

NEWSLETTER

1/2006



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Cover photo: Terracing in Wang Jia Catchment, Yunnan Province, China.

Photo by Mike Fullen (Wolverhampton).

See the Ph.D. thesis abstract by Madhu Subedi (2006).

E.S.S.C. NEWSLETTER 1/2006

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- President: J.L. Rubio
CIDE, Camf de la Marjal s/n
Apartado Oficial
E-46470 Albal-Valencia, Spain
jose.l.rubio@uv.es
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Hungarian Academy of Sciences
Geographical Research Institute
Budaorsi ut. 43-45
H-1112 Budapest, Hungary
kertesza@helka.iif.hu
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Dipartimento di Agronomia Ambientale e Teritoriale
Settore Pedologia
Viale delle Scienze
I-90128 Palermo, Italy
dazzi@unipa.it
- Secretary: P. Bielek
Soil Science and Conservation
Research Institute, Gagarinova 10
827 13 Bratislava, Slovakia
bielek@vupu.sk
- Treasurer: W. Cornelis
Department of Soil Management and Soil Care
Coupure links 653
B-9000 Gent, Belgium
wim.cornelis@UGent.be
- Co-Treasurer: D. Gabriels
Department of Soil Management and Soil Care
Coupure links 653
B-9000 Gent, Belgium
donald.gabriels@rug.ac.be
- Members: G. Govers, Leuven, Belgium
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The NEWSLETTER is published by the Editorial Board:

- Editor-in-Chief: M.A. Fullen
School of Applied Sciences
The University of Wolverhampton
Wulfruna Street, Wolverhampton WV1 1SB, U.K.
m.fullen@wlv.ac.uk
- Assistant Editor: C.A. Booth, Wolverhampton, U.K.
c.booth@wlv.ac.uk
- Co-Editors: N. Fohrer, Kiel, Germany
A. Rodríguez Rodríguez, La Laguna, Canary Islands, Spain

Produced and composed by the Editor-in-Chief at The University of Wolverhampton (U.K.)

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Contents

| | |
|--|----|
| IN MEMORIAM: DR KATHY DAVIES (1953 – 2004) | 3 |
| RESEARCH IN ‘EROSION AND SOIL AND WATER CONSERVATION’ (ESW) AT THE UNIVERSITY OF WAGENINGEN, THE NETHERLANDS | 6 |
| CRUCIAL CHOICES FOR THE NASCENT EUROPEAN RESEARCH COUNCIL (ERC) | 8 |
| CO-OPERATION PACKAGE OF ‘THE WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION’ (WASWC) TO CONFERENCE ORGANIZERS | 11 |
| NEW PH.D. THESES | 14 |
| • Kathy Davies (2005). The potential of palm (Borassus) mat geotextiles as a soil conservation technique, Wolverhampton | 14 |
| • Ferko Bodnar (2005). Monitoring for impact: Evaluating 20 years of soil and water conservation in southern Mali, Wageningen | 15 |
| • Helena Postbus (2005). Adoption of terraces in the Peruvian Andes, Wageningen | 16 |
| • Madhu Subedi (2006). Effectiveness of an agricultural technology research and development project for increasing sustainability of cropping systems in upland areas of Yunnan Province, China, Wolverhampton | 18 |
| • Greet Ruysschaert (2006). Spatial and temporal variability of soil losses due to crop harvesting, Leuven | 20 |
| CONFERENCE REPORTS | 22 |
| BOOK REVIEWS | 22 |
| • The Soil Erosion Web Site (http://soilerosion.net/) | 22 |
| • J.I. Drever (Ed.) (2005). Surface and Ground Water, Weathering and Soils. Volume 5, Treatise on Geochemistry H.D. Holland and K.K. Turekian (Eds), Elsevier, Oxford, UK | 23 |
| BOOK ANNOUNCEMENTS | 24 |
| • Directory of European Organizations and Persons Working on Soil Protection (2006) | 24 |
| • I. Håkansson (2005). Machinery-induced Compaction of Arable Soils, Incidence – Consequences – Counter-measures. Swedish University of Agricultural Sciences, Uppsala, Department of Soil Sciences, Reports from the Division of Soil Management, No. 109, 154 pp. | 24 |
| • J. Boardman and J. Poesen (Eds) (2006). Soil Erosion in Europe. J. Wiley and Sons, Chichester, UK. (Scheduled for publication, August 2006) | 26 |
| PUBLICATIONS BY ESSC MEMBERS | 29 |
| ANNOUNCEMENT | 38 |
| Appointment of new Ph.D. research students | 38 |
| Institutional movements and promotions of ESSC members | 38 |
| ESSC membership list and contact details | 38 |
| FORTHCOMING DATES FOR YOUR DIARY... | 39 |

| | |
|--|----|
| FIRST ANNOUNCEMENTS | 39 |
| • 1 st European Congress of Conservation Biology: 'Diversity for Europe', 22 – 26 August 2006 in Eger, Hungary | 39 |
| • International Conference on 'Farm Level Adoption of Soil and Water Conservation Measures and Policy Implications in Europe.' 1 – 3 October 2006 in Wageningen, The Netherlands | 40 |
| • 2 nd International Conference on Ground Bio- and Eco-engineering 'The Use of Vegetation to Improve Slope Stability', 14 – 18 July 2008 in Beijing, China | 44 |
| SECOND ANNOUNCEMENTS | 46 |
| • The International Scientific Conference 'BALWOIS 2006', 23 – 26 May 2006 in Ohrid, Macedonia | 46 |
| • Long-term Studies in Ecology: a celebration of 150 years of the Park Grass Experiment, 22 – 24 May 2006 at Rothamsted Experimental Station, UK | 47 |
| THIRD ANNOUNCEMENTS | 48 |
| • The XVIII th Conference of the Romanian National Society of Soil Science '100 years of Soil Science in Romania', XVIII th National Soil Conference, 21 – 26 August 2006 in Cluj, Romania | 48 |
| • International ESSC Conference on 'Soil and Water Conservation under Changing Land Use', 12 – 15 September 2006 in Lleida, Spain | 49 |
| • Environmental change, geomorphic processes, land degradation and rehabilitation in tropical and subtropical highlands, 19 – 25 September 2006 in Mekelle University, Ethiopia | 59 |
| FOURTH ANNOUNCEMENTS | 62 |
| • 5 th International Congress of the European Society for Soil Conservation, 25 – 30 June 2007 in Palermo, Italy | 62 |
| • The 14 th Conference of ISCO (International Soil Conservation Organization), 14 – 19 May 2006 in Marrakech, Morocco | 63 |

In Memorium

Dr Kathy Davies (1953 – 2004)

Kathy Davies was a remarkable person. I first met her as an undergraduate student on the B.Sc. Environmental Science Degree course at The University of Wolverhampton (UK). She came to study as a mature student, having completed an interesting range of activities, including being a Wolverhampton bus driver and the owner of a cinema in The Gambia. Kathy had a strong personal commitment to international development and had a long association with The Gambia.



The module 'Soil Use and Management' sparked a strong interest in the issues of soil erosion and conservation. She asked if anyone had used palm leaves as a soil conservation treatment and a literature search revealed little soil conservation work using this resource. Kathy set about her B.Sc. Project on the use of palm leaf geotextiles. She had mats constructed in The Gambia and imported to the UK. These were then installed on erosion plots at the Hilton Experimental Site, in Shropshire, England. Kathy was very diligent in her Project, finding the mats were very effective in erosion control. Kathy's Project was awarded a grade A and Kathy graduated with a B.Sc. in Environmental Science in July 2001.

At this time, Kathy asked me if it was possible to pursue a Ph.D. by self-funded part-time research. I confess I tried to discourage her, mindful of the difficulties, frustration and expense of such a route. However, Kathy was undaunted and persisted in her requests. Thus, Kathy commenced her part-time research. Kathy undertook her research in a very committed and dedicated manner and produced excellent results. Despite all the challenges and difficulties, she remained very determined to complete her programme.

Three years of field research led to the development of a commendable body of knowledge. This is testified by her growing body of publications and conference presentations (listed below). Her registration was successfully transferred from Master of Philosophy (M.Phil.) to Ph.D. Kathy established a series of experiments and these are summarized in her thesis abstract, reported in the 'Ph.D. thesis Abstract' section. These included the use of erosion plots, splash erosion experiments and investigating effects of mat treatments on soil properties.

Sadly, in April 2004 Kathy was diagnosed with cancer. After a valiant struggle against her illness, Kathy died on 16 July 2004. On Kathy's behalf, I collated a portfolio of her work, entitled 'The potential of palm (*Borassus*) mat geotextiles as a soil conservation technique'. The portfolio was subject to the usual examination procedures and the award of the posthumous degree of Ph.D. was agreed by the examiners in February 2005. The External Examiner was Professor Roy Morgan

(Silsoe College, Cranfield, UK) and the Internal Examiner was Dr Eleanor Cohn (The University of Wolverhampton). In fact, Kathy had hoped Roy would be External Examiner, had circumstances been happier. The award of Ph.D. was conferred on Kathy by The University of Wolverhampton in May 2005 and Kathy's three daughters received their mother's Ph.D. certificate at the University Congregation Ceremony in September 2005.

Kathy's work lives on. We have archived Kathy's data and samples and the results are in various stages of preparation for papers in international refereed journals. For instance, a paper on the work is in press in *'Earth Surface Processes and Landforms'*. On the basis of her preliminary work, we made a proposal to the European Union (EU). The proposal on 'The environmental and socio-economic contribution of palm geotextiles to sustainable development and soil conservation' (acronym BORASSUS) was accepted and supported by the EU. The BORASSUS Project came into effect on 1 July 2005 (EU Contract No. INCO-CT-2005-510745) and is scheduled to run for three years. The BORASSUS Project involves an international team, incorporating scientists from Belgium, Brazil, China, The Gambia, Hungary, Lithuania, South Africa, Thailand, The United Kingdom and Vietnam. A full-time University of Wolverhampton Ph.D. research studentship is an integral component of the BORASSUS Project. The researcher will continue Kathy's work at the Hilton Experimental Site. We will report the progress of the BORASSUS Project in subsequent ESSC Newsletters.

Publications and Conference Presentations

- Davies, K., Fullen, M.A., Black, A.W. and Guerra, A.J. (2002). **The potential of palm (*Borassus*) mat geotextiles as a soil conservation technique**. In: Proceedings of the 'IV Simpósio Nacional de Geomorfologia', São Luis (Brazil). CD-ROM (6 pp.).
- Davies, K. and Fullen, M.A. (2004). **Evaluating the soil conservation potential of palm (*Borassus*) leaf geotextiles at the Hilton Experimental Site**. Shropshire, U.K. Paper presented at the 4th International Congress of the European Society for Soil Conservation (ESSC) on 26 May 2004 and published in the Congress Proceedings (p. 97-100).
- Davies K., Booth C.A., Fullen M.A., Li Yong Mei and Zheng Yi (2004). **Soil conservation and agro-environment research in China: past, present and future**. 7th European Conference on Agriculture and Rural Development in China, University of Greenwich, London (August 2004).
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- Guerra, A., Marcal, M., Polivanov, H., Sathler, R., Mendonça, J., Guerra, T., Bezerra, F., Furtado, M., Lima, N., Souza, U., Feitosa, A., Davies, K., Fullen, M.A. and Booth, C.A. (2005). **Environmental management and health risks of soil erosion gullies in São Luis (Brazil) and their potential remediation using palm-leaf geotextiles**. p. 459-467 In: C.A. Brebbia, V. Popov and D. Fayzieva (Eds), Environmental Health Risk III. Wessex Institute of Technology Press, Southampton.
- Davies K., Fullen M.A. and Booth C.A (2006). **A pilot project on the potential contribution of palm mat geotextiles to soil conservation**. Earth Surface Processes and Landforms (In press).

Mike Fullen

The University of Wolverhampton, UK

Research in 'Erosion and Soil and Water Conservation' (ESW) at The University of Wageningen, The Netherlands

The 'Erosion and Soil and Water Conservation' (ESW) Research Unit at The University of Wageningen (NL) aims at first class research. This is being achieved by first class staff and Ph.D. students. Output is published in international peer-reviewed journals. All ESW research is part of Theme 4 ('Sustainable Production and Conservation Systems') of the Graduate School 'Production Ecology and Resource Conservation' (PE&RC) of Wageningen University and Research Centre (UR). ESW has a leading role in the themes 'Land Use and Management' and 'Land Degradation: Processes, Prevention and Remediation' of the Soil Science Centre of Wageningen UR. This Centre consists of five Chair groups of Wageningen UR and four teams of the **ALTERRA** Research Institute (see below).

