I had a chance to attend the 3rd International Conference on Vetiver (ICV3) in Guangzhou, South China, from October 6-9, 2003. This time I was in the entourage of the Royal Princess Mahachakri Sirindhorn of Thailand who is the Patron of the Vetiver Network. Delegates from Thailand formed the largest group, approximately 80-90, or about one-third of all the participants. Previously, Thailand had organized the first and the second international
conferences on vetiver. Much research and experience had accumulated over a decade and it was now time to disseminate that knowledge to other vetiver users abroad.

The conference this time had the theme of “Vetiver and Water”, and was organized under the chairmanship of Prof. Luo Fuhe of the Guangdong Academy of Agricultural Sciences. There were more than 70 papers that focused on the wide and varied applications of vetiver grass, most, in one way or another, having some impact on water. You may read more details in the conference summary by Mr. Dick Grimshaw of the Vetiver Network in this issue.

The organizers have done their best to demonstrate how extensive the work on vetiver has been in China in both research and implementation. Participants were brought to see vetiver being used to stabilize the sloping areas of the garbage dump sites of Guangzhou and Zhongshan cities, as well as on the roadside and in the ecological park. What was interesting from this conference was that most of the implementation of vetiver usage has been carried out by the private sector – many vetiver-growing companies have been set up and have worked successfully along with research organizations and government offices. What impressed me most was the growing of vetiver to make a practically vertical stone quarry wall green once more, a laborious work done by a private company – a bioengineering feat indeed!

During October 15-24, 2003 I went to work with Dr. Jan de Graaff of the Wageningen University and Research Centre in the Netherlands. We are working together on a book on monitoring and evaluating (M&E) soil conservation and watershed development projects, along with other editors. Our intention is to make a book available to project planners and managers, to guide them in M&E and help them to make their projects perform better. We intend to finish the book this year. While working in Wageningen I met Dr Leo Stroosnijder, our National Representative for the Netherlands, and found out that his Erosion and Soil and Water Conservation Group (in the Department of Environmental Sciences) plays a big role in research and in teaching many students from developing countries.

In the same period I had a chance to visit the International Soil Reference and Information Centre (ISRIC) – World Soil Information – also located in the small town of Wageningen. Having been associated with this renowned institution for a long time, I think it is essential that our members know what this institution is doing. The result is that we now have established close contacts with Dr. David Dent, who has been ISRIC’s Director for almost one year. We hope that this will lead to close cooperation and will benefit all our members.

I also visited the beautiful city of Ghent in Belgium where Dr. Donald Gabriels, our National Representative for Belgium, is working at the Department of Soil Management and Soil Care, University of Ghent. Dr. Gabriels is an innovative person. With his good nature, collaboration and help, he managed to give WASWC a special position when he organized a symposium on 25 Years of Assessment of Erosion in September 2003. He arranged to give a 10% discount on the registration fee for WASWC (and ESSC) members, and, what’s more, he arranged membership of WASWC for a year for all participants who had not been members before. This has amounted to 95 additional members. We wish we could have many more ‘Dr. Gabriels’ in our Association! Among several places that he took me to see, the most interesting was his own relatively small building where the largest wind tunnel in the world (for studying wind erosion) is located, with a well-furnished lecture room and all necessary research facilities. At that time he was supervising scores of foreign students coming to study through assistance projects.

This time my visit to the Netherlands and Belgium has given me inspiration to carry out more initiatives for the WASWC, and beyond. I used to say to myself that I am learning new things everyday – as is everyone, since we are all in the ‘university of life’. We will graduate only on our last day. Active life does not stop altogether when one reaches the official retirement age. I met many elderly people who have been retired for many years, some of them going from place to place on bicycles. Several retirees from ISRIC, for example, do not just stay home looking after grandchildren (as we used to say here in Thailand). Hans van Baren, still going strong, keeps doing book reviews for the International Union of Soil Sciences. Dr. Roel Oldeman, former ISRIC Director, is doing research on old time Dutch life and is a volunteer guide at the Netherlands Open Air Museum nearby, taking Dutch and foreign visitors to see how Dutch people lived in past centuries. I was lucky to be escorted by this honorary guide during one Sunday afternoon. This European trip has become very productive, as you can see for yourself in the sections starting from the Guest Message shortly after this. A lot of thanks are due to those who have assisted in organizing my visit.

During November 2003 there were conferences organized by our officers in Japan and Colombia. Dr. Machito Mihara, VP for Asia, organized a conference on “Effective Strategies for Soil and
Water Conservation", hosted by the Institute of Regional Environment of Tokyo University of Agriculture and the Institute of Environment Rehabilitation and Conservation (ERECON). It was attended by several active members of WASWC. A number of awards were given by "WASWC Japan" to members who have done outstanding work over the past year. Dr. Franco Obando, WASWC National Representative for Colombia, organized a Seminar on "Conservation of Hillside Agriculture" at Caldas University, Manizales, Colombia. It was attended by 200 professionals and university students. WASWC from other countries attended both meetings. This is a good sign as it shows that officers in different countries have been using the existing mechanisms of WASWC to conduct meetings in their own countries, without any or little support, while the WASWC Council may give some technical advice and provide space for well edited proceedings to be posted on our website. The first of these is about to appear for last year’s conference in Sofia, Bulgaria.

The role of WASWC in the 13th ISCO: The WASWC will play its biggest ever role in the forthcoming ISCO conference in Brisbane, Australia, July 4-9, 2004. The following activities have been arranged with the organizers:

- We will hold a WASWC Forum in the evening of July 6, immediately after the final session of that day. We therefore invite all officers and members, particularly new members, to participate in this one-hour meeting. Since all participants who have never been members before will become WASWC members through the kind arrangement of the organizers, we expect that this meeting will be attended by a large (in fact, the largest ever) number of WASWC members.

- I have been invited to give a speech for 30 minutes on the last day (July 9) to express my views about the activities of international organizations, especially those of WASWC. This will be done in a special session with Mr. Ben Northcutt, Executive Director of the International Erosion Control Association (IECA) and Dr. Ian Hannam, representative of the IUCN and WASWC VP. Prof. Samir El-Swaify has kindly agreed to moderate this special session.

- The winner of the Norman Hudson Memorial Award for 2004 will be announced and presented with the award during this conference and he or she will be invited to give the Norman Hudson Memorial Lecture. The organizers are considering a suitable time for the event to take place.

I therefore would like to inform all members of these events and encourage everyone to find a way to attend this important conference. Some members have written to me about financial assistance but we regret that we cannot do more than direct them to contact certain other organizations who may be able to help.

GUEST MESSAGE

Message from the Director of World Soil Information, Dr. David Dent

ISRIC – World Soil Information – is an independent foundation, established in 1966 at the request of the UNESCO General Council as an International Soil Museum. Its mandate is: To increase knowledge of the land, its soils in particular, and to support the sustainable use of land resources. It is based in Wageningen, The Netherlands, and since 2001, has enjoyed a strategic partnership with Wageningen University and Research Centre.

The institute has built up special expertise in soils globally, not least in tropical soils; data management and interpretation; taxonomy; soil survey, land evaluation and land use planning; soil conservation and soil fertility. Such expertise is now rare.

ISRIC – World Soil Information – encompasses:

- The unique World Soil Museum with a documented collection of nearly 1,000 monoliths representing the major soils of the world and a continually updated, thematic exhibition comprising some 80 selected examples. The World Soil Museum maintains a broad educational, seminar and publications program, catering for visitors from around the world from schools, colleges and universities and the general public;

- The ICSU World Data Centre for Soils, serving the scientific community as custodian of global and regional soil datasets, land resources maps and reports – collecting, scrutinizing, analyzing and disseminating data and information, and making them freely available. For many of these data, ISRIC is the sole repository;

- An active program of applied research.
Probably, the institute is best known for its underpinning of the FAO-Unesco Soil Map of the World (1971-81) and interpretations of this information, including the Global Assessment of Human-induced Soil Degradation – GLASOD (1987-90), the World Reference Base for Soil Resources (1980-98), which is the internationally accepted soil classification system, and the successor to the Soil Map of the World – the global Soil and Terrain Database – SOTER. However, the demand for traditional soil information has shrunk almost to vanishing point; this reflects the contraction of soil science worldwide, especially in natural resources surveys that were supported mainly by overseas aid. So, the data we have must work harder but, also, there are continual demands for integrated assessments encompassing not just soils but water, ecosystems, and social and economic aspects of the problems of the day.

ISRIC – World Soil Information, now the only global soils institute, is responding with:

- A major program of refurbishing and digitizing its holdings so that, soon, they will all be available on the Internet. In 2003, the library index was digitized; this year the 1,000 profile ISIS database is being transformed into SQL format for web delivery, to be followed by the 8,000 profile WISE database and, ultimately, the global SOTER data; better documentation of and access to the reference collection of soil samples, thin sections, and other specialized collections
- A Virtual Soil Museum for web delivery of the educational program and collections;
- Applied research concentrating on completion of global SOTER at 1:1M to 1:5M, a task only half done; and making the data holdings work – for instance, interpretations of soils data for carbon sequestration and climatic change scenarios, and scenario studies for soil erosion and other forms of land degradation, contributions to the World Overview of Conservation Approaches and Technologies (WOCAT) and applications to sustainable land management. In partnership with FAO and UNESCO, ISRIC is also working up initiatives in green water (most of the world’s available fresh water is held in the soil, and soil use and management determines the partitioning of rainfall to runoff, soil water and stream base flow); and a new global assessment of land degradation and improvement.

ISRIC – World Soil Information is seeking partnerships with all holders of spatial soil data, to help secure these precious assets and make them more available, either freely or under licence, to everyone who can make good use of them. WASWC members are welcome to contact me directly if they want any particular information or to cooperate in certain aspects of our work.

David Dent (David.Dent@wur.nl)
Director, ISRIC – World Soil Information, www.isric.org

ASSOCIATION NEWS

Election of WASWC Council

Time really flies. The present council has been operating for two years already and has only one year left to do its work. Running the WASWC at this time is a process – as well as an experiment. We have initiated several new ideas, several of which have been accepted and we think they should be continued after the term of the present council expires.

This year there will be an election of the next council. We will announce it in the next issue and we are sure several members will step forward and volunteer to run in the election. Our association is a young one; we need new ‘brains’ to operate and take care of it. Opportunities for WASWC to advance within the next few years are enormous.

