



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

NEWSLETTER

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Conserving Soil and Water Worldwide – [Join WASWC](#)

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

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

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

President's Message



There were two international conferences which were organized this year under WASWC and other institutions in order to mark the hundred years of soil and water conservation or/and erosion control: "Erosion Control as a Factor of Sustainable River Basin Management" held in Belgrade/Serbia in September 25th to 28th and "International Forum: Soils, Society & Global Change" held in Selfoss/Iceland from August 31th to September 4th. It is the pleasure to inform members of WASWC about these important events. In this message is presented view on Belgrade Conference.

In order to mark the hundred years of erosion control works in Serbia (1907-2007), the Conference was initiated by the Ecological Engineering Department for the Protection of Land and Water Resources, Faculty of Forestry of Belgrade University. The Conference was organized jointly with the following international organizations and associations: World Association of Soil and Water Conservation (WASWC), World Association for Sedimentation and Erosion Research (WASER) and International Sediment Initiative (ISI) of UNESCO.

The International Scientific Committee of the Conference was composed of distinguished experts in the fields of erosion and sediment transport: D.E. Walling, M.J. Haigh, V. Golosov, J. Huebl, I. Hannam, M. Miloradov, S. Bruk, H. Hurni, J. Křeček, S. Kostadinov, S. Petković, M. Zlatić, M. Janeček, I. Blinkov, I. Marinov and S. Hacıyakupoglu.

BACKGROUND

The significance of sediment issues for river basin management is widely recognized. As sediment problems are strongly related to erosion, sediment yield and torrent processes in the upland areas of river basins, erosion and torrent control is an important element of river basin management plans. The appropriate approach to this problem should be based on the assessment of the land degradation processes in the river basin, and their monitoring and modeling. The design of erosion and torrent control works should include risk analysis involving all mountain hazards, and encompass the different measures of soil conservation, sediment management and ecological engineering. In the view of the complexity of erosion and torrent control issues, river basin management plans should take into consideration the social and economic aspects of these activities

CONFERENCE TOPICS

A. DEGRADATION PROCESSES: Soil erosion (water and wind erosion); Impact of global change on erosion processes; Landslides and rockfalls; Torrents and torrential floods; Hydrological processes; Sediment transport and sedimentation processes; Impact of soil erosion and sediment transport on water quality; Monitoring of erosion and sedimentation processes; Modeling of erosion and sedimentation processes; Vegetation, biodiversity and slope stability; Eco-engineering and land restoration.

B. EROSION AND TORRENT CONTROL WORKS – WATERSHED MANAGEMENT: Risk analysis and risk management of mountain hazards; Erosion control works; Soil conservation; Torrent control works; Sediment management; Effects of erosion and torrent control works; Wind erosion control; Ecological engineering for erosion and torrent control; Impact of land use on soil erosion and sediment transport

C. SOCIAL AND ECONOMIC ASPECTS OF EROSION AND TORRENT CONTROL: Soil erosion and torrents as a social problem; Economic effects of erosion and torrent control works; Project management for soil and water protection; Strategy for erosion and torrent control in view of sustainable development of mountain regions; Legal background and normative acts for erosion and torrent control; Institutional aspects of erosion and torrent control

PARTICIPATION

Over 80 scientists and professionals took part in the event, with 35 participants from 22 different countries of Europe, Asia and Australia. A one-day excursion for the participants was organized within the programme, visiting erosion and torrent control works in localities about 100 km from Belgrade. Out of the 80 papers submitted to the Conference 44 papers were presented orally and 12 in the form of posters. The full papers are available in a CD, whereas the abstracts were published in a booklet distributed to the participants. Both the booklet and the CD have been registered at the National Library of Serbia.

KEYNOTE LECTURES

The topics were introduced by keynote lectures:

Desmond E. Walling: Tracing versus Monitoring: New Approaches to Studying the Fine Sediment Dynamics of Catchments and River Basins.

Martin Haigh: Estimating Sediment Mobilisation from Torrent and Gully Deposits: Field Studies.

Stanimir Kostadinov: Erosion and Torrent Control in Serbia: Hundred Years of Experience.

Wojciech Froehlich: Erosion, Sedimentation and Catchments Management in Mountain Environments: the Polish Experiences.

Zhao-Yin Wang, Guo-An Yu: Step-pool System for Erosion Control and Ecological Restoration.

Miodrag Zlatić: Strategy/Policy on Land Use Management and Soil Conservation.

FIELD TRIP

Field trip was organized in surroundings of Valjevo town in western Serbia. There were seen: (1) afforestation of the erosion area which is situated near the road in the direction to the National Park "Tara Mountain"; (2) Dam "Rovni" in construction, which main use is water supply for Valjevo municipality; (3) River engineering structures on the Kolubara river in Valjevo town.

ACCENTS TO RECALL

By unanimous opinion of the participants, the Conference was highly successful. The Conference brought forward several important points which could be taken into account in the follow-up of the event. Some of the accents merit to be recalled below, for further attention:

Importance of erosion phenomena for watershed management: efficient watershed management needs full assessment and evaluation of erosion and torrent control in the watersheds. It should be noted that the papers presented and ensuing discussions underlined the multidisciplinary character of erosion and sediment research. Thus, in order to facilitate the cooperation of very different scientific disciplines, the preparation of a multidisciplinary glossary could be of great use.

Assessment of the origin of sediments by tracing methods: at the Conference efficient tracing methods were presented to identify the origin of sediment in different parts of the river system and watershed. It has been agreed that these methods need full attention of researchers and managers concerned with control of erosion and sedimentation phenomena in rivers and watersheds.



From upper left and clockwise: Mr. Mishra, representative of UNESCO, gives a welcome speech; Atmosphere during the Conference; discussion regarding afforestation near the road in the direction to Tara Mountain National Park; "Spanac" (Spanish) Student Choir; Student orchestra; Relaxing atmosphere after hardworking day.

Application of remote sensing and GIS. Several papers highlighted the advantages of using remote sensing and GIS technologies for the identification and mapping of sediment phenomena in river basins and watersheds. The papers, at the same time, underlined the need for further research to make these methods applicable in different physical and socio-economical settings.

Ecological Engineering: The Conference has called attention to the increasing importance of ecological engineering in dealing efficiently with erosion phenomena and control. The substance and definition of the notion of ecological engineering would merit further attention, for more efficient dealings with watershed management.

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EDITOR'S NOTE



My Dear Fellow Colleagues

My association with World Association of Soil and Water Conservation started as a Life Member in 2002 to National Representative in 2003, Associate Editor in 2004 and Councilor and Editor-in-Chief of WASWC Newsletter in 2008. The responsibility on my shoulders as Editor-in-Chief though quite big, still I feel that my 20 years experience in the field of Soil and Water Conservation at Punjab Agricultural University, one of the leading universities in Asia, coupled with my two hard task Senior Associate Editors, Dr. Sanjay Arora, Jammu (India) and Dr. Richard Fowler (South Africa) will enable me to fulfill my responsibilities to the satisfaction of WASWC members all over the world.

Friends, I think that time has now come to strongly feel concerned about the fast degrading environment of our Mother Earth. Since, the soil and water are the two major components of Earth's environment, we the Soil and Water Conservationists have a greater role to play in managing this environment. I believe that simply raising an organization and to be its members/office holders does not suffice to claim for real work in the management of the natural resources. Rather we shall have to make real efforts in this direction and I think that WASWC is the best platform for achieving this objective.

