – still at the same fee of \$23.88/yr. This is a real bargain. As a result, most of our photos, especially for the photo competition, can remain on the original domain, <http://community.webshots.com/user/waswc>, while the other one, <http://community.webshots.com/user/waswc1>, will be used for other activities of less immediate purpose. We update these photo websites all the time. Now you can see photos of all Past Presidents posted at <http://community.webshots.com/album/508836519FqLpqm> and all present Councilors at <http://community.webshots.com/album/506549278JIVHdl>. Sorry, both are heavily gender biased; so far we have never had a lady in either group!

Winners of the 5th Photo competition

<http://community.webshots.com/album/52830343100xJSu>



Left: "Cultivated land with grass strips as a soil and water conservation measure, Ethiopia", by Daniel Danano Dale, Ministry of Agriculture, P.O. Box 62758, Addis Ababa. Ethiopia. ethiocat@telecom.net.et

Center: "Hillside ditches: Harvesting and conservation of rainwater, Pakistan", by Sahibzada Irfanullah, Technical and Research Officer, Farm Forestry Support Project (FFSP), Peshawar, NWFP, Pakistan. irfanullah-ffsp@intercooperation.org.pk

Right: "Growing crops on the contour in SALT Program, ICIMOD, Kathmandu, Nepal", by J.U. Shoaib, Soil Resource Development Institute, Dhaka 1215, Bangladesh. jushoaib@aitlbd.net

Winners are welcome to choose your prize book, one each, from www.scipub.net and let us know.

Updated list of Organization members of WASWC

AFRICA - World Agroforestry Centre (ICRAF), Nairobi, Kenya

AMERICA, LATIN - AAPRESID (Direct Seeding Promotion), Rosario, Argentina
- Conf. Asoc. Amer. Agric. Sustentable (CAAPAS), Argentina
- Associação de Plantio Direto no Cerrado (APDC), Brasília, Brazil

AMERICA, NORTH - International Erosion Control Association (IECA), Steamboat Springs, CO, USA

ASIA - International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal
- Soil Science Society of Sri Lanka, Peradeniya, Sri Lanka
- National Agricultural and Forestry Research Institute, Vientiane, Lao P.D.R.
- Hanoi Agricultural University, Gialam, Hanoi, Vietnam
- Vietnam Society of Soil Science, c/o NIAPP, 61 Hang Chuoi, Hanoi, Vietnam
- National Institute for Soils and Fertilizers (NISF), Tu Liem, Hanoi, Vietnam
- Angiang University, Angiang Province, Vietnam
- International Water Management Institute-SEA, Penang, Malaysia
- Land Development Department, Bangkok, Thailand
- Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD), Los Baños, Laguna, Philippines

- Japan Green Resources Agency, Kanagawa, Japan
- Fujian Soil Conservation Office, Fuzhou, Fujian, China
- Fujian SWC Association, Fuzhou, Fujian, China
- Guangzhou Ecoen Env. Afforestation Co. Ltd., China

AUSTRALIA - Aquaseeding Pty Ltd., Vermont, Victoria, Australia
- Australian Society of Soil Science, Queensland Branch, Brisbane, Australia

EUROPE - Hellenic Society of Soil Science, Athens, Greece
- "Erosion et GCES" géré par l'AUF, Montpellier, France
- NGO Bios, Chisinau, Moldova
- Eijkelkamp Agrisearch Equipment B.V., Giesbeek, Netherlands
- World Overview of Conservation Approaches and Technologies (WOCAT), University of Berne, Switzerland
- NCCR NORTH-SOUTH, University of Berne, Switzerland
- SLM, University of Berne, Switzerland
- World Soil Information Centre (ISRIC), Wageningen, The Netherlands
- Soil Conservation Service, Gunnarsholt, Hella, Iceland
- National Association for Protection of Icelandic Environment, Iceland
- University of Wolverhampton, Wolverhampton, UK
- Estonian University of Life Sciences, Tartu, Estonia
- International Institute for Aerospace Survey and Earth Sciences (ITC), Enschede, The Netherlands

We are discussing with a number of national soil science societies and expect that they will join us soon. Members are urged to help draw in organizations that they either know or are involved with to come in and work with us as Organization members. This will be a valued contribution from you.

MEMBERS' FORUM

The Editor has received several Holiday Seasons wishes. Following are a few of them, with shortening to keep the section concise.

☼ Merry Christmas. Wish you will be healthy, wealthy and happy every day! Expect you to visit China again. This is a gift for you: <http://www.f130.net/flash/music4715.htm>.

- Hu Yaoguo, Guangdong Institute of Ecoenvironmental and Soil Sciences, Guangzhou, China

☼ Dear Dr. Samran,

Thank you for your New Year message. I also believe that, "If you want to keep members with you year after year you need to show what you are doing is useful or interesting to them, that they do not want to miss." Message in Bahasa is good for our scientists in Indonesia. They will consider for the membership in WASWC in the future. I hope your idea will succeed soon.

- A. Ngaloken Gintings, Indonesia

☼ Dear Samran,

Thank you very much for the New Year message. Really the initiatives and actions performed in 2005 and the vision for the future are encouraging.

The publications you sent to us, as well as materials posted on WASWAC website, are comprehensive, very interesting, useful and we'll use these ideas and information for our members and partner organizations in Moldova.

I also thank you for the certificates; they look very nice.

- Valentin Ciubotaru, NGO BIOS, Chisinau, Republic of Moldova

☼ Samran,

Keep up the good work: I'm immensely impressed by how much you do and the quality. It is going to be a hard act to follow!

- Will Critchley, Vrije Universiteit, Amsterdam, The Netherlands (WASWC SR)

☼ Dear Samran

Fantastic! What a president you are, dear friend. You can stay as president for life, or as emeritus president, if there's anybody who wants to replace you in the future. More success in 2006.

- Santiago R. Obien, Consultant/ Adviser of BAR-DA, Quezon City, The Philippines

☼ Thank you Samran for your New Year message! See? A year has passed. Soil conservation is profiting from your dedicated enthusiasm, especially in your area and the more developed countries. I wish I could say the same for this part of the world.

I hope you will continue as a President of this organization for good. If not, it is ok for the next 10 years. I know it is difficult to find somebody to replace you for the world position. It's not like the US where universities can afford the time of professors.

By the way, do you have information on latest techniques on surface drainage for hillsides in rainy tropical areas? Not necessarily agricultural areas.

Best wishes for 2006 and this Christmas for you and your family,

- Manuel Paulet (NR for Peru)

Ed.: Thanks Manuel for your kind words. I think it is good to do things that are useful. It is, however, not possible/practical to do the work in the form of association for good; it

has to be rotated among people of various countries in order to get some new ideas coming out to our community.

Sorry that I do not have the latest drainage techniques that you want, but why don't we announce it in the newsletter so people who have it should let you know. We are about to launch a kind of discussion group where members can request for help in this way quite easily.

☼ Dear Samran,

In Israel the title of the unit that works in 'soil conservation' and 'land drainage' is "Division of Soil Conservation and Drainage" and it is under the Ministry of Agriculture. What is the title of a unit that deals with these affairs in other countries? Are they ('soil conservation' and 'land drainage') together in one ministry or in different ministries?

- Menachem Agassi, NR for Israel

Ed: I recently sent out a note about your query and got answer from some members already. Therefore I would like to ask our officers and other readers who have not answered this question to please do. This is important that our members help each other, to become the spirit of WASWC. We'll post all answers on the website to be useful for everyone.

☼ Dear Samran:

I just read your New Year message and want to congratulate you on your efforts during your Presidency!

You have and are making a difference. I am a Charter Member of WASWC and have followed it through its rocky road. The road from my viewpoint has now been graded and is partially paved but as you said, "we are only at the foot of a hill". With your vision statement, I feel that we now know the direction of the road and are on the way to further "paving exercises" so that members and new members know where they are going.

You mentioned that there are new subjects that we need to explore: "There seem to be a large number of them coming up at this time: Carbon issue, Global warming, Farm subsidy, Laws and policies, Conservation agriculture, to mention just a few." I would add that we have seen the term "precision conservation" used lately and that would be worth exploiting on a Global Scale. Additionally, we hear a lot about "food security", how about "conservation security"? I have worked most of my career on "spatial technologies" such as remote sensing, geographic information systems (GIS) and global positioning systems (GPS). I find that these technologies are gaining acceptance in conservation efforts.

Your efforts to the WASWC are much appreciated. I will try to contribute to the Society as I can.

Best wishes to you in this New Year!

- Chris J. Johannsen, Professor Emeritus of Agronomy, Purdue University, IN, USA

Ed.: My salutation to you Chris, a charter member of WASWC. I am a newcomer, just entering the arena in 1992 when I met Prof. Martin Haigh in Prague at a WASWC-sponsored Headwater Control conference.

I am happy and very grateful for your words reflecting what I wrote. It was my intention to devote all my time in the past 4 years in creating a platform where hundreds of specialists in various fields may work effectively in promoting SWC work in many branches, thus perfecting the work on managing natural resources. During recent years we have deliberately included many things into our works (through the pages of the newsletter) and have advocated something like SWC is a large branch of soil science that includes everything concerning management and care for the soil and

land. And perhaps this may work as long as we can attract people who work in various fields. This means that if it is accepted like that we would have come out of the old belief that 'SWC is erosion control' already!!!

One striking thing can be seen in the writing of Francis Shaxson in the newsletter issue 21(4) that, instead of the 'soil loss equation' we may shift our study to the 'soil gain equation'.

As a charter member you would be happy to see the association grow, I am certain. Therefore, we are grateful that you still like to contribute in whatever item that suits you. Now, with your few words about what we have not yet touched on, we will include in our deliberation of what WASWC should do, and we'll see what the council will conclude about them.

Plastic bags and environment

☀ Dear Samran,

Thank you very much for the Newsletter. I have a brief suggestion though! In order to conserve our soil and water, I invite you to join me in the fight against polythene bags, plastics, rubber and other non-biodegradable agents that are becoming a cancer to our soils and waterways. As you may be aware, I am a Member of Parliament from Kayunga District in Uganda. I have started a program "Keep Kayunga Clean." One day we were drilling a hole, and we were as deep as 100 feet and we found a lot of polythene bags as far down as that! Are we safe? Are our waterways ok? Is the aquatic life preserved? Please join me in continuing the fight against polythene bags. Right now, I am in Edmonton, Alberta, Canada. I was just standing outside the window and I saw a polythene bag flying very many km above and again my mind went to soil and water conservation. Thank you once again and please join me in the fight.

- Victoria Kakoko, Uganda

SHORT NEWS on Conservation-Environment

Edited by Alex Watson, Landcare Research Institute, Christchurch, NZ (watsona@landcareresearch.co.nz)

CLIMATE CHANGE

Global Warming Could Hit Indian Agriculture, Study Reveals (050909) Reuters

NEW DELHI — Global warming could push temperatures in India up by 3-40C by the turn of the century, hitting agriculture and infrastructure. Rainfall could increase substantially in many areas while diseases such as malaria may spread, suggests a joint India-UK study entitled "Investigating the Impacts of Climate Change in India".

The impact of climate change on agriculture could result in problems with food security and may threaten livelihood activities upon which much of the population depend. Nearly 70 % of India's billion-plus population depends on agriculture which accounts for about 25% of its GDP. The report also warned that rising sea levels could damage India's vast coastal railway network.

India, as a developing country, has no obligation to cut greenhouse gas emissions.

150 Nations Agree to Future Climate Talks (051210) AP

At the Montreal meeting, the first of the annual climate conferences since the Kyoto Protocol took effect last February, more than 150 nations agreed to launch formal talks on mandatory post-2012 reductions in greenhouse gases — talks that will exclude an unwilling United States.

The Bush administration, accepted only a watered-down proposal to enter dialogue on future steps to combat climate change. This proposal specifically ruled out "negotiations leading to new commitments".

The parallel tracks represented a mixed result for the pivotal two-week UN conference, doing little to close the climate gap between Washington and supporters of the Kyoto Protocol. "These countries are willing to take the leadership," said a Swiss delegate, "But they are not able to solve the problem without the United States, or the big emerging countries," a reference to China and India, not obligated under Kyoto.

Former President Clinton, a Kyoto supporter, appeared at the Montreal meeting. After his speech, Clinton suggested not to try to force Kyoto-style "targets" on Washington, but look for agreement on specific energy-saving projects.

Ex-EPA Chiefs Blame Bush in Global Warming (060118) AP

Six former heads of the Environmental Protection Agency - five Republicans and one Democrat - accused the Bush administration of neglecting global warming and other environmental problems.

"We need leadership, and I don't think we're getting it," Russell Train, who was in both the Nixon and Ford administrations, said. "Slowing the growth of greenhouse gases isn't enough. To sit back and just push it away and say we'll deal with it sometime down the road is dishonest to the people and self-destructive."

All of the former administrators raised their hands when EPA's current chief, Stephen Johnson, asked whether they believe global warming is a real problem, and again when he asked if humans bear significant blame.

Agency heads during five Republican administrations, including the current one, criticized the Bush White House for what they described as a failure of leadership.

CARBON ISSUE

Soil C Loss in UK: Rising Temperatures Decrease Soil Carbon Storage (050908)

LONDON - Rising temperatures resulting from climate change are likely causing soil in England and Wales to lose large amounts of carbon, possibly further contributing to the greenhouse gas effect. A similar trend could be affecting other countries.

Soils store vast amounts of carbon, more than twice as much as in vegetation or the atmosphere. The amount of carbon in the soil is constant if the amount entering from dead vegetation is equal to the amount released via decomposition due to soil microbe activity. But research published in Nature found a disturbance in this natural balance. It estimated that British soil is losing 13 million tons of carbon a year, equivalent to 8.2% of Britain's carbon dioxide emissions in 2004.