Payment of membership fees

Members have started to use our system of pay stations, but progress has been slow. Up to now, only some 25-30% of our members have paid their annual fees, despite the fact that there are as many as four pay stations, with several forms of payment. The Secretariat will soon write to each of you who have not yet paid. Alternatively, you may also write to our Secretariat at waswc@icrts.org and query what you are due to pay. We assure you that your money will be well spent running useful activities.

Special Publication No. 2

Special Publication (SP) No. 1 on The USLE Story has been distributed to around 3,000 individuals all over the world. Editing of the upcoming number, SP No. 2, on Carbon Trading, Agriculture and Poverty, by Mike Robbins, is progressing and we plan to publish the same number of copies, i.e. 3,000. Dr. K.G. Tejwani, a WASWC Vice President during our early years and presently an Honorary Member, has pledged to help by paying US$500 as part of the publishing cost. Since the total cost (printing + sending) will be around US$2,200-2,500, we need additional contributions, either as dona-
tions or advertisements. Our publication goes to as many as 100 countries. If you know any persons or enterprises that may be interested in donating or advertising their products in it, please let them know - we would very much appreciate it.

**OFFICERS NEWS**

Manuel Paulet, WASWC Representative for Peru

Manuel Paulet-Iturri, from Trujillo, Peru, has been an independent consultant since 2002. Before this, he was a member of IICA (the Inter-American organization specializing in agriculture) where he worked from 1976. He was trained as an Agricultural Engineer in La Molina University, Peru, and has a M.Sc from Iowa State University and a PhD from Purdue University. As a member of IICA, he worked in the Dominican Republic, Brazil and Costa Rica. In Peru, he was a professor and Dean of the Faculty of Agricultural Engineering. His areas of work are: soil studies, soil erosion control and water conservation treatments; soil-water-plant relationships; land use planning for conservation; water resources policy; soil and water resources conservation institution building; design, management and analysis of programs and projects; policy for integrated water management; local and international water dialogue. He enjoys tennis, squash and other racquet games.

Menachem Agassi, WASWC Representative for Israel

Dr. Agassi is an assistant professor at the Soil Erosion Research Station, the Division of Soil Conservation and Drainage, Ministry of Agriculture, Israel. He received his B.Sc. degree in Agronomy from the Hebrew University of Jerusalem in 1967 and his M.Sc. degree in Soil Science and Horticulture in 1970. He also received his Ph.D. degree in Soil Science in 1995 from the Hebrew University of Jerusalem.

He is leading several research projects on soil and water conservation and is presently conducting research on: the use of compost as a mulch to control runoff, soil water evaporation and erosion; developing practical methods to reduce soil water evaporation; the effect of soil crusting on soil water evaporation; developing non destructive methods of in situ measurements of soil infiltration rates; and the use of domestic effluent for the irrigation of crops.

He has published numerous papers in different journals, book chapters and has edited a book and conference proceedings on soil and water conservation and environmental related subjects. He has been an active participant in conferences. He has traveled to many countries and has established soil conservation experiments in some of them. In 1993 he spent a 14 month sabbatical leave in UC Riverside and he is presently a Visiting Professor at the Arid Land Research Center, Japan, for a period of 12 months. He is a member of the Israeli Soil Science Society and the National Representative of WASWC for Israel. He enjoys hiking, desert trips and carpentry.

**MEMBERS’ FORUM**

Vision and Mission (V&M) of WASWC

After two years of work developing our Vision and Mission, including a request to all members to help in the last issue of WASWC Newsletter, the Council has finally agreed on the V&M of WASWC on February 5, 2004, as follows:

**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.

Contributions came from several dozen members. The agreed wording of both Vision and Mission is NOT unchangeable and can, over time, be changed if the situation warrants it.

**What should we call our Association: WASWC, WASWAC, or WASAWAC?**

During the last few months I have met a great number of professionals during conferences, many of whom have been acquainted with us for several years. When we discussed WASWC business, naturally, we wanted to use a pronounceable acronym, instead of calling it World-As-so-ci-a-tion-of-Soil-and-Wa-ter-Con-ser-va-tion. I noted that several of them called us WAS-WAC. When I discussed this with some WASWC members they said they favored WAS-WAC, but some did not care about what it is called!
I think we need to clear this up in the interests of practicality after twenty years! I therefore carried out a survey among WASWC officers in December 2003 to ascertain their opinion on the following:

1. Write **WASWC** - the original form, but pronounce it **WAS-WAC**.

2. Write **WASWAC** - to respond to the way it can be read easily and quickly, coming from World Association of Soil and Water Conservation, and pronounce it **WAS-WAC**.

3. Write **WASAWAC** - coming from World Association of Soil and Water Conservation, and pronounce it **WA-SA-WAC**.

One week later, we had received more than two dozen replies. By March 3, 2004 we had altogether 35 replies. The great majority want to retain the name of WASWC for writing, mainly because it is well known already. Only a few say they want to change to WASWAC. One opts for WASAWAC, and two even say they would prefer WASOWAC if possible.

On the other hand, for pronunciation, more than half prefer WAS-WAC. A few prefer WASWC, one WAS and two each prefer WASC, WASK, WA-SA-WAC and WA-SO-WAC.

To sum up, in writing: the majority want to retain WASWC; and so we shall. In pronouncing: more than half prefer WAS-WAC, and a few can go along with this expression (can live with it!). Therefore we may take it as a guide that, when in conversation, we can either call our organization WAS-WAC, or just anything that our discussion partner can understand.

WASWC members with views on this subject are welcome to write to us. Some of us might have brilliant ideas that could be applied later on. WASWC is a member-centered association.

**What members say:**

- I saw the newsletter 19(4). May the almighty give you the strength to continue bringing it out. It's a real huge one indeed. I know that it would have required a lot of effort from you. Best wishes and Happy New Year,
  *Sultan Ahmed Ismail*, Chennai, India

- Many thanks for the latest Newsletter – read with great interest.
  *Michael Stocking*, University of East Anglia, Norfolk, UK

- I thank you for all your efforts to create each time the Newsletter. With best personal wishes,
  *Sjef Kauffman*, ISRIC, Wageningen, The Netherlands

- Congratulations with the WASWC newsletter. It is getting really very informative and useful. Thanks for these efforts! Best regards from Aleppo,
  *Francis Turkelboom*, ICARDA, Aleppo, Syria

- Congratulations to all on the latest edition of the WASWC Newsletter. WASWC is really progressing in its worldwide spread.
  *Francis Shaxson*, Dorset, UK

- I hope you have an exciting and rewarding 2004! Keep up the good work with WASWC. I am currently preparing to give a guest lecture at our local university in a couple of weeks on the "big picture" of soil and water conservation. I start with global situations and jump back to local examples. I use the WASWC newsletter as leads for books and issues.
  *Tom Goddard*, Soil Conservation Specialist, Alberta Agriculture, Food and Rural Development, Edmonton, Alberta, Canada
About the Norman Hudson Memorial Award:

“Norman Hudson Memorial Award – ‘Nobel Prize’ in Soil and Water Conservation.”

Jose D. Rondal, WASWC Representative for the Philippines

About ‘The USLE Story’ book:

- This is to acknowledge with many thanks the booklet THE USLE STORY that arrived a few days ago. Very useful, but not exactly what I expected, considering the title. It is not easy to follow and digest for non-Americans. I wonder whether it achieved your dictum of “light writing which you would like to read continually to the end”. The use of American non-metric units without listing any conversion factors anywhere is a definite drawback. The Musgrave, Wischmeyer and Smith's achievements are no doubt deserving to be pointed out, but would some case stories on prediction use or even mentioning disadvantages or criticism voiced not complement well the “USLE Story”? Yet, congratulations and thanks to WASWC.

Dan Yaalon, Hebrew University, Jerusalem, Israel

(Reply from Michael Zoebisch, editor of the USLE Story: This is an opinion that we should acknowledge. We want people to read our publications critically and therefore I value your remarks. It is a sign that readers do take our work seriously. The book may not be what you exactly expected, but I am sure it is what most of our readers expected. It is easy/light writing (I perceive it that way). The book is not a ‘critique’ of the USLE. We do not need to put it, therefore, into perspective of other erosion models or concepts of erosion modelling. This is not a technical book where formulae need to be converted to ISO units. It is after all a story book.)

OBITUARY

George Langdale (1930-2003)

George W. Langdale, 73, a long time member of WASWC and a major contributor to the use of conservation tillage in the US, and in much of the world, died on December 23, 2003, in Athens, GA, USA.

Dr. Langdale served in the US Army in Korea. He indicated that his exposure to the silt laden Yellow Sea led him to a career in soil erosion control research.

His career with the United States Department of Agriculture’s Agricultural Research Service spanned 40 years. He worked mostly in the Southeastern part of the United States, and was located in South Carolina, Georgia and Texas.

Dr. Langdale was a fellow of the American Society of Agronomy, the Soil Science Society of America and the Soil and Water Conservation Society. He received a USDA merit award in 1973 for his research related to chemical runoff from farmland. – John Laflen

More words from Bill Moldenhauer:

The first time my wife, Kay, and I met George Langdale and his wife Eugenia I knew we were going to be best friends. I was at a conference in Watkinsville, Georgia and George was demonstrating his methods of erosion control tillage. The tractor was there idling, and we were all waiting for a driver to get on and demonstrate the equipment.

At last, we found George was the driver and demonstrator. It reminded me of my own beginnings in erosion research at Big Spring, Texas, where I put together my equipment and was the tractor driver. I told myself, “This is my kind of erosion research scientist”.

Wim Sombroek (1934-2003)

Dr. Ir. Wim Sombroek, former Director of ISRIC (1978-1991), Wageningen, The Netherlands and former Secretary General of the International Society of Soil Science (1978-1990), died on 19 December 2003. Wim’s passing is a great loss for his family, collaborators and friends and all those who were touched by his love for life, wide expertise and interests, and extraordinary energy and enthusiasm. Wim’s legacy will accompany and inspire us for many years. Wim will always be remembered as a great soil scientist, and will be missed in many circles. – From ISRIC website
The members of the World Association of Soil and Water Conservation offer their condolences to Mrs. Willemijn Sombroek, their four daughters, sons-in-law and grandchildren. Information about his lifetime scientific contributions can be read from www.iuss.org/popup/Wim_Sombroek.htm.