ESW research is characterized by an integration of biophysical and socio-economic principles and processes. That is why we work at both the field/farmer scale and the catchment/community scale. We maximize internal Wageningen UR co-operation by stimulating Ph.D. projects to have two promoters; one from the beta sciences and one from the gamma sciences.

ESW research is divided over four domains with different contributions for society:

- **Processes and Measurements.** This fundamental research is used to analyse complex real-world land management problems.
- **Assessment and Design.** This applied research is used to solve land management problems.
- **Impact and Adoption.** This strategic research is used to achieve equity and contribute to the Millennium Goals via policy interventions.
- **Sustainable Land Management.** This integrated research is used to obtain synergy from the interdisciplinary approach of problem solving.

Our research is funded by a several resources. Research themes and priorities are updated annually using a SWOT (Strength and Weakness Opportunities Threats) analysis. Ongoing research in 2006 is indicated in the Table below.

ALTERRA is the research institute for our 'green living environment'. We offer a combination of practical and scientific research in a multitude of disciplines related to the green world around us and the sustainable use of our living environment. ALTERRA focuses on flora and fauna, soil, water, the environment, geo-information and remote sensing, landscape and spatial planning, man and society.

In 2006 ESW has the following projects and Ph.D. programmes operational within its four domains

Processes and Measurements (fundamental research)

| Subject | ESW staff/ Ph.D. | Country of research |
|---|------------------|---------------------|
| Improving Water Use Efficiency | Zida | Burkina Faso/Kenya |
| Runoff modelling | Vahedberdi | The Netherlands |
| Wind Erosion and Scattered Vegetation | Leenders | Burkina Faso |
| Remote Sensing and Degradation Assessment | Saran | India |
| Remote Sensing and Erosion Risk | Vrieling | Tanzania/Colombia |
| WOTRO-IP Fauna | Stroosnijder | Burkina Faso/Kenya |

Assessment & Design (applied research)

| Subject | ESW staff / Ph.D. | Country of research |
|--------------------------------------|-------------------|---------------------|
| Water Conservation in Coffee Systems | Nzeyimana | Rwanda |
| Information System for Green Water | Mantel | Sub-Saharan Africa |
| Improved Zai and Zinc Availability | Traore | Burkina Faso |
| SWC Policy Design | Mutekanga | Uganda |
| Sedimentation and Small Dams | Zaid | Eritrea |

Impact & Adoption (strategic research)

| Subject | ESW staff / Ph.D. | Country of research |
|-----------------------------|-------------------|---------------------|
| Better SWC Practices | Aklilu | Ethiopia |
| SWC Adoption | Kessler | Bolivia |
| Scenarios for Olive Systems | Fleskens | Mediterranean |
| Drought Perception | Slegers | Tanzania/Ethiopia |
| EU OLIVERO | De Graaff | Mediterranean |

Sustainable Land Management (integrated research)

| Subject | ESW staff / Ph.D. | Country of research |
|--|-------------------|-------------------------------|
| PAWACON | Sterk | Africa |
| LM after forces migration | Bezuayehu | Ethiopia |
| Quality Indicators for Land Management | Bidogeza | Rwanda |
| Wind and Nature | Riksen | The Netherlands |
| LLTB-INTEG | De Graaff | Benelux |
| Conservation Agriculture (CA) | De Graaff | Sub-Saharan Africa/ Brazil |
| Green Water (GW) | Stroosnijder | Sub-Saharan Africa |

OUR FUTURE CHALLENGE! To submit more research proposals, together with Universities and Institutions in The Netherlands and abroad. For further details, please contact: Professor dr. ir. L. Stroosnijder and visit our web site: www.esw.wur.nl.

Crucial choices for the nascent European Research Council (ERC)

The diverse scientific communities supporting the Initiative for Science in Europe (ISE) welcome the steps taken to date towards establishing the European Research Council (ERC) – notably, the appointment of a Scientific Council of 22 outstanding scientists. Many important decisions must be taken in the coming months to ensure that the ERC meets the high expectations of the community as a truly autonomous agency that funds fundamental research in all disciplines on the basis of scientific excellence, while guaranteeing that the public funding provided for it will be prudently managed.

The choice of legal structure for the ERC will be vital. An ‘Executive Agency’, established and staffed predominantly by employees of the European Commission (EC) recruited through open competition and detachment, is one option; the alternative is a structure that is independent of the EC but in which all member states are represented. The Executive Agency structure risks the ERC developing in a way that makes it indistinguishable from other European Framework Programme actions. On the other hand, an Executive Agency would ensure that the ERC is not subject to pressure for *juste retour* from the member states (where each country receives back the financial equivalent of its contribution). Recognizing also that the ERC must become operational without delay, and that an Executive Agency could be established rapidly, the ISE agrees with the pragmatic choice of an Executive Agency structure, at least for the start-up phase of the ERC, with the possibility to change the legal structure following an independent assessment after 3 – 5 years.

Irrespective of its legal structure, the ERC must be substantially independent of the EC and, crucially, must be allowed to function outside the standard procedures of the Framework Programmes. In this regard, the leading role of the new Scientific Council must be rigorously respected; the Executive Agency must act under the authority of the Scientific Council. As a consequence, it appears imperative to us that the choice of the Director of the Executive Agency must be based on proposals made by the Scientific Council. The alternative, whereby the EC chooses the key officers, would put at risk the trust between the Scientific Council and the Executive Agency that will be essential to earn, in turn, the trust and respect of the wider scientific community.

The new ERC has the opportunity to engage European researchers in a way that the Framework Programmes have so far failed to do. The Executive Agency must grasp this opportunity by choosing procedures that best serve the needs of science in Europe: applications must be evaluated solely on scientific merit; the application and reporting procedures must not overburden scientists with administration, and funding must be through grants, like those of the national funding agencies, rather than, as is currently the case in the Framework Programme, through contracts with tightly defined deliverables and milestones, which are counterproductive to the more unpredictable frontier research.

Finally, while no decision on the level of financing of the next Framework Programme has been announced, we fear that budget negotiations point to a significant reduction in funds for research by the European Union, including the ERC, compared to the recommendations of the EC. Important choices may have to be made about how to distribute this restricted budget. In any event, the ERC must have a budget that is commensurate with the important task in hand – to stimulate basic research and increase the competitiveness of Europe. This budget should be at least €1 billion per year in the first years and grow quickly to €1.5 – 2.0 billion per year (the size of the larger national research council budgets) within the seven-year Framework Programme. A smaller budget than this could completely undermine the ERC. Funding of this magnitude, i.e. at least €9 billion, should be ring-fenced for the ERC in the Framework Programme budget.

The temptation to reduce ERC funding to protect existing actions, however valuable, or to transfer to the ERC the charge of delivering other parts of the Framework Programme (without the associated budget) must be resisted. If the budget is inadequate, the success rate of applications will be too low, many important projects will not be funded and the most excellent researchers will not apply for grants or participate in the peer review process. All of these would doom the nascent ERC.

This letter is endorsed by the Presidents, Chairs, and Director Generals of XXX European organizations in all scientific disciplines under the aegis of the ISE. For further information, see:

www.initiative-science-europe.org

Signatories (as of 16 February 2006):

Academia Europaea, ALL European Academies (ALLEA), European Acoustics Association (EAA), European Arteriosclerosis Society (EAS), European Association of Archaeologists (EAA), European Association for Animal Production (EAAP), European Association for Chemical and Molecular Sciences (EuCheMS), European Association of Experimental Social Psychology (EAESP), European Association for Research on Plant Breeding (EUCARPIA), European Astronomical Society (EAS), European Brain Council (EBC), European Calcified Tissue Society (ECTS), European Calcium Society (ECS), European Ceramic Society (ECerS), European Crystallographic Association (ECA), European Consortium for Political Research (ECPR), European Federation of Biotechnology (EFB), European Federation of Immunology Societies (EFIS), European Federation of Organisations for Medical Physics (EFOMP), European Federation of Psychologists' Associations (EFPA), European Geosciences Union (EGU), European Life Sciences Forum (ELSF), European Life Scientist Organization (ELSO), European Mathematical Society (EMS), European Molecular Biology Laboratory (EMBL), European Molecular

Biology Organization (EMBO), European Network of Immunology Institutes (ENII), European Neutron Scattering Association (ENSA), European Organization of Cancer Institutes (OEI), European Optical Society (EOS), European Physical Society (EPS), European Plant Science Organization (EPSO), European Science Foundation (ESF), European Society for the History of Science (ESHS), European Society for Soil Conservation (ESSC), European Sociological Association (ESA), European Southern Observatory (ESO), European University Association (EUA), EuroScience, Federation of European Biochemical Societies (FEBS), Federation of European Materials Societies (FEMS), Federation of European Microbiological Societies (FEMS), Federation of European Neuroscience Societies (FENS), Federation of European Societies of Plant Biology (FESPB), GAMIAN Europe, League of European Research Universities (LERU), Marie Curie Fellowship Association (MCFA), Marine Research Stations Network (MARS), Phytochemical Society of Europe (PSE), Sauvons la Recherche (SLR).

Editor's note: This letter was contributed by Dr José L. Rubio, who represents to ESSC on the ERC.

WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION (WASWC)

Websites: www.swcc.cn/waswc/, www.waswc.org, <http://waswc.ait.ac.th>

Photo websites: <http://community.webshots.com/user/waswc> &
<http://community.webshots.com/user/waswc1>

Co-operation Package of WASWC to Conference Organizers

WASWC offers a package of co-operation to organizers of conferences* related to the management and care of soil, water and other natural resources, comprising:

1. Before the meeting, WASWC helps announce the event through the WASWC Newsletter, to inform our 5,000 members in over 100 countries.
2. WASWC helps identify speakers who are suitable for the themes of each conference.
3. WASWC gives Guest membership to all participants to the conference for one year, with the same benefits as paid members. This should be announced in the Announcements, the website and at the conference, e.g. WASWC provides Guest membership to all participants for one year.
4. After the meeting, WASWC helps publish a conference summary (~ 400 words) in the WASWC Newsletter.
5. WASWC will help post the digital CONFERENCE ABSTRACTS book on the website at no cost. The book should be carefully prepared by the organizers, with the following structure:
 - i. (p. 1) Conference title (with logo if available), organizers and sponsors, addresses and e-mails, place and date.
 - ii. Background and some information as necessary (up to 400 words or 1 page).
 - iii. Photos from the event, some 6 – 10, with proper captions. (Photos should be of low resolution, ~ 50 – 80 kb each).
 - iv. Abstracts or extended abstracts of all papers, with appropriate sequence, in easily-to-read font types.
 - v. Conclusions and recommendations (no limit for the length, but should be succinct).

WASWC has now put all publications and activities on the three websites operated from Beijing, Tokyo and Bangkok in a seamless style: i.e.

www.swcc.cn/waswc/

www.waswc.org

<http://waswc.ait.ac.th>.

Following are the benefits that Guest members may receive:

1. Access to our online publications, i.e. WASWC Newsletter, Journal (JWASWC) and Proceedings (PWASWC) posted on the website. WASWC will provide username and password for accessing the sites. Up to April 2006, the username is **waswc** and the password is **waswc8641**, respectively. Members will be informed when the password is changed. The quarterly newsletter is a comprehensive publication that keeps members abreast of important news about soil, land, forest, water, conservation, management, participation, law, policy etc. from all over the world, presented in eight languages (English, Spanish, French, Chinese, Portuguese, Bahasa, Russian and Vietnamese), and to be followed by Arabic later.
2. Members may contribute short articles (up to 400 words) from their areas to the newsletter and have interaction with all other contributors: normally done by e-mail.
3. Members are welcome – and encouraged – to publish their research and development works in the peer-reviewed JWASWC and non-peer-reviewed PWASWC at no cost.
4. Members can freely download WASWC Special Publications (SPs) from the website. First issue (2003) is 'Pioneering Soil Erosion Prediction: The USLE Story'; second (2004) is 'Carbon Trading, Agriculture and Poverty' and the third (2005 – 6 – soon to be published) is 'No-Tillage Agriculture'.
5. Members will be among thousands of specialists in various fields. Presently WASWC has around 5,000 members living in over 100 countries where around 120 officers (Councillors, Vice Presidents, National Representatives and Special Representatives) will gladly assist in the matters that members may request.
6. Apart from that, members will have access to several thousands of digital photos concerning all aspects of soil and water conservation, posted on the websites:
<http://community.webshots.com/user/waswc>
<http://community.webshots.com/user/waswc1>
which can be freely downloaded for their use. There is a photo competition, in which each quarter three winners will receive one good book each from our publishing partner, Science Publishers, Inc. USA, www.scipub.net. Photo websites are freely accessible for all members and non-members, and is considered to be the service of WASWC's to society.

