



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

NEWSLETTER

Reporting global SWC news quarterly since 1983
In English, Spanish, French, Chinese, Portuguese, Bahasa, Russian,
Vietnamese, Arabic, Thai
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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, aroraspau@yahoo.co.in and rmfowler@iafrica.com

President's Message

Dear friends and colleagues,



Dr Miodrag Zlatic sends his good wishes to all members of the WASWC. He feels that the newsletter being a flagship of our association needs to be informative for the members. However, this can be made more attractive if members of WASWC show keen interest and send their responses to Editorial Team. He also believes that the meetings organized under the umbrella of or coordinated by WASWC (i.e. LANDCON meetings) are much more effective and give a chance to all active members to sit and plan the things for betterment of our society. We need to come together and serve the cause of our association and ultimately the society. Friends, our president appeals to

the senior scientists to come forward with their informative experiences through articles which could be placed in the newsletter for the benefit of our younger generations. The President of WASWC strongly feels that our younger generations need to be taken along with us so as to make the plans much more energetic and enthusiastic. This was very well reflected in the International meeting held in Serbia during May 2009.

S S Kukal

For Miodrag Zlatic

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Editor's Note



Dear Colleagues and friends,

We are once again back to you with the 3rd issue of 2009 and hope it will be a nice reading. Friends, as has been said by WASWC President, our newsletter being our flagship is a good platform for soil and water conservationists to come together and discuss their experiences for the benefit of other colleagues and younger generations.

I am sorry to say that I have not been getting sufficient response from members about the newsletter and its contents. In fact the newsletter does not mean that we just have a look at it and then forget it. We have to use it as a medium to interact among ourselves. People like us particularly in developing world need the experiences of our colleagues in developed countries so that we are guided through in our endeavors to serve the society by conserving the most important natural resources – soil and water.

Friends, I have a suggestion in this regard. Let the senior members of WASWC Council come forward and start a debate on some topic related to soil and water conservation. The debate on the topic shall of course highlight the experiences from different quarters. This may prove to be of much use to all of us. Perhaps this will be equivalent to a small e-workshop or even an e-symposium. I shall wait for the response from our President, Vice Presidents, Secretaries and other council members in this direction. I feel that the initiative should come from the Officers of WASWC itself.

Dear colleagues, I have a dream to make this flagship an ultimate platform among the scientists in the field of soil and water conservation to hold e-meetings and other e-gatherings. The recommendations from such e-meetings can then be condensed into a document so as to put on our website. I expect some response to this suggestion of mine, at least from the Officers of WASWC.

Have a nice reading!

SURINDER S KUKAL

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AWARDS

CHAMPIONS OF THE EARTH 2009 (by UNEP)

The UN Environment Programme (UNEP) announced seven innovators of positive environmental change as UNEP 2009 Champions of the Earth at a gala event in Paris, France during June 2009. This year's winners were: Norwegian Environment Minister **Erik Solheim**; tropical forest and climate campaigner **Kevin Conrad**; photographic and public awareness pioneer **Yann Arthus-Bertrand**; wind power entrepreneur **Tulsi Tanti**; biomimicry specialist **Janine Benyus**; recycling innovator **Ron Gonen**; and the Ethiopian youth organization **Tena Kebena**. This year, the awards moved away from geographical distribution to recognize achievements in the areas of Policy Leadership, Science and Innovation, Entrepreneurial Vision, Inspiration and Action, and Next-Generation Champions. We Soil Conservationists congratulate these awardees and hope they shall keep this candle burning to lighten others.

WWF SCIENTIST LANDS INTERNATIONAL CONSERVATION AWARD



Dr. Samantha Petersen receives the Convention on Migratory Species (CMS) Thesis Award in Rome, December, 2008. Dr Samantha Petersen, a biologist with WWF, the conservation organization, has won a prestigious international award for her research into the impact of commercial fishing on migratory seabirds, sea turtles and sharks.

Dr. Petersen is the WWF Responsible Fisheries Programme Manager. Her entry to the 2008 UNEP/CMS Thesis Award on Migratory Species Conservation was judged the winner among those submitted by 32 candidates from 18 countries.

Another South African, Dr Ross Wanless, won 3rd place with his research on Impacts of the introduced house mouse on the seabirds of Gough Island.

Dr. Lin Xia's thesis on Traffic Disturbance to the Migration of Tibetan antelopes (*Pantholops hodgsoni*) in Hoh-xil National Nature Reserve got 2nd place. The award is sponsored annually by National Geographic Deutschland, Deutsche Lufthansa, Zoological Research Museum Koenig and CMS.

Dr. Petersen says: "This award is very gratifying as the exposure will help drive further research and action to help save these vulnerable species from extinction." Our work in this sphere is absolutely crucial now. In the last decade concern globally has grown over the impact of bycatch on these species, especially in longline and trawl fishing, which decimated their populations. It's estimated that 75% of global fish stocks are either exploited to their maximum or over-exploited and that around 25% of marine resources landed are dumped. This has led to a catastrophic decline in vulnerable marine life, including the loss of up to 90% of the large predatory fish.

VIETNAMESE SCIENTIST RECEIVES DIOSCORO L. UMALI ACHIEVEMENT AWARD



Dr. Vo-Tong Xuan, professor of agronomy and former rector of An Giang University in Vietnam, is the first recipient of the Dioscoro L. Umali Achievement Award in Agricultural Development. This regional award is aimed at promoting agriculture by recognizing exemplary individuals who have advanced agricultural development in Southeast Asia. Dr. Vo-Tong Xuan is widely recognized for his significant role in invigorating the rice industry in Vietnam and sharing his expertise in Africa. He received his award during the 42nd anniversary celebration of the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA). The award is named after the late Dr. Dioscoro Umali, a National Scientist of the Philippines, first director of SEARCA, and former Assistant Director-General of the UN Food and Agriculture Organization, among others, "whose quest for scholarship and excellence in

agriculture fueled his vision for a progressive Southeast Asia." Obtain additional information about the Umali award from www.searca.org/web/announcements/dioscoro_umali_award/index.html

EU CONTRIBUTES TO BOOST AGRICULTURAL PRODUCTION IN POOR COUNTRIES

The European Union (EU) has committed €75 million (US\$105 million) to the Food and Agriculture Organization (FAO) to help poor countries in 13 countries in Africa, Asia, the Caribbean and Central America boost agricultural production. This is in addition to the €125 million (\$170 million) donation it gave in June 2009.

"Europe's help comes at a critical moment," said José Maria Sumpsi, FAO's Assistant Director-General of the Technical Cooperation Department. "One out of six persons on this planet is undernourished - more than ever before. Poor countries need all the assistance possible. We are grateful for Europe's unequivocal support," he said. The EU has called for more investment in agriculture and the need to refocus the world's attention on farming. Visit <http://www.fao.org/news/story/en/item/21645/icode/> for the full story.

NOTE: WE ANNOUNCE AVAILABLE AWARDS TO APPLY FOR IN OUR MONTHLY HOT NEWS

NEW OFFICERS

Murielle Ghestem, WASWC Vice President for France murielle.ghestim@cirad.fr

Murielle Ghestem got a master's degree of Agronomy from INA P-G (French National Institute of Agronomy, Paris) in 2001. She then studied public policies for protection of environment, became a civil servant and graduated another MSc in Forest and Water Management from ENGREF (National School of Rural Engineering, Forest and Water Management) in 2003. (The two institutes joined in 2007 to become AgroParisTech www.agroparistech.fr.)

From 2003 to 2006, she worked for the Department of Agriculture of the French Government, leading a 50-member office dealing with agricultural policies and subsidies.

In 2007-2008, she worked at the French International Lycée of Beijing, China. She travelled in the country and learned Chinese language. She applied for a PhD position with a topic concerning eco-engineering and development of rural areas of China entitled, "A new approach for slope stabilisation in Southern China: re-vegetalisation of degradation hotspots". Murielle began her PhD study in October 2008.

In her spare time, Murielle likes hiking, drawing and spending time in the wild nature.

Murielle welcomes WASWC members to contact and discuss with her in anything connected with soil and water conservation and other natural resources, especially when related to France. Her contact information is: UMR AMAP (Joint Research Unit in Botany and Computational Plant Architecture), TA - A 51 / PS2, 34398 Montpellier Cedex 5, France. Phone: 33 (0)4 67 61 55 98; Fax: 33 (0)4 67 61 56 68



Emily Nyanyukweni Mutota, Gobabeb Training and Research Centre, Walvis Bay, Namibia. WASWC Vice President for the Namibia. emilym@gobabeb.org

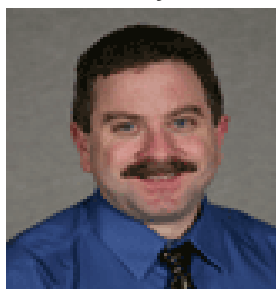
Emily holds a BA degree in Tourism from University of Namibia (2006), and a diploma in Environmental Engineering (with focus on Sustainable Management of Coastal Areas) from Cape Peninsula University of Technology (2008). In 2008, she participated in a 6-month Land Restoration Training Programme which was offered in Iceland.

Emily started her working career 3 years ago as Namibian National Coordinator of the International Year of Desert and Desertification in 2006 to 2007. She is currently working for Gobabeb Training and Research Centre as Training and Outreach Coordinator. Her main tasks are networking, awareness raising of environmental issue through outreach and training programmes. Emily is an active member of the Namibian Environmental Education Network and Environmental Education Association of Southern Africa (EEASA). On that note, she is coordinating and facilitating discussion for establishing a Regional Centres of Expertise (RCEs) on Education for Sustainable Development in Namibia. Because of her eagerness to promote sustainable development in Namibia and the world, she (with the help of various supervisors and colleagues) wrote a feasibility study to the establishment of an International Year of Landcare. She has just co-authored a position paper for developing a Restoration Research Framework in the Namib Desert in Namibia. Additionally, Emily represents her institution (Gobabeb) on various Sustainable Land Management stakeholders committees and forums in Namibia and SADC region.



PEOPLE

IECA Faculty Profile



Alex Zimmerman CPESC, CISEC, CESSWI

Alex Zimmerman brings over 15 years of large-scale construction experience to Erosion and Sediment Control training. From large disturbance, linear, and single family construction to restoration and emergency landslide repair his experiences add to informative trainings on real world compliance issues for construction site operators, inspectors, and designers. From his first IECA experience at Palm Springs, Alex has consistently found value in the quality education he receives from IECA training. By getting involved in the Pacific Northwest Chapter he has worked to bring more local training opportunities to the IECA members and the local community.