The State of Soil Erosion and Soil Conservation in Ukraine, V. Gutsuljak, Yu. Dmytruk, and V. Prysakar, Geography Institute, Chernivtsy University, 58000 Chernivtsy, Ukraine. lidia@unicom.cv.ua

The total area of Ukraine is 603,584,000 hectares of which 71.4% is agricultural land, 17.2% forest-land, 1.6% marshland, 1.7% open lands with no vegetation and 4% is under water. 78% of the agricultural land is under the plough, which is 56% of the total area. Lands of special value occupy more than 12 million hectares (approximately 20% of the total area).

Heterogeneity of climatic, geological, lithological and geomorphological conditions and vegetation characteristics determine the variety of topsoil. In Ukraine there are lowlands and plains, hills and mountain chains; the climate varies from moderately continental to subtropical, and the vegetation varies from deciduous-and-coniferous (in Polesje) to subtropical (on the south coast of the Crimea). For these reasons there are approximately 650 different topsoils and, taking into consideration the differences in the granulometric composition, the stages of erosion, salinity etc., the number of individual soils amount to several thousands.

Ukraine is dominated by black soils (27.7% of the area ploughed); grey wood soils (21.3%) and typical black soils (18.1%). These are potentially fertile soils good for agriculture. The areas under intensive ploughing are ecologically unstable. The most ecologically stable lands are pastures, woods and marshes. Ukraine soils have lost a great amount of humus because of erosion and intensive use.

The contamination of lands as a result of techno-genesis is also a serious problem. After the Chernobyl catastrophe radioactive pollution affected 11 regions where about 3 million people live. The area of contaminated agricultural land and forests amounts to 4.6 million hectares and 4.4 million hectares respectively. Toxic waste (approximately 100 million tons per annum) accumulates in more than 2 770 dumps and occupies almost 160 000 hectares of land. This is expanding by 3 000-6 000 hectares yearly. Thus, changes are needed in the way Ukraine land is used, mainly by the reduction in the area cultivated and by the intensification of measures for their protection from pollution.

Table 1. Soil types in agricultural lands

<table>
<thead>
<tr>
<th>Name of the Soil</th>
<th>% arable lands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turfy-podsol sandy and sandy loam</td>
<td>3.50</td>
</tr>
<tr>
<td>Turfy-podsol</td>
<td>3.60</td>
</tr>
<tr>
<td>Grey forest</td>
<td>21.2</td>
</tr>
<tr>
<td>Typical black earth on loess</td>
<td>18.1</td>
</tr>
<tr>
<td>Usual black earth on loess</td>
<td>27.7</td>
</tr>
<tr>
<td>South black earth mainly on loess</td>
<td>14.8</td>
</tr>
<tr>
<td>Meadow black earth mainly on loess</td>
<td>2.20</td>
</tr>
<tr>
<td>Dark chestnut and chestnut on loess</td>
<td>3.90</td>
</tr>
<tr>
<td>Meadow mainly on illuvium</td>
<td>2.10</td>
</tr>
<tr>
<td>Marshy. Peat-marshy and peat-bogs</td>
<td>0.20</td>
</tr>
<tr>
<td>Salt-marshes and melts</td>
<td>0.80</td>
</tr>
<tr>
<td>Turfy</td>
<td>1.30</td>
</tr>
<tr>
<td>Brown and turfy brown</td>
<td>0.60</td>
</tr>
<tr>
<td>Brown mountainous and mountain-meadow</td>
<td>0.02</td>
</tr>
<tr>
<td>Rock exposure</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Rejuvenation of Rivulets: Farm Pond-Based Watershed Development (A case study from Adihalli-Myllanhalli villages in Hassan District, Karnataka, India),
B.K. Kakade, G.S. Neelam, K.J. Petare, BAIF Development Research Foundation (Dr. Manibhai Desai Nagar, 8-H. 4, Warije, Pune 411029, India. bai@vsnl.com)

The villagers of Adihalli-Myllanhalli in the Hassan district of Karnataka now have adequate water. This is due to the phenomenal impact of an innovative development programme implemented since 1997 by BAIF, a NGO based in Pune.
The Adihalli-Myllanhalli village area of Hassan district in Karnataka is in a drought prone area. Due to erratic rainfall, poor soils, high water runoff and scarcity of water for irrigation and drinking, the area was socio-economically backward. It lies in a watershed of 1004 ha and includes 400 households. The project was initiated to conserve the soil and water. A farm pond network system was conceived mainly to: satisfy the water demand of individual farmers; recharge the ground water; and conserve the soil.

The area was treated with a network of farm ponds varying in size from 6m x 6m x 3m to 9m x 9m x 3m. Each pond has an inlet chamber to trap the silt and outlet for allowing excess water to flow out and into the next pond in the chain. Stone pitching protects inlet and outlet channels from scouring. The excess water from the first pond goes to the second and from the second to the subsequent one in the chain. In this manner, the entire runoff water is harvested through the web of ponds.

In addition, small gullies have been treated with gully plugs and water-harvesting structures. Water is now available all the year, small rivulets have started flowing perennially and better livelihood options have been created.

- **Water**: Surface water availability has increased from 8.57 ha.m to 72.22 ha.m and the ground water table has risen by 3.79 m. All wells have sufficient yields throughout the year. The drinking water problem has been completely solved.
- **Land**: The area under three crops or perennial crops has increased from 140 ha to 265 ha while about 10% more land is now cropped twice a year instead of once. Crop yields have increased by about 50%.
- **Livestock**: Year round availability of water and fodder has motivated farmers to opt for improved breeds of cattle. Milk yield has increased by about 20% and the livestock based income of the households has risen from Rs 100 to Rs 3000.
- **Vegetation**: About 50% of the watershed is under green cover, mainly with horticulture on 349 ha and agroforestry on 118 ha.
- **Health**: Increased agricultural production has ensured the food security of the watershed population and families are now self-sufficient in vegetables.
- **Wealth**: Average annual income has increased from Rs 18,314 to Rs 28,425.
- **Equity and Community**: Women are now involved in various public institutions. Due to decentralized water availability, farmers located in the upper reaches of the watershed also have access to the surface and ground water.
- **Knowledge**: About 800 persons have developed skills in soil and water conservation measures, energy recycling and conservation, nursery raising and small enterprise management. Most of the children are now enrolled in schools.

The networked pond model has proved to be an approach that can ensure food, water and employment security within a village. The model is highly replicable and is being copied by several agencies in the state of Karnataka.

**FEATURES**

**A Global Perspective of Soil and Water Conservation, Maurice G. Cook**, Professor Emeritus, North Carolina State University, USA and WASWC Councilor, mgcook@mindspring.com

We live in a world beset by complex and seemingly insurmountable problems. Violence, war, hunger, diseases, economic bankruptcies, and natural disasters are all around us. Amid these perilous occurrences that have the potential for much human devastation, why should soil and water conservation be on the global agenda? How can we promote soil and water conservation in the current volatile international setting? What is the role of the World Association of Soil and Water Conservation (WASWC) in advancing soil and water conservation internationally?

Perhaps the greatest justification for being concerned about land degradation, and all the concomitant consequences resulting from it, is a genuine humanitarian spirit. I think most of us have a benevolent attitude toward our fellow human beings. We are moved by scenes of starving children, persons ravaged by disease, and people displaced by drought and flooding. Land, namely, soil, water, and associated plants and animals, is fundamental to supplying basic human needs. Therefore, good soil and water management is essential for bringing about a productive and sustainable agriculture to support a given population.

The global picture of population growth and food production is not encouraging. In 1980, when the world population was 4.4 billion, the Food and Agriculture Organization (FAO) projected a world population of 6.2 billion in 2000. That projection was right on target. The growth in population in-
creased world food demand by almost 50%. Meeting this huge food demand would have required bringing thousands of hectares of new land into production, not to mention the need for improving the management of existing agricultural land. I doubt that sufficient adjustments were made in quantity and quality of agricultural land during the twenty-year period to attain large increases in food production.

The 1980 FAO projections are more alarming when we look at the estimated population numbers and food demand farther into the future. The world population is predicted to be 9.3 billion by the middle of the current century with a doubling in food demand over 1980 levels. The situation becomes more serious when we consider that 80% of the world’s population currently live in less developed countries, where increases in food production are more difficult to obtain than in developed countries. That percentage is likely to increase in the future.

The solution of the world food problem is self-reliance in every nation in accordance with its production potential. The developing world has a number of serious problems: Good quality land is not plentiful; water resources are often limited and expensive to harness; capital is in short supply; resource inputs needed for expanded agricultural production, such as fertilizer, are costly; and finally, the necessary infrastructure to adequately market agricultural production is often limited.

Despite the gloomy prospect of food production meeting population demands, much good agricultural development work is being done in many parts of the world by government agencies, non-government organizations, international research centers, academic and philanthropic institutions, and faith-based organizations. We need to encourage and assist such entities in whatever ways we can. An important principle, it seems to me, is to directly involve the land users at the grass roots level in the decision-making process. I believe the success of the Land Care Movement in Australia and elsewhere, and the local soil conservation districts in the United States, is due in large part to the “bottoms-up” approach to soil and water management. This approach should be a guiding factor in the design, evaluation, and implementation of projects that aim to enhance food production in less developed countries.

A compelling reason for a collective effort in soil and water conservation is to alleviate the instability and deteriorating economic conditions caused by low per capita agricultural production, high population growth, and continued hunger and malnutrition. Trade and investment are important but they can only take place in a setting where political, social, and economic stability are possible. Developing countries can look to South Korea and Taiwan as examples of successful agricultural enterprise with admittedly poor resources. Both of these countries have emphasized heavily the need for private incentives in agriculture, proper government support and policies, and the building of the institutions that make agricultural development possible.

I think the WASWC can and should participate in the global challenge of sustainable agricultural development. Here are a few ideas on how the Association can be an important player in the international conservation arena:

1) Continue to be a center of resource information on soil and water issues for an international clientele.
2) Inform members of critical international soil and water problems and their potential impacts on personal and global well-being.
3) Encourage members to work with governmental and non-governmental organizations to obtain legislation and funding for international humanitarian initiatives that include conservation.
4) Encourage members to serve as volunteers and consultants in international soil and water conservation projects.
5) Cooperate and partner with those agencies, organizations, and institutions that engage in international soil and water conservation endeavors.

We do not know how to solve all the soil and water problems in the world. But we can proceed with what we do know and an understanding of what we must do. We owe it to our selves and to future generations to act on that.

