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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

In this issue:

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

PRESIDENT'S MESSAGE

Miodrag Zlatic

REPORT ON THE VISIT TO SOUTH AFRICA

It is with great pleasure that I write to WASWC members about my experiences on visiting South Africa, their SWC point of view and the hospitality of the people who were with me and took care of me after the WOCAT workshop. First **Rinda van der Merwe** and then **Richard Fowler**, both national representatives of WASWC for South Africa - their photos are shown, respectively, below. The first half of my visit to SA (October 23-28, 2006), was linked to the WOCAT workshop, which is presented in WOCAT Highlights column in this issue (p. 24). In a few words, the workshop was very productive, as the representative of Swiss Development Cooperation (SDC - main funder of the WOCAT program) was very satisfied and expressed his plan to finance the program for another period. Organization of the workshop was also of good quality, and Rinda arranged a very valuable and pleasant excursion in the Swartland (the wheat capital of the Western Cape), in the Boland (the main wine producing area of South Africa), as well as visits to other research institutions.

After the workshop we had time to visit places of geographical interest, e.g. Table Mountain, Cape Point and Cape of Good Hope, which are very impressive. Table Mountain is a plateau, 1,087 m asl, with lovely views of Cape Town and with flora (Fynbos) specific to this climate zone. As one of the world's most significant biodiversity hotspots, Table Mountain is the showcase for one of the country's World Heritage Sites, "The Cape Floral Kingdom" which blankets its steep slopes. It is also the centerpiece of the Table Mountain National Park, which covers the entire Peninsula and extends from the mountain's highest peaks, all along its spiny ridge to the windswept coastline of Cape Point and the Cape of Good Hope.

Upper Row, From Left: Table Mountain, 1,087 m asl, towering above Cape Town; Pincushion protea (*Protea sp.,* in the same genus as the national flower *Protea cynaroides* or king protea, shown on the top of this page), found on Table Mountain; Cape of Good Hope (top) as seen from Cape Point. ***Lower row, from left:*** windbreaks-shelterbelts in an orchard area; sheep resting on the road; dry area between Cape Town and Pretoria.

From Monday to Saturday (Oct. 30-Nov. 4) I was the guest of Rinda and Richard. Rinda and I left Cape Town on Monday morning and arrived in Pretoria after two days, covering approx. 1,600 km. This was a very good opportunity to cross a great part of South Africa, from the drier areas to the higher rainfall parts.

On our way we saved one life but killed thousands: we saved one tortoise that was crossing the highway, and killed thousands of red grasshoppers. We slept over in Waschbank on the banks of the Orange River, close to the Gariep Dam, a very lovely place. On Tuesday afternoon we reached Pretoria, visited Rinda's Institute (Agriculture Research

Council - Institute for Soil, Climate and Water), the Union buildings (Pretoria Parliament) and we had dinner at Carin Pretorius home (Above photo – Carin is in SA team involved in WOCAT activities).

Left: detailed map of Cape Town area, down to Cape Point at the southern tip; ***Middle:*** road map of South Africa, showing Cape Town at the Southwestern tip; ***Right:*** Pretoria-Johannesburg-Durban area on the Northeastern part of the country.

Wednesday morning Rinda and I drove to Harrismith to meet Richard. It was another 300 km and lots of traffic near Johannesburg. Traffic was totally stopped but my good driver found a 'shortcut'. In Harrismith we met Richard, who organized lunch for us and one expert from a bio-farming group. Unfortunately, Rinda could not go further as she had to go back another 300 km. After that I was Richard's guest and after another 200 km we were in Pietermaritzburg's surrounding where we visited the Department of Agriculture and Environmental Affairs of KwaZulu-Natal Province. From then until the day of my departure for Serbia I stayed in Richard's house where I met his wife Margaret. I enjoyed her warm hospitality and excellent food.

On Thursday we visited the Agriculture Faculty of the University of KwaZulu-Natal and met at the School of Bioresources Engineering & Environmental Hydrology with Prof. Jeff Smithers, Carl Bezuidenhout and Simon Lorentz. We had good discussion about the education system and research. They are preparing students for the SWC projects in the fields of: (1) innovations, (2) streamflow reduction, (3) hydrological processes, (4) non-point source pollution in agriculture, (5) impacts of atmospheric deposition, (6) mine land rehabilitation, and (7) soil compaction in forestry and sugar production. Research is of a high standard and they have established soil loss plots with measurements of runoff and sediment yield, as well as stream reduction activities (mosaic afforestation, etc.). There are also small catchment-scale investigations including the study of hydrological processes, monitoring of effects at downstream catchments, and the ecological impact of soil deposition. Special attention is given to measurements of soil compaction including the definition of tolerance levels of pressure exerted by wheeltracks. We exchanged experiences in a dynamic discussion and I presented research findings from Serbia. Story of establishing a Student's Forum of WASWC (at Belgrade University, June 2005) was told and was very well accepted, with hope that we can do the same in South Africa.

On the same day we visited the 'Farm for Education', which is a part of the Rainman Landcare Foundation (Caring for Africa's Resources). They have seven education courses for students as well as programs for teaching farmers, training for trainers, etc. Seventy percent of the teaching is practical and the rest is theoretical. This institution prepares interested people for practical work (how to find contour for 'swale' terraces, how to harvest water from two sides, how to improve infiltration, etc.) as well as for its small business training, e.g. market analysis, management skills.

The program as prepared by Richard was very professional and intensive. We did, however, have time to see Pietermaritzburg. In the centre of town is the monument of Mahatma Gandhi 'who is walking and conserving soil of South Africa and the world'. It was very impressive to visit the High School Epworth and the well-arranged park inside, as well as the old railway station that 'breathes history'!

On Friday Richard organized a visit to Durban and the National Department of Water Affairs and Forestry where we discussed problems of natural resources protection with J. Reddy. Special attention was on water allocation reform in South Africa especially (1) why reforming is the way for allocating water, (2) will water reform take away the rights of existing users, (3) how to make sure that the water is used productively and responsibly, and (4) how will the process limit environmental impacts.

On our way back from Durban we visited CEDARA Agricultural Development Institute where we met Ron Bennet who made a presentation on Agriculture and Conservation. The presentation was based on the Provincial Department's experiences in sustainable land management (SLM) in KwaZulu-Natal Province, especially with conservation tillage, ground cover, mulching, weed control, and windbreaks as well as its communal grazing strategy (encouraging rotational grazing, banning burning, utilizing alternative fodder resources, intercropping, and suggesting approaches to communal farming).

The focus of Richard's program was to visit private farmers which was really impressive and with significance in comparison with European/ South European experiences. On Friday afternoon we visited two commercial farms run by Rene Stubbs (ca 700 ha) and Tony Matchet (ca 1,600 ha) and on Saturday morning, we visited two

farms: one commercial and one belonging to a small-scale farmer near Bergville. The commercial farm has achieved good infiltration rates using No Till and had an average maize yield of about 14 t/ha, which is comparable with our Serbian experience (both without irrigation). Farmers have learned to combine various conservation practices on their farms using the Brazilian concepts: to push people/ farmers thinking and learning through their own experience. The last farmer I visited, Mr. Nicholas Madondo, said: *I learned to conserve soil through conserving and infiltrating water through combination of activities. But these activities you cannot take only from lessons. You must practice them and through the feeling in the field you will accept, adapt or reject.*

Upper row, from left: Orange River; gullies caused by intensive grazing and intensive rainfall, KwaZulu-Natal Province; Conservation tillage on commercial private farm (Rene Stubs), KwaZulu-Natal. ***Middle row, from left:*** Margaret, niece Kety and Richard; Richard Fowler, Suzette Smalberger and a private farmer discussing soil conservation; structure of red soil on the same farm where maize production is ca 14 t/ha. ***Lower row, from left:*** Burning and erosion on non-commercial farms in KwaZulu-Natal; "Farm for Education" operated by the Rainman Landcare Foundation; Landslides caused by overgrazing and intensive rainfall in KwaZulu-Natal.

Suzette Smalberger, a colleague of Rinda from the Institute, joined us for the Saturday visits and drove me to the airport in Johannesburg. So, for about 3,000 km I was driven by great women drivers Rinda and Suzette. And for the rest, in KwaZulu-Natal, Richard was not only a professional guide but also a driver.

It was really a great experience for me to visit South Africa, both from a professional and ordinary/ touristic/ sightseeing point of view. It was successful – thanks to National Representatives of WASWC Rinda van der Merwe (rinda@arc.agric.za) and Richard Fowler (rmfowler@iafrica.com) who arranged a phenomenal and attractive program, and who helped me feel at home as I was accommodated at Rinda's flat in Pretoria and Richard's house in Pietermaritzburg. My thanks also go to many other colleagues who found the time and energy to be with us. Special thanks to Margaret for her hospitality and nice food and cakes prepared in Fowler's house. Also thanks to Carin Pretorius for nice evening and special South African dinner and wine at her Pretoria house. I learned that South Africa is not so far from Southeast Europe as it seems through the geographic maps. Who thinks differently must learn for his or herself!

Editor's Note

August 29-30, 2006 I attended the 3rd Assembly of the GEF (Global Environment Facility, www.thegef.org) in Cape Town, South Africa as the representative of WASWC. Before the Assembly, I participated in the Forum on Sustainable Land Management (Aug. 28), thus having a good chance to have reunion with some old friends and colleagues. The GEF, established in 1991, unites 176 member governments – in partnership with international institutions, NGOs, and the private sector – to address global environmental issues while supporting national sustainable development initiatives. It is the catalyst that drives actions to improve the global environment. The GEF mobilizes international cooperation, helping to move the world toward sustainable development. It links local and global environmental challenges. In the past 14 years it has evolved into an effective and transparent entity with a solid track record of getting results. Today, the GEF is the largest funder of projects to improve the global environment. The GEF has allocated $6.2 billion, supplemented by more than $20 billion in co-financing for more than 1,800 projects in more than 155 developing countries and countries with economy in transition.

Earlier, GEF had held Assembly in New Delhi, India in April 1998 and in Beijing, China in October 2002, where Land Degradation was put as another focal area, making the total number six (Biodiversity, Climate Change, International Waters, Ozone Depletion, Land Degradation, and Persistent Organic Pollutants).

For the next 3-4 years GEF expects to provide around $500 million to meet the global threats posed by land degradation. Presently, GEF is the important financial mechanism for the three important conventions, i.e. UN Convention on Biological Diversification (UNCBD), UN Framework Convention on Climate Change (UNFCCC) and UN Convention on Combating Desertification (UNCCD). GEF's invitation to me this time is highly appreciated.

Some people involved in the 3rd Assembly of GEF

Upper row, from left: Klaus Topfer, Former UNEP Chief and former German Minister of Environment; Monique Barbut, CEO and Chair of GEF; Trevor Manuel, Minister of Finance of South Africa, Chair of the Assembly; Achim Steiner, UNEP Chief; Feng Gao, UNFCCC Secretariat. ***Lower row, from left:*** Elizabeth Thompson, Minister of Energy and Environment, Barbados; Trieu Van Be, Vice Minister of Natural Resources and Environment, Vietnam; Li Yong, Vice Minister of Finance, China; Roger Ehrhardt, Canadian International Development Agency; Willem Konjore, Minister of Environment and Tourism, Namibia; Archbishop Desmond Tutu, South Africa.

I would like to invite members to read the whole comprehensive report from the Institute of Sustainable Development (IISD), which is available in its newsletter at www.iisd.ca/ymb/gefassembly3/. It also has links to the report from GEF-2 and GEF-1. For your convenience we are copying the report from the IISD Newsletter on August 28 as follows:

FORUM ON SUSTAINABLE LAND AND WATER MANAGEMENT

A GEF agenda for combating environmental degradation and promoting sustainable livelihoods:

The morning symposia of the Forum were co-chaired by Gunilla Björklund, Director, GEWA Consulting, and Rattan Lal, Director, Carbon Management and Sequestration Center, and were followed by the high-level round table in the afternoon. Walter Lusigi, Senior Advisor of GEF, opened the Forum, highlighting: the addition of land

degradation as a GEF focal area; the ongoing International Year of Deserts and Desertification; and the designation of the GEF as the financial mechanism for the CCD.

GEF CEO/Chair Monique Barbut highlighted the GEF's land degradation agenda, noting institutional and policy challenges, including secure land tenure, and mid- and long-term financing for SLM. She urged participants to consider effective ways to move SLM higher up on the international agenda; innovative financing; and the role of policy reforms in integrating water, land and environmental sectors. Grégoire de Kalbermatten, Deputy Executive Secretary, CCD, stressed that land and water issues present an opportunity for the GEF, noted regional implementation as a key element of the CCD, and supported the land degradation strategy developed for GEF-4. David Dent, Director, World Soil Information Center (ISRIC), highlighted engagement of local communities in decision-making; technology required to effectively address land degradation; and existing information gaps.

GEF sustainable land and water management project experience: Highlighting linkages between land degradation and water management, Björklund outlined the Desert Margins Project in Africa and the People, Land and Environmental Change project implemented in China and Papua New Guinea. Benoit Bihamiriza, GEF/UNEP Lake Tanganyika Integrated Project, highlighted the transboundary diagnostic analysis developed by Burundi, the Democratic Republic of Congo, Tanzania and Zambia. Alfred Duda, GEF, presented on SLM in international water systems, noting the GEF's US$4 billion portfolio and the involvement of 138 countries in transboundary water projects. He said water conservation measures are a critical component of SLM, and that Africa's river and lake basins will be the focus over the next 3 years. Eric Odada, University of Nairobi, emphasized the need to consider climate variability and water scarcity in SLM, and cited as constraints lack of agreement on transboundary water management and the general degradation of water resources.

Mobilizing science and communities to combat land degradation: the role of knowledge management and indicators for optimizing impact: Zafar Adeel, UN University, illustrated a conceptual framework for knowledge management in SLM, recommending inclusion of human well-being and poverty reduction. José Antonio Prado, FAO, shared findings on global sustainable forest management trends and expressed concern about the alarming rate of deforestation notwithstanding a relative reduction in the net loss of forest coverage. Presenting on a project to develop tools and methods for assessing ecosystem impacts of land degradation, Freddy Nachtergaele, FAO, said project benefits include: capacity building; implementation of multilateral environmental agreements; and better use of funds. Jonathan Davis, IUCN, highlighted the role of pastoralists as the custodians of drylands, noting that their stewardship is undermined by inadequate policies and competition over natural resources. Summarizing the session, Maryam Niamir-Fuller, UNDP, noted that the GEF focal area of land degradation is maturing, and expressed hope that, by the fourth GEF Assembly: land degradation projects will have demonstrated real impacts at the local level; their global and local benefits will be better understood; and there will be a strong political commitment to address land degradation.