Conference organizers are welcome to contact any WASWC officer worldwide to receive the co-operation package, or write to sombatpanit@yahoo.com.

What does WASWC ask the organizers to do?

1. Conference organizers should announce this co-operation in the Announcements, the website and at the conference, e.g. **WASWC provides Guest membership to all participants for one year.**
2. Conference organizers are free to quote the co-operation in a proper manner. They may cite the WASWC at the event as well as in the documents as a co-sponsor, co-organizer or co-operator. Logos of WASWC are downloadable from the photo website:
<http://community.webshots.com/user/waswc>.
3. One copy of the Proceedings (book or CD) should be sent to the Editor of WASWC Newsletter for further publicity:

Dr Samran Sombatpanit

67/141 Amonphant 9
Soi Sena 1
Bangkok 10230
Thailand.

With our best wishes to all conference organizers

Samran Sombatpanit

WASWC Acting President (sombatpanit@yahoo.com)

* In the present context, the word 'conference' covers all kinds of technical meetings, e.g. conference, congress, symposium, workshop, seminar and meeting; at international, national and local levels.

Five new Ph.D. theses are reported in this issue.

KATHY DAVIES

University of Wolverhampton

The potential of palm (*Borassus*) mat geotextiles as a soil conservation technique (2005).

Ph.D. portfolio (submitted posthumously), 160 pp.

Abstract

Geotextiles constructed from *Borassus aethiopum* (black rhum palm) leaves were investigated for their effectiveness in decreasing water erosion. The study aimed to develop sustainable methods of soil conservation where the material meets selected criteria (readily available, simple and cost-effective to manufacture, provides immediate erosion control and possibly increases soil fertility and organic matter content). Grid mats were manufactured in a cottage workshop in The Gambia, West Africa.

The effectiveness of palm leaf geotextiles were investigated at the Hilton Experimental Site in Shropshire, UK. Eight runoff plots (10 x 1 m on a 15° slope) were used, with duplicate treatments, (i) bare soil; (ii) grassed, (iii) bare soil with 1 m palm-mat buffer zones at the lower end of the plots and (iv) completely covered with palm-mats. Results from one year of field study (2002 – 03) indicate sediment yield was 36.8% from replicated covered plots and 35.9% from the replicated buffer zone plots, compared to the control bare plots. Sediment yield equated to 0.45 t ha⁻¹ from bare soil, 0.09 t ha⁻¹ from grassed plots and 0.17 t ha⁻¹ from both the covered and buffer zone plots. Results from a second year of study (2003 – 04) were similar. A 12-plot replicated splash cup experiment (6 areas covered with palm leaf geotextile mats and 6 bare areas) showed the geotextile mats significantly decreased splash erosion rates. The results suggest that the application of palm-mats as protective buffer strips is highly effective in temperate climates.

Keywords: Hilton Experimental Site; Runoff plots; Soil erosion; *Borassus aethiopum*.

For further information, please contact Mike Fullen: m.fullen@wlv.ac.uk

Monitoring for impact: Evaluating 20 years of soil and water conservation in southern Mali (2005).

Abstract

A soil and water conservation (SWC) project has been going on in southern Mali since 1986. Donor support was gradually withdrawn between 1998 and 2002, but no final evaluation was undertaken to learn lessons from this long-term and large-scale experience. The objective of this present research was to find out how to evaluate impact, what the impact in Mali has been, and which recommendations could be made for monitoring and evaluation in SWC projects. A reconstructed logical framework made it possible to find out what was needed for the impact evaluation, what was available from project monitoring and external monitoring, and what additional data and analyses were required. Missing baseline data were substituted by reconstructed baselines and virtual time series. Between 1988 and 2002, agriculture has expanded and intensified, but crop yields have declined and nutrient balances are still negative. Further intensification is needed to halt and reverse the yield decline. The cause-effect chain between project activities and impact showed that the SWC extension approach was effectively increasing farmer adoption of SWC measures. Farmer adoption steadily increased, spread to neighbouring villages and continued after project withdrawal. Erosion control measures (live fences, stone rows, grass strips and check dams) reduced erosion by 50 – 70% and improved crop yields by 5 – 12%. Current annual farmer benefits of increased cotton production largely outweigh the annual SWC extension costs during the project. SWC projects are recommended to complete the logical framework and monitor accordingly, and to collaborate with external monitoring for a more efficient evaluation of impact. Achieving impact may take longer than the project life span. Therefore, project activities should be embedded in a long-term national programme. It also implies that to assess impact after a short project period requires proxy impact indicators that reflect a continuing change, rather than an end-status.

Résumé

Un projet de conservation de l'eau et des sols (CES) s'est installé au Mali Sud depuis 1986. Le financement par les bailleurs de fonds a diminué depuis 1998 et s'est arrêté en 2002, avant qu'une évaluation finale ait eu lieu pour tirer des leçons de cette expérience de longue durée et à grande échelle. Les objectifs de la présente recherche

ont été: développer une méthode d'évaluation d'impact, évaluer l'impact du projet CES au Mali Sud, et faire des recommandations pour le suivi et l'évaluation de futurs projets CES. L'application d'un 'cadre logique' de planification par objectif a relevé les éléments nécessaires pour une évaluation, inventorié les informations déjà disponibles du suivi du projet et du suivi externe, et fait le point sur les données supplémentaires à rassembler et les analyses à effectuer. Au manque de données de la situation initiale, on a remédié par les méthodes de la 'reconstruction de la situation initiale' et de la 'succession virtuelle'. Entre 1988 et 2002, l'agriculture s'est étendue et intensifiée, mais les rendements ont baissé et les bilans minéraux sont toujours négatifs. Une plus grande intensification est encore nécessaire pour augmenter la productivité et la durabilité. La chaîne cause-effet entre les activités du projet et l'impact montre que l'approche CES a effectivement augmenté l'application des mesures CES par les paysans. L'application a augmenté progressivement, s'est diffusée aux villages voisins et a continué après l'arrêt du projet. Les mesures anti-érosives (lignes en cailloux, haies vives, bandes enherbées et traitement des rigoles) ont réduit l'érosion de 50 – 70% et ont augmenté le rendement coton de 5 – 12%. Les bénéfices annuels pour les paysans, provenant de cette production accrue, dépassent largement les coûts de la vulgarisation CES du projet. Recommandations faites aux projets CES futurs: compléter le cadre logique et organiser le suivi conformément, et collaborer avec le suivi externe pour une évaluation de l'impact plus efficiente. Puisque l'impact peut se faire attendre au-delà de la durée du projet, les activités du projet doivent être ancrées dans un programme national à long terme. Cela implique aussi que l'évaluation de l'impact d'un projet de courte durée demande des indicateurs dérivés, qui reflètent les changements en cours plutôt qu'une situation finale.

HELENA POSTHUMUS

Wageningen University

Adoption of terraces in the Peruvian Andes (2005)

Abstract

Soil erosion is a serious constraint for agriculture and rural development in developing countries. Many efforts are made to promote soil and water conservation (SWC) among farm households. However, adoption of SWC practices is often disappointing. This thesis analyses the benefits of terraces and the adoption behaviour of farm households in the Peruvian Andes. The main beneficial effect of terraces is the increased water availability in the soils. However, terraces will only result in increased

production if it is combined with intensified crop management or with crops of high market value. Whether terraces are financially attractive for farmers depends mainly on their personal opportunity cost of labour. Incentives only slightly increase the profitability of terraces. The decision to participate in a SWC-oriented programme plays a key role in the adoption process. Programmes with a top-down approach have a strong influence on the adoption decision. Participants of these programmes installed SWC practices on the rainfed and degraded fields with steep slopes that are used for extensive agriculture or pasture. Participants of a participatory programme have more individual control on the adoption decision, and they installed terraces on the less degraded fields in order to intensify agricultural production. Production functions revealed that terraces do not result in a significant increase of agricultural output at household level, but labour productivity did increase. The functioning of factor markets explained the effect of terraces on the marginal product of land and labour. Terraces have the potential to increase agricultural production and factor productivity, but whether this is of interest of a farm household, depends on the existing markets. Therefore, programmes have to take into account the scarcity of production factors and the opportunities at local markets. As conditions differ per region, SWC interventions should be decentralized.

Resumen

La erosión del suelo es considerada como una restricción mayor a la agricultura y así al desarrollo rural. Están haciéndose muchos esfuerzos promoviendo la conservación de suelos y aguas (CSA). Sin embargo, la adopción de las prácticas de CSA por agricultores está decepcionante muchas veces. Esta tesis analiza los beneficios de terrazas y el comportamiento de adopción de las familias campesinas en los Andes de Perú. El beneficio principal de las terrazas fue la aumentada disponibilidad de agua en el suelo. Sin embargo, las terrazas sólo aumentarán la producción si se las combina con una gestión de cultivo más intensivo o con cultivos con un valor mejor del mercado. Depende del costo de oportunidad de su mano de obra, si las terrazas son atractivas financieramente para las familias campesinas. Los incentivos afectaron solamente ligeramente la rentabilidad de las terrazas. La decisión para participar en un programa orientado al CSA juega un papel importante en el proceso de adopción. Los programas con un enfoque arriba-abajo tienen una influencia fuerte en la decisión de adopción. Los participantes de estos programas instalaron las prácticas de CSA en el terreno deteriorado, lo que es cultivado extensivamente o utilizado como pasto. Los participantes del programa con un enfoque abajo-arriba decidieron individualmente en la aplicación de prácticas de CSA, y ellos instalaron las terrazas en los terrenos fértiles con poco pendiente para intensificar la producción agrícola. Las funciones de producción revelaron que las terrazas no resultaron en un aumento significativo de producción agrícola al nivel de la familia campesina, pero la productividad del mano de obra aumentó. El funcionamiento de mercados de factores de producción explicó los efectos de terrazas en el producto marginal del terreno y del mano de obra. Las terrazas tienen el potencial para aumentar la producción agrícola y la productividad de factores, pero depende de los mercados existentes si esto es de interés a una familia

campesina. Por consiguiente, los programas tienen que tener en cuenta la escasez de factores de producción y las oportunidades en los mercados locales. Tienen que descentralizarse las intervenciones de CSA, como las condiciones difieren por región.

These theses are available as 'Tropical Resource Management Papers' (TRMP) 71 (Fenko Bodnar) and 72 (Helena Postbus).

For further information, please contact:

Dr ing. Wim P. Spaan

Erosion and Soil and Water Conservation

Nieuwe Kanaal 11

6709PA Wageningen

The Netherlands.

Tel: 00 31 317 482764;

Fax: 00 31 317 486103;

E-mail: Wim.Spaan@wur.nl

MADHU SUBEDI

The University of Wolverhampton

Effectiveness of an agricultural technology research and development project for increasing the sustainability of cropping systems in upland areas of Yunnan Province, China (2006). 375 pp.

Abstract

Continued increases in population and escalating environmental degradation have changed the priorities of agricultural development projects in developing and emerging countries towards both increasing production or productivity and improving sustainability. The long-term success of these development projects, especially in terms of improving sustainability, depends on how widely those improved practices which are shown to be effective in achieving the technical objectives, are adopted/adapted by farmers in the targeted region. In these terms, many projects in recent years may be considered to be relatively unsuccessful.

This study aimed to investigate the factors contributing to the effectiveness of agricultural technology research and development projects in improving the sustainability of cropping systems in upland areas of China, together with the factors that might limit their effectiveness. This has involved both a review of recent projects carried out in the region and detailed monitoring and evaluation of one such project carried out in South West China: the SHASEA Project.

The SHASEA Project was implemented in Wang Jia Catchment in Yunnan Province using holistic and multi-disciplinary approaches to address the twin objectives

of increasing productivity of maize, wheat and soybean in a more sustainable and environmentally-friendly way. It introduced into the catchment a range of novel or modified cropping practices, which had been evaluated in plot studies over the preceding six years, together with biological and engineering measures designed to stabilize large scale soil movements in lateral gullies and the main stream. The SHASEA Project was successful in achieving its short-term scientific and technical objectives, but was too short to determine the level of adoption by farmers in the locality.

The present study has used a range of approaches to evaluate the effectiveness of this Project, to monitor the biological, environmental and socio-economic impacts and investigate the perceptions of the farmers about the Project and the likelihood of their adoption of the recommended practices. Participatory approaches were used wherever possible, including detailed household surveys, PRA workshops and discussions with Key Informants. Field surveys and direct observations were also made, together with a limited economic analysis of the modified cropping practices introduced into the catchment.

