



NEWSLETTER

Reporting global SWC news to you quarterly since 1983

In English, Spanish, French, Chinese, Portuguese, Bahasa, Russian, Vietnamese, Arabic, Thai

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

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

Conserving soil and water worldwide – join WASWC

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

NEW YEAR MESSAGE FROM DICK & HELEN ARNOLD (Dec 21, 2006)

Do you know what I like best about this season? I enjoy those moments when I am mentally absorbed by thoughts of our relationship over the years. It makes me feel that we are in contact, at least for a few minutes, and re-living some of those memories is such a delight. I think it is a process of renewal of the spirit; it is something we all seem to need; and I am most grateful to you for your part in the process. May the Great Spirit bless you and keep you safe as you continue your journey and may the presence of LOVE of all things be a constant companion.

FRIENDSHIP

There is a place beyond today where we like to go
Its dimensions are those of our choosing in time and space
For there our spirits' freedom soars to ever greater heights
And emotions are renewed by fleeting images of yore

We like to go there because it's filled with goodness just so
Where you and we and those we choose have a special place
Seeing you there in detailed mosaics is such a delight
With vignettes of yesteryear's events visited once more

Friendship is like no other sensation that we know
Acceptance, sharing, steadfast, no complaining face-to-face
No accusations, merely support whether day or night
With wonderful memories of togetherness held in store

What makes all of this so special just now?
Where goes time as we so quickly lose pace?
You make a difference, the sun shines bright
The season, the reason, and visions galore

May the New Year add to your storehouse of goodness
And give added meaning to your life of dreams.

Dick and Helen ct9311@aol.com,



President's Message

Miodrag Zlatic



Land degradation has been **the** global problem from the beginning of mankind. Many traditional technologies and approaches are still used and collected and evaluated in the global data base, as we do with WOCAT, the main goal-project of WASWC.

Establishing similar programs/projects is one of our WASWC activities. In my case, I am involved with a regional project supported by UNU (United Nations University) called *Community-Based Rehabilitation of Degraded Land in Balkan Countries*.

The degradation of valuable agro-ecosystems in the Balkan and Anatolian highlands is an on-going process that affects both local livelihoods and security, and the goods and services provided by the local environment to the broader region. Land degradation, most notably deforestation, degradation of common pasture and individual croplands, is reducing the structural and functional integrity of local agro-ecosystems, as well as their economic productivity and social value. Those processes at the local level add to the cumulative effects of land degradation at the national, regional and global scale. Addressing them is thus an issue of multi-lateral concern.

The proposed project aims to develop a model framework and establish a basis for cooperation among multi-level stakeholders in sustainable land management (SLM) in semi-mountainous and mountainous areas in the region of South-Eastern Europe and Northern Turkey, including the following four countries, Serbia, Former Yugoslav Republic (FYR) of Macedonia, Bulgaria and Turkey. Many of the causes of land degradation in highlands in the region are shared by the four nations. Major political, institutional and ethnic fault lines spanning

the individual countries and the region, however, have hampered the search for common solutions. The lack of an existing framework and channels for cooperation on SLM among rural communities and other stakeholders constitutes a barrier to harnessing the potential of promising synergies in the generation, demonstration and up-scaling of good land use and management practices across political and other borders in the region. The project hopes to help overcome this constraint by supporting and encouraging the establishment of a basis and framework for collaboration and exchange of information, technical support and best-practice examples for community-based SLM among multi-level stakeholders across the four participating countries.

To be efficient and effective, regional cooperation for SLM should be driven not only by government agencies and institutions, as is most often the case, but also by the concerned community stakeholder. The limited experience with and capacities for bottom-up land use and management decision-making and implementation in the region's highlands thus constitutes a second major barrier to the mainstreaming of SLM in the region. Existing formal and informal institutional structures and resource constraints for achieving individual and community aspirations in semi-mountainous rural areas in the Balkan and Anatolian highlands have given rise to a vicious cycle of poverty, out-migration, and further capacity and resource degradation. The project will help reverse this process by empowering a set of pilot communities in the region to undertake economically profitable, socially acceptable and ecologically beneficial land use activities, thus providing an example of how the vicious cycle can be broken and launching a set of individual farmers and community-based organizations capable of and committed to disseminating good SLM practices to other highland communities in the region.

Leading-edge technical and scientific expertise from across the four participating countries will be employed to facilitate the initiation, testing and demonstration of a set of innovative and accessible methods for land rehabilitation, ecosystem restoration and income generation in selected communities. We will also generate knowledge on what techniques and approaches for initiation and replication of sustainable community-based land rehabilitation techniques and SLM practices are suitable for the geophysical, socio-economic and institutional conditions in the Balkan and Anatolian highlands, as well as how they can be up-scaled throughout the region. While a wealth of technical knowledge and experience on land degradation processes in the region already exists, our understanding of what SLM techniques and approaches best address the problem is limited. The questions as to what practices are most suitable, accessible and sustainable under local conditions and how best can they be replicated and up-scaled at the regional level, constitutes a third major barrier. The knowledge that will be generated through the project will provide the missing link between community action and regional cooperation in mainstreaming best SLM practices.

The major outcomes expected as a result of the implementation of the project are as follows:

OUTCOME 1: Enhanced knowledge of efficient and effective SLM techniques and approaches for promoting community-based land rehabilitation in the Balkan and Anatolian highlands

OUTCOME 2: Strengthened capacities of rural communities in the region for undertaking SLM and of advisory and service providers for supporting the up-scaling of good land use and management practices in the region

OUTCOME 3: An improved environment for regional cooperation in mainstreaming community-based SLM practices

In the process of project implementation, regional consultations and cooperation among multi-level stakeholders will be initiated and promoted as a basis for generating a shared understanding of the causes of land degradation and barriers to improved land management in the Balkan and Anatolian highlands and developing effective synergies for addressing them. This is expected to strengthen the institutional capacities and enabling environment for up-scaling the project's experience in promoting community-based SLM in the region.

The project's activities and outcomes will contribute to the goals of the GEF Focal Area on Land Degradation and its Operational Program on Sustainable Land Management (OP#15). By fostering the generation and dissemination of knowledge addressing current and emerging issues in SLM in the Balkan and Anatolian highlands, and the dissemination and up-scaling of best SLM practices in the region, the project is designed to help address the causes and negative impacts of land degradation, and to improve livelihoods and security in region in line with the GEF strategic priorities for the Land Degradation Focal Area SO2 and SO3 respectively.

The cooperation framework for SLM in the sub-region that will be developed through the project will buttress the process of implementation of the United Nations Convention to Combat Desertification in the Regions of Central and Eastern Europe and the Northern Mediterranean. By targeting the achievement of these global and regional goals and commitments through community-based actions, the project will help ensure that international and national efforts aimed at the achievement of SLM and other global objectives benefit local communities in an equitable manner.



Editor's Note

SEDF2006

I was invited to go to attend the 2nd International Symposium on Soil Erosion and Dryland Farming (SEDF2006) at the Institute of Soil and Water Conservation, Yangling, Shaanxi, P.R. China from October 1-5 and had a chance to see more sights in that historic province of China. It was a good time to see old friends and meet new ones. The conference presentation and deliberation was from October 2-4, while a 'bonus' was given to all foreign participants by organizing a tour to visit the Terracotta Warriors Museum outside Xi'an and Shaanxi Museum in the city. More technical details of the Symposium can be seen in the Summary Reports section of this issue. The first SEDF symposium was held in Yangling in 1997, with John Laflen, our present Treasurer, acting as Editor of the book resulting from it.



This meeting was held in connection with the 50th Anniversary of the establishment of the Institute of Soil and Water Conservation. All participants were invited to attend the celebration on October 4, with its many official functions - see below:



Photos from upper left: *Choir singing songs about ISWC and soil and water conservation. *Academicians and guests on stage listening to Prof Liu Guobin, Deputy Director of the ISWC. *Dr Chihua Huang, National Soil Erosion Research Laboratory, Purdue University speaking on behalf of all guests. *Myself with Prof Li Rui. *Prof Liu Zhen, DG of Department of Water and Soil Conservation, Ministry of Water Resources. *Opening the Soils Museum of ISWC, Yangling.



Photo from upper left: *A topographic model in the Soils Museum. *Visitors inspecting the many soil profiles and photographic exhibits, some dating from the year 1956 when the Institute was established. *Building housing facilities to study soil erosion – it is the largest in China, if not the world. *A mini watershed for erosion study. *Equipment to study soil erosion using a rainfall simulator. *The main building of the ISWC, built recently through Sino-US cooperation.

The Institute organized a field tour during October 6-8, 2006 to the interior of Shaanxi, to Ansai Research Station of Soil and Water Conservation – CAS, not far from Yan’an, the historic place where Chairman Mao Zedong led the Long March from Nanchang, Jiangxi and stayed there in 1934. Some interesting scenes from the trip are shown below:



Photos from left to right: *Apple orchards. *With a local family. *Changwu Research Station. *Soil erosion research plots (low slope). *Typical topography of Chinese Loess Plateau. *Yodong, a traditional cave dwelling of people in the Loess Plateau area.





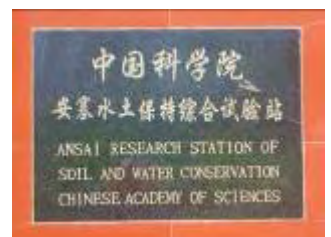
Photos from left to right: *Group photo with Prof Liu Bin (in black attire) at the soil erosion research station, Xifeng, Gansu Province. *Soil erosion plots on medium slope. *Flatland formed from eroded soil from upper watershed – called 'damland'. *Poplar trees along the road to Yan'an. *High slope erosion plot. *Hotel with rooms similar to local yodong (traditional cave).



Photos from left to right: *Prof Yinli Liang explaining her work to visitors. *High slope erosion plots. *Junior lecturer explaining how the artificial erosion plot functions. *Overview of the Ansai Research Station of Soil and Water Conservation. *Mausoleum of Huang Di, the first emperor of a unified China. *Low-relief stone sculpture of Huang Di. *Large trees in the mausoleum grounds, thousands of years old.



Ansai Research Station of Soil and Water Conservation – CAS, Prof. Yinli Liang welcomed all visitors and researchers who would like to work at the experimental station of the Institute of Soil and Water Conservation, Chinese Academy of Sciences, located at Ansai, Shaanxi Province. You may write to Prof. Liang, Director of the Station, at liangyl@ms.iswc.ac.cn, liangyinli@263.net and may also ask for an 8-p brochure that shows the facilities of this station for studying how to manage the soil resources in the Loess Plateau successfully.