Working with CSI Geosynthetics in Vancouver, Washington Alex has been helping project teams succeed by planning for the productive, compliant completion of varied construction tasks. Consulting has been keeping Alex busy across the country and in his favorite destination state, Alaska. "The beautiful scenery, challenging climate and great people make Alaska special and a place that I never get tired of," says Zimmerman. Focusing on productive site management for compliance, Alex assists project teams with planning and site audits to identify potential problems and more effectively ensure regulatory compliance. Though his professional schedule keeps him busy, Alex finds time to volunteer with his local watershed stewards association and assist the NRDC and Waterkeepers with policy and expert advice.

Alex has been recognized by associations and agencies for his professional course preparation and delivery. Developing custom trainings for audiences as varied as the Alaska Army Corps of Engineers to cities in British Columbia, Alex stays informed on the latest regulations and compliance challenges. Awarded the 2009 Educational Achievement Award by the International Erosion Control Association, Alex continues to keep up-to-date and present the latest information. Through training with Alex, course participants learn how to control costs, prevent erosion, protect water quality and comply with permit requirements in a positive, proactive, profitable manner.

Alex Zimmerman may be contacted via e-mail at alex@csigeo.com

From July IECA E-Learning Newsletter, contact info@ieca.org, www.ieca.org

OBITUARY



Norman Borlaug, Hunger Fighter and Father of the Green Revolution

Dr. Norman Borlaug, the winner of the Nobel Peace Prize in 1970, died recently at the age of 95 from complications from cancer, after an exemplary life dedicated to fighting hunger in developing countries. The only person to have been awarded the Nobel Peace Prize for contribution in agriculture and food production, Borlaug is considered the brain behind India's Green Revolution of the 1960s. Before India, experiments with high-yielding varieties (HYV) of seeds took place in Mexico, with some success. Borlaug's Mexican HYV wheat varieties and their Indian and Pakistani derivatives had been the principal catalyst in

triggering the Green Revolution.

High-yielding wheat varieties and improved farming practices, first developed by Borlaug and his team in Mexico during the 1950s, were introduced into South Asia in the 1960s and may well be responsible for saving hundreds of millions of people from starvation. Known as the Green Revolution, Borlaug's work gave rise to science-based agriculture in developing countries. Today, high-yielding, disease-resistant wheat varieties based on Dr. Borlaug's pioneering work are grown on 80 million hectares (200 million acres) throughout the world. Borlaug received the 1970 Nobel Prize for those achievements, and his success led to the establishment of a network of 15 international agricultural research centers.

Borlaug's full-time employment at CIMMYT ended in 1979, although he remained a resident part-time consultant until his death. In 1984, he began a new career as a university professor, teaching one semester a year at Texas A&M University, which continued for 23 years. In 1986, he joined forces with former U.S. President Jimmy Carter and the Nippon Foundation of Japan, under the chairmanship of Ryoichi Sasakawa, to develop an African agricultural initiative. Over a 20-year period, the Sasakawa-Global 2000 agricultural program, as it is known, has been working in 15 African countries to transfer improved agricultural technology to several million small-scale farmers.

Borlaug was especially proud of his role in establishing the World Food Prize in 1986. This prize has grown in stature and is now considered the "Nobel Prize" for food and agriculture. Some 25 men and women have been recognized for their outstanding contributions to increasing the quantity, quality and availability of world food supplies. Based in Des Moines, Iowa, the World Food Prize Foundation has also developed outstanding educational programs to engage young people in world food issues.

Dr. Borlaug always considered himself to be a teacher, as well as a scientist. Today, several thousand men and women agricultural scientists from more than 50 countries are proud to say they were Norman Borlaug's "students". Borlaug used his fame and influence, to champion the cause of smallholder agricultural development around the globe. Over a 63-year career, he traveled tirelessly to more than 100 nations, visiting farmers and agricultural scientists in their fields. It is estimated that over his lifetime he personally spoke to more than 500,000 students and ordinary citizens, explaining the challenges and complexities of world food production.

Borlaug was voted a member of the academies of agricultural science of 11 nations, received 60 honorary doctorate degrees from those countries, and was honored by farmer and civic associations in 28 countries of all

the places that he visited, his beloved home was Mexico, and in particular, the irrigated Yaqui Valley in the state of Sonora, in northwest Mexico. "This is where I truly feel at home, and where I am at peace," he would often say. The feeling was reciprocal. In Ciudad Obregón, in the heart of the Yaqui Valley, one of main streets is named after Borlaug, and hundreds have known him since they were born.

Although probably better known outside the United States - in Mexico, India, Pakistan, China and Latin America, Borlaug's work has also been widely recognized in the USA. At the federal level, he received the Presidential Medal of Freedom, the National Medal of Science and the Congressional Gold Medal, the nation's highest civilian award.

CIMMYT was also home to Dr. Borlaug, who was known as a simple and charismatic figure, who spoke Spanish fluently and truly cared about people, greeting and chatting with researchers and field workers alike. His dedicated pragmatism and vision of applying science to benefit the poor live on as core values of CIMMYT and several other institutions with which he was closely associated.

Norm, as he liked to be called, lived his life as a dedicated hunger-fighter, but one who was forever vigilant. As he said in his acceptance speech of the 1970 Nobel Prize: "...It is true that the tide of the battle against hunger has changed for the better...but ebb tide could soon set in, if we become complacent..."

We can think of no greater tribute to Norm than to carry on the work to which he dedicated his life: applying agricultural science for humanitarian benefits. Thus, he lives on in our hearts and, through our efforts the work he began will also live on.

Borlaug is survived by his son Bill, his daughter Norma Jean, five grandchildren, and several great grandchildren.

Malcolm Douglas passed away



Malcolm Douglas, long-time consultant with FAO and IFAD, passed away on Sunday, 26 July 2009 at 05:00 a.m. Malcolm worked with the FAO Land and Water Division and Investment Center over many years and his writing and guidance is in many of our publications on land husbandry and land management and more recently through the GEF projects he helped formulate and the Terrafrica Strategic Vision paper... so his vision will go on for many years to come in Africa and worldwide. Indeed he was very inspiring to many persons as well as being extremely committed as seen by his very challenging agenda even this year in China, Kyrgyzstan, Tajikistan and Ghana.... We wish he had learned to slow down with age as he could have remained a guiding expert for more years to come.

Read more about Malcolm Douglas in Association News on pp. 6-8.

ASSOCIATION NEWS

Malcolm Douglas – a Champion of WOCAT program

It was a great shock to us when we recently received the sad news about the sudden death of Malcolm Douglas. Malcolm has been instrumental in promoting and enhancing the WOCAT program (World Overview of Conservation Approaches and Technologies) and especially in introducing WOCAT to China. With his engagement in China and his dedication to support land users he had an important role in linking projects to the farmers' field reality. It was in 1997 when he invited us for the first time to present WOCAT during a workshop in Fujian Province in China and since then we worked closely together during several events, such as during the ISCO conference in 2002 and the GEF-OP12 project Loess plateau workshop in 2006. His latest interaction with us was in harmonizing the LADA and WOCAT methodology in Argentina in January this year. Without him WOCAT would by far not be where we are today. In China three different and very important initiatives were developed and Malcolm was involved in all of them.

Malcolm had a quiet and modest behaviour and was a good thinker. During our joint paper on "Towards sustainable land management - 'Common sense' and some other key missing elements (the WOCAT experience)" he demonstrated his experience and dedication to look at things in a very practical and supportive way for the people in the field. He had – indeed – a lot of common sense and a deep understanding of the complex realities at the same time. He was very committed to support concrete actions for farmers and land users. On the other hand, he also had the common sense to take a short nap during boring or irrelevant discussions. He was able to contribute to a meeting with most relevant and up-to-the-point comments. He also managed sensitive situations, e.g. during his stay in Indonesia for the ASOCON project, dealing carefully (though sometimes typically grumbling) with both national interests and FAO requirements. He is very well known in China and in Southeast Asia. We came across so many institutions and people who know him. He worked closely with people and assisted them wherever he could, in a calm and steady way. He was stable like a bear – he was our woBEAR in the group of WOCATs.



We attach a few typical photos of Malcolm in action. It shows him in the field in China giving a TV interview (which he could do anytime without having to prepare himself - he made the points very clear), in Argentina during a LADA meeting, and looking for birds, which was his favourite hobby. He also gave us very useful tips – such as how to avoid getting (too) drunk during an official Chinese dinner! In one photograph one can see him doing a toast in a very controlled way.

All these memories are and will remain with us.

On behalf of the entire whole WOCAT network we wish Hanifa, Rokeya and Zarina all the strength they need to cope with this heavy sudden loss.

The WOCAT Management, Secretariat and partners www.wocat.net.

Following are few more words from Sally Bunning to Zarina and Hanifa, Malcolm's daughter and wife

Dear Zarina and Hanifa,

I am still re-reading the message as I find it hard to believe that Malcolm, your wonderful father, is no longer with us. Please accept my deepest regrets and condolences. We were so recently together on a great mission to Kyrgyzstan in April this year, together with John, Nevelina and Libor, to whom I am copying this message. I will see if I have a photo or two of him though I fear I took mainly landscapes and Kyrgyz people! But I do remember a great image ...he was sitting on a big sofa at the end of the large room where we were all sitting on the floor around the typical Kyrgyz meal (huge round breads, yogurt, lamb stew, and of course vodka and he was wrapped in a large Kyrgyz sheepskin coat and looking very important sitting next to the local leader – he was being careful not to drink the vodka unlike the rest of us ...but he made a good toast to the project and referred to his male companions who accompanied him through the night with their snores! (The females were lined up on mattresses on the floor in one room and the 16 or so men in the other!). He asked for some free time to go bird watching during his stay there and subsequently in Tajikistan.

Malcolm and I both studied Geography at Nottingham University, though at different times. He was instrumental as an ODA/NR adviser in initiating my career in natural resources management when working with the Land Husbandry Centre in Zomba, Malawi, together with Peter Brinn, UK, and John Alders from Australia. He tried to instill with me the passion for bird watching though I regrettably failed as I find it difficult to distinguish the smaller, less exotic birds or to recall their names. But more important he grounded me in how to conduct soil and NR surveys on smallholder and commercial farms and in the in-depth knowledge he had of land husbandry; he certainly helped in generating the enthusiasm for land resources management that will remain with me always. I was so pleased to be able to work with him again in 2008-9 in developing tools for assessment and monitoring of Land Degradation in Drylands (LADA), in training in their use in China and applying them in the Pamir Altai Mountains Sustainable Land Management project with UNU. The LADA local assessment manual was greatly improved with his support.

I am so glad he was able to witness and enjoy your recent wedding with all the family in Burkina Faso over Christmas – he was so proud to show us all the photos!!! He was also very happy for your sister's wedding this year and I so hope he was able to attend! He was so proud of you both and anxious for your careers. In fact he loved talking about his family, I remember stories Hanifa about you having to take over the gardening, the marmalade makingand his special version with whisky!.....and other activities as he was so often on mission.