Resource generation and utilization in policies, institutions and partnerships to benefit rural people and the global environment: Noting that the global loss of agricultural productivity due to land degradation is estimated at US$65 billion per year, Jennifer Olson, International Livestock Research Institute and Michigan State University, called for an annual increase of US$10-12 billion in investments. Chris Brown, Executive Director, Namibia Nature Foundation, highlighted the success of country pilot partnerships for integrated SLM, and called for secure tenure rights, devolution of authority and the removal of bureaucratic barriers. Participants discussed the need to integrate SLM into development frameworks and adopt programmatic approaches; and shared experiences in building partnerships, involving bilateral donors, and mainstreaming SLM in large-scale investments.

Participants then attended the official launch of the GEF/UNEP/FAO Land Degradation in Drylands (LADA) project.

High-level round table: Co-Chairs Mark Mwandosya, Tanzania's Minister of Environment, and Helen Esuene, Minister of Environment of Nigeria (below), opened the high-level round table entitled "Sustainable Land and Water Management to Benefit People and Their Environment: A GEF Action Agenda for the Future." Rejoice

Mabudafhasi, South Africa's Deputy Minister of Environment, stressed the inadequacy of funding for the CCD and called for integrated implementation of the three Rio Conventions.

Following a report on the key findings from the morning symposia, including the need for integrated land and water management and long-term solutions and framework approaches, John Liu, Environmental Education Media Project for China, presented "EARTH'S HOPE," a documentary on watershed rehabilitation in China. He emphasized improving incomes alongside ecosystem restoration and securing land use rights to ensure sustainability.

Mwandosya highlighted the national strategy on land and water catchments degradation and urged developed countries to support African countries' National Action Plans under the CCD. Esuene outlined SLM activities in Nigeria and urged the extension of the RAF to the focal area of land degradation.

Noting that 80% of the country's population is rural, Laurent Sedogo, Burkina Faso's Minister of Environment outlined national measures to combat land degradation, emphasizing that it is a long-term process that requires political leadership and the involvement of all stakeholders. Hu Zhangcui, Deputy Director General, China's State Forestry Administration (photo at left), highlighted China's partnership with the GEF on land degradation, stating it had facilitated the mainstreaming of ecosystem management into other sectors. Warren Evans, the World Bank, underscored the need to better understand climate change impacts when discussing SLM, while Olivier Deleuze, UNEP, highlighted the gender dimension of land management. Frank Pinto, UNDP, supported pastoralism as the best type of land use in drylands, and encouraged the use of innovative financing mechanisms such as payments for ecosystem services.

Participants further highlighted: linkages between the rural poverty and environment agendas; competition between multilateral organizations and governments over SLM funds; the need for full engagement with bilateral partners; the GEF's catalytic role in mobilizing financing to address funding gaps; the need for better site-based integration of GEF focal areas; multisectoral integration and communication; community participation; sustainability of projects; and dissemination of successful SLM strategies.

The draft Cape Town Statement of the high-level roundtable on SLM was circulated for comments at the close of the meeting and has since been announced as follows:

CAPE TOWN STATEMENT

CONSENSUS OF THE FORUM FOR SUSTAINABLE LAND AND WATER MANAGEMENT AT THE THIRD GEF ASSEMBLY, CAPE TOWN, SOUTH AFRICA, AUGUST 28, 2006

The GEF Forum on Sustainable Land and Water Management, held during the Third GEF Assembly in Cape Town, South Africa consisted of three symposia and a high-level round table attended by 250 participants including six African ministers and heads of multilateral agencies. The following statement was agreed by the Forum participants for submission to the Third GEF Assembly:

1. Ever-increasing demands on the land from global economic growth, burgeoning cities and rural people are driving unprecedented land use change. Land use change is often driving soil erosion, water scarcity and salinity, nutrient overdraft, pollution and forest loss - undermining the ecosystems that support our habitat, economy and society. Land degradation is not just a collection of local difficulties; it is a global issue responsible for climate change, loss of biodiversity, rural poverty, and the flight of people to cities and across borders. Extreme land degradation and extreme poverty join forces in drylands where the vagaries of climate are often exacerbated by unsustainable land management.
2. It is proven that land degradation can be reversed but effective technologies are yet to be translated into effective policies, and the resources applied are not even of the same order of magnitude as the scale of the problem.
3. The mandate of the Global Environment Facility (GEF) is to protect the global life support system on which all life depends. Land degradation, part of this mandate, is an environment issue and, at the same time, a development issue. Sustainable land management is essential to both combat degradation of ecosystems and to raise human well-being.
4. The GEF has provided a new impetus to efforts to combat land degradation through its many linkage projects and its Operational Program 15 (OP#15) on Sustainable Land Management (SLM) through investments, capacity building, projects, and framework processes such as Country Pilot Partnerships (CPP) and TerrAfrica. SLM is

being carried into national development programs and donor cooperation frameworks by GEF's collaboration with the UN Convention to Combat Desertification (UNCCD) and the Global Mechanism; these initiatives are beginning to make a difference and need to be continued and expanded.

5. A critical aspect of OP#15 is the integration of land, water, biodiversity and societal issues. This enables responses to problems affecting whole ecosystems and economies, through coordinated land use planning and resource management. Integrated land and water management is important everywhere but critical in drylands - to conserve biodiversity, moderate climatic fluctuations and change, and enhance productivity.
6. SLM involves a combination of scientific knowledge, local knowledge and know-how, innovation, and community-driven action. New capacity for knowledge management and exchange plays a key role; transparent knowledge-sharing and feedback are important GEF principles.
7. GEF is encouraged to test implementation of the concept of integrated land and water resources management by working with countries to:
   a. Define problem/opportunity areas in the context of ecosystems or drainage basins;
   b. Create community-based approaches to improved natural resources management;
   c. Identify and pursue activities that will yield global benefits.
8. GEF, as a coordinating agent, should take the lead to develop a policy and administrative framework within which various sectoral, national and district organizations can contribute to such integrated approaches as SLM.
9. In view of the critical state and trend of land degradation, GEF and its partner agencies are urged to focus on activities that will result in a significant reduction in land degradation and its damage to ecosystem services and to the poor. Every effort should be made to increase the resources devoted at national and international levels, and to improve their effectiveness where the need is greatest – in particular in Africa.

At a minimum, the Forum background paper on Resource Mobilization recommends an additional 10-15% annual increase in resources for the next 10 years by countries and donor agencies.

- Walter J. Lusigi, Senior Advisor (Natural Resources Management) of GEF, Washington, D.C., U.S.A. wlusigi@thegef.org

WASWC's role at GEF-3: Upper row, from left: The 3rd GEF Assembly was attended by a number of WASWC members, e.g. Rattan Lal, Michael Stocking and Samran Sombatpanit; Poster showing Climate Change, a focal area of GEF among the six areas; An exhibition booth of China's GEF Program among about 20 booths. ***Lower row, from left:*** Rattan Lal (and Samran Sombatpanit – not in the photo) presented cases at the Climate Change Forum that, with good land management and conservation a good proportion of carbon could be captured and stored in the ground, thus an effective way of mitigating global warming; Alfred Duda of GEF assured that WASWC members could send proposals for small grants of at least US$15,000 each and he would help explain the process if needed – members are therefore encouraged to write proposals and submit to GEF; Samran Sombatpanit and Monique Barbut, CEO and Chair of GEF at the Reception; John Liu of EARTH'S HOPE, David Dent and Samran Sombatpanit. ***REPEAT:*** **WASWC members are encouraged to submit proposals to GEF. Contact 'Al' (Alfred Duda, aduda@thegef.org and www.thegef.org) if you have any question!**

Cape Town before GEF-3: Upper row, from left: a lovely small hotel in downtown Cape Town; a nice villa at the foothill of Table Mountain; cable car going up to the top of Table Mountain, overlooking beautiful Cape Town. ***Lower row, from left:*** wild flowers on the path at the middle height of Table Mountain; at Cape of Good Hope; Breakwater Lodge, a hotel converted from an old prison built over a century ago, with very good service and – importantly – sumptuous breakfast. FYI: Cape Town is one of the world's 50 places listed by BBC that one should visit before one dies, http://www.twisty.com/misc/50places/.

ASSOCIATION NEWS

Thanks to every member: As we are approaching the end of the year we wish to thank all members who have helped in various capacities, e.g. Editors of Newsletter, Journal, Proceedings and Special Publications – and several wordsmiths. We thank those who send in articles to publish, which is the very essential part of our works. We thank our members of the Translators' Club profoundly for their day-in, day-out task that they kindly and willingly volunteer. We thank members who agree to put themselves as our outpost in various countries/ regions as WASWC National Representatives, Special Representatives and Vice Presidents. We thank many learned institutions/ government agencies/ non-government organizations for their support by signing up as Organization members in WASWC. We thank host institutions (Ministry of Water Resources, PRC; AIT; ERECON) and their webmasters for their support in the services which have enabled us to operate the association continually and smoothly. Lastly, the financial contributions from the following enterprises, SYNGENTA (Switzerland), SEMEATO Farm Machinery (Brazil), Eijkelkamp Agrisearch Equipment (Netherlands) and Donald Fryrear Custom Products & Consultants (U.S.A.), is highly appreciated.

Payment for membership fees: We have sent reminders to hundreds of our paying members in the past few months. We have got in a number of payments, with thanks, and we ask those who have not paid to please pay. Your contribution will help make the work of WASWC proceed smoothly and strongly – to be useful for people in all economy levels.

Nomination for Norman Hudson Memorial Award 2007 is open: Members are encouraged to submit nominations of deserving persons for the Norman Hudson Memorial Award. This is the highest honor bestowed on an individual by the Association. It is given for distinguished service in recognition of international accomplishments in soil and water conservation. The award is named after Norman Hudson, whose exemplary professional career was devoted to the cause of global soil and water conservation. If you know any person who has done outstanding work in soil and water conservation, especially at the international level, please send the name and a short description of the work to us, in order that our Awards Committee can judge the Norman Hudson Memorial Award for this year. Please send your nominations to the chairman of the Awards Committee, Prof. **Stanimir Kostadinov**, Faculty of Forestry, University of Belgrade, Belgrade, Serbia and Montenegro, kost@eunet.yu and kost@yubc.net. The deadline for receiving all nominations is April 30, 2007. The regulations for judging the Award are as follows:

Criteria

* The award may be given to Association members or nonmembers.
* No elected officer of the Association shall be eligible for the award while holding office.

* The service and accomplishments of the nominee shall have made major and widely recognized contributions to soil and water conservation on the international level.

Nomination Procedure

* Any Association member may make nominations.
* Nominators should submit nominations in narrative form of up to 1,000 words. The supporting material should document the international scope of the nominee's accomplishments, including such items as professional achievements in natural resource publications and papers written or delivered at professional meetings. Service to the Association either as a member or nonmember and service to other professional or conservation organizations can also be included.

Selection

* The Association's Awards Committee will review all nominations and select the recipient.
* The award will be presented at an event designated by the President of the Association.
* The award will be given to no more than one individual annually. No award shall be made if a suitable candidate is not nominated or if the Awards Committee decides the nominees do not fulfill adequately the criteria for the award.

Change of format of WASWC Newsletter from issue 22(3) onward:

Members may have noted some changes in the format of the last issue of the newsletter. The contents of it were, in fact, the same as for all previous issues but columns have been rearranged. They are now divided into two parts, with the advertisement(s) between them. The columns in the first part are those that most members will want to read first to find out about new developments over the last three months. Those in the second part are mostly articles that are less urgent in their nature and can thus wait to be read later. But this is only a rough idea at this moment. Members are encouraged to write in and let us know what their preferences are.

Message from Our Editor-in-Chief of Journal and Proceedings of WASWC

The photo at left shows **John Laflen,** our Editor-in-Chief, his wife **Shirley,** his 4 daughters, 15 grandchildren and 2 great grandchildren, plus 3 son-in-laws, and the mates of 3 of his married grandchildren at his home in Iowa, U.S.A., last November – 29 in all.

John said: 2006 marked the first year of publishing the Journal and Proceedings of the World Association of Soil and Water Conservation. Accomplishments for the year include:

1. A web page was designed for WASWC publications.
2. Procedures for peer review and editing and posting were developed.
3. Nine Journal papers (from Kenya (2), U.S.A., Thailand, India, China, Turkey, Iran and Israel) have been peer reviewed and posted on the web. Another 15 papers are in process (4 accepted undergoing revision or editing, 11 out for peer review to associate editors).
4. Nine Proceedings papers (from U.K., Nepal, China, Australia, Chile, Brazil, Canada, Afghanistan, Kenya) have been edited and posted, 2 papers are being edited.
5. Papers posted on the web – for both Journal and Proceedings – are furnished with abstracts in 10 languages.

The Journal is a fully peer reviewed Journal. Papers are submitted to the Editor-in-Chief (EiC); the EiC selects an Associate Editor (AE) to manage the peer review process, with 3 peers. The AE selects the peer reviewers, receives their recommendations, and then furnishes these reviews, with their recommendations, to the EiC. The EiC then communicates with the authors regarding their publications. A list of potential reviewers is furnished to the AE, but the AE is encouraged to go beyond the list to include reviewers from other geographical regions and to include those that could bring good scientific expertise to review of the particular manuscript. If you are interested in being an AE and/or a reviewer, please e-mail me (laflen@wctatel.net).

Associate editors that have led peer reviews in the last year include:

Artemia Cerda, Spain
Nahid Elbezzaz, Morocco
Tom Goddard, Canada
Mohammad Golabi, Guam
Antonio Guerra, Brazil
Ian Hannam, Australia
Ion Ionita, Romania
Surinder Singh Kukal, India
Franco Obando, Colombia
James Owino, Kenya
Dorothy Mutisya, Kenya
Hemanthi Ranasingh, Sri Lanka
Eduardo Rienzi, Argentina
Rajendra Shrestha, Thailand
Rhodri Thomas, United Kingdom
Alex Watson, New Zealand

The proceedings is intended to be a repository for well conducted professional work that is of interest to WASWC members. This may include reports, unreplicated studies, case studies, preliminary results, and other work judged to be of interest to WASWC members. It will not be peer reviewed. All papers submitted will be published if they are of interest to WASWC members and if they are of good quality. Papers submitted will be edited for conciseness and clarity.