Prof Li Rui Receives Honorary Membership

The WASWC has taken this opportunity on October 4, 2006 to present a **Honorary Membership** certificate to **Prof Li Rui** (below right), VP for Asia and the **Distinguished Researcher Award** for 2006 to **Prof Tang Keli** (below left)



WASWC Distinguished Researcher Award for 2006 Bestowed to Prof Tang Keli of China



The Awards Committee of WASWC unanimously agreed to bestow the WASWC Researcher Award for 2006 on Prof Tang Keli of the Institute of Soil and Water Conservation, Yangling, Shaanxi, China. The Award Presentation Ceremony took place at the Conference on Soil Erosion and Dryland Farming II in Yangling early in October 2006. (Photos at left: Prof Tang in 2006 and in 1993)

Prof Tang Keli was born in Shanghai in 1932. She graduated from the Department of Soil and Agro-chemistry, Shandong Agricultural University in 1954, and completed a PhD on soil erosion at the Institute of Soil Sciences in the former Soviet Union in 1962. Dr Tang Keli has devoted her professional life to research on soil erosion and soil and

water conservation in China. Based on her pioneering contributions, she has become widely recognized as one of the outstanding scientists in the field of soil erosion at home and abroad. Recently, she has been elected as a full member of the International Eurasia Academy of Sciences.

She has made many important contributions to our understanding of the scientific basis of soil erosion and soil and water conservation. Her scientific insights based on first-hand observations and new experimental approaches have broken through a number of long-time debated scientific problems. For over half a century, she has investigated the Loess Plateau and also traveled through the Yangtze River basin, Pearl River Basin and others, covering more than 50,000 km. She is one of the founders of the State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau. She was the first director during 1991-1996 and now serves as Honorary Director of the Laboratory. In addition she had founded Shenmu and Ziwuling Experimental Stations for Soil Erosion and Ecological Restoration

Throughout her brilliant career, she pioneered the development of new methods to study erosion environments and the erosion catena of slope-gully systems, and the complexity of water-wind-crossed erosion. In 2004, she edited and published an important book, *Soil and Water Conservation in China*, in which she integrated the achievements of more than 50 years of hers and other Chinese scholars' efforts (right picture).



Because of her numerous academic achievements the Awards Committee of the World Association of Soil and Water Conservation deliberated and agreed to bestow its Distinguished Researcher Award for 2006 to Prof Tang Keli. (Photo at left: Prof Tang, at 74, conducting the Yangling choir at the 50th Anniversary Celebration of ISWC vigorously)

Contact information: Institute of Soil and Water Conservation CAS & MWR, 26 Xinong Rd., Yangling, Shaanxi, China; Post Code: 712100. Phone: +86-29-87012884; Fax: +86-29-87012210; kltang@ms.iswc.ac.cn



ASSOCIATION NEWS

NEW OFFICERS

Nada Dragović, National Representative for Serbia. nadad@verat.net

Nada Dragović was born in Mihajlovo (Serbia) in 1959. She graduated from the Faculty of Forestry, Department for Erosion and Torrent Control, Belgrade University (1983). She started working in 1986 at the Faculty of Forestry organizing erosion control works and mechanization. She completed her master's thesis in the field of rational application of mechanization for watershed management (1990). In 1991/92 she was attached to the Institute for Torrent Control in Vienna as an Austrian government scholarship holder, and worked there again in 1995/96 on torrent and avalanche control at the University for Agricultural Sciences, Vienna. In 2001 she presented her doctoral thesis: *Optimisation of realisation of watershed management projects*. She was involved in a DAAD/FORNET project at Freiburg University (2003) and in the TEMPUS Programme at Prague University (2005). In 2006 she was appointed an Associate Professor to the Faculty of Forestry specializing in erosion control. She participates in various national and international research projects in this field, and enjoys reading and traveling.



Address: Faculty of Forestry, Belgrade University, Kneza Visislava 1; 11 030 Belgrade, Serbia. Phone: +381-11-3553-122; Fax: +381-11-2545-485

Moshood N. Tijani, National Representative for Nigeria. tmoshoo@yahoo.com, mn.tijani@mail.ui.edu.ng

Born in 1965, Dr. Tijani gained a bachelor's degree in geology and a master's degree in hydrogeology from Nigerian University before proceeding to Germany as a two-term DAAD Scholar, first to undertake a Professional Postgraduate Course in Hydrogeology and Engineering Geology of Tropical and Sub-Tropical Regions at the University of Tübingen, and secondly for a PhD program in Hydrogeology and Hydrochemistry at the University of Münster. He has been working at the Department of Geology, University of Ibadan, Ibadan – Nigeria since 1998. As a Senior Lecturer/Researcher, his research interests focus on soil, surface and groundwater contamination assessments, and pedo-geochemical assessments of soil-water interactions, as well as related agro-geological assessments of soil-plant transfer of trace metals.



Over the years, he has earned international fellowships for overseas research studies in Japan under the sponsorship of Matsumae International Foundation (MIF) (July-December 2001), and with the Japanese Society for the Promotion of Science (JSPS) (August 2003-May 2005). With some 20 scientific research papers and technical reports to his credit, he has participated in a number of international conferences and training workshops. Memberships of international professional associations include AGID, IAH, GSAF and IAHS. He is fluent in German and English and his hobbies are reading, writing, traveling and sightseeing.

Address: Department of Geology, Faculty of Science, University of Ibadan, Ibadan, Nigeria. Mobile Phone: +234-(0)8023252339

Aytan Poladova, National Representative for Azerbaijan. aytanpoladova@yahoo.com



Aytan Poladova, a hydrological engineer, received her PhD in *Land hydrology, water resources and hydrochemical regimes of land-water resources* in 1999 from Baku State University.

Since then she has worked as an environmental consultant and water specialist in irrigation and water system distribution for many local and regional projects financed by ADB, World Bank, TACIS and other international organizations. She is a leader of the environmental public organization ECOS, an NGO that implements mainly educational projects in better water management and water consumption, environmental conservation and sustainable usage of natural resources. She now works as an environmental consultant for AmC Caspian Environmental Laboratory in Azerbaijan, and as a part-time lecturer in the geography faculty of Baku State University, where she trains students in hydrology and hydrochemistry. She has participated in many international conferences and training courses in environment and water issues.

Her latest publications are: *Establishment of best environmental approach water management for Ag-Gol Lake, a Ramsar location in Azerbaijan*, UNITAR Training Course on Biodiversity, August 2006, Kushiro, Japan. *Threats to Water Supplies*, NATO Workshop on Supply of Water to Cities in Emergency Situations, 5-7 June 2005, Tel-Aviv, Israel. *Influence of lake ecosystems of the Azerbaijan arid zones on the Caspian Sea*, Second International Conference on Climate and Water, Espoo, Finland, 17-20 August 1998.

Her hobbies include reading, music, traveling, communications with friends and picnics.

WINNERS OF PHOTO COMPETITION 9



Ravine head threatening public buildings (in DR Congo)
Paul Truong, The Vetiver Network, Brisbane, Australia
truong@uqconnect.net



Staggered contour trench for water and soil conservation (India)
G.B. Reddy, Orissa Watershed Development Mission, India
bhaskar_gala@yahoo.com



Sediment storage dams under construction (Ethiopia)
Daniel Danano, NR for Ethiopia
ethiocat@ethionet.et

Will the winners please select and let us know the books of your choice in
www.scipub.net.

How we present articles in Newsletter and HOT NEWS

To speed information flow, since the start of 2007 we have moved one big column to HOT NEWS. The column is:

NEW INFORMATION SOURCES

We also post the following columns on the website <http://waswc.soil.gd.cn> directly:

HOT NEWS (with Full version, while the Light version will be sent out to members by e-mail)

SHORT NEWS, with about 30 interesting news monthly

DISSERTATION ABSTRACTS, with 3 abstracts from ITC, The Netherlands presently

BOOK REVIEWS, with review of 5 books

What's new on our website? The following pages on our website are new:

SWC POSTERS, with two of them, from Thailand and India. More are welcome.

NO-TILL FARMING, for posting papers

SOIL QUALITY, for posting papers

WEB BOARD, to give members opportunity to ask or deliberate in anything of interest. Soon to open.

MEMBERS' VOICES, with the voice of 3 members now. Everyone is welcome to write for this column.

- [Voice of Vir Singh, Uttaranchal, India](#)
- [Voice from John Burton, New Jersey, U.S.A.](#)
- [Voice from Nonoy Oplas, Pangasinan, The Philippines](#)

ASSN OFFICIAL DOCUMENTS

TRAVELOQUES, presently with two articles of mine – about my trips in China. More will be posted.

(Note: After my trip to Argentina and Chile in October-November 2000 I wrote “A Short Trip to the End of the World” and sent out to friends during Christmas 2000. Now, I have lost it, could anyone who still has it forward it back to me? I would highly appreciate it.)

What's new in our photo websites?

- ▲ Terraces in the Philippines <http://outdoors.webshots.com/album/558798221xiQIfI>
- ▲ Debris flow in Sichuan <http://outdoors.webshots.com/album/556603165kRWyAY>
- ▲ Landcare in Africa <http://good-times.webshots.com/album/555397758rwIFd>
- ▲ Seven new wonders of the world <http://outdoors.webshots.com/album/559793112UxFohq>
- ▲ Explosion in Okinawa <http://good-times.webshots.com/album/560372517OFPpUN>

And several Climate Change albums

OBITUARY

Jose Rondal, NR for the Philippines – January 30, 2007 in Manila, the Philippines.

Condolences can be sent to his son Rommel J. Rondal at romsky2000@yahoo.com

MEMBERS' FORUM



☀ **CONGRATULATIONS** to **John Landers**, who received the Order of the British Empire (OBE) from Queen Elizabeth II. Our photo shows John Landers in front of Buckingham Palace, dressed in the traditional top hat and tails, on 4th November 2006, when he received the OBE from Princess Anne, in lieu of the Queen (a rare day off for Her Majesty) in whose 80th birthday honors list he was cited for 'services to sustainable agriculture in Brazil.'