The past examples of the impact of the degrading environment are still afresh in our minds. The most recent tragic incidents of the deadly storm in Myanmar claiming thousands of lives and the severe earthquake in China claiming almost 70,000 innocent lives have shaken the mankind. The tragic death of school children under the debris in China has shaken me personally, when I read from the newspaper that many of the parents of these children had only one child. These parents are really inconsolable. Friends, as I said earlier, not mere slogans, but the real ground level work needs to be undertaken by the scientists all over the globe. A simple sharing of information regarding the management of soil and water resources among scientists all over the world will serve as a big step forward in mitigating the deterioration of the environment.

Friends, this newsletter should not simply aim at 'what happened where' or 'who is who'. It should act as a platform for the scientists all over the world to sit together and share their experiences; otherwise I do not think it will serve to fulfill the aims of WASWC. May I appeal to all the concerned scientists about the welfare of common man to come forward and use this newsletter as a platform to serve the Mankind? I feel that due to our first experience and time-constraint there might be many lacunae in this newsletter more so because it was previously handled by an experienced, seasoned and hardtask master – Dr. Samran Sombatpanit. I therefore request all the members to send us your feedback about this issue so that we may improve upon the future issues. I along with my fellow Senior Associate Editors will make concerted efforts to achieve the WASWC objectives and of course our success will depend on the co-operation from all my fellow colleagues.

Kukal

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ASSOCIATION NEWS

NEW EDITORIAL TEAM

A new editorial team has taken over the responsibility of compiling the newsletter with effect from first issue of 2008. The new team is as under:

Surinder Singh Kukal, Editor-in-Chief (Punjab Agricultural University, Ludhiana, India, sskukal@rediffmail.com)

Sanjay Arora, Senior Associate Editor (Shere Kashmir University of Agricultural Sciences and Technology, Jammu, India aroraspau@yahoo.co.in)

Richard Fowler, Senior Associate Editor (5 Musson Mews, Hayfields, Pietermaritzburg 3201, South Africa, rmfowler@iafrica.com)

Members are requested to send their views, suggestions, success stories and feedback to these editors

PHOTO COMPETITION 11

The winning photos are as follows:



Debris flow rushing onto the road in the Hailuo Gully National Park, by **Cui Peng**, Institute of Mountain Disaster and Environment, Chengdu, China. pengcui@imde.ac.cn



Continuing flow of low-viscosity debris flow, by **Kang Zhicheng**, Institute of Mountain Disaster and Environment, Chengdu, China.



Gullies caused by overgrazing and intensive rainfall in KwaZulu Natal, South Africa, by **Miodrag Zlatic**, Belgrade University, Belgrade, Serbia, miodrag.zla@sbb.rs

Winners of the competition may write to Samran Sombatpanit at sombatpanit@yahoo.com and let him know what book from www.scipub.net s/he would like to have as the prize.

We ask members to please send your photos to compete.

AWARDS

Philip Nelson Awarded World Food Prize



The 2007 World Food Prize (US\$250,000) was awarded to Dr. Philip E. Nelson of Purdue University who pioneered breakthroughs in large-scale storage, packaging and transportation of fruit and vegetable products. The award was announced on **June 18, 2007** at the US Department of State and was formally presented to Dr. Nelson at a ceremony at the Iowa State Capitol on **October 18, 2007** during a WFP International Symposium that focused on "Biofuels and Biofood: The Global Challenges of Emerging Technologies." Dr. Nelson's research led to the discovery of methods and equipment to preserve perishable food at ambient temperatures in very large carbon steel tanks (beginning with 100 gallon tanks and increasing in capacity to 8 million gallons). By coating the tanks with epoxy resin and sterilizing the valves and filters, food products were able to be stored and removed without reintroducing contaminants. As a result, enormous quantities of pathogen-free food could be distributed to plants around the world for final processing and packaging. Later partnering

they are implementing that idea in one or more other places". A library of information like this does not dictate one way of solving a problem. Rather, it shows many choices, based on what can be learned from other people solving the same problem in different places.

If someone working in soil and water conservation, builds a web library with links to good work being done by others, that library becomes a resource for everyone doing this work ... if you have a public awareness strategy that helps people find the information and motivates them to look at it and learn from it. Every large city in the world has pockets of poverty that can be mapped in the same way we're piloting maps of Chicago. Overlays of such maps can show the organizations working to end poverty in specific locations. I hope that through this discussion some of you will connect leaders in your community to the Tutor/Mentor Connection, and others will apply this thinking to other problem areas, such as soil and water issues.

Dan Bassill, Tutor/Mentor Connection, Cabrini Connections, 800 W. Huron, Chicago, IL 60622 USA.
tutormentor1@earthlink.net

080122

Sawatdee Khun Samran (Hello Samran)

I work in Southeast Asia and Southern China and believe that there is a lot of scope for these technologies. Soil and water conservation is becoming an increasing issue in this region, and with the increasing interest and understanding of carbon issues this will accelerate. I recall some of the earlier practitioners using no-till farming in the Isarn (NE region of Thailand) showing some considerable promise.

One thing that strikes me though is that one of the best ways for promoting this is to show people where it is happening - why not put maps of where there are no-till farming demonstration plots on the web so people can find them, for example? All too often the efforts of pioneers are not so well known even when they are doing excellent and interesting work and a map can be one of the best ways for people to find where this is happening near them, or see how the technologies are spreading or what agro-ecosystems people are using them in, etc.

Jeffrey Himel, Cambodia.

jeffrey.himel@arunatechnology.com

080120

Hello Samran,

I visited the site you referenced and viewed the publication's table of contents and first chapter that was available in pdf format. It is clear, as you say that there appears to be a great deal of interest in no-till farming and from all accounts, many benefits to adopting this practice. From what I saw, there appears to be some applicability of this technology in many parts of the world. Not having read the full book, I am wondering if much attention was paid to the landscape of local areas and the varying needs and limitations of different soils within that landscape in regards to the use of no-till farming.

Being a geographer by training, my first instinct is to look for a map of the soils of an area, evaluate their characteristics and determine which if any might benefit from the use of one technology or another. I am sure that there are different approaches and aspects of no-till that could individually be applied in different circumstances. Perhaps implementers would benefit from research and discussions about their particular soil and its adaptability and responsiveness to different no-till operations. This then would naturally be presentable in a map of different soils and the appropriateness of no-till practices in each class of soil.

Please let me know if this is already being considered and perhaps already a part of the contributions to the book on no-till farming.

Jim Cory, Horizon Mapping, USA. www.horizonmapping.net,
jcory17@charter.net

080119

Dear Samran,

What an achievement! It reflects very well on WASWC, especially at this time when people are really beginning to worry about the detriments of 'conventional' agricultural practices, especially in the face of likely effects of climate change and population increase. NT systems make a lot of sense, and mean that, instead of everyone just talking about how the soil is being ruined, we can take the alternative positive viewpoint that there are these demonstrable methods which not only stabilise but also improve soil conditions.

I congratulate you all on having put it all in place, and I look forward with greatest interest to reading it in detail, beginning today!

Francis Shaxson, UK. fshaxson@gotadsl.co.uk

071221

Dear Dr. Samran Sombatpanit

Thank you for the season's wishes and for the good work you are doing for WASWC. I was particularly excited about the hot news on the No-Till book. I quickly requested the office in charge of our Book Bank to include it on the next Book orders for our library. I am glad to report that she confirmed to have done so last week. Our dept. will make good use of it especially our new degree programs (B.Sc. & M.Sc. in Agricultural Land Use and Management'). Thanks again and keep up the good Hot News and mobilisation for WASWC.

Joy K Tumuhairwe, Dept of Soil Science, Faculty of Agriculture Makerere University, P.O. Box 7062, Kampala, Uganda. joykt@agric.mak.ac.ug

070927

Dear Samran,

Thanks very much for your two emails. I am happy that you liked my website www.cvsanten.net, on which I recently started to upload the material I am preparing for the Dutch Ethnological Museum with the intention to make my material more accessible. I would very much appreciate if the WASWC website <http://waswc.soil.gd.cn> would be prepared to establish a link to my website, this would certainly increase its accessible.