The losses are happening irrespective of land use. This suggests a link to climate change. Over the 25-year survey period mean temperatures rose by 0.5 C. Soil microbes are more active at warmer temperatures increasing the turnover of soil carbon. While the increased global growth in vegetation is absorbing some of the carbon dioxide released by human activity, this is being offset by the loss of carbon from the soil.

Britain has set a target of cutting carbon dioxide emissions by 20 % below 1990 levels by 2010. But in 2003, carbon dioxide emissions rose 2.2 %.

LAND AND WATER

East Africa People and Wildlife Struggle to Share Precious Land and Water (060213) AP

AMBOSELI NATIONAL PARK, Kenya — Wild animals drink water on one side of a swamp. On the other, Maasai warriors watch hundreds of cattle graze the parched land of this wildlife sanctuary. Balancing the needs of both sides is becoming more complex, and environmentalists fear the wildlife is gradually losing out.

Kenyan officials recently bent stringent conservation regulations to allow cattle into the Park, the only permanent source of water in the region, to help the Maasai save their livestock from drought. Local and international groups say the politicians lack the ability and experience to conserve wildlife and its habitat, and provide security for tourists and animals.

Dwindling wildlife would discourage tourists from visiting Amboseli, Kenya's second-highest earner of tourism revenues. That would hurt the local community that uses part of the earnings for education, health services and well digging.

4th World Water Forum: Water Problems May Be Solved in Farms (060318) AP

MEXICO CITY - Farms and their wasteful irrigation systems are a major contributor to water scarcity on the globe, nations at a world water summit said Saturday. March 18, 2006. Farming accounts for 70 percent of the water consumed and most of its wasteful use, said representatives of 130 nations at the 4th World Water Forum discussing water management. One-fifth of the world's population lacks safe drinking water, the United Nations said in a report last week that laid much of the blame on mismanagement of resources.

FARM SUBSIDY

WTO OKs Deal to End Farm Trade Subsidies (051218) AP

WTO negotiators approved an agreement requiring wealthy nations to end farm export subsidies by 2013, a support system that poor nations say puts them at a competitive disadvantage. All 149 WTO member nations and territories endorsed the agreement after six days of hard talks that were accompanied by daily protests and occasional clashes between riot police and demonstrators outside.

The agreement, which also calls for modest reductions in other trade barriers, brings a binding treaty to further open up global trade one step closer. The way was opened when delegates managed a last-minute breakthrough on farm subsidies, with wealthy nations agreeing to eliminate their payments to promote exports like cotton and sugar.

In a victory for West African cotton-producing nations, rich countries agreed to eliminate all export subsidies on cotton in 2006. That was a concession by the United States, a major cotton exporter. But the US Trade Representative suggested that the proposal would be hard to sell to US lawmakers.

FOOD ISSUE

Donors helped stave off humanitarian disaster in Malawi (060206)

A top UN official, James Morris, has applauded donors for preventing a humanitarian crisis in Malawi from 'becoming a catastrophe'. "Generous donations from the international community prevented a disaster. The government, UN system, NGOs and donors should be proud of their efforts."

Up to five million people, 2.8 million of them children less than 18 years, were hit by food shortages after drought, the worst in a decade, drastically reduced the output of maize.

Malawi requires an average of two million tons of food annually to feed its 12 million population. Most Malawians are unable to meet their nutritional requirements. About 65% of Malawians live below the poverty line, on less than a dollar a day.

Morris said that recent good rainfall could mean Malawi has a good harvest this year. Malawi could be on target to produce its best harvest in nearly 6 years if rainfall patterns continue as they have over the last two months. Malawi's next harvest starts from April.

El Niño May Affect Africa's Food Supply (060221)

Climate change that strengthens the El Niño weather patterns, a warming of the water in the tropical Pacific Ocean, could endanger food supplies for more than 20 million people in Africa, a new study warns. In the past, El Niños have occurred every 4 to 7 years, but many climate experts worry that continuing global warming will lead to stronger and more frequent events.

A new analysis of 40 years of African crop and livestock records shows a close association between El Niños and variations in production of corn, sorghum, millet and groundnuts such as peanuts. In southern Africa, crop production could be down by as much as 20-50% in strong El Niño years. For Africa overall, the variation in corn production corresponded to that needed to feed 20 million people a year. Variations in rice, sorghum, millet and groundnuts amounted to food for 2 to 3 million people.

The danger could be reduced by increasing irrigation and by changing land use, including planting alternative crops, the researchers said.

WETLANDS

Researchers Say Farming Threatens Brazil Wetlands (060113) AP

RIO DE JANEIRO, Brazil — The growth of farming and cattle ranching in western Brazil could destroy the world's largest freshwater wetlands by 2050. Farming has already wiped out nearly 45 % of the original vegetation in the Paraguay River Basin, which includes the 145,000 sq km Pantanal wetlands, according to a new study by Conservation International-Brazil.

While most of the destruction is outside the Pantanal, the wetlands have lost 17% of their original vegetation, degrading soil and altering the flood plain's dry and wet cycles, which help sustain the region's rich biodiversity, the study said.

"It is extremely important to conserve the areas surrounding the Pantanal lowlands because they are the headwaters of the rivers that make up the Pantanal," said Sandro Menezes, manager of the conservation group's Pantanal program.

The Pantanal, is home to some 650 bird species, 230 fish species, 80 varieties of mammals and more than 1,000 kinds of butterflies.

LANDSLIDE

Deadly Landslide in Indonesia Sets off Debate over Role of Logging in Disaster (060110) AP

BANGKOK, Thailand — Landslides and flash floods in Indonesia that killed up to 240 people have set off a heated debate over the role logging may have played in the disaster.

Local environmentalists say logging in central Java worsened the situation and exposed the government's failure to reign in illegal logging. But the administration denies that logging was to blame and has found unlikely support from international conservation groups, who say the cause of the landslides had more to do with the makeup of central Java,

where thousands live in flood-prone areas and farmers have cleared forests for agriculture land and plantations.

"Often such tragic disasters are blamed on excessive logging," said a spokesman with CIFOR (Center for International Forestry Research). "Sure, deforestation may play a small part in flooding, but strong scientific evidence suggests even good forest cover will not prevent flooding in cases where exceptionally long and heavy rainfalls saturate the forest soil, making them unable to absorb more water."

This view is supported in a recent UN study that concluded that heavy rains were the main causes of flooding and economic and human losses were due to people increasingly moving into flood zones.

[Ed: Members may like to read "Forests and floods: Drowning in fiction or thriving on facts?" – an FAO-CIFOR publication, <http://waswc.ait.ac.th/law-policy-article.html>.]

1,800 Feared Killed by Landslide in Philippine Village (060218) AP

GUINSAUGON, Leyte Island, Philippines — The village of Guinsaugon disappeared on the 17th February. So did nearly every man, woman and child who lived in this farming community of 1,857 people. Only a few jumbles of corrugated steel sheeting, sticking up from 30 feet of sludge, indicate Guinsaugon ever existed.

On Saturday morning, 24 hours after a landslide sent a wall of mud and boulders tumbling down a mountain, rescue workers held little hope of finding more survivors. Only 57 have been found out of a population of 1,857. Drenching rain and high winds made the task more miserable. The search was focusing on an elementary school, amid unconfirmed reports that relatives of the 250 children and teachers had received cellphone text messages from survivors. Only one girl and a woman had been rescued alive.

Rescue helicopters, two navy ships and a military transport plane carrying sniffer dogs rushed to Leyte Island. Soldiers were given sketches of the village, so they could approximate where the houses had been. The troops were

digging only where they saw clear evidence of bodies, because of the danger that the soft, unstable mud could shift and claim new victims.

An appeal was sent to US troops, in the Philippines for a joint military exercises, to assist. In all, two American warships carrying 17 helicopters and 1,000 marines plus two additional navy vessels carrying supplies were diverted.

Many blamed the persistent rains and illegal logging. "The logging stopped around 10 years ago," said Roger Mercado, a member of the local Congress, "This is the effect of the logging in the past."

The International Red Cross began an emergency appeal for \$1.5 million for relief operations. China pledged \$250,000 in cash and other emergency relief.

TECHNOLOGY

USDA Using Satellites to Monitor Farmers (060114) AP

Satellites have monitored crop conditions around the world for decades, helping traders predict future prices in commodities markets and governments anticipate crop shortages. But those satellite images are now increasingly turning up in courtrooms across the USA to crack down on farmers involved in crop insurance fraud.

Government and private industry are using satellite imaging technology in water rights litigation and in prosecution of environmental cases ranging from waste discharge regulations to injury damage lawsuits stemming from herbicide applications. The technology is also used to monitor the forestry and mining industries.

What's catching attention is a spate of recent cases involving the use of satellite imaging to prosecute farmers. While fewer than 100 cases have been prosecuted, satellite imaging pinpoints about 1,500 farms annually that are put on a watch list for possible crop fraud. The agency says its spot checklist generated by the satellite data has saved taxpayers between \$71 million and \$110 million a year in fraudulent crop insurance claims since 2001.

FEATURES

The Association For Better Land Husbandry (ABLH): A Brief History, T.F. Shaxson, Dorset, UK.
fshaxson@aol.com

Origin: Immediately after the ISCO Conference in Kenya & Ethiopia in November 1989 Jim Cheatle said: "If we keep on suggesting what farmers ought to be doing to conserve soils and raise productivity, we ought to show that our suggestions actually work on the ground". As he lived in Nairobi, he undertook personally to start such work with small farmers. With Kenyan colleagues, he reported on some promising results in June 1991 at the Workshop in Kenya entitled 'Environment and the Poor'¹, itself a specific outcome of the ISCO Conference. In order that he could receive donated funds without incurring a tax liability, the Association for Better Land Husbandry was set up in UK by Norman Hudson and Jim Cheatle as a society with charitable non-profit status under the UK's Charity Commission, primarily to support the fieldwork in Kenya. Its first formal meeting was on 6th January 1993, at which Norman Hudson (its first Chairman), Francis Shaxson (its second Chairman), Martin Haigh, Jane Clark, Adrian Wood, Malcolm Douglas, and Bill Moldenhauer (WASWC) were elected as its officers.

Activities: In Kenya Jim Cheatle was employed by ABLH as Executive Secretary throughout the Association's life. He gathered a staff of field workers, and expanded the work with small farmers in Central and Western Kenya to improve their land husbandry by encouraging betterment in physical, biological, hydric and chemical conditions of their soils, resulting in a greater range of crops being grown and in raised yields even where and when fertilizers were not affordable.

In UK, the Association received and channelled funds - generously provided chiefly by the Ford and Rockefeller Foundations and ODA/UK - to the Kenya office, and arranged annual meetings for those who, as

¹ 'Working with Farmers for Better Land Husbandry' eds. Norman Hudson and Rodney J. Cheatle, 1993. London: Intermediate Technology Publications, with WASWC, 272 pp. Paperback, ISBN 1-85339-122-0

Members, took an interest in the Association's philosophy and actions. A number of Occasional Papers were also produced for Members in addition to formal Annual Reports. Members themselves also have contributed papers about various aspects of land husbandry to many international conferences and workshops throughout the Association's life.

Development: From the early stages of the fieldwork in Kenya, it became obvious that, because cash is always a major need by poverty-stricken small-farm families, difficulties with marketing of the extra produce were an ever-present problem. This aspect became an increasingly significant factor in the planning for future developments. By the time that the Kenya operation had matured enough to solicit funds on its own account, the additional main *foci* of future work had become the investigation and exploitation of market opportunities for a widening range of crops that small-farmers were interested to produce, and an emphasis on adding value where necessary by some appropriate processing and packaging of particular products, with the production of raw materials based upon conservation farming principles and compliance with appropriate standards.

Farmers Own: It was at this point that ABLH-Kenya became an autonomous not-for-profit body registered with the Government of Kenya, and the linkage with ABLH in UK was amicably and formally ended in March 2000, with remaining assets being transferred from its parent ABLH in UK to ABLH-Kenya. Since that time, Jim's continuing work in Kenya has resulted also in the setting-up of 'Farmers Own', a not-for-profit company for undertaking fieldwork, crop processing, and marketing in both the national and international arena, in collaboration with several Farmers Associations and a range of governmental and non-governmental organizations in Kenya (see <http://www.farmersown.com/>). Significant funding is now being sought to expand these activities in a major partnership with the Kenyan Poverty Eradication Commission and many community groups, after a successful 2-year pilot operation with 5,000 small farmers that put them all on a ladder climbing out of the pit of absolute poverty.

ABLH-UK today: In 2004 the membership of ABLH in UK was merged with that of the Tropical Agriculture Association in UK. From November 1993 to July 2003, 17 issues of the ABLH Newsletter 'ENABLE' were published for Members. Significant articles from different issues are added to the TAA's website <http://www.taa.org.uk/> from time to time.

Conclusion: ABLH set out to put the concepts and philosophy of 'better land husbandry' into practice with small farmers in Africa. Building on the experience gained in the field and market-place in Kenya since 1993, a 'rôle-model' program has now been designed and tested in the field, which can show how even resource-poor farmers can 'make poverty history'. Farmers Own, the fair trade commercial successor to ABLH-UK is now showing how to develop a fair-trade and large-scale approach that will take many thousands out of poverty. With around 21 million people in a state of absolute poverty and few significant actions to eradicate that poverty, this flagship model in Kenya is surely to be welcomed. (www.farmersown.com)

Postscript by R.J.Cheatle: All the work done and the challenges overcome became possible only because of the practical support by the two UK-based chairmen (Norman Hudson and Francis Shaxson) and the Association staff, government officials and participating Kenyan people.

Agroforestry Highlights

Riparian Buffer Zone Restoration for Food Security, by **Craig Elevitch**, Permanent Agriculture Resources, Holualoa, Hawaii. cre@agroforestry.net, www.overstory.org.