Ed.: John Landers (john.landlers@uol.com.br), a WASWC Life Member, is Executive Secretary of the APDC (Zero Tillage Association for the Cerrado Region), Brasilia, Brazil. He is an indispensable source of knowledge in no-tillage agriculture - a form of conservation agriculture. I was lucky to be his guest once in 2004 when he showed me around the area of Brasilia Federal District and Mato Grosso Province, where an extensive area of the land was under no-tillage farming.

☀ Dear Prof. Miodrag Zlatic, President of WASWC

We join with WASWC to congratulate ourselves on all that we positively performed last year. It is a good sign that WASWC is for the real world that is shared by everyone on the globe.

As part of the WASWC process, IRTECO, an environmental NGO, is also incorporating an education and communication package in its programs. In collaboration with our Italian partner, D'Alaquila Province, we have had an idea since early 2006 to start a sound ECI program. Due to some political and economic changes in Italy, financing mechanisms have not yet been realized. The program could involve 20 young farmers (working in water and environment) to undergo a study at the Agriculture and Environmental Professional School in Avezzano, Italy, and at the same period a couple of the same cadre in Italy could join them for the same fields. This is an initiative that requires a global joint action in agriculture and environmental fields. Still we are looking for partners (through linking IRTECO and Avezzano University, Italy) to make this initiative practical, and WASWC could be one sound partner.

As one of the agri-environmental NGOs in Tanzania, IRTECO has represented its members in different national and international events, and we intend to work closely with WASWC for broad representation. We would like to know concretely, how this plan could be practical in line with WASWC objectives. In Tanzania we have some networks like Tanzania Coalition for Sustainable Development on MDGs number 7, 1 and 8. We have a newspaper and some simple leaflets. We would like to share with others through WASWC.

Through World Social Forum, we will send 10 farmers (on crop processing, water and environmental packages) to Nairobi (WSF2007) and we feel they will be more empowered through exposure to global networks. Some products will be displayed over there during this event. It is our expectation to be one of the key players in WASWC in the future and hopefully to take one of the key positions in its structures, if not representing office at country level.

Thank you and wishing you all the best for Year 2007.

Mwadhini O. Myanza, Director, IRTECO, P.O. Box 6820 Moshi, Tanzania, EA, Phone: +255 754 583242; mwadhini@yahoo.co.uk, irrigationt@yahoo.com

☀ **To: The Editor, Irish Farm Journal**

Brasília DF, 21st January, 2007.

Dear Editor,

Dr. Samran Sombatpanit, Immediate Past President of the World Association of Soil and Water Conservation (WASWC), has requested me to respond to your editorial in the *Irish Farm Journal* 'To plough or not,' since I received a visit from John Geraghty in Brazil two years ago, and also the journalist Aine Connolly, who prepared a broadcast for Irish radio on the zero-tillage system in our Cerrado region.

First, let me say that you have put a reasoned and unbiased position which greatly assists in dialogue. What I can say from my 30 years experience of zero tillage in Brazil, both as a farmer and as Executive Secretary of the Zero Tillage Farmers Association for the Cerrado (savannah) region of tropical Brazil, is that the principles of zero tillage are universal, the solutions local. These depend mostly on farmers' creativity and require the persistence shown by Bruce's spider, which can only come through a firm conviction on the potential value of the exercise (whether it be beating the English or conserving one's soil).

I notice that you treat minimum tillage and zero tillage together as 'ploughless tillage.' There is a huge difference in mindset between the two. The former is a modification of conventional tillage which merely eschews the plough for non-inversion implements. The second implies a determination to adopt new paradigms and make the system work without any tillage at all (the Cassandras will say that the drill cutting the soil is classified as tillage – I prefer to treat this as a red herring). In the tropics, our erosion losses with conventional tillage (Brazil average 23.6 tons/ha/yr) far exceed the soil's re-generation capacity (estimated at 10 tons/ha/yr) and we need at least 6 tons of biomass dry matter generation/ha/year to compensate for the rapidity of soil organic matter oxidation. You may well be right that, under Irish conditions, minimum tillage would give more satisfactory results as compared to ploughing. But who says that zero tillage might not be even better?

While farmers are cosseted by EU subsidies, these management decisions are masked. I asked an English landowner why he only adopted zero tillage three years ago and his reply was that his estate agent had never been trained in this and therefore resisted the change into an unknown technology. In this situation, which we have seen repeated many times, the perceived risks of change are far greater than the real ones and the only way to counter this is to expose farmers, managers and crop consultants to good technical training and support services and, above all, dialogue with zero-tillage practicing colleagues. Our association organizes seminars and training courses to this end and has a specialized technical bulletin which reports on research and farmer experience. Your point that the agricultural technical services (I would add universities) need to produce hard cost-benefit data is poignant, but there will be dangers concentrating on the immediate benefits, while zero tillage benefits accrue over time, as earthworm and natural predator populations and soil structure (drainability) build up. But the most important aspect is a proper environmental accounting exercise so that environmental services payments can be tuned to the right indicators.

In Europe, you are lucky; your public accepts the need to pay to preserve, we are still struggling to get this principle across! I would also like to say that we would welcome a study tour of Irish farmers to Brazil to see what zero tillage has done to conservation, productivity and profits. The best period would be 15 October to 15 November.

Yours fraternally,

John N. Landers OBE
Executive Secretary

Zero Tillage Farmers' Association for the Cerrado, Brasilia, DF, Brazil john.landiers@uol.com.br

☀ **Dear Samran,**

Greetings from Swarna Hansa Foundation. We have hot news for WASWC from Sri Lanka.

President of Sri Lanka assures **"Water will not be privatized"**

More than a decade-long struggle against privatization of water in Sri Lanka met with success when His Excellency Mr Mahinda Rajapaksa, the President of Sri Lanka, pronounced that water resources will never be privatized, a few days back.

It was only a few weeks ago that the Swarna Hansa Foundation, which had been struggling with successive governments, launched a fresh initiative in its campaign against water privatization.

Having drawn the attention of the people to the alarming situation that has erupted in several regions of the country; where kidney diseases are widespread, actually on an unthinkable scale, the Swarna Hansa launched its fresh initiative.

The explanation from medical personnel for the rise in disease was increased consumption of polluted water as well as people not drinking sufficient water.

'We will not sell our water', says President

'A single state organization not sold to bridge budget deficit'

The President yesterday said the government would never sell the water resources of the country and pointed out that not a single state organization had been sold to bridge the budget deficit.

President Mahinda Rajapaksa said there were speculations that there was a move to sell the water resources.

"It is only a myth. Can anyone expect us to sell our water resources when a single state organization had not been sold to narrow the budget gap? By action we have proved that we will never sell our resources," the President said.

Mr. Rajapaksa emphasized this fact in his address to the people of Kandy via satellite technology from Temple Trees soon after the opening of the Kandy water supply project.

"Currently there is a debate on 'heritage' and 'water resources' in the country. I will explain our policy on water resources. Water is an important resource. We should preserve it in the manner we protect and preserve the 'Tooth Relic'.

"During the past, reservoirs had been constructed to preserve every drop of water that fell on our land. We should follow the practice of our forefa-



Mahinda Rajapaksa

thers and if we waste a single drop we will fail to offer them their due respects," the President said.

The new project will provide water to more than 77,000 persons in the Kandy district who earlier suffered without their daily needs of drinking water.

"These will be made from this water supply project which cost the government Rs. 6,000 million. Water supply for another 304,000 will be improved.

"We will develop the city of Kandy and improve the living condition of its citizens. As the first step, the administrative centre will be shifted to Kundasale," the President said. He al-

so said the shifting would not be confined to the changing of boards and that the Provincial Council administrative buildings were being constructed at Kundasale.

"As you are aware Bogambara Prison is located within sight of Sri Dalada Maligawa. Hence, we have made arrangements to shift it to Pallekele. The International Centre of Buddhist Affairs which was located at Sri Dalada Maligawa has already been shifted to Kundasale. A new Cardiology Unit will be set up soon at the Kandy General Hospital", the President added.

The Japanese government-funded Greater Kandy Water

Supply Project was ceremonially commissioned by President Mahinda Rajapaksa and Japanese Ambassador Kiyoshi Araki at a ceremony held at Temple Trees. It was followed by a handing over ceremony at Katugastota in the presence of Urban Development and Water Supply Minister Dinesh Gunawardena, Ambassador Araki and others.

This project was constructed under the Official Development Assistance (ODA) of the Japanese Government, with a 5,151 million yen loan channelled through the Japan Bank for International Cooperation (JBIC). The funds were utilised for the construction of an intake and water treatment plant together with other related facilities to meet an acute shortage of potable water in the historically prominent city of Kandy and its suburbs.

The project was implemented by the National Water Supply and Drainage Board (NWS&DR) and constructed by Iaisei-Hitachi Plant Consortium, under the supervision of NJS Consultants and Nihon Suido Consultants.

The water source for this project is the Mahaweli River at Gohogoda, located upstream of the Polgolla Dam.

The point put forward by the Swarna Hansa is that the tragedy is due to abandoning traditional practices the people followed with regard to water. In Sri Lanka the water resource was regarded as sacred. It was honored and preserved with due respect. There was a practice of maintaining a water pot at public places. It was called Pinthaliya. Its significance was that water was looked after with great respect. It was never polluted. Pollution amounted to a crime. The present day water shortage as well as water pollution is the result of abandoning these practices. The large-scale kidney failures were Nature's punishment for the crime of not preserving water resources: with due respect pollution of water, and on top of that trying to sell it at a price, treating it as another consumer commodity. Selling water at a price is a disgrace to life, which solely depends on water.

Swarna Hansa took the message to the people in the affected areas by making available Pinthaliyas - water filters. Swarna Hansa's initiative was greatly appreciated by the Chief Minister who personally began to participate in Swarna Hansa Foundation's Pinthali distribution to promote their use as an effective way of preventing water-borne diseases.

This was the background to the President of Sri Lanka assuring the nation that he would never privatize water resources.

While it was greatly appreciated by the people and so many people's organizations that fought hard to save water resources of Sri Lanka from corporate abuse, it was certainly a matter of rejoice for Swarna Hansa when the President also took that opportunity to make clear the policy of his government with regard to water.

He said water is an invaluable gift of Nature. It is an asset which needs to be preserved with utmost care and respect, like the sacred tooth relic of Lord Buddha. The Temple of The Sacred Tooth Relic is situated in Kandy, where the new water project was opened. What the President meant is **water is sacred**. Swarna Hansa has said thank you the President.