During my career since 1966 I wrote many papers, but to date I only digitalized a few of these. However, I write digital summaries as I am preparing my material for the museum, after which these summaries are uploaded on my web site. In case someone would need a copy of one of my papers I would gladly send a photo copy of the requested paper to any person asking for this.

I visited your China diary May-June 2007 on the website and found your travel story very interesting and well presented. I saw that you visited many places I also visited in China during the late 1980s and received the impression that since then many things have improved.

Yes, I still remember Prof Leendert Pons, the soils and soil survey professor, who was our coach in Surinam, South America during the 1960s when some friends and me did our

practical experience period for Wageningen University in that country.

I live near Bogor, which is only about one hour by train from Jakarta. In case you visit Indonesia it would be nice if we could meet. You are welcome to my place near Bogor.

Re your suggestion for a short article over my "no tillage" experience, I like to mention that I am not really a soil specialist but an agricultural economist, though with a great interest in soil fertility issues. I participated in several farming systems research teams together with soil specialists and agronomists. The hard data on soils were always prepared by my colleagues, the soils specialists. *Yet I recall that in many cases the no tillage or the minimum tillage part of specific projects or experiments gave the most attractive economic returns.*

In a number of other projects with negative results, which I was asked to analyze, I found often that high land development and tillage costs formed an important part of the explanation of the negative results. I mentioned this aspect especially in my Liberia web page at the end of my introduction on the economic analysis of the rice development project of which I was a project member during 1970-1971. Actually the images on my Liberia web page show very clearly the poor soil condition in the project area as a result of the very poor land tillage applied with heavy machinery. This as opposed to the good soil condition of the upland farms, farmed by the traditional farmers, who hardly touched their soils and only removed some weeds before planting, which they called "scratching" their soils. I should have other material on the same issues, but this is not yet digitalized and uploaded. Thanks very much for the invitation to write an article, but it is too early for me at this point in time. Actually at this moment I am finalizing my report and photo gallery on my travels through the Sahara and like to focus to complete this work as soon as possible.

– Charles van Santen, Jalan Preanger 11, Sentul City, Bogor 16810, Indonesia. www.cvsanten.net, cvsanten@indo.net.id

MEMBERS' CONTRIBUTIONS

▲ A PRESENTATION ON AUTOMATIC MONITORING OF HILLSLOPE/WATERSHED HYDROLOGIC AND SEDIMENT PROCESSES

Reported by Yi Xu, Yan-chun Zhou and X.Z. Xu xzxu@dlut.edu.cn

Recently Prof. Ting-wu Lei, the director of State Key Laboratory of Soil Erosion and Dryland Farming on Loess Plateau, visited Dalian University of Technology and gave a wonderful report on monitoring method on soil and water conservation. The presentation was held in the meeting room of Laboratory Building #3 on Oct. 7. Tens of graduate students and professors from the School of Civil & Hydraulic Engineering attended the lecture. The talk involves several newly-developed methods applicable to soil erosion monitoring, including measuring shallow water flow velocity for soil erosion with electrolyte tracer, sensor for sediment concentration, sensor for measuring flow rate from erosion plot, soil infiltrability measurement methods: run-on-ponding method, linear run-off method, etc. A lively discussion was made between the speechmaker and the audiences by the end of the lecture.



After the lecture, Prof. Lei visited the State Key Laboratory of Coastal and Offshore Engineering and other laboratories in the School of Civil and Hydraulic Engineering. He was surprised and sang high praise of the advanced experimental devices. He said he was very glad to cooperate with DUT in the near future.

Professor Lei is a full professor and the director of State Key Laboratory of Soil Erosion and Dryland Farming on Loess Plateau, supported by Hundred Talents Programs of the Chinese Academy of Sciences.

▲ **OSMOSIS OR PROJECT ACTIVITY? THE SPREAD OF IMPROVED LAND HUSBANDRY IN MALAWI**
 Stephen Carr, Llongwe, Malawi. scarr@sdpn.org.mw

Introduction

The dramatic changes which took place in smallholder agriculture in Sub-Saharan Africa in the hundred years up to the mid-twentieth century were largely due to the rapid spread of new crops and ideas from farmer to farmer by what could be described as 'osmosis'. These changes all provided obvious immediate benefits in terms of increased productivity per unit of labour, access to a wider and more palatable range of foods or to a source of cash. The challenge facing a growing number of smallholders today is of a different nature. Counteracting the slow but steady loss of soil fertility on permanently cultivated land involves the use of quite unfamiliar concepts and offers benefits and returns which are less immediate and obvious than the switch from sorghum to maize or hoe to ox plough. At the same time the people who shouldered the responsibility for developing appropriate technologies to meet the challenge of declining fertility of the frequently difficult soil conditions of tropical Africa were themselves moving into unfamiliar territory, and some advice that has been given has either been impractical in terms of labour demand or actually faulty. This in turn has served to limit adoption. Technologies are now being refined, but experience to date shows that intensive extension effort is required to elicit farmer response and there has been little 'osmotic' spread of ideas from farmer to farmer. As a result the level of adoption remains far too low to have any impact at the national level. Malawi with its high population density and degrading soils offers a good example of the challenges posed by the factors described above.

Early Efforts

The main concern of colonial agricultural staff with regard to land husbandry was to limit soil erosion from run-off. This took two forms. The first was the banning of cultivation on all steeply sloping land. The second was the compulsory ridging of all farm land. A combination of coercive powers, a well disciplined extension staff and a small rural population resulted in all arable land being switched from cultivation on the flat to contour ridges. In the event farmers found the system advantageous and, despite the original coercion, the practice of ridging is now almost universal. The reasons are not difficult to find. Drawing together a shallow layer of top soil into a ridge provides a better growing medium for the crop. Temporary excess moisture is problem during the growing season

in most years and the ridges give some protection against protracted waterlogging. Finally, farmers are becoming more aware of the impact of soil loss and the mitigating effects of ridging.

Recent Developments

Malawi experienced a fourteen-fold increase in population during the twentieth century, which has had a dramatic impact on the landscape. Forests have disappeared, farm size has declined to less than a hectare per family for much of the population and maize cropping for twenty or more consecutive years with no rest or rotation has reduced soil fertility. All attempts to limit farming to flatter land have been overwhelmed by population growth and the steepest hills are now cultivated right to the top. The Ministry of Agriculture sought help from donors to address this situation and the 1990s saw the European Union, USAID, the World Bank, IFAD and a range of NGOs embark upon projects to improve upon land management. The main technologies promoted were:

- 1) The use of A frames and line levels to realign ridges on to the contour.
- 2) The use of contour bands of vetiver on the steepest slopes to limit gullying.
- 3) The use of a promiscuous soya beans in rotation with maize.
- 4) Several agroforestry initiatives.
- 5) Minimum tillage/conservation agriculture

What was the impact of each?

The promotion of simple methods, which a farmer could use to realign ridges, faced two challenges. Firstly the Ministry had always depended on staff with dumpy levels to do this work. With only a short window to work between harvest and land preparation this had meant that only small areas were covered each year, *but the staff felt that empowering farmers to do the job themselves reduced their own status and there was also the feeling that a change from a 'modern' piece of equipment to an A frame represented a backward step in development.* In consequence there was limited extension effort to promote farmer-led soil conservation and there has been little impact. Most importantly it was demonstrated effectively in so few situations that there was insufficient impetus for the technology to spread by osmosis.

