



**WORLD ASSOCIATION OF SOIL &  
WATER CONSERVATION  
(WASWC)**

# NEWSLETTER

*Reporting global SWC news quarterly since 1983*  
*In English, Spanish, French, Chinese, Portuguese, Bahasa, Russian,  
Vietnamese, Arabic, Thai*  
**VOLUME 24, NUMBER 4 (OCTOBER-DECEMBER 2008)**

*Conserving Soil and Water Worldwide – Join WASWC*

*WASWC Vision: A world in which all soil and water resources are used in a productive, sustainable & 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.*

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*The WASWC Newsletter seeks to keep conservationists worldwide informed of new developments in the field of soil and water conservation and land management issues. Please send editorial contributions to the editor at [sskukal@rediffmail.com](mailto:sskukal@rediffmail.com)*

## President's Message

**Dear members of World Association of Soil and Water Conservation, friends and colleagues**



I wish all the members of WASWC a very HAPPY NEW YEAR 2009. We have to exert much more efforts in 2009 to fulfill the objectives of WASWC successfully. I request all the WASWC members to actively participate in the activities of WASWC and contribute for the Newsletter, HOT NEWS and Journal/Proceedings. Let us pledge to make this Association grow in future so that we may collectively serve the mankind.

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## EDITOR'S NOTE



**Dear colleagues and friends,**

I wish all of you a very happy and prosperous new year 2009. Let this year prove to be more successful for our newsletter and other organs of WASWC.

Friends, our new team has been able to successfully complete four issues of the newsletter with the untiring efforts of our Past President Dr. Samran Sombatpanit. But I may mention here that during this year I or my co-editors did not receive any feedback from our members with the reasons unknown to us. This has been a greatest setback to our editorial team. It is therefore important that the editorial team gets the regular feedback to efficiently serve our members.

Dear colleagues, in the last issue I had raised a topic for discussion on the use of indigenous technology for soil and water conservation and had requested the members to have an open discussion on this topic at this platform (Newsletter of WASWC). I believe that the newsletter should just not be a mere compilation of news, but it should also collect the views on different topics from our stalwarts. This will not only help in summarizing the views of our scientists on a particular topic but also help our new generation of scientists to learn from our stalwarts.

I once again request all the members to come forward and let me have your views on the above-said topic. At the same time suggestions on any other topic are most welcome.

**SURINDER S KUKAL**

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## AWARDS



### **African President Receives FAO Award**

Liberia's President Ellen Johnson-Sirleaf, 70, received the Food and Agriculture Organization (FAO) Ceres Medal for her outstanding contribution to food security and agricultural development. In ceremonies at the National Agricultural Fair in Voinjama, Liberia, FAO Director-General Jacques Diouf lauded her determination to invest in agriculture despite the international financial crisis. The Ceres Award is named after the Roman goddess of agriculture. Read the FAO news articles at <http://www.fao.org/news/story/en/item/8842/icode/>

## The Japan International Award 2008 for Young Agricultural Researchers

On November 11, 2008, the Commendation Ceremony of the Japan Award for Young Agricultural Researchers (sponsored by the Agriculture, Forestry and Fisheries Research Council) was held at the U Thant International Conference Hall in the United Nations University in Tokyo. In this award, which is being given for the second time this year, the Chairman of the Agriculture, Forestry and Fisheries Research Council extends his commendation to young foreign researchers who have distinguished themselves by achieving excellent performances in research and development in agriculture, forestry, fisheries and other related industries for developing countries. The winners and their achievements are as follows (from left):



Dr. Thuy Thi Thu Nguyen (Network of Aquaculture Centers in Asia Pacific - NACA): Topic: *Application of molecular genetics in aquaculture and fisheries management*

Ms. Maryam Ambundo Imbuni (Kenya Resource Centre for Indigenous Knowledge - KENRIK): Topic: *Promotion and research of African leafy vegetables for improved nutrition, health and incomes*

Dr. Xiaoyuan Yan (Institute of Soil Science, Chinese Academy of Sciences): Topic: *Developing greenhouse gases emission inventories for croplands and evaluating their environmental impacts*

## UC Davis scientists receive \$4 million grant to study biodiversity in Indonesia



The University of California, Davis scientists who manage campus biological collections have received a 5-year, \$4 million grant to study fungi, bacteria, plants, insects, and vertebrates on the Indonesian island of Sulawesi, a southeast Asian island threatened by the loss of biodiversity in its tropical forests.

An international team of collaborators will conduct biodiversity field surveys, screen microbes and plants for applications to human health and energy needs, recommend strategies to conserve endangered species and develop and encourage local conservation efforts, said principal investigator Professor Daniel Potter of the UC Davis Department of Plant Sciences.

The grant is funded by the International Cooperative Biodiversity Group Program, a multi-agency program led by the National Institute of Health, with contributions from the U.S. Department of Agriculture, U.S. Department of Energy and the National Science Foundation. "The alarming rate at which biodiversity is being lost in many tropical regions has resulted in an urgent need for such efforts," said Potter, director of the UC Davis Center for Plant Diversity.

## Verghese Kurien gets Lifetime Achievement Award

The committee of Agricultural Leadership Awards 2008 instituted by the Center for Agriculture and Rural Development, India, has honored Verghese Kurien with the lifetime achievement award. The 87-year-old Mr. Verghese Kurien was the spearhead of White Revolution in India. He was selected for the lifetime achievement award because of his ample contribution towards the milk industry of India. He fulfilled the dreams of millions of milkmen across the country by implementing better techniques of the milk production and distribution. He brought a huge transformation in lives of Indian farmers under the Operation Flood.



From the website <http://profiles.incredible-people.com/verghese-kurien/>

Born on November 26, 1921 in Kozhikode, Kerala, Dr. Verghese Kurien graduated with Physics from Loyola College, Madras in 1940. Subsequently, he did his B.E. (Mechanical) from the Madras University and went to USA on a government scholarship to do his Masters in Mechanical Engineering from Michigan State University. In between, he completed special studies in engineering at the Tata Iron and Steel Company Institute at Jamshedpur, Bihar, in February 1946 and underwent nine months of specialized training in dairy engineering at the National Dairy Research Institute of Bangalore.

Dr. Verghese Kurien returned from America in 1948 and joined the Dairy Department of the Government of India. In May 1949, he was posted as Dairy Engineer at the Government Research Creamery, a small milk-powder factory, in Anand, Gujarat. Around this time, the newly formed cooperative dairy, Kaira District Cooperative Milk Producers' Union Limited (KDCMPUL), was engaged in battle of survival with the privately owned Polson Dairy,

which was a giant in its field. Enthused by the challenge, Dr. Verghese Kurien left his government job and volunteered to help Shri Tribhuvandas Patel, the Chairman of KDCMPUL, to set up a processing plant. This led to the birth of AMUL and the rest is history.

In 1965, the then Prime Minister [Lal Bahadur Shastri](#), created the National Dairy Development Board (NDDB) under the leadership of Dr. Verghese Kurien to replicate the success story of Amul throughout the country. In 1973, Dr. Kurien set up GCMMF (Gujarat Cooperative Milk Marketing Federation) to market the products produced by the dairies. Under Dr. Kurien's stewardship India became the largest producer of milk in the world.

During his illustrious career, Dr. Verghese Kurien won many accolades and awards.

## **Vietnamese agricultural leader awarded prestigious rice research honor**



A veteran Vietnamese plant breeder has won the Senadhira Rice Research Award for 2008 for his outstanding contributions to the development of many popular rice varieties in Vietnam. The award is named after Dharmawansa Senadhira, one of IRRI's most successful rice breeders, who died tragically in a traffic accident in Bangladesh in 1998.

Bui Chi Buu, Director-General of the Institute of Agricultural Science for Southern Vietnam, based in Ho Chi Minh City, has enjoyed a long and distinguished career in rice breeding during which he has emphasized grain quality improvement, salt tolerance, and resistance to pests and diseases such as blast fungus, bacterial blight, and brown plant hopper.

Dr. Buu, also a former director of the Cuu Long [Mekong] Delta Rice Research Institute, received the award at a recent meeting on the Challenge Program for Water and Food, held at International Rice Research Institute (IRRI) headquarters in Los Baños, Philippines.

## **Philippines honors De Datta for agriculture role**

<http://www.oired.vt.edu/sanremcrsp/News%20archives/DeDatta.php>



S.K. De Datta, administrative principal investigator for SANREM CRSP, has been recognized in the Philippines for his contribution to agriculture in that country and to the Green Revolution in Asia in the 1960s. The College of Agriculture at University of the Philippines-Los Baños recognized De Datta at a ceremony on May 20, 2008 and the International Rice Research Institute honored him on May 26, 2008.

The ceremonies were part of the annual meetings of SANREM and the Integrated Pest Management Collaborative Research Support Program (IPM CRSP), both of which De Datta manages at Virginia Tech, where he is associate vice president for international affairs and director of the Office of International Research, Education, and Development. Both awards recognized De Datta's contributions to Philippine agriculture and his 27 years of research and education, which includes overseeing 77 master's and Ph.D. students from 22 countries at the International Rice Research Institute. They also recognized his contributions as affiliate professor in the soil science and agronomy departments at the University of the Philippines-Los Baños; his wide-ranging research in agronomy, soil science, weed science, and other aspects of rice production; his major contributions to the Green Revolution; and his leadership role in advancing agricultural productivity for poor farmers in Asia.

## **Lithuanian honor for Mike Fullen (our WASWC Councilor), [M.Fullen@wlv.ac.uk](mailto:M.Fullen@wlv.ac.uk)**

An academic has received a top honor from the prestigious Lithuanian Academy of Sciences. Professor Mike Fullen, from the School of Applied Sciences, Univ. of Wolverhampton, UK, has been made an Academician of the Lithuanian Academy of Science (LAS). This was reported in the 'Times Higher Educational Supplement' on February 5, 2009.

Mike, who is Professor of Soil Technology, was elected September 23, 2008. Prof. Fullen gave an inaugural open lecture entitled 'SOIL – Sustainable Only If Loved.' A special reception was held in his honor on September 22, hosted by His Excellency Mr. Simon Butt (the British Ambassador to Lithuania) in the British Embassy in Vilnius. Distinguished guests attending the reception included the Ambassadors of Belgium, China and Hungary to Lithuania. These were H.E. Mr. Philip Cumps (Ambassador of the Kingdom of Belgium). These countries are all research partners in the EU Project (BORASSUS), which Mike is coordinating. For more information on this Project, please visit the BORASSUS Project web site: <http://borassus-project.net>

Mike was presented with the Award of Academician by the President of the Academy, Professor Zenonas Rokus Rudzikas. The role involves promoting and developing international scientific cooperation.

Professor Fullen said: "it is a great honor and privilege, as it is the highest honor the Lithuanian Academy of Science can bestow. It recognizes the collaborative research I have been involved in with the scientific community in Lithuania over the last 10 years in the sphere of soil erosion, soil conservation and climate change."

The Lithuanian Academy of Sciences (LAS) was founded in 1941. It is an autonomous scientific establishment which brings together the most distinguished Lithuanian scientists as well as foreign researchers whose academic activities are related to Lithuania. The award was initially proposed by Professor Algirdas Motuzas (Professor and Head of Soil Science at the National Agricultural University, Kaunas and President of the Lithuanian Soil Science Society). Professor Motuzas commented “Professor Fullen was elected to the Lithuanian Academy of Sciences due to his major contribution to the development of research in Lithuania and due to his active development and promotion of international research collaboration.”



**From left:** Mike happily advises there are positive spin-offs to being an ‘LMAkad,’ including free use of the Academicians apartments in Vilnius City Centre! Her Britannic Majesty’s Ambassador to the Republic of Lithuania, His Excellency Mr. Simon Butt; Professor Zenonas Rokus Rudzikas (President of the Lithuanian Academy of Sciences and Mike (slightly nervous!); The presentation of Mike’s open lecture ‘SOIL: Sustainable Only If Loved’ in the Lithuanian Academy of Sciences on 23 September 2008.



**Bonus photo from Mike:** Vilnius Basilica celebrates New Year for 2009 (photo courtesy Mr Saulius Marcinkonis of Lithuania).

## OBITUARY

**Professor John Thornes (1940-2008): innovative British geomorphologist** From *The Times* August 4, 2008 and sent from *Maria Asuncion Romero Diaz*, [arodi@um.es](mailto:arodi@um.es)

John Thornes was one of the most eminent and influential physical geographers of his generation, a highly original researcher and a passionate exponent and exemplar of geographical field work.

John Barrie Thornes was born in December 27 1940 and brought up in Horbury, near Wakefield, UK. Although he failed his 11-plus exams he quickly began to show academic promise. His lifelong commitment to the landscape was awakened by time he spent walking and scouting. After transferring to Ossett Grammar School he went on to obtain a first-class degree from London University. As an undergraduate, he met his future wife, Rosemary, whom he married in 1962, before his MSc at McGill University and a studentship at King’s College London, for a PhD on erosion and sedimentation in the Alto Duero in Spain.