Gallege Punyawardana
Swarna Hansa Foundation (shf@slt.lk)

PS: If your organization or institute as well can send a note of appreciation, dispatch it to

*His Excellency Mr Mahinda Rajapaksa
The President
Presidential Secretariat
Colombo 1
Sri Lanka*

That will be great!

☀ **Is Rainwater Really Safe - One Sample Case**

<http://topics.developmentgateway.org/water/rc/ItemDetail.do?itemId=1087947>

Water quality is an extremely hot topic these days. With continued population growth and strained water supplies it is likely to become even more so. It is estimated that already one in five homes has some type of water filtration or purification ...

Emmanuel Habumuremyi

I am concerned with Rainwater collection off roofs and bird droppings that may contain the bird flu virus. Am I really off base on this?

Sidney Clouston (cloustonenergy@aol.com)

Bird flu is transmitted mostly by ducks, as they migrate from one country to another. Therefore, bird flu contamination is more likely to be present in water from ponds, and lakes. Roof water should be considered to be safe in this particular regard. However, we do not know what pathogens may be present in the fecal matter of other animals that live on and in the roof thatch, especially in tropical countries. I refer to mice, squirrels, rats, lizards, geckos, snakes, sparrows, and visitors like monkeys, cats and civets.

A.D. Karve, India

☀ **Dear Samran,**

We met at the NATO Advanced Research Workshop in Marianske Lazne in 2003. I hope you are well.

We (alpS - Centre for Natural Hazard Management, the University of Innsbruck and the Austrian Academy of Sciences) are currently organizing an international conference called 'Managing Alpine Future - strategies for sustainability in times of change' during October 15-17, 2007 and think that WASWC members might be interested in the event. Would you be so kind as to distribute the call via the WASWC Hot News or other links? Details are in www.alps-gmbh.com/alpinefuture. All the best from Innsbruck.

Angela Michiko Hama (Michiko.Hama@uibk.ac.at)

☀ **Dear WASWC colleagues,**

I am a geographer teaching and working as Reader (Associate Professor) on Community Based Natural Resource Management (CBNRM), in the Department of Geography, Kumaon University, Nainital, for the last 21 years, located in the newly created Himalayan State of Uttaranchal in India. I have been supervising PhD students and have directed, and am currently directing, research projects in the field. I have also worked on 'Participatory Resource Management' in British Columbia, Canada, at the Department of Geography, Simon Fraser University, Burnaby, BC, in 1997, and also on 'Aboriginal Forestry Management in Canada' at the University of Toronto in 2005 under the Canadian Studies Fellowship of the Shastri Indo-Canadian Institute. Besides this, I have taught CBNRM at the University of Leipzig, Germany and University of Salzburg, Austria as DAAD Guest Professor in 2002. Above all I am a native of Himalaya, and look for collaborative work in various areas of natural resources management to benefit human society. I shall look forward to receiving your kind response. With warm greetings from Nainital.

Prakash C. Tiwari, Reader, Environment and Natural Resource Management, Department of Geography, Kumaon University, Nainital-263002, Uttaranchal, India. Phone: +91-5942-237156 (R); +91-5942-239691(O); Fax: +91-5942-235576; pctiwari@yahoo.com



☀ **To Samran and my international colleagues in soil science,**

Each of us has a personal attachment to the soil, but this picture brings a dimension beyond what I have ever seen. It is a special reverence, with special meaning. I hope you enjoy it.



*Julian Dumanski, 16 Burnbank St., Ottawa, Canada
K2G 0H4, Phone: +1-613-226-3911 jdumanski@rogers.com*

Subject: Mowing the grass

I hope the picture will go through for you – of this Canadian soldier in Afghanistan with his tiny plot of grass in front of his tent. It's heart-warming!

Here is a soldier stationed in Afghanistan; stationed in a big sand box. He asked his wife to send him dirt (Canadian soil), fertilizer, and some grass seed so that he can have the sweet aroma, and feel the grass grow beneath his feet. When the men of the squadron have a mission that they are going

on, they take turns walking through the grass and the Canadian soil - to bring them good luck.

If you notice, he is even cutting the grass with a pair of scissors. Sometimes we are in such a hurry that we don't stop and think about the little things that we take for granted.

Upon receiving this, please say a prayer for our Canadian soldiers that give and give so unselfishly for us. You don't have to send this on, but gosh, who wouldn't?

☀ **Dear Samran,**

While editing the Newsletter, I was particularly struck by the question raised by Menachem Agassi – 'We ... have to realize that the acceptability, by farmers, of the common methods (of soil conservation) is rather poor and we have to ask ourselves why?' This is a subject that has continued to be raised by soil conservationists ever since I became involved in the profession well over forty years ago. Fortunately, much progress has been made over the years and, in fact, farmers are now accepting soil conservation measures in many countries. What is becoming increasingly clear is that generally farmers will only accept conservation measures if there is some clear benefit for them if they do so. In other words, there must be some incentive. We, on the WASWC Council in the 1990s, were very aware of the interest in this subject and, as a result, produced the book, *Incentives in Soil Conservation – from Theory to Practice*. I would suggest that anyone looking for guidance in this subject refers to this publication.

David Sanders, Past President (dsanders38@btinternet.com)

***Incentives in Soil Conservation – From Theory to Practice*, 1999, Eds. David W. Sanders, Paul C. Huszar, Samran Sombatpanit, Thomas Enters. Science Publishers, Inc. ISBN 1-57808-061-4 is available from www.scipub.net for US\$39/ copy. WASWC members can have a 40% discount.**

☀ **Dear Samran,** thank you very much for the email with greetings, and particularly for all the communications and valuable information over the year. Much appreciated. May I also send you our very best wishes for a healthy, happy and prosperous 2007 – and one which sees the start of significant long-term improvements to the environment of the planet. We, in your network, are certainly all trying our best in our various ways! Warm wishes.

*Susie Wren, Organic & Natural Product Advisor
Product and Market Development
Kenya Tel/Fax: +254 6651043; UK Tel/Fax: +44-1793 740304
organic@africaonline.co.ke*

☀ **Dear Samran,**

I am in India and using dial-up access. The newsletter really jams up my mail and usually I have to delete it. Can you ZIP it in future, I am sure that others would agree!

*Keith Virgo
keith@virgos.freereserve.co.uk, www.villageways.com, Dehradun
Ed.: Yes, we are doing this, as you have suggested. Thanks Keith.*

☀ **Dr Samran,**

Hope this e-mail finds you well. Just to report a little constraint in sending my membership fees to you. I wanted to send some money amounting to 10 US Dollars on Saturday but was told the amount was too little for them to produce a Bank Draft. The cost of making it was higher than the amount being sent. The other option was the Money Gram and Swift but these too seem to be expensive for the money being sent. Unfortunately, though many members have become part and parcel of the network here in Malawi, most if not all of them have not yet paid their dues. These could have increased the amount to be posted. However, my request is to find out whether you have other options of sending the money that could be cheaper to reach you. Please advise.

Amon Kabuli – WASWC NR - Malawi

Ed.: We have advised for years that members can pay membership fees in local currency to National Representatives or Vice Presidents, and the latter may keep it in a safe place, and find a way to transfer it later. Recently we have devised a better way, called Incentive Rate, i.e. pay 4 years with membership validity for 5 years, the amount of which will be large enough and there might be some way to send it economically. After all, we have almost 20 pay stations all over the world; you can make a payment at any one of them.

☀ **Dear Samran Sombatpanit,**

Hope all is well. How is work and every other things? And kids? I guess they are doing fine. I really appreciate your mails updating me with information about upcoming events. I really want to know if the Association welcomes opinions about conservation of soil and water in another West African country, i.e. Nigeria. I am a citizen and resident of Nigeria, hoping we can develop agriculture, economic and environmental issues in West Africa.

I want the Association to throw more light on issues relating to West African countries, e.g. Nigeria. Nigeria is endowed with a lot of natural resources, e.g. water and land, which have not been maintained over the years. Some parts of Nigeria have their soil degraded, and also face the consequence of erosion. This has brought problems to farmland and also disrupted other social and economic activities.

Samran, I really want to use this opportunity to introduce Nigeria as a country we should put into consideration while drawing out West African development projects/plans. And I believe the association can improve on other West African countries. Hope to hear from you soon. Yours in Nation Building

Ayodele Ayoola (Let the Farmers Hear, let_the_farmers_hear@yahoo.com)

Ed.: Thanks Ayodele. For the time being, please find a chance to discuss with our newly appointed NR for Nigeria, Dr Moshood Tijani (see in NEW OFFICERS this issue) about how to use WASWC network and facilities in developing some plans to help conserve soil and water resources in your country, certainly through farmers.

☀ **Dear Fellows and Friends,**

We have just had a birthday with the big 50 for Ghana (March 6, 2007) being a leader in Africa for independence from British rule. It is considered to be a stable and also an investment-worthy country. Congratulations.

I had a conversation with Robert Hindle who is with the Millennium Challenge Corporation. He is joining the Energy and Biofuels working group. He will, I hope, provide me guidance on the Center of Excellence effort and related matters. Additionally, I will seek understanding on the regional group that is existing now in Ghana for programs that they have. I am working with Abdul Suleman in Ghana. There is interest in Senegal and Nigeria as to the location of the Center of Excellence amongst some of our members.

My idea presently is that we establish an Administrative Office in Senegal. We will develop stronger links to the universities in the several countries of the Western Africa Region for the World Energy Council Center of Excellence. Coordination can occur, cooperation is required. A Business Plan is being discussed and is required by Michigan State University for any participation and financial investments.

Some discussions were directed to the Florida International Univ. and Oregon State Univ. MIT is not going to spearhead this but may participate later. This is the up-to-the-minute news from the Energy and Biofuels working group.

I am sure is that Energy and Water are needed for real development to occur. Income can be generated with these two things in peri-urban and rural areas. Thus all of the Millennium Development Goals can be done in a sustainable development fashion with self-esteem of the communities that will earn the things that they need. We call that Top Down services meeting the Bottom Up activities of the cooperators.