Malcolm was a very, very kind and thoughtful man, a tremendous mentor to me and so many others and a truly committed natural resources management/development expert. I and others in FAO will remember him with

fondness and admiration. I know Parviz, Freddy and Guy will be very sad by the news. We have informed others in FAO and will follow up regarding his pending missions in Iran and Ghana.

Please let me know if there is anything else we can do and inform us of the funeral arrangements.

My thoughts are with you

Sally Bunning

Land Conservation and Management Officer, Land and Water Division (NRL)

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Letter from Sally to Samran

Dear Samran

No doubt you have heard the extremely sad news ... and will be as shocked as those of us in FAO who had the pleasure to work with him. I imagine you and Malcolm share many memories of times and experiences in Asia in working on land husbandry and WASWC issues. He was indeed a great mentor to me from applying the land husbandry manual to the more recent LADA and GEF SLM experiences

We will certainly miss him greatly.

Sally

Condolences from Samran

- WASWC has lost a great friend. Malcolm was one of the first batches of Life members of WASWC. I got to know him for the first time since almost 20 years ago, at first as an ASOCON officer who came to work at the office in Jakarta along with Godert van Lynden, and later as a consultant working in many countries in Asia and Africa. Malcolm has contributed a lot to the Southeast Asia region in matters concerning 'land husbandry' (or modern way of doing soil and water conservation that always involves people) and we have now taken as a standard in implementing SWC at this time. Malcolm and I share few happy moments together outside the technical sphere during all these years – and it is naturally hard to forget.

So to his family members, Hanifa, Zarina and Rokeya, please receive our deep condolences for the untimely departure of Malcolm.

Samran

MEMBERS' FORUM

What members say about SWAT book....

Dear Samran,

I appreciate having a copy of the new book about SWAT. I find it interesting that so many people have used and/or modified portions of the model to better characterize the moisture conditions and patterns in their watersheds. It is a good example of scientists sharing their talents and skills and illustrating that symbiotic relationships in science are indeed valuable. I hope that many people will benefit from the knowledge contained in this recent book. It is also a credit to WASWC for its dedication and resolve to be a continuing global platform as the world struggles toward sustainability and harmony with the tolerances of nature.

Thank you very much, and with best wishes,

Dick Arnold, retired USDA-NRCS ct9311@aol.com

MEMBERS CONTRIBUTIONS

☛ “SHARED WATERS, SHARED OPPORTUNITIES”

On the occasion of World Water Day, which was observed on 22 March 2009, around the theme: “Shared Waters, Shared Opportunities,” UN Secretary-General Ban Ki-moon noted that climate change is making less water available in many regions as glaciers recede, rainfall becomes less predictable, and floods and droughts become more extreme. He stressed the need to carefully manage water and urged all stakeholders to recognize that “our collective future depends on how we manage our precious and finite water resources.” To mark the Day, the UN Environment Programme (UNEP) highlighted the potential benefits of investing in the world’s freshwaters, and underscored the opportunities for businesses, noting that the market for supply, sanitation and water efficiency is expected to be nearly US\$660 billion by 2020, and that global economic benefits of US\$38 billion annually could

be reaped from investing US\$15 billion annually in halving by 2015 the number of people without sustainable access to safe water and basic sanitation.

Also on the occasion of World Water Day, the Executive Secretary of the UN Convention to Combat Desertification (UNCCD), Luc Gnacadja, released a message noting that prudent water management “means solving at the same time two of the most crucial challenges that dryland communities face and that go hand in hand: *the reversal of land degradation processes and the simultaneously unsustainable management of water resources.*”

▣ UNDOALOS CELEBRATES WORLD OCEANS DAY

On 8 June 2009, the UN Division for Ocean Affairs and the Law of the Sea (UNDOALOS) celebrated World Oceans Day for the first time and around the theme “Our Oceans, Our Responsibility.” In a message to mark the Day, UN Secretary-General Ban Ki-moon underscored the impacts of human activities on oceans, highlighting over-exploitation of vulnerable ecosystems, illegal, unreported and unregulated fishing, destructive fishing practices, invasive alien species and marine pollution, especially from land-based sources. He also emphasized that climate change causes sea temperature increases, sea-level rise and ocean acidification, thereby posing a further threat to marine life. The activities organized by UNDOALOS for the Day included a panel discussion on the theme “Our oceans, our responsibility,” and a documentary film screening of “A Sea Change.”

▣ VALUING COASTAL AND MARINE ECOSYSTEM SERVICES

The World Bank has launched a publication titled “Valuing Coastal and Marine Ecosystem Services.” This study argues that, while we recognize that the ocean provides vast quantities of food, offers enormous recreational values and stores carbon, these services have been treated as “free goods,” and the ecosystems that provide them are rapidly deteriorating through overuse, pollution and physical destruction. The review suggests that properly valuing coastal and marine ecosystem services is critical to sustainable development.

▣ GOBABEB TRAINING AND RESEARCH CENTRE – EDUCATION AND TRAINING FRAMEWORK - *Emily Mutota, emilym@gobabeb.org*



The Education and Training Framework of the Gobabeb Training and Research Centre, located in the heart of the Namib Desert within the Namib-Naukluft Park, offers a broad scope of possibilities. Originally chosen for research purposes, Gobabeb’s location at the intersection of three ecosystems provides a unique opportunity for guided learning about our natural environment with an emphasis on the arid zone. Gobabeb is also a demonstration site for hybrid energy, water recycling systems and sensitive environmental impact practices. Students therefore gain practical field experience and knowledge on arid ecosystems with simultaneous exposure to sustainable living techniques. Questions that are asked may be: What are the implications, advantages and disadvantages for Namibia of climate change, of desertification and of the Namib’s unique biodiversity? How can our resources, whether they be space, water, energy or waste, be appropriately managed in arid areas? How have people, plants and animals adapted to extreme climate variability? These and many other pertinent questions relating to Namibia’s variable and rapidly changing environment are part of the education and training programme at Gobabeb and challenge young minds in a stimulating and adventure-filled context.

Using a questioning, self-discovery approach, the education programmes cater particularly for young Namibians but are equally suitable for those learning about environmental education, who are teaching environmentally related subjects or who want to gather ideas for integrating all aspects of the environment into more formal education opportunities. Training courses for school groups with their teachers range from a few days to a week or longer. Likewise, tailor-made courses are offered to tertiary groups, particularly concerning arid ecology and sustainable development. Students from a range of disciplines select topics for investigation on rural development such as water management, horticulture and community development as well as undertaking investigations into the natural environment. The focus is on fieldwork, including the design, implementation, analysis and presentation of independent group work.

Longer-term in-service training placements (3 to 12 months) are offered to tertiary-level Namibians who focus on the application of theory to environmental problem-solving for sustainable development. This problem-solving approach has proven itself a key contributor in promoting well-rounded training for Namibia’s future technical

cadre and decision makers. The program has three integrated elements, one group of Polytechnic students based at the Centre for a comprehensive course which forms part of a study module, and a general group of graduate interns working under supervision on long- and short-term projects undertaken by the Centre. A third group is comprised of international interns who participate in research and long-term monitoring projects in collaboration with local students, thus enhancing cross-cultural and cross-national interactions.

Throughout its fifty-year history, Gobabeb has welcomed students from all over the world to pursue PhD, MSc or post-doctoral research, often in collaboration with Namibian students, in fields ranging from geology and ecology to sustainable use and management of a range of natural resources in a variety of settings. They may undertake this research in the Namib-Naukluft Park at Gobabeb or use the Centre as their base to work in surrounding areas.

Namibian community groups, in their broadest sense, take part in a range of training programmes including project planning, proposal writing and management. Local community members participate in courses in community tourism in arid environments, agriculture, water, sanitation and waste applications at village level.

The sky is the limit in terms of education and training opportunities at Gobabeb. Innovative, dynamic educators and trainers and students on all levels are invited to check the web-site at www.gobabeb.org for further information on these and other attractive research and training programs.

✦ **CONTRIBUTION FROM PRO-NATURA** by Guy F. Reinaud, President, Pro-Natura International:
guy.reinaud@pronatura.org

New Oasis: Super Vegetable Gardens at the heart of agroforestry systems

Agroforestry was once a specific traditional type of agronomy practiced by rural communities in the tropics. A rational land use system that restores and maintains soil fertility, it increases total yield, involving agricultural crops (food-producing annuals) in synergy with trees (perennials) and/or animal husbandry, all on the same land and in varying combinations over time. It should be reintroduced without upsetting the ecological and socio-economic balance of a given local population.



It has taken scientists a long time to fully understand all the benefits involved in agroforestry.

We advocate the establishment of a pilot project on a small- or medium-scale before proceeding to larger-scale development. Quantitative data on the yield of a pilot agroforestry system can be used to improve technical methods and further refine a system which is generally far more productive than any form of monoculture.

Pro-Natura agroforestry development centre in Nigeria
Agroforestry is not only a response to the fight against poverty and malnutrition, it also tackles climate change. The Intergovernmental Panel on Climate Change (IPCC), which was awarded the Nobel Peace Prize, describes the opportunity in these terms: "More than a billion hectares are available for

conversion to high-productivity agroforestry systems capable of significantly reducing poverty and deforestation and sequestering carbon on a large-scale". According to the IPCC, in the next 50 years, carbon markets could finance such poverty-reduction projects, which have the potential to reduce greenhouse gases in the atmosphere by the equivalent of 50 billion tons of CO₂.

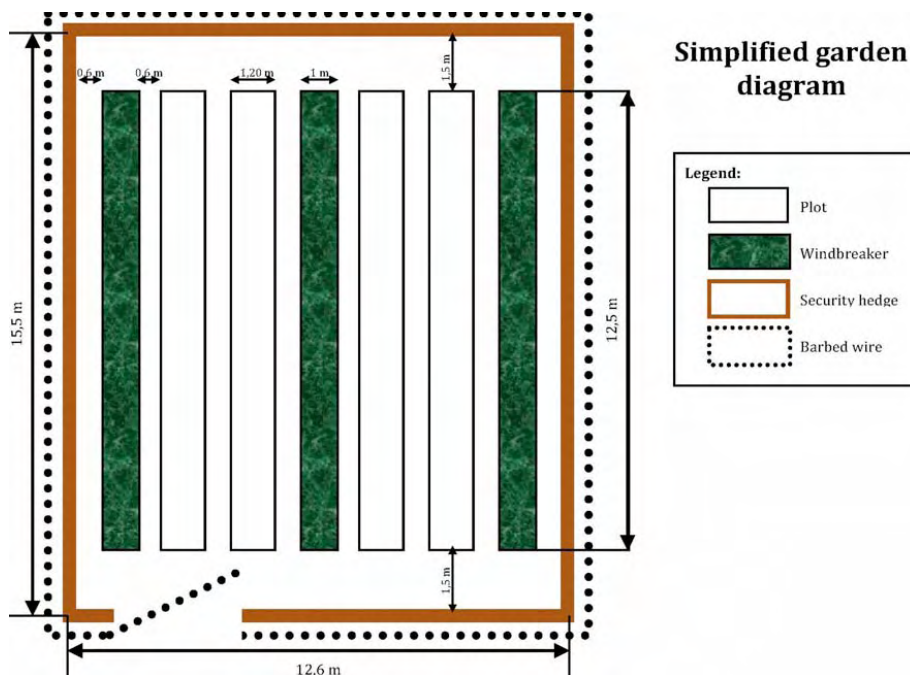
For two decades Pro-Natura has demonstrated the effectiveness of agroforestry in Latin America, Africa and Asia, developing practical training centres for farmers funded by the French Cooperation and the Leventis Foundation. The full range of this experience is succinctly summed up in handbooks available in both English and French.