Rivers, streams and creeks are attractive and valuable components of nature that provide beauty, enjoyment, recreation, inspiration and valuable resources for both urban and rural communities. From the beginning of human history riparian ecosystems have been one of the most intensively used ecosystems in the world. "Riparius" is a Latin word meaning "belonging to the bank of a river". It is the biotic community located at the bank of any kind of water body. All waterways have riparian zones whether they are tiny creeks or major rivers. This is the waterways buffer. It stretches along both sides of the waterway and is as wide as the area where annual or periodic flooding occurs.

Riparian areas were used primarily by early settlers for livestock grazing, fodder and firewood harvesting. Later intensive uses, including civil engineering works in the nineteenth century and hydroelectric developments in the twentieth century, have contributed to the decline of these

valuable ecosystems. "Hydrologic modifications due to water diversions and dams; non-point source pollution and sediments from agricultural, forestry, and urban land practices; and vegetation removed by logging, cattle grazing all have damaged riparian ecosystems and have decreased their ability to support fisheries and wildlife, purify water, reduce flooding and perform other ecological functions".

This land/water boundary (ecotone) is greatly influenced by the vegetation, hydrology and geomorphology of a particular region. These factors also determine the structure, dynamics and economic importance of this zone. Although the ecological properties of riparian zones differ, they all share common characteristics that allow the application of certain restoration and rehabilitation principles to all riparian landscapes. The most important of these characteristics is extensive surface and subsurface connectivity of the ecotone with the adjacent upland and aquatic systems; diverse vegetation represented by a variety of age classes; and resilience in response to changes in the hydrologic and geomorphic characteristics of the boundary.

A buffer zone can bring food security in many ways. The especially productive, protective, enriching and interactive nature of the riparian zone to adjacent habitats can be

tapped for increased food production while still providing essential environmental services. As a transition area between land and water, buffer zones generally have an intermediate microclimate that allows for increased species richness. Designers can augment both the productive and protective roles of the buffer zone by incorporating habitat-modifying factors and specific components in stream bank stabilization bioengineering and by vegetating riparian buffer zone by multiple beneficial species. Vegetation in the riparian zone prevents the depletion of top fertile soil during water runoff and thus enhances the fertility of adjacent farmlands. It also prevents the erosive action of floods if there is a tendency of flooding and thus protects the crops from floodwater velocity and erosive power, and blocks debris from entering the cropland.

Designing the buffer zone with multiple plant species can produce more microniches for animals to inhabit. The riparian habitat is a wildlife abode and a corridor in many

cases, and thus attracts many animals and provides opportunities for hunting. Buffer zones can often be used by farmers for raising a few milk animals by controlled grazing.

Buffers may produce perennial crops such as hay, nuts, fruits and berries, lumber and veneer, and fiber. Fuelwood and mulching materials are other harvestable products from trees. Herbs can provide herbal medicines, handicraft items, edible parts, fodder for domestic animals and mulching materials. In Kerala, India, many local medicinal leaves are an essential part of the riparian vegetation.

Source: Sebastian, M. 2006. Riparian buffer zone restoration for food security. The Overstory #167. Permanent Agriculture Resources, Holualoa, Hawaii. www.overstory.org. Note: Reader who wants to read the full article may request it from Craig at cre@agroforestry.net and ask him to put your name in the mailing list for future dispatch of Agroforestry articles.

Vetiver Highlights

Vetiver Grass – “The Community Plant”, Dick Grimshaw, The Vetiver Network, r.grimshaw@comcast.net, www.vetiver.org

This year, from October 22-26, the Fourth International Conference on Vetiver (ICV-4) will be held in Caracas, Venezuela, and will have the theme “Vetiver and People”. This is actually a rather good name as Vetiver Grass is the “People’s Grass”, and has found to be very acceptable to communities when the latter have been properly educated about its application and uses. In particular rural communities can use vetiver for, amongst other purposes: soil and water conservation, house plot protection, village road stabilization, village land reclamation, land slip prevention, boundary markers and dividers between closely spaced houses, water supply protection and water quality improvement, village pond purifier, house by house sewage treatment, mulch, thatch, medicinal application, drinking water purifier, termite excluder, livestock forage, and material for handicrafts. A pretty good list – a plant of many purposes for all people at a very low cost, and basically an easy to understand technology.

A couple of soil related examples came to my attention recently that I would like to share with you.

Gully – ravine rehabilitation and control. There are many parts of the tropics where gullies are so large that they consume houses in the relentless erosion process that creates them. There are huge gullies in eastern Nigeria, Cameroon and the Congo, particular where the soils are of light and alluvial origin. These gullies that destroy property and result in loss of land can be rehabilitated and stabilized by the Vetiver System. Recent experience under a USAID development project in the Congo (DR) is a good example. A very large gully was cutting back into a Kikwit Town, houses were at risk and following meetings with the villagers the community as a whole took action. The community created its own vetiver nursery, reshaped the gully and then planted vetiver grass. Two months after planting the vetiver is growing well. The Vetiver Network was actively involved with this project.



The upper end of the gully threatening the town. The picture on the right shows the gully head already stabilized with vetiver and the slopes being prepared for planting.



Slope preparation on the left, and the final product after 4 months on the right with the Alain Ndona (right of the sign) who worked with the community on this gully reclamation.

Community Rehabilitation in East Bali, Indonesia. The Vetiver System has been instrumental in changing the lives of 11,500 impoverished, undernourished, illiterate adults and children in the barren mountains of East Bali over the past 8 years. The main thrust was to educate children through better schools to go back to their parents and teach them what they had learned at school about vetiver and other agricultural and health issues and remedies. Working with these communities the NGO responsible for the project used vetiver for a wide range of uses:



The hamlet roads (left) were improved and stabilized with vetiver, as were the surrounds of village houses (center). Organic gardens were established using vetiver for soil and water conservation and for mulch (right).



Organic gardens protected by well managed vetiver (left), a spring head stabilized with vetiver (center), children and their families compete to see who can plant the best 'technical' row of vetiver (right).

As a result of this program by the Ekoturin Foundation, Bali, Indonesia, 20 km of roads were community constructed and stabilized with vetiver allowing 2,500 families to travel for the first time to markets and other services including health; 600 children attended the schools and were educated in organic farming and the use of the Vetiver System; the Vetiver System enabled nutritious organic vegetables to be grown by 2,500 families – malnutrition almost eliminated; child mortality (before 1 year old) was reduced from 25% to near 0%; palpable goiter in children reduced from 84% to less than 20%; and 1,300 families have safe and clean drinking water. The power of Vetiver!! There are many other examples of communities being involved with the Vetiver System. I believe it provides a technical focus for the community, each person being able to use vetiver for the purpose best

suited to his or her needs; it is easy to understand, it is low cost, and does not need government support or sanction.

I invite you to the Fourth International Conference on Vetiver (ICV4) to see and learn about this remarkable plant and its uses. Details are at: <http://www.vetiver.org/ICV4%20-2%20announcement.pdf>

Landcare Highlights

Landcare Highlights 2006-2026

This year Australia celebrates 20 years of Landcare, the unique grassroots movement that has motivated and mobilized Australians to work together to repair degraded land, bush and coastal ecosystems. Can Australia sustain the same enthusiasm over the next 20 years, as it has demonstrated in the past?

Australian Landcare is a grassroots umbrella movement. It is made up of thousands of small local groups and many thousands of landholder and community volunteers. It has succeeded because of its flexibility and adaptability. Landcare empowers and enables ordinary people from all walks of life to take action and do the hard work required to rebuild environmental assets and prevent further degradation caused by human development. Increasingly, Landcare has world wide significance and potential.

The word Landcare is important. It is easily understood – no pretences. To old and young alike it means 'looking after the land, water, sea and air'. It means caring about the environment and taking action. It means learning about the benefits that come with healthy natural systems, for humans and the biodiversity that supports life on earth.

There is political pressure in Australia to 'move on' from Landcare and segment the movement into neat strategic compartments: natural resource management; environmental management systems; ecosystem services; catchment (or watershed) management, and a host of other strategic policies, programs, and action plans. However, these policies, programs and plans are more the mantra of academic and political leaders than ordinary working people and Landcare volunteers.

Australia would lose one of its most valuable assets if it lost such an identifiable trademark as Landcare – one that can be clearly understood and used by everyone prepared to plan and then work together. While collecting baseline data, strategic planning and setting investment targets is vitally important, it is worthless without implementation.

While Australia debates the strengths and weakness of Landcare the world is catching on and looking to Australia for inspiration, and support. A Google search now finds many thousands of articles from all corners of the world on emerging global Landcare with reference to its namesake here in Australia.

How ironic if Australia was to bow out at this critical time when the world is looking for new and better ways to combat environmental degradation and improve the living conditions of rural people particularly in the developing world.

Australian Landcare mobilizes people to take part in shaping their environmental destiny. It can do the same worldwide. It is frustrating for the small group of Australians championing international Landcare that Australian policy makers and government are slow to see its potential to help tackle global environmental degradation.

The achievements of Australian and International Landcare will be highlighted at the 2nd International Landcare Conference Melbourne in October 2006. The Secretariat for International Landcare (SILC) Inc is coordinating both pre and post conference Landcare study tours to enable visiting delegates to experience Landcare in all its dimensions.

For information contact SILC Directors: Sue Marriott, smariott@silc.com.au; Victoria Mack, vmack@silc.com.au, www.silc.com.au

Wocat Highlights

Creation of Agricultural and Rural Development (ARD) Clubs as WOCAT Partners in Cameroon, October 16, 2005



The Presbyterian Rural Training Center (PRTC) in Fonta, North-West Province (NWP), Cameroon, had organized an event for farmers, farmer groups, several technical agronomists as well as members of the

Provincial Ministry of Agricultural and Rural Development ARD. During this meeting Vincent Tekum, Coordinator and Director of PAFSAT (Promotion of Adapted Farming Systems based on Animal Traction) showed interest in the ongoing studies on the use of *Tithonia diversifolia* (Tithonia, an insecticidal and nematicidal plant) as green manure, a technology not commonly known. There are several rural training centers and agricultural schools in the NWP providing good educational work and extension services, but communication and transfer of relevant information is still relatively poor.

Therefore, Vincent organized an event at PAFSAT, where besides a presentation of the studies on Tithonia as green manure an introduction into WOCAT's objectives and methodologies was given. A number of agricultural experts of different ministries concerning with natural resource management as well as leaders of agricultural schools and farmers attended the presentation and showed their interest in participating in an initiative enhancing information management on SWC technologies and approaches. Vincent Tekum accepted to contact relevant institutions and to work out a proposal on how this information exchange could be organized including the WOCAT methodology and network, which would include the building of ARD Clubs to provide a free form of organization that is open to a wide target group. His proposal is now with the WOCAT secretariat, which will provide further support and backstopping to the use of WOCAT within the ARD Clubs.

- Fabienne Thomas, University of Fribourg, Switzerland

IAEA-WOCAT training workshop in Istanbul, Turkey, November 23-25, 2005



The 3-day training, organized by the Istanbul Technical University, Institute of Energy, and supported by the International Atomic Energy Agency (IAEA) Coordinated Research Project, was accomplished

with around 10 participants from various university and government institutes. The 1st day focused on introductions to WOCAT and to the WOCAT methodology.

The 2nd day was spent in the field, looking at degradation problems in the area and at conservation measures, trying to document them with the WOCAT questionnaires. Two lively village meetings were held, discussing degradation and conservation issues around Omerli dam, where protection areas cause conflicts with villagers. The Omerli reservoir is the most important water source for the city of Istanbul. The field day showed the high degradation problems in the area, illustrated also by the rainfall during the day. Cultivation land with minimal vegetation at this time of the year (rainy season!) and up-and-down the slope tillage, overgrazing and wood cutting in brush and forest land, conflicting protection zones around

Omerli reservoir, heavy urbanization with illegal constructions of whole city parts, etc.

On the 3rd day we concentrated on training on tools like database and assessment criteria and developing workplans to use WOCAT in the local programs. The established work plan includes the creation of a TURCAT team, the documentation of local SWC Technologies and Approaches, the translation of WOCAT questionnaires into Turkish and the expansion of the current team beyond University level.

- Gudrun Schwilch, CDE, Bern, Switzerland.
gudrun.schwilch@cde.unibe.ch

RESEARCH ABSTRACTS

ABSTRACT: Tools for catchment level soil and water conservation planning in the East African Highlands: Tools for participatory soil and water conservation mapping - Tools for financial analysis of soil and water conservation measures. Edited by Rik van den Bosch, rik.vandenbosch@wur.nl, and Geert Sterk, g.sterk@wur.nl, Tropical Resource Management Paper No. 65, Erosion and Soil & Water Conservation Group. Dept of Environmental Sciences, Wageningen Univ. and Research Centre, Wageningen, Netherlands. 2005. 115 pp. ISBN: 90-6754-995-9, ISSN: 0926-9495, <http://www.dow.wau.nl/eswc/>. Contact: Jolanda Hendriks, jolanda.hendriks@wur.nl

In Kenya and Tanzania extension services use the Catchment Approach. This is a methodology for participatory soil and water conservation planning at catchment scale. The approach is currently applied at different locations in the East African Highlands. The method has been reviewed in 1996 and the EROAHI project developed tools to assist the local extension services to improve the methodology based on this review. The project delivered two new methods to be employed within the daily context of the extension services. The first method is a method for participatory soil and water conservation planning at catchment scale. The method makes use of farmers' indicators for soil erosion and results in a catchment erosion risk map, made by farmers. For each unit on the map expected yield loss due to erosion is assessed by farmers and experts, relating erosion to yield loss. Since farmers can relate to the map it is a good basis for further negotiations on soil and water conservation planning at catchment scale. The second method developed by the project is a method for financial analysis of soil and water conservation measures before the actual implementation. The analysis is done for and with farmers and shows farmers when they can expect financial returns from their investments in land management activities. The method takes into account the socioeconomic situation of the farmer family as well as the bio-physical situation, such as slopes, soils and climate. The methods were developed not only together with the farmers but also together with representatives of the extension services in Kenya and Tanzania, since they are the end-users of the methods. The extension services and the researchers developed a strategic vision on how the tools can be used in the current approaches for natural resource management in Kenya and Tanzania. This report describes in detail the developed tools and the potential use of the tools in the current extension approaches. The scientific results of the project are published in the Tropical Resource Management Papers 62, 63 and 64.