Green and Blue Water for Food and Ecosystems, Sjef Kauffman, The International Soil Reference and Information Centre (ISRIC), Wageningen University and Research Centre, Wageningen, The Netherlands. sjef.kauffman@wur.nl

What’s the problem? Sixty five per cent of the world's fresh water resource is green water. Water resources, their use and misuse, and its scarcity is the dominant theme across most of Africa, the Middle East, China, the Indian sub-continent and Australia. And yet, the largest component of fresh water
resources, green water, held in the soil, has been neglected in policy, action and research. Managers and policy makers lack basic information on the resource, its availability, quality, the management options open and their likely consequences.

Definition Green Water is rainfall that is stored in the soil and available to plants. Globally, it makes up some 65 per cent of fresh water resources and it is the basis of rain-fed farming and all terrestrial ecosystems (Figure 1).

Rain falling on the land may be intercepted by the ground cover, run off the ground surface, or infiltrate into the soil. Intercepted water is evaporated directly to the atmosphere. Infiltrating water may be held in the soil - green water; or drain to groundwater and stream base flow (Figure 2). Runoff, stream base flow and groundwater may be dubbed blue water. An important distinction between green water and blue water is that green water may be used only in situ: blue water may be tapped, transported and used elsewhere – for irrigation, urban and industrial use, and as environmental flow in streams.

Significance nearly all the world’s attention, research and development efforts have gone into blue water. In the case of irrigation, this is dealing with the management of only 3 per cent of global fresh water resources. Green water deserves attention from policy makers, planners, land users, and water engineers and managers for these reasons:

1.— Rain-fed agriculture contributes most of the world’s farm production: 95 per cent in Sub-Saharan Africa where in makes use of only 15-30 per cent of rainfall, the rest is lost, mostly as destructive runoff;
2.— The partitioning of rainwater is a dynamic process (governed by rainfall intensity, terrain, land cover and soil) that may be controlled by management of land cover, micro topography and soil conditions;
3.— Soils process several times more water than they retain; while soil erosion by runoff and bank erosion by peak flows contribute nearly all the sediment load of streams, leading to the siltation of reservoirs and water courses. This means that management of green water is also management of blue water;
4.— Finally, agricultural demand for water is in competition or, even, conflict with the needs of industry, urban populations and the environment.

In short, green water bears upon problems of global importance: food supply; water supply, including falling water tables and unreliable springs and streams in areas of water scarcity; and water quality, including salinity and the dilution function of fresh water in wetlands, aquatic ecosystems and waste treatment. Better information is needed to develop more effective policies and reorient actions and supporting initiatives, including research, education and training.

The Green Water Initiative, which is supported by ISRIC, FAO and the Environmental Sciences Group of the Wageningen University and Research Centre, includes:

- A pilot scenario analysis at river-basin level, to show the impact of land use and management on the green water resource and the quantity, quality and timing of blue water flows. It combines climatic, soil, soil management, and hydrological information. The next stage is to apply the methodology to national and regional studies for policy development and river basin management;
- The green water proposal to build a linked biophysical, technical and social knowledge base to provide on-line, interactive advice on land and water management from field scale to regional scale, is being submitted to several organizations.

WOCAT Highlights
8th WOCAT Workshop and Steering Meeting, November 2003, Kathmandu, Nepal, Will Critchley

The 8th WOCAT Annual Workshop and Steering Meeting (WWSM8) was hosted by the International Centre for Integrated Mountain Development (ICIMOD; PARDYP project). It was attended by 22 participants from 12 countries. The meeting started with a review of the progress and problems encountered. Most institutions indicated considerable progress and achievements of targets. All felt that data quality remains an issue requiring attention. At the global level, it was noted that SDC is committed to continue funding. ‘The use of WOCAT’ and ‘Quality Assurance’ were addressed together. The meeting concluded that the major
responsibility for data quality lies with the national and regional institutions. Documentation and dissemination should act as the major motivation to collect and store good information. An international review panel should also be established. A UNEP supported publication (the “Overview book”) will be the first output of “quality assured data” from the WOCAT database. It will contain about 25 case studies and be published late in 2004.

The WOCAT Website statistics showed a marked increase in traffic since last year from less than 10,000 requests to almost 30,000 per month. The high number of requests for the Worldmap page is remarkable in this respect. The WOCAT mailing list (WOCAT-L) has grown to almost 450 subscribers who receive a newsletter twice a year. It was explained that the map displayed on the Website is only an example, and does not reflect the actual situation. A new structure for the Management Group was proposed. Various national and regional organizations will share responsibilities on an ad-hoc and/or regional basis. The next Annual Workshop and Steering Meeting (WWSM9) will be hosted by the Soil and Water Conservation Monitoring Centre in China, probably in the second week of November 2004.

Directly after the WWSM, a WOCAT training session was held for participants from ICIMOD member countries. Hanspeter Liniger attended the International DANIDA workshop on watershed development in November. A WOCAT presentation was given to the participants from the different DANIDA watershed programs all over the world.

News from regional and national initiatives

East Africa: The Kenya Overview book has now been published. An internal (national) training course was conducted in Tanzania. In Ethiopia several more cases have been documented.

South Africa: Updating of existing data received priority during the past year. An Info-book is currently being put together.

Nepal: The PARDYP project at ICIMOD considers WOCAT important and will make use of WOCAT methodologies.

India: WOCAT activities in India continue to be carried out within DANIDA’s watershed program (DANWADEP).

Philippines: The Philippine Conservation Approaches and Technologies (PHILCAT) initiative continued its planned activities over the past year.

Thailand: The Thai team is determined to operate as proposed during the WWSM7 in Rome once the MoU has been signed (there have been delays).

WASWC: WASWC supported conferences in Belgrade, Yugoslavia and Sofia, Bulgaria where WOCAT was presented prior to the launch of the WOCAT SEE (Southeast and East Europe). WOCAT is also included in two books (to be) published by WASWC. A special publication of the WASWC will highlight the accomplishments of WOCAT from 1992-2004.

FAO: Yuji Niino highlighted several activities related to WOCAT activities, such as the Agroecological Zoning (AEZ) / Land Resource Information System (LRIS) and the Land Degradation Assessment in Drylands (LADA) Project.

China: The past year marked the beginning of activities at the national level.

Central Asia: The Central Asian Mountain Programme (CAMP) has the mission of sustainable development of mountain regions in Central Asia. CAMP has translated QT and QA into Russian and updated them.

Serbia-Montenegro: The search for donors for a national program continued with some success at the Ministry for Natural Resources and Environment.

Europe: The project “Soil and surface water protection using conservation tillage in Northern and Central Europe” (SOWAP) is installing pilot sites to investigate the effects of minimum tillage in three countries: UK, Belgium and Hungary.

EU WORKING GROUP RESEARCH TASK GROUP on Erosion, Compaction, Floods and Landslides (Very Urgent and Important)

INVITATION: We invite you to support and contribute to the activities of a TASK GROUP on erosion, compaction, floods and landslides, that forms part of a Working Group Research that will report on the research needs of the EU Thematic Strategy on Soils, later this year. Further information about the EU Soil Strategy and all of the supporting documents can be accessed at the Circa library http://forum.europa.eu.int/Public/circ/env/Home/main (select “Soil Policy”, and then “Library”), and also at http://www.scape.org

The EU (DG-ENV) is currently developing a soil thematic strategy to address the threats to soils identified during a Communication that was published last year.
At an advisory forum that met earlier this year, six Working Groups were approved with mandates to produce working documents that would help the Advisory Forum develop policies for addressing the threats to soils and for identifying the actions that are needed.

Our Working Group is specifically dealing with research. Parallel working groups are looking at erosion, organic matter, contamination and monitoring and some of you may be contributing to their efforts in a somewhat different context.

The TASK GROUP on erosion, compaction, floods and landslides is one of the 9 task groups within the Working Group Research. The others are examining contamination, organic matter, salinization, sealing, monitoring and data, awareness, education and communication and soil quality and soil health.

The first meeting of the Research Working Group was held in Vienna on June 23rd under the Chairmanship of Prof. Blum.

At this meeting we were nominated as Co-chairs of the TASK GROUP on erosion, compaction, floods and landslides. Other members of the task group are shown on the list at Circa library. Our task as Chairs is to consult the other members of the group and the wider scientific community, and to express their views in a draft report that is structured in a specific way to the Chairman of the Working Group in October. The Commission would like us, where practical, to apply the DPSIR approach.

Our Task: Our task is to produce a readable draft document of about twenty pages that covers the research needs of erosion, compaction, floods and landslides in the context of both sustainable development and the thematic soil strategy.

We would like to collect your opinions regarding the following:

* What is the state of the art and available knowledge in these four areas?
* Why is this knowledge not (fully) applied to protecting and conserving soils?
* What are the current gaps in scientific knowledge (focus on key areas of interest)?
* Identify new areas where research is needed.

In addition we would like your opinion on the following:

* Is there accurate data on these four threats in Europe at a sufficient spatial and temporal scale?
* How do we monitor these threats?

On the basis of your answers, please draft a document setting out and explaining the priorities for future research. If possible, look at the whole DPSIR chain of events. We need this for our communication with the policy writers. Also please write simply, avoiding jargon.

You are also welcome to discuss any of these issues on the Circa or other discussion sites. In addition to answering the above questions would you please fill in a questionnaire at the www.scape.org site so that we can contact you.

It is extremely important that we have your opinion as it could be vital in guaranteeing that important research issues are not missed in the near future.

We would appreciate hearing from you soon.

Anton Imeson (3de@hetnet.nl) and Coen Ritsema (coen.ritsema@wur.nl)
Wageningen University and Research Centre, Wageningen, The Netherlands

Abstract: Integrated Water and Nutrient Management for Sorghum Production in Semi-arid Burkina Faso
Robert B. Zougmoré, PhD Dissertation of Dept. of Environmental Sciences, Erosion and SWC Group, Wageningen University and Research Centre, Wageningen, The Netherlands, 2003, jo-landa.hendriks@wur.nl, www.dow.wau.nl/eswc/

Losses of water and nutrients through runoff are major agricultural problems for inherently poor soils in semi-arid West Africa. The intensification of crop production requires an integration of soil, water and nutrient management that is locally acceptable and beneficial for smallholder farmers. To this end, two semi-permeable soil and water conservation measures (stone rows, grass strips) and two nitrogen inputs (compost, urea) applied alone or in combination were studied on the Central Plateau of Burkina Faso. Stone rows greatly reduce runoff and soil erosion and improve soil moisture.
Under unfertilised continuous sorghum cropping, stone rows have a limited effect on soil fertility improvement. During erratic rainfall years in the Sahelian zone, stone rows alone doubled sorghum yield compared to plots without stone rows and, therefore, can reduce risks of crop failure. During well-distributed rainfall years, stone rows alone did not result in significant yield increase. Grass strips of Andropogon gayanus were also an efficient anti-erosion measure and could be an interesting alternative to stone rows, especially in areas short of stones.