Our chief objective today is to intensify this type of action in arid zones where food problems and the degradation of the environment are alarming.

Plan for the establishment of a Super Vegetable Garden (SVG)

An SVG consists of 4 plots, each measuring 1.20 m x 12.5 m. A suitable terrain must be organised into these four plots, separated from each other by a walkway of at least 60 cm.

If interested, you may contact: **Guy F. Reinaud**, President, Pro-Natura International:
guy.reinaud@pronatura.org Tel. +33 680 61 09 36 and **Laurent Colas**, Managing Director, JTS Semences:
laurent.colas@jtssemences.com Tel. +33 630 86 27 29



A biochar enriched Super Vegetable Garden of less than 60 m² provides a balanced diet for a family of 10 with 80% less water consumption

Pro-Natura International, in association with the social business JTS Seeds, has developed the innovative, ecological and highly productive *Super Vegetable Garden*. Initially planned for Africa, this enriched garden yields a perfectly balanced diet for 10 people on a surface area of 60 m². It is a combination of the Improved Tropical Garden (ITG) of JTS Seeds, and Pro-Natura's Biochar. This garden is a promise for a richer, healthier future worldwide. The result of 15 years of research and 30 years of field experience, initially demonstrated in Niger and Senegal, the biological growing technique involved is applicable to all tropical zones. The corresponding kit includes the necessary seeds, soil amendments, adapted irrigation devices together with specially adapted equipment (covering veils, tools etc.). The price ex-production facility in France is from 149€. The GMO free seeds are the fruit of 15 years of specialist selection. Production in this garden is constant all year round, what ever the season, involving a consistently regular cycle of 45 days. Water consumption is reduced by more than 80%, the necessary workload limited to 2 hours per day.

Among the notable innovative aspects of the *Super Vegetable Garden* is the inclusion of biochar, produced thanks to Pro-Natura's *green charcoal* technology. Soil fertilisation using charcoal dust (biochar) is an ancestral practice first employed more than 7,000 years ago by pre-Columbian Indians in the Amazon regions. The exceptional properties of these soils are still discernable today, as has recently been discovered by the scientific community which as a result now shows great interest in biochar. Pro-Natura's biochar avoids ecological problems linked to charcoal production since it involves green charcoal, exclusively produced from renewable biomass (agricultural or forest residues not used for cattle feed, organic matter, invasive plants etc.). It is the product of a continuous carbonisation process, both efficient and ecological, using Pyro-6 and Pyro-7 machines. Complementary fertilisers are limited to organic products such as compost and manure. In and of itself, biochar allows for the doubling in productivity of agricultural land, if not more, once the soil has been fertilised by incorporating one kg of biochar per m². In addition to this direct fertilising effect, biochar also acts as a sustainable carbon sink. This induces the sequestration of carbon from atmospheric CO₂ (one ton of biochar being the equivalent of 3 tons of CO₂), thus mitigating long-term climate change.

The Super Vegetable Garden comes in a basic kit, to which certain options can be added so as to further increase productivity and enables the establishment of the garden.

The kit includes:

- **Plastic lining.** This allows for the limiting of plot size and the restriction of work to a single place (like a flower pot) resulting in subsoil enrichment and pest infestation control, as well as countering water and wind erosion. Plastic lining constitutes the basis of the ITG technique. Its installation leads to deeper work on the soil, and therefore both deeper rooting and better lateral growth of plants.
- **Water retention mini-sponges.** Water absorbers improve the quality of the soil, contributing to better garden management and a reduction in water use (added to the plastic lining and the veils, the water consumption is 4 times less than in a traditional garden);



Left: Biochar application in Senegal; Right: Setting up of veils



Left: Super Vegetable Garden in Niger; Right: Production of cabbages in the city of Niamey

- **Organic fertilizer.** Natural fertilizer is very useful to regenerate soil fertility and constitutes a form of security guaranteeing optimum productivity;
- **Germination veils.** Indispensable to the ITG, they help counter water evaporation by at least 2/3, limit the time when the stomata (foliar cells of the plant indispensable for the photosynthesis) remain closed during the hottest hours of the day, thus increasing the photosynthesis period, create a barrier to flying insects, attenuate the early morning cold, and form a protection against sandstorms as well as heavy rain;
- **Nursery veils.** These guarantee the same effect as production veils over small surface areas characteristic of nurseries;
- **A fine-nozzle watering-can.** Allows for regular, non-aggressive plant watering and prevents soil compacting;
- **A dibble.** Indispensable for transplanting;
- **An alignment cord.** Delimits the planting area and facilitates planting in a straight line;
- **The JTS seeds:** are the fruit of 15 years of GMO free agronomic research. The packaging is waterproof with sole use and a germination verified by JTS laboratory and providing an optimum rate.

Creating an important piece of the CO₂ reduction puzzle



The method employed here involves unused agricultural residues or renewable biomass which would otherwise go to waste, and transforming them into either biochar or briquettes of green charcoal, a wood charcoal substitute. Pro-Natura thus proposes an alternative domestic fuel made of vegetable carbon, obtained through a proven, clean and efficient process, based on the continuous carbonisation of renewable biomass. Savannah weeds, reeds, wheat or rice straw, cotton and corn stems, rice or coffee husk and bamboo can all be used to produce green charcoal. Any form of wood, including sawdust, can also be carbonised, with a yield around three times higher than would be the case using classical batch processes. A Pyro-6F machine allows for the economical and ecological production of between 4 and 5 tons of

green charcoal per day. The first French-made machine has been in use in the Saint Louis region of Senegal since the end of 2007 (see photo above). This technology has just been transferred to the new Paris-based company Green Charcoal International, which produces the machine.

Note: In 2002 Pro-Natura won the ALTRAN Foundation's first prize for technological innovation for the ecological production of biochar.

Wondering what biochar is, read the next page.

BOOK REVIEW: Biochar for Environmental Management: Science and Technology

Editors: Johannes Lehmann and Stephen Joseph

2009: hardback, 416 pages

Earthscan (www.earthscan.co.uk)

Reviewed by William Critchley: 14 September 2009

This book is a splendid, and timely, achievement. It serves as an authoritative text on Biochar, while simultaneously advocating its potential in addressing environmental and food security issues. But *what is* Biochar? Basically it's charcoal, but not produced for burning as fuel, rather for mixing in the soil. Technically, as the editor's excellent opening chapter tells us, it is the product of thermal decomposition of organic matter under a limited supply of oxygen – or (basically) "pyrolysis". An actual definition, according to the International Biochar Initiative, is given (rather strangely) only on page 108. The next question is: *why* biochar? Well, the practice of incorporating charred organic matter into the soil was apparently an indigenous practice of the Amazonian Indians. The dark soils that resulted, the *Terra Preta*, simply made crops grow better, over a sustained period of time. And scientific investigations of the effect of biochar as a soil amendment show that, as well as directly adding minerals, it indeed enhances certain properties – including uptake of nutrients, more efficient use of fertilizers, rainwater infiltration and toxin neutralisation. It is "*more efficient at enhancing soil quality than any other organic soil amendment*", according to the editors.



What, however, makes biochar even *more* special, is the fact that it also locks up carbon in the soil for a very, very long time: up to 7,000 years counting in the case of the *Terra Preta* soils of the Amazon. This is carbon sequestration at its very best, because the carbon is not just simply stored under lock and key (so to speak) but is actively employed improving soils for plant growth: it's climate change mitigation that directly improves food production. As though that was not enough, the process of producing biochar from organic matter generates energy through the by-products of gases and oils; *and* biochar can clean up the city by potentially being produced from green wastes.

The 22 chapter book is divided into four main areas. First biochar's properties, then "production and application", thirdly "environmental processes" and finally "implementation". The chapters are thus thematically arranged, and provide a logical continuity. It doesn't take long to see that, despite the disparate authorship of these chapters, there is uniform quality from scientific authorities. While no doubt there has been time-pressure to produce the book in good time for the Copenhagen COP later this year, this is anything *but* a hastily cobbled together set of conference papers (the reader's nightmare). And the presentation is firstly class: easy-to-read double columns and generous use of diagrams, drawing, tables and charts. You don't have to be an organic chemist to understand this book, but much of the material is quite technical. It is an authoritative text after all. To the very broad constituency of readers that it will attract (climate change experts; agronomists; energy specialists; environmentalists), the first chapter itself may satisfy their main interests: it summarises the full story in easy, readable terms. The rest of the book then serves as reference material – which is not only well indexed, but also has a very valuable list of abbreviations and explanations of SI units (to help answer the question, for example, *what is a petagram?*). At the outset, this reviewer noted the dual goal of the book: to act as a text on biochar, while putting forward the argument for its potential environmental impact. The first objective is achieved admirably, the second, marginally less so. While the editors provide a balanced but powerful argument, the foreword by Tim Flannery provides a "green mist moment" with his extravagant claim that "[biochar represents] *the single most important initiative for humanity's environmental future*". That sort of hype can be counter-productive: there will be surely formidably practical barriers to full-scale adoption of biochar. More useful (and with far greater impact) is the sort of information snippet the editors provide us with: "*diverting merely 1% of annual net plant uptake into biochar would mitigate almost 10% of current anthropogenic C emissions*". And the final chapter on policy could certainly have been punchier: why not a list of "policy points" for decision makers? But, all-in-all this is a must for anyone seriously concerned with the environment...or climate change...or food production. As someone who is concerned with all the above, and a university lecturer as well, your reviewer will make full and regular use of his copy.