His subsequent academic career took him to the London School of Economics with spells as a visiting scholar abroad. During this time he developed strong links with Spanish colleagues, particularly at the University of Murcia. As his work there blossomed, he entered into many fruitful collaborations that have profoundly influenced the evolution of physical geography in both Spain and Britain. This led to a fruitful exchange of ideas between the scientific communities through Thornes's field work and that of his many research students. The inventive development of theory and models, particularly for soil erosion, also ensued. This had a continuing influence on the development of geographical research in semi-arid areas. *His work was also one of the main stimuli for others in Britain to visit Spain for their own field work, and to take advantage of expanding travel opportunities to develop undergraduate field weeks in Spain — a pattern that was adopted by almost half of Britain's geography departments.*

Concurrently Thornes put his experience and language skills to good use with other field campaigns, often supported by the Royal Geographical Society (RGS), particularly to South America. The results of this work have appeared in numerous scientific papers, distilled into a treatise on Semi-arid Erosional Systems, and a more thoughtful book, with Denys Brunson, on *Geomorphology and Time*. This activity naturally led to promotion and allowed Thornes to make a wider contribution to university life, where his innovative thinking had a transforming effect on department and research strategies.

In 1981 he was appointed to a chair in physical geography and became head of the geography department at Bedford College London, where he became Dean of Science and deputy principal before moving to Bristol in 1985, initially as chair and head of department, and later as Dean of Graduate Studies in the science faculty. Finally, King's reclaimed him and in 1992 he moved back to London to lead its geography department, and became a member of its council.

In parallel with the university appointments, Thornes was strongly involved with the RGS (receiving its Patron's Medal in 1996), the British Geomorphological Research Group, of which he was chair in 1987, and the Institute for British Geographers, becoming its president in 1992.

Over the years, Thornes received grants from research councils, the RGS and latterly from the European Union. In 1990 Roberto Fantechi, for the EU, convened a meeting to promote research into desertification, initially focusing on Southern Europe. Out of these discussions Thornes took on the leadership of a series of EU projects, under the title of Medalus (Mediterranean Desertification and Land Use) to establish methodologies for evaluating and mitigating desertification, at a time when the United Nations was moving towards establishment of the UN Convention to Combat Desertification, formally established in 1994. This series of linked projects, 1991-1999, have established the agenda for all subsequent research in this area. They continue to be influential in European studies through the setting of standards for monitoring and modeling, providing a scientific basis for current work.

None of these administrative and scientific tasks interfered with his steady flow of research students, many now in senior positions, for whom he was both an inspiration and a critical taskmaster. His later scientific papers and edited volumes took on several additional themes that had become prominent in his work, focusing on the links between vegetation and geomorphology, on palaeohydrology, and on desertification coming out of Medalus and other European projects.

After recovering from a severe stroke in 1996, he traveled to China, undertook a Rhodes Fellowship in South Africa, and was most recently working on the dynamics of grazing patterns and their role in desertification. In 2005 he received an honorary degree from the University of Murcia. He was on a field trip, for once in England, when he was taken ill.

John died after a short illness on July 17, 2008, aged 67. He is survived by his wife Rosemary and their daughter and son.

**NOTE: The International Conference on Desertification in Memory of Professor John B. Thornes** will take place in Murcia, Spain during 16-18 September 2009. Those interested in participating please contact Prof. Maria Asuncion Romero Diaz, [arodi@um.es](mailto:arodi@um.es), soonest. Pls access <http://fobos.bio.um.es/thornes/doku.php> for more information.

**Roel Oldeman (1942-2008)** *From Yolanda Karpes, ISRIC (World Soil Information), [Yolanda.Karpes@wur.nl](mailto:Yolanda.Karpes@wur.nl)*

Dr. ir L.R. (Roel) Oldeman suddenly passed away on 24 November 2008. Roel was born on 16 June 1942, in Bandung, West Java, Indonesia. In 1968 he graduated from Wageningen Agricultural University and went to Hawaii for his PhD study on sugarcane: "Analysis of Sugarcane Production in Relation to Climate, Soils, and Management".

From 1972 to 1980 he worked as agroclimatologist at the Central Research Institute for Food Crops (CRIFCI) in Bogor, Indonesia, in the framework of a bilateral agricultural assistance program between Indonesia and the Netherlands. His research activities focused on the relationship between climate and rice-based cropping systems. From 1980 to 1982 Roel worked as a guest researcher at International Institute for Land Reclamation



and Improvement (ILRI), Wageningen, the Netherlands. There he wrote the technical report "A Study of the Agroclimatology of the Humid Tropics of Southeast Asia", at the request of the Interagency Group (FAO, UNESCO, WMO) on Agricultural Biometeorology. Roel was a visiting scientist at the International Rice Research Institute (IRRI), Los Baños, Philippines from 1982 to 1985, where he was a Project Manager of a

joint IRRI-WMO Rice-Weather Studies program.

Since the mid 1980s until his retirement in 2002 he worked at ISRIC, Wageningen, The Netherlands. First as a senior scientist and as part of his duties he worked for 12 months on the agroecological characterization of Madagascar in the framework of a Rice Research and Training Project of the International Rice Research Institute (IRRI). From 1987 to 1990 Roel was the project manager of a joint UNEP-ISRIC project: World Map on the Status of Human-Induced Soil Degradation (GLASOD, published in 1990). That map has been widely used and was his masterpiece.

From 1992 to 2002, he was the director of ISRIC and responsible for the management of ISRIC with the following mandate: The collection and dissemination of scientific knowledge of the soils of the world aimed at a better understanding of their characterization, classification, distribution, and capability for sustained land use at local, national, and global scale. After his retirement, he worked as volunteer for the Openluchtmuseum (Open Air Museum) in Arnhem. Roel had a sudden stroke on the 22<sup>nd</sup> November 2008 and passed away two days later. He will be remembered as a highly amiable and open-minded person, who always was a good company, and inseparable from his pipe. He is survived by his wife Henneke and daughter Mariëtte.

**NOTE:** Dr. Olderman was instrumental in producing the WASWC book of 2001 under the title **Response to Land Degradation**, edited by E.M. Bridges, I.D. Hannam, L.R. Oldeman, F. Penning de Vries, S.J. Scherr and S. Sombatpanit, ISBN 812041942, available from [www.scipub.net](http://www.scipub.net). Many WASWC members would miss him greatly. We offer our sincere condolences to his family.

**MEMBERS' FORUM - members are most welcome to write to us to share your opinion**

**What members say about Guidelines for Successful Meetings** (<http://waswc.soil.gd.cn/consti-decentra.html>)

- Thanks Samran, (the Guidelines for Successful Meetings) is very useful. - Alfred Hartemink
- It is good to come to the final version of Guidelines. As you have said, 'A good start means half of success.'  
- Henry Lu Shunguang

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**What members say about SWAT (Soil and Water Assessment Tool) book**

In continuation of earlier publications, the team of 17 WASWC editors have brought out its publication No. 4 on SWAT which deserves high compliments. The publication is very comprehensive for the global use of SWAT. The impact assessment of soil and water conservation measures is very complex due to the dynamism of the process. SWAT technology was in limited use previously, but due to this publication it will get global application eventually. In the book the SWAT technology has been explained along with its application in this publication which will enable the better understanding of evaluation assessment. Also the DVD supplied along with the publication is very useful for understanding the SWAT and its application through the solution.

The WASWC deserves high appreciation for their hard work in bringing this important publication.

- Suraj Bhan, President of Soil Conservation Society of India, soilcsi@yahoo.co.in

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**And all other issues ...**

Dear all,

Click here on to see a piece of good news; soil is back in news? <http://news.bbc.co.uk/2/hi/science/nature/7826275.stm>

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Dear Editor,

The Ministry of Environment of Colombia has declared the year 2009 **The Year of Soils**. I will integrate a working group representing University of Caldas in order to organize different activities to celebrate this special year dedicated to soils. Thus, I look forward to listening to ideas from WASWC members.

Franco Obando Moncayo [fobando1@yahoo.com](mailto:fobando1@yahoo.com), Universidad de Caldas, Manizales, Colombia

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Dear Samran,

Thank you for the newsletter, this is very interesting! It is be good for us and our organizations to network more, beyond Landcare International idea. My job includes forming international linkage. I have attached a short description of what we do here at Gobabeb. Perhaps in the future we can have our researchers and students to contribute to your newsletter. In addition to that, I am also the editor of our newsletter here at gobabeb and will be glad to send to you and any member of WASWC who are interested.

Emily Mutota [emilym@gobabeb.org](mailto:emilym@gobabeb.org), [www.gobabeb.org](http://www.gobabeb.org)

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Dear Dr. Samran Sombatpanit,

I am so happy to receive your message which you have sent us so far. I would like to inform you that currently I am not available at CARDI because i come to study at Khon Kaen University for two years and six months. I think that it is very important for us to read all your messages.

Please keep in touch.  
Ung Sopheap

^^

Hello Samran,

Thank you for all what you do to create links between all the good initiatives around us (for example, I contacted Bert after having read his announcement about his forum on roots in your last HOT NEWS. It was a pleasure to hear from him after our meeting in Beijing, and his forum seems very promising).

Murielle GHESTEM, France [yellownosed@gmail.com](mailto:yellownosed@gmail.com)

^^

Dear Friends,

I would like to invite you to open the following web page [www.incagro.gob.pe](http://www.incagro.gob.pe), specifically the page: [http://incagro.gob.pe/~incagro/apc-aa-files/67a4a69687d83de98a0ff99b37f34961/INCAGRO\\_Converting\\_ideas\\_into\\_values.pdf](http://incagro.gob.pe/~incagro/apc-aa-files/67a4a69687d83de98a0ff99b37f34961/INCAGRO_Converting_ideas_into_values.pdf)

I am now the Executive Director of World Bank Project INCAGRO in Peru. Since 2001, INCAGRO has shared innovative experiences with thousands of producers, research organizations, private sector civilian organizations, professional organizations and successful companies in the country. With these alliances, INCAGRO has performed co-financing to the order of \$36,000,000 to make more dynamic the system of agrarian innovation (livestock, agriculture,

fish farms, forest grazing, forestry and others. All these sectors have to do with the great limits that still exist that Peru is ranked not only as a producer of food in the world but also with potential as an agricultural exporter of competitive strength.

One of the accomplishment of INCAGRO has been the advanced institutional development which has defined clear playing rules in fomenting the wide participation of producers, businessmen, NGOs, state organizations and international institutions that have animated or reanimated agrarian innovation in this country. On the other hand, among the strengths of INCAGRO stands out the quality of the professionals joined with INCAGRO who daily bet on an innovative nation with great ethical value and respect for the rights of their countrymen who every day assume the risks which the country and its surroundings generate.

INCAGRO, with a modest number of decentralized professionals throughout the 24 regions of Peru, has managed to anticipate the new policy of decentralization and has successfully provided co-financing for more than 500 innovative projects. These projects have animated the principal agricultural and livestock activities of the country. Main promoted products were asparagus and other food crops: mango, avocado, grape, banana, chirimoya and other fruits; coffee and cacao, native potato and tubers such as sweet potato; milk derivative products such as from ranch vicuña and sheep; fiber derivatives from alpaca and vicuña; guinea pigs; forest products and other species of high value in developed countries.

Currently, INCAGRO continues to co-finance innovative projects but with a focus more oriented to the development of added value and the associated training to guarantee the sustainability of the competitive capacity of the country.

Dr. José R. Benites (Pepe)

Director Ejecutivo

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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

*Red point on the shore of Caspian Sea: [College of Natural Resources and Marine Sciences, Tarbiat Modares University, Noor 46417-76489, Mazandaran Province, Iran](#)*



Dear Dr. Samran

Please find the exact place of our college. We also have a plan to admit PhD students from abroad through our International Affairs Department located at the headquarters in Tehran. But the main medium is Farsi language though we would communicate with foreign students in English.

S.H.R. Sadeghi Ph.D.

Head and Associate Professor

Department of Watershed Management Engineering, College of Natural Resources and Marine Sciences, Tarbiat Modares University, Noor 46417-76489, Mazandaran Province, Iran

[sadeghi@modares.ac.ir](mailto:sadeghi@modares.ac.ir), [shrsadeghi@rediffmail.com](mailto:shrsadeghi@rediffmail.com), Tel.: +98 122 6253101-3, Fax: +98 122 6253499

## NEW OFFICER

### WASWC Vice President for Iran

Dr. Seyed Hamidreza Sadeghi ([sadeghi@modares.ac.ir](mailto:sadeghi@modares.ac.ir), [shrsadeghi@rediffmail.com](mailto:shrsadeghi@rediffmail.com)) was born at Khonsar, Iran. He completed his A.Sc., B.Sc. and M.Sc. at Giulan, Gorgan and Tarbiat Modares Universities, Iran, in Watershed Management Engineering in 1987, 1990 and 1993, respectively. He received his Ph.D. in Soil and Water Conservation Engineering, College of Technology at G.B. Pant University of Agriculture and Technology, India, in 2000. He also was awarded by the Matsumae International Foundation (MIF), Japan, to conduct his post-doctoral program at Kyoto University (SABO Lab) on suspended sediment yield mechanism in forest watershed in 2006. He worked in national watershed management projects for few years. He has started giving lectures at many Iranian universities since 1993. He has published more than 65 papers in Iranian and international journals in field of soil erosion and modeling of hydrologic processes. He also is a reviewer for more than 21 papers, and is associate editor and editorial board member of a number of recognized Iranian and international journals.