The Vetiver programme was dogged by two factors. The first was a poor understanding on the part of a number of extension staff of the role of vetiver in a farming system based on ridging. Rather than focus its use as a 'barrier of last resort' on steep slopes to back up the contour ridges one sees it planted on almost flat land because the extension worker found a co-operative farmer there who was willing to plant the grass in a situation where it serves virtually no purpose. The second were bureaucratic weaknesses so that wages were not available on time to weed and water nurseries, planting material was delivered too late in the season or in the middle of a dry spell. Consequently there are so few examples of the effective use of the technology that there has been little osmotic spread.

There was a striking response by women to early work by an NGO which linked cookery classes for women with the sale of seeds of a promiscuous indeterminate soya bean (variety Magoye) and in the third year of the programme 150,000 packs of seed were sold. The Ministry of Agriculture would not officially release the variety and banned its promotion or sale and so the initiative died. Subsequently a number of determinate and non-promiscuous varieties were introduced but their distribution was not linked to teaching women how to use an unfamiliar food source. A combination of limited yields and a lack of knowledge of how to make use of the crop in the home meant that the spread of soya cultivation has been severely limited and it plays a minor role in soil improvement.

Agroforestry has perhaps received the most attention and effort. Three approaches have been used. The first was the promotion of *Faidherbia albida* for the long-term restoration of soil fertility. The tree is indigenous and is valued by farmers where it grows naturally but it can thrive over much of the country. Thousands of farmers were encouraged to establish nurseries of *Faidherbia* in small pots and then transplant the young trees in the field. The results were disappointing as growth rates were extremely slow and most of the young trees were either trampled on or weeded out by mistake because they were so small. It took some time to appreciate that small pots were quite inappropriate for a plant, which drives down a powerful taproot deep into the ground as soon as it germinates. It has taken some years to develop an effective nursery strategy and in the meantime so many farmers were disappointed that there has been virtually no osmotic spread of the technology.

The second approach was that of alley cropping with a variety of different trees recommended by IITA and ICRAF. The system suffered the same problems in Malawi as it did elsewhere and after a number of years of intensive effort with little impact there has been no spread of the technology.

The third approach involved the interplanting of leguminous shrubs in between the maize plants. *Sesbania*, *Tephrosia* and *Glyricidia* have all been tried. In neighbouring Zambia, with abundant land, the use of these shrubs in three-year fallows has had a striking impact on yields. In Malawi land cannot be left fallow and so the *Sesbania* and *Tephrosia* have to be cut down and incorporated into the soil after only six months of growth. Farmer surveys

showed that this raised yields by 20% in the first year and 40% in the second if the system was followed properly. In the event farmers found that the gain of 20% in maize yield did not compensate for the displacement of all food intercrops by an inedible shrub. In consequence few farmers used the technology for two years in order to achieve greater benefits and in consequence there has been a complete lack of spread of this technology. ICRAF continues to promote *Glyricidia* as a long-term intercrop and has achieved good results with a small number of farmers under intensive extension supervision. Difficulties in obtaining good establishment and the delay in achieving significant yield gains which compensate for the land lost to maize has meant that there has been little spread from the farmers under extension management to other members of the community.

Minimum tillage was promoted for two years with an intensive campaign, but in a moist climate (800 to 1,000 mm in four months) weed growth was so rapid that the plots had to be weeded up to ten times which made the technology unattractive and there has been no significant farmer uptake in a population too poor to afford herbicides.

Conclusion

Malawi therefore faces a situation in which after twelve years of effort by some of the country's best agricultural staff and the expenditure of many millions of dollars by a group of major donors the only visible impact of these initiatives is on a small number of farms, which have been the object of intensive extension effort. There has been a tendency to blame the main body of the extension staff for this failure and it is true that they certainly carry some blame for the failure of the soil and water conservation measures. On the other hand the lack of response to the main initiatives to actually improve soil quality was largely a result of the promotion of technologies which had not been fully tested for technical efficiency and practicality under Malawian conditions and which subsequently proved to be unattractive to farmers.

The urgent need for improved soil management remains unchanged. What is now needed is the refinement of appropriate and practicable technologies so that truly proven recommendations can be offered to farmers combined with the mobilisation of the thousands of people (particularly women) who belong to the social, often faith based, networks in the rural areas to act as volunteers to supplement the work of the small number of formal sector extension staff. Only in this way will the spread of technology change from being dependent upon specific project activity and become an osmotic movement from farmer to farmer.

▲ PAKISTAN SUFFERS FROM ACUTE SOIL DEGRADATION

Dr. Farooq Ahmad, Department of Geography, University of the Punjab, Pakistan.
(farooq@gis.pu.edu.pk)

Pakistan is one of those countries, which are facing the problem of desertification, and as a result the land resources of the country are turning into unproductive and barren, consequently generating an enormous pressure on fertile agriculture land. Being agrarian country, agriculture is playing a key role for the economy of Pakistan. However, desertification and land degradation are decreasing agricultural productivity, creating poverty and unemployment in Pakistan on one hand and generating haphazard slums development in urban areas on the other.

Pakistan is a tropical country with vast semi-arid and arid tracks of land spreading over 68 million ha receiving less than 250 mm of rain a year. All its provinces possess large chunks of such land, i.e. Punjab 119,310 km², Sindh 134,896 km² Balochistan 149,467 km². The increasing incidence of desertification caused by drought, deforestation and soil erosion is creating grave concern to the planners and humanitarians. Any further deterioration in present status will bring about adverse changes with disastrous outcomes.

Outside the Indus basin, water mining without groundwater recharge has resulted in sharp decline in water table in areas like Balochistan. Over-exploitation and misuse of rangelands extending over a vast area are seriously constraining livestock production, thus adversely affecting the livelihood of pastoral communities. The arid coastal strips and mangrove areas are under increased environmental stress from reduced freshwater flows, sewage and industrial pollution and over-exploitation of other natural resources. The accelerating rate of land degradation in the fragile ecosystems like sandy deserts, Rod Kohi and coastal areas is rendering many areas unproductive and threatening the agricultural economy of the country.

Desertification is a global phenomenon caused by environmental and climatic factors and human activities. More than 100 countries of the world including Pakistan are affected by desertification and are faced with problems of environmental degradation, loss of soil fertility, loss of biodiversity and reduction in land productivity resulting in increased poverty of local communities.

The World Day to Combat Desertification and Drought is commemorated each year on 17 June. It is part of a UN-led international campaign to increase awareness of land degradation. International Year of Deserts and Desertification (in 2006) presents a golden opportunity to get the message across effectively that Desertification is a global problem. It also provides an impulse to strengthen the visibility of the drylands on the international environmental agenda.

The Convention pioneers a democratic, bottom-up approach in international environmental law. It emphasizes that the people who bear the brunt of desertification must be fully involved and be allowed to participate in the decisions that will shape their lives.

Disturbance of the natural equilibrium ultimately results in economical losses, social problems and general moral decline of the society. Degradation of natural and agricultural ecosystems has led to a deep environmental crisis. At all previous stages of its development, human society has tried to transform nature, with the aim to make it maximally complying to man's requirements. Presently any society has to transform its technology and psychology in such a way to comply with the requirements of environmental and economical sustainability.