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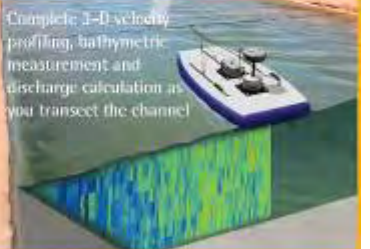
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FEATURES

C Highlights

To All interested in carbon and no-till,

The attached and following information is a report of the outcomes from the World Bank's carbon meeting held on March 2, 2009 in Washington, D.C. Please read the summary of the meeting results and view the PowerPoint presentations at the link

<http://wbcarbonfinance.org/Router.cfm?Page=BioCF&FID=9708&ItemID=9708&ft=DocLib&ht=42&dtype=46120&dl=0>. This meeting's result shows the progress made in developing carbon markets and identifies the next steps for global carbon management in agricultural systems. If you have something to contribute in this regard, please feel free to forward it to Mikko Ollikainen at the World Bank with his contact point mikko.ollikainen@biota.fi.

Don Reicosky

**Summary of outcomes and proposed next steps
Soil Carbon Methodology Workshop
2 March 2009, the World Bank**

Potential of agricultural soil carbon finance projects to mitigate climate change should be tapped

- Wealth of data exists on the mitigation potential in agriculture in different climatic zones.
- This mitigation potential is cost-efficient and comparable to that of other sectors that are already part of the internationally agreed mitigation regime under the UN Climate Convention, e.g. forestry.
- Increasing carbon content in agricultural soils typically has attractive co-benefits such as increased productivity, improved food security, and enhanced climate resilience.
- Governmental and voluntary carbon trade systems, although relatively limited to date, have pioneered agricultural carbon *in developed countries* as a part of the mitigation palette and others are planning to do so. This paves way for inclusion in the regulated mitigation regime.

Common ground was established between soil scientists and market representatives on a feasible approach to developing soil carbon sequestration verification methodologies

- Despite having huge total potential, amounts of carbon typically sequestered per ha per year in agricultural soil systems are relatively small and require verification methods that are not too labor-intensive or costly.
- There is enough scientific data to confidently establish *ex ante* positive correlation between different management practices and levels of soil carbon sequestration in certain agro-ecological systems.
- Existing understanding allows proceeding in some relatively well-known developing country environments with technically sound pilot projects based on default values for sequestered carbon following specific management interventions. It is also important in the early demonstrations phase to work in areas where potential soil carbon gains are highest.
- One size does not fit all: There was unanimous agreement that there is not one single agricultural management practice that should be adopted for all systems.
- Compensation for good soil carbon management has usually multiple benefits and lends itself to exploring further opportunities for payments for environmental services.

The World Bank is in a unique position to promote soil carbon projects globally

- The Bank has expertise both in pioneering Land Use, Land-Use Change and Forestry (LULUCF) carbon finance projects, including two soil carbon projects in Africa in the BioCarbon Fund (BioCF) and in sustainable rural development in developing countries.
- The Bank has unparalleled convening power to bring to table investors, developing country organizations and technical experts.
- Participants encouraged the Bank to play a more active role in both developed countries such as the U.S. and in developing countries, to raise awareness of governments of soil carbon potential and to keep agricultural soil carbon high on the climate change mitigation agenda.

The workshop unanimously agreed to recommend that the Bank takes the lead in coordinating accumulation of information necessary for *ex ante* sequestration verification. Specifically:

- The Bank should set up a task force of 5–8 experts and key stakeholder organizations for strengthening the existing draft database of soil carbon responses to specific management interventions in specific eco-regions.
- This draft database (“look-up tables”) would be upgraded periodically through a peer-reviewed process, and the data would be made widely publicly available. This database would be:
 - Simple and cost-effective, and present information in a form that scientists could quantify and farmers could understand.
 - Applicable for various management practices and land-uses, and through extrapolation, in different regions, watersheds and communities, and include all key variables: climate, soil types, land uses, farming systems, farm sizes, agronomic practices and integrated system components.
- A land-use and practice based verification protocol would also be developed, perhaps as a partnership between research institutions in developing and developed countries.

Next steps after the workshop: how do we make use of the momentum?

- Channels are open to coordinate and strengthen collaboration with stakeholders such as the CGIAR centers, FAO and universities, as well as internally within the Bank (ENVCF, ENV, ARD, AFTAR).
- Agricultural soil carbon will be on the agenda of the preparatory meetings in the run-up to Copenhagen climate summit such as the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) meeting in Bonn in end of March.
- The BioCF/AFTAR work for developing the agricultural soil carbon methodology will continue as endorsed by the workshop participants – since such methodologies are not yet eligible in the Clean Development Mechanism (CDM) framework, the Voluntary Carbon Standard (VCS) system is used.
 - The methodology will be submitted by April 2009 for VCS approval and the projects for VCS registration.
 - The BioCF pilot projects are used to illustrate the benefits and challenges of implementing such methodologies in developing countries, with a view of also demonstrating acceptability in a future climate change mitigation regime.
 - The BioCF methodology work will be publicly available.
- All information accrued in the workshop will be made publicly available.

Vetiver Highlights What’s New?

Roley Nöffke, Managing Director of Hydromulch (South Africa), has done much to promote the use of the Vetiver System for the stabilization of highway related slopes. In a recent article relating to the Ilmenite Project in Madagascar, vetiver was used on a large scale for the protection of wind blown sand highway slopes. The full article by **Carol Knoll and Roley Nöffke** can be found at: <http://www.vetiver.org/Graphics/Images/MAD-sandunetxt.pdf>.

An important component was the **Community based Vetiver propagation program** described below. TVNI see the opportunities for local farmers to produce vetiver plant material for infrastructure stabilization as an important component in the Vetiver System and a very important and rewarding cash crop for farmers. Imagine what could be done in Haiti and any other disaster impacted countries.

“From Carol Knoll and Roley Nöffke, Community based Vetiver propagation program. It was estimated that the erosion control and vegetation reinstatement program as a whole would require about two million Vetiver plants and Hydromulch, in conjunction with QMM Environmental, initiated a Vetiver sourcing and growing program utilizing family groups in neighboring communities. Nöffke commented that fifteen communities were approached initially during December 2006 and this had expanded to 35 by August 2008.

Some of the families involved in the project sourced parent material from their farming locations close to the rehabilitation sites and were paid for the material, while others were given slips of the parent material to grow in community nurseries of their own making. Hydromulch briefed the villagers on the correct cropping and trimming procedures and demonstrated sustainable harvesting methods – removing material without damaging the parent plant. They were also encouraged to identify and collect viable strong material and often traveled great distances to source suitable material. Potting bags and Vetiver planting material in the form of slips were delivered to the communities that had chosen the propagation route. The growers filled the bags with a suitable growing medium and planted the slips. Open ground nurseries were also encouraged, so that the growers could establish a stock for future demand. Along with the potting bags, the growers received fertilizer sticks, spades, rakes, plastic watering cans and wheelbarrows. The families were paid for the initial planting process, with a second payment being made once the plants were satisfactorily established with well-developed root systems. According to Nöffke, establishment takes between three and six weeks during which time regular watering is needed.

The communities selected for the propagation process were close to reliable water sources. Some communities are involved in the post-establishment maintenance of the plants and are being paid accordingly. Once established, the plants were collected by Hydromulch ready for planting out into the harsh roadside environment. The communities or families in the various villages are subsistence farmers that grow mainly rice, while those on the coast are fishermen.

In the Mangaiky Village, ‘Andre’s community’ has propagated over 230,000 Vetiver plants to date and, in the same village, the Auguste family has propagated in excess of 250,000 plants. In the Mangarivotra Village, the ‘Antahova Community’ will soon reach their target of 80,000 plants, while Maria Agnes’s family from the Mandromdromotra Village has grown 100,000 plants. These are some of the 35 groups involved in this program, supplying the on-site holding nursery with stock. A total of in excess of two million Vetiver plants has been used for erosion control on the project.

The community based program has already generated in excess of US\$150,000 for the respective communities, during the construction phase of the Ilmenite Project. The local farmers have invested their returns in buildings and stock. Farmer Auguste built a large robust house with the income his family received, while Madame Marie Agnes built a secure house for herself and her grandchildren from the income generated through Vetiver propagation. Andre David Mahalogny from the Mangaiky district bought six Zebu cattle with the proceeds generated by his family’s Vetiver nursery. With the money he earned, Farmer Arthur carried out the traditional restitution ceremony at his father’s grave, while Farmer ‘Jonesey’ is educating his children with the payment received for the 240,000 Vetiver plants grown by his family.”

Apart from the above you can learn about a lot of new developments at TVNI’s website – <http://www.vetiver.org>. We have redesigned the website to make it easy to access specific topics. We have published five new manuals relating to the Vetiver System. One has already been translated into Mandarin, Swahili and Vietnamese. We hope to soon have French, Spanish and Portuguese translations. These are or will be downloadable from the internet or can be purchased from amazon.com. We had a very successful Vetiver workshop in India earlier last year, and are planning a similar one in Ethiopia this year.

What ever your views might be about the Vetiver System there is a desperate need to mitigate soil and water related problems and to renew and protect our natural resources – one of the quickest, cheapest and most effective ways is through the application of the Vetiver System.

- Dick Grimshaw, Bellingham, USA October 23 2008



New WOCAT Website

We would like to draw your attention to the completely renewed [WOCAT Website](http://www.vetiver.org) which is in the air since several weeks now. For those who were used to the old Website it may take a bit of getting used to as the structure has changed drastically. The easiest to explore the new Website may be to use the [Sitemap](#). As you can see in the

picture below there is a (horizontal) menu with the headings: Network; Knowledge base; Methods; Vision & Mission; and News & Events. Clicking on any of these will open another horizontal submenu which in turn will lead to a vertical menu as in the picture below (Network → Organisation → Global management).

The old URL (www.wocat.net) is still valid and now points to the new Website. However, **some files which you may have downloaded before need to be re-loaded, e.g. the *WOCAT in Google Earth file***, which can now be found under Knowledge Base → SLM Mapping → WOCAT in Google Earth (or which can be downloaded directly by clicking the link above). This will open a WOCAT placemark file with all Technologies and Approaches in Google Earth. Countries with WOCAT data show a WOCAT logo, which when zooming in is replaced by one or more small WOCAT icons, each of which represents a Technology (green) or Approach (red). Clicking on the icon opens a summary window of that Technology or Approach. Also a link is provided to give comments on each specific case study, please feel free to do so!

Under News & Events you can find the (latest) News, such as now the presentations of the recent WOCAT/ DESIRE symposium in Morocco.

Most of the information is available without logging in, hence for anyone browsing the Website. With login as [registered user](#) some additional features become available, e.g. Network → Organisation → address database. Also login is needed for any data entry or for making changes in the database on Technologies or Approaches, or related to mapping.

Any constructive comments or criticism on the new Website will be greatly appreciated. Your feedback to the [WOCAT secretariat](#) will help to improve it!