## MEMBERS' CONTRIBUTIONS

### ▲ DESIRE Project

**The DESIRE Project – choosing and testing alternative land use and management conservation strategies** – Nicola Geeson [nicky.geeson@googlemail.com](mailto:nicky.geeson@googlemail.com)









Scientists today are learning to emerge from their universities and consult with a wide range of stakeholders, including land users, policymakers and schoolchildren. This is a better way to convert the science to practical applications. DESIRE (Desertification mitigation and remediation of land – a global approach for local solutions) is a project that will build on such interactions. Scientists and stakeholders will choose and evaluate promising alternative land use and management strategies in selected areas affected by desertification. This is one of the European Commission's Integrated Projects. It started in February 2007 and runs until 2012.

Many of the DESIRE study site countries border the Mediterranean, but there are also sites in Chile, Mexico, Botswana, Cape Verde and China. The selected sites experience a wide range of problems, including soil erosion by wind or water, the effects of forest fires or overgrazing, salinisation and droughts or flash floods. At each site current desertification issues are being analyzed, and mapped using desertification indicators. Appropriate new strategies to combat the desertification problems have been chosen at workshops with local people. Experimental plots to try out these ideas are being set up, and the results will be evaluated to determine which are likely to be suitable for neighboring farms or other similar areas. A variety of water conservation measures are included in the experiments, that reduce evaporation and also conserve moisture retained in the soil. There are many ideas that could be useful, but in the end scientists and land users must agree on the most cost-effective solutions.

In the public part of the DESIRE website (<http://www.desire-project.eu/>) you can register to receive DESIRE newsletters by email, or download them directly from 'DESIRE Publicity' → 'Newsletters' on the main menu. The first newsletter is now downloadable in three versions: 1) written for those with a scientific background, 2) in non-scientific language, and 3) in simpler language for general interest. The newsletters will soon be available in the languages of the study sites as well. DESIRE study site leaders will be printing off text and photographs from the newsletters for those stakeholders who do not have access to email or have poor literacy. In this way, DESIRE aims to reach as many different stakeholders as possible. The first issue contains a summary of what the DESIRE Project is doing, and the main desertification issues in the DESIRE study sites. The next Newsletter will move on to the strategies that have been chosen to combat desertification in each study site.

You may simply click on the links in the table below to download the pdf Newsletters.

Issue	General interest	Landusers	Scientists & Descision makers
February 2009	 <a href="#">1.6Mb</a>	 <a href="#">1.6Mb</a>	 <a href="#">1.6Mb</a>
February 2009 (Fr)	 <a href="#">850Kb</a>	 <a href="#">880Kb</a>	 <a href="#">900Kb</a>



Desire study sites in various countries.



**Left:** Boteti field site, Botswana (Photo: M. Reed); **Right:** Maintenance of terraces in Cape Verde (Photo: E. van den Elsen).

### ▲ Dr. Samran Sombatpanit visited Dalian University of Technology

Recently Dr. Samran visited Dalian University of Technology. On July 20, Dr. Samran met Professor Z.Y. Ma, vice dean of the School of Civil and Hydraulic Engineering, Professor S.G. Xu, director of the Institute of Environmental and Water Resources and other academics. Next morning, Dr. Samran gave a lecture titled *Development of Soil and Water Conservation Practices in the Past and a New Challenge*, for the teachers and graduate students from the School of Civil and Hydraulic Engineering. The speech aroused great attention and gained a favorable comment from the audiences. Dr. Samran introduced the development of WASWC and encouraged the audiences to join WASWC. After the report, Dr. Samran visited the laboratories in the School of Civil and Hydraulic Engineering and saw some soil and water conservation practices around Dalian City.

Dr. Samran Sombatpanit, the immediate past president and general coordinator of the World Association of Soil and Water Conservation is a scholar who has made great contributions on the international academic communication.



**Left:** Dr. Samran gave a presentation on development of soil and water conservation practices; **Right:** Dr. Samran visited the State Key Laboratory of Coastal and Offshore Engineering in the School of Civil and Hydraulic Engineering.

- X.Z. Xu, Dalian University of Technology, Dalian, China. [xz xu@dlut.edu.cn](mailto:xz xu@dlut.edu.cn)

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Issue 5

## INSIGHT ON ULTRA-LOW SEDIMENT FLOW PROVIDED BY ARGONAUT-ADV®

### LOUISIANA, USA.

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> [www.sontek.com/news/UltraLowFlow.pdf](http://www.sontek.com/news/UltraLowFlow.pdf)



## ACOUSTIC DOPPLER TECHNOLOGY ENABLES FAST ASSESSMENT OF POST-QUAKE HYDRAULIC CONDITIONS



### SICHUAN PROVINCE, China.

A 7.9 magnitude earthquake in China left millions homeless and susceptible to thirst and water-borne disease as it ravaged the country's hydrology monitoring stations. SonTek/YSI immediately responded with assistance and hydroacoustic equipment — allowing hydrologists to gauge the speed and strength of water flow, as well as monitor drinking water distribution. The advanced RiverSurveyor®



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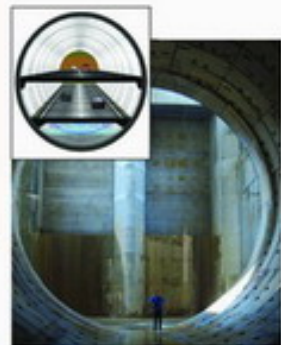
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### KUALA LUMPUR, Malaysia.

Devastating floods are common in crowded Kuala Lumpur, necessitating the massive Stormwater Management and Road Tunnel (SMART) project. Because accurate and timely information on discharge and velocity are vital for success, 16 SonTek Argonaut-SL and Argonaut-SW current meters were required. Says Bruce Sproule, Greenspan Technology's International Manager, "SonTek equipment...was the easiest and most accurate to incorporate into this project. The support is good and the equipment reliable."

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## FEATURES

### CA (CONSERVATION AGRICULTURE) HIGHLIGHT

‘Towards Alleviation of Poverty in the Tropics:  
An International Technical Workshop on  
INVESTING IN SUSTAINABLE CROP INTENSIFICATION:  
THE CASE FOR IMPROVING SOIL HEALTH’<sup>1</sup>.

FAO, Rome: 22-24 July 2008

#### SUMMARY OF THE MEETING

The present Workshop built on a previous meeting which took place in March 2007 at Newcastle University, UK, entitled:

‘The Importance of Improving Soil Conditions for Water, Plant Nutrients and  
Biological Productivity to Sustain Agricultural Growth  
under Rising Population Pressure and a Changing Climate’.

Reasons for concern are that, in many situations, current common agricultural practices - notably tillage and other inappropriate land management - have resulted in deterioration of soils that restrict both yields, profitability and sustainability of agricultural land uses. These are matters of special concern in the warm/hot subtropics and tropics in the face of rising pressures of population growth and the anticipated likely problems associated with climate change.

At the Newcastle meeting participants had considered that a paradigm-shift towards conservation-effective agricultural systems (as exemplified by well-managed crop rotation and mulch-based zero-tillage systems) would be essential if agricultural growth is to be achieved and sustained.

Planning of this second Workshop began immediately after the conclusion of the Newcastle meeting. In the 15 months between the Workshops, further examples worldwide of good land husbandry practices based on the 'no-till' paradigm mentioned above have come to be grouped together under the generic heading of 'Conservation Agriculture', whose development spread across the world is actively encouraged by the Food and Agriculture Organization of the United Nations.

Prior to the second Workshop, a technical paper, entitled '*Underpinning Conservation Agriculture's Benefits: the Roots of Soil Health and Function*'<sup>2</sup> was sent to prospective participants. Its chapter-headings are: (1) Introduction - Challenge; (2) Components of soil productivity; (3) Some adverse effects of 'conventional' tillage agriculture; (4) Key features of optimum Conservation Agriculture; (5) Impacts of CA; (6) Hindrances to progress; (7) CA in sub-optimal, problem areas; (8) Thinking unconventionally; (9) Key areas for further investigation; (10) Conclusions.

As an introduction to the forthcoming meeting, a short technical note complemented that produced for the first Workshop (see above) with a definition of Soil Health, arising from the biological nature of soils, and emphasizing the requirement to maintain sufficient supply of organic matter as a substrate for biotic activities within soils<sup>3</sup>.

The basic intention of this second Workshop was to discuss, define and propose modalities for 'mainstreaming' CA appropriately into regional, national and even local policies, plans and programs, so that the improvement and sustainability of livelihoods of both land and people would be encouraged, facilitated and supported as the norm rather than the exception.

Two introductory sessions described the organizational and technical backgrounds of the meeting. These were followed by three sessions of powerpoint presentations of CA examples: from Latin America (Brazil; Paraguay; Argentina); from Asia (China; Kazakhstan; DPR Korea); and from Africa (Tanzania and Kenya; Tunisia; Swaziland; Madagascar; and an overview of emerging lessons from Africa as a whole).

Three sessions were dedicated to discussions in three parallel Working Groups: (1) Science and Technology; (2) Field practice and Development; (3) Policy and Financing. The purpose was to discuss and marshal the information which had been presented, and to provide - to the plenary group and to the team drafting the report on the outcome of the Workshop - an input from each of the special topic groups under the subheadings: Principles and Issues; Investors and Opportunities for Investment; Cross-sector Knowledge-brokering; Contributions to an Action Plan.

The results of their discussions and recommendations were presented to, and discussed in plenary sessions, and the agreed compilations transmitted to the Drafting Team. A draft Action Plan was prepared and presented, again in plenary session, for comments by the three subject-matter Working Groups. The draft plan was amended accordingly, and the final draft version was then adopted by the participants.

The finalized Action Plan, entitled 'A Framework for Action', provides a concise summary of the presentations and discussions, and the recommendations that arose from them, moulded into statements of the central concerns and the characteristics of CA which can effectively address them. Goals and strategies for effective action - both agronomic and organizational - are set out under the main headings: Science and Technology Development; Underpinning Scaling-up of Conservation Agriculture; Creating Supportive Policies, Putting in Place Incentives, and Tapping Resources. Each of these is subdivided into: Strategic Issues - Goals - Priority Actions.

Under the heading 'Next Steps' it records that the Workshop participants recognize the value of joint action and wish to contribute to the emergence of greater and sustainable institutional and human capacities to:

- Acquire, evaluate, share and disseminate accurate, unbiased and diverse **knowledge** about the principles, practices and impacts of conservation agriculture;
- Raise **understanding** in governmental circles, professional organizations and the general public of the benefits, limitations and solutions relating to CA;
- Identify, share, enhance and give more ready access to multidisciplinary **expertise** on CA; and
- Support diverse **initiatives** for research, extension, advocacy and evaluation of CA that can advance the state of the art and the effective application for CA.

Participants wish to establish and sustain a **multi-stakeholder knowledge management system** that will be suited to the needs of diverse users, and in particular of farmers who can benefit from more appropriate and effective CA practices. They wish to set up a system of interlinking web-based system of 'Communities of Practice' with some overarching identity and common purpose, and which will engage a variety of agencies, professional organizations, and publics to acquire mindsets and create programs more supportive of CA. Possible areas of focus for specific constituent CoPs would be: Knowledge-generation and exchange for CA; Advocacy for CA among the public and decision-takers; Training and information-exchange support for CA initiatives in the field; Education for CA through curriculum improvements in primary and secondary schools, plus enrichment of university and professional education. A Facilitating Group is envisaged to both initiate such a process and prepare both a Policy paper on CA, and an Analytical paper on CA's relative costs and benefits.

At the conclusion of the two-day meeting, the 98 participants from 40 different countries agreed that progress had been made towards putting their agreed Framework for Action into operation.

oOo

T.F.Shaxson, [fshaxson@gotadsl.co.uk](mailto:fshaxson@gotadsl.co.uk) (October 2008)

*[2-p. Summary of Rome Workshop, derived from 'Rome wksp synopsis dre-7-10-08', for use in draft Report on the meeting, as suggested in AK's to TFS at TAAW 142 31-10-08]*

<sup>1</sup> From 'Agenda+Bkgd 7-7-08.pdf'

<sup>2</sup> see 'Main Document.pdf'. = 'Underpinning Conservation Agriculture's Benefits...'

<sup>3</sup> see 'Rome FAO Technote Update\_2 final.pdf'

## **CC&C (CLIMATE CHANGE AND CARBON HIGHLIGHT)**

### **International Carbon Sequestration Meeting: The Conservation Technology Information Center (CTIC) and United Nations Carbon Offset Meeting Paves the Way for Paying Farmers to Capture Greenhouse Gases, Purdue University, Indiana, U.S.A., October 28-30, 2008**

Supported by science and spurred by emerging markets, more than 80 participants in an international workshop on carbon sequestration called on world policymakers to focus research and create fair-priced carbon offset markets that would pay farmers to adopt conservation agriculture practices that will capture carbon in the soil. Carbon offset markets would allow farmers to sell the service of capturing and storing – sequestering – carbon from the atmosphere. In turn, that would help offset the levels of greenhouse gases emitted by human activity, essentially locking up enough carbon in the soil to cancel out airborne emissions of tons of carbon dioxide, methane and nitrogen oxide. Currently, carbon credits from industrial sources are widely traded, but soil carbon has generally not been a marketable commodity.

The meeting – called the Conservation Agriculture Carbon Offset Consultation – was hosted by the Conservation Technology Information Center (CTIC) and the Food and Agriculture Organization of the United Nations (FAO) at the Purdue University campus October 28 through 30. Bringing experts from an array of disciplines, from soil science to economics, to focus on carbon sequestration was a bold move to use science and markets to promote opportunities for farmers around the world.