ABSTRACT: Floodplain Rehabilitation and the Future of Conservation and Development: Adaptive management of success in Waza-Logone, Cameroon, PhD thesis of Paul Scholte, Tropical Resource Management Paper No. 67, Resource Ecology Group. Dept of Environmental Sciences, Wageningen Univ. and Research Centre, Wageningen, Netherlands. 2005. 342 pp. ISBN: 90-6754-953-3, ISSN: 0926-9495, www.dow.wur.nl/reg. Contact the author at scholkerst@cs.com.

Since 1979, the hydrology of the Waza-Logone floodplain in semi-arid Cameroon has been affected by the construction upstream of a dam and embankment, reducing the flooding intensity in an area of 1,500 km², including Waza National Park. As a consequence, annual grasses invaded productive perennial grasslands, reducing the carrying capacity of the area for livestock, fisheries and wildlife. In 1994, after local consultations, a watercourse blocked by the embankment along the Logone river was re-opened, reinstating the natural flooding regime in an area of 600 km². Monitoring showed a gradual recovery of perennial grasslands, virtually completed in 2003, albeit with a species composition somewhat different from the 1970s. Numbers of most waterbirds increased two-fold, especially when their colonies benefited from local communities' protection, whereas colonies of piscivorous birds were frequently destroyed. Floodplain antelopes showed an initial increase that has not continued, probably because of increasing competition with livestock which densities increased three-fold due to the arrival of new pastoral groups and prolonged stay of herds traditionally frequenting the area. These developments indicate a problem in the sharing of the reflooding benefits between wildlife and people that rapidly respond to new opportunities, calling for intensified management planning to anticipate this unexpected success. A dialogue was institutionalized between protected area authorities and local communities. Effective conservation called for a stronger and lasting involvement of protected area personnel in planning and community conservation. Developed training courses showed good potential to upgrade necessary knowledge and skills of present personnel. In addition, institutional changes are needed to assure the necessary increase in numbers of park personnel and their rotation, not only in and amongst national parks but with training institutes as well. The success of floodplain rehabilitation ultimately depends on long-term ecological and socioeconomic monitoring, with individuals and institutions capable to translate upcoming insights into practice.

ABSTRACT: Monitoring for Impact: Evaluating 20 years of soil and water conservation in southern Mali. PhD thesis of Ferko Bodnár, fbodnar@yahoo.com. Tropical Resource Management Paper No. 71, Erosion and Soil & Water Conservation Group. Dept of Environmental Sciences, Wageningen Univ. and Research Centre, Wageningen, Netherlands. 2005. 219 pp. ISBN: 90-6754-963-0, ISSN: 0926-9495, <http://www.dow.wau.nl/eswc/>. Contact: Jolanda Hendriks, jolanda.hendriks@wur.nl

A soil and water conservation (SWC) project has been going on in southern Mali since 1986. Donor support was gradually withdrawn between 1998 and 2002, but no final evaluation was undertaken to learn lessons from this long-term and large-scale experience. The objective of this present research was to find out how to evaluate impact, what the impact in Mali has been, and which recommendations could be made for monitoring and evaluation in SWC projects. A reconstructed logical framework made it possible to find out what was needed for impact evaluation, what was available from project monitoring and external monitoring, and what additional data and analyses were required. Missing baseline data were substituted by reconstructed baselines and virtual time series. Between 1998 and 2002, agriculture has expanded and intensified, but crop yields have declined and nutrient balances are still negative. Further intensification is needed to halt and reverse the yield decline. The cause-effect chain between project activities and impact showed that the SWC extension approach was effectively increasing farmer adoption of SWC measures. Farmer adoption steadily increased, spread to neighboring villages and continued after project withdrawal. Erosion control measures (live fences, stone rows, grass strips and check dams) reduced erosion with 50-70% and improved crop yields with 5-12%. Current annual farmer benefits of increased cotton production largely outweigh the annual SWC extension costs during the project. SWC projects are recommended to complete the logical framework and monitor accordingly and to collaborate with external monitoring for a more efficient evaluation of impact. Achieving impact may take longer than the project's life span. Therefore, project activities should be imbedded in a long-term national program. It also implies that to assess impact after a short project period requires proxy impact indicators that reflect a continuing change, rather than an end-status.

ANNOUNCEMENTS

AWARD

The King of Thailand Vetiver Awards: Fourth Series

On the occasion of the Fourth International Conference on Vetiver (ICV-4) which will be held in Caracas, Venezuela between October 22-26, 2006, Her Royal Highness Princess Maha Chakri Sirindhorn, the Chairperson of His Majesty the King of Thailand's Chaipattana Foundation, has graciously granted US\$10,000 from the Chaipattana Foundation for "The King of Thailand Vetiver Awards" for the most outstanding works on vetiver. The award will be split into the following categories:

1. Outstanding Research
 - 1.1 Agricultural Application (US\$ 2,500)
 - 1.2 Non - agricultural Application (US\$ 2,500)
2. Outstanding Dissemination Work in the Vetiver System
 - 2.1 Government Agency (US\$ 2,500)
 - 2.2 Non-Government Agency (US\$ 2,500)

The winners will receive the awards from Her Royal Highness Princess Maha Chakri Sirindhorn, the Patron of The Vetiver Network, on His Majesty the King of Thailand's behalf, during the Opening Ceremony of the Fourth International Conference on Vetiver (ICV-4) in Caracas, Venezuela on 23 October 2006. The recipients of the awards will be invited to present their papers at the Conference, with full financial support. Moreover, Certificates of Excellence will be granted to the two runner-up papers of each sub-category.

Pls contact: The King of Thailand Vetiver Awards Committee, Planning and Foreign Affairs Division, Office of the Royal Development Projects Board, Rajdamnern Nok Avenue, Dusit, Bangkok 10300, Thailand. Phone: +66-22806193-200 ext. 261, 262, 263; Fax: +66-22806234, vetiver@rdpb.go.th, spasiri_2000@yahoo.com. See more information in The Pacific Rim Vetiver Network website, <http://prvn.rdpb.go.th/>.

FELLOWSHIPS

Ph.D. Fellowships (For non-UK applicants)

The Catchment Science Centre is a collaborative research initiative created by the Environment Agency and the University of Sheffield with a mission to provide the scientific underpinning for the management of catchments to deliver good ecological quality in freshwater ecosystems. We have Marie Curie funding from the European Commission for six PhD fellowships for a project called CatSci.

We are seeking up to six intellectually able, skilled and ambitious individuals to receive multi-disciplinary research training and conduct research within a large team on specific topics in the general field of catchment science.

Broad topic areas include:

- Understanding the controls on aquatic and riparian ecosystem structure and functioning, for example the roles of flow, hydro-morphology and chemical quality, and disentangling the relative importance of abiotic to biotic interactions.
- Understanding the pathways and transformations which control the delivery of water and associated solutes to freshwater ecosystems.
- Analysis and modeling of the combined physicochemical, ecological, and socioeconomic interactions in catchments, for example using systems analysis, numerical modeling and AI methods.

We are willing to consider alternative research topics for particularly able candidates. These Fellowships are available to start before December 31, 2006, and are 3-year fixed term appointments.

For more information, please see: <http://www.shef.ac.uk/csc/catsci.html> or contact: John Wainwright, Department of Geography, The University of Sheffield, Winter Street, Sheffield S10 2TN UK. Tel: +44 (0)114 222 7951, Fax: +44 (0)114 279 7912

MEETINGS

14th Conference of the Int'l Soil Conservation Organization (ISCO) "Water management & soil conservation in semi-arid areas" Marrakech, Morocco May 14-19, 2006

THEMES

Management of Water Resources

- New technologies for improving water use efficiency
- Traditional approaches for water management
- Recent trends and innovations in water management for agriculture
- Harvest, storage and management of runoff water

Desertification Assessment and Control

- Factors and processes leading to desertification
- Desertification impacts
- Desertification control
- Progress in implementing the UNCCD convention on combating desertification

Dynamics of Agro-Silvi-Pastoral Systems and Land Degradation

- Soil cover changes and their hydrological effects
- Role of agroforestry systems
- Impacts of fire

Quantifying Erosion Extent and Impacts

- Measurement techniques of soil erosion
- Modeling of soil and soil nutrient losses
- On site and off-site indicators for erosion impacts

Erosion Processes and Control

- Surface erosion and innovative biological control methods
- Gully erosion and restoration
- Mass movement and stabilization
- Wind erosion control and sand dune fixation

Enhancing Soil Quality

- Rehabilitation of degraded lands
- Innovative methods for soil nutrients management
- Conservation management practices and soil productivity
- Biological methods for restoring the soil

Soil Degradation and The Global Environment

- Landscape and biodiversity preservation
- Water quality impairment and reservoir siltation
- Carbon sequestration and global climate change
- Desertification, poverty and human migration

Economic, Social, Institutional and Policy Stimulants of Soil and Water Conservation

- Economic and social impacts of land degradation
- Cost efficiency evaluation of alternative soil and water conservation practices
- Institutional mechanisms for promoting soil and water conservation
- Upland & lowland interactions & community initiatives for holistic watershed mgmt
- Training and awareness needs for improved land husbandry
- Integrating soil and water conservation into profitable farming enterprises
- Incentives and subsidy issues

Registration Fees: North countries: €545; South countries: €270; North country students: €200; South country students: €100. Participants are asked to register and pay relevant fees to the Organizing Committee soon.

Excursions: Pre- and post-conference excursions, payable by the participants will be organized during May 10-13 and May 20-23, 2006. The pre-conference excursion (Marrakech-Taroudant-Agadir-Essaouira through Tizi N'Test) will tackle the soil conservation in the High Atlas and Souss regions.

The post-conference excursion (Marrakech-Ouarzazate-Merzouga through Tizi N'Tichka) will concentrate on water management and desertification in arid environments (valleys of southern flanks of the High Atlas).

Contact: Prof. Mohamed Sabir (sabirenfi@wanadoo.net.ma), President of 14th ISCO;
The Organizing Committee, isco2006@wanadoo.net.ma, Phone & Fax: +212-37861149. Information about Marrakech: cherifi@ucam.ac.ma; Conference website: www.maneskovtravel.com/isco2006 and www.isco.org. Note: WASWC provides one-year Guest membership to all participants to the 14th ISCO Conference who are not yet member.

2nd International Symposium "Preventing and Fighting Hydrological Disasters" Timișoara – Romania June 29-July 1, 2006

Organized by "Politehnica" University of Timișoara, Romanian Water Authority, Romanian National Committee, Hydrotechnical Faculty IHP-UNESCO, under the auspices of WASWC

Themes:

- Natural and Accidental Floods
- Hydrological Droughts

- Pollution of Water Resources
- Policies and Strategies

Important dates

- 15 February, 2006 Pre-registration and abstracts
- 15 March, 2006 Notification of acceptance
- 30 April, 2006 Full text

Language: English

Symposium location: "Politehnica" University of Timișoara, Faculty of Hydrotechnics, Enescu St., no. 1A, 300022 Timișoara, Romania. Chairman: Prof. dr. ing. Gheorghe Cretu, Phone: +40 256 404096, Fax: +40 256 404106, gcr@mail.dnttm.ro
Contact person: As. Flaminia Mocanu, Phone: +40 256 404105, Fax: +40 256 404106, flaminiamro@yahoo.com

IGU Regional Congress on Land Degradation: Causes, Implications and Management

Brisbane, Australia July 3-7, 2006

The Second Circular for the International Geographical Union Regional Congress in Brisbane, Australia, 3-7 July 2006, is now available on www.igu2006.org.

Themes: Land Degradation, Geomorphology and Land Degradation, Scientific Guidelines in Environmental Decision-making

Would you therefore please send to Prof. Arthur Conacher (arthur.conacher@uwa.edu.au) your intention to present a paper as soon as possible. Please indicate in which of the above themes you wish to present your paper. [Formal abstracts must be submitted online through the above website.]

Information about the COMLAND field trip in Brisbane (June 29-July 2, 2006) can be seen at the following weblink: <http://www.sages.unimelb.edu.au/news/comland/index.html>

18th World Congress of Soil Science

Philadelphia, PA, USA July 9-15, 2006 <http://www.colostate.edu/programs/IUSS/18wcsc/index.html>

Over 2,800 abstracts have been submitted for the Congress. I hope to see all of you in Philadelphia for what promises to be not only a stimulating scientific meeting, but also socially and culturally enjoyable. This will be the first World Congress held in the USA since 1960. I urge you to take advantage of early preregistration which ends May 1, 2006. After May 1 the registration fee will increase \$100. More details will appear later on the various scientific and social activities at the Congress, but I wanted to alert you now about the excellent Opening Session at the 18th WCSS.