One of the major accomplishments is the publication of abstracts in ten languages. This effort is led by Samran Sombatpanit. The volunteers that translate the English abstract to the nine other languages (and also the newsletter) are shown in http://waswc.ait.ac.th/translators.html.

Goals for 2007 are to formalize the group of Associate Editors, and strengthen procedures to speed up the evaluation, editing, and publication of Journal and Proceedings articles.

New papers of Journal and Proceedings posted on the website are:

- A laboratory study for optimum programming of check dams in the Loess Plateau, China, **Xu, X. Y.** et al.
- Evaluation of activated sludge by white rot fungi for decolorization of textile wastewaters, **Seker, S.** et al.
- The relationship between net nitrogen mineralization/immobilization and short-term respiration rates in a calcareous soil amended with different plant residues, **Nourbakhsh, F., and R. P. Dick**
- Long-term Changes in Groundwater Regime of a Semi-confined Aquifer in Jezre'el Valley, Israel, **Mirlas, V.** et al.
- Participatory Watershed Management: Examples from Herat, Western Afghanistan, **Virgo, K. J.** et al.
- Sand Harvesting and Its Environmental and Socioeconomic Effects in Arid & Semi Arid Kenya, **Mutisya, D. N.**

You may browse by clicking http://homepage2.nifty.com/waswc/publication/j-articles.htm.

Winners of Photo Competition 8 (deadline June 25, 2006)

Left: Water infiltration study in the field, Morocco, by **Najwa Bensaleh**, National School of Forest Engineers, BP 511 Tabriquet, Salé, Morocco. b_najwa@hotmail.com

Middle: No tillage with full use of crop residue can increase soil organic matter 0.2% annually, Chequen, Chile, by **Carlos Crovetto**, Concepción, Chile. crovetto@entelchile.net

Right: Lack of availability of fuel material is the principal watershed-related concern of the rural communities, although there is only minimal reference to this in the published literature. Fuel collection is the responsibility of men and children. Any burnable vegetation is collected: sticks, woody herbs (khor) and up-rooted saplings, Afghanistan, by **Keith Virgo,** Newmarket, U.K. keith@virgos.freeserve.co.uk.

Winners are welcome to choose a book from www.scipub.net of his/her choice and let us know. Members are invited to send in more photos; the next deadline will be March 25, 2007.

What's new on our photo websites

1. Photos from the 10th WOCAT Workshop and Steering Meeting in Belgrade, Serbia, September 2005 (300 photos)
http://outdoors.webshots.com/album/555473540NSHLDw

2. Photos from the trip to attend a conference at Nihon University in Japan, September-October 2005 (300) http://outdoors.webshots.com/album/469766807MCLvuF

3. Photos from recent activities concerning Climate Change, November-December 2006 (359)
http://good-times.webshots.com/album/555675979XNmamy

4. Photos from the Durian storm that struck the Philippines, December 2006 (154)
http://outdoors.webshots.com/album/556162416FDGmrG

5. Photos of debris flow from the Key Laboratory of Mountain Hazards & Earth Surface Process, Chinese Academy of Sciences, Sichuan, China (37)
http://outdoors.webshots.com/photo/2999041520056376852EtYNwP

Elsewhere …

Winning photos from World Environment Day 2006 Contest at ICIMOD in the theme: Deserts and Desertification in High Altitude Areas. These stunning photos can be viewed and downloaded from, www.icimod.org/home/pub/publications.content.php?puid=84. The event was used to celebrate the Mountain Forum's 10th Anniversary as well. More info in www.icimod.org.

In addition, desk calendars with beautiful mountain photographs from the contest (below) are also available at only US$5 each (postage included), or US$7 for addresses outside Asia.

New Officers

Suraj Bhan, National Representative for India; also President, Soil Conservation Society of India, G-3, National Societies Block, National Agriculture Science Centre Complex, DPS Marg (PUSA), New Delhi-110012, India. bhan_suraj2001@yahoo.co.in & soilcsi@yahoo.co.in.

Born on the 15th July 1945, Dr. Bhan holds a Bachelor degree in Agriculture and a Master's and Ph.D. degree in Soil Science and Agricultural Chemistry from the Indian Agricultural Research Institute, New Delhi - a deemed agriculture university.

He started his professional career as a Junior Soil Chemist from 1975 and rose to the position of Specialist (Sedimentation), Deputy Commissioner, Joint Commissioner, then Additional Commissioner before retiring on July 31, 2005. He has over 90 technical scientific research papers to his credit and has authored books, reports, field manuals and technical bulletins.

He has organized the Training Programs in watershed management and catchment treatment areas to develop human resources skill in the country. He gained vast experience in monitoring and the implementation of watershed management, reclamation of problem soils, degraded wasteland, soil and water conservation and management, soil survey and land use planning, rainfed agriculture, remote sensing, environment, and natural resources management in plains and hills areas.

His hobbies are reading, writing and traveling.

Walid Dhouibi, National Representative for Tunisia. pasp@anged.nat.tn, dhouibi_walid@yahoo.fr

Eng Walid Dhouibi was born in Tunisia on the 23rd of November 1978. He has been working at the Tunisian Waste Management Agency (Ex-Solid Waste Department under the Tunisian Environment Protection Agency) since July 2002 and is currently the National Coordinator of the Africa Stockpiles Program (www.Africastockpiles.org) for Tunisia. This program aims to: (a) improve the quality of life in the poor communities, by reducing environmental health risks, (b) improve environmental protection, and (c) enhance the capacity of the agricultural sector to better manage crop pests. He holds an Engineering Degree in Industrial Engineering from the National Engineering School of Tunis "Ecole Nationale d'Ingénieurs de Tunis". He can read, write and speak Arabic, French and English. He has participated in the design and implementation of several national programs in the field of solid waste management and environment protection. He has participated in various international meetings and training workshops. He has good relations with several international organizations such as the World Bank, the UN FAO, and CropLife International.

He can be contacted at: Agence Nationale de Gestion des Déchets, 06 rue Al Amine Al-Abbassi, 1002 Tunis-Belvédère - Tunisia. Phone/Fax: +216.71 286 171; Mobile: +216.97 49 46 75

Miglena Zhiyanski, National Representative for Bulgaria. zhiyanski@abv.bg

Miglena Zhiyanski was born in Sofia, Bulgaria, in November 1976. She graduated with a Master's Degree in Ecology and environmental conservation from the University of Forestry in Sofia, Bulgaria, in 1999. She is working as

Associate Researcher in the Forest Ecology Department at the Forest Research Institute (FRI), Bulgarian Academy of Sciences from 2004. She holds doctorate in ecology and environmental protection from the Bulgarian Academy of Sciences. She was granted a scholarship from the French Embassy in Bulgaria and completed a second doctorate from the University of Franche-Comté, Besançon, France. She can read, write and speak Russian, French and English. Her scientific studies are on subjects of soil system, organic matter in soil, modeling, radioecology and radiobiology, behavior of radionuclides in natural ecosystems and transfer of elements in soil-to-plant system. She is an active member of the Bulgarian Soil Science Association and the Union of Foresters in Bulgaria. She participates in various research projects in the field of soil conservation. In her free time Miglena likes reading and mountain climbing.

Her address: Forest Research Institute, BAS, 132 "Kl. Ohridski" Blvd., 1756 Sofia, Bulgaria. Phones: +359 2 962 04 42 and +359 887 29 81 18 (mobile)

Obituary

Georgi Gergov (1938-2006)

On December 7, 2006 our dear colleague and friend

Prof. Georgi Gergov, Vice President of WASWC for Eastern Europe, suddenly passed away. He was born in 1938 in Sofia, Bulgaria. He finished his education at the University of Architecture, Civil Engineering and Geodesy, with further study in Russia. He worked at the National Institute of Meteorology and Hydrology, Sofia, Bulgaria since 1964 from being a researcher up to the head of the Division on River Sediment Load.

Prof. Gergov was an excellent scientist in the field of hydrological measurements, data collection and storage of information, water resources, river sediment load, fluvial processes, hydrometry, water pollution, anthropogenic impact and remote sensing, with more than 200 publications.

For many years he was a WASWC officer taking the role of the Vice President for Eastern Europe. He represented WASWC at many conferences. He organized WASWC meeting for Balkan countries in Sofia in July 2003 when the first initiative for regional cooperation in Balkans (Bulgaria, Macedonia, Turkey and Serbia) was established.

Here is what Prof. Stanimir Kostadinov, Head of the Department for Ecological Engineering, Belgrade University said: ***"The death of Prof. Gergov is a great loss for his family, his friends, and also for colleagues from all over the world in the field of erosion and torrent control and sediment transport."***

Dr. Ivan Marinov, Forest Research Institute – BAS, 132 "Kl. Ohridski" Blvd., Sofia, Bulgaria

Prof. Stanimir Kostadinov and **Prof. Miodrag Zlatic,** Department of Ecological Engineering for Soil and Water Resources Protection of Faculty of Forestry, Belgrade University, Serbia

Members are welcome to write to us, informing any news that other members might be interested to know. Send your mail to sombatpanit@yahoo.com.

A conservation catastrophe for Nepal: Conservationists killed in Nepal helicopter crash, http://news.mongabay.com/2006/0924-wwf.html, September 25, 2006

The three conservationists who have lost their lives; from left - **Chandra Gurung** was a pioneer in sustainable development; **Tirtha Maskey** was a leading expert on crocodiles and rhinos; **Harka Gurung** was an expert on the Himalayas (Photos: WWF)

Twenty-four people were killed in a helicopter crash in Nepal on Saturday September 23. Seven of the victims were staff members of WWF, a leading conservation group. The helicopter was carrying them from a conservation site at Ghunsa, in the remote eastern mountains of Nepal.

Also on board were high-ranking government officials from Nepal, representatives of agencies including USAID, journalists and four Russian and Nepali crew members. There were no survivors.

"I am deeply saddened to inform you of a significant loss within the WWF family," said Carter S. Roberts, President & CEO of WWF. "Early this morning, we received word from our office in Nepal that seven WWF staff members along with important partners in our conservation work appear to have died in a helicopter crash in Nepal. If confirmed, this tragic event marks the single greatest loss of life in WWF's 45-year history."

The passengers had just attended an event marking the handover of the Kanchenjunga Conservation Area to local community management. After two days of searching - poor weather conditions, reduced visibility, rough terrain and the remote location hampered the search effort - the helicopter crash site was found just 1.5 miles from the Ghunsa village.

The Kanchenjunga Conservation Area which borders Sikkim in India, the Tibetan Autonomous Region of China and eastern Nepal is home to Kanchenjunga, the third highest mountain in the world.

The region supports snow leopard, red panda, musk deer, and the Himalayan black bear and is known for its ethnic diversity and rich cultural heritage. Nevertheless, it is estimated that roughly 75% of the households in the area face food scarcity every year.

In a BBC report: In the words of Gabriel Campbell*, an American conservationist based here: "It would be almost impossible to assemble a more remarkable group of conservationists and Himalayan scholars - pioneers in helping local people understand and conserve their natural resources."

*Director General, International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal. gcampbell@icimod.org, www.icimod.org

MEMBERS FORUM

Ecoagriculture Partners: Choosing gifts that change the world

$100,000,000,000 now available to save the world!

Dear Samran and other WASWC members,

Ecoagriculture Partners has teamed up with ChangingThePresent.org, a new concept in nonprofit web sites. Here's the opportunity we find so exciting.

Every year, people around the world spend billions of dollars buying presents for one another. Folks in the U.S.A. spend $250 billion--$100 billion during the holiday season alone. Imagine, for one delirious moment, what we could accomplish if even a small percentage of that gift money were redirected to nonprofits working to make the world a better place. Many of us, and many of our friends, don't really need another fruitcake, toaster, wallet, tin of popcorn, pen & pencil set, or necktie. Still, we want to demonstrate our friendship with a gift.

Since most of us are passionate about a favorite cause or nonprofit, it's no wonder that more and more people are giving donation gifts, that is, a charitable donation made in a friend's name, in lieu of giving store-bought presents. What better way to honor the people we care for than by making the world a better place.

ChangingThePresent.org offers thousands of specific donation gifts from hundreds of leading nonprofits, so visitors can choose exactly what they want to accomplish. You can protect an acre of the rainforest or fund an hour of a cancer researcher's time. You can provide a child with a first book, an AIDS patient with life-saving drugs, refugees with shelter, or a hungry family with a nourishing meal. The site offers something for virtually every cause. And of course, you will find donation opportunities there for Ecoagriculture Partners. This link will take you straight to our page: www.changingthepresent.org/welcome/nonprofits/show/121

All of us would again like to thank you for your generosity and spirited support this past year, and wish you a wonderful holiday and new year.

Sara J. Scherr, Ph.D. ,President, Ecoagriculture Partners, 1050 Potomac Street, NW Washington, DC 20007 U.S.A., sscherr@ecoagriculturepartners.org, www.ecoagriculturepartners.org

☼ Dear Samran,

We have some fantastic news. Recently, Benas (Benediktas Jankauskas – WASWC National Representative for Lithuania, kaltbs@kaltbs.lzi.lt) was an invited guest at the British Embassy in Lithuania for a formal gathering, where Queen Elizabeth II was the guest of honor. Benas was fortunate to meet her personally (in the photo) and mentioned the BORASSUS Project during his conversation.

Subsequently, this has been picked-up by the British press and has been reported on the BBC website (see link below). It is good publicity for the project.
http://news.bbc.co.uk/2/hi/uk_news/england/west_midlands/6084168.stm.

Colin Booth (c.booth@wlv.ac.uk), BORASSUS Project and Deputy National Representative for the United Kingdom

☼ Dear Samran,

This is to complement you on the good job you are doing and to wish you a Merry Christmas.

Mildred Amakiri, Nigeria. mildred4u2002@yahoo.com

☼ Dear Dr. Samran,

Many thanks for your kind message and the WASWC HOT NEWS. This is indeed very useful to us. You really deserve congratulations for the well done job.