It was found that the farmers had different perceptions about the range of practices introduced into the catchment. Some were clearly preferred, such as contour cultivation and were likely to be adopted, while others were seen as inappropriate, such as straw mulching and intercropping, and were unlikely to be adopted. The benefits of an innovative, integrated cropping system, INCOPLAST, were not fully appreciated by the farmers. Other practices would only be adopted if the financial returns were favourable, such as the use of polythene mulch. Longer-term measures, such as tree planting schemes, were regarded favourably, but adoption would still depend on economic returns and related issues such as land security. An irrigation scheme was suggested by the farmers, but after installation it was not used extensively for the staple crops in the catchment. It was found that farmers planned to use the irrigation for higher value crops such as tobacco, after the end of the Project.

It has been concluded that, despite the technical and scientific success of the Project, long-term adoption of many of the practices introduced into the catchment will be low, unless considerable incentives are used or much more effective dissemination techniques employed. It is considered that the outcomes would have improved considerably if participatory approaches had been used from the outset, to engage farmers more fully with the project, to ensure that the practices introduced were as appropriate as possible, to achieve greater ownership of the objectives and outcomes, leading to higher adoption rates. More emphasis should have been given to the dissemination of the outcomes at farmer level outside the catchment of study and there should have been more involvement with the regional policy makers and extension officials throughout the programme. Longer-term improvements in sustainability at the catchment level have not yet been demonstrated.

These outcomes are discussed within the context of other agricultural projects carried out in South-East Asia and other developing regions.

Based on the outcomes and conclusions from this study, a series of recommendations are made which are presented as good practices for future agricultural development projects in South-East Asia.

Contact Madhu Sudedi on:
M.Sudedi@wlv.ac.uk

Spatial and temporal variability of soil losses due to crop harvesting (2006)

Abstract

For decennia, water and wind erosion were considered to be the most important soil erosion processes acting on cropland. In the early 1990s, it was recognized that also soil tillage practices, such as mouldboard ploughing, might lead to considerable soil redistribution with important consequences for soil quality. The fact that the harvest of crops such as sugar beet, potato, chicory roots, carrots, cassava and sweet potato can lead to truncation of the soil profile has hereto rarely been taken into account by earth scientists. Large masses of soil clods and soil adhering to such crops may, however, be exported from the field together with the harvested crop. This soil erosion process is abbreviated as SLCH or 'Soil Loss due to Crop Harvesting'.

This thesis investigated the importance and controlling factors of soil losses due to crop harvesting at various spatial and temporal scales by gathering literature from various sources, field measurements and analyses of soil tare data measured in crop-processing factories. The focus was mainly on mechanically harvested sugar beet and potato as these crops are from an areal point-of-view the most important SLCH-crops in Belgium and Europe.

SLCH varies between a few to tens of Mg per hectare and per harvesting event. These values are from the same order of magnitude as soil losses by water and tillage erosion. The controlling factors could be divided into four main categories, i.e. soil, crop characteristics, agronomic practices and harvesting technique. Soil moisture content during the harvest appeared to be the most important variable controlling SLCH for sugar beet. This is in contrast to the harvest of potatoes, whereby not adhering soil, as in the case for sugar beet, but soil clods cause the largest variability in soil losses. These soil clods are predominantly dependent on soil texture. Differences in harvesting technique render comparison of SLCH-rates within Europe difficult. For the same reason, results from mechanized agriculture in Europe cannot be straight away extrapolated to non-mechanized agricultural systems elsewhere. Besides evolutions in crop yields, evolutions in harvesting technique play also an important role for soil losses on the long term. Before mechanization, soil losses were only one- third to one-fifth of current SLCH-rates. At the beginning of mechanization, soil losses increased sharply, after which, especially from the end of the 1980s onwards, they started to decrease again resulting from improvements in the cleaning capacity of harvesting machines. On the long term, the types of crops grown in crop rotation cycles need also to be considered. In the middle of the 19th century, mean yearly

SLCH-rates on cropland were 0.4 Mg per hectare in Belgium. This average soil loss rate increased to 2.4 Mg in the 1970s, while current soil losses are 1.8 Mg per hectare and per year. This has led, since 1846, to a soil profile truncation of 1.2 cm or a total soil export from Belgian cropland of more than 163×10^6 Mg (109 hm^3). The masses of soil, transported over the road resulting from SLCH, i.e. yearly more than 600,000 Mg or 0.4 hm^3 (ca. 20,000 trucks of 30 Mg) are significantly larger than the masses of soil, i.e., ca. 360,000 Mg, yearly delivered to rivers by water erosion.

Publication list:

Ruysschaert, G., Poesen, J., Verstraeten, G., Govers, G. (2004). **Soil loss due to crop harvesting: significance and determining factors.** Progress in Physical Geography 28(4), 467-501.

Ruysschaert, G., Poesen, J., Verstraeten, G., Govers, G., (2005). **Interannual variation of soil losses due to sugar beet harvesting in West Europe.** Agriculture, Ecosystems and Environment 107, 317-329.

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Li, Y., Ruysschaert, G., Poesen, J., Zhang, Q.W., Bai, L.Y., Li, L., Sun, L.F., In press. **Soil losses due to potato and sugar beet harvesting in NE China.** Earth Surface Processes and Landforms.

Supervisors

Professor Dr Jean Poesen

Professor Dr Gert Verstraeten

Professor Dr Gerard Govers

Physical and Regional Geography Research Group, Department Geography-Geology, K.U. Leuven, Belgium.

E-mail:

Greet_Ruysschaert@hotmail.com

Jean.Poesen@geo.kuleuven.be

Conference Reports

No conference reports have been submitted for this issue. Please remember, this is your opportunity to report conference information to your ESSC colleagues.

Deadlines for submission of future material are: **1 July 2006**

1 October 2006

10 January 2007.

Book Reviews

The Soil Erosion Site

<http://soilerosion.net/>

This website has been well put together by Dave Favis-Mortlock (The Queen's University of Belfast, Belfast, UK). The layout is pleasing to the eye, and it is easy to find your way about it. The text is apposite, succinct, easy-to-read and well balanced in its approach. The many colour images are good and often striking. Briefly, it is a very useful site and even people like me who have been around rather a long time, can find new things and images on it. To quote: *"The soil erosion site brings together reliable information on soil erosion from a wide range of disciplines and sources. It aims to be the definitive internet source for those wishing to find out more about soil loss and conservation"*. It largely meets its aims.

The site describes what soil erosion is, its processes, its past impacts, as well as its present extent, the size and frequency of erosion events, and the on- and off-site impacts of erosion. It is brave enough to say what we still don't know about erosion, what is likely to happen in the future, and even has a few pictures of erosion on other planets. There are many useful links to other internet sites: to photos and videos of erosion; to erosion and conservation organizations and projects; to meetings; to data on soil erosion; and, as you would expect from Dave, there is a section on erosion models.

There are still a number of areas on the site which are under construction, so there is little on wind and tillage erosion, nor on where soil erosion occurs, nor how to prevent it and the question 'is more research needed?' is hardly answered. And perhaps there should be more on mass movements on eroding slopes. Some links also need updating and many relate to the years 2000 – 2002.

However, apart from these minor caveats this is a really good internet site and for those wanting to learn (more) about soil erosion it is a very good place to start. Well done Dave, please keep up the good work, and hopefully before too long the site will be completed and updated. The soil erosion community owe Dave a debt of gratitude

for creating the site. It could also help by sending him material, or at least contact details, though if we all did that I suppose the site would become unmanageable or at least become difficult to navigate.

Visit the soil erosion website, it's worth it.

Dr Bob Evans

Anglia Polytechnic University, Cambridge, U.K.

J.I. Drever (Ed.) (2005). **Surface and Ground Water, Weathering and Soils**. Volume 5, Treatise on Geochemistry, H.D. Holland and K.K. Turekian (Eds), Elsevier, Oxford, UK, 626 pp. (ISBN 0-08-044719-8)

'Treatise on Geochemistry' presents an integrated summary of modern-day geochemistry, ranging from the solar system to the environment (Executive Editors: H.D. Holland and K.K. Turekian). This issue, *Surface and Ground Water, Weathering and Soils* (Edited by J.I. Drever), forms volume number five in the range (set of 10 volumes). The book provides a detailed overview of the: (a) composition of surface and ground waters on the continents and the mechanisms that control the compositions; (b) tools and methodologies used in modern studies of the geochemistry of surface and ground waters; and (c) role of weathering and soil formation in geochemical cycles: weathering affects the chemistry of the atmosphere through uptake of carbon dioxide and oxygen, and palaeosols provide information on the composition of the atmosphere in the geological past.

The book consists of 18 chapters, each offering comprehensive text reviews, which are supported with extensive figures (some in colour), photographs and exhaustive reference lists. It is a notable contribution for the shelves of all earth/environmental scientists and an indispensable reference for final-year undergraduates and postgraduate students. Those chapters of specific relevance to the ESSC readership are Chapter 1: *Soil Formation* by R. Amundson (University of California, USA), Chapter 6: *Plants and Mineral Weathering: Present and Past* by E.K. Berner, R.A. Berner (Yale University, USA) and K.L. Moulton (Kent State University, USA) and Chapter 18: *Soils and Global Change in the Carbon Cycle over Geological Time* by G.J. Retallack (University of Oregon, USA). The primary components of these sections include: (i) factors of soil formation; (ii) soil morphology; (iii) mass balance models of soil formation; (iv) processes of matter and energy transfer in soils; (v) soil data compilations; (vi) studies of modern weathering; (vii) geological history of plants, weathering and atmospheric CO₂; (viii) approaches to the study of palaeosols; (ix) record of past soil and global change; and (x) soils and global carbon cycle changes.

UK Price £60.00 paperback

Dr Colin A. Booth

School of Applied Sciences

The University of Wolverhampton, UK.



Directory of European Organizations and Persons Working on Soil Protection (2006)

The ESSC (in co-operation with the CIDE, SSCRI and SCAPE) has completed the Directory of European Organizations and Persons Working on Soil Protection. The Directory provides information on organizations and people who are dedicated to soil conservation and degradation.

The price for non-ESSC members is €10.

All orders should be addressed to The Soil Science and Conservation Research Institute in Bratislava. Contact details are:

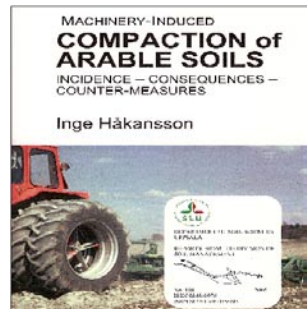
Vyskumny ustav podoznalectva a ochrany pody
Soil Science and Conservation Research Institute
Gagarinova 10
827 13 Bratislava
Slovakia

E-mail: bielek@vupu.sk
or tekellova@vupu.sk

Editor's note: Dr Saulius Marcinkonis (Lithuanian Institute of Agriculture, Voke, Vilnius, Lithuania) has kindly agreed to review the Directory and this review will be presented in the next issue of the ESSC Newsletter (2006/2).

Håkansson, Inge, 2005. **Machinery-induced Compaction of Arable Soils, Incidence – Consequences – Counter-measures.** Swedish University of Agricultural Sciences, Uppsala, Department of Soil Sciences, Reports from the Division of Soil Management, No. 109, 154 pages (ISSN 0348-0976).

**Price: €30 plus (when applicable)
about €10 for postage and VAT**



This book is written as an introduction and concise reference book to soil compaction problems for people interested in agriculture and environmental issues and in sustainable use of soils. The author worked at SLU, Uppsala, in 1954 – 1995, most of the time as Research Leader for extensive research into various soil management problems, such as primary tillage, seedbed preparation and machinery induced soil compaction. In this book, he uses his extensive experience to summarize current knowledge on the effects of soil compaction during crop production from both a scientific and a practical point of view. He also discusses the environmental impact of soil compaction and measures to prevent its negative effects.

The book is largely based on experience from Scandinavia, where field experimentation on soil and crop responses to machinery traffic has been more extensive than in most other parts of the world, but the situation in other climatic zones is also considered. In nine chapters, the following subjects are discussed:

- 1) Traffic intensity in arable fields.
- 2) Stress distribution under wheels and tracks.
- 3) Extent and persistence of soil compaction.
- 4) Effects of compaction on soil properties and processes.
- 5) Effects of compaction on crop growth and yield.
- 6) Ecological and environmental effects.
- 7) Methods to minimize compaction and its negative effects.
- 8) Economic consequences of compaction.
- 9) The present situation and the need for load limits.