“To create working markets for farmers’ efforts to capture atmospheric carbon, we need to understand the science of how carbon acts in the soil, and the science behind no-till systems,” said Karen Scanlon, executive director of CTIC. “With that insight, we can quantify the effect that farmers have with specific practices and on specific soils, and create a fair compensation structure for those effects.”

#### **Working Meeting**

After sharing their research results and field experiences from six continents, the participants spent several hours at the end of the meeting’s third day in a lively discussion, hammering out a position statement calling for the inclusion of soil carbon in worldwide carbon offset markets.

“This has been one of the better meetings I’ve been to because the focus has been on ‘this is what we know, these are the answers we have, this is what we can accomplish today,’ rather than focusing on the problems we have and what we don’t know,” said Dan Uthe, an industrial process consultant with Novectra in Johnson, Iowa.

The first day of the consultation was dedicated to exploring the science of soil carbon sequestration in the soil. Researchers from the South American tropics, the Australian bush, the Midwestern United States and China presented the results of their studies on how soil carbon levels responded to various tillage regimes. Not surprisingly, there were no simple answers.

Changes in soil carbon are small – imagine finding 1,000 pounds of carbon in a mass of soil 2.5 acres in area and 3 feet deep. Complex chemistry dictates that the soil can only sequester a limited amount of carbon per year, and that after a certain number of years – scientists believe it is 15 to 20 years – a field reaches a plateau.

To make it even more complex, the soil's capacity to store carbon depends on soil type, tillage system, the use of cover crops, cropping history and how much carbon it lost in the first place. Research from highly degraded soils in South America put into improved pasture showed dramatic jumps in carbon levels after 5 years – much higher storage than Midwestern soils in the U.S. Deep-rooted pasture plants also have the capacity to place carbon deeper into poor South American soils than annual crops do in cooler climates with richer ground. However, Corn Belt farms have the capacity to capture and store significant amounts of carbon, too.

“The higher the clay content, the more capacity there is to store carbon,” said Charles Rice of Kansas State University.

### **Which Practices Help?**

The less tillage used, the better the sequestration of the carbon, according to many scientists at the meeting. Though there were lively discussions on definitions of terms such as “conservation agriculture” and “no-till,” the data showed that tillage burns soil carbon and releases greenhouse gases. The difference in the amount of crop residue required to rebuild soil carbon stocks also varied widely. Joao Carlos de Moraes Sa of the University of Ponta Grossa in Brazil pointed out that tropical Brazilian soils consume 9 to 14 tons of crop residue per hectare each year – often in a matter of months – while Rice's studies in Kansas showed that 3 tons of residue per hectare in his state was enough to yield an increase in soil carbon.

In Brazil, Telmo Amado of the Federal University of Santa Maria plants corn and a deep-rooted, perennial pasture grass called *Brachiata* together for great sequestration results. Tightly planted corn quickly grows tall, while shaded *Brachiata* sends roots deep into the soil. The result is a tremendous amount of biomass above and below the ground – a cash crop, a grazing opportunity and plenty of residue for carbon-fixing microbes.

But just growing biomass isn't enough, says Amado. “One side of the equation is introducing this carbon,” he noted. “The other side is how we stabilize it in the soil. Both physical and chemical protections are important.”

That means protecting the soil surface with plenty of residue, maintaining soil structure by no-tilling or minimizing tillage, keeping soil microbes healthy (again through minimal soil disturbance), fertilizing crops adequately, avoiding soil compaction and rotating crops. “It's really *site-specific*, and we really need to understand the crop system we're talking about,” said Amado.

### **Got to Pay**

Building carbon levels in the soil delivers a variety of important benefits, from improved soil quality to better water-holding capacity, higher fertility and resistance to erosion. Still, the biggest enticement to sequestering carbon will be creating markets through which farmers can sell the service they provide.

“I think what we're really looking for as a farm organization, or society in general, is some way to reward farmers and ranchers for doing things like storing carbon and some other environmental practices,” said North Dakota farmer Dale Enerson, who serves as director of the Carbon Credit Program for the National Farmers Union in Jamestown, N.D.

The National Farmers Union has served as an aggregator of carbon credits, collecting pledges from 3,700 growers in the U.S. to sequester carbon on 4.7 million acres of cropland and rangeland and selling the bundle of carbon credits on the Chicago Climate Exchange (CCX). Participating growers received an average of \$1.20 per ton of sequestered carbon. Official CCX estimates for carbon sequestration range from 0.2 to 0.6 metric tons per acre on no-tilled cropland, 1.0 metric ton per acre on long-term grassland (such as CRP ground) and 0.12 to 0.52 metric tons on rangeland with enhanced management practices.

In a pioneering carbon offset trading program in Alberta, Canada, 47 percent of the offsets are from agricultural land. On the Chicago Climate Exchange, 25.52 percent of the offsets have been purchased from farmers. In Canada, provincial carbon offset trading in Alberta and Saskatchewan are paving the way for nationwide caps on industrial greenhouse gas emissions that will kick in on January 1, 2010. Capping emissions will boost the market for tradable carbon offset credits, and agriculture wants to be part of the package.

Preparing soil carbon offset credits for a full-scale, regulation-driven market will require policymakers to sort out an array of issues, ranging from how long the contracts should be, who owns the carbon (the operator or the landowner), how practices are verified, and how to handle situations in which an operator releases carbon by disturbing the ground in violation of his contract.

“These cross-cutting issues can be worked out by working together,” noted Don McCabe, an Ontario farmer who serves as vice president of the Soil Conservation Council of Canada, “because at the end of the day, it's the same science. We're starting to see the ball running down the hill. We've got to keep it rolling.”

Though voluntary markets have kept the value of a ton of sequestered carbon low – prices on the Chicago Climate Exchange have ranged from \$0.90 to \$7.50 per metric ton, and Alberta prices have ranged from \$6.00 to

\$12.00 – McCabe believes a free market in which buyers are motivated by regulatory emissions caps could reach \$65 per metric ton by 2020.

That would be music to the ears of farmers – and the participants in the October meeting. “There has to be a fair-price incentive,” said Rattan Lal, director of the Carbon Management and Sequestration Institute at The Ohio State University, “and \$2 or \$3 or \$4 per acre in the market isn’t going to do it.”

Meeting sponsor Theodor Friedrich, senior officer for Crop Production Systems Intensification in the FAO’s Crop and Pasture Service at the organization’s world headquarters in Rome, Italy, said the program exceeded his expectations. “We had a very good, sound gathering of experts and we had an unexpectedly high degree of coinciding views and agreement, and that allowed us to come up with a fairly punchy, clear and concise document with relevant recommendations,” he said. “I could imagine that this meeting, the outcome and the proceedings being produced might be future references to further our objective to get soil carbon into the international carbon trading markets.”

*The Conservation Agriculture Carbon Offset Consultation was hosted by the Food and Agriculture Organization of the United Nations (FAO) and the Conservation Technology Information Center (CTIC), with sponsorship from Agrotain, Mosaic, Syngenta, the National Corn Growers Association, Case IH and the Indiana Soybean Association. Further information on the consultation, no-till farming and carbon sequestration is available at CTIC’s web site, [www.conservationinformation.org](http://www.conservationinformation.org).*

## **BIOFUEL HIGHLIGHT**

### **▲ Biofuels soon to be measured by international standards**



**Three hundred experts and representatives of the public and private sector have come together in the Roundtable on Sustainable Biofuels, housed at the EPFL Energy Center, to develop global norms for the economic, social, and environmental impacts of biofuels.**

LAUSANNE, August 13, 2008 – Are biofuels a panacea or a threat to climate, food and energy security? While the answer is indeed “it depends”, pundits so far have not agreed on global criteria to evaluate the positive or negative impacts of a certain crop, produced in a certain area, processed in a certain way into a biofuel to be used in a certain place.

However, such diverse constituencies as businesses, academics and environmentalists seem closer to a previously unlikely agreement about the economic, social, and environmental sustainability of biofuels. A critical step was announced today, when the Steering Board of the Roundtable on Sustainable Biofuels (RSB), an international initiative hosted by the Energy Center at the Swiss Federal Institute of Technology in Lausanne (EPFL), endorsed the first draft of a global sustainability standard for biofuels.

The standard is intended to be used by investors, governments, corporations, and civil society groups to assess the sustainability of different biofuels. “With all of the mixed messages we hear about biofuels, there is a clear need for a standard that can differentiate the good from the bad,” said Claude Martin, chair of the Roundtable and former Director-General of WWF International. “For an issue of such seminal importance, it was necessary to bring many different stakeholder groups together to agree on how to define and measure sustainable biofuels. The publication of the first draft standard today represents an important consensus for how we can judge the development of this industry”.

The draft criteria of the Roundtable for Sustainable Biofuels, developed through a multi-stakeholder process, are based on a comprehensive “land to tank” analysis, covering the whole chain of biofuels’ production. ‘Version Zero’ of the standard will now undergo six months of global stakeholder consultation for incorporation into what will become Version One to be released in April, 2009. In-person feedback sessions on Version Zero are being planned in East Asia, Europe, Mozambique, Mali, and throughout the Americas. “Any interested stakeholder is welcome to attend these meetings or give feedback online,” explained Charlotte Opal, Head of the RSB Secretariat. “Our hope is that by February, 2009, all interested stakeholders will have had their chance to influence the criteria”.

Over 300 experts from corporations, civil society groups, academic institutions, and government agencies from nearly 40 countries helped draft Version Zero of the standard, through teleconferences, an innovative Wiki format ([www.bioenergywiki.net](http://www.bioenergywiki.net)), and in-person meetings in Switzerland, Brazil, China, India, and South Africa. The standard addresses the major issues of concern regarding biofuels’ production, including their potential contribution to climate change mitigation and rural development; the protection of land and labor rights; and their impacts on biodiversity, soil pollution, water availability and food security. Version Zero can be accessed here: <http://cgse.epfl.ch/page70341.html>.

The Energy Center at the Swiss Federal Institute of Technology in Lausanne, EPFL (one of the two federal institutes of technology in Switzerland) houses the Roundtable on Sustainable Biofuels. Steering Board members include, among others, individuals from BP, Bunge, EPFL, the National Wildlife Federation, the United Nations

Environment Programme, Petrobras, Shell, Swiss and Dutch federal agencies, TERI - India, Toyota, UNICA (the Brazilian sugar producers' union), the World Economic Forum (WEF), and the World Wild Fund for Nature (WWF).

For more information, please call Charlotte Opal, +41 21 693 5351, or e-mail her at [charlotte.opal@epfl.ch](mailto:charlotte.opal@epfl.ch). The Roundtable's website is <http://EnergyCenter.epfl.ch/Biofuels>.

### ▲ Air New Zealand to test biofuel



Air New Zealand will make its first commercial flight using biofuels as it looks to cut fuel consumption and carbon emissions, the national carrier said on Wednesday. The flight on Dec. 3 out of Auckland will use a 50:50 blend of standard jet fuel and a biofuel made from the jatropha plant in a Rolls Royce engine on a Boeing 747-400, the airline added.

"The blended fuel meets the essential requirement of being a 'drop-in' fuel, meaning its properties will be virtually indistinguishable from traditional Jet A1 fuel," said Air NZ's chief pilot, David Morgan, in a statement. Jatropha is a plant that grows up to 3 m and produces inedible nuts, which contain the oil. It is grown on arid and marginal land in Africa.

Air New Zealand told Reuters in June it hoped to use one million barrels of biofuel a year, about 10% of its fuel consumption, in its jet fleet by 2013. Shares in Air NZ, about three-quarters owned by the New Zealand government, last traded steady at NZ\$0.91, in an overall weaker market. British-based Virgin Atlantic used a bio-jet fuel blend made from babassu and coconut oils in a commercial flight in February 2008. (\$1=NZ\$1.75) (Reporting by Glen Johnson and Gyles Beckford, Editing by Mark Bendeich).

From [Thomson Reuters Carbon Markets Community](#), a free online network for carbon market and climate policy professionals

### ▲ Biofuel can eliminate carbon debt – from Sidney Clouston [CloustonEnergy@aol.com](mailto:CloustonEnergy@aol.com)

New Study Shows Biofuel 'Carbon Debt' Can Be Eliminated. A newly published study shows that effective land management practices can reduce the so-called 'carbon debt' attributed to biofuels to near zero. Greenhouse gas emissions associated with growing agricultural feedstocks for biofuels can be greatly reduced using available crop management techniques, such as no-till agriculture, according to the new study by Bruce Dale and Seungdo Kim of Michigan State University, and Hyungtae Kim of Phillips Academy Andover.