Godert van Lynden Godert.vanLynden@wur.nl, WOCAT-L moderator

"WOCAT-L" WOCAT-L@mailserv.fao.org; "WOCAT secretariat" wocat@cde.unibe.ch

The screenshot shows a web browser window displaying the WOCAT website. The address bar shows the URL <http://www.wocat.net/en/network/organisation/global-management.html>. The page has a header with a navigation menu: NETWORK (Organisation), KNOWLEDGE BASE (Activities, Funding, Contact, Join us), METHODS, VISION & MISSION, and NEWS & EVENTS. Below the header, there is a main content area titled "WOCAT Global Management". On the left, there is a sidebar with "Organisation" selected. The main content area contains a description of the organization's role, a list of participating institutions (CDE, ISRIC, FAO), and a list of responsibilities. On the right side, there is a "WOCAT user login" form with fields for "Email:" and "Password:", a "Login" button, and links for "Forgot your WOCAT password?" and "Create a new account".

SUMMARY REPORTS

SWAT SEA Workshop and Conference, Chiang Mai, Thailand, January 5-8, 2009 Chiang Mai University together with 40 organizations organized the first Southeast Asia (SEA) training workshop (January 5-6, 2009) and conference (January 7-8, 2009) on Soil and Water Assessment Tool (SWAT) in Chiang Mai, Thailand.



The event was aimed at key research partners in the SEA region and sought to provide training resources and ideas for those looking to engage their organizations in integrated and efficient ways in gaining better understanding of changes of soil and water resources due to changes of climate and management.

The workshop hosted 42 participants and the conference attracted 82 participants from more than 10 countries, mostly researchers and educators and they participated in the conference that consisted of lively presentations, workshops and smaller discussion groups.

We hope that the workshop and conference demonstrated to those present that they are not alone and that resources exist to help them inspire their co-workers and organizations to engage with using SWAT as a tool to improve their decisions to manage their soil and water resources.

The organizers are particularly grateful to The Thailand Research Fund (TRF) and SANREM-CRSP project of the United States Agency for International Development (USAID) for making the event possible through their generous financial support. Grateful thanks also to the speakers and workshop leaders who donated their time and made the event successful. In particular we wish to thank, on behalf of the 1st SWAT-SEA Committee, the local organization team at Chiang Mai University and also the team from North Carolina Agricultural and Technical State University. Without you none of it would have been possible!

Participants to the **Workshop** came from following countries: Cambodia 2, Germany 1, India 1, Indonesia 2, Iran 1, Japan 1, Kenya 1, Korea 3, Lao PDR 6, Nigeria 1, Philippines 2, Thailand 15, USA 2, Vietnam 4, Grand Total 42

Participants to the **Conference** came from following countries: Cambodia 2, Germany 1, India 2, Indonesia 2, Iran 7, Japan 2, Kenya 1, Korea 14, Kuwait 1, Lao PDR 6, Malaysia 1, Myanmar 2, Nigeria 2, Philippines 3, Thailand 22, USA 8, Vietnam 5, Grand Total 82

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- Proceedings from this SWAT SEA Conference will be available in LANDCON e-LIBRARY, to release in April 2010.

Recent Advances in Hydrology for Water Resources Development and Management at WREMI, Baroda, India, January 21-22, 2009

Water Resources Engineering and Management Institute (WREMI) of The Maharaja Sayajirao University of Baroda, Samiala organized a national seminar on “Recent Advances in Hydrology for Water Resources Development and Management” on 21-22 January 2009 with Prof. D.T. Shete, Director, WREMI as Convenor. The seminar was organized on the occasion of the inauguration of the Gujarat Chapter of the Association of Hydrologists of India and XXVII Annual convention of Association of Hydrologists of India at WREMI, Samiala.

Dr. C.C. Patel was the Chief Guest at the inaugural function. He observed that irrigation management leaves considerable scope for improvement. Water allocation amongst different uses and different regions is almost chaotic. Existing legal framework for water management is not conducive to optimum development and management. He further elaborated on water requirement - issues and concerns. He identified population and water stress is the main issues and concerns. The entire program including investigations planning, designs implementation and operation has been successfully handled by the professionals of our country without any significant assistance from foreign consultant firms.

International Training Workshop, “Design and Evaluation of Pressurized Irrigation Systems” In Lahore, Pakistan, March 3-7, 2009



Centre of Excellence in Water Resources Engineering, Lahore, Pakistan with cooperation of Islamic Development Bank organized five-day International Training Workshop on Design and Evaluation of Pressurized Irrigation Systems for the professionals working in irrigated agriculture in Muslim countries. The main focus of the workshop was to create close and long-term liaison among institutions of Islamic countries and to provide a forum to discuss the issues related to the pressurized irrigation. Seventeen participants from nine Islamic Countries including Bangladesh, Iran, Jordan, Malaysia, Oman, Saudi Arabia, Sudan, Syria & UAE and more than thirty from Pakistan participated in the workshop. The workshop was inaugurated by Prof. Dr. Muhammad Ashraf, Dean, Faculty of Civil

Engineering. Experts working in different aspects on Pressurized Irrigation made presentations during the workshop.

In his remarks, the chief guest Mr K Akram Khan, Vice Chancellor of University of Engineering and Technology, Lahore, stressed upon the participants of the workshop to abreast themselves with the latest technologies like sprinkler and drip irrigation techniques. In his address he also stated that the common perception that the future wars would be on water is true since in reality such issues have already emerged in Muslim countries like Jordan. Such unfortunate events are likely to be more intense in future. Earlier at the start of the ceremony, the representative from Islamic Development Bank, Dr. Muhammad Akhtar Bhatti briefly described the programs being offered by the IDB for the Muslim ummah to uplift the technological advancement in the Muslim countries. At the end of the ceremony, Prof. Dr. Muhammad Latif, Director of the Centre of Excellence in Water Resources Engineering thanked the participants and their organizations for nominating their employees to update their knowledge on the subject of vital importance for arid countries.

Biotech Ministers Support the Use of Biotech for Food Security, Dhaka, Bangladesh, March 2009



A 3-day International Conference on Plant Breeding and Seed for Food Security was recently held at the Bangladesh Agricultural Research Council, Dhaka, Bangladesh with both Ms. Matia Chowdhury, Minister for Agriculture and Dr. M.A. Razzaque, Minister for Food and Disaster Management supporting the use of biotechnology as the prime option for food and nutritional security for Bangladesh.

Ms. Chowdhury assured that the government will continually support initiatives for food security using hi-tech agriculture. Dr. Razzaque on

the other hand, emphasized the development of world class biotech laboratories and research institutions that will conduct significant research to address agricultural problems such as salinity, waterlogging, drought, diseases and pests. He further suggested to develop varieties for improved water/nutrient use efficiency and more photosynthetic ability like converting C3 to C4 plants.

Similarly, Bangladesh Food and Agriculture Organization representative Ad Spijkers expressed his support to biotech and basic research especially for developing saline tolerant crops and other varieties of crops with important traits for food security. The conference was attended by 600 scientists, seed growers, farmers, researchers and was chaired by Dr. Kazi Badruddoza, National Scientist Emeritus.

For details of the conference, contact Dr. K.M. Nasiruddin of Bangladesh Biotechnology Information Center at nasirbiotech@yahoo.com (From Crop Biotech Update March 13, 2009)

WATER, ENVIRONMENT AND CLIMATE CHANGE

Report from an international conference held in Cholula, Puebla, Mexico, April 13-17, 2009

The International Conference of Water, Environment and Health Sciences: The Climate Change Challenges (ICWEHS) was organized to provide a forum for the interdisciplinary exchange of ideas and points of view in all the aspects related with water, environment and health sciences, and all the trade-offs between these three fields. The ICWEHS Conference was held at the Universidad de las Americas, at Cholula, Puebla, Mexico, on April 13-17, 2009. The ICWEHS conference was funded by the Mexico's National Water Commission (CNA), Mexican Water Technology Institute (IMTA), and Universidad de las Americas, Puebla. The co-sponsors of the ICWEHS conference were the American Institute of Hydrology, American Society of Civil Engineers, Colorado Water Institute, International Association of Hydrological Sciences, International Water Resources Association and Mexico's Academy of Engineering. The ICWEHS conference was focused on Water – precipitation, potential evaporation, groundwater, surface water; Environment – water and wastewater treatment, pesticides, remediation, hazardous waste, heavy metals; Health Sciences – epidemiology, toxicology, exposure assessment, risk assessment and communication; and Education.

More than one hundred scholars, experts, professionals and students from fifteen countries of America, Asia and Europe attended ICWEHS. Twenty two papers were presented along six technical sessions at ICWEHS. Three plenary sessions and a panel discussion gathered many worldwide well-known scholars who shared their expertise, knowledge and experience with ICWEHS participants. The three keynote lecturers were Professors **Terry Barker**, Director of the Cambridge Centre for Climate Change Mitigation Research (The Effect of Climate Control on Air Pollution), **Benito Mariñas**, Professor of the Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, USA (Sustainable Approaches for the Control of Emerging Waterborne Pathogens), and **Jose D. Salas**, Professor of the Department of Civil and Environmental Engineering, Colorado State University, USA (On Climate Variability and Change in Water Resources). The members of the Panel Discussion were Drs. Felipe Arreguin, Under Technical Director (CNA), Humberto Marengo, Hydropower Project Coordinator, Mexico's Federal Power Commission and Polioptro Martinez, General Director (IMTA). On Friday April 17, 2009, a technical field trip was organized to IMTA in the outskirts of Cuernavaca, Mexico.

4th Biennial National LandCare Conference in South Africa - July 12-16, 2009

The Fourth Biennial National LandCare Conference with the theme **Together caring for our land, caring for our future** was held recently in Polokwane in the Limpopo Province of South Africa. Convened by LandCare South Africa with the assistance of the Limpopo Department of Agriculture, it benefited, among other things, from the participation of a delegation from LandCare Kenya. Proceedings were further enriched and enlivened by a Conservation Agriculture Workshop which included presentations by CA Convenor for South Africa, Dr. Hendrik Smith of ARC-ISCW, WASWC Associate Editor Richard Fowler ('Breaking ploughshares into peaces - Conservation Agriculture as the way to trigger & sustain South Africa's rural reconstruction & development'), KwaZulu-Natal farmer Thabane Madondo and Kenya Agricultural Research Institute's Ms Hottensiah Mwangi

2nd ECHO Asia Agricultural Conference, Chiang Mai, Thailand, September 21-25, 2009

During September 21-25, 2009, approximately 155 development workers from 15 countries gathered in Chiang Mai, Thailand for the 2nd ECHO Asia Agricultural Conference. This assembly was the first major event sponsored by ECHO since establishing its Asia Regional Office earlier this year.