Sidney Clouston (CloustonEnergy@aol.com)

☀ **United Nations Day for Women's Rights and International Peace, March 8**

Global – In 1977 the United Nations' General Assembly invited states to proclaim, in accordance with their historical and national traditions and customs, any day of the year as United Nations Day for Women's Rights and International Peace. States were called upon to contribute to creating conditions for the elimination of discrimination against women and for their full and equal participation in social development. That action came in the wake of the International Women's Year (1975) and the United Nations Decade for Women (1976-1985), both proclaimed by the Assembly. The United Nations began observing International Women's Day, 8 March, in 1975. The theme for 2007 is 'Ending Impunity for Violence against Women and Girls.' Read more...

www.un.org/womenwatch/feature/iwd/

☀ **IUCN celebrates International Women's Day, 8 March 2007**



Dear colleagues and friends,

Today is International Women's Day, an opportunity every year to celebrate women's significant contributions to environmental protection, poverty reduction, and community well being. It is also a day to recognize what still remains to be done to achieve gender equality and ensure women's rights in society.

We at IUCN will celebrate this special day with our colleagues and families by reflecting on the important achievements we have made to promote gender equality. In fact, IUCN has spearheaded some of the most ambitious work in the environmental field to ensure that use of natural resources is carried out equitably – through capacity-building, knowledge generation, and policy development. But today we will also set our sights on a new goal. If we are to be successful in addressing one of the most challenging environmental and social issues of our time – climate change – we must incorporate a gender perspective in this work.

We are well aware that existing conditions and existing discrimination determine who is most impacted by natural disasters. Women account for 70% of the poorest populations and 50% of those poor women live in rural areas where their livelihoods are dependent upon healthy biodiversity. There are widespread gender differences in access to resources and information, and women are often responsible for the health and safety of their families. Girls are unable to attend school when they have to spend long hours hauling water and firewood. When swift environmental changes come along, these existing gender-related roles and conditions make women more vulnerable to the impacts. Moreover, emergency situations often increase the demand for basic services, reinforcing traditional and often unbalanced roles and responsibilities.

While climate change may thwart global and IUCN's efforts to protect the environment and reduce poverty, gender inequality is an equally detrimental obstacle to these goals. We know that gender equality will be impossible to achieve while women have access to only 5% of the concessions granted worldwide for natural resource use and management. Nor can we aspire to justice without addressing the fact that women bear the majority of responsibility for food production worldwide while holding ownership of less than 1% of that land.

IUCN is committed to addressing climate change and gender equality hand in hand, and learning from the most positive examples. In Honduras, an effort to ensure gender balanced participation in early warning systems training saved an entire community during Hurricane Mitch. During a disaster in Micronesia, a community realized that women's knowledge of hydrology was critical to survival. And several European countries are exploring ways to promote women's and men's equal participation in measures to prevent climate change.

By understanding how women and men are each affected by climate change and its impacts, and by ensuring that both women and men contribute to climate change mitigation and adaptation measures, IUCN will continue to be at the forefront of conserving nature and ensuring equitable and sustainable use of natural resources.

Julia Marton-Lefèvre, IUCN Director General

www.iucn.org/en/news/archive/2007/03/7_gender_climate_change.htm



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Commentary

**Intergovernmental Panel on Climate Change (IPCC)
Fourth Assessment Report (AR 4) dated 6 April 2007**

by D.C. Reicosky

The Intergovernmental Panel on Climate Change (IPCC) has been established by WMO and UNEP to assess scientific, technical and socio-economic information relevant for the understanding of climate change, its potential impacts and options for adaptation and mitigation. It is currently finalizing its Fourth Assessment Report "Climate Change 2007", also referred to as AR4. The reports by the three Working Groups provide a comprehensive and up-to-date assessment of the current state of knowledge on climate change. The IPCC report, a consensus document put together by 600 scientists and agreed by representatives of 113 countries, predicts continued warming of 0.2°C per decade for the coming few decades. The IPCC stated: "Observational evidence from all continents and most oceans shows that many natural systems are being affected by regional climate changes, particularly temperature increases." The changes will effect "ecosystem structure and function, species' ecological interactions, and species' geographic ranges, with predominantly negative consequences for biodiversity, and ecosystem goods and services, e.g. water and food supply."

The question arises relative to the global impact on the conservation of our soil, water and air resources. If we accept the role of soil carbon in our conservation efforts, then carbon management comes vital to global sustainability. Increased drought and water scarcity are likely to lead to growing problems of hunger and human dislocation in coming decades. Reductions in food production capacity in the poorest parts of the world are projected, bringing more hunger and misery and undermining achievement of the millennium development goals. Low-carbon energy supply systems can make an important contribution through biomass from forestry and agricultural by-products, municipal and industrial waste to energy, dedicated biomass plantations, where suitable land and water are available, landfill methane, wind energy and hydropower, and through the use and lifetime

extension of nuclear power plants. Emissions from biomass-fueled power plants could be reduced substantially through pre- or post-combustion carbon removal and storage.

Conservation practices on agricultural lands, forests and other terrestrial ecosystems offer significant carbon mitigation potential with carbon management. While there is limited discussion of soil conservation issues in the IPCC report, the discussion on soil carbon issues remains unclear. Although soil carbon sequestration is not necessarily permanent, conservation and sequestration of carbon may allow time for other options to be further developed and implemented. Biological mitigation can occur by three strategies: (a) conservation of existing carbon pools, (b) sequestration by increasing the size of carbon pools, and (c) substitution of sustainably produced biological products for energy intensive construction products and biomass for fossil fuels.

Conservation of threatened carbon pools may help to avoid emissions. Sequestration reflects the biological dynamics of growth, often starting slowly, passing through a maximum, and then declining over decades to centuries. Conservation and sequestration result in higher carbon stocks, but can lead to higher future carbon emissions if these ecosystems are severely disturbed by either natural or direct/indirect human-induced disturbances. Appropriate management of land for crop, timber and sustainable bio-energy production, may increase benefits for climate change mitigation. Realization of this potential depends upon land and water availability as well as the rates of adoption of different land management practices. Biological mitigation options may have social, economic and environmental benefits beyond reductions in atmospheric CO₂, if implemented appropriately. Many of the recommendations and suggestions of the IPCC report with respect to soil carbon are confusing and we can hope that clarification will come in future reports. For additional information see the following web sites: <http://www.ipcc.ch/>, <http://www.ipcc.ch/pub/wg3spm.pdf>, <http://www.ipcc.ch/SPM6avr07.pdf>.

RESEARCH NEWS

The following five short research news are from the last issue of Soil Tidbits for 2006, by Tom Goddard, Alberta Agriculture and Food, Alberta, Canada. tom.goddard@gov.ab.ca (Contact Tom if you would like a free subscription.)

1. "A tenth of China's arable land is polluted with heavy metals and other toxins, with the pollution contaminating food crops..." (China's State Environmental Protection Agency). The OECD sponsored a workshop in China preceding their release of an environmental performance review of China which was released early in 2007. Ten million hectares of land in China has been damaged. That is about half of the total agricultural land in Alberta. "China only has 50,000 environmental monitoring and inspection personnel working at all levels of environmental protection, for a population of 1.3 billion and over a million polluting factories, the agency said." Relative orders of magnitude I suspect http://www.edie.net/news/news_story.asp?id=12250&channel=0

2. Sulphur deficient soils may increase carcinogens in crops. In 2002, researchers found acrylamide (linked to cancer and other ill effects) in baked and fried breads. The compound is found in the brown crusts (oh, great! another excuse for kids who don't want to eat their bread crusts!). Clever fellows, Donald Mottram, Nigel Halford et al. at the University of Reading, UK, researched how precursors to acrylamides (asparagine - a non essential amino acid) get into wheat in the first place. They found that bread from wheat grown on sulphur deficient soils had 4.7 times the acrylamide in it than a non deficient wheat. Halford said other stresses such as nitrogen deficiency and heat may have similar effects. Well folks, it all comes back to the soil sooner or later....! (agronomy is linked to food safety...) Nature published on line Nov 23/06 <http://www.nature.com/news/2006/061120/full/061120-11.html>

3. Barrett, K.A. and McBride, M.B. 2006. Trace Element Mobilization in Soils by Glyphosate. SSSAJ 70: 1882-1888. Research on soil columns in the lab at Cornell University showed that heavy applications of glyphosate increased mobilization of metals and P. "The application (of glyphosate) to long-contaminated soils containing elevated concentrations of heavy metals and phosphate resulted in significant increases in the leaching of Cu, Zn, Al, Ni, P, Si and As. No significant increases in elemental leaching were detected in mineral and organic soils with normal background concentrations of heavy metals and P. The results indicate that several elements, particularly Cu, Al and P, could be mobilized within the thin surface layer of soils receiving a high effective rate of glyphosate during herbicide application." Now, we wait to see if the researchers looking at glyphosate in drain waters via preferential flow in field soils can find the same.

4. Fresh, Stockpiled, and Composted Beef Cattle Feedlot Manure: Nutrient Levels and Mass Balance Estimates in Alberta and Manitoba. Francis J. Larney, Katherine E. Buckley, Xiyang Hao and W. Paul McCaughey. J Environ Qual., 2006 35: 1844-1854. I have not found a good database of cattle manure constituents so I keep my nose to the ground (so to speak!) for new data. Cattle manure (barley straw based) from Lethbridge and Brandon research stations was sampled for three years. Analysis was done for total C, N and P as well as inorganic N, and available P. Total C concentration of composted manure was about half that of fresh (314 kg Mg⁻¹). Total N was not affected by treatment and total P only increased by composting at Lethbridge. Composting resulted in a 66% C loss and a 46% N loss compared to fresh manure (greenhouse gases not accounted for in the study).

Composting allowed for transporting twice as much P as fresh manure. Contact the lead author at the Lethbridge Research Station if you want a copy.

5. Sorption of Atmospheric Ammonia by Soil and Perennial Grass Downwind from Two Large Cattle Feedlots. Xiyang Hao, Chi Chang, H. Henry Janzen, George Clayton and Brett R. Hill. *J Environ Qual* 2006 35: 1960-1965. NH₃ sorbed on soil was measured during the growing season downwind from a couple of 25,000 head feedlots near Lethbridge. Near the source sorption rates were 2.3 to 3.2 kg N ha⁻¹ wk⁻¹ (measured over 19 weeks). This rate dropped off to about 0.3 kg N ha⁻¹ wk⁻¹ further from the source (0.6 to 1.7 km). Background levels were 0.085 kg N ha⁻¹ wk⁻¹. Data showed that about 19% of ammonia emissions were sorbed within 1.7 km of the feedlot.