Brent Erickson, executive vice president of the Biotechnology Industry Organization's (BIO) Industrial & Environmental Section, noted that the study is relevant to the continuing debate on the life cycle assessment of biofuels to be included in the EPA's rules for the Renewable Fuel Standard. "Increased domestic biofuel production and use can reduce America's reliance on oil, which is the key to cutting U.S. greenhouse gas emissions in the transportation sector. This new study makes an important contribution to our understanding of how to produce these renewable biofuels more sustainably. It also provides a counterpoint to previously published scenarios of international land use change that greatly overestimate greenhouse gas emissions," Erickson said. "Measuring greenhouse gas emissions from biofuel production and international land use change has received a great deal of attention, but the science is still in its infancy and still contains many uncertainties, making the EPA's task of regulatory analysis difficult," Erickson added. "This study shows that applying best practices in biofuel production and agriculture can dramatically improve the outcome of life cycle analysis for biofuels. Available crop management practices, such as no-till agriculture, which is already in widespread use, can significantly reduce the greenhouse gas emissions attributed to biofuels." The study, "Biofuels, Land Use Change, and Greenhouse Gas Emissions: Some Unexplored Variables," was published January 6 in the journal *Environmental Science & Technology*. The study concludes: Existing land use change studies have not considered important variables that can improve the greenhouse gas emissions of biofuels. Cropping management following land use change is a key factor in determining greenhouse gas emissions associated with land use change. No-till agriculture can reduce the carbon debt associated with converting grassland and temperate zone forests to crop production to 4 and 20 years, respectively. No-till with cover crop agriculture can create a carbon sink, resulting in higher soil organic carbon levels than those in unmanaged forests and grasslands. The full study can be accessed at <http://pubs.acs.org/doi/abs/10.1021/es802681k>.

## SOIL EROSION HIGHLIGHT

**China's crops at risk from massive erosion** (081121) Reuters (Reporting by Emma Graham-Harrison)



BEIJING - Over a third of China's land is being scoured by serious erosion that is putting its crops and water supply at risk, a 3-year nationwide survey has found.

Soil is being washed and blown away not only in remote rural areas, but near mines, factories and even in cities, the official Xinhua agency cited the country's bio-environment security research team saying.

Each year some 4.5 billion tonnes of soil are lost, threatening the country's ability to feed itself.

If the loss continues at this rate, harvests in China's northeastern breadbasket could fall 40% in 50 years, adding to erosion costs estimated at 200 billion yuan (\$29 billion) in this decade alone (\$1=6.835 Yuan).

"China has a more dire situation than India, Japan, the United States, Australia and many other countries suffering from soil erosion," Xinhua quoted the research team saying.

Beijing has long been worried about the desertification of its northern grasslands, and scaled back logging after rain rushing down denuded mountainsides caused massive flooding along the Yangtze in the late 1990s.

But around 1.6 million sq km of land are still being degraded by water erosion, with almost every river basin affected. Another 2.0 million sq km are under attack from wind, the report said. The survey was the largest on soil conservation since the Communist Party took control of China in 1949.

## VETIVER HIGHLIGHT

**What's New?** - Dick Grimshaw, [r.grimshaw@comcast.net](mailto:r.grimshaw@comcast.net), [www.vetiver.org](http://www.vetiver.org), Bellingham, U.S.A. October 23, 2008

I would like to let readers hear about some vetiver programs from vetiver users in their own words.

- Back in 1996 The Vetiver Network made a grant to Munchen fur Munchen (a German NGO working in Mettu, western Ethiopia, to support and expand its vetiver-based soil conservation program.

**From Debela Dinka - Sustainable Land Use Forum, Ethiopia.** "According to our partner NGO in Illubabor, Ethio-Wetlands and Natural Resource Association (EWNRA), vetiver technology is more or less being used in 17 districts of 22 in Illubabor Province. It is estimated that about 17,000 households are using vetiver. It is expected that the remaining 5 districts will be involved. The major impacts of vetiver are: decreased rate of soil erosion; increased crop (maize sorghum, vegetables) yield – as much as 50% – due to soil and water conservation; reduced siltation of wetlands and streams; groundwater recharge which subsequently improved flow of springs, streams and wetlands; survival rate of tree and coffee seedlings reached more than 80%. Other uses of vetiver: mulching in coffee plantations; thatching of houses, stores and shades (vetiver grass gives long-time service); mattress making (it repels home fleas and other insects); homestead hedgerows for beautification; making rope; income generation (farmers sell vetiver clumps for planting materials); and the green leaves of vetiver are cut and spread in and around homes during holidays and social gatherings such as wedding ceremonies."

- In 2001 Paul Truong (Australia) visited his country of birth, Vietnam, and introduced the Vetiver System to his former colleagues.

**From Tran Tan Van – Vietnam.** "Vietnam, like most countries, suffers natural disasters and environmental degradation. The threat from future rising sea levels puts Vietnam in the top five most endangered nations. Yearly 1,000 people die during storms; as a result of toxic pollution of waterways, yearly average property damage is \$300 million. The government understands the need to mitigate these effects but has resorted to using piecemeal, conventional engineering works. These are very expensive, technically complicated and are not durable. TVNI's introduction of VS into Vietnam 7 years ago was for Vietnam "a timely glass of fresh water to the thirsty desert traveler". It has been tested, demonstrated and adopted by the government, the research community, the private sector and individuals. The speed of its adoption over large landscapes attests that it is indeed the solution to myriad problems. Vietnam represents one of the world's most successful cases of VS use".

- In 2005 TVNI started working with Sally Holker – she wanted to **integrate** vetiver into some of her weaving projects. We funded the training of two Indian textile experts in handicraft training in Thailand. Sally also used vetiver on her farm land.

**From Sally Holker – Women Weave of India.** "I planted vetiver three monsoons ago on my 11 acres of land (Central India, on the banks of the Narbada River, near Maheshwar). The original idea was to arrest the erosion of my very unstable terrain, which slopes at a 20° angle from the north down to the river and was slowly washing the whole story away. That has completely reversed itself now. The vetiver has been a miracle and has multiplied many times over. Not only is the land stable, but also we have been able to use the leaf of these plants very effectively in a project close to my heart. For 30 years I have been committed to increasing rural employment for women in our area through handloom weaving. Most of the area weaves cotton and silk. We are now weaving vetiver leaf, making and selling beautiful table mats and runners."

- Don Miller of New Zealand has been using vetiver in Vanuatu for over 10 years for soil and water conservation purposes. In a recent account of his work at Fort Patrick he shows how vetiver hedgerows, followed by tree planting, has significantly reduced sediment flows to nearby coral reefs. Learn More at: [www.vetiver.org/VAN\\_REEF/VAN-reef2.htm](http://www.vetiver.org/VAN_REEF/VAN-reef2.htm).

**From Dr. Thomas J. Goreau, President, Global Coral Reef Alliance.** It is a pleasure to attach this brilliant study by Don Miller, a soil restoration ecologist working in Vanuatu. He has definitively shown how the most severe erosion can be stopped cold, with enormous benefits for both terrestrial productivity and by stopping the mud that was killing the coral reefs and fisheries. The local fishermen tell him that since this project, the waters are clearing and the corals and fish are coming back. We are very eager to see his incredible results greatly expanded and applied in so many more places where they are needed, and to work closely with Don to replicate his efforts elsewhere. I propose that he be fully involved in all of the many restoration projects all of our groups are proposing in high islands, and to see his study included in the volumes we are working on. In particular it should be noted that these results were achieved by simple planting, and that even better results might be expected if his methods were combined with use of char and vermiculture. Combining his methods with other methods of enhancing soil fertility should be proposed wherever feasible in the programs we are trying to seek funding for implementing in small island developing states and elsewhere.

*(Cont. in the next issue)*

## **LANDCARE HIGHLIGHT**

### **An International Year of Landcare (IYLC) – possible effective approach to global issues**

- Emily Mutota ([emilym@gobabeb.org](mailto:emilym@gobabeb.org)) and Andres Arnalds ([andres.arnalds@land.is](mailto:andres.arnalds@land.is))

*This article is a summary of a feasibility study conducted in Iceland during the 2008 Land Restoration Training Program. Information presented in this article was obtained through literature review, email and in-person interviews with local and international individuals in land management and in discussions with Icelandic farmers. The full report is available on <http://www.lbhi.is/lrt>.*

Raising awareness of importance and sensitivity of global land resources is a burning issue. As the foundation of life, human survival and lasting peace, proper land care should be compulsory for everyone. Over the past decades, community-based approaches for increasing sustainability of land use have been developing in a number of countries. "Landcare", the name for this community-based approach to resource management, is about committed people working together at local and international levels, changing attitudes and stimulating new ideas among land users.

Landcare-based approaches have sprouted in a number of countries, and the success stories clearly show the potential of this concept as one of the world's strongest tools in addressing land degradation, climate change and loss of biodiversity. There is a crucial need to change the way the global land resources are being utilized, and community-based approaches, such as Landcare, are needed to build the land ethics and stewardship need to secure a sustainable future.

At the International Forum on Soils, Society and Global Change (SSGC), which was held in Iceland in September 2007 ([www.iisd.ca/YMB/SDFSS/](http://www.iisd.ca/YMB/SDFSS/)), a recommendation was put forward to explore the feasibility of establishing an 'International Year of Landcare'. As with other International Years the main aim would be to highlight efforts to build local capacity and share knowledge and experiences between territories, countries and continents.

In its context, the Landcare approach has the advantages of being easy to adapt and connected with all aspects of life. As a tool for learning and adopting sustainable land use practices, Landcare has a great potential to aid in resolving pressing environmental, social and economic issues, such as global warming, losses of biodiversity, food and water security and alleviating poverty. Moreover, a Year of Landcare would be important in furthering the Millennium Development Goals, achieving synergies between the United Nations environmental conventions, and contribute to global partnership for development.

In line with the above goals, the focus of the International Year of Landcare should be to increase understanding

of sustainable land management at all levels (locally, nationally and globally), empower grassroots movements by putting them in the spotlight, foster land literacy education (“read the land”), especially among young people, and finally to develop outreach, and awareness activities.

These goals are important to all, but establishing an international year is by its very nature a complex process, and the same applies to its preparation. Many international years have been highly successful in reaching their goals, while others may have been poorly marketed and implemented, and were thus not successful. To ensure success the following is essential:

1. Early commitment among all potential stakeholders must be earned (globally: to gain intergovernmental support; nationally: to secure strong in-country programs and locally: to engage the people, who utilize the land on daily basis).
2. A champion international lead agency (e.g. FAO, UNEP) is needed, with support from related agencies, to sell the idea and facilitate the process.
3. Sufficient resources and time for preparation is essential, as well as setting clear objectives. As one interview subject noted: “countries should promote Landcare nationally and ensure that the concept becomes a household name.”

With proper planning there is no doubt that the establishment of an International Year of Landcare is ethically and environmentally feasible. However, it is up to all nations in the world to turn this dream into a reality. More information about how you can be involved in spreading the message of Landcare is presented in the report on <http://www.lbhi.is/lrt/>.

*Ed.: WASWC members are welcome to share their ideas and support for IYLC through our Newsletter pages.*

## WOCAT HIGHLIGHT

**13th WOCAT Annual Workshop & Steering Meeting, Switzerland, November 20-25, 2008, -**  
- *Christine Hauert* [christine.hauert@cde.unibe.ch](mailto:christine.hauert@cde.unibe.ch); Photos: Hanspeter Liniger [hanspeter.liniger@cde.unibe.ch](mailto:hanspeter.liniger@cde.unibe.ch)

The 13<sup>th</sup> WOCAT Annual Workshop & Steering Meeting (WWSM) was organized by the WOCAT Secretariat, the Centre for Development and Environment (CDE) in Switzerland. The workshop was attended by more than 40 participants from 22 countries.

The workshop started in Bern, with a 1-day symposium on ‘Promoting Sustainable Land Management (SLM) for Its Local and Global Impacts’. The symposium aimed at bringing together various partners and donors interested in SLM and natural resource management. The symposium was an exceptional chance for WOCAT and the regional/ national partners to further promote WOCAT in Switzerland. The morning presentations at the symposium gave an impression about WOCAT and its initiatives. An introduction to WOCAT and its history was made by Hans Hurni, the director of the CDE and Hanspeter Liniger the WOCAT coordinator. It was emphasized by Hans Hurni that WOCAT has grown from a project to an established network to a global institution. In the afternoon the presentations reflected global partnerships and future developments of WOCAT, including speakers from the TerrAfrica, FAO, Global Environment Facility, UNCCD and the University of Bern. About 100 people participated at this unique WOCAT event.



**From left:** Introduction speech of Hans Hurni, CDE; Presentation of Lehman Lindeque, South Africa.

The following days of the WWSM were spent in Gwatt on lake Thun. Progress reports of the different WOCAT partners and special topics were presented and discussed. Considerable progress was reported by national/

regional institutions. China and Nepal presented their national overview books based on the WOCAT 4-page summary format. At the global level the new or strengthened involvement of certain international organizations such as UNCCD, TerrAfrica and GEF was stressed.

The WOCAT/ LADA mapping methodology, the new WOCAT questionnaires and watershed module, the decision support tool and how to react and cover global issues were discussed in more details. Each session was followed by group work, giving participants the possibility to get an in-depth impression about different topics. The WWSM participants were especially interested in the WOCAT/ LADA mapping and how they could start implementing it in their own countries. Also presentations in the session on decision support, showing the DESIRE-WOCAT and the Sustanet tools, was highly appreciated.

Specific global activities foreseen for the coming year are among others the completion of the watershed module, the development of the new on-line database system, the new WOCAT homepage and the enhancement of the collaboration with international organizations.



*From left: Presentation at the 13<sup>th</sup> WWSM in Gwatt; Impressions from the field day; Group photo of the 13<sup>th</sup> WWSM participants at Lake Thun.*

The field excursion brought WWSM participants to visit two Swiss farms; this has provided the participants an impression about the Swiss agriculture. A special highlight was also the visit to a Swiss cheese diary in the cheese region 'Emmental'.