The meeting featured morning plenary sessions covering a variety of practical agriculture and community development topics. Agricultural concerns included SRI rice production (led by Dr. Norman Uphoff), the use of microorganisms in farming (as explained by Manny Asprek), how to extend the growing season by ECHO's Danny Blank and Khaing Dhu Wan's description of natural farming in Myanmar.

Conference goers were also introduced to earthen houses by Jo Jandai and Peggy Reents, small-scale alternative energy sources (such as micro-hydro) by Salinee Tavaranan and the use of 12-volt battery powered water purifiers by Kurtis Daniels.



Additionally, Stan Doerr, President/CEO of ECHO described the organization's growing range of global services while Jim Goering, member of ECHO's board of directors, helped delegates better grasp the big picture related to global food security challenges.



From left: Dr. Norman Uphoff during a plenary session; ECHO President Stan Doerr leading a Plenary Session; Our guide through the Green Manure/Cover Cropping Tour, Chiang Dao, Thailand.

Afternoon and evening workshops were led by dozens of conference delegates. Largely related to small farm food production, income generation and appropriate technology, workshop topics included composting toilets, grain amaranth production, family biogas units, automated banana stalk slicers for natural pig feeds, warm water aquaculture, effects of recycling rice straw, community mapping and green manure cover crops.

However, many delegates expressed that the highlight of the meeting was the post-conference tours. Participants were able to see examples of local work related to aquaculture, community-based natural farming, small-scale livestock production, agroforestry, vermiculture, natural rice production, alternative housing and seed saving.

Photos and plenary speaker powerpoint presentations from the recent ECHO Asia Agricultural Conference can be viewed via the following link [ECHO Asia Conference Photos](#). The next ECHO Asia Agricultural Conference in Chiang Mai is planned for 2011.

- From Asia Network News (echoasia@echonet.org, <http://www.echonet.org/>), edited by Rick and Ellen Burnette, rburnette@echonet.org, eburnette@echonet.org

MISCELLANEOUS

SCIENCE FOR EVERYONE

Colour and light, The scientific explanation behind the colourful beauty of our natural world, by Dave Canavan

My favourite painting is by Monet of his garden at Givenchy. What I love about it is the enormous variation in shades of green. It is for the same reason that I love the natural world, due to its colour and vibrancy.

How colour variation is achieved is dependent on wavelengths of **light**, how they are absorbed and how they are reflected. If you have ever been deep in a cave you will know what absolute darkness is like. Apart from caves and a few other exceptions, light is a part of every day and every night.

The visible spectrum

Our eyes are only sensitive to electromagnetic radiation at certain frequencies. Electromagnetic radiation can be plotted on the **electromagnetic spectrum** which incorporates a vast scale that includes x-rays, gamma rays and radio waves. It also has a small section at **frequencies** (number of waves per second) between 400 and 700 nanometres (nm) known as the visible spectrum.

White light is a combination of different colours which is emitted by the Sun and contains the whole visible spectrum frequencies. White light can be split into the seven colours of the rainbow: red, orange, yellow, green, blue, indigo and violet.

Blue light has short wavelengths, therefore high frequencies, and ranges from 400-500 nm. **Green** light has medium wavelengths and ranges from 500-600 nm and **red** light has long wavelengths and therefore lower frequencies and ranges from 600-700 nm. These are the three primary colours of which all other colours are produced.

To split white light, it needs to be **refracted** (bent) through a medium such as Perspex, exactly as sir Isaac Newton did in the 1600s, pioneering our knowledge of light. The famous image of light refracted through a prism donned Pink Floyd's 'Dark Side of the Moon' album and is a common experiment in many science classrooms.

Somewhere over the rainbow

When light is refracted through a medium it bends. Perspex or water are denser materials than air so when a light ray travels from the air into the denser material, it slows down, bending the light, much as a car traveling at high speed on a road would slow and change direction if it hit the gravel on the roadside.

If the Sun is shining and it is also raining, the rain can act as a material to refract the Sun's light. If this happens and we are in the right location, we get to see one of nature's most beautiful phenomena: The **rainbow**. Rainbows can also be seen at waterfalls or when using a hosepipe on a sunny day, yet however they are created, they are always impressive.

Equally impressive is how many animals can accommodate for refraction. Many birds which hunt fish from above the water's surface have to account for refraction or they will go hungry. If you see a fish in the water, from your eye to the fish is an apparent straight line, but in reality the fish is closer to you than it appears.

The same effect can be observed by a simple experiment. Place a small coin (e.g. 1 Thai Baht) in a mug and then look into the mug from an angle until you can just see the edge of the coin. Then pour water in the mug whilst keeping your head still and you will see the coin magically appear. The magic of science!

What colour is that?

Look around you. What colour is your couch? Or your T-shirt? If you reply the colour you see, sadly, that's not technically true. The colour of anything is dependant on the amount of light reaching the object.

At night time nothing has a colour. Everything is black, due to the lack of light and therefore lack of **absorption** and **reflection**. And even in the light, be aware that no two people see the exact same colour!

For something to appear blue, the material has to absorb all the electromagnetic wavelengths in the visible spectrum except the 500nm wavelength. This wavelength is reflected, which our eye absorbs and interprets it as the colour blue.

This is the same for any coloured object. Certain colours are absorbed and others are reflected and depending on the reflected wavelength, it determines which colour we see. With black objects, all of the wavelengths in the electromagnetic spectrum are absorbed, whereas with white objects, all of the wavelengths are reflected.

Why is the sky blue?

As stated earlier, sunlight is a combination of colours we call white light. In space, the surrounding is black and this is because there is no atmosphere, but on Earth, the atmosphere is a combination of gases and water vapour, and as a result, the sky appears blue.

The gases (mainly nitrogen and oxygen) scatter the Sun's white light in an effect known as **Rayleigh scattering**. Due to the high frequency and energy of blue light, it scatters more effectively than the other colours, meaning that when we look up to the sky on a sunny day, the sky is blue.

What you may have noticed is that the sky is paler at the horizon. This is because the blue light has to pass through more air, resulting in scattering in other directions and less blue, reflected light reaches your eyes.

You would be amazed at how many people think that the sky is blue due to reflection from the ocean! A nice idea and an application of light properties, but sadly not correct.

Sunsets are beautiful (even chimpanzees have been observed appreciating them), with their yellows, reds and orange skies. This is due to the Sun's light having to travel through more atmosphere than during the middle of the day where the Sun is highest in the sky.

Dust and water reflect much of the setting Sun's light and as the blues and greens are scattered, the main light frequencies reaching your eyes are the longer wavelength, lower frequency waves which are the yellow, orange and red.

A sad factor is that in Bangkok, with their being relatively high pollution levels, the sunsets are more spectacular! A dramatic result of a disappointing factor.

Dave Canavan has an MSc in Behavioural Ecology and is the Head of Secondary at Garden International School. Dave is fascinated by science and loves animals, especially the dangerous kind! You may contact Dave at davidc@gardenbangkok.com

<http://www.james-robinson.ltd.uk/colour.htm>; <http://www.devx.com/projectcool/Article/19954>;
http://www.sciencemadesimple.com/sky_blue.html; <http://science.howstuffworks.com/question39.htm>



Dave and python

Computips!

✦ Cut and paste matters

Many times it is really very annoying to do cut & paste or copy & paste for your regular folders. For this we need an easy solution as we can directly send our data (movies, songs, or your relevant one) in our favorite folder as we do by the right click and sending anything directly to Desktop, mail Recipient, My Documents or Pen Drive.

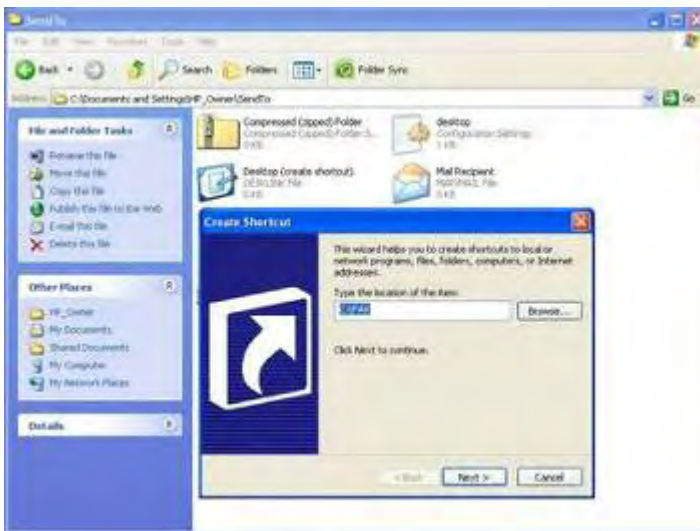
Now the solution for your problem is given below.....

Step 1: Copy the Address of your desired folder from address bar for example if it is C:\FAV copy it (its location on your hard drive)

Step 2: Go to C:\ drive, go to Tools->Folder Option->View->Hidden Files and Folders->Hide protected operating system files (Recommended)->Unhide Hide protected operating system files (Recommended)
#It will give a warning, don't worry!!!

Step 3: Go to C:\Documents and Settings\Administrator\Send To
#In place of Administrator its your User name

Step 4: Right Click -> New-> Shortcut. Paste The name of your desired folder in "Type the location of the Item" Text Field for Example C:\Fav ->Next->Finish



Step 5: Go to C:\ drive, go to Tools->Folder Option->View->Hidden Files and Folders->Hide protected operating system files (Recommended)->Hide Hide protected operating system files (Recommended)
#Step 5 is optional

You may browse your desired folder also....

✦ Disable error reporting in XP:

If error reporting in XP is bugging you then turn it off.

When a system error occurs in XP, a little dialog box appears asking if you want to report the error to Microsoft. To disable error reporting, follow these directions: 1. Right-click My Computer and choose Properties. 2. Click the



Advanced tab on your System Properties dialog box. 3. Click the Error Reporting button on the Advanced tab. 4. Place a checkmark next to "Disable error reporting. 5. Leave the other radio button unchecked next to the text labeled, "But notify me when critical errors occur." 6. Click OK. Hope you loved this useful post!!!!

☒ Use Google to get Serial No of any Software

I know it is old but more of them don't know this.

Most of the people downloading trial and using it, only after the expiration of trial they try for crack, Serial No, Keygen, Patch.... But many don't know where to get Serial No, Some websites may be infecting your system with Trojan horse, Viruses, Ad ware, Spy ware....

So for beginners this is a simple way to find hack with less effort and it saves time to, But make sure you have anti virus activated before trying to get some Serials, Patches to avoid data loss:

Just follow the steps as instructed below

- 1) Go to <http://www.google.com>
- 2) type this syntax in search bar " 94FBR"
- 3) Replace Product name with desired software and leave a space then type 94FBR
- 4) Press enter, that's it

Now you receive Many pages which contains Serial no, Crack, Patches....

Just make a try, this simple trick works for many people

☒ MegaUpload ToolBar Hacks

Hello Friends...