The book can be ordered from Inge Håkansson, Morkullv. 84, SE-756 52 Uppsala, Sweden

e-mail: hakansson.inge@spray.se

or:

SLU, Department of Soil Science

P.O. Box 7014

SE-750 07 Uppsala

Sweden

e-mail: Britt-Louise.Atterdagsdotter@mv.slu.se

Editor's note: Dr Barry Mulholland (Duchy Agricultural College, Camborne, Cornwall, UK) has kindly agreed to review the Book and this review will be presented in the next issue of the ESSC Newsletter (2006/2).

NEW

Editors

John Boardman

**University of Oxford,
UK**

Jean Poesen

K.U. Leuven, Belgium

Hbk 0-470-85910-5

£150.00* / €235.00*

Due August 2006.

* Prices are subject to change

Soil Erosion in Europe

Soil Erosion in Europe provides a unique and comprehensive assessment of soil erosion throughout Europe, which is an important aspect to control and manage if landscapes are to be sustained for the future.

Written in two parts, this book primarily focuses on current issues, area-specific soil erosion rates, on and off-site impacts, government responses, soil conservation measures, and soil erosion risk maps. The first section overviews the erosion processes and the problems encountered within each European country, whilst the second section takes a cross-cutting theme approach.

- Based on a COST-funded project that has been running for five years with 145 erosion scientists from 19 countries.
- Reviews contemporary erosion processes and rates on arable and rangeland in Europe.
- Looks at current issues, such as socio-economic drivers, controlling factors specific to the country and changes in land use.

Contents

Preface

List of Contributors

Section 1

Norway, Sweden, Finland, Denmark, Iceland, Lithuania, Estonia, Russia and Belorussia, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Moldavia, The Ukraine, Austria, Germany, Switzerland, Italy, Albania, Serbia and Montenegro, Greece, Macedonia, Slovenia, Spain, Spain (Canary Islands), Portugal, France, Belgium, The Netherlands, Luxembourg, Great Britain and Ireland.

Section 2

Introduction

Past soil erosion in Europe

Soil Erosion Processes

Erosion processes across Europe: major processes and controlling factors and research needs; Soil Surface Crusting and Structure slumping in Europe; Sheet and rill erosion; Gully Erosion; Piping hazard on collapsible and dispersive soils in Europe; Wind

Erosion; Shallow landsliding; Tillage Erosion; Soil losses due to root and tuber harvesting; Soil erosion processes in non-cultivated land; Soil erosion by land levelling.

Risk Assessment and Prediction

Erosion risk assessment and erosion maps; Rain erosivity; Soil erodibility; Erosion modelling in Europe; Existing soil erosion datasets; Impacts of environmental changes on soil erosion across Europe.

Off-site impacts and responses

Muddy floods; Reservoir sedimentation; Off-site impacts of erosion: eutrophication as an example; Economic Impacts; Government and agency response to the erosion risk; Agri-environmental measures and soil conservation.

Editor's note: Dr Matt Römken (Oxford, Mississippi, USA) has kindly agreed to review the publication for a future issue of the ESSC Newsletter.

CABI PUBLISHING

are pleased to offer a 20% discount to ESSC Members on the following titles:

Land Use Changes in Tropical Watersheds: Evidence, Causes and Remedies

Edited by G.E. Shively (Purdue University, USA) and I. Coxhead (University of Wisconsin, USA)

December 2005, Hardback 208 pages, ISBN 0-85199-912-3

Special Discount Price: £40.00/US\$72.00 (Normal Price £49.95/US\$90.00)

This book studies land use change in tropical landscapes, with particular emphasis on the economic processes that influence rates of land degradation and forest clearing. Multidisciplinary contributions draw lessons from a rich, decade-long collection of economic, social and environmental data on the Manupali upland watershed in the southern Philippines. Through this detailed case study the book documents forces leading to land use changes, in particular the potential impacts of institutional evolution and policy reforms, and highlights interrelationships between biological, economic and social phenomena. It is the result of a long-term project

from the Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program (SANREM CRSP), funded by the United States Agency for International Development (USAID).

Microbiological Methods For Assessing Soil Quality

Edited by J. Bloem (Alterra, Wageningen, The Netherlands), D.W. Hopkins (University of Stirling, UK) and A. Benedetti (Istituto Sperimentale per la Nutrizione delle Piante, Rome, Italy).

December 2005, Hardback 320 pages, ISBN 0-85199-098-3

Special Discount Price: £52.00/ US\$96.00 (Normal Price: £65.00/US\$120.00)

With growing concern about the protection of soil quality and biodiversity many countries have established regional and national programmes to monitor soil quality. This book reviews the theory and practice of a range of the various microbiological methods used within these programmes. The first section gives an overview of approaches to monitoring, evaluating and managing soil quality. The second section provides a practical handbook with detailed descriptions of the methods. The methods are described in chapters on soil microbial biomass and numbers, soil microbial activity, soil microbial diversity and community composition, and plant-microbe interactions and soil quality. Finally, a census is given of the main methods used in over 30 European microbiological laboratories.

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We are including the citation details of papers and books produced by ESSC members. This will provide a growing resource for exchange of valuable information to both research and teaching. The cumulative citation list is being added to and updated on the ESSC web site. Please e-mail the citation details of papers in international refereed journals since and including the year 2000 to any member of the Editorial team.

PAPERS

Aerts R., Maes W., November E., Behailu M., Poesen J., Deckers J., Hermy M. and Muys B. (2005). **Surface runoff and seed trapping efficiency of shrubs in a regenerating semiarid woodland in northern Ethiopia.** Catena 65, 61-70.

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Appointment of new Ph.D. research students

Ms. Jennie Millington (B.Sc. Liverpool Hope, M.Sc. Liverpool; UK) has been appointed as a Ph.D. research student at The University of Wolverhampton, UK. Her project title is 'Pedogenesis on the Sefton coastal dunes'. The Director of Studies is Dr Colin A. Booth and the second supervisors are Professor Mike Fullen and Professor Ian Trueman (The University of Wolverhampton) and Dr Annie Worsley and Dr Nigel Richardson (Edge Hill College, Lancashire, UK).

E-mail: jenniemillington@btinternet.com

Institutional movements and promotions of ESSC members

Dr Saulius Marcinkonis (Lithuanian Institute of Agriculture, Voke, Vilnius, Lithuania) has been awarded the title of 'Young Scientist of the Year' (2006) by the Lithuanian Government and Parliament (Seimas). Saulius also won this prize in 2002.

Congratulations Saulius!

E-mail: Saulius.Marcinkonis@voke.lzi.lt

ESSC membership list and contact details

The full ESSC membership details are reported in ESSC Newsletter 2005/1. These details are also held on the ESSC web site. Under 'members' you can get a full listing. Also under 'members' you can click on any member country and find a listing of members in the selected country.

We are trying to keep the membership list on the web site up-to-date. Please check your details and let us know if there are any necessary correction(s). If your details change, also please let us know. Please send updated information to Zuzana Tekelová at:

E-mail: tekelova@vupu.sk

Forthcoming Dates for Your Diary...

First Announcements

1ST EUROPEAN CONGRESS OF CONSERVATION BIOLOGY, 'DIVERSITY FOR EUROPE', 22 – 26 AUGUST 2006, EGER, HUNGARY

The European Section of the Society for Conservation Biology and the Hungarian Natural History Museum invites you to Eger, Hungary for the '1st European Congress of Conservation Biology' (ECCB).

The ECCB will cover all aspects of conservation biology under the theme of 'Diversity for Europe'. We expect contributions to reflect the biological and cultural diversity of our continent, as well as the diversity of approaches to conservation. We have the specific intent to address the problems of linking science, policy and practice. The Scientific Committee decided to include circa 30 symposia and workshops in the programme. The topics are from the conservation of large carnivores to marine biodiversity, from modelling to threats of GM plants, from transboundary issues to urban conservation.

Now, ECCB announces its CALL FOR ABSTRACTS for contributed papers and posters. The Congress, with an expected 800 participants, and plenaries who are world leaders in their field (like John Lawton, Georgina Mace and Robert Pressey), encourages scientists and practitioners of all aspects of conservation biology to submit an abstract and to attend the Congress. Please visit our website for more information:

<http://www.eccb2006.org/>.

Please, join us in Hungary! This country is situated in the heart of Europe, has a unique and diverse wildlife and is the home of famous wines and cuisine. Just some of the many reasons to attend the Congress in Eger, 2006!

Looking forward to meeting you in Eger, 2006!

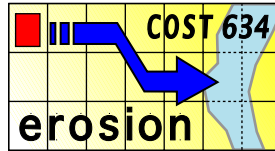
Andrew Pullin

Chair, Scientific Committee

András Báldi

Chair, Local Organizing Committee





INTERNATIONAL CONFERENCE

Farm Level Adoption of Soil and Water Conservation Measures and Policy Implications in Europe

Wageningen, The Netherlands (1 – 3 October 2006)

Objectives

The aim of the meeting is to discuss research methodologies and results on farm level adoption of SWC measures and 'best practices', and on the policy measures required for improved adoption. The Workshop will build upon the outcome of earlier COST634 conferences, and in particular the one in Mont Saint Aignan on 'Soil conservation management, perception and policy'. It will concern the two working groups WG 1: 'Policy issues in the implementation of sustainable land use', and WG2: 'Sustainable farm-scale management'. In the papers for this Conference the focus should be on socio-economic aspects.

Conference Focus Topics

The Workshop will focus on the following issues in European agriculture:

- Under WG1:** Public versus private interests in SWC, and the role of negotiations.
Effects of policy measures on adoption of SWC measures.
- Under WG2:** Socio-economic (and physical) factors, affecting adoption of SWC measures. Farmer's perception and adoption behaviour with regard to SWC.
Best agricultural practices and cross-compliance.

Draft Programme:

Saturday 30 September: Arrival and registration, then welcome reception
Sunday 1 October: Field trip to South Limburg
Monday 2 October: WG2 Plenary sessions on Farm level adoption
Tuesday 3 October: WG1 Plenary sessions on Policy implications
Closing reception and dinner

Organizers: Jan de Graaf, Michel Riksen, Dirk Meindersma

Field trip committee: Wim Spaan, Piet Peters

Scientific committee: John Boardman (UK), Preben Olsen (DK), Anne Mathieu (F),
Leo Stroosnijder (NL)

Host Institution:

Wageningen University and Research Centre
Erosion and Soil & Water Conservation Group,
Nieuwe Kanaal 11, 6709 Wageningen, The Netherlands
Tel: 00 31 317 486096 /482881; Fax: 00 31 317 486103
E-mail: Jan.deGraaff@wur.nl

How to get to Wageningen

By air to Amsterdam-Schiphol: Then by train from Schiphol to Ede-Wageningen station.

Now one has to take first a train to Duivendrecht (direction Hilversum) and from there a train in the direction of Nijmegen until Ede-Wageningen station. After May 2006 there will most likely be a direct train from Schiphol to Utrecht, after which you take a Arnhem or Nijmegen train until Ede-Wageningen. Total traveling time 1 hour.

By train from the South: In Rotterdam C.S. take a train to Utrecht and from there to Arnhem-Nijmegen until Ede-Wageningen.

By train from the East: In Arnhem take a train for Utrecht until Ede-Wageningen.

Then by bus from Ede-Wageningen station to WICC: Take bus 86 or 83 from station to Wageningen Bus station. From there the WICC is less than 5 minutes walk.

By taxi from Ede-Wageningen station to WICC: Taxi fare from the railway station to the WICC in Wageningen should be about €15.

Registration: The registration fee includes fieldtrip, some meals and refreshments and conference materials.

Note: Hotel reservations have to be made directly with WICC, mentioning Cost 634 Erosion Conference.

Accommodation:

WICC Hotel and Congress Center (Conference will be held in WICC hotel)

- : 00 31 317 490133; Fax: 00 31 317 426243
Email: info@wicc.nl
- : Lawickse Allee 9
6701 AN Wageningen
The Netherlands
- : Reserved for COST634 meeting:
50 rooms single & 10 rooms double
- : Single room/day: €71 (including breakfast, but excluding tax)
Double room/day: €97.50 (including breakfast, but excluding tax).