The next WWSM will be held in Morocco in November 2009. The full proceedings of the 13<sup>th</sup> WWSM and of the symposium will be available in January 2009 and will also be accessible from the [WOCAT-website](#).

## SUMMARY REPORTS

**6<sup>th</sup> International Symposium on Agriculture [AGROENVIRON 2008]**, Antalya, Turkey, April 28-May 1, 2008

AgroEnviron Symposia covered a range of topics addressing key environmental, agricultural and horticultural issues through applying new technologies that aim at sustaining agricultural systems, monitoring the environment and conserving natural resources. The First AgroEnviron symposium in 1998 was organized by the University of Agriculture in Faisalabad, Pakistan. Trakya University in Tekirdag, Turkey hosted the Second Symposium in 2000 and the National Authority for Remote Sensing and Space Sciences (NARSS) in Cairo, Egypt served as the host for the Third Symposium in 2002. The Fourth AgroEnviron Symposium was organized by the University of Udine in Udine, Italy in 2004. Gent University, Belgium was the home of the Symposium in 2006.



On April 28-May 1, 2008, the 6th International AgroEnviron Symposium was successfully held in the city of Antalya, Turkey, with 120 distinguished participants from many different countries, including Algeria, Belgium,

Colombia, Egypt, France, Germany, Hungary, Iran, Libya, Mexico, Netherlands, Pakistan, Saudi Arabia, Slovenia, Spain, Tunisia, Turkey, Uruguay, United States and Venezuela.



The main theme of the Agroenviron-2008 was to involve scientists, engineers, planners, research centers and institutions in issues related to the agricultural environment. The symposium was very fruitful and successfully brought researchers together from various disciplines, including soil science, geology, agricultural engineering, geo-informatics, spectroscopy, agronomy, spatial statistics, and environmental engineering. The next AgroEnviron meeting will take place in Mexico in 2010.

- AGROENVIRON Coordinator: Dr. Sajid M. Azeemi, Pakistan. [drsajid\\_pk@yahoo.com](mailto:drsajid_pk@yahoo.com), [smahmoodpk@yahoo.com](mailto:smahmoodpk@yahoo.com)

## Report on the 15<sup>th</sup> Conference of ISCO, Budapest, Hungary, May 18-23, 2008

The theme of the 15<sup>th</sup> Conference of ISCO (International Soil Conservation Organization) was "Soil and water conservation, climate change and environmental sensitivity". At the 14<sup>th</sup> ISCO Conference in Marrakech, Morocco in 2006 it was decided that the 15<sup>th</sup> Conference would be held in Budapest and Ádám Kertész was asked to be the chairman of the Organizing Committee. The reason for Hungary is the long and fruitful history of soil conservation and the important scientific results in this field.



The Conference was organized in the Budapest Congress and World Trade Center. Four days of papers and posters were presented in 10 thematic sessions. Altogether 162 participants took part in the Conference from all over the world.

The thematic sessions presented the newest results on climate change and environmental sensitivity, land use change, soil erosion, water management and agronomy, salinization and other land degradation processes, desertification, soil rehabilitation and management, socioeconomic aspects of land degradation, legislative and institutional aspects of soil and water conservation and a special session was organized on soil conservation in China.

During the mid-conference excursion conference participants visited the Soil Erosion Experimental Station of the Geographical Research Institute, Hungarian Academy of Sciences at Szentgyörgyvár, near Lake Balaton where the results of the SOWAP (Soil and Water Protection) project were presented. The main objective of the SOWAP Project was the comparison of conventional and conservation agriculture from the point of view of soil loss and runoff. Ecological aspects of conventional and conservation agriculture were also included in the objectives of the project. The second stop was at the Research Institute for Viticulture and Oenology, Centre for Agricultural Sciences, Pannon University in Badacsony where soil conservation experiments of the Institute were introduced followed by wine tasting. The third stop was on the Tihany Peninsula to enjoy the panoramic view of Lake Balaton.

The main scientific topic of the pre-conference excursion were salinization processes and problems of the Great Hungarian Plain. The post-conference excursion took the participants to the Eger and Tokaj wine-growing region where volcanic soils as well as the wine-growing areas were shown to the participants.

We feel that all participants have a good memory of this conference with high scientific level and interesting excursions.

- Ádám Kertész, 15<sup>th</sup> ISCO President, Geography Research Institute, Hungarian Academy of Science, Budaörsi út 45, H-1112 Budapest, Hungary. [kertesza@helka.iif.hu](mailto:kertesza@helka.iif.hu)

## **Traditional Knowledge Conference, Auckland, New Zealand, June 8-11, 2008**

Nga Pae o te Maramatanga is New Zealand's Maori Centre of Research Excellence. Every 2 years it hosts a Traditional Knowledge Conference as one of the major activities of its Knowledge Exchange Programme. This year's conference was held at The University of Auckland from 8-11 June.

The title of the conference was 'Te Tatau Pounamu - The Greenstone Door'; it refers in a figurative sense to how in the Maori world, in times of trouble, peace could be secured and warfare ended through a political marriage and the exchange of greenstone. The peace thus established is often likened to a greenstone door as both were seen as being durable, strong and highly valuable. The theme for the 2008 Conference was based on traditional indigenous concepts, values, ideals, models and strategies for sustaining balanced and healthy relationships within and across families, communities, nations, nation-states, local, regional and global borders, territories and environments.



The conference provided opportunities to discuss indigenous strategies for sustaining relationships between collectives and over generations, for resolving conflict, for peace-making, reconciliation and restorative justice. There were also opportunities to share what had been learned from diverse contexts around the world about how indigenous models, values, concepts and processes have been incorporated into state or government initiatives and with what impact for indigenous peoples. The international conference, with associated community engagement and input, enabled participants to bring together in dialogue a wide range of perspectives, voices and models for understanding indigenous frameworks.

A particular objective of the Conference was to provide an opportunity to bring together members of Nga Pae o te Maramatanga's four target audiences, Māori, national, international and academic, into one forum to exchange knowledge. Accordingly, the organizers provided for the involvement of Maori communities and their representatives as well as academics from the indigenous world to ensure that a broad spectrum of ideas was being fed into the conference.

There were 16 invited speakers, respected and well known within their particular disciplines and communities, who brought a wealth of indigenous knowledge to the conference. In addition, 58 presentations were delivered in parallel sessions. The presenters came from a wide range of academic disciplines and institutions – all contributing to the themes of the conference. The main knowledge areas represented were: Education, Language, Method, Philosophy, Traditional Knowledge and Relationships, Law, Anthropology, Sociology, Science, Environmental Science, Health, Sport and Business.

While many of the speakers and presenters were Maori there was also a good international representation – including Aborigines from Australia, indigenous Americans, the director of an indigenous centre in Canada and a Magar woman from Nepal. In addition there was a delegation of 26 students and staff from the University of Hawai'i, a number of whom presented papers.

The feedback from the conference was enthusiastic, participants expressing appreciation for the diversity of input and the chance to interact with others who have an interest in and commitment to traditional knowledge and the well-being of indigenous peoples. A conference proceedings is presently being compiled. For further information contact [information@maramatanga.ac.nz](mailto:information@maramatanga.ac.nz).

## **Conference held on lessons learned for ecoagriculture in East Africa, Naivasha, Kenya.**

August 25-28, 2008

More than 80 people participated in an ecoagriculture conference on "Challenges and opportunities for integrating agricultural production, biodiversity conservation and poverty reduction strategies in East Africa," held in Naivasha, Kenya, 25-28 August 2008. The conference was co-hosted by Ecoagriculture Partners, the Kenya Ecoagriculture Working Group, and the Uganda Ecoagriculture Working Group, with support from TerrAfrica, the Government of the Netherlands, the Generative Change Community, Rhino Arc and UNDP Uganda. The conference highlighted the experiences from more than a dozen ecoagriculture landscapes in Kenya and Uganda, and discussed the visions, innovations, policies and tools needed to respond to the integration of agricultural, environmental and poverty reduction objectives in national development and local community landscape levels, and to enhance multi-sectoral partnerships, networks and platforms for ecoagriculture. Farmer and community-based organizations working in ecoagriculture landscapes also showcased their work, and participants discussed how best to support grassroots initiatives.

### *Key themes included:*

- \* Markets for ecosystem services in East Africa: opportunities and challenges
- \* Policy and institutional constraints to integration of agricultural production, environmental conservation and poverty reduction in East Africa
- \* Innovative community programs towards sustainable land management
- \* Public-private partnerships and agriculture, environment and rural development
- \* Science, innovation and technologies in the integration of agricultural production, environmental conservation and poverty reduction
- \* Climate change, ecoagriculture and sustainable land management in East Africa, and
- \* Lessons learned about implementing ecoagriculture in East African landscapes.

Materials presented at the conference are available on a CD, and a conference report on "Lessons Learned" is being prepared. A video featuring the conference participants can be found at:

<http://www.timthomasphoto.com/Africa%20Flash%20Oct%202008/786K%2015fps%20400%20px.html>

- For more information contact: [cochieng@ecoagriculture.org](mailto:cochieng@ecoagriculture.org)

## **EUROSOIL 2008, Vienna, Austria. August 25-29, 2008**

The Congress EUROSOIL 2008 was jointly organised by the soil science societies of Austria, Croatia, the Czech Republic, Hungary, Slovakia, Slovenia and Switzerland, under the chairmanship of Prof. Winfried E.H. Blum, at the Technical University Vienna, Austria.

About 1,500 scientists from 77 countries participated with approximately 650 oral and 750 poster presentations, organised within 30 symposia and 13 workshops. Moreover, 3 technical excursions took place.

Twenty-six presidents of national soil science societies or their representatives participated in the Council Meeting of ECSSS, with the main outcome as follow:

- The next venue for EUROSOIL 2012 will be Bari/Italy.
- The next President and Vice-President of ECSSS will be Prof. Dr. Nicola Senesi from the University of Bari as President and Prof. Teodoro Miano from the same University as Vice-President.

Congratulations to both!

- For EUROSOIL 2016, the Polish Soil Science Society presented its bid for the city of Olsztin, in Masuria, in the northeast of Poland.
- The 10 best posters were awarded a prize from the organisers (diploma and €200).

An additional prize was provided by the international journal "Biology and Fertility of Soils" (Springer), providing a free copy of this journal to the winner and free electronic access to further journals by Springer.

A motion in support of the European Framework Directive for Soil Protection, prepared by the French Soil Science Society, was unanimously accepted by the Council of ECSSS and unanimously backed by the participants of the Congress at the Closing Ceremony:

## **Motion to Support the EU Framework Directive on Soils**

Soil is a vital, non-renewable resource, providing essential goods and services to human-life and ecosystems. For instance, soil plays a major role in climate change, food, fibre and energy supply, water regulation, biodiversity, and human health. Therefore, it is essential to maintain and preserve the soil functions for the sustainable development of our societies.

Long-term soil sustainability is endangered by numerous threats that have been listed in the proposal of a European directive for soil protection.

The over 1,500 participants of the EUROSIL congress held in Vienna (August 25-29, 2008), soil scientists from 77 countries, including the representatives of the 43 European national soil science societies, consider that a unique legal and political framework for soil protection is an absolute necessity to preserve soil resource at the European level.

We therefore urge the French Presidency to resume the discussions aiming to reach a political agreement in the Environmental Council on 20 October. We request the 5 Member States that could not agree with the Portuguese Compromise text on 20 December 2007 to reconsider their position for the sake of preserving this precious natural resource.

- Winfried E.H. Blum, President, European Confederation of Soil Science Societies, Vienna, Austria.  
[winfried.blum@boku.ac.at](mailto:winfried.blum@boku.ac.at)

### **5<sup>th</sup> International Conference on Land Degradation: Moving ahead from assessment to actions – could we win the struggle with land degradation?** Bari, Italy, September 17-23, 2008



The 5<sup>th</sup> International Conference on Land Degradation (5<sup>th</sup> ICLD) was successfully held at the Mediterranean Agronomic Institute of Bari (MAI-B), Italy from 18-22 September 2008. About 100 participants from 37 countries from around the world attended. Dr. Cosimo Lacirignola, director of the Mediterranean Agronomic Institute of Bari and President of the Fiera del Levante (The International Fair of the Mediterranean) welcomed all the participants during the opening ceremony (photo at left). He paid particular attention to the important role of the decision-makers especially in the implementation of scientific results.

A total of 43 oral and 50 poster presentations were made covering all continents. Keynote papers were provided by Dr. Luca Montanarella (EC-JRC Ispra, Italy), Prof. Raoul Ponce-Hernandez (Trent University, Canada), Prof. Ahmet Mermut (University of Saskatchewan, Canada / Harran University, Sanlurfa, Turkey), Christy van Beek (ALTERRA, The Netherlands), Gerd Dercon (IAEA Vienna, Austria), Sally Bunning (FAO, LADA, Rome, Italy), Dr. Ben Sonneveld (Vrije Universiteit, Amsterdam, The Netherlands), and Prof. Selim Kapur (University of Çukurova, Adana, Turkey).

The theme of the conference: “*Moving ahead from assessments to actions: Could we win the struggle with land degradation?*” was thoroughly discussed and debated. The main outcome is that such fight could be won if the right policy instruments are put in place and most importantly when local people are both authors and actors of the development process. Only in this way it is possible to make a change and to reverse the trend of land degradation, as despite the ‘troubling’ data and pessimistic scenarios there are as well many success stories in the sustainable management of natural resources.