The opening session will be kicked off by one of America's most illustrious historical figures, Benjamin Franklin, the great inventor, publisher, politician, and diplomat, who is celebrating his 300th birthday. Other opening speakers will include Dr. Michael Clegg, the Foreign Secretary of the U.S. National Academy of Sciences, Ambassador Kenneth Quinn, who will recognize the 2006 World Food Prize Laureate who is a soil scientist, and Dr. Ed de Mulder, Past President of the International Union of Geological Sciences (IUGS), who will discuss the Year of Planet Earth (YPE) Initiative, which the UN recently approved for 2008. The IUSS is a founding partner of the YPE. Other invited speakers are U.S. Secretary of Agriculture Michael Johanns and Chief of the Natural Resources Conservation Service (NRCS), Bruce Knight. The plenary address will be given by Professor Jeffrey D. Sachs, the noted economist at Columbia University and author of the acclaimed book, *The End of Poverty*. Professor Sachs is the Director of the Earth Institute at Columbia and serves as Special Advisor to UN Secretary-General Kofi Annan on the Millennium Development Goals. - *Don Sparks, President IUSS, dlsparks@udel.edu*

XVIII National Soil Conference of the Romanian National Society of Soil Science

Cluj, Romania August, 21-26, 2006.

The XVIIIth Conference of the Romanian National Society of Soil Science '100 years of Soil Science in Romania': Complex management and multipurpose use of soil resources, environment protection and rural development in the North-North Western part of Transylvania, Romania. Contact: Executive President SNRSS: Professor Dr. Guș Petru: petru.gus@email.ro, Phone: +40 264 596384/206, 204, Fax: 00 40 264 443467 and Dr. Rusu Teodor rusuteodor@yahoo.com Phone: +40 264 596384/204

Conference Secretary: Dr. Valentina Coteș snrss2000@yahoo.com, Fax +40 21 2225979. Address: Bd. Mărăști 61, 011464 București 32, ROMANIA

AGRO ENVIRON 2006



Faculty of
Bioscience Engineering

Fac. of Bioscience Engineering, Coupure Links 653, Ghent, Belgium, September 4-7, 2006

The first Agro Environ symposium was organized by the University of Agriculture, Faisalabad (Pakistan) in 1998. Trakya University, Tekirdag (Turkey) hosted the second symposium in 2000 and the National Authority for Remote Sensing and Space Sciences (NARSS), Cairo (Egypt) organized the third in 2002. The fourth symposium was organized in 2004 by the University of Udine (Italy). This series of symposia proved to be a tool for involving scientists, engineers, planners, research centers and institutions in issues related to the agricultural environment.

Participants are invited to share their knowledge and experiences in discussions on the issues related to agricultural constraints within the soil-plant atmosphere continuum, within the framework of the following special topics.

- * Role of Conservation Agriculture for sustainable farming
- * Contamination of the soil-water-atmosphere continuum in agricultural areas
- * Waste treatment for agricultural soil amendment
- * Desertification and land degradation in agricultural ecosystems

The sessions are open for applications of RS/GIS techniques and Geo-information systems.

Symposium Chairman: Dr. Donald Gabriels, donald.gabriels@Ugent.be

Contact: Agroenviron-2006 Symposium Secretariat, Ghent University, Faculty of Bioscience Engineering, Department of Soil Management & Soil Care, Coupure Links 653, B-9000 Ghent, Belgium. Ph: +32092646038, Fax: +32092646247
joke.vandesteene@Ugent.be, donald.gabriels@ugent.be, <http://users.ugent.be/~jvdestee/agroenviron/index.html>
or Dr. Sajid Mahmood (Azeemi), International Coordinator, Centre of Excellence in Water Resources Engineering, Lahore, Pakistan, drsajid_pk@yahoo.com

**International ESSC Conference on
"Soil and Water Conservation under Changing Land Use"**
Lleida (Catalonia, Spain) September 12-15, 2006

Organizer: Department of Environmental and Soil Sciences, University of Lleida, Lleida, Spain as an ESSC conference, with cooperation from WASWC

THEMES

- Land Use Changes Affecting Soil and Water Conservation
- Processes of Soil and Water Degradation under Changing Land Use and Management
- Soil and Water Conservation Practices under Changing Land Use and Management

Key dates

December 31, 2005: 2nd Announcement (see on the website www.udl.es/serveis/sedai/sigtel/ESSC2006.html). Deadline for reception of abstracts and pre-registration forms

February 28, 2006: Notice of acceptance of abstracts

March 31, 2006: Deadline for registration with reduced fee

May 31, 2006: Deadline for reception of extended abstracts and registration fee for accepted participants

June 30, 2006: Publication of the preliminary program

Registration fees

	Before March 31, 2006	After March 31, 2006
Participant	€300	€350
Members ESSC	€270	€320
Students (ID required)	€150	€200

(Registration fee includes: welcome cocktail, coffee breaks, conference book of abstracts, proceedings on CD, access to all sessions, conference dinner and field tour)

Extended abstracts Instruction on how to prepare extended abstract is on the website. The deadline for reception of extended abstracts of accepted presentations (oral and poster) and payment of registration fee (required for inclusion of the participations in the final program of the Conference) is May 31, 2006.

Contact: Idefonso Pla Sentis, WASWC Vice President at ipla@macs.udl.es, www.udl.es/serveis/sedai/sigtel/ESSC2006.html

2nd International Symposium on Soil Erosion and Dry-land Farming (SEDF'06)
Yangling, Shaanxi, China September 26-30, 2006

Organized by: CAS-MWR-Institute of Soil and Water Conservation, USDA-National Soil Erosion Research Laboratory, USDA-National Sedimentation Laboratory, World Association of Soil and Water Conservation and Northwest Science & Technology University of Agriculture and Forestry

Themes:

- * Soil erosion processes, assessment, and control
- * Mechanism and techniques of ecological rehabilitation
- * Sustainable soil and water resource management in semi-arid areas.
- * Improved water use efficiency in dry-land farming systems.
- * Impacts of global climate change on soil erosion and dry-land farming
- * New technologies in soil conservation and dry-land agriculture.

Important Dates: January 01, 2006: Interest reply and Abstract due
February 01, 2006: Preliminary program
May 20, 2006: Conference registration due
August 30, 2006: Final program and proceedings paper due

Participants of the SEDF06 are requested to register before May 20, 2006. The registration fee is US\$240 (student: US\$140). This will cover the cost of scientific activities, abstract volume, transportation between Xi'an Xianyang Airport and Yangling, and social events (reception and banquet).

The cost of post-conference tours is not included in the registration fee. Post conference tours are to be organized, with an additional fee.

Contact: SEDF'06 Secretariat, No.26 Xinong Road, Yangling, Shaanxi 712100, People's Republic of China. Phone: +86-29-87012872/ 87012871, Fax: +86-29-87012872/ 87012210, keyanban@ms.iswc.ac.cn, <http://www.iswc.ac.cn>

IV International Conference on Vetiver (ICV-4), "Vetiver and People"
A Green Investment for Sustainable Development - Weaving a Better World
Caracas, Venezuela October 22-26, 2006

Social problems and poverty are closely related with environmental quality and the possibilities to improve people's income. Vetiver (*Vetiveria zizanioides*) is an affordable alternative to eradicate the poverty, mitigate and solve environmental problems shared by many Latin American countries and the rest of the world. At the same time, vetiver technology can mobilize and empower communities through their participation in social projects that combine economic and basic services improvements with ecological benefits.

Vetiver grass has multiple uses due to its anatomical and eco-physiological characteristics that make vetiver a unique plant in its diverse uses and applications. This extraordinary grass is adaptable to multiple environmental conditions and it is globally recognized as an easy and economical alternative to control soil erosion and to solve a variety of environmental problems. It has been used for restoration, conservation and protection of land disrupted by man's activities, like agriculture, mining, construction sites, oil exploration and extraction and infrastructure corridors. It is also used for water conservation in watershed management, disaster mitigation and treatment of contaminated water and soil.

During the last International Conference on Vetiver (ICV-3) in China in October 2003 it was proposed that the ICV-4 would be held in Venezuela, for the special interest derived from its application and socioeconomic impact in deprived communities.

Organized by: Fundación Polar, Faculty of Agronomy-Central University of Venezuela, Venezuelan Soil Science Society, The Vetiver Network TVN, Latinamerica Vetiver Network LAVN, Venezuelan Vetiver Network VEVN, and Aragua Conservation Society

Program in brief:

I. Sessions:

- * Contributions of vetiver to sustainable agricultural development and poverty eradication.
- * Protection and stabilization of infrastructure in rural and urban areas.
- * Handicraft and Vetiver: an innovative approach for community participation.
- * Social development through vetiver multiple purpose projects.
- * Vetiver role in watershed conservation and management.
- * Disaster prevention and poverty mitigation.
- * Prevention and control of soil and water contamination and treatment and disposal of wastewaters.

II. Plenary sessions:

- * Vetiver grass technology and its impacts on economic and ecological sustainability.
- * Vetiver and People. Social sustainability impacts.
- * The challenge for technological innovation, entrepreneur and scientific research in relation to vetiver grass.

III. Exhibition and poster session during the conference

IV. Technical tours:

- * Pre conference tour: Visit to land restoration and stabilization projects in the SE region of Venezuela.
- * Mid conference tour: Within the north central region of the country with visits to nurseries, bioengineering companies, social projects and watershed restoration and protection sites.
- * Post conference tour: To be announced.

Place and date: Fundación Polar, Caracas, Venezuela. October 22-26, 2006.

Official language: Spanish and English with simultaneous translation.

Registration Fee: US\$300, incl. materials, conference attendance and related events, mid-conference tour & some meals.

Note: To receive the second announcement please contact oluque1@cantv.net, narongchc@au.edu, www.fpolar.org.ve

ASSSI – ASPAC National Soils Conference
"Soil Science Solving Problems"
Adelaide, South Australia, Australia December 3-7, 2006

Jointly convened by the Australian Society of Soil Science Inc and the Australasian Soil & Plant Analysis Council Inc, the Conference will appeal to all those who work in any aspect of soils or soil science. A four-day program is planned in association with a trade exhibition and the opportunity for all delegates to enjoy pre- and post-Conference tours to some of South Australia's major attractions. The Conference will be held at The University of Adelaide and within easy walking distance of a wide range of accommodation and Adelaide's theatre and restaurant districts. Call for abstracts closes 30 June 2006.

For more information, visit the official Conference website at www.plevin.com.au/soils2006/index.htm

5th Iberian Congress on Water Management
"Shared River Basins: Basis for Sustainable Management of Water and Land"
University of Algarve, Faro, Portugal December 4-8, 2006

THEMES:

1. Water landscapes and water systems conservation
2. Institutional aspects of water management
3. Participation of citizens and media over water subjects
4. Water and public health
5. Innovation and technology

Contact: Prof. Dr. João Pedroso de Lima, Department of Civil Engineering, Faculty of Science and Technology, Polo 2 - University of Coimbra, 3030-290 Coimbra, Portugal. Phone: +351-239-797-183, Fax: +351-239-797-179, +351-239-797-123, plima@dec.uc.pt, <http://www.ualg.pt/5cigpa/>

2nd Conference on Sustainable Sloping Lands and Watershed Management (SSWM 2006)

Luang Phrabang, Lao P.D.R. December 12-15, 2006

The conference's aims are:

- * To encourage the sharing of recent research findings into sustainable management of upland farming systems that will enhance livelihoods and ensure environmental integrity to all stakeholders.
- * Policy interventions that will assist in the promotion and adopting of sustainable management practices in upper catchments.

Important Dates

March 2006	1st conference announcement posted on web
June 2006	2nd announcement, details of registration posted on web
July 2006	Deadlines for abstract submission by potential participants
September 2006	Selected papers announced by organizing committee and guidelines for paper preparation sent to potential speakers; Registration form posted on the web
October 15, 2006	Deadline of paper submission, 3rd announcement, conference program posted on web
November 2006	Peer review of selected papers and revision by authors
December 12-15, 2006	Conference
2007	Editing, typesetting of proceedings
2007	Publication of conference proceedings

Call for Papers: We welcome your contributions. These should be relevant to the objectives of the conferences and address issues described in the following conference sessions:

- Land use changes and degradation processes in mountain environments
- Impacts of inappropriate land and water resource management on up and down stream stakeholders.
- Research innovations in the management of upland catchments
- The role of policy and incentives in enhancing up-scaling of sustainable land and water management practices.

Language: English; Venue: Provincial Meeting Hall of Luang Phrabang; Conference Fee: US\$200.

Contact: Dr. Bounthong Bouahom, National Agricultural & Forestry Research Institute (NAFRI), P.O. Box 7170, Vientiane, Lao P.D.R. Phone: +856-21-770084; Fax: +856-21-770047, bounthong@nafri.org.la, contact@nafri.org.la, <http://www.nafri.org.la/>

(Advertisement)

**RiverWorks Rapid Assessment System™ (RRAS™):
A New Tool for Water Resource Conservation**



RiverWorks Rapid Assessment System™ v.1.2 (RRAS™) is the first in handheld technology developed specifically for work in and around streams and rivers. RRAS™ seamlessly integrates the latest digital camera and GPS technologies with an easy-to-use, yet powerful, handheld field computer.



Developed and sold exclusively through THI RiverWorks, Inc., based in Livingston, Mont., the complete system is both versatile and expandable to accommodate a wide spectrum of parameters and protocols. Add probes and data loggers for scientifically-backed assessments, monitoring, inventory, inspections and reconnaissance. The rugged, waterproof design and nonvolatile Flash storage protects against data loss even if the unit is fully submerged or dropped onto hard surfaces.

Professionals and technicians can use the handheld field unit, RRAS™ Stream, to efficiently document site-specific location data; record ecological condition parameters; collect channel survey data; describe existing disturbances and document observed problems and opportunities. With RRAS™ customized data fields can be created or additional software can be installed to meet a wide variety of objectives.

Transfer data automatically from the RRAS™ Stream field unit to the companion RRAS™ Base desktop software, which completes much of the analysis. Calculations, tables and charts are generated automatically, while still allowing the user flexible editing control. Printable reports for both the end user and client contain comprehensive, high quality project documentation and output.