However, Andropogon grass must be managed properly to alleviate shading and other effects of competition on crops near to the strips. Applications of compost or urea alone improved nutrient uptake and crop biomass production and increased demands for available water for transpiration. Combining stone rows or grass strips with compost in intensified crop production systems resulted in substantial crop yields and economic benefits. This integrated water and nutrient management may help to alleviate poverty and may empower smallholder farmers to invest in soil management for better crop production in West Africa.

**ANNOUNCEMENTS**

**JOBS OPPORTUNITY**

President of the Asian Institute of Technology, Bangkok, Thailand

The Asian Institute of Technology (AIT), a unique non-profit autonomous regional multicultural postgraduate institution based in Thailand, invites applications and nominations for the post of President. The deadline for the receipt of applications and nominations is 6 May 2004. The successful candidate should be available to join the Institute starting 1 January 2005, when the position becomes vacant.

AIT’s mission is to develop highly qualified and committed professionals who will play a leading role in the sustainable development of the region and its integration into the global economy. AIT supports the human resource needs of developing countries in Asia taking into account their specific development priorities, gender issues and other important social concerns. The Institute’s intention is to remain a leading multicultural regional institution of higher learning, offering state-of-the-art education, research and training in technology, management and societal development.

AIT has a student enrolment of some 1,700 from more than 40 countries, learning and living together with a multinational full-time faculty of about 120, as well as international research and support staff. AIT has a strong alumni body of more than 12,000 from 70 countries.

Contact: Mr. Karma Rana, Secretary, Presidential Search Committee, Asian Institute of Technology, P.O. Box 4 Klong Luang, Pathumthani 12120, Thailand, fax: (66)+0+2524 6004, psc@ait.ac.th

**TRAINING**

The International Institute of Rural Reconstruction (IIRR) is pleased to announce the international training courses that will be offered on its beautiful Y.C. James Yen Center campus in the Philippines.

- NGO Leadership, Development and Social Change (NGOLDSC)
- Participatory Monitoring and Evaluation
- Rural Development Management
- Policy Development and Advocacy
- Designing Development Training Systematically
- Sustainable Approaches to Community Health
- Participatory Approaches to Agricultural Extension
- Participatory Action Research for Community-based Natural Resources Management (PAR-CBNRM)
- Gender Mainstreaming: From Programmatic to Organizational Transformation
- Community-based Integrated Watershed Management

For more information please visit www.iirr.org. For IIRR publications, please visit: www.iirr.org/publications.htm.

For registration or to get an application form, please contact: Education and Training Program, International Institute of Rural Reconstruction, Y.C. James Yen Center, Silang 4118, Cavite, Philippines, Phone: +63-46-4142417, Fax: +63-46-4142420, Education & Training@iirr.org.
National Agricultural Research Organization (NARO), Uganda, is pleased to announce its forthcoming conference to review the contributions of agricultural research to development. The purpose of the conference is: “To reflect on achievements and lessons learnt in agricultural research for development; and to identify key learning points for future research in Uganda and elsewhere”

Conference Format
The conference will be structured according to the thematic challenges to agricultural research listed below, using a synthesis approach. All accepted papers will be published as proceedings of the conference, but with the exception of selected case-studies, there will not be oral presentations. Instead, internationally recognized authorities in the five thematic areas will synthesize the papers and present key points to the authors and participants. These syntheses will form the basis for discussions and development of best practice guidelines for integrated agricultural research for development – with contributions from all participants.

Outputs of the conference will be:
- Published papers on research from Uganda and elsewhere contributing to the development themes currently challenging agricultural research;
- A synthesis of achievements and lessons learnt;
- Best practice guidelines for integrated agricultural research for development.

Theme 1: Understanding people, their livelihood systems, demands and impact of innovations
* Biophysical, natural resource and socioeconomic opportunities and challenges within peoples’ agricultural systems identified and understood at various levels:
* Interactions between systems components understood;
* Peoples’ constraints, opportunities and demands identified and prioritized;
* Contribution of innovations to poverty reduction determined

Theme 2: Enhancing innovation process and partnership
* Methods and approaches for management and delivery of agricultural technologies & information developed;
* Methods and approaches for enhancing institutional linkages and establishing strategic partnerships developed;
* Methods and approaches for biophysical and socio-economic research developed.

Theme 3: Enhancing integrated management of natural resources
* Strategies for harnessing and commercializing natural resource-based products developed and disseminated.
* Strategies for mitigating adverse environmental effects developed and disseminated.

Theme 4: Technological options that respond to demands and market opportunities
* Technological options that increase productivity of crops, livestock, fisheries and forestry resources developed and promoted
* Technological options that optimize quality, broaden utilization base and enhance marketability of agricultural products developed and promoted
* Appropriate farm power, tools and equipment that optimize production and processing developed and promoted
Theme 5: Enabling policies and linking producers to markets
* Recommendations for formulation of policies that enhance competitiveness provided;
* Information and mechanisms for research priority setting based on market opportunities generated
and promoted;
* Information and mechanisms that lead to improved response to market opportunities by farmers
generated and promoted

Titles, authors and abstracts (up to 300 words) should be submitted to NARO as soon as possible,
then the draft papers should then be submitted to NARO by May 29, 2004. NARO’s scientific
committee will provide feedback on the drafts, and final versions should be received by NARO by July

Contact: NARO Conference Organizing Committee, c/o Director SAARI, P.O. Sordi, Uganda.
Phone: +256-77-221351/ 702553, Fax: +256-77-280351/ 250553, naroconf@narosaari.org

4th Int’l Conference on Land Degradation (ICLD4)
Cartagena, Murcia, Spain September 12-17, 2004

Land degradation is a very serious global issue. It has adverse impacts on land productivity, food
security, climate change, environmental sustainability, and eventually the quality of life. The Conference
aims to provide a forum for discussion on factors and causes of land degradation and its impact
and consequences on land use and society. It also aims at discussing possible solutions, using cur-
rently available data and technology together with possibilities of national and international legal sys-
tems.

The Conference is supported by the International Union of Soil Sciences (IUSS), Division I, by
the Spanish Society of Soil Science, by the Technical University of Cartagena, by the University of
Murcia and by the European Soil Conservation Society, and is open for land and water conservation
researchers, educators, policymakers, practitioners, and advocates interested in land degradation
throughout the world. The Conference will provide an excellent opportunity to extend personal and
professional networks.

The Conference will consist of invited lectures, scientific sessions with oral and poster presenta-
tions, and field excursions. The main topics of the Conference are indicated below, however, we wel-
come suggestions from the prospective participants that may be of general interest:
1) Geographic perspective
2) Historical and archaeological perspectives of soil degradation
3) Linkages with global issues
4) Quantifying land resources stresses
5) Managing land quality to reduce degradation
6) Human impact on land degradation
7) Policy and legal framework
8) Rehabilitation of degraded land

Further information about this Conference can be found at the following website:
www.upct.es/icld4/. You can register and submit an abstract on-line or write to Gregorio García, Sec-
retary of the ICLD4, at icld4@upct.es for more information.

Int’l Symposium on Participatory Strategy for Soil & Water Conservation
Tokyo University of Agriculture, Tokyo, Japan November 27-28, 2004

This international symposium deals with the acceptability of soil and water conservation (SWC) tech-
nology from the viewpoint of the participation of local people. There are many reports and meetings
concerning SWC technology in Japan and in other countries, however there have been few meetings
to discuss the technology transfer of SWC through participation strategy. Also, there has been an
increase in the transfer of SWC technology to developing countries in recent years; but it can hardly
be said that all instances of technology transfer produced beneficial results for local farmers because
of the lack of thought given to the comprehension and practices of local farmers.

The objective of this international symposium is to discuss not only SWC technology but also
technology transfer, including participatory strategy. We welcome presentations from NGO officers
conducting grass-root activities, as well as from researchers and engineers from governmental or-
ganizations, research institutes and universities.
Presentations in this symposium – oral and poster presentation - will cover the following topics: (a) Soil and Water Conservation, (b) Technology Transfer, and (c) Participatory Strategy.

Organizer: Institute of Environment Rehabilitation and Conservation (ERECON); Co-organizers: United Nations University; Graduate School of Frontier Science, The University of Tokyo; Institute of Regional Environment Science, Tokyo University of Agriculture; WASWC, etc.

Registration fee: 20,000 yen. Full papers will be published as a book in 2005.

Contact: Dr. Rokuro Yasutomi, Organizing Chairman, Institute of Environment Rehabilitation and Conservation (ERECON), 2987-1 Onoji Machida-shi, Tokyo 195-0064, Japan. Phone/Fax: +81-42-7368972, erecon@nifty.com, http://homepage3.nifty.com/erecon/WASWCtop.htm

4th Congress on Water Planning and Management
Tortosa, Cataluña, Spain  8-12 December 2004

On behalf of the Organizing Committee of the Fourth Congress on Water Planning and Management I would like to invite WASWC members to attend this conference in Spain this winter.

The New Water Culture Foundation (Fundación Nueva Cultura del Agua) is organizing its Fourth Congress on Water Planning and Management (IV Congreso Ibérico sobre Gestión y Planificación del Agua - Ciencia, técnica y ciudadania: claves para una gestión sostenible del agua), at Tortosa, Cataluña, Spain, from 8-12 December 2004. Official Congress languages are Spanish, Portuguese and Catalan. Website: www.us.es/ciberico.

Contact: João Pedroso de Lima, WASWC National Representative for Portugal.