FEATURES

FINANCE HIGHLIGHTS

Microfinance crucial to alleviating poverty in forest communities

(An old article but still interesting and useful)

27 January 2006, Rome - Basic financial services can help families start their own small businesses. Giving poor forest-dwellers access to basic financial services is a key element in helping them improve their living standards, according to a new FAO publication.

The publication, *Microfinance and forest-based small-scale enterprises*, funded by Norway, shows how microfinance can help low-income households living in forest areas start up and run their own small businesses. Such forest-dwellers frequently live in remote areas where a lack of financial services is a major obstacle to developing successful business activities.

"Opening up the possibility of taking out loans and saving money with interest is crucial to helping poor households who earn their living from forest products to establish their own small-scale enterprises," according to Sophie Grouwels, an FAO forest expert.

Microfinance is a general term referring to the provision of basic financial services such as credit, savings, leasing, equity financing, insurance and remittance mechanisms by banks, non-governmental organizations and credit and savings cooperatives in both the formal and informal financial sectors.

Close to 100% recovery rate in Nepal

Microfinance and forest-based small-scale enterprises includes a number of success stories, including one from the Parbat District of Nepal, where 673 small-scale enterprises were set up under a microfinance enterprise development program, creating employment in rural areas that depend on trade of non-wood forest products such as honey, *allo* (traditional cloth made from nettles) and *lapsi* (a fruit used to make drinks and candy). Some 669 businesses, or 99.4% of program participants, paid back their loans in full.

"Several factors contributed to this success," said Sven Walter, an FAO forest expert. "The entrepreneurs were carefully selected using stringent criteria, the enterprises had access to business development services, and they were monitored regularly."

He continued: "The provision of microfinance in itself will not break the cycle of poverty. To succeed, it must be accompanied by other services provided to the small forest enterprises."

Microfinance can do even more

FAO's new publication suggests that in addition to their regular services, microfinance institutions should provide business development counseling and support to small enterprises. It also notes that there is often a need to break social barriers that can discourage rural people from approaching financial institutions for help.

Microfinance and forest-based small-scale enterprises also warns against the imposition of artificial ceilings on interest rates and subsidizing targeted credit programs, since this can distort the market and make microfinance less sustainable.

Full online book (104 pp.) is available at www.fao.org/forestry/site/4640/en

For more information, contact: FAO Media Office, (+39) 06 570 53625, FAO-Newsroom@fao.org

NO-TILL HIGHLIGHTS

▲ "Park the Plow Program" Taking Applications, www.capitalrcd.org

HARRISBURG (Sept. 29, 2006) – The Capital Resource Conservation and Development (RC&D) Area Council is taking applications for its new no-till assistance program called "Park the Plow for Profit." Under the program farmers in the South Central Pennsylvania are encouraged to adopt continuous no-till cropping systems in the lower Susquehanna Valley, specifically Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon and York counties.

"Park the Plow for Profit" was designed to address some of the barriers to no-till adoption such as equipment costs as well as education and technical information. The need for technical knowledge to make the transition to no-till successful will be included in the form of a landowner payment for the services of a Certified Crop Adviser, to develop a "transition plan" for the acreage enrolled in the program. A fundamental principle of the program is that no-till farming has to be done by managing a total cropping system in order to be successful.

"Decisions about crop varieties, manure and fertilizer application, pest control tactics, crop rotations and the use of cover crops all need to be done in recognition that no-till systems are not simply the same as tilled systems without the tillage," according to John Rowehl, Extension Educator in Agronomy.

To help address the issue of the costs to convert to no-till, there will be a per-acre payment made available for technical services throughout the transition period, as well as a payment for the practice, if so desired by the farmer. Many farmers who are successful in no-till have expressed that no-till works best when it is continuous no-till. Consequently, continuous no-till is the ultimate goal of this program and participation in it means that a grower will need to commit the acreage to no-till for three to five years.

No-till cropping is a very cost effective soil erosion control practice. It is also a way to significantly reduce fuel use.

The Capital RC&D Council has partnered with the Department of Environmental Protection (DEP), Natural Resources Conservation Service (NRCS), Penn State Cooperative Extension and participating county conservation districts to develop the program. The Capital RC&D Council is a registered 501(c) 3 non-profit corporation and an equal opportunity provider.

For more information or your county's contacts for the program, call the Capital RC&D Council office at (717) 948-6633 or check out the website at: www.capitalrcd.org.

▲ **MAN-DAK Zero Till Workshop 2007**, www.mandakzerotill.org

The Manitoba-North Dakota Zero Till Farmers Association held their 29th annual workshop and trade show February 7-8, 2007, in Brandon, Manitoba, Canada. The organizers and management of the event were delighted with the hundreds of farmers from North Dakota and Manitoba who attended.

Featured speakers included Dr Dwayne Beck, from the farmer-owned Dakota Lake Research Station in North Dakota. He presented a paper describing their research with advancement of cropping systems that minimize dependence on herbicides to manage weeds and disease.

Several speakers from both Canada and the United States addressed carbon storage and the intriguing potential for carbon credits associated with zero-till farming. While emphasizing soil management, crop rotation, and fertility issues, the workshop also gave farmers more exposure to such topics as the synergies between zero till and livestock operations.

The evening rap sessions were popular and were well attended as this was the place where farmers were able to get a lot of their individual questions answered. Farmers shared their experience on such subjects as what they have learned on no-till fertilizer placement, seed placement, managing dry and wet soils, root enhancement products, strip tillage, no-till equipment and geospatial technology.

Soil erosion is a long running concern for all farmers and while the media considers soil erosion mundane compared to giant oil spills or rainforest destruction, it is just as important. Zero-till farming began as a direct response to concerns about soil erosion. Zero till benefits farmers and the environment in many other ways. It helps maintain and improve the environment as the use of fossil fuel in the zero-till fields is drastically reduced. Zero-tillage farming can produce abundant food while protecting the soil and wildlife.

The impact of zero-till technology is quite evident in this part of the world. In the 1970s there were around 10 million hectares of summer fallow in western Canada. Thanks to zero and minimum tillage, the number of summer-fallowed acres has fallen to under 4 million hectares. Despite what some people think, the land in western Canada is well taken care of. Crop residue is all going back into the land; there is very little wind or water erosion; soil texture improves each year and carbon in the ground is much less exposed to the atmosphere. The remaining summer fallow is concentrated in southern Saskatchewan, where rainfall is usually limited. And even there, summer fallow is done much differently than in the past: the land is worked sparingly, sprayed with glyphosate and tilled for the first time in mid-July or early August. Farmers in past decades often tilled their summer fallow six or eight times per season, damaging the soil texture, releasing soil carbon into the atmosphere; and using far more fossil fuel, but with lesser yields.

The zero-till farmer's desire to work in harmony with nature is often illustrated by duck nests found between the rows of emerging zero-till crops and by the duff layer which is created in a zero-till farming system.

Making optimal use of zero till is not a simple or easy thing. For that reason, these annual workshops are critical for the wider dissemination of zero-till knowledge.

Many believe zero till will soon be the dominant form of crop agriculture in many parts of the world. It is popular in Australia. Given its impressive track record of economic, social and environmental benefits, its future must be guaranteed.

- Bill Anderson, Professional Agrologist (P.Ag.), WASWC Life Member, P.O. Box 1, Forrest MB ROKOWO, Canada. wheatcity_man@yahoo.ca

Agroforestry Highlight

Craig Elevitch, Agroforestry Center, Hawaii, U.S.A.
cre@agroforestry.net

Trees outside forests, by Ronald Bellefontaine, Sandrine Petit, Michelle Pain-Orcet, Philippe Deleporte, Jean-Guy Bertault (Cirad and FAO). (Photo: Timber trees growing along the boundary of a coffee and banana plantation, North Kona, Hawaii, by C. Elevitch)



Rural people around the world are of one mind when it comes to the durability, availability and use of the goods and services provided by tree resources, whether inside or outside the forest. These men and women make no distinction between field trees and forest resources, perceiving the clear and close link between the two, and their interaction. Policy-makers and planners, however, tend to view these resources as different entities. It seems clear that Trees outside forests have not yet succeeded in arousing real interest at the top. So there is a need to describe and comprehend the dynamics of trees and shrubs on rural and urban land, and their interaction with forest dynamics. This should lead to a better understanding of off-forest tree management and towards integrated and sustainable management of natural resources and of forest, farm, pastoral and urban land.

Trees outside forests comprise a widespread and multi-purpose resource, frequently domesticated, cultivated and tended, and offering a gamut of environmental services and products. That society has appropriated this resource is plain to see in the many local practices, laws and customs governing their use, as in their symbolic and cultural representations. This is as true of countries with scant forest resources as of those more richly endowed.

Tree resource conservation and even expansion is a strategic issue in less-forested countries, where trees outside forests – growing in rural or urban areas, in orchards, gardens, savannah, or agroforestry parklands as shade trees or permanent crops – constitute a genuine and essential source of the wood and non-wood products crucial for people's day-to-day needs. *While their contribution to local economies is significant, their contribution to the conservation of biodiversity is inestimable.*

Trees outside forests have a similar social impact in countries with abundant forest resources, though it may not seem so, and the economic necessity for this resource may, at first sight, appear less urgent, but the environmental need is clearly just as crucial. There may be no present concern over their disappearance, but the degradation of off-forest tree systems is often irreversible and there is a clear risk of ecosystem deterioration.

Well-forested or not, all countries face the same constraints regarding the management of Trees outside forests. Despite land insecurity and unfavorable economic guidelines, rural and urban communities attempt to maintain and preserve these tree systems, calling on skills and practices handed down from one generation to the next. As for the institutions, many working under difficult material and financial circumstances, there is a need to take a fresh look at certain legal contradictions, confront the drastic rules of the international market-place, and try to reconcile local strategies with policies of more general interest.

Generally speaking, the integrated development and sustainable forest and non-forest land management sectors have not paid enough attention to non-forest tree resources, whether rural or urban. Nonetheless, if we look at the environmental and development record, the topic gradually and increasingly appears on the agenda of scientific, economic and policy debates. The apparent climate degradation that took place in the 1970s provoked a rush of aid to countries hit by drought and desertification. This was followed in the 1980s by a wealth of agroforestry research that acknowledged the major role of trees in rural development and soil fertility.