Important dates:

| | |
|------------------------------|---------------|
| Registration form: | 21 April 2006 |
| Abstract: | 21 April 2006 |
| Registration fee: | 21 April 2006 |
| Abstract evaluation Results: | 5 May 2006 |
| Full Paper: | 15 June 2006. |

Further information:

Jan de Graaff

Tel: 00 31 317 482881; Fax: 00 31 317 486103

E-mail: Jan.deGraaff@wur.nl

The following web sites contain updated information:

<http://pythagoras.gcparks.com/cost634>

<http://www.soilerosion.net/cost634>

Farm Level Adoption of Soil and Water Conservation Measures and Policy Implications in Europe (1 – 3 October 2006, Wageningen, The Netherlands)

Registration Form

Please send this form to: Jan.deGraaff@wur.nl

Or post to:

Erosion and Soil and Water Conservation Group

Wageningen University, Nieuwe Kanaal 11
6709 PA Wageningen, The Netherlands.

Participant's Data:

Family Name: First Name:

Affiliation:

Mailing address:

Postal Code/City: Country:

Tel/fax: E-mail:

Title of paper/poster:

Special diet:

Please make your own hotel reservation at WICC.

Mention with your booking that you will attend 'COST634 – Erosion Conference'.

Registration fee:

€120 for PhD students until 21 April 2006

€190 for participants until 21 April 2006

€200 for all participants after 21 April 2006

Number of participants will be limited to 55.

Payment of registration fee by bank transfer:

Account Holder: Department of Environmental Sciences

Address: Bornsesteeg 47, 6708 PD Wageningen

Bank Name: ABN-AMRO

Address: Stadsbrink 43, 6707 AA, Wageningen

Bank account: 53 95 09 396

: NL39 ABNA 053 95 09 396

BIC: ABNANL2A (with payment please quote: ESW360-120217).

The Use of Vegetation to Improve Slope Stability Beijing, China, 14 – 18 July 2008

This Conference is the second in the series 'The Use of Vegetation to Improve Slope Stability.' The first Congress was held at Thessaloniki, Greece, from 13 – 17 September 2004. In an era where more natural hazards are occurring; soil erosion, landslides and other catastrophic events result not only in the loss of lives and infrastructure, but cause major environmental damage. The aim of these meetings, therefore, is to bring together scientific researchers, practitioners, geotechnical and civil engineers, biologists, ecologists and foresters to discuss current problems in slope stability research and how to address those problems using ground bio- and eco-engineering techniques.

Ground bioengineering methods integrate civil engineering techniques with natural materials to obtain fast, effective and economic methods of protecting, restoring and maintaining the environment. Eco-engineering has been defined as a long-term ecological strategy to manage a site with regards to natural or man-made hazards. Conference sessions will focus on an area where such engineering techniques are used increasingly frequently, i.e. natural and man-made slopes. Papers will be presented on slope instability, erosion, soil hydrology, mountain ecology, land use and restoration and how to mitigate these problems using vegetation. The mechanics of root-soil interaction are of utmost importance, along with the modelling of root reinforcement and the development of decision-support systems, areas where significant advances have been made in recent years. Proceedings will be published in a special edition of an international journal. We hope that you will be able to join us at this meeting, to be held in exciting Beijing, 2008's Olympic City.

The Organizing Committee:

T. FOURCAUD, CIRAD, Montpellier, France / LIAMA-CASIA, Beijing, China

L. JOUNEAU, INRA Jouy / LIAMA-CASIA, Beijing, China

H. LU, WASWC, Beijing, China

Y. LU, Chinese Academy of Forestry, Beijing, China

T. LUO, Institute of Tibetan Plateau Research CAS, Beijing, China

J. NORRIS, Nottingham Trent University, Nottingham, UK

I. SPANOS, NAGREF, Thessaloniki, Greece

***A. STOKES**, INRA, Montpellier, France / LIAMA-CASIA, Beijing, China

X. ZHANG, LIAMA-CASIA Beijing, China.

***Conference Chair and for further information, please contact:**

Alexia Stokes

LIAMA-CASIA, P.O. Box 2728,
Zhonguancun Dong Lu 95, Hadian,
Beijing 100080
P.R. China

E-mail: stokes@liama.ia.ac.cn

Tel: 00 86 10 82614528

Fax: 00 8610 62647458

CONFERENCE THEMES

Root-soil interaction

Root anchorage, root architecture, root/soil interface, root growth, modelling.

Root reinforcement

Root strength, soil cohesion, root density, root morphology.

Slope degradation

Debris flow, landslides, avalanches, rockfall, forest fires, pathogens, wind throw, silviculture, human intervention.

Soil erosion and conservation

Soil loss, run-off, sub-surface erosion, soil quality, soil sealing, desertification.

Riverbank and coastline protection measures

Flow mitigation, torrent control, hydrological structures, up- and downscaling, sustainable planning, soil bio-engineering techniques.

Slope hydrology

Infiltration, flooding, sustainability of agricultural crop systems, plant interception and evapotranspiration, land use change, land abandonment.

Slope stability modelling

Mechanistic and empirical models, root reinforcement, hydrology, unsaturated strength, soil moisture relations and vegetation, post-failure, static and dynamic models.

Vegetation and ecology

High-altitude plant ecosystems, disturbance ecology, plant establishment, plant management, bio-remediation, species selection, soil ecology, influence of climate change.

Mountain biodiversity and slope stability

Biological richness, structural diversity, grazing.

Plant growth versus engineering

Temporal factors (seasonality), when to choose which technique? Lifespan of systems.

Ground bio-engineering, earth stabilizing and retaining techniques

New soil fixing techniques, protective techniques, cuttings and embankments, mulches, geotextiles, soil nailing, chemical stabilizers, long-term stability and performance of ground-bioengineered structures.

Eco-engineering and land restoration

Disaster management, short and long-term measures, eco-restoration, protection forests.

Risk management and decision support systems

GIS, modelling, databases, strategic management, choice of tools, new systems.

Benefits and liabilities in slope and erosion control

Economic factors, resource sustainability, legislation, cost analysis.

Second Announcements

Dear Colleague,

I have the pleasure to inform you that, following the great success of **BALWOIS 2004** – more than 300 participants, 249 papers available on www.balwois.net – we are planning to organize the International Scientific Conference **BALWOIS 2006**, in Ohrid (located on the shores of the lake shared by Macedonia and Albania), Macedonia from 23 – 26 May 2006.

The main objectives of **BALWOIS 2006** will be to provide at international and Balkan levels:

- A meeting that will further the progress of knowledge in the fields of scientific research, education, policy and development activities and on all the water related issues related to climate changes, hazards mitigation and water resources assessment, management and protection.
- An atmosphere to enhance the links between the providers and the end users of water related knowledge.
- A forum for free discussion of new ideas, research, development and applications, including techniques and methods to stimulate future works.
- Opportunities for students and young researchers and engineers to meet their experienced peers and to stimulate them to join BALWOIS activities. An exhibition of current hardware and/or software in the field of water science. New knowledge through the publishing of high quality papers in www.balwois.net and through DVD bundles and book editions.

The main topics of BALWOIS 2006 are:

- 1 – Climate and environment.
- 2 – Hydrological regimes and water balances.
- 3 – Droughts and floods.
- 4 – Integrated water resources management.
- 5 – Water bodies protection and ecohydrology.
- 6 – Lakes.
- 7 – Hydrological modelling.
- 8 – Information systems for decision support.

All proceedings will be published on the BALWOIS Web site and on DVD.

Hoping to see you in Ohrid in May 2006!

With my best regards,

Marc Morell
BALWOIS Coordinator

E-mail: secretariat@balwois.net

Note: No registration fees will be charged for participants from Balkan non-EU member countries and some financial support will be available to accommodate them.

Second Announcements

LONG-TERM STUDIES IN ECOLOGY: A CELEBRATION OF 150 YEARS OF THE PARK GRASS EXPERIMENT (22 – 24 MAY 2006) AT ROTHAMSTED, UK

Rothamsted is the largest agricultural research centre in the United Kingdom and almost certainly the oldest agricultural research station in the world.

2006 sees the 150th anniversary of the world-famous 'Park Grass Experiment' based at Rothamsted Research. It is the longest standing ecological experiment of its kind. The Experiment continues to exemplify the value of long-term studies to investigate effects of biotic and abiotic factors on population dynamics, above- and below-ground community composition and micro-evolutionary change. To commemorate this milestone, Rothamsted will host an international symposium exploring the role and applications of long-term ecological research, and the exploitation of resulting datasets. The Symposium will highlight experiments already underway but will also review opportunities for establishing new experiments as an investment for future generations of ecologists and society as a whole.

The Symposium, which commences after registration and lunch on Monday 22 May 2006 and concludes in the afternoon of Wednesday 24 May, will include three sessions of invited oral presentations, covering a range of perspectives and scales.

Session 1 will review results from the Park Grass Experiment itself, with particular emphasis on recent studies of soils and plants and include contributions from Mick Crawley (Imperial College), Jonathan Silvertown (Open University, UK), Keith Goulding, David Powlson, Paul Poulton, Ian Woiwod and Richard Harrington (all from Rothamsted Research).

Session 2 will widen the picture geographically with presentations from five of the world's foremost plant ecologists: Dave Tilman (University of Minnesota, USA), Steve Hubbell (Smithsonian Tropical Research Institute, USA), Bernhard Schmid (University of Zurich, Switzerland), David Wardle (Swedish University of Agricultural Sciences) and Phil Grime (University of Sheffield, UK) are all scheduled to contribute.

Session 3 will examine classic long-term studies of other trophic levels, including Darwin's finches and red deer on Rhum, and include contributions from Peter Grant (Princeton University, USA), Ilkka Hanski (University of Helsinki, Finland), Jane Lubchenco (Oregon State University, USA), Charles Godfray (Imperial College, London, UK) and Tim Coulson (Imperial College, London, UK).

The delegate fee for this landmark event, to include the workshop and the celebratory banquet but excluding accommodation, is £250. To book your place, go to: <http://www.rothamsted.bbsrc.ac.uk/Research/ParkGrass.html>

ROMANIAN NATIONAL SOCIETY OF SOIL SCIENCE

Bd. Mărăști 61, 011464 București 32, ROMÂNIA

Bank account lei: RO 58 RZBR 0000 0600 0066 7291

Bank account USD: RO 77 RZBR 0000 0600 0423 8780

RAIFFEISENBANK - AG. DOROBANȚI

Tel: +40-21-224.17.90/128

Fiscal code: 5.441.911

Fax: +40-21-2225979

E-mail: snrss2000@yahoo.com

The XVIIIth Conference of the Romanian National Society of Soil Science '100 years of Soil Science in Romania' will focus on complex management and multipurpose use of soil resources, environmental protection and rural development in the north-north western part of Transylvania, Romania.

FIRST CIRCULAR

The National Romanian Society of Soil Science has the pleasure of inviting you to attend our XVIIIth National Soil Conference to be held in Cluj, Romania from 21 – 26 August 2006.

The contact persons are:

Executive President SNRSS: Professor Dr Guș Petru: petru.gus@email.ro

Tel: 00 40 264 596384/206; 204

Fax: 00 40 264 443467

Dr Rusu Teodor E-mail: rusuteodor@yahoo.com

Tel: 00 40 264 596384/204

Conference Secretary: Dr Valentina Coteș E-mail: snrss2000@yahoo.com

Fax: 00 40 21 2225979

Dr dr h. c. Ioan Munteanu

President of the Romanian National Society of Soil Science.



Universitat de Lleida



International ESSC Conference on

**‘Soil and Water Conservation under Changing Land Use’
Lleida (Catalonia, Spain)**

September 12 – 15, 2006

Host Institution

Department of Environment and Soil Sciences, University of Lleida, Lleida, Spain

Organizing Committee

- Chairman:** Idefonso Pla Sentís, Universitat de Lleida, Spain
ipla@macs.udl.es
- Vice-Chairman:** José A. Martínez-Casasnovas, Universitat de Lleida, Spain
j.martinez@macs.udl.es
- Secretary:** M. Concepción Ramos Martín, Universitat de Lleida, Spain
cramos@macs.udl.es
- Members:** J. Carles Balasch, Universitat de Lleida, Spain
Roser Cots Folch, Universitat de Lleida, Spain
Francisco Fonseca, Universitat de Lleida, Spain
- Logistics:** Fundació Universitat de Lleida
- Scientific Committee:** Winfried E.H. Blum
President of ECSSS (Vienna, Austria)
José Luis Rubio
President of ESSC (Valencia, Spain)
Samran Sombatpanit
President of WASWC (Bangkok, Thailand)
Mohamed Sabir
President of ISCO (Marrakech, Morocco)
Antonio Rodríguez
President of CCS-SECS (La Laguna, Tenerife, Spain)

Carmelo Dazzi
Vice-President of ESSC (Palermo, Italy)
Eric Roose
President of Réseau Erosion (Montpellier, France)
Julian Dumansky
Consultant World Bank (Ottawa, Canada)
Paul Bielek
Secretary ESSC (Bratislava, Slovakia)
Jaume Porta Casanellas
Universitat de Lleida (Lleida, Spain)
Samir A. El-Swaify
University of Hawaii (Honolulu, USA)
Don Gabriels
University of Ghent (Ghent, Belgium)
Marc Nearing
USDA-ARS (Tucson, USA)
Mike Fullen
University of Wolverhampton (Wolverhampton, UK)

Background

Land degradation directly or indirectly affects all the vital processes on the earth's surface, which mainly depend on the conservation of soil and water in adequate places, amounts and qualities. Economic and social problems, associated with changes in population, markets and the costs of products and technology may induce drastic and sudden changes in land use and management, which may increase the hazard of land degradation and environmental side-effects. Global climate changes may increase negative influences of these changes. This is especially true in the South European countries, where the recent abrupt and widespread changes in land use and management, involving in some cases abandonment of previous agricultural lands, and in others intensification of agricultural land use or utilization of land for other purposes, is leading to different environmental impacts, with immediate or future negative effects. These effects include problems of loss of biodiversity, decreased supply and quality of available water and increases in surface erosion, landslides and flooding. All these have strong social and economic effects in both the short and long-term. In arid and semi-arid regions these effects may lead to irreversible desertification.