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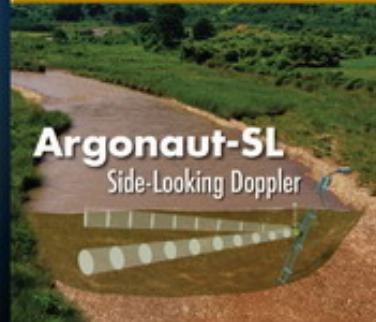
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FEATURES

AGROFORESTRY HIGHLIGHT

We would like to introduce our **Agroforestry** websites to all WASWC members as follows:

Main web site: <http://www.agroforestry.net>

The Overstory E-journal: <http://www.overstory.org>

Traditional Tree Initiative: <http://www.traditionaltree.org>

Hawaii shade-grown coffee: <http://www.agroforestry.net/caf>

Specialty crops for Pacific islands: <http://www.agroforestry.net/scps>




Craig Elevitch, Permanent Agriculture Resources, P.O. Box 428, Holualoa, HI 96725 USA
Tel.: 808-324-4427; Fax: 808-324-4129 cre@agroforestry.net, agroforester@gmail.com

WOCAT HIGHLIGHT

WOCAT in Google Earth

WOCAT technologies and approaches available in Google Earth

All technologies and approaches from the [WOCAT database](#) can now be viewed in Google Earth (if it is installed on your computer, see below).

When you click [this link](#), you will be asked to Open or Save the file. Choose Open and Google Earth will start automatically showing a WOCAT banner on top. You will notice the WOCAT logo  appearing in several places on the globe; this indicates that a specific country has one or more case studies in the database. When you zoom in on a country with a WOCAT logo, the logo will be replaced by one or more smaller icons ("placemarks"), together with a country code. A green  icon indicates a technology; a red one indicates an approach. Clicking on the  icon will open a **brief summary** of that specific technology or approach with some photos, a map and/or sketch (if available). It will also provide a **link to the corresponding entry** in the WOCAT database where you can find more details about this technology or approach.

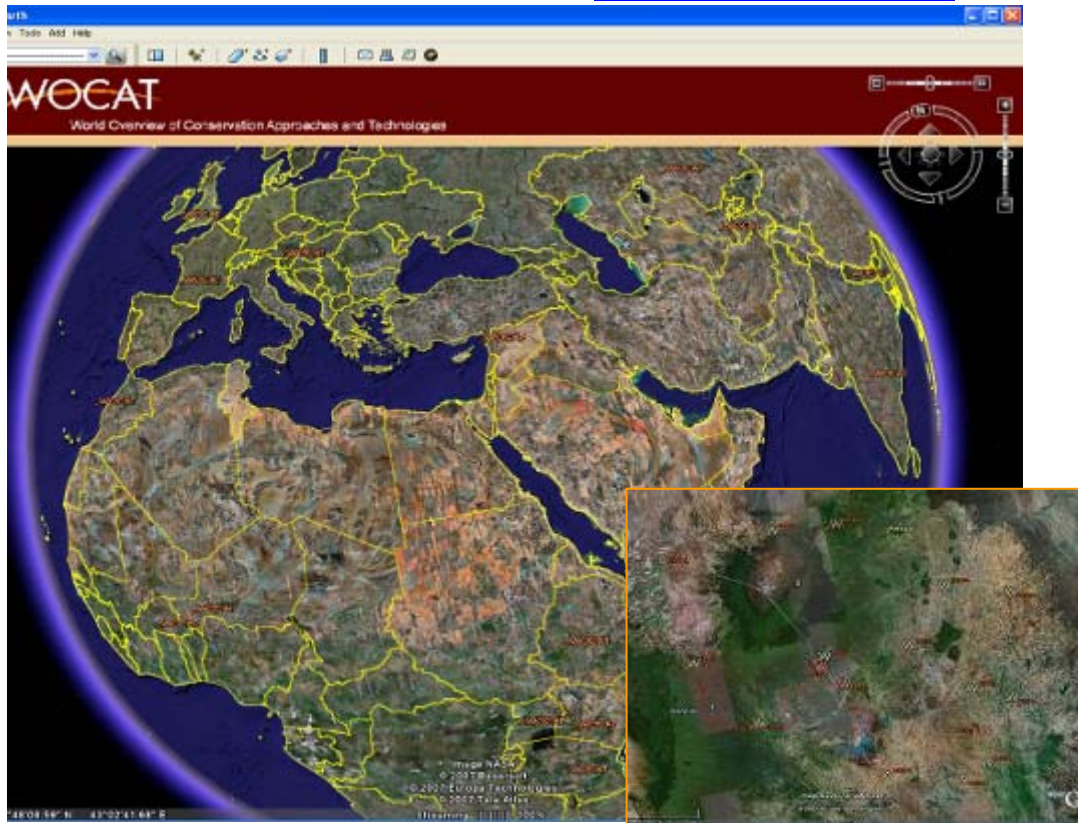
Not only did WOCAT receive a positive welcome by one of the Google Earth moderators ("A very impressive and informative post") but it was also listed among the top 20 ranked posts!

If you do not yet have Google Earth installed on your computer, you can download it from <http://earth.google.com/download-earth.html> for free.

At the moment it is not yet possible to edit the location of the placemarks - though you can make changes to the version downloaded on your own computer. Should you notice an error in the location or description of one of the placemarks, please let us know!

Tip: in sloping areas with a high-resolution coverage it is interesting to activate the 'Terrain' feature in Google Earth, which allows you to obtain a 3-D impression of the terrain around the described technology / approach. See also the [Google Earth Help Center](#). We would appreciate any [feedback](#), questions or comments you might have.

- Christine Hauer, CDE, Univ. of Berne, Switzerland. christine.hauer@cde.unibe.ch



Screenshot of Google Earth with WOCAT placemarks: "view from space", and zoomed in on Kenya (inset)

SUMMARY REPORTS

▲ International Symposium on Balanced Fertilization for Sustaining Crop Productivity, Ludhiana, India, November 22-23, 2006

More than 300 delegates from Australia, Bangladesh, Canada, China, Germany, India, Iran, Israel, Pakistan, Sri Lanka, Turkey and USA participated in the *International Symposium on Balanced Fertilization for Sustaining Crop Productivity* held at the auditorium on the beautiful campus of the Punjab Agricultural University (PAU), Ludhiana, Punjab, India on November 22-25, 2006. I was the sole delegate from Canada. After the invocation and lighting of lamp, the inaugural session on November 22 included: (1) Welcome by Dr. B.S. Dhillon, Director of Research, PAU; (2) Introductory remarks by Dr. Hillel Magen, Director, International Potash Institute and Dr. J.S. Maini, Additional Secretary, Government of India; (3) Special address by Dr. J.S. Samra, Deputy Director General (DDG), Indian Council of Agricultural Research; (4) Inaugural address by Dr. G.S. Kalkat, Chairman, Punjab State Farmers' Commission; (5) Presidential address by Dr. K.S. Aulakh, Vice Chancellor, PAU; (6) Presentation of awards and; (7) Vote of thanks by Dr. G.S. Chahal, Dean, PAU.

About 30 oral papers were presented in eight technical sessions. More than 160 posters were presented in the following groups: Potassium in soils and fertilizers, modern balanced fertilization techniques, carbon sequestration in relation to balanced fertilization, role of potassium in pests and disease resistance and moisture stress in plants, quality improvements in bio-materials, nutrient management and recycling, alternate source of plant nutrition, and outreach activities involving balanced fertilization.



Left: The inaugural session of the symposium at the PAL auditorium. (l to r) Drs. M.S. Brar, B.S. Dhillon, J.S. Samra, K.S. Aulakh, G.S. Kalkat, H. Magen, J.S. Maini, and G.S. Chahal (Photo courtesy of IPI). **Right:** A warm Indian welcome was accorded to the delegates from abroad during a pre-symposium tour to village Rauke Kalan, District Moga, Punjab, India (Photo courtesy of Hans-Werner Olf).

The pre-symposium professional tour for the delegates from abroad on November 21 included a visit to a village and a greenhouse nursery. There was ample time to discuss village life, crops, extension, farm machinery, and related topics. At the symposium banquet on November 23 the cultural program included energetic bhangra and graceful gidda dances. The delegates participating in the post-symposium tour visited the historic city of Amritsar.