Environment, sustainable development and biological diversity were high on the agenda of the 1992 United Nations Conference on Environment and Development (UNCED). During the 1980s and 1990s, interest mounted in non-wood forest products. Trees, especially trees growing outside forests, began to be viewed in terms of their contribution to social well-being and to the environment. Policymakers and planners gradually evolved and converged in their thinking to acknowledge the promise of this resource, in all its myriad forms, as a key to multi-sector, sustainable development.

And yet, while the wide-ranging uses and services of these resources are increasingly well-known, hard numerical data and information are still lacking worldwide. Deforestation has been mapped and quantified, but we know very little about the fate of land formerly under forest, and the parallel changes in tree cover in fields and towns. What we do know about Trees outside forests comes mostly from local studies, so that our knowledge is quite diffuse, and much of it remains untapped, lodged in the local lore of rural societies.

What is needed, then, is an overall grasp of the socioeconomic and environmental implications of these resources at every level, a better understanding of what influences their expansion or regression, identification of the institutional underpinnings, a closer look at the relevant practices and underlying knowledge, and a thorough review of resource assessment experiences in the sector.

Source: Bellefontaine R., Petit S., Pain-Orcet M., Deleporte P. and Bertault J.G. 2002. Trees outside forests: towards better awareness. FAO Conservation Guide 35, FAO, Rome.

VETIVER HIGHLIGHTS

Dick Grimshaw, Chairman, The Vetiver Network (International), 709 Briar Rd., Bellingham, WA 98225, U.S.A.

dickgrimshaw@vetiver.org, <http://www.vetiver.org>

Vetiver Network Picture Gallery - <http://picasaweb.google.com/VetiverNetwork>

Vetiver Clients Gallery: <http://picasaweb.google.com/VetiverClients>

Blog Site: <http://vetivernetinternational.blogspot.com/>

I have started a **Vetiver Picture Gallery** at <http://picasaweb.google.com/VetiverNetwork>. This is accessible through our website frontpage.

Whilst putting it together I have come to realize that it would be much better if those of you working with Vetiver Systems could also establish vetiver picture galleries showing your own work (updated when necessary) with proper captions. It is very easy and Google provides the service at no cost. Once you have established your gallery you could send me the **url** of the site and I could list it prominently on our web site. By participating in this we would have the following advantages:

- (1) We would record collectively what we are doing in the world of vetiver.
- (2) It would be terrific advertising for the Vetiver System.
- (3) It would be an excellent way of advertising for those of you who are working with vetiver as a business.
- (4) It would make us all feel good to see what we are all doing in our own way to help improve the environment and help others to do the same.

Please copy this message to others who are working with vetiver and invite them to participate. This could be a really useful input by all of us.

The Vetiver Network will give an annual award over the next three years of \$500 per year for the best Vetiver picture gallery. I will be the impartial judge! The galleries will be judged on quality and value of content.

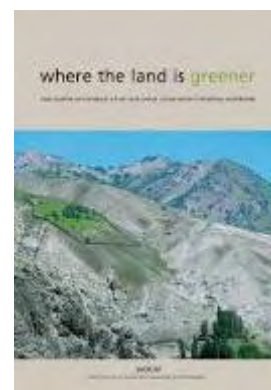
WOCAT HIGHLIGHTS

Reactions to the WOCAT book 'where the land is greener: case studies and analysis of soil and water conservation initiatives'

Probably by now the word is out that WOCAT has set a standard by publishing the book **'where the land is greener'**, a prototype for systematic documentation, evaluation and dissemination of SLM knowledge and case studies that are presented in a standardized four-page summary format. This well-illustrated and attractive book looks at soil and water conservation from a global perspective. In total 42 soil and water conservation technologies and 28 approaches are described.

There are some well-established successes but also many little known 'islands of promise'. The case studies come from more than 20 countries around the world and each one is described on four pages with photographs, graphs, line drawings and brief, concise texts, which makes this fascinating book very well legible.

The book does not stop with case studies: there are two main analytical sections taking the technologies and approaches in turn: these search for the common elements of success. Finally there are also policy pointers for decision-makers and donors.



After its publication WOCAT received many reactions, most of them congratulating the editors for their hard and excellent work to create such an interesting and useful book.

Most feedback complimented the excellent style and buildup of the book, saying that it was “a valuable asset with good photographs and illustrations which makes it more legible and understandable”.

The many photos and illustrations were considered “a great addition” and the book was said to be “remarkable in terms of reader friendliness”.

Many commented that after reading the book one would feel more optimistic that “the planet could support its population” and the collection of so many success stories gave people the hope that “anything is possible on this earth if we desire so”. Some declared the book “just exemplary” and it was said to be “one of the outstanding publications in recent times in the field of land management”.

High credit was also given to the fact, that not only positive outcomes of the different technologies and approaches were described and documented: “Particularly the mentioning of negative results in some case studies also gives a clue to the readers to follow the right approaches in handling the degraded lands.”

Such positive feedback is a very nice remuneration for all the efforts that have been put into writing and editing this great book!

- Francesca Verones (f.verones@bluewin.ch) and Rima Mekdaschi-Studer, Rima.Mekdaschi_Studer@cde.unibe.ch

SUMMARY REPORTS

THE VIETNAM VETIVER NETWORK (VNVN)'s Regional Conference on Vetiver, Cantho, Vietnam, January 18-21, 2006

Vetiver System: Disaster Mitigation and Environmental Protection in Vietnam



A regional conference on Vetiver grass, (*Vetiveria zizanioides*) was held in January 2006 at the College of Agriculture and Applied Biology, Cantho University, Cantho, Vietnam, which provided Vietnamese and overseas scientists a chance to present their research and achievements on the application of Vetiver grass systems in three main areas. (Photo at left shows the rector of Cantho University when delivering the opening speech.)

Disaster Mitigation: Vietnam is prone to disasters such as landslides and sea water intrusion. This conference showed how vetiver can be used effectively to control/stabilize sea dikes in the north, flash flood and sea water intrusion in the central, and erosive annual flooding and wave erosion in the south of Vietnam.

Environmental Protection: Due to a very rapidly developing economy, Vietnam is facing growing environmental pollution problems caused by the food processing industry, animal farms, rubber plantations, mining and in particular, urban and industrial wastes. This conference introduced the latest vetiver technology in wastewater treatment, phytoremediation of industrial wastewater and tailings of mines and showed how vetiver could be used to effectively and cheaply to control/remediate such problems.

On-farm applications and its socio-economic impact: It was shown how vetiver can contribute to the improved livelihood of local communities, through soil and water conservation, fodder for livestock, income generation from handicraft and also job opportunities where families can engage in plant propagation and implementation of projects in infrastructure protection.

Many local authorities were introduced for the first time to the benefits of the vetiver system. In particularly authorities of An Giang Province, where the area of planted vetiver grass is the largest in Mekong delta, were very interested in the utilization of vetiver leaves for handicraft production, as occurs in Thailand. The Thai conference participants promised to support training if requested.

Overall the conference provided information about internationally successful applications of vetiver grass systems for soil erosion control, slope and dyke stabilization, and wastewater treatment and the initial results of vetiver system application in Vietnam. Several reports stated that vetiver could be combined with other

technologies, such as concrete, steel net and supporting stakes to control soil erosion along dyke and river banks, and in conjunction with microorganisms in wastewater treatment.

- *Le Viet Dung, Cantho University, Cantho, Vietnam lvdung@cctu.edu.vn and Tran Tan Van, Research Institute of Geology and Mineral Resources (RIGMR), Hanoi, Vietnam van@rigmr.org.vn*

An Integrated and Participatory Research Approaches towards Sustainable Livelihoods and Ecosystems in Mountainous Regions, Chiang Mai, Thailand, March 7-9, 2006

Mountainous regions cover about 27% of the world's land surface and are home to some 22% of the global population. A greater number of people depend on mountain environments for a wide range of services, including clean water, energy, timber and recreation. At the same time, mountain areas are extremely vulnerable ecosystems and under continuous threat of environmental degradation due to natural resource exploitation, high population pressure, and insecure and inequitable resource ownership.

Mountain people are often among the most marginalized groups in society. The remoteness and frequent position of mountain regions along disputed political and ethnic borders also make them prone to armed conflict. On the other hand, mountainous regions are treasures of biological and agricultural diversity. Perhaps no other life zone contains such high degree of variation between habitats and ecosystems as mountains.



Although the significant importance of mountainous regions for the global ecosystem is undisputed, there has been pitifully little investment in mountain research. Much of what we know is based on highly fragmented investigations. The high degree of cultural, ecological, economic and social diversity of mountain environments cannot adequately be captured by scientists constrained by disciplinary boundaries and working in isolation from other strata of society.

The main objective of the recent International Symposium "Towards Sustainable Livelihoods and Ecosystems in Mountainous Regions", Chiang Mai, 7-9 March 2006 was to bring together scholars, development workers, policy-makers and farmers to exchange innovative multi-disciplinary and integrated research outcomes and successful extension and development approaches. A secondary objective was to present and discuss the research results of "The Uplands Program", a Thai-Vietnamese-German collaborative research program on "Sustainable Land Use and Rural Development in Mountainous Regions of Southeast Asia".

The Symposium brought together more than 300 participants from 25 countries. An innovative feature was the so-called 'farmer-scientist dialogue', in which farmers from the major ethnic minority groups in the Thai highlands presented community-based research results and discussed them with the attending scientists and development practitioners. The panel discussions saw a change in composition of participants: natural scientists, economists, social and political scientists, anthropologists, all attending sessions dealing with topics outside their disciplines. Hence disciplinary boundaries were crossed, not only in many of the presentations, but also in terms of session attendance and discussions, thus heeding the major imperative of mountainous regions research, i.e. interdisciplinarity and integration.

Note: The full papers can be downloaded from the symposium's website www.mountainsymposium2006.net.ms.

- *Andreas Neef, Uplands Project, c/o Chiangmai University, Chiang Mai, Thailand a_neef@usa.net*



Training Course on Environment Monitoring in Pakistan, Ayubia, Pakistan, May 29-June 2, 2006



The Center for Integrated Mountain Research (CIMR) and Center for Advance Studies and Research (CASR) of University of the Punjab, Lahore in collaboration with Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) organized a short training course on "Environment Monitoring" at Khanaspur, Ayubia from May 29 to June 2, 2006.

The course covered a range of environmental assessment and analytical monitoring techniques, including environmental pollution, air pollution dispersion mathematical modeling, application of remote sensing and GIS in environment monitoring, water quality assessment, land degradation, and legislative aspects of environment protection.