Let me also take this opportunity to inform you and all the other WASWC Members that I terminated my contract with the Botswana College of Agriculture/University of Botswana because I was recently appointed by His Excellency Paul Kagame, the President of Rwanda and the Rwandese Government as Director General of the Institute of Scientific and Technological Research/ Institut de Recherche Scientifique et Technologique (I.R.S.T).

It is my sincere hope that in my new position I will be able to work with you and other WASWC members to establish strong and durable collaborative linkages between WASWC and Members' Organizations/ Institutions/ Universities and our Institution (I.R.S.T).

All the WASWC Members are warmly welcome in Rwanda. Your scientific contributions will be highly appreciated by all the Rwandans.

Dr. Jean Baptiste Nduwayezu - Life Member of WASWC
Director General, Institute of Scientific and Technological Research/ Institut de Recherche Scientifique et Technologique (I.R.S.T), B.P. 227 Butare, Rwanda. Phone: +(250)530395/530015; Fax: +(250)530939; Mobile: +(250) 08657767; jbuwayezu@yahoo.co.uk.

☼ Dear Samran,

PPgis.net - the Forum on Participatory Geographic Information Systems and Technologies - was launched on 7 July 2004. Last month, two years after its start, the membership had outgrown the 1,000-member threshold and is steadily growing by 30-40 persons a month. So far 1,026 messages have been posted in addition to resources, news and announcements. All can be viewed via our online interface.

We all learn and we keep on learning and exchanging, day by day. Many thanks to all of you who have made this challenging initiative so enriching and fruitful. WASWC members are welcome to join our PPgis.net group.

Giacomo Rambaldi (rambaldi@cta.int),List administrator and moderator of PPgis.net

[The Open Forum on Participatory Geographic Information Systems and Technologies is managed by www.iapad.org and hosted by www.ppgis.net. PGIS, PPGIS and community mapping bibliography is found at http://ppgis.iapad.org/bibliography.htm.]

☼ Dear Dr. Samran,

Re: Mangrove Soil Conservation Protecting River Bank Erosion - A CCEC Initiative Bangladesh

Happy New Year to you and all WASWC members

The CCEC is a local environmental NGO based at Khulna, Bangladesh working towards environmental sustainability of the coastal ecosystems of Bangladesh, particularly in the southwest coastal Sundarban region with local people participation. Environmental Education Training (EET) among the Primary School teachers of Khulna, Bagerhat Satkhira districts and Biodiversity Conservation Awareness among Sundarban stakeholders are the two major thrust areas of CCEC.
However, CCEC is more active on mangrove conservation campaign after the tsunami devastation on 26 December 2004 in the Indian Ocean caused thousands of deaths in Indonesia, Sri Lanka, Thailand and other countries. Leaflets and posters with messages on mangroves protection and conservation needs are available on request.

You will be glad to hear that the CCEC has formed a 51-member Mangrove Protection Society (MPS) and observed the International Mangrove Action Day on July 26, 2006.

CCEC plans to extend the activity in areas adjacent to Sundarban, the UNESCO declared World Heritage site. We want your cooperation in raising funds for the conservation movement and allowing natural regeneration, and restoring mangrove species at the outside polder in order to sustain the coastal ecosystems besides long-term planning for making the Green Coastal Belt with mangrove thickets.

Your cooperation and suggestions can reduce the vulnerability and save millions who live in Bangladesh coastal communities from sea level rise due to global warming.

Mowdudur Rahman
Director, Centre for Coastal Environment Conservation (CCEC), Tagdir Mohal House No. 93, Road No. 2, Sonadanga R/A, Khulna-9000, Bangladesh. ccec_bd@khulna.bangla.net, mowdudurrahman@hotmail.com

NEW INFORMATION SOURCES

Books, Proceedings, Manuals, Reports and Brochures (Many of them are online and free of charge – see also Publication Reviews in Part II of the Newsletter)

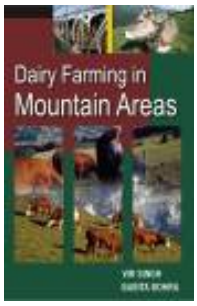
Biological Approaches to Sustainable Soil Systems, by **Norman Uphoff, Andrew S. Ball, Erick Fernandes, Hans Herren, Olivier Husson, Mark Laing, Cheryl Palm, Jules Pretty, Pedro Sanchez, Nteranya Samginga, Janice Thies** (eds). 102 experts from 28 countries view on the science and innovation involved in sustainable soil-system management. 2006.

The book has 50 chapters, 764 pp and costs US$149.95/ GB£85.

* explores problems and solutions for soil systems in a variety of climates;
* discusses the importance of symbiotic relationships between plants and soil organisms, with crops as integral and interdependent participants in ecosystems;
* seeks to reduce the distance between scientific research and technical practice;
* examines related considerations such as pest and disease control, climate change, methods of fertility restoration, monitoring and modeling.

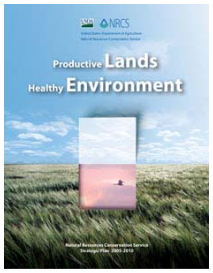
Outstanding and extremely relevant in the quest to grow our understanding of soil ecology and how to attain and manage sustainable soil systems.

A CRC Press book, ISBN 1-5744-583-9, Taylor & Francis, U.K./U.S.A., www.crcpress.com, www.taylorandfrancisgroup.com



Dairy Farming in Mountain Areas by **Vir Singh and Babita Bohra.** 2006. 191 pp. ISBN: 8170354374. Rs 500. Please send your orders to: DAYA PUBLISHING HOUSE, 4760-61/23, Ansari Road, Darya Ganj, NEW DELHI - 110 002, Ph: +91-011-23245578, 23244987, Fax: +91-011-23244987, dayabooks@vsnl.com, www.dayabooks.com

Productive Lands – Healthy Environment: NRCS Strategic Plan, 117 pp.



This Strategic Plan sets the direction for NRCS and describes our conservation priorities and goals.

Bold, forward-looking, and far-reaching, this plan challenges us to reformulate some past approaches and develop and adopt new approaches. This plan will guide NRCS in implementing key overarching strategies, managing agency business lines, meeting customer needs, and developing and strengthening the capacity to achieve our mission goals. Requests for hard copies of the Strategic Plan may be made at http://landcare.sc.egov.usda.gov/ or by calling 1-888-LANDCARE. Digital copy is available at Productive Lands, Healthy Environment—NRCS Strategic Plan 2005-2010 (6 MB)

The Plain Language Guide to the World Summit on Sustainable Development

By **Jan McHarry, Janet Strachan, Rosalie Callway and Georgina Ayre,** £19.99 + P&P

"The guide will be widely used in the Commonwealth and beyond to promote understanding and engagement in the WSSD process at all levels." From the Foreword by Don McKinnon, Commonwealth Secretary General.

This is the easy-to-understand reference book for the results of the WSSD. An essential resource book for those working in community groups, business, local government, central government departments, regional institutions and the international community. This guide aims to provide a quick way in to the Johannesburg Plan of Implementation, the technical document resulting from the World Summit on Sustainable Development, to help promote genuine public understanding of the agreement and practical action on the commitments. Produced in partnership with the Commonwealth Secretariat. Send your order to Owen Davies, odavies@stakeholderforum.org.
- Stakeholder Forum for a Sustainable Future, 3 Bloomsbury Place, London, WC1A 2QL

FAO Guidelines for Soil Description

The Guidelines for Soil Description were prepared to assist in the understanding of the nature, properties, dynamics and functions of the soil as part of the landscape and ecosystem. They contain precise instructions on how to describe the site and the morphology of a soil in the field. A section is added in this fourth edition on the link of soil descriptions with soil classification. Click here for on-line reading and/or downloading or visit the AGL On-line Publications Database. Contact: Freddy.Nachtergaele@fao.org.

Journals, Magazines and Newsletters

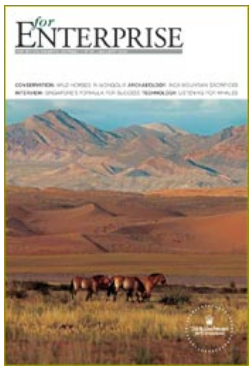
Mission Statement: The International Land Coalition (ILC) is a global alliance of intergovernmental organizations and civil society. The Land Coalition works together with the rural poor to increase their secure access to natural resources, especially land, and to enable them to participate directly in policy- and decision-making processes that affect their livelihoods at local, national, regional and international levels.

Advancing Together is published three times a year. Copies can be seen on our website. Please distribute copies of our newsletter to interested parties.

Please keep articles to a maximum of 350 words. The editorial committee reserves the right to edit submitted articles. Please email us at coalition@ifad.org with comments, articles and relevant photos. - *International Land Coalition Secretariat, IFAD, Via del Serafico 107, Rome 00142, Italy, Phone: +39 06 5459 2445; Fax: + 39 06 5459 3445, coalition@ifad.org, www.landcoalition.org*

The Rolex Awards for Enterprise Journal

Published twice a year, it reports on recent and past Laureates as well as other award-related news.



No. 20, Winter 2006

Singapore's formula for success, High-altitude anthropologist, Listening for whales, The Dutch god of language, Arctic weather alert, The first year, In brief

www.rolexawards.com/journal/journal.html

www.wikiloc.com/wikiloc/spatialArtifacts.do?event=search&user=Jordi
Dear colleagues, I'm new to the list and after reading the vision/mission of the forum I think the following might be of interest to you, so I'm writing this my first post to announce a website where an open community of GPS enthusiasts participate in sharing their GPS data from around the World: http://www.wikiloc.com. It's completely free, based in Google Maps & Earth and allows even to visualize GPS data overlaid on maps coming from any freely accessible Open Geospatial Web Map Service (WMS). It's been developed by me in my spare time. I hope you find it useful and I'd love to hear what you think of the app. There's a lot of room for improvements and any suggestion will be very welcome.
- Jordi L. Ramot, http://wikiloc.blogspot.com

WEBSITES:

▲ http://www.iapad.org/journey.htm
Journey of our lives (Paglawig Sa Among Kinabuhi), Bukidnon, Philippines
Description: A 14-minute participatory video production documenting a journey to the land of Higaonon ancestors. The virtual journey recreates experiences lived up by the members of the community in using a physical participatory 3D model to document, share across generations and safeguard their intangible cultural heritage.
Video is by www.pafid.org.

Ed. – This is a good stuff that you may like to take a look at; using hi-speed internet can be advantageous.

▲ Amazon natives use Google Earth, GPS to protect rainforest home, www.mongabay.com November 14, 2006.
Deep in the most remote jungles of South America, Amazon Indians (Amerindians) are using Google Earth, Global Positioning System (GPS) mapping, and other technologies to protect their fast-dwindling home.

▲ European Scientist network to combat desertification (www.desertnet.de/european_dn.htm)

▲ www.sustainableag.org
Baraka Agricultural College, Box 52 Molo 20106, Kenya. Tel: 254 51 721091; Fax: 254 51 721310; Mobile: 254 725 777421. Contact baraka@sustainableag.org and request for Baraka e-newsletter.

▲ Click www.floraculture intl.com/passport/default.asp for subscribing to FloraCulture International magazine, Chris Beytes, Editor

▲ www.gemswater.org/publications/index-e.html
UNEP convened the third meeting of its Technical Advisory Group for its GEMS/Water Program from 25 to 26 September 2006. The meeting was hosted by UNEP-World Conservation Monitoring Centre (WCMC) in Cambridge, and brought together technical and scientific experts from United Nations bodies and other partners committed to environmental water quality and sustainability. Discussion highlights include:
1. Global water quality data access on www.gemstat.org, open web services and geospatial referencing with Google Earth;
2. Needs for data quality and capacity building in developing countries;
3. Technical issues such as modeling, ecohydrology, and groundwater data; and
4. The future needs for global water quality data collection and assessment.

Details and plans for fulfilling these issues are described in the Technical Advisory Paper No. 3: Future needs for global water quality monitoring and assessment, as the main product of the meeting. This paper may be of interest to those working in water quality monitoring and assessment, and can be downloaded from http://www.gemswater.org/publications/index-e.html. The fourth advisory meeting is scheduled for early 2008. Comments and feedback are most welcome, contact sabrina.barker@gemswater.org.

▲ www.howtopedia.org, Simple technologies, simply shared
We are pleased to launch a new collaborative library for practical knowledge. Howtopedia is a Swiss non-profit organization, supported by Practical Action (ex. ITDG) and the International Network for Technical Information (INTI), which aims to establish a major collaborative platform for simple technologies, because we are convinced that sharing low-tech know-how across borders and organizations is essential for an independent and self-sufficient form of sustainable development.
This first phase is addressed to specialists and potential users in the field of appropriate technologies and development, such as yourselves. We invite you to visit our website and to give us your professional support and feedback. Please participate in howtopedia.org by editing and adding content, providing us with access to your database or promoting our community among your networks.

Following is a section on "How to Fight Soil Erosion"
1. How to Fight Slopes Soil Erosion?
2. How to Fight Soil Erosion by planting Vetiver Grass?
3. How to Fight Sandy Soil Erosion?
4. How to Protect Cultures from the Wind?
5. How to Restore Soil?

▲ Click www.borassus-project.net to learn about the BORASSUS Project operated by Prof. Mike Fullen of the University of Wolverhampton, U.K.

INSTITUTIONS

▲ Conservation Technology Information Center, 1220 Potter Drive, West Lafayette, IN 47906, U.S.A. www.conservationinformation.org. Phone: +1-765-494-9555
CTIC, a not-for-profit organization located in West Lafayette, Indiana, is THE reliable source of information and technology for environmentally responsible and economically

viable agricultural conservation. To learn more, visit www.conservationinformation.org or call +1 (765) 494-9555.

National Crop Residue Management Survey Featured in Farm Journal

The National Crop Residue Management Survey has once again caught the attention of a major ag publication. Farm Journal magazine highlighted the loss of the National CRM Survey in its January issue. The story, "Tillage Tracking Idles," is written by veteran ag journalist Darrell Smith and highlights the importance of the survey, its uses and what the future may hold for data collection.

The article concludes with a quote from Karen A. Scanlon, CTIC executive director, "If you recognize the value of the survey, tell NRCS, your conservation district and your Extension staff that you would like to see one conducted next year," Scanlon says. "Contact me at scanlon@conservationinformation.org or call CTIC at +1 (765) 494-9555, and we'll help you get started."