The symposium provided an excellent opportunity to network and learn about the latest research and technological developments from the leaders in their fields. It brought together a broad spectrum of interests and gave us an opportunity to meet old friends and make new ones.

The joint IPI-PAU symposium was organized by of the Punjab Agricultural University (PAU), the Potash Research Institute of India (PRII), and the International Potash Institute (IPI). It was co-sponsored by the Indian Council of Agricultural Research (ICAR), the Fertiliser Association of India (FAI), the Bangladesh Fertilizer Association (BFA), and the National Fertilizer Secretariat (NFS). The event was widely covered by the state media, and appeared in about 20 Indian newspapers in several languages. The large number of participants from Pakistan complemented the significant presence of the regional researchers, officials, and industry representatives. The following Organizing Committee members and their dedicated team of volunteers are to be congratulated for an excellent symposium: Dr. M.S. Brar (Organizing Secretary), Dr. S.K. Bansal (Director, Potash Research Institute of India, Gurgaon, Haryana, India), Dr. Hillel Magen (Director, IPI, Horgen, Switzerland), Dr. Patricia Imas (IPI coordinator in the region, Beer Sheva, Israel), and Dr. Vladimir Nosov (IPI coordinator in the region, Moscow, Russia). I am grateful to the Organizing Committee for inviting me to present a plenary and a poster paper and to co-chair a session with Dr. Fasuo Zhang from Beijing, China. I would like to express my thanks to Mrs. Santosh Malhotra, Mr. Mukesh Kapoor, Mrs. Seema Kapoor, Mr. Vikas Malhotra, and Mr. Gurcharan Singh for their assistance.

My visit to India for participation in this symposium also gave me an opportunity to participate in the first-ever Alumni Meet at my *alma mater* Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh on November 11 and the inaugural session of the International Conference on Post-Harvest Technology and Value Addition in Cereals, Pulses and Oilseeds on November 27 there. I am grateful to Dr. V. K. Suri, Vice Chancellor for his kind hospitality.

- Yash P. Kalra, Canadian Forest Service, Edmonton, Alberta, Canada, ykalra@nrcan.gc.ca

▲ Brief report on the 4th international conference of ASSS, Accra, Ghana, January 7-13, 2007

The 4th African Soil Science Society International Conference hosted by the Soil Science Society of Ghana took place during January 7-13, 2007 at GIMPA International Conference Centre in Accra. The conference theme was “*Impacts of climate change, global trade, urbanization and biotechnology on land use in Africa*”. Over 150 participants from national, international and advanced agricultural research centres, universities and NGOs in Africa, America, Europe and Asia attended the event.

During the 6-day conference, over 100 scientific oral papers and posters were presented under the following five sub-themes: (i) Dynamics of land use, local market; (ii) Global trade and land use patterns; (iii) Land management and biodiversity; (v) Land use changes in urban and peri-urban agriculture.



From left: Conference group photo taken in front of GIMPA International Conference Centre; New officers of ASSS Executive Committee; Participants describing a soil profile during the excursion at the Central Region of Ghana

The conference highlighted the fact that:

New challenges in soil science have to deal with the achievement of Food Security in Africa as enunciated in: the World Summit for Sustainable Development, the World Food Summits (1996, 2001), UN reports and Africa Fertilizer Summit (Abuja, June 2006) and Resolutions of African Heads of State and governments at the Summit on Food Security in Africa (December 2006);

Only a few countries in Africa have functional land use policy and promote the use of land use planning as a basis for rational agricultural production.

Based on the above observations, the following were recommended:

- The need for an active involvement of national soil science societies in the implementation of the recommendations from the Africa Fertilizer and Food Security Summits held in 2006;
- African soil scientists should incorporate some contemporary strategies such as GIS, remote sensing and precision agriculture into their activities to boost soil science research and agriculture production in Africa;
- African soil scientists should come up with very well-defined soil fertility policy papers to guide sector-based development;
- The institutional linkage between national soil science societies and governments should be strengthened and a closer relationship with international bodies such as The African Union (AU), IUSS, FAO, UNESCO, CGIAR Centres and others, should be reinforced.

A new Executive Committee was elected to reactivate the ASSS, liaise with IUSS Executive Bureau, and organize:

- In collaboration with other institutions, a workshop on the state of Conservation Agriculture and the way forward in Africa (October-September 2007);
- A technical meeting in early 2008 in Mauritius; and
- A 5th ASSS international conference in 2009 in Cameroon.

New officers of ASSS comprise: R.D. Asiamah (Ghana), President; M. Yemefack (Cameroon), Vice President; Robert Zougmore (Burkina Faso), Secretary; Fred Kizito (Uganda), Vice Secretary; V. Lalljee (Mauritius), Treasurer; Vide Anosike (Nigeria), Vice Treasurer and S.K.A. Danso (Ghana), ex officio.

- Robert Zougmore, ASSS Secretary, INERA 01 BP 476 Ouagadougou, 01 Burkina Faso
rb_zougmore@hotmail.com

▲ The International Meeting of Fire Effects on Soil Properties, Barcelona, Spain, January 31-February 3, 2007

A total of 107 scientists from 18 countries attended the meeting. The total of 84 oral and poster papers were presented.

The main aims of the meeting were to explore the effects of fire on soil properties. It is known that fire and associated high temperatures produce changes to the physical, chemical, organic and biological characteristics of soils, and that the frequency and severity of forest fires has increased worldwide over the past decade. As fire can be used as a management tool, it is important to understand the effect of high intensity fires on soils. It was hoped that the exchange of information would suggest solutions for soil rehabilitation and management in terms of soil quality and forest regeneration.

The sessions were divided in 5 categories:

- Fire Effects on Hydrology and Soil Physical Properties;
- Fire Effects on Organic Matter Content, Soil Chemical and Biological Properties;
- New Methodologies to Study Fire Effects on Soil;
- Fire Intensity and Fire Severity Measurements; and
- Soil Recovery after Fires.



The conference also discussed:

Spatial and temporal scale effects immediately after fire and in relation to the short, medium and long term effects of both wild and prescribed fires; The influence of forest fires and their intensity and recurrence in carbon cycling and climate change analysis; The use of models to predict the changes and the recovery after fire; How do scientific results and perspectives influence policy?; and effective ways to communicate the meeting's results to Forest Authorities and the broader public.

The journal CATENA has agreed to publish a selection of the contributions in a special issue under the title: "**Fire Effects on Soil Properties**" under the guest editors Xavier Úbeda and Jorge Mataix-Solera.

- Artemi Cerdà, University of Valencia, Valencia, Spain. acerda@uv.es

▲ Seminar on Major Water Infrastructure Development, Swaziland, 25th-27th July 2007

This was a regional seminar for Eastern and Southern Africa and was convened by NEPAD, AMCOW, SADC and EAC with the support and facilitation of UNEP, INWENT, GTZ and GWP. Dr. Thomas Chiramba and the African Centre for Water Research (ACWR), RSA were the main organizers of the seminar. The seminar was officially opened by Swaziland's Minister for Natural Resources and it involved over 80 participants who included decision makers in governments, senior managers of key stakeholders and selected experts from Eastern and Southern Africa. The goals of the seminar were:

- Sustainable development of major water infrastructure in Eastern and Southern Africa addressing adequately environmental and social issues and meeting water and energy needs.
- Implementation of the Action Plan of the "African Ministerial Conference on Hydropower and Sustainable Development" (March 2006) based on the findings and tools of the UNEP Dams and Development Project and other materials through partnerships and sharing experiences on how to balance different interests.