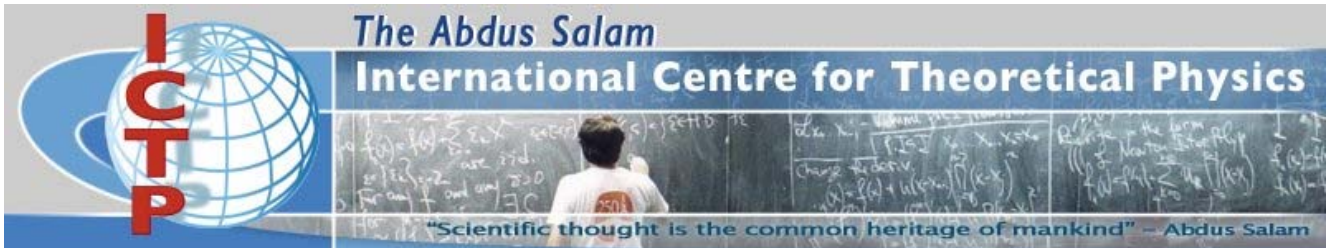
Transfer stored assessment data from the desktop RRAS™ Base back to the RRAS™ Stream handheld for repeat site visits or monitoring, and to quickly evaluate or compare a particular site over time before, during, or after treatment.

Dynamic river systems require a multidisciplinary approach. RRAS™ is a tool that enables the success of practitioners in the field by assisting careful site analysis, meeting permit requirements and identifying potential cumulative disturbance effects.

RRAS™ is currently in use by the Environmental Protection Agency, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, private industry, universities and non-profit organizations nationwide, and has broad application for baseline stream assessments, ecological reconnaissance, watershed conservation, project inspection, permitting, water resource inventories, TMDL development, restoration or enhancement, banks stabilization, post-treatment evaluation, trend monitoring, and more.

For more information about powerful river technologies, please visit RiverWorks' website at www.riverworks.net. Address: River Works, Inc., 5079 Old Yellowstone Tr N., P.O. Box 1840, Livingston, MT 59047, USA. Phone: +1-406-2226466, Fax: +1-406-2026693, info@riverworks.net.

SUMMARY REPORTS



Founded in 1964 by Abdus Salam, the Centre operates under a tripartite agreement among the Italian Government and two UN Agencies, UNESCO & IAEA. Its mission is to foster advanced studies and research, especially in developing countries. While the name of the Centre reflects its beginnings, its activities today encompass most areas of physical sciences including applications.

Author Edward Skidmore



WASWC EDITORIAL TEAM MEMBER HAS UNIQUE EXPERIENCE. On 12-30 September 2005, Claudio Kvolek (left photo) participated in College on Soil Physics at the Abdus Salam International Centre for Theoretical Physics (ICTP). The ICTP, in Trieste, Italy, located on the shore of the Adriatic Sea, is a unique scientific institution dedicated to both research and training. The Centre has earned an international reputation for its contribution to the advancement of science in developing world with an expanding array of physics topics. The College on Soil Physics is one of the longest continuous running programs at ICTP.

The College on Soil Physics had a unique beginning. In 1980, while participating in an ICTP Autumn Course on the Physics of Flow in Oceans, Atmospheres and Deserts, Donald Gabriels, University of Ghent, Belgium, queried: "ICTP is a great centre of physics but does not include an activity on Soil Physics, how come?" When Edward Skidmore (right photo), soil physicist, arrived to lecture on "Physics of Desertification" prompted by the Gabriels' query, Centre officials approached Skidmore with the request: "We are thinking about adding a course on soil physics at ICTP and would appreciate a proposed outline." Skidmore and Gabriels both submitted similar course proposals for a College on Soil Physics. The proposals were approved and funded. The first College on Soil Physics was held in 1983 with Gabriels and Skidmore as co-directors. Subsequently, Donald Nielsen, USA, and Ildefonso Pla Sentis, Spain, joined Gabriels and Skidmore as directors of the activity. GianCarlo Ghirardi, University of Trieste, is the local organizer. Since starting in 1983 ten Colleges on Soil Physics have been held with almost 700 scientists from approximately 70 countries. All inhabited continents have been represented.

The main topics in the 2005 college were: soil structure, soil porous system, soil water, soil degradation, water and wind erosion, spatial and temporal variability of soil properties, geo-statistical analysis, modeling, etc. Attendees came from a variety of fields that included not only physics but agricultural science, biology, chemistry, engineering, forestry and land use management. Their work places ranged from academic research centers, to government agencies to universities.

- Ing. Claudio M. Kvolek, 2005, *Management and Soil Conservation*, University of Buenos Aires, Buenos Aires, Argentina (WASWC Editorial Team), kvolek@agro.uba.ar.



College on Soil Physics, 12 -30 September 2005, ICTP – Trieste, Italy

9th International Symposium on Sediment Research, Yichang, China, October 18-21, 2004, Georgi Gergov, WASWC VP (East Europe), g_gergov@internet-bg.net

China hosted about 500 experts from almost 40 countries and organizations in Yichang the 9th symposium on Sediment Research. On 2,689 pages they were presented 390 scientific papers with 40 invited lecturers. We had 4 days discussions on the problems of sediment formation and regulation: factors that affect them; regime, quantities and parameters of sediment load; their dynamic changes along the rivers and across the area; and fluvial processes and the possibility of their modeling and forecasts. A new engineering problem has been reported as well like: integrated sediment management; the effect of engineering constructions over the river sediments, the limits to reduce the sediment load without getting negative effect on the environment, etc. More information and the Proceedings are available on www.irtces.org or contact chliu@iwhr.com.

The second day was devoted to the foundation of the new global organization called WASER (World Association of Sedimentation and Erosion Research) to be hosted in China. This is a new professional organization for the people dealing with soil erosion and sediment load and transport. It has a scientific committee to set the status, the program, the Constitution and By-Law, to push up ahead diversity of initiatives like symposia, workshops, editing and disseminating a specialized journal "Journal of Sediment Research" and many others. The Secretary of WASER is Prof. Zhao-Yin Wang (zywavg@tsinghua.edu.cn; zywang@iwhr.com) and Prof. Des Walling (d.e.walling@exeter.ac.uk) was elected the first President of WASER, with total number of 19 people from various countries forming the committee. More about WASER can be obtained by writing to irtces@public.bta.net.cn.

On behalf of the WASWC Prof. George Gergov, VP for East Europe, gave a speech to congratulate the newly established association, with a strong wish for future cooperation and some joint activities.

A Précis of Results of the Conference 'Integrated Assessment of Water Resources and Global Change: A North-South Analysis',

Bonn, Germany, February 23-25, 2005.

The Conference was organized by the Global Water System Project of the Earth System Science Partnership, based at the University of Bonn. Funding was provided by: the German Government, UNESCO, and by other international bodies relevant to the theme. The meeting attracted 130 participants from 29 countries. Selected papers will appear in a special issue of Water Resources Management.

Themes explored:

- * Water science and policy interactions
- * Summary of International Water Programs
- * Stakeholder perspectives
- * Water resource data
- * Complexity of water-relevant processes within river-basins.
- * Integrating physical and social factors in water-allocation decision-making

Key points to emerge:

* **'Blue' and 'green' water**

A shift in thinking is required to address the 21st century hunger gap. There is a need to move the emphasis in water management from 'blue' water (rivers, lakes, aquifers etc.) to 'green' water (water evapo-transpired through plants, which provide the staple foods for humanity).

* **'Virtual water'**

Growing consumption-needs in the North are causing lack of water in the South – water used in crops for export is not available for producing locally-used crops; Conversely, importation of crops from another country effectively 'saves' water in the recipient country, allowing more of its own water resources to be used for other purposes. These quantities must form part of calculations of a nation's 'water-footprint'.

* **Environmental change and water management**

Scenario analysis of the impact of global environmental change on total water consumption indicates that population growth will cause increasing water stress in regions such as the Middle east and parts of Sub-Saharan Africa. Better management of available water and needs will mitigate such effects.

* **Nexus between social and natural sciences**

There is growing concern about maintaining biodiversity on the planet. Balancing the water needs of humans and nature is a major challenge, highlighting the need for truly integrated water management (IWM). The past lack of interdisciplinary collaboration between social scientists and natural scientists needs to be bridged so as to understand better the interactions between human and natural processes. The new scientific methods, models and practical tools need to be combined to allow participatory assessment and better approaches to adaptive management.

* **Data gap**

In many countries the relevant institutions (e.g. hydro-meteorological, geophysical services) are not able to provide data needed for projects. Even where adequate data exists, there are problems with free exchange of data, which could be alleviated by greater attention to WMO regulations about the free exchange of such information.

* **Cooperation and feedback**

Increasing international cooperation between water research programs and global observation systems can be employed effectively to help predict global environmental change. At the same time, such information can assist water users and managers on the ground at river basin scale.

* **North-South science capacity gap**

The science-capacity gap between North and South is still large, not only concerning water's availability and quality but also concerning the capacity to apply science and the solutions it offers in various situations. Close cooperation with local partners is made easier by capacity-building which emphasizes linkages between land uses and water availability.

*** Science-Policy linkages**

Well-trained scientists returning to their own nations often find themselves in an unreceptive policy environment. They can help to change this by undertaking the role of facilitators who can present scientific outputs, together with any associated uncertainties, in such ways that local stakeholders and decision-makers become better-informed. An important adjunct will be the ability to present multi-faceted information in ways that encourage discrete organisations to collaborate where this is appropriate and necessary.

To find out more, visit www.gwsp.org, and contact Dr. Eric Craswell, Executive Officer, Global Water System Project, eric.craswell@uni-bonn.de.

– T. Francis Shaxson, Dorset, UK. fshaxson@aol.com

**Soil conservation issues in Nordic Countries, ESSC Tartu Conference,
Estonia, May 25-26, 2005**

The themes of ESSC Tartu 2005 Conference were concentrated on soil policy and case studies of soil conservation practice and multifunctional land use in Nordic rural areas as well as on pedoecological, theoretical and socio-economic aspects of soil conservation. The Conference identified substantial differences between the north and south of Europe in terms of soil protection policy and practice.

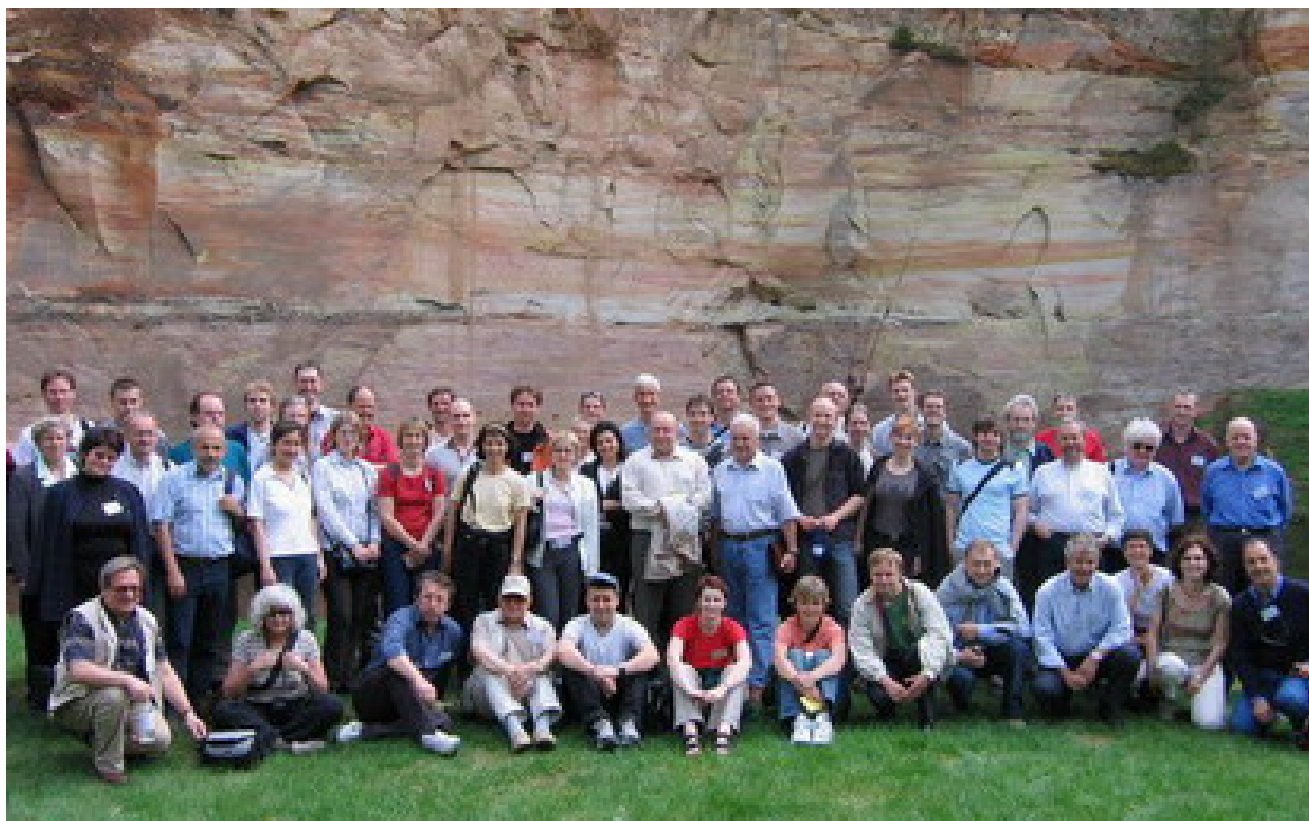
* For effective protection of soil cover the prevention, mitigation, control and regulation of locally occurred soil degradation processes (acidification, erosion, podzolization and oth.) is needed. Soil conservation may be achieved by ecologically sound land use, by soil remediation (liming, drainage and oth.), by equilibrated nutrition element balance and by adapted for local conditions technology of conservation agriculture.

* Distributed widely in Nordic areas organic soils, which represent huge natural pools of sequestrated organic carbon, must be protected from excessive mineralization. For avoiding these soils negative organic carbon balance the suitable for them land use with appropriate plant cover must be arranged.