There is a grate tip to download from mega upload no need for download & Install That Toolbar.

OK, 1st you want to Firefox browser to do that trick...

1. Open firefox.....
2. Go to Address bar and type "about: config"
3. then search for "general. useragent. extra. firefox"
4. then double click on that ..
5. change the default text with "Firefox/2.0 MEGAUPLOAD 1.0"
6. You have Done It....!
7. Now Download Without Any Toolbar

(for details go to <http://interestingandusefulwebsites.wordpress.com/category/interesting-tips-about-pc/>)

Suggestions for improving quality of Newsletter

- from Soil Conservation Society of India soilcsi@yahoo.co.in

1 QUALITY

- Improvement in the usage of language, grammar, syntax, readability, clarity of expression.
- The technical quality of the write up should be checked through peer revision by the editorial committee.
- Use of good quality visuals, proper illustrations and high resolution photographs.
- Need for professionalism in preparing layout design and use of colours keeping in mind the process of reproduction.
- Quality of paper, printing and binding to be improved.

2 CONTENT

- Peer group should finalize the Manuscript
 - The news should be focused on target audience.
 - Focus on mandate of the publication
 - There should be balance between topics, regions, subject matter, and different heads.
 - The news may cover latest policy changes, policy information, implementation of agricultural policies and its likely impact, strategies adopted for problem solving.
 - The news should include success stories from thematic areas and also input from farmers.

3 PRESENTATION

- The size and shape of the newsletter should be as per international standard.
- The newsletter must have visual depiction in the form of actual photographs, diagrams, flow charts, figures, schematic diagrams for clear understanding of the news.
- Need for professional layout, style, colour and font selection
- Need for right type of paper, printing and binding.

4 STANDARDS

- ISSN should be printed.
- Need for access through website for registered users, i.e. access to newsletter through internet.
- CD Rom format of the newsletter can be produced.
- It should be catalogued under British library or Library of American Congress.

LAUGHTER ZONE ... JUST TO LAUGH

▲ **Are you Internet Junkie?**

- When asked to your address, your answer begins with http://
- Instead of calling you to dinner, your spouse sends e-mail.
- You chat with your fingers, not your mouth.
- You use Netscape 4.72, and you check every week whether version 4.73 was released.
- You know the difference between Java and Java script.
- Most of your friends have an @ in their names.
- In order to watch CNN you move to www.cnn.com
- On your business card the e-mail appears before the phone number.
- You find yourself typing "com" after every period when using a word processor.com
- You check your mail. It says "no new messages." So you check it again.
- You can perfectly imitate the sound pattern of your modem connecting to your ISP.
- You can think of nineteen keystroke symbols that are far more clever than :-).
- You are told about a new program, and you are disappointed to find that it is a TV program.
- Not only do you check your email more often than your paper mail, but you remember your network address faster than your postal one.
- You wake up at 3 a.m. to go to the bathroom and stop to check your e-mail on the way back to bed.
- Customer: "Can you copy the Internet for me on this diskette?"

▲ **Another one.....**

A panda (a Hindu religious man) walks into a café. He orders a sandwich, eats it, then draws a gun and proceeds to fire it at the other patrons.

"Why?" asks the confused, surviving waiter amidst the carnage, as the panda makes towards the exit. The panda produces a badly punctuated wildlife manual and tosses it over his shoulder.

"Well, I'm a panda," he says at the door. "Look it up."

The waiter turns to the relevant entry in the manual and, sure enough, finds an explanation.

"Panda. Large black-and-white bear-like mammal, native to China. Eats, shoots and leaves."

▲ **Bill Gates on plane**

One night, a Delta twin-engine puddle jumper was flying somewhere above New Jersey. There were five people on board: the pilot, Michael Jordan, Bill Gates, The Dali Lama, and a hippie.

Suddenly, an illegal oxygen generator exploded loudly in the luggage compartment, and the passenger cabin began to fill with smoke. The cockpit door opened, and the pilot burst into the compartment. "Gentlemen," he began, "I have good news and bad news. The bad news is that we're about to crash in New Jersey. The good news is that there are four parachutes, and I have one of them!" With that, the pilot threw open the door and jumped from the plane.

Michael Jordan was on his feet in a flash. "Gentlemen," he said, "I am the world's greatest athlete. The world needs great athletes. I think the world's greatest athlete should have a parachute!" With these words, he grabbed one of the remaining parachutes, and hurtled through the door and into the night.

Bill Gates rose and said, "Gentlemen, I am the world's smartest man. The world needs smart men. I think the world's smartest man should have parachute, too." He grabbed one, and out he jumped.

The Dali Lama and the hippie looked at one another. Finally, the Dali Lama spoke. "My son," he said, "I have lived a satisfying life and have known the bliss of True Enlightenment. You have your life ahead of you, you take a parachute, and I will go down with the plane."

The hippie smiled slowly and said, "Hey, don't worry, pop. The world's smartest man just jumped out wearing my backpack."



▲ How to divide assets at a divorce, Cambodian style

This handout from the Phnom Penh Post shows a house sawed cut in half by a Cambodian couple as they were hoping to avoid the country's convoluted divorce process in Prey Veng province near Phnom Penh. (AFP/PHNOM PENH POST-HO 081011)

Few Nice/Interesting Words

- Reach for the stars. Although you will never touch them, you may get a little stardust on your hands – *Dr. N. Borlaug*

- The sound body is the product of a sound mind. - *George Bernard Shaw*

- When the well is dry, we know the worth of water. - *Benjamin Franklin* (1706-1790), from Poor Richard's Almanac, 1746

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

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Syngenta is a leading agribusiness committed to stewardship and sustainable agriculture through innovative research and technology. We develop technologies to drive the environmental, economic and social sustainability of agricultural systems.

Syngenta is committed to supporting the concepts of conservation agriculture and works with partners and stakeholders worldwide on many projects to enhance soil and water quality.

Learn more about Syngenta in www.syngenta.com



INFORMATION ABOUT MEMBERSHIP IN WASWC

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

You may ask sombatpanit@yahoo.com about your membership status, i.e. up to which year you have paid. Then you may send your membership fee to either John Laflen or me or any other address in the following list:

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

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

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

b. Dr. Samran Sombatpanit, WASWC Immediate Past President, 67/141 Amonphant 9, Soi Sena 1, Bangkok 10230, Thailand. Phone/Fax: +66-25703641, sombatpanit@yahoo.com. He accepts Bank Draft from every country. Mark the draft "payable to Dr. Samran Sombatpanit". He receives SWIFT through the Bangkok Bank, Bangkok Branch, 2124 Phaholyothin Road, Jatujak, Bangkok 10900, Thailand. Phone: +66-25614091/ 25791146-8, Fax: +66-25791149.

SWIFT CODE: BKKBTHBK, A/C No. 161-0-210864, which you should also indicate “payable to Dr. Samran Sombatpanit”.

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

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

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

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

OTHER ADDRESSES TO SEND THE MONEY TO WASWC

Argentina: Eduardo Rienzi, Fac. of Agronomy, Univ. of Buenos Aires, Av. San Martin, Buenos Aires. Banco Nacion, suc 0082 Nro 200388227 CBU 01100204-30002003882279. rienzi@mail.agro.uba.ar

Australia: Kristie Watling, Department of Natural Resources and Water, 203 Tor Street, Toowoomba Q 4350, (P.O. Box 318, Toowoomba Q 4350) Phone: +61-(0)7-4688 1092, Facsimile: +61-(0)7 4688 1487

Kristie.Watling@nrw.qld.gov.au, www.nrw.qld.gov.au

Brazil: Antonio Guerra, Avenida Jose Luiz Ferraz, 250, apartamento 1706, CEP. 22.790-587, Rio de Janeiro – RJ BRAZIL.

SWIFT: BRASRRJRJO, Banco do Brasil – conta 652291-2; agencia 3652-8. antoniotguerra@gmail.com

India: Surinder S. Kukal, Department of Soils, Punjab Agricultural University, Ludhiana 141004.

sskukal@rediffmail.com

India: Suraj Bhan, Soil Conservation Society of India (SCSI), G-3, Nat. Soc. Block, NASC Complex, Dev Prakash Shastri Marg, New Delhi-110012. bhan_suraj2001@yahoo.com

Indonesia: Syaiful Anwar, WASWC Indonesia Chapter (Masyarakat Konservasi Tanah dan Air Indonesia, MKTI, c/o Ministry of Forestry, Jakarta) with following account details: Bank Mandiri cabang Jakarta Gedung Pusat Kehutanan;

Account holders: Trisnu Danisworo, qq Zulfikar Ali; A/C No: 102-00-0437516-5. sanwar@cbn.net.id

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

Kenya: James O. Owino, Dept. of Agric Eng., Egerton University, P.O.B. 536 Njoro. SWIFT: BARCKENXANKE, Bank code: 003, Branch code: 027, Acc. No. 1214170, P.O. Box 66, Nakuru 20100. joowin@yahoo.com

Morocco: Mohamed Sabir, National School of Forest Engineers, BP 511 Salé. sabirenfi@wanadoo.net.ma

Netherlands: WRS Critchley, ABN AMRO Bank, Gelderlandplein, POSTBUS 87091, 1080 JB Amsterdam. Account number 549365478, BIC number = ABNANL2A, IBAN = NL28ABNA0470430559. wrs.critchley@dienst.vu.nl

Serbia: Miodrag Zlatic, WASWC President, Faculty of Forestry, University of Belgrade, Kneza Viseslava 1, Belgrade. Serbia. Phone: +381-11-3553122 (o), +381-11-3583280 (h), +381-63661549 (m). He can receive money from the Balkans Region through the Raiffeisen Banka AD, Beograd, Republic of Serbia, SWIFT code: RZBSRSBG,

Customer’s name: Zlatic Miodrag, A/C No. RS35265051000004691675. miodrag.zla@sbb.rs,

South Africa: Richard Fowler, fax 086 672 6872 or e-mail rmfowler@iafrica.com

Spain: Artemi Cerdà, Departament de Geografia, Universitat de València, 46010-Valencia. acerda@uv.es

Thailand: Karika Kunta, Land Development Dept., Chatuchak District, Bangkok 10900, Thailand, Savings A/C No. 256-210171-8 Siam Commercial Bank (Tops Central Lat Phrao Branch) care_045@yahoo.com

United Kingdom: Mike A. Fullen, School of Applied Sciences, University of Wolverhampton, Wolverhampton WV1 1SB, U.K. Phone: +44-1902-322410, Fax: +44-1902-322680, M.Fullen@wlv.ac.uk. He can receive money from within the UK in pound sterling equivalent to the rates stated above. Cheques should be made payable to the University of Wolverhampton. You may use the most recent exchange rate for converting US\$ into GBP.

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.



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