The story can be viewed online at www.agweb.com/Get_Article.aspx?sigcat=farmjournal&pageid=133768

▲ What is ITC? (www.itc.nl)

Dr. **Abbas Farshad** of ITC told us that the Dutch institute formerly named **"International Institute for Aerospace Survey and Earth Sciences,"** located at Enschede, the Netherlands, has been renamed **"International Institute for Geo-Information Science and Earth Observation"** since some years ago and still keeps the same abbreviated name of ITC as before. The 'ITC' is believed to have been abbreviated from "International Training Center" since its early years and is being used continually, mainly because of its brevity.

The ITC has been an Organization member of WASWC since the year 2006. You are welcome to browse its website at www.itc.nl and learn of its activities on our website http://waswc.ait.ac.th/ITC-PP2006.pdf. You may contact Dr. Farshad at farshad@itc.nl for more information. His post address is: Department of Earth Systems Analysis, ITC, Hengelosestraat 99, P.O. Box 6, 7500 AA Enschede, The Netherlands. Phone: +31-(0)53 4874 318; Fax: +31-(0)53 4874 336.

WASWC will be very grateful if you can place some advertisements to help us, whereby we will be able to do more works and serve all members better.

FEATURES

U.S. Population to Top 300 Million This Month October 03, 2006 — By **Deborah Zabarenko,** Reuters, www.boston.com/news/nation/washington/articles/2006/10/02/us_population_to_top_300_million_this_month/

WASHINGTON — Some time this month, the number of Americans will surpass 300 million, a milestone that raises environmental impact questions for the only major industrial nation whose population is increasing substantially.

The U.S. Census Bureau predicts the 300 million mark will be reached in mid-October, 39 years after U.S. population topped 200 million and 91 years after it exceeded 100 million. (In fact, it reached this milestone in the early morning of Tuesday, October 17, 2006, Ed.)

This will make the United States No. 3 in population in the world, after China and India.

Most of the growth is taking place in the South and West, according to the Census Bureau. From 2004 to 2005, U.S. population had a natural increase - births minus deaths - of 1.7 million and international migration of 1 million.

Whether the 300 millionth U.S. person is added by immigration or by being born in the United States, the expected absolute number of Americans prompted a report by the non-profit Center for Environment and Population.

The report's author, Victoria Markham, noted that the United States is the only industrialized nation with significant population growth. The vast majority of the world's opulation increase - about 98% - is in poor countries, she said.

"In combination with our very high rates of natural resource consumption and the associated pollution, that results in America having the highest per capita environmental impact in the world," Markham said in a telephone interview.

NUMBERS DON'T TELL THE WHOLE STORY

Sheer numbers of human beings do not necessarily have the heaviest impact on the environment; instead, environmental impact is a calculation that involves population, affluence and technology, the report said. In the areas of land use, water, biodiversity, forests, fisheries and aquatic resources, Americans are consuming more than they did in the past. The report found:

- Each American occupies 20% more developed land - housing, schools, shopping and roads - than 20 years ago.
- Each American uses three times as much water as the world average; over half the original wetlands in the United States have been lost, mainly due to urban and suburban development and agriculture.
- Half the continental United States can no longer support its original vegetation; nearly 1,000 plant and animal species are listed by the U.S. government as endangered or threatened, with 85% of those due to habitat loss or alteration.
- The United States consumes nearly 25% of the world's energy, though it has only 5% of the world's population, and has the highest per capita oil consumption worldwide.
- Each American produces about 5 pounds of trash a day, up from about 3 pounds in 1960; the current rate is about five times that in developing countries.

After U.S. population hit 200 million in 1967, Paul Erlich gained notoriety with a book called "The Population Bomb," which predicted mass starvation due to population growth.

No such dire warnings accompany the center's report, Markham said. "We aren't saying there's too many of us," Markham said. "We were trying to step back and take a look at the broad picture and at the population trends and the scientific data."

CARBON AND CLIMATE CHANGE HIGHLIGHTS (C&CC) Biofuels and Carbon Cycling, by **Donald C. Reicosky**, reicosky@morris.ars.usda.gov

Our dependence on fossil fuels threatens our national security, economy and the environment and requires the development of alternate fuels. Biofuels, renewable sources of energy, can be produced from biomass, including agricultural crop residues, straw, corn stover, perennial grasses, legumes and any other biologically derived materials. The use of biomass energy has the potential to greatly reduce our greenhouse gas emissions. Biomass generates about the same amount of carbon dioxide (CO_2) as fossil fuels, but every time a new plant grows, CO_2 is actually removed from the atmosphere. The net emission of CO_2 will be zero as long as plants continue to be replenished for biomass energy purposes.

This requires careful management of the biological carbon cycle from CO_2 captured by the process of photosynthesis to the various forms of biomass oxidation that release the CO_2 back to the atmosphere.

From an agricultural perspective, one concern is regularly removing crop residues for energy production removes potential soil carbon and many other nutrients important for maintaining soil productivity. Residue quantities required for producing bioenergy and by-product can be substantial. Part of the challenge is to determine the amount of residue that can be safely removed and still control erosion and maintain soil carbon, nutrients, soil tilth and soil quality as the foundation of environmental quality. The utilization of co-products from renewable fuel production may provide some opportunities.

There are many different processes for the "combustion for oxidation of agricultural biomass" to produce renewable energy. The wide range in the co-products with these diverse processes need to be carefully studied to determine how these co-products can be beneficially recycled in the biological carbon cycle managed by agriculture to offset mining of nutrients. Long-term sustainability will require replenishing carbon and nutrients in the soil periodically. Thus it is imperative to utilize some of the co-products from biomass utilization as a means of restoring soil carbon in our production systems.

The term 'black carbon' is a general one applied to various carbonaceous products of incomplete combustion of feedstocks and includes bio chars, charcoals and soots. Often, when some of these terms are used interchangeably that contributes to jargon that often requires clarification. There is a need for explicit quantification of chemical and physical properties of these materials. The black carbon is generally ubiquitous in the environment, however, may provide some long-term benefits in "semi-permanent" carbon sequestration, maintaining environmental quality and a mechanism for reducing net CO_2 emissions to the atmosphere. One example of the beneficial attributes of 'black carbon' is illustrated in the Amazonian Terra Preta soils. The soils have received large amounts of charred materials from biomass burning that appear to be present after hundreds and thousands of years and are still highly productive today relative to adjacent soils without char. The application of bio char to the soil has been proposed as a significant, long-term, sink for atmospheric CO_2 in terrestrial ecosystems. Bio char can act as a soil conditioner enhancing plant growth by supplying and, more importantly, retaining nutrients and by providing other ecosystems services such as improving soil physical, chemical and biological properties.

Biomass pyrolysis is one 'combustion' process being evaluated and has been practiced for centuries for production of charcoal. Pyrolysis is the thermal decomposition or degradation of organic biomass by high temperatures in the absence of oxygen, which results in the production of liquid (bio oil), gaseous products (biogas) and the formation of a carbonaceous solid residue called pyrolysis char (bio char). The pyrolysis process can be divided into subclasses based on the controlled temperature and pressure during the process. Methodological aspects of biomass processing are complex and depend a lot on the specific biomass properties, temperature and pressure of the specific combustion process.

Variations in the thermochemical processes presents a 'combustion continuum' that creates serious methodological problems in providing co-products with consistent physical and chemical characteristics as every carbon co-product has a carbon spectrum. Herein lies a challenge in the industry and the need for policies to clarify the characteristics of the carbonaceous co-products. Research is desperately needed to quantify these attributes of the co-products of renewable fuel production and to verify the potential environmental benefits.

Selected Literature citations:

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AGROFORESTRY HIGHLIGHTS

Ten percent multipurpose tree cover for every farm: A low risk, high opportunity first step

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

Agricultural research suggests that farmers can confidently plant trees for shelter and land protection across at least 5% of their farm without risking agricultural productivity or capital value. Most farmers could increase this to 7-8% by protecting native remnants, targeting land of low agricultural value and extending ornamental plantings. Farmer and community acceptance of the potential for these same trees to produce commercial products (agroforestry) could well justify the extra required to achieve 10% tree cover across the farming landscape. Rather than threatening agriculture, 10% multipurpose farm tree cover could reduce risk and provide greater opportunities for farm families and their local communities.

The key is to form a web of linear shelterbelts and riparian corridors across the farming landscape that links patches of remnant forest and small plantations established for land degradation control, wildlife habitat and income. With this goal in mind, the most important consideration will be the short-term impacts of tree planting on farm management costs, agricultural productivity and land values.

The promise of long-term benefits, including environmental sustainability and any income from the sale of tree products and services, might be viewed either as a bonus, icing on the cake or an investment in future generations.

Achieving widespread integrated multipurpose revegetation requires changes in the way our community invests in landscape change:

1. Government agencies and catchment management authorities must acknowledge that it is acceptable for farmers to establish and manage multipurpose forests for both conservation and profit.
2. Incentives for revegetation (both for conservation and timber production) should reward those who actually deliver the balance of environmental, social and economic outcomes sought by the community, thereby encouraging innovation and efficiency.
3. Government and industry must take agroforestry seriously and invest in the research and development required to underpin the practicality and viability of integrated multipurpose forestry.
4. The farming community must get behind the workable solution of "10% of every farm – rather than 10% of farms".

Source: Steward, A. and R. Reid. 2006. Ten percent multipurpose tree cover on every farm. Paper presented at the Victorian Farmers Federation Conference July 11, 2006. www.mtg.unimelb.edu.au/publications.htm

VETIVER HIGHLIGHTS

The Fourth International Conference on Vetiver (ICV4),

Dick Grimshaw, Chairman, The Vetiver Network, Bellingham, WA, U.S.A. dickgrimshaw@vetiver.org, www.vetiver.org

During October 22-26, 2006 ICV-4 was hosted by Fundación Empresa Polar in Caracas, Venezuela. The conference was graced with the presence of the Vetiver Network's Patron, HRH Princess Maha Chakri Sirindhorn of Thailand. It was indeed a memorable conference, well attended and organized, and with more than100 papers and presentations made.

The conference theme was "Vetiver and People". Venezuela started working with Vetiver Systems (VS) some 10 years ago with introduction through community development as a handicraft for the rural poor. The impact is impressive and over 11,000 poor people have benefited from vetiver handicraft income. Many of these people have completely changed their lives and have a new sense of self-esteem. Soon some of the handicraft workers, mainly women and children, started using vetiver for on-farm soil and water conservation with a result, for these families, that slash and burn agriculture is now a thing of the past. Fundación Empresa Polar has nicely encapsulated the approach through a short documentary DVD "Una matica sagrada" (with English subtitles) that describes, in the words of the mother, how the life of her family has been changed forever with the introduction of the Vetiver System. For copies and other information contact Graciela Pantin, General Manager of Fundación Empresa Polar, graciela.pantin@gmail.com.

The East Bali Poverty Alleviation Project has also demonstrated vetiver's impact on improving nutrition, health and incomes. Just as has NOBS (El Slavador), Royal Development Project Board of Thailand, PTT Thailand, China Vetiver Network, and others have shown the importance of the community approach.

The presentations provided a good picture of how the Vetiver System is advancing. Soil and water conservation programs using vetiver are expanding across the regions and research and practice shows the impact on improved crop yields, income, and sustainable farming systems. It is quite clear that VS will significantly cut down or eradicate slash and burn agriculture, particularly if associated with other cultural practices. Thailand's Land Development Department has amply demonstrated vetiver's use for land stabilization, and was justly awarded one of this year's King of Thailand prizes. Land reclamation – particularly in the mining sector – benefits greatly from VS – some great work by Venezuela's Vetiver Antierosion CA (Rafael and Oswaldo Luque) amply demonstrated this in the reclamation of bauxite mine tailings. The expansion of VS application for highway, building site, and other structural stabilization underscores its effectiveness and low cost.

Climate change impacts on the severity of the weather. We see severe weather conditions in more frequent and stronger tropical storms. VS for disaster mitigation is clearly demonstrated by the excellent work of our new Vetiver Champion – Tran Tan Van – Vetiver Coordinator for Vietnam Vetiver Network. Through his and his colleagues' efforts VS is now being used in more than 40 provinces in Vietnam for the protection of river levees and sea dykes against major storm damage.

Landslides that impact on highways and villages are also a by-product of severe rainfall events. Vetiver could do much to mitigate against the potential damage. Tran's team is also about to publish the "Vetiver Brown Book" A manual for engineers to be available in Vietnamese and English. VS is now a very serious technology for water quality improvement, effluent and wastewater treatment, and the associated health and environmental benefits. VS programs in Australia, China, Vietnam and Venezuela demonstrate its effectiveness.

Top row, from left: Gala performance by dancers from around Venezuela; Dick Grimshaw among old friends, i.e. Oscar Rodriguez (LAVN Coordinator), Dale Rachmeler (TVN President), Dick Grimshaw (TVN Chairman), Ronaldo Chavez, General Manager of NOBS Hidroifusion, El Salvador; DG giving a closing speech. ***Bottom row from left:*** Handicrafts made from vetiver grass displayed by ladies from San Pedro Handicraft Cooperative; Chilean vetiver researcher, Ms. Rocio Fonseca of Fundación Chile, with a polar bear handicraft; DG with an old friend, Ms. Suwanna Pasiri of Thailand. Below: ICV-4 participants planting trees between newly planted vetiver hedges during the field trip.

Basic research continues in various important areas of VS, including investigations into propagation methods, varietal differences and ecotype selection, and mechanisms in plant function.

Some very interesting work is being carried out in China by Bingbing Yang, a Vetiver Network Award recipient at the Chinese Academy of Sciences' South China Institute of Botany into developing cold-tolerant varieties of vetiver in order to extend vetiver's application to hot summer/cold winter climate locations – such as north China, the High Andes and North America.

We believe that the conference will greatly influence and expand the use of Vetiver Systems in Latin America. The next conference, ICV-5, is planned to take place in 2010, in either South Africa or India, yet to be decided. All this adds up to an exciting time for Vetiver Systems and for the many people around the world involved with the technology. Details of the ICV-4 papers and powerpoint presentations can be found at: www.vetiver.org/ICV4pdfs/ICV4-PROG-IN.htm.