SUMMARY REPORTS

Declaration of the 2nd World Congress on Conservation Agriculture*, and Road Map for the Wider Adoption and Development of Conservation Agriculture, Worldwide (ratified at the Congress)

* “Conservation Agriculture – Producing in Harmony with Nature”, Iguassu Falls, Paraná State, Brazil, August 11-15, 2003

This Congress endorses the Declaration of the First World Congress on Conservation Agriculture (CA) in Madrid (2001) and notes the remarkable advances made in the two years which succeeded it, both in area adopted (now totaling 72 million ha of annual crops worldwide - an additional 7 million hectares since 2001- and at least a similar area of agro forestry/perennial crops) and the evolution of CA technology and its implementation in many new farming systems in the 50 countries represented in the WCCA2. This congress strongly believes that CA, comprising the universal principles of permanent soil cover, direct seeding or planting, minimum soil disturbance and pluri-annual crop rotation, is the principal road to sustainable agriculture and capable of helping solve the world’s hunger and environmental crises while improving the quality of life. CA can achieve food security by reversing soil degradation, reducing agrochemical use and contamination, improving food quality, and conserving, preserving and enhancing the quality of natural resources and biodiversity while increasing farmer net income and competitiveness, and sequestering carbon from the atmosphere. Also, CA is applicable to all sizes and types of farms and to all crops. Therefore, this Congress calls upon all governments, elected politicians, policy makers, NGOs, the private sector and consumers of agricultural products worldwide to actively support the wider adoption and development of CA.

To achieve this goal, the following road map is recommended which would:
* Create conditions for the paradigm shift necessary to the adoption of CA principles by lead farmers, technicians, educators and policy makers (education, training, demonstrations, risk removal, media reports).
* Apply the universal principles of CA, as stated above.
* Support all initiatives, with preference for farmer-led, to transfer and develop CA technology.
* Carefully examine and endeavor to overcome the barriers to CA.
* Fund farmer led on-farm research programs and support applied research to maximize agricultural sustainability and net returns for CA farmers.
Develop widespread awareness of the substantial benefits of CA for society as a whole and fund research for socio-economic and environmental impact assessments.

Include support actions for CA in ongoing national and international initiatives, especially those in developing countries.

Promote the remuneration of environmental services including carbon sequestration, reduction in soil erosion and water pollution.

Develop world guidelines for the market differentiation of environmentally friendly products produced by CA.

Incorporate support actions for CA in the implementation of international conventions, such as Agenda 21, Convention to Combat Desertification (CCD), Framework Convention on Climate Change (FCCC) (including the Kyoto protocol) and Convention for Biological Diversity (CBD), especially as a means of mitigating global warming, deforestation and HIV/AIDS-induced labor shortages.

Support farmer organizations to lobby for appropriate enabling policies for CA.

Promote the intensification of worldwide exchange of information on CA technologies.

Promote and support, where appropriate, integrated crop x livestock CA systems and other means of minimizing the conflict of demands on crop residues.

Move towards the establishment of an International Coordinating Committee for CA which would interconnect national and regional efforts, perhaps through a “web-based” platform, to facilitate sharing of information on CA study tours, international training schemes, publications and congresses/seminars, etc.

For more information: www.febrapdp.org.br/ - Rolf Derpsch, WASWC VP for South America

International Symposium on 25 Years of Assessment of Erosion
Ghent, Belgium, September 22-26, 2003

In his opening address, Dr. Don Gabriels gave the background to the meeting: 25 years ago an international meeting was held in Ghent (the first ISCO Conference) to examine the possibility of developing methods of universal applicability for assessing soil erosion and its effects on soil productivity. Now, 25 years later, the time is ripe to review what progress - if any - has been made.

This was followed by an address from Mr. de Croo, Minister of State, Mayor of a local community and a farmer, on the subject of “Erosion problems at the community level.” and excellent presentations on the state of soil erosion research in the USA (L.D. Norton), Africa (Eric Roose), Latin America (I. Pla Sentis), Europe (Jean Poesen), England and Wales (Rob Evans) and finally the “Flemish Case” (M. Swerts).

The meeting then went on to cover following sessions:

- Assessment of the impact of erosion variables: rainfall erosivity;
- Assessment of the impact of erosion variables: soil properties;
- Assessment of the impact of erosion variables: methodology;
- Assessment of soil erosion on nutrient losses; and
- Miscellany

In the closing session the Chairman summarized what had been covered during the week and presented his conclusions and suggestions as to what was needed in the future.

From the presentations and discussions it was clear that considerable progress had been made in some respects. This is particularly so in the case of modelling. Here progress is largely due to the growth in the use of computers. Now, every scientist has access to a computer and there is a wide range of programs that are easy to access and use. As a result, we now have a range of models available and the presentations showed that many of these are capable of predicting erosion with far more accuracy than was possible in the past.

A problem in the past was the lack of basic, reliable data for modellers working outside the USA. This situation has improved substantially; for example, there are now between 2,000 and 2,500 plot years of data available for Europe alone.

It was also clear from the discussions that the basic processes of erosion are now better understood than they were 25 years ago and that this understanding is continuing to grow.

Unfortunately, less progress has been made in other directions and little of what has been pre-
Presentations at this symposium would provide answers to the practical problems that were posed to the participants on the first morning by Mayor de Croo. It would seem that more time should be spent in looking at the day-to-day problems of the community and less time spent on refining our knowledge of erosion processes.

Many young researchers are making the mistake of building on old models without questioning them and using data that is often of poor quality. In the end a model is only as good as the data upon which it is based. The widespread use of computers has also created another problem – it is very easy for the researchers to spend most of their time in the comfort and warmth of an office rather than getting out in the cold and wet and actually observing runoff and erosion in action. As a result, information is often presented that seems to bear little relation to what can be observed in the field.

It was also noted that little had been said at the symposium about the assessment of erosion in the field and the involvement of farmers in the process of gathering data.

Probably the biggest gap is still in the assessment of erosion on a broad scale – at the regional or global level – and there had been little mention of this subject.

A fuller report on this symposium will shortly be available on the WASWC website.

David Sanders

The 3rd International Conference on Vetiver (ICV3)
Guangzhou, China October 6-9, 2003

This conference was hosted and sponsored by the Guangdong Provincial Government in co-sponsorship with the Chinese Academy of Sciences, the Chaipattana Foundation of Thailand, and the Vetiver Network. The Organizing Committee of the conference was chaired by Prof. Luo Fuhe of the Guangdong Academy of Agricultural Sciences.

These conferences are held every three or four years, and this time the conference theme was “Vetiver and Water”. Conference participants were treated to over 70 papers that focused on the wide and varied applications of vetiver grass, most, in one way or the other having some impact on water. There were some excellent papers demonstrating how vetiver grass could be used for treating polluted waters by its use as a constructed wetland for the tertiary treatment of sewage plant outflow; for the treatment of pig effluent ponds through its growth on floating platforms; and landfill leachate uptake. These are but a few of its more dramatic uses. Participants also learned of its use for reclamation of polluted minelands (tailings); revegetation of stone quarries (China); the stabilization of river banks (Mekong) and coastal barriers (Bangladesh); and for stabilizing the coastal sand dunes of Central Vietnam. We learned how vetiver could be used for stabilizing extremely erodible and slump-prone railroads, highways, and construction sites. From Madagascar we saw how vetiver grass saved a railroad from complete destruction from cyclones and at the same time the integration of farmers into the railroad embankment stabilization program, using a unique modular conservation system. Vetiver grass and the Vetiver System that it supports is clearly an outstanding Eco-Technology for this century. You can read all the papers that were presented at the conference on the Vetiver Network homepage at www.vetiver.org/. In addition, you can purchase from the Vetiver Network the complete set of conference papers and the excellent PowerPoint presentations that go with them on a CD-ROM for US$20.

Although vetiver grass has been known for centuries to many rural people for its soil binding and medicinal value, it is only since the mid 1980s that it surfaced as a powerful soil and water conservation technology with a wide range of application. Thanks to the Vetiver Network and associated practitioners and scientists, and with funds supplied by various agencies and donors, much research and demonstration has been carried out in the past 15 years that shows the tremendous potential of the grass over a wide range of sectors and applications. This grass is no longer the property of agriculturists or soil conservationists. It belongs to anyone who wants to use its extraordinary properties to fix problems - that in the past have been attempted to be solved with often high cost and ineffectual methods - in a relatively simple and low cost manner.

Those who attend these vetiver conferences always leave with a reinvigorated urge to get out and use the technology in the ways demonstrated by other conference participants. Many can put these new ideas into practice without having to wait for more research or more support from official agencies. Thus we are now seeing many more private sector enterprises using the Vetiver System as a profitable technology.

I would challenge many of the readers of this newsletter, with an open mind, to learn about and promote the use of the Vetiver System. We are all interested in conserving our planet – the Vetiver System is one technology that can do much to achieve this aim.

Dick Grimshaw, The Vetiver Network
The book focuses on soil fertility decline in the tropics. The information is presented in three parts: a literature review, a review of soil changes under annual and perennial crops including two case studies, and an integrated part in which literature and case studies are combined.

No information is included on micronutrients, soil biological and soil physical properties. The main aim of the book is to quantify soil fertility decline under permanent cropping systems in the tropics and to identify strategies to assess the rate of change in soil chemical properties.

The book is extremely rich in information (360 pages with an author and a subject index) and extensive references (arranged by chapter). An original contribution is the historical view taken, with several analyses going back to the beginning of the last century, including illustrations. The number of subjects treated that are directly or indirectly related to soil fertility decline (population growth, land degradation, land use, statistics, chemistry, sampling schemes to name only a few) is interesting but at the same time confusing as each of these subjects probably deserves a chapter in itself. The book remains largely a review of research results over the last 100 years focusing on plantations that have often been neglected in the past, in spite of their importance in the tropics, in extent as well as in export earnings. The most interesting chapters are the case studies presented at the end: the sugar-cane production in Papua New Guinea and the Sisal production in Tanzania identify major changes in soil chemical properties that can be related to the driving factors linked to land policy and land management.

The book makes a convincing case for supporting plantation agriculture from a biophysical point of view. Its major defect is to neglect socio-economic problems beyond the narrow focus point of earnings and soil fertility decline associated with this specific land use.

Among the minor defects of this work are the confusing way in which an attempt is made to be comprehensive, the use of Soil Taxonomy as a guide to soil types and the incomplete authors’ index. The book is recommended reading for anyone interested in nutrient balances, soil fertility and plantation agriculture. – Freddy Nachtergaele and Parviz Koohafkan, Land and Water Development Division, FAO, Rome.