Objectives and topics of the Conference

The objectives of the Conference are to analyse and discuss the most recent cases and results of studies and research in relation to soil and water conservation problems associated with changes in land use and management. The main topics will be related to the evaluation, prediction, diagnosis and prevention of the environmental impacts derived from specific cases of changes in land use and management.

Preliminary Programme

All activities, except the Conference Dinner, will take place in the Conference Centre: **Edifici Centre de Cultures i Cooperació Transfronterera**, (Campus Universitari de Cappont), Jaume II, 67 (bis), 25001 Lleida.

Tuesday 12 September

- 8.⁰⁰ – 10.⁰⁰ h **Registration**
- 10.⁰⁰ – 11.⁰⁰ h **Opening Ceremony**
- 11.⁰⁰ – 12.⁰⁰ h **Keynote Presentation**
Dr Julian Dumansky (Ottawa, Canada):
'Changing Course: Soil Conservation in a Changing World'.
- 12.⁰⁰ – 13.⁰⁰ h **Welcome cocktail**
- 13.⁰⁰ – 15.⁰⁰ h **Lunch**
- 15.⁰⁰ – 19.⁰⁰ h **Session Topic I:**
'Land Use Changes affecting Soil and Water Conservation'
- 15.⁰⁰ – 15.⁴⁵ h **Keynote Lecture**
Dr Ildefonso Pla Sentís (Lleida, Spain):
'Hydrological effects of land use changes under Mediterranean climatic conditions'.
- 15.⁴⁵ – 16.⁰⁰ h Coffee break
- 16.⁰⁰ – 18.⁰⁰ h Oral presentations (6)
- 18.⁰⁰ – 19.⁰⁰ h Poster presentations (Topic I)
- 18.⁰⁰ – 19.⁰⁰ h **ESSC Council Meeting.**

Wednesday 13 September

- 9.⁰⁰ – 13.⁰⁰ h **Session Topic II (1st):**
'Processes of Soil and Water Degradation under Changing Land Use and Management'
- 9.⁰⁰ – 9.⁴⁵ h **Keynote Lecture**
Dr Samir A. El-Swaify (Hawaii, USA) 'Predicting the erosion consequences and conservation needs of changing land use: A case study for transition from plantation agriculture to diversified planting'.

- 9.⁴⁵ – 10.⁴⁵ h Oral presentations (3)
- 10.⁴⁵ – 11.⁰⁰ h Coffee break
- 11.⁰⁰ – 13.⁰⁰ h Oral presentations (6)
- 13.⁰⁰ – 15.⁰⁰ h Lunch
- 15.⁰⁰ – 18.³⁰ h **Session Topic II (2nd)**
- 15.⁰⁰ – 15.⁴⁵ h **Keynote Lecture**
 Dr Winfried E.H. Blum (Vienna, Austria)
 'Urban and peri-urban environments: emerging frontiers in
 soil and water conservation.'
- 15.⁴⁵ – 17.⁰⁵ h Oral presentations (4)
- 17.⁰⁵ – 17.³⁰ h Coffee break
- 17.³⁰ – 18.³⁰ h Poster presentations (Topic II)
- 21.⁰⁰ h **Conference Dinner.**

Thursday 14 September

- 7.⁰⁰ – 21.⁰⁰ h **Field Trip (Priorat Region)**

Friday 15 September

- 9.⁰⁰ – 13.⁰⁰ h **Session Topic III:**
 'Soil and Water Conservation Practices under Changing Land
 Use and Management'
- 9.⁰⁰ – 9.⁴⁵ h **Keynote Lecture**
 Dr Eric Roose (Montpellier, France)
 'Evolution of anti-erosive strategies with changing land uses.'
- 9.⁴⁵ – 10.⁴⁵ h Oral presentations (3)
- 10.⁴⁵ – 11.⁰⁰ h Coffee break
- 11.⁰⁰ – 13.⁰⁰ h Oral presentations (6)
- 13.⁰⁰ – 15.⁰⁰ h Lunch
- 15.⁰⁰ – 16.⁰⁰ h **Poster presentations (Topic III)**
- 15.⁰⁰ – 16.⁰⁰ h **ESSC Council Meeting**
- 16.⁰⁰ – 18.⁰⁰ h **Conclusions and Closing Ceremony**

(Oral presentations: 15 minutes presentation + 5 minutes discussion)

(Poster Exhibition (maximum size: 100 cm x 120 cm): From 09.⁰⁰ – 19.⁰⁰ h on the
 day corresponding to the topic of the poster).

Key dates

| | |
|---------------------------|--|
| 30 September 2005: | Intention to participate |
| 15 January 2006: | Deadline for reception of abstracts and pre-registration form |
| 15 February 2006: | 2 nd Announcement. |
| 28 February 2006: | Notice of acceptance of abstracts. |
| 31 March 2006: | Deadline for registration with reduced fee. |
| 31 May 2006: | Deadline for reception of extended abstracts and registration fee for accepted participations. |
| 30 June 2006: | Publication of the preliminary programme. |

Registration fees (€)

| | <u>Before March 31, 2006</u> | <u>After March 31, 2006</u> |
|------------------------|------------------------------|-----------------------------|
| Participant | € 300 | € 350 |
| Members ESSC | € 270 | € 320 |
| Students (ID required) | € 150 | € 200 |

(Registration fee includes: Welcome cocktail, coffee breaks, conference book of abstracts, proceedings in CD, access to all sessions, conference dinner and field tour).

Payment:

Registration fee must be paid in Euro currency (€) by bank transfer through the following bank account:

Account number (IBAN code): ES16 2100 2464 6902 0003 1462
SWIFT code: CAIXESBB
Bank name and address: LA CAIXA
Oficina Universitat
C/ Maragall 17
25003 Lleida (Spain)

If the bank transfer is made from Spain:

Account number: 2100-2464-69-0200031462

VERY IMPORTANT: The transfer concept must specify:

- Registration fee – ESSC Soil&Water Conservation Int. Conference
- The NAME of the person to which the registration corresponds

A **copy of the transfer voucher**, together with the registration form, must be sent by Fax: 00 34 973003552 or e-mail (JPEG or PDF format) to fundacio@700.udl.es

Extended abstracts

The deadline for reception of extended abstracts of accepted presentations (oral and poster) and payment of registration fee (required for inclusion of the participations in the final Conference programme) is **31 May 2006**.

Authors are requested to prepare their extended abstract according to the following instructions:

1. The Extended Abstract must be limited to 4 A4 pages, with a margin of 2.54 cm from the top, bottom, right and left. Use single line spacing for writing the text.

Title, Authors Names, and Institutional Affiliations:

- a) Start typing the title on line-1 using Times New Roman (TNR) size 14 font, bold, centred, Reserve upper case only for the initial letter of each main word.
 - b) Leave a blank line after the title.
 - c) Type author's/authors' name. Initials or first name must precede the last name. Use TNR size 12 font, with upper case for the initial letter, centred.
 - d) In the next line, after author's/authors' name, write the institutional affiliation(s); city and country and E-mail. Use TNR size 12 font, italics.
 - e) Leave a blank line after the address.
2. Write Summary (TNR size 12, bold). Return to the beginning of the line and add a summary, maximum 10 lines, TNR size 12, justified. Leave a blank line after the abstract.
 3. Body of the text:
 - a) The Extended Abstract should include the following sections: Introduction, Materials and Methods, Results, Discussion and Conclusions, Literature cited (only the most relevant references). Use TNR size 12, justified.
 - b) Any extended abstract may be rejected for publication by the Scientific Committee if it is not written in correct English.
 4. The extended abstract can include tables and figures or illustrations.
 - a) For tables: they must be numbered (e.g. Table 1) and titled, just before the location of the table in the text. Use the same font as for the body of the abstract. Tables must be referred to in the text.
 - b) For figures or illustrations: They must be numbered (e.g. Figure 1) and titled, just after the location of the figure or illustration. Use the same font as for the body of the abstract. Figures must be referred to in the text.

5. Send the extended abstract to:
E-mail: aet2001@macs.udl.es

Publication of selected papers: The authors of a number of selected participations (oral and posters presentations) will be invited to prepare a full paper, which will be reviewed for publication in a special issue of a recognized scientific journal.

Posters

The maximum size for posters is 100 x 120 cm. Guidelines for the preparation of posters:

Recommended size: 90 x 120 cm.

Recommended letter sizes: 85 – 90 pp for main title, 50 pp for section titles and 35 – 40 pp for the text of the body.

Recommended sections: Introduction, Material and Methods, Results and Discussion, and Conclusions.

Hotel reservation

The Organizing Committee has agreed special rates for the ESSC Conference in the following hotels. Hotel reservation must be done directly by the participants through the facilitated contact information. To achieve these special rates, you must mention your participation in the 'International ESSC Conference on Soil and Water Conservation under Changing Land Use'.

| Hotel | Cat. | Address and contact information | Rates |
|--|------|--|---|
| Hotel AC Lleida | 4* | C/ Unió 8 - 25002 Lleida Tel. 00 34 973283910 Fax. 00 34 973283911 direc.aclleida@ac-hotels.com aclleida@ac-hotels.com www.ac-hotels.com/lleida.htm | Double room single use + breakfast: €80 (7% VAT not included). |
| Hotel Zenit Lleida (located near the railway station). | 4* | C/ General Britos, 21 25002 Lleida Tel. 00 34 973229191 Fax. 00 34 973229190 dirlleida@zenithoteles.com www.zenithoteles.com | Double room single use + breakfast: €68 (7% VAT not included). |
| Hotel Real | 3* | Avenida. Blondel, 22-25002 Lleida Tel. 00 34 973239405 Fax. 00 34 973239407 hotreal.lleida@eizasa.com www.hotelreal lleida.com | Double room single use (standard): €54 Double room single use (high standard): €62 Double room (standard): €72 Double room single use (high standard): €80 Breakfast: €7.50/pax (7% VAT not included). |

| Hotel | Cat. | Address and contact information | Rates |
|---|------|---|---|
| Hotel Transit Catalonia (located near the railway station). | 3* | Pl. Ramon Berenguer IV, s/n 25007 Lleida Tel. 00 34 973230008 Fax. 00 34 973222785 transit@hoteles-catalonia.es www.hoteles-catalonia.es | Double room single use: €54 Double room: €59 Breakfast: €5/pax (7% VAT not included). |
| Apartamentos Campus (Campus University Apartments; (located near the Conference Centre). | | C/ Jaume II, 75 - 25001 Lleida Tel. 00 34 973208290 lleida@apartamentoscampus.com www.apartamentoscampus.com | Double room single use: €24.36 Breakfast not included (7% VAT not included). |

Information about the City of Lleida:

Lleida is a city of 120,000 inhabitants situated 155 km west of Barcelona, located on a fertile plain mainly devoted to horticulture and fruit growing. It is surrounded by varied landscapes, from the Pyrenees to the banks of the Ebro River. Over recent decades it has become a prosperous industrial area, essentially based on processing industries of vegetable and animal products, as well as on services derived from agriculture. The atmosphere is suitable for study and research in the fields of agriculture, stockbreeding, food technology and environmental and forest sciences. Lleida is a 1000-year-old city made up of a great variety of cultures, which all through their history have shaped a warm, lively and easily accessible city, situated in a unique and balanced natural environment. More information about the City and Province of Lleida can be found in the following web pages:

<http://www.paeria.es/ang/ciutatLleida.asp>

<http://turisme.paeria.es/index.nou.asp>

<http://www.lleidatur.com/ing/>

How to get to Lleida

Lleida is located in an important communication and transportation crossroads connecting Spanish roads with the rest of Europe and the Mediterranean. The City of Lleida can be easily reached from Barcelona by highway and railway. Moreover, there are high-speed trains (AVE and ALTARIA) connecting Madrid and Lleida.