One last word - the Vetiver Network has established a very large Vetiver Picture Gallery on Google at http://picasaweb.google.com/VetiverNetwork. We would like to invite WASWC members who work with vetiver to establish their own vetiver picture gallery (it costs nothing - http://picasaweb.google.com) and link them to TVN's. This would give people the opportunity to show what they are doing and share with others this great technology. TVN will award annually, for the next three years, a US$500 prize to the best (quality and content) vetiver picture gallery. This should be a great way of showing the world what vetiver is all about and what it can do to improve people's lives and the environment at this difficult time when we are facing severe climate variations and other disruptions. A picture is worth a thousand words.

LANDCARE HIGHLIGHTS: International Landcare Conference Melbourne 2006 – consensus - 'a real winner'!

By **Victoria Mack,** vmack@silc.com.au and **Sue Marriott,** smarriott@silc.com.au

Over 100 international delegates attended the 2nd International Landcare Conference in Melbourne in early October 2006 and declared it to be an outstanding success. The international group joined over 900 Australians in an event that may have an international impact for many years to come.

The Secretariat for International Landcare (SILC) Inc organized a conference package for delegates from 16 countries which included a pre-conference study tour, Conference registration and for a smaller group SILC facilitated their attendance at the post-conference Crawford Fund sponsored Landcare Master Class. SILC collaborated with a team of Landcare agencies, groups and individuals from across Australia and overseas* to deliver the program.

The largest international delegations came from the Philippines and South Africa where Landcare is now well established. There was also a strong team from Pacific states including Fiji, Tonga, the Solomon Islands and Nauru, and another strong delegation from East Africa. Other countries well represented included the U.S.A., Iceland, United Kingdom, Sri Lanka, and Puerto Rico.

Highlights for international visitors attending the pre-conference study tour included being billeted with Australian Landcare families for two nights, site visits to big and small Landcare projects, visits to education centers, seed banks, plant nurseries and schools, and meetings with Landcare practitioners of all persuasions. The Conference itself was also a highlight with excellent speakers on Landcare and environmental issues from both Australian and international perspectives.

The International Landcare Steering Committee (ILSC) made up of international and Australian Landcare specialists also met during the Conference to develop policy and strategy to support the expansion of global Landcare. World Agroforestry Center chief and ILSC Chair Dennis Garrity was gratified with the overwhelming success of Conference program and encouraged Australians to get involved by supporting international Landcare groups and projects - through sister Landcare relationships, facilitators and mentoring support, and cross-country visits.

Some might ask what it is about Landcare that other countries find so interesting. The answer in part is that it provides a mechanism for involving communities, whether in developed or developing countries, to take control of their local environmental issues and their solutions. In fact they find it to be attractive in the same way that Australia has found that Landcare can provide unique social, economic, agricultural and environmental benefits.

The Conference social program also positively contributed to the valuable cross cultural networking that took place. Landcare is as much about social issues and community as it is about livelihoods, conservation agriculture, resource protection, improved and sustainable agricultural technologies and practices and economic development. The Australian response to the lively international presence, especially on the dance floor during the Conference Dinner, was that these guys were great!

Dynamic new Landcare initiatives are likely to flow from the formal and informal discussions and meetings that took place over the 10-day program. These are already resulting in active trans-national dialogue on how Landcare can be scaled up, particularly in developing countries, and the institutional arrangements required to support a global Landrace program.

As a result of the Conference, SILC, which has been involved in hosting cross-country visits since 1999, is organizing a reverse African Landcare study tour in mid July 2007 for Australian Landcare members. This Landcare focused cross-cultural tour will visit four African countries, and will also include the Philippine Landcare Conference on the way home to be held in early August 2007.

For people interested in becoming involved in any aspect of the International Landcare program please register your interest with SILC.

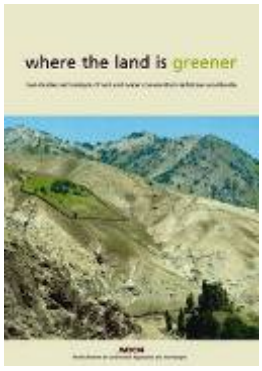
** These included SILC, the Crawford Fund, The Australian Centre for International Agricultural research, AusAid, the Federal Department of Agriculture, Forestry and Fisheries, the Victorian Department of Sustainability and Environment, Waldron Smith Management (Conference), Barung Landcare, The Ballarat Landcare Network, CTA (Netherlands), Department of Agriculture South Africa, GTZ (Germany), the World Agroforestry Centre (Nairobi), Landcare South Africa, the Philippine-Australian Landcare Project, Department of Primary Industries and Fisheries Queensland, CRS (Catholic Relief Services – Philippines), The University of Queensland, and many more individuals and groups.*

International delegates from both Landcare study tour groups join up at Ballarat, Victoria, for a great photo opportunity!

WOCAT HIGHLIGHTS

by **Gudrun Schwilch**, University of Berne, Switzerland. gudrun.schwilch@cde.unibe.ch

Overview books: The long awaited global WOCAT overview book is now available! **"where the land is greener"** looks at soil and water conservation from a global perspective. Forty-two soil and water conservation technologies and 28 approaches are described – each on four pages with photographs, graphs and line drawings – from more than 20 countries around the world. In addition to the case studies, the book includes two analytical sections on the technologies and approaches under study. By identifying common elements of success, these analyses offer hope for productive conservation efforts at the local level with simultaneous global environmental benefits. Policy pointers for decision-makers and donors offer a new impetus for further investment – to make the land greener.



The book is furthermore a prototype for national and regional compilations of sustainable land management practices – a practical instrument for making field knowledge available to decision-makers. It is a new standard for the systematic documentation, evaluation and dissemination of knowledge on sustainable land management.

The price of this invaluable book (365 pp.), which should not miss in your collection, is US$45. Click at wocat@giub.unibe.ch to order. Nationals of ACP (Africa, Caribbean, Pacific) countries working in agriculture and rural development, can receive the publication for free. Please see www.cta.int or write to CTA, BP 173, 6700 AD Wageningen, The Netherlands.

Parallel to and more or less simultaneously with the global overview book, several national overview books have been or are in the process of being produced. South Africa was in 2004 the first country to produce a loose-leaf "fact sheet" book with 'light' (1 p.) technology descriptions.

This year the BANCAT team produced a nice booklet on 30 technologies and 9 approaches in the Chittagong Hill Tracts (Bangladesh), entitled "Selected Natural Resource Conservation Approaches and Technologies in the Chittagong Hill Tracts, Bangladesh." Please contact the BANCAT team (jushoaib@yahoo.com, skhisa@yahoo.com) to obtain copies (US$10/copy). Other overview books are under preparation, e.g. in Ethiopia, Eritrea and for the ICIMOD region.

11th WOCAT Annual Workshop & Steering Meeting, 23-28 October 2006, South Africa

The 11th WOCAT Annual Workshop and Steering Meeting was held in Cape Town and was organized by the South African Department of Agriculture (DoA) and Institute for Soil, Climate and Water (ISCW) in Pretoria. Including 12 delegates from the Southern African Development Council (SADC) who joined the meeting during the first two days, a total of 52 participants from 29 countries in Asia, Africa and Europe attended the meeting.

Considerable progress over the last year was reported by national and regional institutions. It became obvious that WOCAT is playing a role at institutional/ departmental level in various countries. It is also evident that the low number of case study contributions to the global WOCAT database in the past year does not reflect the much higher number of case studies documented at the national level (often in a national language).

A special topic session on Conservation Agriculture and on Rainwater Harvesting had been scheduled and included eight interesting presentations from Europe (U.K./SOWAP, Switzerland), Africa (ACT, South Africa, Kenya) and Asia (Philippines, Central Asia, Pakistan).

The WOCAT mapping activities received special attention and the South African team demonstrated the progress made with the on-line mapping system (ARC-IMS based) and the off-line viewer. The discussion was coupled to a more general discussion about the need as well as the pros and cons of changing from the current off-line data management system to an (interactive) online system for the mapping and also the technology and approach databases.

A discussion was held about WOCAT as a tool for decision support, and initially also about what was actually meant by a Decision Support System: a sophisticated expert system, or basically WOCAT in its present form as a tool to document and evaluate either someone's own activities or to assess the potential of a documented technology or approach from somewhere else. The agreement was it should be somewhere in between, with a more elaborated form of the current "Assessment indicators" system.

The draft WOCAT Strategy document was discussed and priorities for the national and regional level were identified in regional group meetings. Finally, activity plans for the next year were refined and presented and Task Forces identified for issues needing follow-up.

The meeting accepted the offer of the Philippines to host the next WWSM, which will take place from 12-17 November 2007. The full WWSM11 Proceedings are expected to be finalized in January 2007. Please check the WOCAT Website www.wocat.org, www.wocat.net for this.

RESEARCH ABSTRACTS

ABSTRACT: Caring for the Land Best practices in soil and water conservation in Beressa watershed, highlands of Ethiopia, PhD thesis of **Aklilu Amsalu Taye** (muksitay@yahoo.com), Tropical Resource Management Paper No. 76, Department of Environmental Sciences, Erosion and Soil Conservation Group, Wageningen Univ. and Research Centre, Wageningen, Netherlands. 2006. 149 pp. ISBN: 90-8585-066-5, ISSN: 0926-9495, www.esw.wur.nl.

Land degradation in the form of soil erosion and nutrient depletion is a major constraint to agricultural development in the Ethiopian highlands. Conservation programs have extensively been carried out during the past decades to rehabilitate degraded areas and stop further degradation. However, the conservation measures introduced have not been sustained by most farmers and land degradation continues to be a problem. The main objective of this research was to examine soil and water conservation activities in the central highlands (Beressa watershed) and identify the constraints and opportunities for better conservation intervention. Farmer' knowledge of erosion problems and their conservation practices, the determinants of sustained adoption of introduced measures, and the performance of currently used conservation measures was analyzed in order to identify best conservation practices. The study was carried out in the context of the history of land use and farming activities, livelihood and socio-economic changes, and past conservation interventions during the past decades.

The results show a complex inter-linkage between farmers' livelihoods and soil and water conservation. Farmers were aware of erosion problems as well as soil fertility changes and they applied a range of conservation practices against these problems. Such local efforts are however constrained by soil degradation, insecure land tenure, weak extension service, and high fertilizer price. Nonetheless, introduced measures faced problems of acceptance and have barely been sustained by the farmers. Participatory evaluation of SWC practices revealed that farmers consider a range of criteria while choosing best soil and water conservation practices. The results further indicated that conservation activities in the watershed are constrained by problems relating to the various levels of decision-making, viz. local/household, village/community, and national/regional level. The research presents a framework with a set of enabling conditions in order to support and encourage local conservation activities, and thus realize sustainable land use

ABSTRACT: Moving people – towards collective action in soil and water conservation: Experiences from the Bolivian mountain valleys, PhD thesis of **Aad Kessler** (Aad.Kessler@wur.nl), Tropical Resource Management Paper No. 78, Department of Environmental Sciences, Erosion and Soil Conservation Group, Wageningen Univ. and Research Centre, Wageningen, Netherlands. 2006. 194 pp. ISBN: 90-8585-102-5, ISSN: 0926-9495, www.esw.wur.nl.

Land degradation in the Bolivian mountain valleys has increased in the past decades, and many cropland fields have been abandoned. Although farmers are concerned and urgent actions are required, no serious widespread actions are undertaken, Several SWC practices – mostly based on local knowledge - are available to control runoff and improve soil management. The challenge is how to motivate farmers to adopt these practices on a wide scale. Facing this challenge, the JGRC project validated a strategy for executing SWC practices within a holistic framework of rural development. In the first phase of this 'logical strategy', the objective was to lay a solid foundation for sustainable development: to motivate farmers (improve their future prospects) and achieve their genuine participation. Based on this foundation, in the second phase SWC and development activities were executed. Participation rates in SWC contests and in maintenance of practices were higher in villages where a solid foundation existed.

Nevertheless, two years after project withdrawal, many farmers had lost motivation to continue with SWC. The main reason: the lack of a catalyst to keep the process going. Active involvement of municipalities in rural development is therefore indispensable; they must provide follow-up activities. This requires well-trained and motivated actors in municipalities. Moreover, micro-meso-macro linkages must work efficiently, with local experiences that feed sector-wide approaches for scaling-up SWC activities, and adequate strategies that support and motivate farmers to invest in sustainable land management, Moving people - at all levels - towards collective action in SWC; only then land degradation in the Bolivian mountain valleys can be reversed.

SUMMARY REPORTS

IECA IberoAmerican Chapter Conference Update, Buenos Aires, Argentina, August 9-11, 2006
III Congreso IberoAmericano Sobre El Control De La Erosión Y Los Sedimentos (CICES)
Argentina's Vice President Welcomes IECA to Buenos Aires

More than 250 people attended the CICES III Congress (Third IberoAmerican Erosion and Sediment Control) at Palacio Paz in Buenos Aires to engage in the largest IberoAmerican conference, organized by IECA members Gustavo Salerno and Angel Menendez.

Dr. Daniel O. Scioli, Argentina's Vice President, underscored the importance of erosion control as a vital part of environmental protection to solve serious problems caused by soil erosion in Argentina. After that IECA President Doug Wimble and Fabién López, Argentina's Under Secretary of Water Resources, provided perspectives from their respective organizations on how government leaders and professionals can collaborate to identify programs and technology that can provide cost-effective solutions.

From left: IECA president Doug Wimble (I) and past IberoAmerica Chapter president Jesus Cardozo; The Vice President of Argentina, Dr. Daniel O. Scioli, speaks to the audience of CICES III; IECA Director Julie Etra and president Doug Wimble, with new IberoAmerica Chapter president Gustavo Salerno and CICES conference secretary Angel Menendez.

There were 70 oral and poster presentations, an exhibition and two pre-conference short courses included in this program. John McCullah, instructor from IECA, taught one short course. Director Julie Etra presented a paper in Spanish, and Ben Northcutt, Executive Director, summarized IECA and described the benefits of membership. Understanding the 'drivers' or key factors is one challenge IECA faces in developing its international presence. Once the reasons are known why a particular country or government is concerned about erosion, then IECA can develop an education program and resources that help meet the specific needs. One driver in Argentina is risk management whereby investors of large construction projects related to energy development and transmission (e.g. mining, oil and pipelines) seek to ensure the environmental integrity of their projects. Since erosion can create significant and costly impacts, especially with large land disturbing projects, the investment companies want to minimize their exposure for loss and legal actions. Therefore, controlling erosion and other adverse environmental impacts becomes a priority.