**Participants of the 5<sup>th</sup> ICLD during the Opening Ceremony held at Fiera del Levante in Bari**

Conference participants agreed that environmental measures, which include interventions in the range of agriculture, forest, land, water and livestock sectors, should be assessed on both productivity and ecological functions and on the effects they have on ecosystem stability. Soil conservation and restoration should be one component of an integrated ecosystem management strategy that should include also water, biodiversity, livelihoods and human impacts on ecosystems.

A major outcome of the conference was that research findings and their use in scenario development for guiding policy should be validated by long-term monitoring systems and addressing land degradation requires consideration of both biophysical and socio-economic aspects since there is evidence that often the latter are determinant, especially in determining land use options. Recent positive trends in reducing soil erosion or improving fertility (notably in the EU countries and the Americas) through protective soil cover, restoring soil organic matter and reducing compaction, provide good examples to be followed in other regions and for addressing other land degradation processes such as chemical degradation for instance. The positive results should be used to further emphasize the urgent needs for further actions worldwide to accelerate and scale up progress and not the opposite to induce complacency.

The Conference draw special attention to the fact that not all soil and water conservation measures work well, as there are plenty of examples of failures due to being ill-adapted in terms of limited impact. Improved land



resources management measures should build on scientific evidence, local innovation and knowledge and be locally tested and validated before being applied at larger scale. Natural resource base should continue to be a priority for national governments and international organizations. Africa requires particular attention due to limited resources and research capacities, and evidence of little progress over recent decades to stimulate agricultural and economic growth and to address the cumulative pressures of expanding populations, food insecurity and political instability.

**From left:** Prof. Selim Kapur (Secretary, Turkey), Dr. Pandi Zdruli (Deputy Secretary, Italy), Dr. Marcello Pagliai (Chair, Italy) and Prof. Angel Faz Cano (Vice Chair, Spain)

Conference participants decided to propose the reactivation of the **Working Group on Land Degradation (WG-LD)**, established under the **International Union of Soil Science**. All participants being present signed a document and none of them opposed such proposal. The conference unanimously elected the following people to lead the WG-LD:

An internationally known publisher will publish a special issue of about 30-50 Selected Papers of the 5<sup>th</sup>ICLD. Finally, great appreciation was expressed for the excellent organization and warm hospitality shown by the MAI-B.

**The 6<sup>th</sup> International Conference on Land Degradation will be held in Egypt in autumn 2011.**

- WG LD, main inputs from Pandi Zdruli, Mediterranean Agronomic Institute of Bari (IAMB), Bari, Italy [pandi@iamb.it](mailto:pandi@iamb.it)

## MISCELLANEOUS

### SCIENCE FOR EVERYONE



**Human Evolution: How human beings came to be**, by Dave Canavan, Bangkok Garden School, Bangkok. - Dave Canavan, [davidc@gardenbangkok.com](mailto:davidc@gardenbangkok.com). Dave contributes articles concerning natural phenomena to Education section of The Bangkok Post every Tuesday. We highly appreciate Dave's regular inputs of high value in our newsletter.

If we were to put naked humans in an enclosure in a zoo and we had alien scientists visit Earth, there would be no doubt the humans would be classified as a very close relative of chimpanzees and bonobos (often referred to as pygmy chimps). They would potentially be placed within the same genus. To put this in perspective, lions and tigers share the same genus, and can even interbreed.

The similarities between chimps, bonobos and humans is striking. Their physiology is extremely similar, which leads to many humans saying, when having the pleasure to meet a chimp or other ape: "Aren't they so human like?" They have individual fingerprints and the same blood types as humans. You can legitimately have a blood transfusion from a chimp and be perfectly fine.

But the real similarity with chimps and humans is in the cells. DNA, the four-based code that is present in all life, is astoundingly similar in humans and chimps. We share at least 98.5% of our DNA with chimps, although recent studies have suggested that figure is up to 99.4% when studying critical DNA. This alone is evidence that we are very close cousins of chimpanzees and bonobos.

What is even more interesting is that based on this molecular evidence, the split between humans and chimps, and humans, chimps and gorillas, our next nearest relative, is greater, where humans and chimps share approximately 97% of DNA with gorillas. That means that chimps are more closely related to humans than they are to gorillas!

### The Split

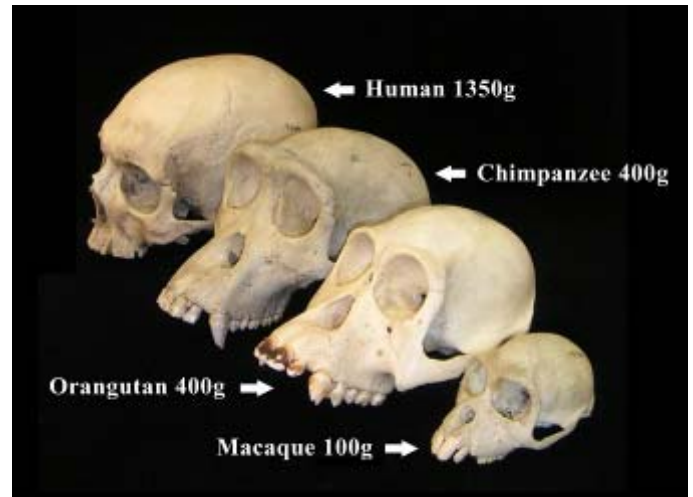
One common misconception of all this information regarding human/ape similarities, is that people often ask why chimps aren't still evolving into humans? The answer is simple: *humans never evolved from chimpanzees in the first place.*

Chimps and humans evolved independently from a common ancestor. Chimps, although relatively unchanged, are perfectly adapted to live in the jungle and survive so much better than any human would. Conversely, humans are much better adapted to live on the savannah, where chimps would struggle.

Based on the fossil record and a '**molecular clock**', we know the split from common ancestry to be somewhere between 4 and 7 million years ago. This is when humans and chimps took their separate paths of evolution.

The molecular clock is based on a steady mutation rate. If you take the DNA that comprises haemoglobin which is present in all vertebrates and therefore has been part of our DNA for many millions of years, you can see mutations that have happened in the DNA sequence yet leave the molecule fully functioning.

These mutations happen at a steady rate when analyzed over millennia, and therefore the differences in DNA in structures such as haemoglobin can give us an approximate time as to the relatedness of species, if you know how often these mutations happen.



### The Fossil Record

The most compelling and overwhelming evidence for human evolution is the fossil record which shows transitional fossils of ape-like humans, through to more modern humans and finally us, *Homo sapiens*.

In 1856 in the Neander valley in Germany, workers uncovered a skull that was kind-of human like, but still very different. It had a sloping forehead, heavy set jaw and very prominent brow ridge. A notion of a half-human half-ape like creature was considered but the fact that it could be an ancestor was not really accepted.

Then, in 1859, Charles Darwin published *On the Origin of Species*, which transformed the way in which people viewed evolution and how species diversity came to be. This was the platform on which human evolution grew, and with the discovery of more intermediate fossils, human evolution had overwhelming evidence.

Many key factors are integral as to how humans evolved. These are the coming out of the trees, then walking upright (bipedal) which frees the hands to allow tool and weapon use, language development and culture. There are many ecological reasons as to why these advancements happened but exactly when is unknown.

When Lucy was discovered, named after the Beatles song 'Lucy in the Sky with Diamonds', this answered at least one of these questions. Lucy was a bipedal (upright walking) ape-like ancestor and existed about 3.6 million years ago. She is of the genus *Australopithecine* which are the most ape-like of our ancestors, although their skulls and teeth were certainly becoming more human-like.

The *Australopithecine* genus diverged off our evolutionary past and eventually became extinct, with other transitional fossils leading to our path. As the hominids became larger bodied with larger brains they became classified in the *Homo* genus. There have been many *Homo* ancestors of humans but the most notable are *H. neanderthalensis* (of which the Neander Valley discovery lent its name) and *H. erectus*.

### Out of Africa

*Homo erectus* was the first human ancestor to leave the cradle of humanity, Africa, and did so about 2 million years ago, spreading throughout Asia and Europe. Later, around 600,000 years ago, Neanderthals evolved and spread throughout Europe.

Meanwhile, approximately 200,000 years ago the ancestors of you, me and every other human on Earth evolved in Africa, finally becoming *Homo sapiens*: wise man.

Around 50,000 years ago *H. sapiens* left Africa and spread throughout the old world. They superseded erectus in Asia, and about 30,000 years ago finally saw off the last of the Neanderthals to remain the only human species of animal left.

Since that time, tool use and technology has continued to advance exponentially. Art, in all its forms, has progressed from the meagre cave wall paintings to the Sistine Chapel ceiling. Agriculture and domestication have literally changed the world and language has developed into the written word.

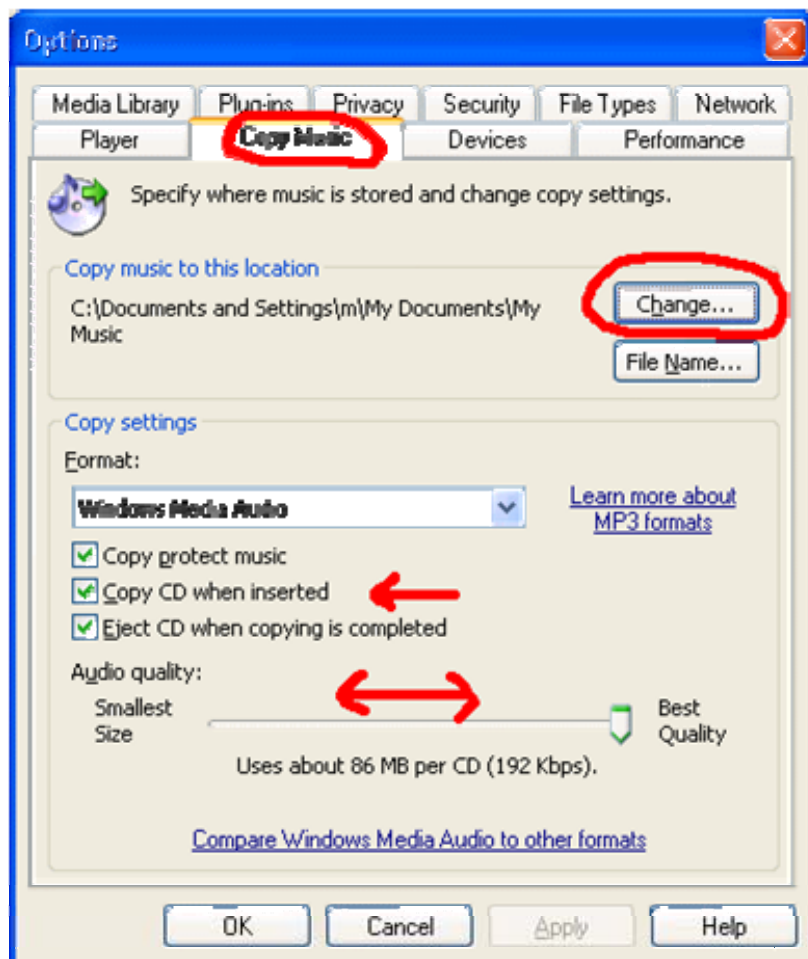
We have certainly come very far in the last 50,000 years but we mustn't forget our history and heritage, on which all our successions are based. All humans on Earth are of the exact same species, despite color, race or religious belief. As Jared Diamond, a respected biologist once stated: *we are simply the third species of chimpanzee*.

**Biological classification places chimps and bonobos into the genus *Pan*, but if biological classification rules were correctly applied regarding species relatedness, the reclassification of the three chimpanzees should be *Homo sapiens* (humans), *Homo paniscus* (bonobos) and *Homo troglodytes* (chimpanzees).**

## COMPUTIPS

### • Automatically rip a music CD when you insert it

- Open *Windows Media Player* (v. 9 and up)
- Go to the menu at the top and choose *Tools*
- From the drop down menu choose *Options*
- Go to the *copy music Tab*
- Put a tick in the box next to *Copy CD when inserted*



- Press *Change* and you can browse for where you want to store your music that is ripped from CDs.
- You can also choose the quality of the audio file that you rip from the CD. A higher quality takes up more space.
- Next time you insert a music CD Windows Media Player it will open and start ripping the music.

#### **Notes:**

- Ripping your music to your computer allows you to put it onto an ipod or mp3 player.
  - If you decide to just listen to a music CD in your computer you will need to disable this auto ripping.
- Sanjay Arora, [aroraspa@yahoo.co.in](mailto:aroraspa@yahoo.co.in)

## ● A practical way to put dates of your folders/files

See below how to write the last day of this year and you will know which is the shortest and most practical way to put dates of your folders or files:

31 December 2008

December 31, 2008

31-12-2008

12-31-2008

2008-12-31

08-12-31

081231

You may see that the last one is the shortest. Additionally, this one and the other two immediate above entries will enable the folders or files to align chronologically in your computer – while the rest do not. I normally use this way to note the date of my folders and files and welcome other members to use it too, which is a way to save both time and space. – *Samran Sombatpanit*

## **Laughter Zone**

### ● "You're all the same!"

A Chinese walks into a bar in America late one night and he saw Steven Spielberg. As he was a great fan of his movies, he rushes over to him, and asks for his autograph. Instead, Spielberg gives him a slap and says, "You Chinese people bombed our Pearl Harbor, get outta here."