The specific objectives were:

- To create awareness and broad understanding of the issues that are critical to achieving sustainable development of major infrastructure (including dams), i.e. environmental and social issues.
- To enhance the understanding of the opportunities and options available to accelerate the achievement of the MDGs through careful consideration of environmental and social issues in the development of major water infrastructure.
- To provide detailed (technical and managerial) information on available approaches, possible mechanisms and relevant examples to be considered in the development of major water infrastructure in the region for sustainable outcomes drawing on the experiences of DDP and others.
- To provide guidance on the way forward in terms of capacity building measures around environmental and social issues essential to ensure sustainable development of major water infrastructure in the region. This shall include setting of priorities on topics to be handled, how to utilize the tools developed by DDP and other institutions in recent times, identifying suitable approaches.
- To contribute to effective networking between the water sectors professionals and actors of other relevant sectors as well as civil society and the affected persons in particular with the view of jointly promoting sustainable development of major water infrastructure.

Field trip to Maguga Dam

During the second day of the seminar we had a field trip to Maguga Dam, which is the fourth highest dam in Southern Africa. It is 115 m high and with a reservoir 870 m long and has a storage capacity of 332 million cu m of water.

The dam supports commercial forestry and sugar plantations in South Africa and Swaziland, and provides irrigation for about 1,000 of Swaziland's small-scale farmers. It is also used for hydro- electricity power generation.

The following were the key recommendations on the way forward:

Vision:

- To derive the greatest benefit from the envisaged water infrastructure development through sustainable outcomes, there is a need to adapt and incorporate new approaches to mobilise and utilise resources effectively.
- To this end the participants recommend the establishment of a "new African culture of balancing social, environmental and economic components of water infrastructure development" – encompassing policy development as well as practical implementation.

Concepts:

- To move towards the above vision, implementation of capacity building needs to be enhanced by learning from good practice in the region as well as internationally from reference material such as the UNEP DDP Compendium and adapting these lessons to local conditions.
- Appropriate individual capacity building should compliment the development of institutional and policy frameworks.
- Capacity building initiatives should include all relevant sectors (horizontal) as well as different levels (vertical) – encouraging networks and partnerships at all levels.
- Capacity building activities should include the enhancement of the skills and knowledge of civil society to interact meaningfully in decision-making and planning processes.

Embedding in political processes

- The participants requested the forthcoming SADC Summit (August 2007) as well as the EAC structures to commit to the sustainable balancing of the social, environmental and economic factors in the development of water infrastructure.
- The participants requested the SADC Heads of State and the EAC to support the implementation of a capacity building programme in support of the above commitment.
- The participants recommended to SADC and EAC to submit the outcomes of this seminar and the resultant

capacity building programme to the AMCOW Presidency and the NEPAD Secretariat.

Establishing Partnerships

- Further, the participants recommended the wide dissemination of the key messages from this seminar to development partners regionally and internationally through a variety of forums, such as World Water Week in Stockholm, the Petersburg Dialogue in Bonn, and the African Water Week in Tunis.
- The participants recommended that a reference group, comprised of key development partners, be formed to champion the capacity building initiative and establish a partnership for the development of water infrastructure.



Left: Downstream side of the Maguga Dam showing the spillway and power generation plant (Green building). **Right:** I am standing on the Upstream side of the Maguga Dam with the reservoir in the background.

- James O. Owino, Dept. of Agricultural Engineering, Egerton University, Njoro, Kenya joowin@yahoo.com

MISCELLANEOUS

▲ Insect a la carte

(Condensed from an article by Michael Hopkin, published in *Nature*)

In the rainforests of the northwest of the Republic of Congo, the trees rain caterpillars. For the *Mbendjele* pygmies who live there, it's boom time. For a few weeks each year, children climb the 45-metre-tall sapelli trees and shake the branches, sending hundreds of newly hatched caterpillars down to the waiting women, who dry and cook the creatures to eat or sell.

Full story: <http://www.nature.com/nature/journal/v448/n7152/full/448402a.html>

▲ Ancient Sites Mark the Winter Solstice

Many ancient cultures built their greatest and most sacred structures -- tombs, temples, cairns and sacred observatories -- so that they aligned with the solstices and equinoxes.

Of all the stone circles in the world, the most famous is probably [Stonehenge](#) in England. Stonehenge is a perfect marker of both solstices and [large crowds gather](#) on those days to view the sunrise and participate in solstice ceremonies.

[Newgrange](#), a beautiful circular stone megalithic site in Ireland, is estimated to be 5,000 years old. At the precise moment of sunrise on the winter solstice, a shaft of sunlight penetrates through entrance and illuminates a stone basin below intricate carvings.

[Maeshowe](#), on the Orkney Islands north of Scotland, shares a similar trait, admitting the winter solstice setting sun. If you can't make it to Scotland for the solstice, a [Solstice Webcam](#) will help you view the phenomenon.

<http://www.candlegrove.com/solstice.html#architect>

Take a Break

Just for fun – from Sid (Abdallahi) Clouston cloustoneenergy@aol.com

English is a tough language to learn: Can you read these sentences right the first time?

- 1) The bandage was wound around the wound.
- 2) The farm was used to produce produce.
- 3) The dump was so full that it had to refuse more refuse.
- 4) We must polish the Polish furniture.
- 5) He could lead if he would get the lead out.
- 6) The soldier decided to desert his dessert in the desert.
- 7) Since there is no time like the present, he thought it was time to present the present.
- 8) A bass was painted on the head of the bass drum.
- 9) When shot at, the dove dove into the bushes.
- 10) I did not object to the object.
- 11) The insurance was invalid for the invalid.
- 12) There was a row among the oarsmen about how to row.
- 13) They were too close to the door to close it.
- 14) The buck does funny things when the does are present.
- 15) A seamstress and a sewer fell down into a sewer line.
- 16) To help with planting, the farmer taught his sow to sow.
- 17) The wind was too strong to wind the sail.
- 18) Upon seeing the tear in the painting, I shed a tear.
- 19) I had to subject the subject to a series of tests.
- 20) How can I intimate this to my most intimate friend?

4 WIVES - Sid (Abdallahi) Clouston

This struck me as an interesting story and I hope you all do not mind that I share it with you.

Once upon a time there was a rich King who had four wives.

He loved the 4th wife the most and adored her with rich robes and treated her to the finest of delicacies. He gave her nothing but the best.

He also loved the 3rd wife very much and was always showing her off to neighboring kingdoms. However, he feared that one day she would leave him for another.

He also loved his 2nd wife. She was his confidant and was always kind, considerate and patient with him.

Whenever the King faced a problem, he could confide in her, and she would help him get through the difficult times.

The King's 1st wife was a very loyal partner and had made great contributions in maintaining his wealth and kingdom. However, he did not love the first wife. Although she loved him deeply, he hardly took notice of her! One day, the King fell ill and he knew his time was short. He thought of his luxurious life and wondered, "I now have four wives with me, but when I die, I'll be all alone."

Thus, he asked the 4th wife, "I loved you the most, endowed you with the finest clothing and showered great care over you. Now that I'm dying, will you follow me and keep me company?"

"No way!?" replied the 4th wife, and she walked away without another word.

Her answer cut like a sharp knife right into his heart.

The sad King then asked the 3rd wife, "I loved you all my life. Now that I'm dying, will you follow me and keep me company?"

"No!?" replied the 3rd wife. "Life is too good! When you die, I'm going to remarry!" His heart sank and turned cold. He then asked the 2nd wife, "I have always turned to you for help and you've always been there for me. When I

die, will you follow me and keep me company?"

"I'm sorry, I can't help you out this time!", replied the 2nd wife. "At the very most, I can only walk with you to your grave." Her answer struck him like a bolt of lightning, and the King was devastated. Then a voice called out: "I'll go with you. I'll follow you no matter where you go."