Regular readers will recall a review of Volume I of this series in the Oct.-Dec. 2002 Newsletter. That volume dealt with the principles of conserving and improving sloping land in the humid tropics. I am pleased to be able to announce that Volume II, “Practical Application – Soil Improvement”, is now available. This volume is also written by well-known WASWC member, Peter Storey, in the same easy-to-understand English as the first volume and it includes a great amount of practical, useful information. The book is well illustrated and contains numerous examples from different parts of the developing world. I particularly liked some of the tables that list such information as the plant nutrient content of various plant and animal residues that can be applied to improve the soil and the “companion planting guide” that lists plants that can aid or hinder the growth of companion plants. The author challenges some of the more conventional measures for conservation and soil improvement and, while some of his ideas may be unconventional, they are based on his many years of experience in tropical, developing countries.

The book is divided into two sections. The first starts with a general discussion about the importance of soil and then a chapter follows explaining what soil is and how it is formed. The subsequent chapters concentrate on better plant nutrition, improving soil management and soil micro-organisms. The second part of the book includes chapters on livestock; forestry, agroforestry and bamboo; appropriate field trials; weed control; research and development needs; and extension policy, methods and related considerations.

I believe that this book will be a very useful guide to many of our field workers. It is the sort of book that many field projects could profitably buy and provide for the staff they are training as extension workers. Of particular value is the simple way that complex subjects, such as the soil’s cation exchange capacity, are explained. I now look forward to Volume III which, I understand, will be devoted to the practical application of soil and water conservation.

– David Sanders.
Optimizing soil moisture for plant production – The significance of soil porosity

FAO’s Land and Water Development Division has been producing Soils Bulletins since 1965 and, although they have varied greatly in quality, many of them are excellent publications. In this case the writers, well known WASWC members Francis Shaxson and Richard Barber, have provided us with excellent background information on the importance of optimizing soil moisture and how this can be achieved in practice. This will be a very useful text for students, field practitioners and anyone with a general interest in this subject.

As the writers point out, soil moisture is often neglected, but improved soil moisture management is crucial if we are to increase food production and water supplies in many parts of the world. At present huge amounts of water are unnecessarily allowed to run off, resulting in depleted soil moisture for plant growth, soil erosion, the lowering of water tables and flooding. We need to conserve and use much more water where it falls. This fact is becoming increasingly important as the possibilities for expanding irrigation are diminishing.

The bulk of this publication is devoted to discussing and describing the different methods and techniques of trapping, conserving and using rainfall. This is well done, the publication is well-written, easy to read and is packed full of examples from many parts of the world. It is also well illustrated with good photos, charts and tables that are easy to follow.

While the authors have done a commendable job in covering this complex subject, it seems to me that they have missed one important subject: waterlogging. Although soil moisture may be the main constraint to plant growth in many areas, a major problem, even in the low rainfall areas, is that what rain does fall, comes in short, high intensity storms. When this happens, the farmers’ main concern is getting rid of excess water and preventing waterlogging. This is a fact that is often overlooked by field workers and, from my experience in a number of countries, is the reason why farmers are often reluctant to accept techniques such as contour works. But this is a minor criticism and I have no hesitation in recommending this publication to all WASWC members.

The publication comes with a CD-Rom that provides additional guidelines for the field worker, particularly on how to make field observations of soil and plant indicators to identify soil moisture problems in collaboration with the farming communities.

WASWC members may request one free copy from Jose Benites at Jose.Benites@fao.org, cc to Pilar.Pazos@fao.org; for large orders please contact: Sales and Marketing Group, Information Division, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy. Fax: +39-6-57053360, publications-sales@fao.org. Price per copy: US$53 + postage.

– David Sanders


Anyone interested in Soils Bulletin 79 (see above), or Conservation Agriculture in general, may like to receive copies of these leaflets that have been prepared by FAO in collaboration with the University of Teramo, Italy. The four leaflets – Soil Moisture, Organic Matter, Soil Compaction and Implementing Conservation Agriculture - come in an attractively produced packet. They are well illustrated and concisely outline the basic principles of Conservation Agriculture. These leaflets would be useful for students, extension staff and anyone teaching soil and water conservation.

For a free copy, contact Jose Benites at Jose.Benites@fao.org, with cc to Pilar.Pazos@fao.org

– David Sanders

INFORMATION SOURCES

Announcements or reviews for the WASWC newsletter may be sent to the President or any other Council member. Please state clearly if a publication is available free or priced (including or excluding delivery). Also please indicate the e-mail address and website.

Books, Proceedings & Reports

- Land Quality, Agricultural Productivity, and Food Security, edited by Keith Wiebe (Resource Economics Division, Economic Research Service, USDA, Washington, DC, USA, kdwiebe@ers.usda.gov), with 20 papers from 34 well-known writers. This 461-p book, ISBN 1 84064 752 3, concerning our most crucial issues of today, was published in 2003 by Edward Elgar Publishing (www.e-elgar.com) and may be ordered from either their UK office at info@e-elgar.co.uk (UK£95) or US office at elgarinfo@e-elgar.com (US$150).


- Natural and socio-economic Effects of Erosion Control in Mountainous Regions, a 496-p proceedings from the conference of the same title in Belgrade, Yugoslavia, in December 2002, edited by Miodrag Zlatic, Stanimir Kostadinov and Nada Dragovic, is available from the Faculty of Forestry, Belgrade University, Belgrade, Serbia and Montenegro, mzlatic@yubc.net, at US$25/copy.

- 25 Years of Assessment of Erosion, a 555-p proceedings of the International Symposium of the same title, September 22-26, 2003, Ghent, Belgium, edited by Donald Gabriels and Wim Cornelis, and available from the Department of Soil Management and Soil Care, Ghent University, Compure Links 653, B-9000 Gent, Belgium, donald.gabriels@rug.ac.be, at €50/copy.

- Einkommen Sichern durch Ökologisch Orientierte Bewirtschaftung, a 60-p booklet on reduced tillage in Austria, in German, co-produced by the Agricultural Office of Coordination for Education and Research, Frauentorgasse, A-3430 Tulln, Austria. Write for your copy to Dr Josef Rosner, our National Representative, at josef.rosner@noel.gv.at, www.lako.at.

Journals, Magazines & Newsletters
- World Conservation, a 32-p 4-monthly publication of the International Union for Conservation of Nature and Natural Resources (IUCN), ISSN 1027-0965, is free to its Institution members, and US$45/year for non-members, with airmail postage included. To subscribe, contact: cynthia.craker@iucn.org. The title of the present issue, No. 3/2003, is “Journey to Bangkok”. It contains all necessary information for those who will attend the 3rd World Conservation Congress in Bangkok (People and Nature – only one world), November 17-25, 2004.

- Newsletters of the Canadian Society of Soil Science (CSSS), issued three times a year, are available on the web site www.csss.ca/newsletters.html.

CD-Rom
- Erosionschutz in der Landwirtschaft, a movie CD with brochure, in German, is produced by Andreas Klik, Bernd Hebel and Josef Rosner, Agricultural Office of Coordination for Education and Research, Frauentorgasse, A-3430 Tulln, Austria. Write for your copy to Dr Josef Rosner, our National Representative, at josef.rosner@noel.gv.at, www.lako.at.

- Konservierende Bodenbearbeitung durch Mulch- und Direktsaat, a movie CD, in German, also produced by the Agricultural Office of Coordination for Education and Research, Frauentorgasse, A-3430 Tulln, Austria. Write to Dr. Rosner for your copy.

Website
The WASWC Website: www.swcc.cn/waswc/: The WASWC website is informative and useful. As members will know, WASWC is a worldwide network on Soil and Water Conservation that gives recognition to, and provides information for, specialists in the international field of SWC. The basic objective of WASWC is to promote the wise use of soil and water resources. WASWC aims to facilitate interaction, cooperation and links among its members, provide a forum for discussion and hold conferences. One of its main activities is to publish a quarterly newsletter with meeting announcements, international conservation news, book reviews, members’ news etc. This newsletter and various other articles on SWC can be downloaded: these include, for example one on the Kyoto Protocol, another on ‘Green and Blue Water’. The website updates a calendar of international events (but why are the most recent items not at the top of the page?) and gives access to an officers’ list and several related links. The website itself has an attractive homepage – with several entrance headings (calendar; activities; membership form; history etc). There is also a rolling sequence of pictures – which promises much. But click on the headings and the website reverts to being a sequence of plain, non-illustrated, texts. These in themselves are useful in terms of information, but visually unimaginative. What is also missing is a concise overview of what WASWC actually is (similar to our description above). WASWC could do well to liven up its website to the standard of its homepage – then its value would be increased, and attention captured.

– Wendelien Tuyp, Vrije Universiteit Amsterdam

Page 22
Meetings

The organizers of meetings in the field of SWC and related subjects are invited to send announcements for publishing in the WASWC Newsletter. Note: Events identified with asterisk (*) are organized, co-organized by or in cooperation with the WASWC, events with date in bold are presented in the list for the first time.

2004

- **2004.** Int’l Conference on Conservation Tillage and Sustainable Small Farming, Beijing, China. Contact: Li Hong Wen, lhwen@cau.edu.cn; Zhou Xingxiang, xxzhou@cau.edu.cn

- **2004** (date to be announced). Int’l Workshop on Soil Conflicts – Soil-related Discords and Conflicts, Montpellier, France. Contact: Rabah Lahmar, Phone/Fax: +33-467-270456, secretaire.executif@torba-soil-society.org, soilconflicts@torba-soil-society.org, www.torba-soil-society.org

- February 9-11, 2004. Int’l Meeting on Soils with Mediterranean Type of Climate, Marrakech, Morocco. Contact the Secretariat at Fax: +212-55300238, 8msmtc@enameknes.ac.ma

- February 9-20, 2004. 7th Meeting of the Conference of the Parties (CoP) of the CBD, Malaysia. www.biodiv.org

- *February 11-14, 2004.** Int’l Conference on Sustainable Management of Natural Resources (Land, Water and Forest), Banaras Hindu University, Varanasi-221005, India. Contact: M.B. Singh, Phone: +91-542-2316218, Fax: +91-542-2368174, singhmb@rediffmail.com. See more details in Announcement section, 19(3) issue.