The astonished Chinese man replied, "It was not the Chinese who bombed your Pearl Harbour, it was the Japanese".

"Chinese, Japanese, Taiwanese, you're all the same," replied Spielberg.

In return, the Chinese gives Spielberg a slap and says, "You sank the Titanic, my forefathers were on that ship."

Shocked, Spielberg replies, "It was the iceberg that sank the ship, not me."

The Chinese replies, "Iceberg, Spielberg, Carlsberg, you're all the same."

### ● Email that got into the wrong hands

There are different versions of this joke which is making the rounds on the internet but the essential part is here:

A man checked into a hotel. There was a computer in his room, so he decided to send an e-mail to his wife.

However, he accidentally typed a wrong e-mail address, and before he could do anything about it, the e-mail had left.

Meanwhile, somewhere in Houston, a widow had just returned from her husband's funeral. She decided to check her inbox, expecting condolence messages from relatives and friends.

Upon reading the first message, she fainted. The widow's son rushed into the room, found his mother on the floor, and saw the computer screen which read as follow:

To: My loving wife

Subject: I've Reached

Date: 14 December 2008

I know you're surprised to hear from me. They gave computers here, and we are allowed to send e-mails to loved ones.

I've just reached here and have been checked-in. I see that everything has been prepared for your arrival tomorrow.

Looking forward to seeing you TOMORROW! Hope your journey is as uneventful as mine was.

Your loving hubby

PS ..... Sure is hot down here!

## **Poets' Corner**

### • **Water Our Wealth** - Prof. J. S. Bali, Jammu, India

Our planet Earth of 51000 million hectares  
29 per cent land 71 per cent water  
Nature's gift of 1386 million BCM  
Changes in form but never more never less  
96.5 per cent filling the seas all saline:  
"Water water everywhere but not a drop to drink"  
Only 3.5 per cent is the fresh water in whole of this world  
Of the 3.5 per cent fresh water -- soul of our life  
Glaciers locking up 1.7, feeding perennial rivers  
0.8 per cent buried deep, too costly to lift  
Only one per cent enters the water cycle of the earth  
Life arose in water; water sustains life  
From plants to micro organisms, animals and man  
Water our wealth, waste it and perish  
Water share of India: 4000 BCM of precipitation  
1869 in rivers and natural lakes, not all can be used  
1122 utilizable, both surface and ground  
690 BCM -- the surface water, springs, streams and lakes  
Lifting 432 from below the ground, energy needs large  
1820 cubic metres only, our share per capita  
Harvest water, manage well, efficiently you must use  
Hunger is horrible, kills in weeks  
Our body two-third water, thirst kills in days  
Water is scarce wars will occur over water  
Water will be "inflammable" more so than oil  
Water you develop -- micro to macro,  
Waste not, pollute not, treat it with technology  
Fail and face: floods and famines, disease, droughts and disasters  
Manage water, manage the watersheds  
Forests, pastures and conservation farming  
No flooding of fields, subsidize micro-irrigation;  
Clean and safe water to drink -- the first priority  
Agriculture, housing, industry are the next;  
Treat the sewage, treat the industrial effluents  
Water is the boon water can be the bane

### • **Prof. Vir Singh's 'The Planet Earth' verse now in German**

Prof. Vir Singh's love in writing articles and verses has brought several works to entertain our members. Recently, one of his several verses, *The Planet Earth*, has attracted attention of a German academic, Mr Peter E. Rucker ([peter.e.ruecker@web.de](mailto:peter.e.ruecker@web.de)), so he had translated it to his language. Following is part of the translated version (Part 2), comparing with the original in English. The verse in full-length will be posted on our website.

#### **English**

The Planet Earth  
Was borne  
To give birth to my mother,  
My mother was borne  
To give birth to me.  
Mother Earth has brought the Evolution  
Down to Earth –  
The Evolution of eternity.

#### **German**

Geboren wardst du, Planet Erde,  
Um Leben zu spenden für meine Mutter.  
Geboren wardst du, meine Mutter,  
Um Leben zu spenden für mich selbst.  
Mutter Erde, du hast Entwicklung  
Herabgebracht auf unsere Erde –  
Die Entwicklung der Endlosigkeit.

● **A Book of Verse** by [Omar Khayyam](#) (1048-1122)

A book of verse, underneath the bough,  
A jug of wine, a loaf of bread - and thou  
Beside me singing in the wilderness -  
Ah, wilderness were paradise enow!

(From F. X. Browne Newsletter, [www.fxbrowne.com/html/newsletters/\\_2009/news\\_mar09.htm](http://www.fxbrowne.com/html/newsletters/_2009/news_mar09.htm), March issue)

### **A Few Nice/Interesting Words**

".....We ask ourselves, who am I to be brilliant, gorgeous, talented and fabulous? Actually, who are you NOT to be?....." - *Marianne Williamson*

"We are strong enough to stand tall tearlessly. We are brave enough to bend to cry, and sad enough to know we must laugh again. We are Virginia Tech!" - *Nikki Giovanni*

"Fix your eyes forward on what you can do, not back on what you cannot change." - *Tom Clancy*

"If you want to know how the shoe fits, ask the person who is wearing it, not the one who made it." - *Anon*  
*Ed.: There is an explanation of the quote as follows: The above quotation is very apt and describes superbly the ongoing struggle of the small isolated rural communities to have their voice and concerns heard.*

"We might say that the earth has the spirit of growth that its flesh is the soil." - *Leonardo da Vinci*

### **And All Others ...**

● **Tips for Getting the Most out of Life, Even in a Bad Economy**

The economic news gets worse every day, and naturally it makes a body nervous. We have some recommendations for low-cost activities and alternatives for enjoying the world around you. It may be as simple as turning your attention and your entertainment budget closer to home, and finding ways to have fun without spending much money.

1. Visit your local and state parks and recreation areas. **Take the opportunity to explore that park down the road; you may find a treasured new vacation or picnic spot. Even better, get involved in restoration or cleanup activities.**
2. Get outside and enjoy the outdoors. **Many activities such as hiking, paddling, or cross-country skiing are inexpensive or free, and do not negatively impact the environment.**
3. Take advantage of low-cost community events. **Check out your local newspaper to see what is going on in your community. You may just find a new hobby, special interest group, or fun event that you never knew existed!**
4. Go to the library. **Instead of buying that bestseller or renting the latest movie release, borrow them from your local library. Libraries also often provide free family programs, workshops, and assistance with interesting research or genealogy projects.**
5. Plant a garden. **It may be icy and snowy outside, but now is the time to start garden planning for the spring. Plant a vegetable garden, join a community garden, or better yet, plant a rain garden!**

**Volunteer to help others.** Nothing is more rewarding and fun than getting involved in your community. Volunteer opportunities run the gamut from youth groups to sports teams to social organizations to environmental groups to you name it! It is amazing how much working together with others to create a better world can improve one's outlook.

Keep in mind that the bad economy will not last forever, and it is still critical to maintain the quality of our environment. Nonpoint source pollution and stormwater runoff don't suffer layoffs - they still occur no matter what the political happenings. Failure to keep tabs on environmental quality may mean more costly fixes or dangerous situations down the road. Water quality monitoring or stormwater management projects can be modified to help you get the most for your money, even if costs must be reduced. F. X. Browne, Inc. can work with you to find a scope of work that will fit your budget and still produce a good product. For more information, contact [info@fxbrowne.com](mailto:info@fxbrowne.com) or 215-362-3878. (From F. X. Browne Newsletter [www.fxbrowne.com/html/newsletters/\\_2009/news\\_mar09.htm](http://www.fxbrowne.com/html/newsletters/_2009/news_mar09.htm))

## ● Kilim – is it carpet?



Kilim Knitting is a historical art and a traditional ancient way for Azerbaijani people (especially Ardebil) for making money.

There was an old famous mosque in Ardebil's Musalla (a place where Muslims pray together and socially) where Shah Esmaeel, the leaser of Safavi Dynasty was buried. This mosque is known as the source of first Ardebil kilims for Europeans, since Vincent Robinson a European merchant brought a Kilim from to his country

*Kilims are different regarding their knitting and weaving methods from carpets. Persian Carpets are knitted on the frames called Daar, but Kilims are knitted on the ground and without any frame.*

This is the reason why Kilims may have some problems in their accuracy regarding the design and around margins. But this makes them look completely natural and more alive than carpets. Also Carpets knitted from exact designs with scales but Kilims are knitted more sensual.

WASWC members are requested to send news about anything concerning SWC, e.g. funds, awards, publications, websites, exhibitions, technical meetings, to publish with us by sending to [sskukal@rediffmail.com](mailto:sskukal@rediffmail.com), [arorasgau@yahoo.co.in](mailto:arorasgau@yahoo.co.in), and [rmfowler@iafrica.com](mailto:rmfowler@iafrica.com)

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## INFORMATION ABOUT MEMBERSHIP IN WASWC AND HOW TO PAY

- 1. Individual membership:** US\$5/yr for developing countries; US\$10 for developed countries and persons working in international organizations worldwide. Payment of the fee for 4 years at the same time will enable the membership to be valid for 5 years.
- 2. Life membership:** US\$80 for developing countries; US\$160 for developed countries and persons working in international organizations worldwide.
- 3-1. Organization membership (OM):** For universities, research and implemental institutions, government agencies, NGOs, societies, associations and international organizations, etc. Persons belonging to an Organization member will receive the same online products and services as the other two above categories: \$100/ yr for an organization with up to 150 persons; \$150/ yr for an organization with up to 300 persons; \$200/ yr for an organization with up to 500 persons; and \$10/ yr for an additional 100 persons or part thereof. Local organizations in developing countries can request to pay at a lower rate.
- 3-2. Organization subscription (OS):** is the same as the **Organization membership** but the organization wants to limit its involvement only as a **subscriber**.
- 3-3. Organization cooperation (OC):** is the same as the **Organization membership** but the organization wants to limit its involvement only as a **cooperator**, without paying a fee. Any organization can be a cooperator for 1-2 years before deciding to join as OM or OS if desired.
- 4. Gift membership:** US\$5/ yr worldwide, to be purchased by anyone to give to colleagues, friends, students, etc.

Membership application form is posted on our website <http://waswc.soil.qd.cn/appli-form.html>. You may ask [sombatpanit@yahoo.com](mailto:sombatpanit@yahoo.com) about your membership status, i.e. up to which year you have paid. Then you may send your membership fee (and form, for new members) to either John Laflen or me or any address in the following list:

**a. Dr. John M. Laflen**, Treasurer, 5784 hwy 9, Buffalo Center, IA 50424 U.S.A. Phone: +1-641-561-2324. Fax: +1-641-584-2265 Attn: J.M. Laflen. [laflen@wctatel.net](mailto:laflen@wctatel.net). He can receive money from US and Canadian members through Personal Check, Money Order, or Bank Draft (payable to WASWC), and can receive VISA and MasterCard credit cards and Bank Draft (payable to WASWC) from all over the world. For sending money through a bank, please give the following information to your bank:

- **Foreign wires:** United Bankers Bank, 1650 West 82<sup>nd</sup> Street, Bloomington, MN 55431, U.S.A. Routing number 091 001 322; Swift Code UBBKUS41; for benefit of First National Bank of Volga; account number 091 402 552; further credit World Soil #703-488.

- **Domestic wires:** United Bankers Bank, 1650 West 82<sup>nd</sup> Street, Bloomington, MN 55431, Routing number 091 001 322; for benefit of First National Bank of Volga; account number 091 402 552; further credit World Soil #703-488.

**b. Dr. Samran Sombatpanit**, WASWC Immediate Past President, 67/141 Amonphant 9, Soi Sena 1, Bangkok 10230, Thailand. Phone/Fax: +66-25703641, [sombatpanit@yahoo.com](mailto:sombatpanit@yahoo.com). He accepts Bank Draft from every country. **Mark the draft "payable to Dr. Samran Sombatpanit"**. He receives SWIFT through the Bangkok Bank, Bangkok Branch, 2124 Phaholyothin Road, Jatujak, Bangkok 10900, Thailand. Phone: +66-25614091/ 25791146-8, Fax: +66-25791149. SWIFT CODE: BKKBTHBK, A/C No. 161-0-210864, which you should also indicate **"payable to Dr. Samran Sombatpanit"**.

IMPORTANT NOTES: 1. DO NOT write the word 'WASWC' in your remittance document, as it will cause a problem, since this is an alternative account that supplements the official one (a, as above).

2. Do not deduct the bank fee from your side from the amount of money to send.

3. For sending money by wire/bank transfer or check please add US\$8 per transaction to compensate for the charge at the receiving bank in Bangkok. This additional charge is NOT applicable for the payment of membership fee(s) of US\$50 or more.

**c.** You can also send to **Dr. Samran Sombatpanit** (use the address as shown in b.) through the **Western Union worldwide money transfer service**. Learn how to send from [www.westernunion.com](http://www.westernunion.com). Their service is quick and the transfer fee has been much reduced from the earlier time. Also as in (b), please do not deduct the money transfer fee from the amount to send and also do not have to add US\$8 as shown in (b3) above. Please write to [sombatpanit@yahoo.com](mailto:sombatpanit@yahoo.com) to show your intention before sending.

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**Note: For the convenience of all parties you are advised to sign up as a Life member or to pay for several years (e.g. 4 years and get 5 years) in one time. Contact [sombatpanit@yahoo.com](mailto:sombatpanit@yahoo.com) if you have any problem.**