* The best agricultural soils of any Nordic locality must be protected from reforestation and soil sealing by construction. This is specially important areas where arable lands form only 1/4–1/3 of total territory.

* The philosophy of soil conservation should be much more refined and scientifically validated on the basis of local ecological conditions and soil properties. Ecologically sound and profitable for local socioeconomic conditions soil conservation strategy depends very much from the matching of existing soil cover with suitable for these soils plant cover.

The oral presentations of the ESSC Tartu Conference are presented on the homepages of ESSC (<http://www.essc.sk>) and of the Department of Soil Science and Agrochemistry, EAU (<http://www.eau.ee/~muld>).



- Prof. Raimo Kölli, Estonian Agricultural University, Tartu, Estonia

Headwater 2005: Hydrology, Ecology and Water Resources in Headwaters
Sixth International Conference on Headwater Control
Bergen, Norway, June 20-23, 2005

The Sixth International Conference on Headwater Control was organized and sponsored by the Norwegian Water Resources and Energy Directorate, in collaboration with the IAHC, IAHS-UNESCO, the United Nations University, WASWC, IUFRO, EOMF, BKK and other local agencies including University of Bergen, City of Bergen and Norwegian Ministry of Petroleum and Energy.

Headwaters are the places where stream channels form and collect runoff, and water-flow lines begin. They include the agricultural fields where most soil and water conservation work is conducted. Headwater control incorporates trans-disciplinary soil and water conservation alongside forestry and water resources management, environmental planning and development. Its aim is to secure the habitats and livelihoods of the inhabitants of headwater regions. Today, it is recognized that it were better if both the environmental qualities and economies of headwater regions were self-sustaining. This requires a new approach to management and an empowerment of responsible indigenous communities.

The conference sessions covered 11 broad topics: (1) climate change impacts; (2) changes and management of vegetation cover; (3) environmental impact assessment and mitigation; (4) pollution, water quality and limnology; (5) groundwater - surface water interactions; (6) catchment and stream-flow hydrology, (7) remote sensing and GIS; (8) integrated watershed management; (9) public participation, education and management; (10) socio-economic aspects/ community empowerment; and (11) interdisciplinary approaches to water management. As the Conference was shared with the International Association of Hydrological Sciences, the meeting ran in two parallel sessions for much of its duration. The conference was followed by a 2-day technical excursion to Hardangerfjord, where problems of salmon fisheries, hydro-power generation, water quality management and tourist development were discussed as part of integrated watershed planning.

Proceedings are now available in a CD-ROM containing 70 oral and 35 poster presentations. Discussions are in progress about the production of hard copy proceedings, which will contain fully edited and peer reviewed versions of the best of the conference papers. Three volumes are mooted including one on Integrated Watershed Management, another on Forest Hydrology and Hydrological Management, both slated for the WASWC Series "Land Reconstruction and Management". A third cluster of papers is being considered for the International Journal of Environmental Economics and Statistics.

First impressions. First, there seemed to be increased self-awareness amongst contributors, who were more strongly tuned to their own personal responsibilities to act and communicate than in previous conferences. In general, there was more humility, and fewer spoke with the certainty that they held all the answers. The recommendation that each training course on environmental policy and management should begin with a consideration of ethics captured the spirit of the conference.

Second, despite the large academic contingent, there seemed to be fewer of the 'science-for science's sake' papers and academic virtuoso pieces. In general, delegates displayed a greater concern to tackle real world problems, to grant more emphasis to actions in the community and to influencing practice and policy. There was a reassuring balance between work that thought globally and that which acted locally. There was a greater need to value those who collected long term records through environmental monitoring and a greater need to sustain long running data records.

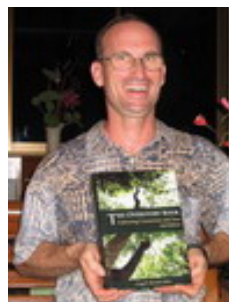
On the technical side, novel features of this meeting included a new emphasis on the long term and creative uses of chemical tracers. It was widely advised, that on the hydrological side, the key area needing development was surface-water – ground-water interactions.

- Martin Haigh, Oxford Brookes University, Oxford, UK

PUBLICATION REVIEWS

The Overstory Book: Cultivating Connections with Trees, Craig R. Elevitch, 2nd Edition, Permanent Agriculture Resources, P.O. Box 428 Hulualoa, HI 96725 USA. Phone: +1-808-3244427, Fax: +1-808-3244129, par@agroforestry.net, cre@agroforestry.net, www.agroforestry.net. A large format book, 20 x 27.5 cm, 526 pp., it has been written by dozens of agroforestry experts worldwide, including Roland Bunch, Robert Chambers, Jeff McNeeley, Bill Mollison, P.K. Nair and Anthony Young. 2004. ISBN 0-9702544-3-1. The price – with airmail delivery – is a bargain at US\$64.95 (hardbound), \$49.95 (paperback) and \$24.95 (CD).

Author and his book



It is my great honor to have the opportunity to review the 2nd Edition of the Overstory Book. I found this book very well-organized with the subjects covering agriculture, forestry, and sustainable use and management of natural resources through agroforestry techniques. Each article is concise, easy to read and find information with useful figures and photos. The chapters are very well placed to be able to find exactly what looking for. There stories covers very diverse subjects – simply amazing! In addition to their original information sources, the authors include several web links to useful websites and further readings for those who want more information.

The Overstory Book introduces and explains new concepts with traditional knowledge and has a good mix of theoretical and practical information in agriculture and forest area. This book also introduced not only various products in agriculture and forestry, but also various non-timber forest products such as mushroom and bamboo.

In addition, there are lots of marvelous ideas about natural resources, such as pests as food and weed as resources. I especially liked the chapter on Useful Species, as it gave me a variety of ideas about non-timber forest products. In developing countries, traditional forest dwellers have a long history of dependence on forests and have co-evolved with them, making use of non-timber forest products and managing the forest through a variety of indigenous knowledge. In recent decades however, people have migrated to the forest areas although they are not traditional forest dwellers, and they generally do not know how to manage forest land sustainable or, other than by logging, how to benefit from using this natural resource. Therefore this chapter could be very useful to both traditional forest dwellers and impoverished migrants.

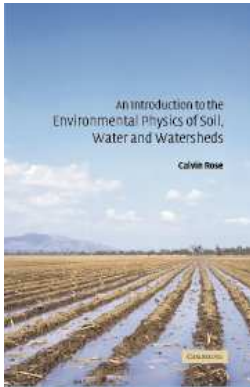
The book is well furnished with Glossary, General Index and Botanical Names Index.

In conclusion, I found *The Overstory Book* great in having both a very rich source and such useful information. I would like to highly recommend it to people who want to get valued information relating to agriculture and forestry. The book will be a pioneer to lead people who study agroforestry or community-based natural resource management. I am sure this book will be useful to academics, professionals and practitioners alike for several years until the more progressive 3rd edition arrives.

- Ji-Won Park, *Nicholas School of the Environment and Earth Sciences, Duke University*, jwp11@duke.edu

An Introduction to the Environmental Physics of Soil, Water and Watersheds, Calvin Rose, Cambridge University Press, 2004. 454 pp. Paper back, ISBN 0 521 82994 1, £30; hardback, ISBN: 0521829941, £75 / US\$120 / A\$250. www.cambridge.org/aus/catalogue/catalogue.asp?isbn=0521829941.

An Introduction to the Environmental Physics of Soil, Water and Watersheds by Calvin Rose describes the nature of the Earth's environment and its physical processes. It also highlights several problems arising from human use of soil and water resources. Environmental science and engineering are introduced with practical examples of the calculations without the need for previous knowledge of physics or calculus.



The first chapter (Environmental systems of rock, soil and earth energy systems) gives a general introduction to environmental processes. The author gradually expands on the different aspects of the subject, beginning with the physics of soil and sediment in chapter 2 (Soil and soil strength) and fluid dynamics in chapter 3 (The behaviour of liquids). The characteristics of soil and water and the kinds of measurements made related to watersheds, e.g. water-balance-accounting, are introduced in chapter 4 (Soil, water and watersheds). The role of vegetation is discussed in chapter 5 (Evapotranspiration and exchange of energy at the earth's surface). Chapter 6 (Infiltration at the field scale) describes infiltration at various scales and introduces mathematical modeling. The subject of hydrology is introduced in chapter 7 (Overland flow on watersheds), with further attention given to mathematical modeling.

Chapter 8 (Erosion and deposition by water) explains the physical processes of soil erosion as well as sediment transport and deposition. Surface and subsurface hydrology are discussed in more detail in chapter 9 (Watersheds and rivers) and chapter 10 (Movement of water through the groundwater zone). In chapter 11 (Movement of water through the unsaturated zone), equilibria between soil and water above the saturated zone are discussed. Finally, in chapter 12 (Salinity and contaminant transport) the processes responsible for salinization and the movement of salts and other contaminants in soil and groundwater are explained.

As well as worked examples of problems, at the end of each chapter there is a set of student exercises. The answers to the exercises are provided at the end of the book, while complete solutions are available to lecturers from solutions@cambridge.org. The book has many clearly presented illustrations with informative captions. The simple style and thorough explanation, helped by numerous illustrations, make this book easy to read and understand. It seems suitable for its intended audience of students at introductory university course level and would be useful for anyone working in the field of environmental and resource management. Perhaps the only criticism of this book could be a lack of more up-to-date references. However, the references and bibliography sections at the end of each chapter do provide a comprehensive list of publications. - Rhodri Thomas, *Environmental Consultant, Rome, Italy*. Rhodri_P_Thomas@hotmail.com.

Governance for Sustainable Development: A Foundation for the Future, by **Georgina Ayre and Rosalie Callway (eds)**, EARTHSCAN, London, 2005. Paper back, 209 pp. £17.99. www.earthscan.co.uk



Are you clear about the difference between government and governance? Can you summarize the outcome of the 2002 World Summit on Sustainable Development? For that matter, does WEHAB mean anything to you? The answers to these questions and many, many more are to be found in Ayre and Callway's excellent book. This edited volume is full of information and analysis while pleading for improved governance, at all levels, to carry the process of sustainable development forward. Well written, attractively presented, complete with useful boxes and an index, plus a list of acronyms and abbreviations (intimidatingly long, but vital), this book is a must-have for serious professionals and students alike. Anyone, in fact, who has a serious interest in the issues of environment and development.

Governance for Sustainable Development: a foundation for the future is divided into three main sections, sandwiched between an introduction and a conclusion. Section one summarizes the outcomes of the 2002 World Summit for Sustainable Development (the WSSD had underlined governance as a key issue), section two then takes the 'three pillars of sustainability', environment, society and the economy, in turn, and the final section provides us with a look at governance in each of the WEHAB (Kofi Annan's priority list of water, energy, health, agriculture and food, and biodiversity) sectors. The eight chapters which comprise sections two and three are each written by a different, erudite, authority.

Governance is defined at the outset: "the framework of social and economic systems and legal and political structures through which humanity manages itself ". We are invited to think of governance as a tool that facilitates the coordination of groups. Clearly, governance is different from government. Governments, at whatever level, 'govern' particular aspects of society – but other bodies, including private companies, NGOs and associations contribute to governance as a whole.

Rosalie Callway opens the debate skillfully, using an extract from Hardin's 'tragedy of the commons'. Hardin's vivid metaphor, that of greedy stockowners creating their own downfall by overgrazing common land, has, in popular perception, been taken as his literal, solitary message. Callway restores Hardin where he belongs: the harbinger of the message that true 'freedom' is not simply everyone (or each country) being free to do what he/she/it pleases. Paradoxically, freedom requires

regulation and mutual coercion. And this can only be achieved through good governance. That goes as much for nation-states with respect to the global environment as it does for our selfish herdsmen and their barren pastures.

The central message of the book is straightforward. If we are to pull ourselves out of poverty, and steer the world away from environmental catastrophe (climate change, in particular, is spotlighted) and attain the elusive goal of sustainable development, then better governance is fundamental. In her conclusion, Georgina Ayre points out that though multilateralism is 'at a crossroads' there simply has to be reform at the highest level – the Bretton Woods Institutions, UNDP, UNEP etc - to ensure global governance of issues that are of global concern and can only be solved collectively at the global level. Ms Ayre, with neat symmetry, recalls Hardin to point out that nation states acting increasingly in isolation will only undermine global governance. Are you listening Mr. Bush and like-minded friends?

In many ways the book makes depressing reading. The list of poverty related problems and impending environmental crises is formidable; the case for governance is so convincingly argued it leaves the reader frustrated that those with the power don't simply get on with it. Why can't that 'global ethic based on widespread public participation in decision over resource use' simply be taken as imperative and agreed in some form of 'declaration of human obligations' as Robert Chambers has recently suggested? Probably the answer is that humanity is still too busy, metaphorically, building up cattle numbers. At least we are offered a glimmer of hope, and reassured that not all is gloom and doom. The WSSD, we are told, helped established the importance of interconnection between issues – environmental, social and economic – and what is needed now is concerted commitment and action.

This book makes an important contribution to our knowledge base, and can only be a positive force in the struggle to promote better governance. – *Will Critchley, Vrije Universiteit Amsterdam, The Netherlands.* wrs.critchley@vu.dienst.nl

INFORMATION SOURCES

Books, Proceedings, Manuals and Reports

NRCS National Handbook of Conservation Practices

USDA-NRCS seeks public comments within 30 days of 2 Feb. on a series of new or revised conservation practice standards in its National Handbook of Conservation Practices, including Cover Crop (Code 340), Nutrient Management (Code 590), Prescribed Forestry (Code 409), Silvopasture Establishment (Code 381), and Spring Development (Code 574).