- *February 16-20, 2004.** International Erosion Control Association’s 35th Annual Conference and Expo (EC04), Philadelphia, PA, USA. Contact: Kate Nowak, Phone: 970-879-3010, ext. 15, kate@ieca.org, www.ieca.org/public/articles/details.cfm?id=990

- **February 23-26, 2004.** Int’l Conference on Strategies to Promote the Adoption of Conservation Agriculture in South Africa. Contact: rmfowler@iafrica.com

- March 22-27, 2004, Int’l Training Workshop on HydroSalinity Abatement and Advance Techniques for Sustainable Irrigated Agriculture, CEWRE, Lahore, Pakistan. Contact: Muhammad Latif, mazhar_cewre@yahoo.com, or Sajjd Mahmood, Phone: +92-300-6607290, Fax: +92-41647846, smahmoodpk@yahoo.com

- March 26-28, 2004. Int’l Seminar on Salinity Mitigation for Water Resources Management, CEWRE, Lahore, Pakistan. Contact: Muhammad Latif, mazhar_cewre@yahoo.com, or Sajjd Mahmood, Phone: +92-300-6607290, Fax: +92-41647846, smahmoodpk@yahoo.com


- June 27-July 2, 2004. 1st World Congress of Agroforestry: Working together for Sustainable Land-use System, Orlando, Florida, USA. Organized by Univ. of Florida, World Agroforestry Center, etc. Contact: P.K. Nair or Mandy Padgett, Phone: +1-352-3925930, Fax: +1-352-3929734, pknair@ufl.edu, mrpadgett@mail.ifas.ufl.edu, http://conference.ifas.ufl.edu/WCA/. See more details in Announcement section, 19(2) issue.

*July 4-9, 2004.** 13th Int’l Soil Conservation Organization (ISCO) Conference in the theme: Conserving Soil and Water for Society: Sharing Solutions, Brisbane, Australia. Contact: Mike Grundy, Phone: +61-7-38969935, Fax: +61-7-38969898, grundym@nrm.qld.gov.au, mik_beth@bigpond.net.au, and the Conference Secretariat, isco2004@icms.com.au. See more details in Announcement section of 19(1) issue and more updated information in www.isco2004.org

- August 2-6, 2004. Int’l Symposium on Sediment Transfer through Fluvial System, Moscow, Russia. Contact: Duke de Boer at deboer@duke.usask.ca, http://duke/usask.ca/~deboer/ICCE/


- September 4-12, 2004. 2nd Congress of EUROSOIL, Freiburg-im-Breisgau, Germany. Contact: Thorsten Gaertig, Phone/Fax: +49-761-2039144, Thorsten.Gaertig@bodenkunde.uni-freiburg.de. See more details in Announcement section, 19(4) issue.


- October 18-21, 2004. 9th Int’l Symposium on River Sedimentation: Interaction Between Fluvial Systems and Hydroprojects and Their Impact, Yichang, China. Contact: Hu Chunhong, Phone: +86-10-68415522/68415657/68413372, Fax: +86-10-68411174, irtces@public.bta.net.cn, irtces@95777.com

- October 20-24, 2004. Agroenviron-2004: Role of Multi-Purpose Agriculture in Sustaining Global Environment, Udine University, Udine, Italy. Contact: Giuseppe Zerbi, Phone: +39-328-0908099, Fax: +39-043-2558603, zerbi@dpvta.uniud.it, www.dpvta.uniud.it/~agroenv, or Sajid Mahmood, Phone: +92-300-6607290, Fax: +92-41647846, smahmoodpk@yahoo.com


- November 7-14, 2004. 9th Int’l Annual WOCAT Workshop and Steering Meeting (WWSM9), Chongqing(?), China. Contact: Xu Feng (xufeng@mwr.gov.cn) and Godert van Lynden (godert.vanlynden@wur.nl)


- December 8-12, 2004. 4th Congress on Water Planning and Management, (IV Congreso Ibérico sobre Gestión y Planificación del Agua - Ciencia, técnica y ciudadanía: claves para una gestión sostenible del agua), Tortosa, Cataluña, Spain. Contact: Joao Pedroso de Lima, Phone: +351-239-797-183; Fax: +351-239-797-179/ +351-239-797-123, plima@dec.uc.pt, www.us.es/ciberico. See more details in Announcement section issue 20/4.

- December 20-22, 2004. 2nd Int’l Symposium on Land Use Change and Geomorphic, Soil and Water Processes in Tropical Mountain Environments, Luang Phrabang, Lao PDR. Contact: Christian Valentin at valentinird@laopdr.com. Source of fund to provide travel assistance to a limited number of participants are currently being sought. Participants needing travel support should contact the committee soonest.
2005

- *2005. Int’l Conference on Forest Hydrology, Bulgaria. Contact: Georgi Gergov, g_gergov@internet-bg.net*

- March 29-April 6, 2005. Int’l Conference on Global Soil Change: Time-scale and Rates of Pedogenic Processes, Montecillo, Mexico. Contact: Elizabeth Solleiro-Rebolledo, solleiro@geologia.umam.mx


- *May 2005. VI Headwater Control Conference, Bergen, Norway. Contact: Martin Haigh (mhaigh@brookes.ac.uk) and Josef Krecek (krecek@cesnet.cz)*

- September 10-18, 2005. 19th Int’l Congress on Irrigation and Drainage (ICID), Beijing, China. Contact the Chinese National Committee on Irrigation and Drainage, Phone: +86-10-68415522/68416506, cncid@iwhr.com, www.icid.org/index_e.html

2006


List of WASWC Officers for the period up to December 2004

(Only newly appointed officers are shown – the full list will be published in the next issue)

**Austria:** Josef Rosner, Agric. Office of Coord. for Education & Research, Frauentorgasse, A-3430 Tulln. josef.rosner@noel.gv.at

**Bolivia:** Oscar F. Alvarez C., Nacional Proyecto MINK’A, Casilla de correo 367, Plaza Bolivar No. 1, Potosí, minka@entelnet.bo

**Portugal:** João L.M.P. de Lima, Univ. of Coimbra, Dept. Civil Eng., 3030-290 Coimbra. plima@dec.uc.pt
World Association of Soil and Water Conservation – WASWC

MEMBERSHIP APPLICATION / RENEWAL FORM (issued 040411)

(For renewal, you may fill in only your name, country, year and amount to pay. Sending the form by e-mail is acceptable and preferred.)

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Institution …………………………………………………………………………………………………………………..

Postal address …………………………………………………………………………………………………………………..

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E-mail (1) …………………………………………………….. (2) …………………………………………………. 

My specialized field(s): ………………………………………………………………………………………………………

Please sign me up for the WASWC membership in category: 1 2 3 (see below)*

My membership starting year ……………… US$ …………………

Donation for developing country membership US$ …………………

Donation to the Moldenhauer Fund US$ …………………

Total US$ …………………

Date …………………………………… Signature ……………………………………………………………………….

Please tick one: I would like to receive the digital newsletter in: Word (~250-300 kb), or .pdf (~400 kb), or I do not have e-mail access and would like to receive the newsletter in paper version.

* Membership rates: The rates depend on where you are working/ living. There are 3 categories.
1. Individual membership: US$5/yr worldwide but please pay more if you can; $10-$20 is suggested.
2. Life membership: US$60 (developing country)/ US$100 (developed country).
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▲ How to submit this form and the money: You may send this form by e-mail, fax or post.

- For countries in the Decentralization Program (DP), the program coordinator in each country will notify members how and where the fee in local currency should be sent to. Countries in the Program include: Albania, Bangladesh, Bulgaria, Chile, China, Ethiopia, India, Indonesia, Japan, Kenya, Lithuania, Nepal, Nigeria, Philippines, Romania, Russia, Serbia & Montenegro, Tanzania, Thailand and Uruguay. Program coordinators may send the members list and fees to a, b, c or d below. New applicants living in these DP countries can send their fees in local currency to the program coordinator, who normally is either Vice President (VP) or National Representative (NR), or send directly to a, b, c or d.

- For other countries, you may send the fee/ donations to a, b, c or d, or send in local currency to the nearest VP/ NR.

a. Dr. William (Bill) C. Moldenhauer, Vice President (Assist. Treasurer), 317 Marvin Ave., Volga, SD 57071, USA. Phone: +1-605-6279309; Fax: +1-605-6279123 Attn: W.C. Moldenhauer, moldwc@itctel.com. He can receive money from US and Canadian members through Personal Check, Money Order, or Bank Draft (payable to Dr. William C. Moldenhauer), and can receive VISA and MasterCard credit cards from all over the world.

b. Mr. Zhong Yong, WASWC Secretariat, c/o ICRTS, Ministry of Water Resources, Jia 1, Fuxinglu, Beijing 100038, P.R. China. Ph: +86-10-63204370, Fax: +86-10-63204359, waswc@icrts.org. Remittances can be received in the form of Domestic Money Order from within China, SWIFT Wire Transfer (see the box below) from all countries, and UNESCO Coupons from 59 countries (see details and list of countries in www.unesco.org/general/eng/about/coupon/ or ask the WASWC Secretariat). All forms should be marked “payable to the World Association of Soil and Water Conservation”, from whom and which country.
SWIFT wire transfer can be done for both US$ and Euro, using the official exchange rate of the day, and payable through the following routes and addresses: For US$: Intermediary banks: (1) First Union National Bank, New York, International Branch (SWIFT Code: PNBPU3NNYC) or (2) Citibank N.A. (SWIFT Code: CITIUS33)
For Euro: Intermediary Bank: Dresdner Bank AG (SWIFT Code: DRESDEFF)
Beneficiary’s Banker in China: Beijing City Commercial Bank (SWIFT Code: BJCNCNBJ)
Beneficiary’s Name: ICRTS
Beneficiary’s Account Number: 010903362001201051671-82
Please indicate: The membership fee and/or donation is sent from (Your name and/or institution, and country)

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**c.** Dr. Samran Sombatpanit, WASWC President, 67/141 Amonphant 9, Soi Sena 1, Bangkok 10230, Thailand. Phone/Fax: +66-25703641, sombatpanit@yahoo.com. He accepts Bank Drafts from every country. Mark the draft “payable to Dr. Samran Sombatpanit”.

**d.** Dr. Machito Mihara, WASWC Japan, c/o Institute of Environment Rehabilitation and Conservation (ERECON), 2987-1 Onoji Machida-shi, Tokyo 195-0064, Japan. Phone/Fax: +81-42-736-8972, erecon@nifty.com. He can receive all forms of payment from within Japan, and can receive Visa and MasterCard credit cards from all over the world (mark in all forms of payment “payable to ERECON Japan”). Payment is in Japanese yen only; see more details in: http://homepage3.nifty.com/erecon/WASWCtop.htm.

**Note:** To avoid hassles and bank charges due to cash transactions in certain cases you are encouraged to pay for several years or sign up as Life member. Contact WASWC Secretariat (waswc@icrts.org) if you have any problem.