A second driver is public image. This key factor is more important than ever to maintain healthy relationships with governments and local communities in association with the larger energy and resource development companies. For example, controlling erosion on access roads restores disturbed habitats, reduces maintenance costs and prolongs the useful life of the roads. Roads are some of the more visible impacts that the public can quickly focus on and companies are recognizing the value of proper environmental management in these high visibility areas.

At the conference Gustavo Salerno was elected as the new IberoAmerica Chapter president. Outgoing president Jesus Cardozo will continue on the Chapter board as past president. By using IECA's new webinar training technology, the IberoAmerica Chapter can provide valuable erosion control training on a regional basis in their native language. Stay tuned for how you can help*. - Ben Northcutt, Executive Director, IECA, Steamboat Springs, Colorado, U.S.A.* ben@ieca.org

National Conference on "Role of Soil and Water Conservation in Rural Employment" Sponsored by the Soil Conservation Society of India (SCSI), Organized by the Indira Gandhi Agricultural University at Raipur, Chhattisgarh State, September 19-21, 2006

The Conference was attended by more than 300 delegates associated with the field of Soil and Water Conservation, viz. scientists, senior policy-makers, planners and officers from all over the country.

It was inaugurated by Lt. Gen. (Retd) K.M. Seth, Honorable Governor of Chhattisgarh State, who emphasized the urgent need for conservation and sustainability land and water resources. He gave a clarion call on the importance of water resources development including restoration and renovation of the 37,000 water bodies in Chhattisgarh. He outlined three priority subject areas for the Conference - Agriculture, Soil Conservation and Water Conservation - all of which should be in integrated, practically oriented action programs.

Earlier, welcoming the delegates, Dr. Suraj Bhan, SCSI President (upper photo, at left), highlighted the Integrated Watershed Development approach for increasing crop production system in arid and semi-arid areas and also in the livelihood support, employment, environment protection, rain water harvesting and recharge of underground water for enhancing biomass production towards livestock development.

Dr. C.R. Hazra, Vice Chancellor IGAU, while delivering his welcome address, highlighted the prevailing rural poverty against the backdrop of falling agricultural growth rate from 3.5% to 1.5%, while population recorded an increasing rate of 1.8%.

Prof. J.S. Bali (upper photo, at right), Patron of the Society, in his keynote address gave a prevailing brief account on the situation relating to agriculture in rural India and expressed his concerns on issues. He emphasized the need for consolidation of operational efforts to make economically viable units within watersheds and infuse technologies and investment in rural India through Bio-industrial Watershed Management.

The major recommendations emerged out of the Conference are given below:

1. Highest Priority need be accorded to the field of Soil and Water Resource Development and Conservation in the agricultural-production campaigns by State and Central Governments in India.
2. For ensuring real productive employment, the activities relating to Soil and Water Conservation organizations need to be strengthened in all concerned Ministries and the State Governments.
3. Watershed Management has been recognized as a key sector not only for resource conservation but also for holistic rural development, rural employment and poverty eradication. It is, therefore, urged that appropriate programs of all central Ministries and State Departments dealing with rural areas be brought within the Integrated Watershed Program.
4. Human resource development and capacity building activities related to water conservation and management should be suitably organized at all levels to villagers, User-Associations and District Administration Official functionaries and others associated with the program of watershed development
5. Research in Soil and Water Conservation programs should be reoriented towards creating specific and integrated systems of ecology, production, processing and marketing, for different Ecological Zones and Sub-Zones of the country, in order to enhance employment-oriented rural growth.
6. The Soil Conservation Society of India should create a pool of consultants and urge all Panchayat Raj institutions to utilize their services for enhancing productivity and profitability of the field programs.
7. Water Harvesting Management programs in arid and semi-arid areas should be promoted for surface and groundwater development in the watershed projects.
8. Improvement of Post-Harvest Management Technologies (processing, packaging and marketing etc.).
9. Strengthening of Certification Systems for Organic products especially their competitiveness in the context of globalization of trade.
10. Massive awareness among the farmers and other stakeholders regarding the value and security of water and other resources need be promoted on a continuing basis.

- Suraj Bhan, President, Soil Conservation Society of India, bhan_suraj2001@yahoo.com, soilcsi@yahoo.co.in

National Workshop on Natural Resource Management for Sustainable Hill Agriculture

S.K. University of Agricultural Sciences and Technology, Jammu (SKUAST-J), India, November 9-10, 2006

From left: Inauguration of National Workshop; Participants attending the Workshop; Valedictory session, Nov. 10, 2006

A two-day National Workshop on 'Natural Resource Management for Sustainable Hill Agriculture' was conducted by the Soil Conservation Society of India, Jammu Chapter and Faculty of Agriculture, SKUAST-J, India. 250 Participants attended the workshop comprising subject matter specialists and field functionaries from line departments, especially the State Government Departments of Agriculture, Horticulture, Forests, and Rural Development and NGOs.

Minister of State for Agriculture Mr. Ajaz Ahmed Khan inaugurated the workshop and stressed the need for application of technology to improve farming in hilly areas. Prof. Nagendra Sharma, Vice-Chancellor, SKUAST-J emphasized that the scientists/ researchers should develop site specific, feasible and low-cost technologies for adoption to improve the productivity with minimum damage to natural resources of land, soil, water and forest.

Dr. Suraj Bhan, President SCSI, inaugurated the Jammu chapter and emphasized on the need of site specific management of resources for development of hill agriculture. Dr. Sanjay Arora, Organizing Secretary, thanked all the participants and sponsoring agencies for the workshop. He also encouraged the participants to be associated with professional societies, e.g. SCSI, WASWC, IASWC, which can expose them to the latest information on development in the area of SWC and to frame their future strategies and excel in their professional skills.

The following major recommendations were made:

1. Site specific intervention options such as slope and cover management, water resources development and integrated farming systems have to be evaluated and encouraged.
2. Role of geo-informatics also has to be made a part of the decision-making process in delineation of watersheds.
3. Available technologies for water harvesting need to be improved on a scientific basis for efficient use of irrigation water.
4. There is a good scope for cultivating hardy aromatic and medicinal crops on wastelands so as to prevent soil erosion and excess runoff.
5. A close linkage of farmers' participation was stressed for hill areas to improve farm sustainability through eco-friendly agriculture, diversification and afforestation, with a "production to consumption" livelihood system.
6. Prevent soil erosion on sloping lands, especially plugging of first order gullies.
7. At least one chilled milk preservation cooperative in each district should be established.
8. There should be active NGO participation in integrated watershed management activities with encouragement from the government.
9. In-situ soil moisture conservation in orchards should be encouraged.

- Sanjay Arora, Organizing Secretary, SKUAST-J, India, aroraspau@yahoo.co.in and Suraj Bhan, President, Soil Conservation Society of India, bhan_suraj2001@yahoo.com, soilcsi@yahoo.co.in

2nd International Conference on Problematic Soil Conference,
Petaling Jaya, Malaysia, December 4-5, 2006

The engineering community of the world achieved another milestone with the successful organization of the 2nd International Conference on Problematic Soils in Sunway Lagoon, Petaling Jaya, Malaysia. The conference aimed to provide an opportunity for dissemination of current practice and discussion on recent development in problematic soils. Arguably, problematic soils are the most commonly encountered soils faced by geotechnical engineers and engineering geologists worldwide.

There were 5 keynote papers and 47 technical papers from 22 countries presented at the conference. Among them were 8 papers on organic and peat soils, 8 papers on expansive soils, 8 papers on soft clays, 3 papers on collapsible soils and 2 papers on unsaturated soils. The remaining papers were on other issues related to problematic soils such as ground improvement, construction problems, landfill and arid/desert soils. This conference gave opportunities for the participants to discuss and assimilate the problems and the solutions that they could rely on.

The overall aim of the conference was to highlight the importance of understanding the geology and geomorphology of the problematic soils, failing which might result in damages and failures costing billions of dollars to the built environment. With identifying and addressing the difficult ground conditions, engineers and geologist are at the front end to make decisions with major developments involving problematic soils. The conference also provided platforms to exchange ideas and comments on methods to cure the problematic soils and develop a sounder engineering approach.

The conference which was supported by Commission C18 (Problematic Soils) of the International Association of Engineering Geology and the Environment (IAEG) and University Putra Malaysia, hoped to utilize the wide range of expertise available in this field in order to achieve the aim and the goal of the conference. The conference was certainly the right vehicle to drive on the path of success of tomorrow.

In the Photo: Conference Chairman Prof. Bujang Huat (middle), with two participants from India

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PUBLICATION REVIEWS

Quality of Water in the Rural Environment Qualité de l'Eau en Milieu Rural: Savoirs et Pratiques dans les Bassins Versants (in French).

Philippe Merot, coordinator (2006). INRA - Collection Update Sciences and Technologies, INRA/ Cemagref/ Cirad/ Ifremer, 356 pp, 2006, ISBN 2-7380-1214-0 (Ref. 01531). Price: 33 Euros + mailing costs. Orders to: INRA Editions,

Route Départementale 10, F-78026 Versailles Cédex, France. Fax: +33-1-3083-3449; Editions@versailles.inra.fr, www.quae.com

The degradation of water quality has become a major issue in industrialized and densely populated areas in the world, and many researchers and research organizations have tried to monitor this development, understand its causes and find acceptable solutions.

This work presents the findings of research undertaken in this domain in the cattle breeding area around the Atlantic coast and in Brittany, France. It contains the most up-to-date knowledge and know-how collected over the past years about water pollution in a rural environment, and the dynamics involved in restoring its quality. The information displayed in this book is the result of a collaborative research effort undertaken by INRA, the Armorican Center for Environmental Research, Cemagref, and a number of regional development agencies.

The book is made up of 29 papers, mostly written in French, by a large number of collaborators. These papers are grouped along 4 major themes: (1) indicators, including biological ones, and methods for monitoring changes in water quality (5 papers); (2) innovative tools and techniques for a more effective fertilizer management, crop protection and integrated rural development (8 papers); (3) modeling of environmental effects, cultural practices and various management levels (7 papers); and (4) mobilization of people involved and concerned with the sector (9 papers).

This book is intended for a broad readership: scientists, development officers, farmers, representatives of the administration and local government, and all those who are concerned with environmental protection. Though mainly focused on Brittany, the conclusions of this study might be helpful in tackling similar problems in other parts of the world.

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Geology for Engineers, A. Parriaux (Géologie: Bases pour l'Ingnieur) (2006 - Text in French). Presses Polytechniques et Universitaires Romandes, Lausanne, Switzerland, 2006, 536 pp., ISBN 2-88074-555-1, Price: 119 CHF (Switzerland) or 82.50 Euros + taxes (other countries). Orders to: Presses Polytechniques et Universitaires Romandes (PPUR), CP 119, EPFL-Centre Midi, CH-1015 Lausanne, Switzerland. Fax +41-21-693-4027. ppur@epfl.ch, www.ppur.org

This excellent book, written in French, constitutes a good reference document on the nature and geological composition of the Earth, and on the many processes that interfere in our environment. Over more than 500 pages it offers an exhaustive overview of existing geological techniques and methods for studying the nature and properties of the most important rocks and sediments. It explains how geology affects engineering decisions and how to manage adequately subsurface conditions.

The book contains 13 main sections which discuss in great detail the various selected topics. The introductory part explains the relation between geology and engineering sciences. The following two chapters describe the Earth in a spatial (solar system, planets) and temporal context (dating methods, geo-chronological scale). Chapter 4 deals with the nature and physical composition of the globe in general based on seismological, gravimetric, magnetic and geothermic parameters. The next chapters discuss the mineralogical composition of the rocks (ch. 5), magnetism and magmatic rocks (ch. 6) and the hydrological cycle (ch. 7). The sedimentary environments in well-drained (dryland) and poorly-drained (aqueous) levels are discussed in chapters 8 and 9, followed by the processes linked to diagenesis and their impact on the composition of sedimentary rocks (ch. 10), metamorphism (ch. 11), tectonics (ch. 12) and the weathering of hard rocks into loose soil material (ch. 13).

A CD-Rom provided as a complement to the hardcopy text contains the answers on a number of problems put forward throughout the text. It also gives access to some examples showing particular aspects of earth dynamics selected worldwide.

This well-written and very didactic work constitutes an excellent synthesis on the role and impact of geology and geological phenomena which affect daily life conditions. It is therefore an excellent reference book and manual for engineers and other specialists dealing with civil engineering, construction and environmental problems, and with issues related to landscape architecture.

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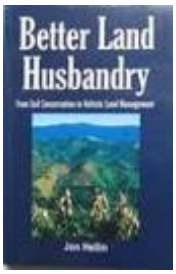
Better Land Husbandry: From Soil Conservation to Holistic Land Management, Jon Hellin, j.hellin@cgiar.org, Science Publishers, New Hampshire, U.S.A.. www.scipub.net, 2006. Softcover, US$59.50/copy

Jon Hellin's book 'Better Land Husbandry' has an impressive pedigree: a glance at the references confirms this. What better balance of sources than Stocking, Bunch, Pretty, Lal, Hudson, Fujisaka and Shaxson? These authors take pride of place, each having eight or more publications cited. But it is the last named, Francis Shaxson, to whom Hellin owes the greatest debt. As Hellin puts it: "Over the years Francis Shaxson's insight has assisted me immeasurably during my intellectual journey from soil conservation to better land husbandry".



This is the fourth volume in a series entitled 'Land Reconstruction and Management' edited by Martin Haigh, and it is a fine achievement. Interwoven with a review of what the 'great and the good' have to say is Hellin's own research. To those of us who have shared Hellin's journey then there's little new here – but what is new, is to find it all under one cover. Hellin takes us on a comprehensive tour around the principles and practices that are becoming increasingly accepted by those who are concerned with the land. No longer a narrow focus on 'saving the soil' but a more sensitive and rounded view that looks at the land (not just the soil) and the people who live on it, and from it. Amongst several excellent quotations (Hellin has an eye for these) here is the one that captures the mood best of all: "Land husbandry is less of a closely defined discipline than it is a philosophy whose practical expression – by both farmers and advisers – is both science and art". The quotation is from Chinene et al. (1996) and it is no surprise that, disguised under the 'et al.' is none other than Francis Shaxson himself.