The King looked up, and there was his first wife. She was very skinny as she suffered from malnutrition and neglect. Greatly grieved, the King said, "I should have taken much better care of you when I had the chance!"

In truth, we all have the 4 wives in our lives:

Our 4th wife is our body. No matter how much time and effort we lavish in making it look good, it will leave us when we die.

Our 3rd wife is our possessions, status and wealth. When we die, it will all go to others.

Our 2nd wife is our family and friends. No matter how much they have been there for us, the furthest they can stay by us is up to the grave.

And our 1st wife is our Soul. Often neglected in pursuit of wealth, power and pleasures of the world. However, our Soul is the only thing that will follow us wherever we go.

Cultivate, strengthen and cherish it now, for it is the only part of us that will follow us to the throne of God and continue with us throughout Eternity.

Thought for the day. Remember, when the world pushes you to your knees, you're in the perfect position to pray.

FEW NICE WORDS

"Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do. So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover."

- *Mark Twain* (from Clouston)

Allow me to share with you a simple thought on Personal Fulfillment: Riches lie within us, not in material possessions. Our real riches are riches of the head and heart. Satisfaction comes from appreciating what we have. Wealth without enjoyment is little consolation. Our real prosperity lies in being thankful.

- *Bueno Dickens Sande*, WASWC Vice President for Uganda bdsande@yahoo.co.uk

TIPS AND TRICKS

This new column is for helping among members. There are many things that one knows and others don't. The first example shows how to make a file smaller, applicable to both **Word** and **Powerpoint** files. I received it from Mr. Giacomo Rambaldi of PPGIS (grambaldi@iapad.org, www.ppgis.net, www.iapad.org). Though he is very busy but he can still help others in computer knowledge. We appreciate his help in making this good example available.

Members are asked to help others by sending what they know – but others may not – to us and the editors will see to that this column will be useful to many of us. It may not limit to only the computer science but in all other areas that we are facing in our everyday life.

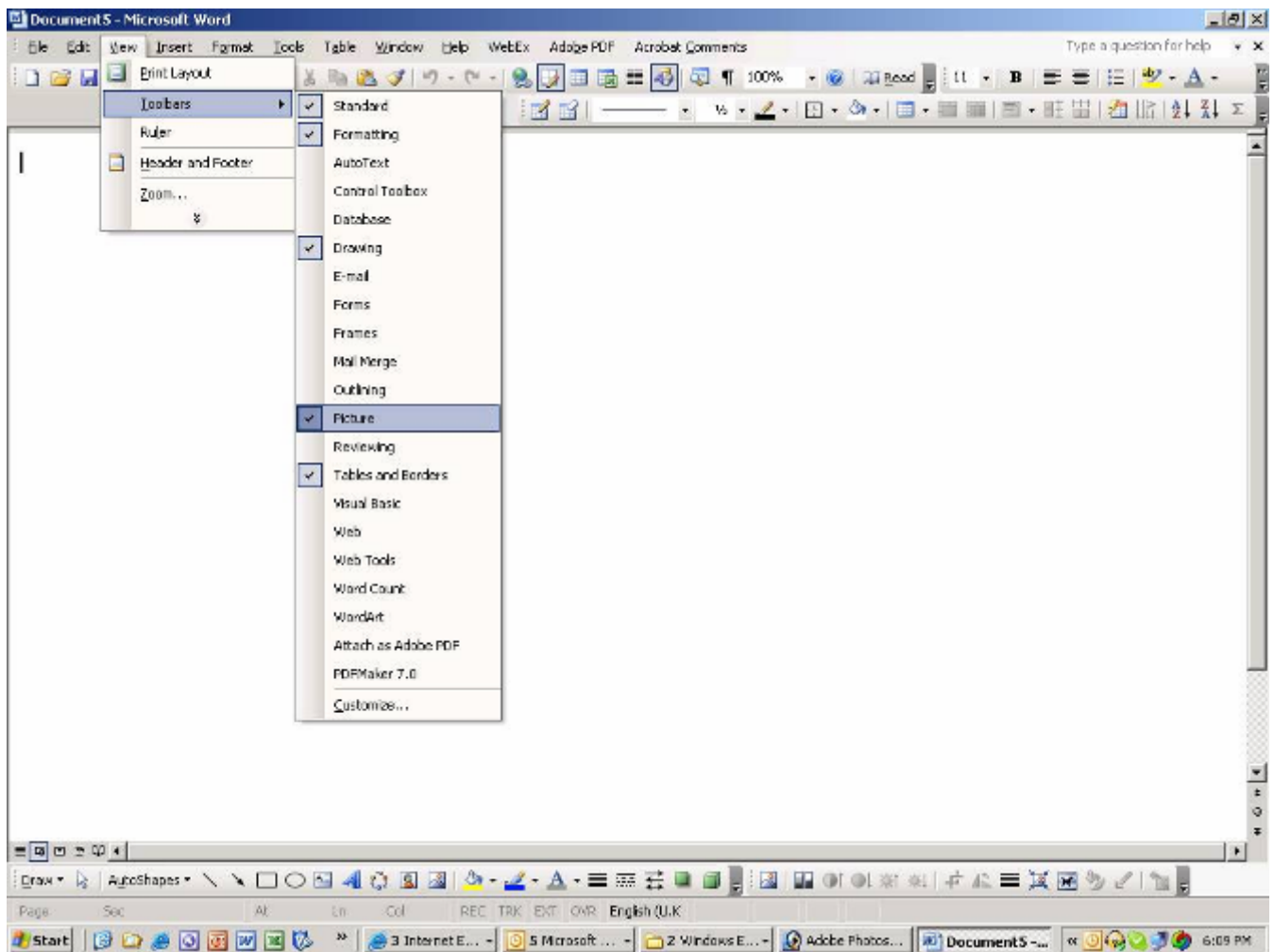
Samran Sombatpanit

HOW TO MAKE A FILE 'LIGHTER'

Many times when we produce a file to use in our works .the resulting file may become too heavy, i.e. occupying too many bytes and making it awkward and difficult to handle or send. Mr. Rambaldi told me to do as follows:

Open a file, then click **View > Toolbars > Picture > select the icon for compress pictures>** in the dialogue box select **all pictures > change resolution >** then select **print or web/screen** (The latter will produce an even a smaller file.)

If you have not known this tip before you will be surprised to see that the resulting file can be made much smaller. A Word file with a number of pictures of 10-15 MB can be reduced down to only 2-3 MB. Likewise, a Powerpoint file of something like 20 MB can be lowered down to just 1.5-2.0 MB. It can be explained that many photos that we maybe using to produce a file may have high resolution according to the cameras that are available these days. When using this function to reduce the resolution, it will reduce down to the level low enough for either to print out or to view digitally or put in the website.



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

- 1. Individual membership:** US\$5/yr for developing countries; US\$10 for developed countries and persons working in international organizations worldwide. Payment of the fee for 4 years at the same time will enable the membership to be valid for 5 years.
- 2. Life membership:** US\$80 for developing countries; US\$160 for developed countries and persons working in international organizations worldwide
- 3-1. Organization membership (OM):** For universities, research and implemental institutions, government agencies, NGOs, societies, associations and international organizations, etc. Persons belonging to an Organization member will receive the same online products and services as the other two above categories: \$100/ yr for an organization with up to 150 persons; \$150/ yr for an organization with up to 300 persons; \$200/ yr for an organization with up to 500 persons; and \$10/ yr for an additional 100 persons or part thereof. Local organizations in developing countries can request to pay at a lower rate.
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- 4. Gift membership:** US\$5/ yr worldwide, to be purchased by anyone to give to colleagues, friends, students, etc.