The course recommended that:

The necessary laws should be reframed to make an individual or organization responsible for installation of treatment plants for disposal of effluents in water bodies.

The national environmental quality standards be reshaped, keeping in view the local environmental conditions, and point source pollution caused by industrial and municipal effluents should be determined in terms of quality/quantity.

It was also recommended that the soil, plant and water systems in context of food production be included as an important element for strategic planning on pollution control and that community participation be ensured in order to tackle environmental issues in their true perspective.

To solve the water problems it is essential to develop and use indicators, to set up monitoring systems and promote research on carrying capacity. Water-use and related activities should respect the ecological characteristics and capacity of the local environment in which they take place, and should be restricted or prohibited in ecologically sensitive areas.

It was felt that strong local and government support is required to save water in dry areas. Education on environment monitoring, especially on air and water conservation and management, should be strengthened at local and national levels. National and local codes of ethics, based on the Global Code of Ethics on Environment, should be developed. Certification systems, labeling and contests need to be developed in order to support good practices in sustainable management at local level. A database of financial resources for sustainable water should exist at the national level and should be accessible to public.

International organizations, especially funding organizations, need to be informed about the environmental issues in the air and water sector, and pay special regard to environmental awareness programs when preparing, approving and funding environmental management projects.

- Khalida Khan, Center for Integrated Mountain Research, Lahore Univ., Lahore, Pakistan cimrpu@yahoo.com

Brief report on Soil Science History activity at the World Congress of Soil Science in Philadelphia, July-August 2006

Many of us came together for the 18th World Congress of Soil Science in Philadelphia. The past 4 years have been a period of renewed interest in the history, philosophy and sociology of soil science. For this, we owe a great debt of gratitude to the leadership team of IUSS Commission 4.5 - Benno Warkentin, Dan Yaalon and Hans van Baren.

Their efforts at promoting research and publication within our profession, and outreach to related disciplines has been exemplary. The active support of Emmanuel Frossard, as IUSS Division 4 Chairperson, has given our community a voice at the highest levels of our profession. To Benno, Dan, Hans and Emmanuel, we say bravo and thanks for a job so very well done.

- Edward Landa (erlanda@usgs.gov), (newly elected) Chair of IUSS Commission C 4.5
- Christian Feller (feller@ird.mg), (newly elected) Vice Chair

Ed. - For the Newsletter of Soil Science History, click www.iuss.org/ and go to 'IUSS Newsletters' link. Its Editor, Dr Eric C. Brevik, will be glad to receive your contributions, including information about upcoming meetings, new books, etc. and he maintains a group e-mail list, so please consider joining the group. His contact address and webpage are: ecbrevik@valdosta.edu, <http://chiron.valdosta.edu/ecbrevik/HistoryMainPage.htm>. This news was sent by Dan Yaalon in Jerusalem (yaalon@vms.huji.ac.il) who believes that "there is no progress without good knowledge of socio-historical foundations."

Summary for the 2nd International Symposium on Soil Erosion and Dry-land Farming (SEDF2006), Yangling, Shaanxi, China, October 1-5, 2006



With the permission of Chinese Academy of Sciences and Ministry of Water Resources, the "2nd International Symposium on Soil Erosion and Dry-land Farming" (SEDF2006) was held between Oct.1-5 in 2006 at the International Convention and Exhibition Center of Yangling, Shaanxi Province, China.

The main object of the symposium was how to hasten soil erosion control and improve production efficiency of dry-land farming in order to realize ecology melioration, highly efficient utilization and sustainable development of soil and water resources in the arid and semi-arid region. (Photo at left: Prof Zhao Qi-Guo, Soil Scientist and Academician of the Chinese Academy of Sciences, formerly of Nanjing Institute of Soil Science)

Another important objective was to establish the international academic status of the Institute of Soil and Water Conservation of the Chinese Academy of Science in the fields of soil erosion, soil and water conservation and dry-land agriculture.

Another objective was to further advance the Institute's reputation by widening cooperation channels and promoting communication with national and overseas universities and institutions, so as to enable stable foundation to be established to realize a scientific leap during Science Research for the 11th Five-Year Plan and National Medium- and Long-Term Program for Science and Technology Development (2006-2020).

The symposium was attended by more than 160 participants. Thirty two overseas participants arrived from America, Canada, Russia, Netherlands, Germany, France, Australia, Iran and Thailand. The rest of the attendees were from 20 provinces and municipalities in China. Two hundred and thirty two abstracts and eighty two full papers were received for this symposium.

- Li Rui, Institute of Soil and Water Conservation – CAS, Yangling, Shaanxi, P.R. China lirui@ms.iswc.ac.cn

BRIEF REPORT ON STATE LEVEL WORKSHOP ON WATERSHED DEVELOPMENT at SHILLONG, MEGHALAYA, INDIA

A two-day State Level Workshop on Watershed Development Projects in Shifting Cultivation Areas (WDPSCA) and National Watershed Development Projects in Rainfed Areas (NWDPRRA) was held at Shillong, Meghalaya, India on the 14-15 November, 2006.

One hundred and fifty five technical and field officers participated in the workshop. While welcoming the guests from both within and outside the State, Shri K.C. Momin, Director of Soil & Water Conservation emphasized the need for concentrated interactions on watershed management programs, focusing on the effects of high rainfall in hilly, mountainous terrains and land degradation of the North Eastern Region of India.

Honorable Minister Shri Mukhim addressed the gathering and related that the Soil & Water Conservation Department was playing a vital role in the conservation of Natural Resources, and emphasized the need for a watershed approach in the development of agriculture and horticulture in the State.



From left: *M.N. Mukhim, Honorable Minister I/c Soil & Water Conservation Department, Government of Meghalaya inaugurated the two-day workshop on WDPSCA on November 14, 2006 at Shillong. *Sketch map of Northeastern Indian States. *Officials and participants listening attentively during one of the technical sessions.

The workshop included five technical sessions on the topics: land resources management; new concepts on soil & water conservation in watershed management; guidelines and instructions for implementation of WDPSCA & NWDPRAs; rainwater harvesting and management; and safe disposal of run-off in the hilly terrains of Meghalaya.

From the lively discussion generated by the presentations, the following recommendations emerged:

- The need for a reliable database relating to the inventory of resources, adoption of effective soil, water and energy conservation measures and enhancement of input use efficiency;
- The scientifically efficient conservation of rainwater and water management including integrated use of rain, surface and groundwater, and provision of adequate drainage;
- Quantification of short- and long-term impacts of resource management practices on soil and water quality, crop productivity and environmental security;
- An adoption of farming systems having higher resource use efficiency in terms of water productivity and nutrients use efficiency for varying agro-ecological zones;
- For a scientific farming system on sloping and marginal lands following integrated watershed management mode; and
- The need for periodic monitoring of soil health and water quality in mining areas of the State.

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

MISCELLANEOUS

TAKE A BREAK

Five Principles for Happiness in 2007

Tuesday, January 2, 2007



Before you make your New Year's resolutions for 2007, I'd like to share some thoughts about how it's never too late to start living a rich life.

Principle 1: Give Yourself a Break - Its time to move on. The fastest way I know to do this is to write all of your regrets down on paper.

Principle 2: Get Connected with Your Truth - Ask yourself some key questions like 'What makes you happy at work and it will lead you to some amazing discoveries?'

Principle 3: Stop Judging Yourself - stop the negative conversations you have with yourself immediately.

Principle 4: Stop Judging Others - We're not here to judge one another.

Principle 5: Pursue Fun with a Vengeance - Fun doesn't just happen. You have to make it a priority in your life or it'll go missing. Life's too short to not have it.

A Surprising Secret to a Long Life: Stay in School



Irma Lara, 75, who came to the United States from Mexico when she was 26, spends time exercising at a community center in Texas.

In every country, compelling children to spend a longer time in school led to better health.

By Michael Stravato for The New York Times

CHARITY

SuVyapar



PEOPLink is a non-profit organization based in the USA whose mission is to guide small and medium enterprises (SMEs) all over the world to participate in e-commerce. They began working with artisans but are now supporting a wide range of SMEs and business networks in 42 countries.

Starting in 1999, PEOPLink developed the CatGen (for "catalog generator") e-commerce platform which enables any enterprise anywhere to create and maintain their own web catalog. It also provides an "out of the box" solution for business networks to aggregate many catalogs into an on-line marketplace of sufficient scale to generate the visibility and credibility necessary for successful e-commerce.

To know more [click here...](#)

It's Amazing

Jong Sarat is the most famous of the various embroidery designs from



Brunie and has been accepted by connoisseurs of this art as the "trademark" of the traditional skill weaving process.

At the pre-weaving state, the weaver prepares ten bamboo spools of cotton thread of any color to be woven into a piece of cloth. This process is called *melarau*. She then begins the *mengani* process, which is to prepare the thread to a required length, depending on how many pieces of cloth she intends to weave at one time. The number of strands of the thread to be prepared, called *inanai*, is calculated on the size of the cloth to be woven, and it can be between 1,200 to 1,500. Before the actual weaving is started, the weaver selects the design or pattern requested by her customer. It takes 2 weeks to 3 months, depending on the design, to weave one traditional woven cloth. To know more [click here...](#)



It's Amazing !

Himachali Poolan-the slip-ons to protect one's feet during the hard winters, is a rare example of beauty and utility. Made from the dried stems of the opium plant these *Poolan* are used to wear indoors where leather slippers are not allowed even today. Their tops are made in colorful threads. To know more [click here](#)

FEW WISE/ INTERESTING WORDS

"Personally I'm always ready to learn, although I do not always like being taught." – *Sir Winston Churchill*

"You can tell a lot more about a person by what he says about others than by what others say about him." – *Anonymous*

"Injustice anywhere, is a threat to justice everywhere" – *Martin Luther King, Jr.*

"The outward freedom that we shall attain will only be in exact proportion to the inward freedom to which we may have grown at a given moment. And if this is a correct view of freedom, our chief energy must be concentrated on achieving reform from within." – *Gandhi*

"You should do the right thing." – *Wesley Autrey, who helped a teenage boy in New York from being run over by a subway train on January 2, 2007*

Seize the day ... live with no regrets. – *Denise A. Wilson*

In the Next Issue

- **SWCS Workshop on Managing Agricultural Landscapes for Environmental Quality**
- **Report from Punjab's Symposium on Balanced Fertilization**
- **Report from Australian Soils Conference**
- **Report from African Soils Conference**

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