Central to that philosophy, is the recognition that soil erosion is a symptom of poor land husbandry rather than a cause, and cannot be countenanced simply by erecting physical barriers. The root cause is poor land use, and this is what has to be addressed. Furthermore there are no 'silver bullet solutions': and certainly not the vetiver grass barriers that were proposed by some influential agencies – including

the World Bank - a few years back. But, as Hellin admits, there are still many who need to be convinced. And this book will win over many doubters. What's more it will fulfill an admirable role as a text book on the topic – and your reviewer is admirably placed to speak with authority here, teaching a course on precisely this topic. The important areas are covered; from livelihoods to green manure, from the impact of erosion on productivity to indigenous knowledge; from zero-till farming to the use of incentives. But not quite! There is one glaring omission. And that is livestock. For a book that emphasizes the importance of listening to small-scale farmers this is surprising. Not only do livestock play a key role in livelihoods, but they are crucial in issues of degradation and conservation: their integration into farming systems is an important component of better land husbandry.

Another quibble is the strong emphasis given to the author's own work – interesting and valid though it undoubtedly is. This lends a strong Latin American bias to the book, which is accentuated by the preponderance of photographs from that region. And these are photos that, oddly, concentrate more on erosion than better land husbandry itself. But all in all it is a work that pleases. And a great deal of effort has gone into it. Its imperfections (including rather too many typos) can be accommodated and its praises sung. This is a timely and important book, and both Jon Hellin and the series editor, Martin Haigh, should be congratulated.

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Landcare in Australia: Founded on local action, By **Rob Youl, Sue Marriott and Theo Nabben,** Published by SILC and Rob Youl Consulting Pty Ltd., ISBN 0-9775240-1-9, 56 pp. Free of charge.

This short book provides a concise review of the Landcare movement in Australia since its formal launch 16 years ago. It starts by briefly describing the history of Landcare but then outlines how this very successful program actually works in practice.

A fascinating feature of Landcare is the unique way in which the private sector has been involved and brought in with the federal, state and local governments to promote and provide funding. Companies and charitable trusts are now providing a large proportion of the money being spent on this program in Australia. The sections describing this and how Landcare has been marketed should be essential reading for anyone wishing to start up a similar program in any other country.

The booklet concludes with a number of interesting case studies showing how Landcare has been successful at the national, state, regional, catchment and individual levels.

Members wishing to find out what exactly Landcare is, what it does and how it works, will find this a very useful publication. It is available for free from Rob Youl Consulting P/L, 113 Nelson Road, South Melbourne, Vic 3205, Australia, rob.youl@landcareaustralia.com.au, and is also available online at www.landcareonline.com/page.asp?pID=7.

- David Sanders, dsanders38@btinternet.com

Short News on Conservation-Environment

Edited by **S.K. Sharma,** Environmental Educator, 24 National Road, Dehradun 248001, Dehra Dun, India, sks105@rediffmail.com (Note: 061031 = October 31, 2006)

CLIMATE CHANGE

Gore's message is a critical one. It should be heard not only by the converted (061031)

Al Gore's movie An Inconvenient Truth is simply a movie about his presentation on the dangers of global warming, which he has now delivered in more than 1,000 cities around the globe. It's interspersed with a few polished personal observations. The country's failure to sign the Kyoto accord on carbon dioxide (CO_2) emissions is taken to task by Gore; his message to his countrymen is that they have a moral and environmental obligation to address the crisis. The sense of urgency is starting to spread and Gore can take a measure of credit for that. Since the beginning of his lecture circuit, more and more high-powered people are listening, particularly business people. Virgin's Richard Branson, Newscorp's Rupert Murdoch and General Electric's Jeff Immelt have vowed to reduce their "environmental footprint". Missing from the legions of the converted are the big petroleum companies, other greenhouse gas culprits and, most notably, the Bush administration.

Australia to push for 'New Kyoto' in Asia: Reuters (061102)

CANBERRA — After repeatedly blocking domestic carbon trading, Australia said on Thursday it would now push for Asia-wide emissions trading to combat global warming as part of a planned "new-Kyoto" pact. The turn-around by Australia, which refuses to sign the Kyoto Protocol to reduce greenhouse gases, comes as an opinion poll showed most Australians believe the government should sign Kyoto.

A News poll done for environmental groups, including Greenpeace, showed 79% of Australians wanted their conservative government to sign Kyoto. Nine in 10 people wanted a shift from coal-fired power to renewable energy. Environment Minister Ian Campbell said Australia wanted to forge a "New Kyoto" out of a six-nation alliance of the world's biggest polluters - China, India, the United States, Australia, South Korea and Japan. Prof. Tony Owen, from the Centre for Energy and Environmental Markets at the University of NSW, said the government appeared to have been spurred into action on climate change by fast-shifting public opinion. Australia, which has failed to ratify Kyoto, is already feeling the brunt of global warming with the worst drought in 100 years eating into economic growth.

DEMOGRAPHY

China's one child policy averts 400 million births by 2005: TPI (060503)

Beijing, May 3 China has averted over 400 million births by the end of 2005 as part of its 'one child per couple' family planning policy, a senior official has said. "The one child policy has helped China prevent 400 million births by the end of last year," minister in charge of the National Population and Family Planning Commission, Zhang Weiqing said. Thanks to sustained efforts in the past three decades, China has curbed rapid population growth and recorded low birth rate, reducing 300 million births by 1998 and 400 million births by 2005, Zhang was quoted as saying by the latest issue of "Qiushi" (Seeking Truth From Facts) magazine. However, Zhang stressed that family planning laws would remain in place to stabilize the low birth rate.

FLOOD

Dozens dead in Ethiopia flooding (061031)

The deadly floods began Friday when the Shebelle River overflowed its banks in the Ogaden region, more than 600 miles from the capital, Addis Ababa. Four days of devastating floods along Ethiopia's eastern border killed dozens of people and prowling crocodiles hampered rescue efforts as rain continued to fall, officials said Tuesday. Muktar Mohammed, flood coordinator for the government-run Disaster Prevention and Preparedness Bureau said more than 2,500 acres of crops were washed away in the floods, along with thousands of cattle, camels, donkeys and other livestock. Rain was expected to continue through the week. Ethiopia is one of the poorest countries in the world, with more than half of its 77 million people living on less than $1 a day. Aid groups were sending food and other help to the region, officials said.

MANGROVES

Former U.S. President Clinton Champions Mangrove Forest Recovery Efforts: AP (061101)

UNITED NATIONS — Former U.S. President Bill Clinton who is the UN special envoy for tsunami recovery lent his humanitarian heart to yet another cause: protecting the mangrove forests along the coastlines of countries affected by the 2004 tsunami, which he has made a special cause. Shortly after the 2004 tsunami, planting mangroves became the rage among non-governmental organizations who saw it as a way to promote the environment and employ locals. Despite tens of thousands of seedlings that were planted in coastal areas, experts say mangroves have been on a steady decline. Clinton received concrete expressions of new financial support totaling US$10 million (euro 7.88 million) for the mangrove project from Norway, Sweden, Germany, Australia, the UNDP and the UNEP.

NATURAL DISASTER

Disasters Losses May Top One Trillion Dollars per Year by 2040: Reuters (061115)

NAIROBI — Losses from extreme weather could top $1 trillion in a single year by 2040, a partnership of the UNEP and private finance institutions (UNEP FI) warned. "In one scenario, potential disaster losses are calculated at more than $1 trillion in a single year by 2040. It is one of many scenarios, but the process was robust and the institutions felt comfortable it was a realistic scenario." Another report modeled by Andlug Consulting for UNEP FI's Climate Change Working Group, whose members include Dresdner Bank, Bank of America, Swiss Re, UBS and HSBC said it seemed likely there would be a "peak year" of losses of more than $1 trillion before 2040.

POLLUTION

Pollution Shortens Life Expectancy Worldwide: AP (061019)

The report published by the Blacksmith Institute, an international environmental research group, lists 10 cities from Russia, China, Dominican Republic, India, Peru and Zambia where pollution poses health risks and fosters poverty. These countries, which are mostly part of the developing world, generally have few or inadequate pollution controls, and the problem is compounded by the local governments' "lack of knowledge" and the inability of citizens to enforce justice. According to the report the cities are reminders of an early industrial era, with most pollution stemming from relics such as unregulated lead and coal mines or unrefined nuclear weapons manufacturing plants.

PRESSURE ON RESOURCES

UAE, U.S. Top List of Pressures on Nature, WWF Finds: Reuters (061024)

The WWF conservation group says that the inhabitants of ten nations, namely, United Arab Emirates, United States, Finland, Canada, Kuwait, Australia, Estonia, Sweden. New Zealand, Norway place most demands per capita on the world's natural resources. It said that the humans were stripping nature at an unprecedented rate and would need two planets' worth of natural resources every year by 2050 on current trends. The "ecological footprints", calculated by the WWF, comprise use of fossil fuels, nuclear power, cropland, grazing land, built-up land, fishing grounds, forests. For the top nations, emissions from using fossil fuels were the main component.

PRIZE

African prize is a 'developmental project', says Sudanese Billionaire (061027)

LONDON — A Sudanese billionaire Mohamed Fatehi (Mo) Ibrahim is offering a $5 million prize to an African head of state who significantly improves the lives of citizens and take 4 or 5 million people out of poverty. Ibrahim hopes it is a much greater achievement than the Nobel Prize.

Ibrahim hopes to award the prize annually to an African head of state who improves the standard of living among ordinary citizens, and who does not try to cling to power. If no candidate meets the criteria, no prize will be given. The first prize was scheduled to be awarded in late 2007. Ibrahim said his prize may be too small to influence the corrupt. But he said it would reward leaders trying to do the right thing, and sway those who are wavering.

Board members of the Mo Ibrahim Foundation for African Development include Mary Robinson, former president of Ireland and UN high commissioner for human rights, and Salim Salim, a Tanzanian diplomat and former leader of the Organization of African Unity.

SOCIOECONOMICS

Microloans mushroom, aided by banks, billionaires: Reuters (061019)

Nobel Peace Prize winner Muhammad Yunus, a Bangladeshi economist, and his Grameen Bank started making small loans to the poor without any collateral because no one else would in 1976. With loans as little as $50, micro-credit can allow the poor to start or develop small businesses, from raising chickens in the backyard, to making handicrafts for tourists. After starting out as just small loans for the poor, microfinance has mushroomed into a large market that is attracting big banks, technology billionaires, and last week brought its innovator the Nobel Peace Prize. Meanwhile, new-age development gurus such as Bill Gates, eBay founder Pierre Omidyar, and former U.S. President Bill Clinton are also looking at microfinance schemes as a way to help provide basic services to the poor.

TREES

Kenyan Nobel Prize Winner Launches Campaign to Plant One Billion Trees in 2007: AP (061108)

Wangari Maathai, a Kenyan environmentalist, who in 2004 became the first black African woman to win a Nobel called on people around the world to plant 1 billion trees in the next year. The effort is a way ordinary citizens can fight global warming. Destroying trees through burning contributes to global warming, releasing about 370 million tons of greenhouse gases every year, about 5% of the world total. Planting trees can offset climate change in part because they absorb carbon dioxide. Africa is the continent expected to suffer most from shifting climate zones and droughts, like the one now in its fourth year in East Africa.

MISCELLANEOUS:

TAKE A BREAK

* Why laughter is contagious: You can catch it without asking for it, or even necessarily wanting it. Now, scientists say they have an idea of why. http://www.world-science.net/othernews/061212_laugh.htm

* Humor beats disease, researchers find: Scientists are reporting what they call most direct evidence yet that ability to laugh saves lives. http://www.world-science.net/othernews/061212_humor.htm

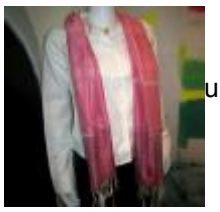
* You are welcome to view a couple of blogs from the Subcontinent: www.sunaulobihani.blogspot.com and www.bodhighanashyam.wordpress.com/

* You are welcome to solve the Millennium Map Jigsaw Challenge, www.themillenniummap.com, and win a prize! You can enter as many times as you can meet the Challenge!

Note: Millennium Map Jigsaw Challenge Prizes: Stay in one of the 5 Millennium hotels in China, Singapore, NZ, U.S.A., sometime with a ticket to fly there!*

CHARITY It's Amazing


Lace making is a tradition for Cyprus and the village of Lefkara. The technique has been carried out for generations. It was however, the period of the Venetian occupation that produced "Lefkaritika", that survives in present day form. The women in the village make this type of drawn and counted thread embroidery. With their keen minds, sharp eyes and deft fingers they copy and adapt the ethnic white needlework common in Italy, particularly in Venice. The Lefkara women create beautiful bodices, dresses and cloaks, not only in linen but also in silk.It's also said that Leonardo da Vinci, on a visit to Cyprus, was very impressed by the Lefkara women's adaptation of Venetian embroidery and one of his inspired designs today is known as the **"Leonardo da Vinci design".** To know more about their work and shop, please visit

Buy this unique handmade silk scarf made by artisans in Bihar, India at unbelievable prices. **click here**

(WASWC helps advertise anything for charitable purpose for free.)

FEW WISE/ INTERESTING WORDS

"Leading by example is 100 times better than being a good preacher" - *Two Bears*

"Man - despite his artistic pretensions, his sophistication, and his many accomplishments - owes his existence to a 15 cm layer of topsoil and the fact that it rains" – *Anon*

"I am only one; but still I am one. I cannot do everything, but still I can do something; I will not refuse to do the something I can do." – *Helen Keller*

"If a man hasn't discovered something he will die for, he isn't fit to live." – *Dr. Martin Luther King, Jr*

"We do not inherit the Earth from our ancestors; we borrow it from our children." – *Native American proverb*

IN THE NEXT ISSUE:

- The II International Symposium on Soil Erosion and Dryland Farming, Yangling, Shaanxi, China

- Summary of COP12/ MOP2 (Kenya) and 4th Assessment Report from Paris meeting of IPCC

- Review of the books: Climate; No Tillage Seeding in Conservation Agriculture; Landcare in Victoria; L'agronomie aujourd'hui (Agronomy Today)