<http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/E6-1406.htm>

Soil Survey Laboratory Methods Manual - USDA

(Rebecca Burt, USDA, Lincoln, Nebraska, USA) 700 pp.

<http://soils.usda.gov/technical/lmm/>

Watershed Handbook Released

On 6 Jan, EPA's Office of Water published a draft guide to watershed management as a tool in developing and implementing watershed plans. The 414-page "Handbook for Developing Watershed Plans to Restore and Protect Our Waters" is aimed toward communities, watershed groups, and local, state, tribal, and federal environmental agencies. EPA is making this draft document freely available with the purpose of having it used and tested by a variety of watershed partnerships, whose advice will be considered in developing the final version. Comments deadline: 30 June to

watershedhandbook@epa.gov,

www.epa.gov/owow/nps/watershed_handbook

Methods manual for forest soil and plant analysis

(Yash P. Kalra and D.G. Maynard, Canadian Forest Service, Edmonton, Alberta, Canada), 116 pp.

<http://warehouse.pfc.forestry.ca/nofc/11845.pdf>

RUSLE2 and various other materials can be downloaded from this site.

http://bioengr.ag.utk.edu/rusle2/default_old.htm?action=Go+to+back+ground+RUSLE2+material+%28not+recently+updated%29

WHO/FAO Guidelines for the safe use of wastewater, excreta and greywater

(From Land and Water Development Division FAO Newsletter, issue 1/2006)

A joint collaboration between FAO and WHO, the newly revised WHO guidelines for the safe use of wastewater, excreta and greywater will be available in print in March 2006. Volumes 2 and 4 on Wastewater Use in Agriculture and Excreta and Greywater Use in Agriculture address health-based guidelines for irrigating crops with reclaimed wastewater that would be protective as well as adaptive to what is locally available and achievable. New opportunities in identifying wastewater as a resource for water scarce regions and in pro-poor agricultural development, particularly in peri-urban areas, are illustrated with best practices in minimizing health risks. In addition, the interface between wastewater use and poverty in the political context and international development targets is mentioned with expanded sections on risk analysis/management, revised microbial guideline values and further elaboration of chemical contaminants, health impact assessment, and wastewater use planning strategies at sub-national levels. Contact Sasha.Koo@fao.org for information.

Journals, Magazines, Newsletters and Brochures

The **Subtropical Soil and Water Conservation (SSWC) Journal** has been published every 3 months by the Fujian SWC Committee and Fujian SWC Society since 1989 and is now in its 17th year. It consists of 70 pages, with an English Table of Contents and some papers with English abstracts, while the rest is in Chinese. Contact: Nie Bijuan, SSWC Editing Department, 6 Tongpan Rd., Fuzhou, Fujian 350053, jswc@fjstbc.gov.cn, sunny_cn@126.com

Partners, a quarterly publication of the Conservation Technology Information Center (CTIC), a public/private partnership providing reliable, profitable solutions to improve the relationship between agriculture and the environment. Address: 1220 Potter Drive, West Lafayette, Indiana 47906-1383, USA. <http://www.ctic.purdue.edu/partners/>

Soil Q Newsletter

<http://www.nc.nrcs.usda.gov/technical/TechRef/soilqualitynewsletter.html>

While many of the examples in the newsletter are from conditions in the Southeast US, the principles will apply anywhere in the world. The newsletter on soil quality from 1997 to the present can be accessed from the website. It

contains a wealth of information that can be beneficial to conservationists around the world. The newsletters are a valuable source of information on soil quality issues. Contact or comment to Bobby Brock, NRCS State Agronomist in Raleigh, North Carolina, USA, Phone: +1-919-873-2121; Fax: +1-919-873-2154, bobby.brock@nc.usda.gov.

Websites

ASOSID (www.asosid.com.mx, Asociación para la Agricultura Sostenible en base a Siembra Directa), a non-profit, non-government association, created in 2002 by farmers, public institutions and private enterprises in Mexico to promote No-Till and any other sustainable agriculture technology, is going to organize a massive No-Till Demonstration Field Day in Guanajuato, Mexico, with 1,500 farmers attending the demonstration, to meet the following objectives:

- Testify the benefits obtained in this farm from the practice of No-Till during more than 15 years: Cost reduction, increase in water efficiency and soil improvement.
- Learn about the practice of No-Till system, especially concerning residue management and Weed management.
- Learn about the latest technology innovations in machinery, agrochemicals, and seeds (commercial exhibition area).

For more information about ASOSID, contact Hugo Escoto Ramírez, ASOSID AC, Gerente, Mexico. Phone: +461 612 25 17/ +461 608 04 77, Cell phone: +442 237 90 37, hugo.escoto@asosid.com.mx.

The Sloan Technical Services (STS) <http://sloanspace.mit.edu>

STS at the Massachusetts Institute of Technology (MIT) is hosting our group known as STS-Sustainable Development which is a forum and site to foster and form Working Groups. There we demonstrate by our use an Information and Communication Technology (ICT) of an Open Source type that is named .LRN (Dot Learn). It has tools developed by MIT for a library archive (information) and e-mail for a forum or separate e-mails for our communications to the listed membership. This open source software is having more tools developed for it by an international consortium of well-known universities around the world. Membership listing is without cost as a service with compassion to address the Millennium Development Goals of the United Nations planning.

To join, you may e-mail Sidney Clouston at cloustonenergy@verizon.net and you will be asked to give your first and last name, email address and a password.

Sediment Data from Hurricane Katrina www.epa.gov/katrina/testresults/sediments/index.html#2

As part of hurricane response efforts in Louisiana, EPA posted data reflecting longer term human health concerns for sediment samples taken in Orleans and St. Bernard Parishes. EPA is comparing sediment sample results to the Louisiana Department of Environmental Quality's Risk Evaluation/Corrective Action Program Soil Standards. These standards are intended to be protective of long-term (i.e. 30-year) exposures to children and adults in a residential

setting. Chemical concentrations in most samples taken were below acceptable RECAP values; however, in a limited number of samples, concentrations of arsenic, lead, and other chemicals were detected above RECAP values. In cases where chemical concentrations exceed RECAP standards, EPA and LDEQ are working together to determine the next steps.

CGIAR Challenge Program on Water and Food (CPWF) has launched a new website, www.waterandfood.org. Please contact or send your comments to the Communications Coordinator, Amena Mohammed, CGIAR Challenge Program on Water & Food, P.O. Box 2075, Colombo, Sri Lanka. a.mohammed@cgiar.org

Participatory Planning In the United States, a two year participatory planning project was implemented with young people in Chicago through a university-community partnership and with funding from the Ford Foundation. The first year of the project involved extensive use of digital technologies. Check out <http://www.placeworx.com> to get an overview, and then contact Laxmi Ramasubramanian, laxmi@hunter.cuny.edu, prof.laxmi@gmail.com if you have specific questions. Others who are interested in the topic of Childrens participation and technology may also contact her.

You can join the Children, Youth, and Environments group at <http://groups.yahoo.com/group/cyef>.

Smithsonian Soil Exhibit www.soils.org/smithsonian, Washington, D.C., USA

The Agronomic Science Foundation and the Soil Science Society of America are developing a soil science exhibit for the Smithsonian's Museum of Natural History. It will be part of the Global Links gallery, the core of the museum's Forces of Change earth system science program. The Smithsonian is the most visited museum in the world, it is expected that 6-9 million people will view the exhibit each year. The exhibit will feature the myriad ways soil is essential to our lives, the link between healthy soils, human health, economic strength, food security and environmental health.

It is expected that exhibit modules will be loaned to museums, libraries and institutions, that educational materials will be developed for grades 6-9, and that resources will be available through websites. This exhibit is expected to fill a void in public education – most educational material make almost no mention of soils. The exhibit is expected to raise the awareness of the public to the importance of soils in our lives.

TAKE A BREAK:

Check your IQ at <http://web.tickle.com/tests/uiq/authorize/signin.jsp?url=/tests/uiq/index.jsp>

The Classic IQ Test is claimed the most thorough and scientifically accurate IQ Test on the Web. Previously offered only to corporations, schools, and certified professionals — it's now available to you from Tickle. It's free, private and developed by PhDs.

Institutions

The international Commission on Land Degradation and Desertification (COMLAND)

COMLAND is one of the most active Commissions of the International Geographical Union (IGU), which in turn is affiliated with the International Council of Science and the International Social Science Council. Originally a Study Group, titled Erosion and Desertification in Regions of Mediterranean-type Climate (1992-6), the group was asked by the IGU to extend its work globally and to encompass all aspects of land degradation, including physical processes, socioeconomic factors and management, which it has done since 1996. Reflecting this breadth of interest, COMLAND's members come from some 50 countries. The Commission's founding Chair was Professor Maria Sala (University of Barcelona - Spain), succeeded by Professor Moshe Inbar (University of Haifa - Israel). The current Chair is Professor Guðrún Gísladóttir (University of Iceland - a WASWC member).

COMLAND's objectives are to encourage research by geographers into land degradation and desertification, particularly young, physical and human geographers in developing countries. Therefore, in addition to meeting during IGU congresses, which are held every two years in different locations, the Commission has consciously tried to hold specialist meetings in regions where geography is developing.

Students, particularly, are encouraged to participate by presenting papers or posters and discussing their work, preferably in the field, with more senior members of the Commission. Efforts are also made to link with government agency personnel in areas such as agriculture, soil and water conservation, and forestry. Thus specialist COMLAND meetings (held at least one every year, usually more frequently) have all included a major field component, and have been held in countries such as South Africa, Portugal, Spain, Italy, Morocco, India, Mexico, Argentina, Brazil, Egypt, Iceland, Australia and Vietnam.

COMLAND also fulfills its objectives by publishing the work of its members, as presented at meetings. These usually take the form of theme publications in special issues of journals such as *Catena*, *Geografiska Annaler*, *Geographical Research*, and *Land Degradation and Development*, as well as a range of more local publications associated with field trips and paper presentations. The Commission and its predecessor have also published two books, *Land Degradation in Mediterranean Environments of the World: Nature and Extent, Causes and Solutions* (1998, by John Wiley & Sons), and *Land Degradation*, published by Kluwer Academic Publishers in 2001.

Further details on past and future meetings, publications and other events, and contact details, may be found on the Commission's website, <http://www.ub.es/gram/COMLAND%20website/>.

Interested persons are warmly invited to become members of COMLAND by providing their details to the Secretary, Dr. Arthur Conacher, Arthur.Conacher@uwa.edu.au. There is no joining or membership fee. From 2006 onward, COMLAND and WASWC have agreed to be cooperating organization with each other.

Certified Professional in Erosion and Sediment Control (CPESC)

Many units of government have passed laws, ordinances and regulations that attempt to minimize the misuse of land and water resources. Controlling soil erosion and the resulting sedimentation has created a need for the services of professionals trained in proper erosion and sediment control and water quality methods. Such professionals must increasingly be able to show evidence of their qualifications and competence.

The Certified Professional in Erosion and Sediment Control (CPESC) is an established international certification process that recognizes individuals who have proven their ability in the field of erosion and sediment control. In order to attain this certification, the applicant must:

1. Pass a peer review process to evaluate his/her education, work experience and on the job experiences.
2. They must have a minimum of 3 years of professional level experience in the erosion and sediment control field plus a BS or higher degree in a related field. Or the applicant with no college degree can qualify with 7 years of professional job experience in the field.
3. Successful applicants may then sit for the CPESC exam. This 6-hour exam is designed to rigorously evaluate a person's knowledge and ability to apply erosion and sediment control concepts.
4. Upon passing the exam, the CPESC must complete 60 hours of professional development units over a 3-year period to maintain their certification.
5. Comply with a strict code of ethics.
6. An "In Training" designation is offered to those who do not currently meet the above criteria.

Further information about IT is available on our web site.

The CPESC certification process was developed in close association with the International Erosion Control Association (IECA) and the Soil and Water Conservation Society (SWCS).

The CPESC process is designed to compliment other professional certifications and state licenses. It is not the intent of the program to compete with professional engineers, architects or other design professions. It is to compliment the team approach to solving and developing sound resource management plans.

The field of erosion and sediment control has evolved into an extremely technical field that demands knowledge, experience and competence. Knowledge of soil properties, erosive stormwater runoff, erosion rates, vegetative establishment, sediment capture, sediment detention and available erosion and sediment control products is essential. The CPESC must have a working knowledge of current NPDES regulations along with state, province and local ordinances that would apply to a specific site.

The CPESC, working in cooperation with municipalities, engineers, developers, contractors and other design professionals, have and will continue to provide professional expertise in addressing soil erosion and sediment control measures.

Contact: David Ward at david@cpesc.org, Phone: +1-828-655-1600, and info@cpesc.org, <http://www.cpesc.org/>.

Community Friendly Movement



Community Friendly Movement

Commercial supply chain dynamics do not, by themselves, address the challenges of third world employment and quality of life issues.

CFM as a not-for-profit organization seeks to answer these issues within commercial interaction and benefit artisan lives globally. We work to create simple solutions within the retail perimeter and provide competitively priced handmade products from across the globe directly to the customers.



Solutions:

TORAN: Networks play a very crucial role in connecting small pockets of good happening across the globe. Our newsletter is one such attempt to bring stories of happiness that have been possible due to small efforts of individuals and large dedication from communities.



[S2C]: TORN is the noise that has to be supplemented by action. "S2C" provides the action in the form of high volume-low margin platform, reducing the number of intermediaries and selling for the communities to end customer directly.



[T2C]: Through T2C we empower the end customer to leave a tip for the community if s/he is happy with the purchased product. These tips are repatriated directly to the intended communities and are managed by them. We provide feedback to the customer on how the tips have induced systemic changes in and around the community.

To know more on our work, please visit us at www.whycfm.org or contact Saurav at saurav@whycfm.org, or at newsletter@whycfm.org for free nicely illustrated TORAN Newsletter.