Depending on the airport you choose to arrive in Spain, the best way to get to Lleida is:

- From **Barcelona Airport (el Prat)** (<http://www.aena.es>) to Sants Station (Barcelona) by train. From this railway station you can take another train to Lleida. There is also a bus line (**Eurolines – Rapid Aeroport:** <http://www.eurolines.es/>) from Barcelona Airport to Lleida (two daily buses), leaving from Terminal B.
- From **Reus** (<http://www.aena.es>) to Lleida by train.
- From **Girona** (<http://www.aena.es>) to Lleida by bus ('Eix bus').
- From **Madrid** (<http://www.renfe.es/>) to Lleida by high-speed trains (AVE or ALTARIA).

For those arriving by car, there are several alternatives:

From the French frontier at La Jonquera the easiest route is to follow the AP-7 (toll) motorway to Girona and then follow the 'Eix Transversal' (C-25), a new fast road, to Cervera and from there by A-2 (free motorway) to Lleida.

The alternative from Girona or from Barcelona is to follow the AP-7 (toll) and then take AP-2 (toll) (direction Lleida/Zaragoza).

In Lleida it is easy to move around on foot, because of the layout of the City. Most hotels are located in the city centre and can be reached on foot or by public transport. Information about bus lines and timetables are available on the webpage:

Autobusos de Lleida (<http://www.autobusoslleida.com/>).

Other interesting and useful links for mobility information are:

AENA (Spanish Airports): <http://www.aena.es>

RENFE (Spanish Railway): <http://www.renfe.es/>

Map of Spanish roads:

<http://www.geocities.com/elcomercial/mapacarreteras.htm>

Access roads to Lleida: http://www.paeria.es/img/mapa_acces.gif



Universitat de Lleida



**International ESSC Conference on
'Soil and Water Conservation under Changing Land Use'
Lleida (Catalonia, Spain)**

September 12 – 15, 2006

REGISTRATION FORM¹

| | | | |
|---|---|---|--|
| Name & Passport Number | Name: | | |
| | Passport number: | | |
| Institution | | | |
| Address | Mail address: | | |
| | Zip code: | | |
| | City and country: | | |
| | Telephone: | | Fax: |
| E-mail | | | |
| Presentation | <input type="checkbox"/> Oral <input type="checkbox"/> Poster Title of the presentation: | | |
| Type of participant and fee paid | <input type="checkbox"/> Normal participant <input type="checkbox"/> ESSC member <input type="checkbox"/> Student (ID required) | Before March 31, 2006 <input type="checkbox"/> €300 <input type="checkbox"/> €270 <input type="checkbox"/> €150 | After March 31, 2006 <input type="checkbox"/> €350 <input type="checkbox"/> €320 <input type="checkbox"/> €200 |
| Type of registration | <input type="checkbox"/> By bank transfer | | |
| Signature and date | | | |
| Receipt | Please, indicate the name of the institution (if different from above) to which a receipt of the registration fee must be issued. | | |

All participants to this Conference are welcome as Guest members in the WASWC for one year.

¹⁾ The registration form accompanied by the copy of the transfer voucher must be send to fundacio@700.udl.es or Fax 'Fundació de la Universitat de Lleida' on: 00 34 973003552.



**Environmental change,
geomorphic processes,
land degradation and
rehabilitation in tropical and
subtropical highlands**

19 – 25 September 2006

Mekelle University, Mekelle, Ethiopia

Symposium organized by

Professor J. Poesen

Physical and Regional Geography Research Group

E-mail: jean.poesen@geo.kuleuven.ac.be

Professor Mitiku Haile

Mekelle University

E-mail: mekelle.university@ethionet.et

Professor J. Deckers

Laboratory for Soil and Water Management

E-mail: seppe.deckers@biw.kuleuven.be

Themes to be discussed

1. Changing environments and geomorphic process intensities in tropical and subtropical mountains since late Pleistocene times; changes in vegetation cover, climate, hydrology, hillslope and fluvial processes, tufa dam development and landsliding.
2. Land degradation in tropical and subtropical mountains: natural and anthropogenic controls; on-site and off-site consequences (soil erosion, landsliding, degradation of vegetation cover, hydrological processes and reservoir siltation).
3. Soil and water conservation in tropical and subtropical mountains; effectiveness and efficiency of traditional and recently introduced techniques and their implementation in rural societies.

Aims

This **scientific congress** aims to show to the international science community the excellent research work that has been conducted at Mekelle University and in the Tigray hinterland in the field of land degradation and rehabilitation. Much of this research has already alerted the international community through peer-reviewed publications and congress presentations. By hosting this international congress on the theme at Mekelle, we aim to exchange views with international experts in the farmers' field and to provide international scientists an opportunity to discuss in the field with Ethiopian farmers themes which have been published in formal journal papers.

The **stakeholders' forum** brings under one roof all actors (scientists, stakeholders and beneficiaries) with the following aims:

- To discuss project and conference findings with stakeholders.
- To bring stakeholders in contact with international scientists for mutual benefit.
- To formulate recommendations from stakeholders towards future research.

Invited participants are international scientists, leading farmers and experts from governmental and non-government organizations. Scientists, representatives of donor organizations and decision-makers are particularly invited to exchange views with the farmers and experts.

Objectives

- Evaluate past research efforts in land degradation and rehabilitation in Northern Ethiopia.
- Streamline future scientific efforts in support of sustainable livelihoods in the Tigray Region.
- Draw recommendations for capacity building in land management throughout the Tigray Region.

Questions to be addressed

1. How have changing environments impacted the type and intensity of geomorphic processes in tropical and subtropical mountains since the late Pleistocene?
2. Which factors control land degradation, its on-site and off-site impacts in tropical mountains?
3. What is the effectiveness and efficiency of traditionally and recently introduced soil and water conservation techniques?

Submission of abstracts

An abstract should not be more than 250 words and must include objectives, materials and methods, results and conclusions. The abstract could be for a paper or poster presentation.

Accepted abstracts will be published in the Book of Abstracts, which will serve as the Conference Proceedings.

Accepted papers will be peer-reviewed and submitted to a refereed journal as a special issue.

- **Deadline submission of titles:** 15 September 2005
- **Deadline submission of abstracts:** 15 December 2005.

Feedback

Please inform Mrs. Sofie Bruneel, by e-mail (sofie.bruneel@biw.kuleuven.be) or fax, (00 32 16 329760), your intention to participate in the Symposium and the tentative title of your paper or poster as soon as possible. Based on replies, the organizing committee will try to secure travel grants for African researchers.

More information:

<http://www.kuleuven.ac.be/geografie/frg/>

<http://www.agr.kuleuven.ac.be/lbh/>

The total number of participants will be limited to 50; persons will be admitted on a first come first served basis.

Fourth Announcements

Dear Colleague,

I am pleased to announce that the **'5th International Congress of the EUROPEAN SOCIETY for SOIL CONSERVATION'** will be held in Palermo (Italy), 25 – 30 June 2007.

The general subject of the congress will be: **'Changing Soils in a Changing World: the Soils of Tomorrow'**. The objective is to promote exchange and discussion about the problems that affect soils due to the pressure of Man on Soils and the Landscape, that year after year is becoming increasingly evident, and to stimulate soil awareness in civil society. The Congress is open for soil scientists, educators and policymakers. It will consist of invited lectures, scientific sessions with oral and poster presentations and field excursions and will attempt to advocate interest in soil awareness at all societal levels.

The main topics of the Congress are indicated below. However, we welcome suggestions from prospective participants that may be of general interest:

Soil erosion; Soil contamination; Soil sealing by construction activities; Soil compaction; Soil biodiversity; Soil salinization; Soil consumption; Soil policy; Anthropogenic soils.

The Congress will take place in Palermo, at the University Campus. Palermo, whose history dates back to the Phoenicians, is located on the north coast of Sicily and is one of the main cities of Italy. It has a beautiful beach area (Mondello) and can be reached by air, rail and bus from the major cities of Europe. The region has a Mediterranean climate with hot and dry summers and mild and rainy winters and shows many unique historical and tourist attractions with artistic and natural beauties. As a result of these, Sicily receives many tourists.

Take note, A WEB PAGE WITH THE FIRST CIRCULAR AND ALL THE INFORMATION REGARDING THE CONGRESS is being circulated.

In the meantime all correspondence should be sent to:

Professor Carmelo Dazzi

Dipartimento di Agronomia Ambientale e Territoriale

Facoltà di Agraria

Università di Palermo

Viale delle Scienze

90128 Palermo

Italy

Tel.: 00 39 091 6650247

Fax: 00 39 091 6650229

E-mail: dazzi@unipa.it

We look forward to seeing you in Palermo!

Professor Carmelo Dazzi

ESSC Vice-President

Fourth Announcements

Under the auspices of:
**The High Commissioner for Water, Forestry
and Desertification Control**

**The Moroccan Network of Soil and Water Conservation
The Moroccan Association of Soil Sciences
The Moroccan Association of Geomorphology**

Organize

The 14th Conference of ISCO

**INTERNATIONAL SOIL CONSERVATION ORGANISATION
MARRAKECH**

14 – 19 May 2006

In partnership with

The Ministry of Agriculture, Rural Development and Fisheries;
The Secretariat of State in Charge of Water;
The Secretariat of State in Charge of the Environment;
The National School of Forestry Engineers, Salé;
Hassan II Institute of Agronomy and Veterinary Sciences, Rabat;
The National School of Agriculture, Meknès;
The National Institute for Agronomic Research, Rabat;
The UNESCO Chair in Sustainable Development,
Mohamed V University, Rabat;
Faculty of Sciences Semlalia, Marrakech
Faculty of Sciences and Techniques, Marrakech
The Cadi Ayad University, Marrakech.

Information

The Organizing Committee of the 14th Conference of the International Soil Conservation Organization (ISCO) takes great pleasure to invite you to participate in

ISCO 2006, which will take place in Marrakech, Morocco, on 14 – 19 May 2006.

This Conference will be a common global forum for experts in various disciplines related to sustainable management of soil and water, particularly in semi-arid environments. Researchers, professors, developers, decision-makers and stakeholders representing public and private institutions and non-governmental organizations (NGOs) will meet to exchange their experience and ideas on soil and water conservation and sustainable development.

The 'sustainable management of soil and water in semi-arid environments' subject matter of the Conference engenders many challenges in terms of sustainable management of natural resources for the planet and adequate food production for a perpetually growing population. The substantial disturbance of natural habitats, which occurred during the 20th Century, reveals the extent of the challenge humanity faces during the new Millennium.

Research works, development actions and collaborative activities in relation to sustainable management of soil and water in semi-arid environments will come upon a common ambition to share experiences and thoughts during one week in Marrakech.

We count on you and on your active participation in the 14th ISCO Conference.

We hope to see you in Marrakech, Morocco, in May 2006.

The Organizing Committee of ISCO 2006

Suggested topics of the conference:

Topic 1. Water Management in semi-arid environments:

- Quantification and modelling of the hydrological balance: estimation of resources in semi-arid environments.
- New technologies for water use rationalization.
- Traditional strategies for water management and future evolution.
- Harvesting and management of runoff waters in semi-arid and arid areas.
- Effectiveness of water storage.

Topic 2. Desertification:

- Factors and processes of desertification.
- Consequences of desertification.
- Control of desertification.

Topic 3. Agro-pastoral transformations and land degradation:

- Changes in soil cover and land use and their effects.
- Land use and hydrological soil behaviour.

Topic 4. Indicators, measurements and modelling of the various erosion processes in semi-arid environments:

- Measurement techniques of erosion.
- Modelling of the ground and soil fertility losses.
- Follow-up of the processes and the impacts.

Topic 5. Specific erosion processes and anti-erosion control:

- Ravine erosion and stabilization of ravines and wadis.
- Mass movements in semi-arid mountains and watershed stabilization.
- Wind erosion, sanding and desertification.

Topic 6. Management, preservation and rehabilitation of soils:

- Rehabilitation of degraded soils.
- Organic and mineral fertilization.
- Farming techniques and land productivity.
- Agroforestry and soil rehabilitation.

Topic 7. Economic evaluation of land degradation, efficiency and cost of anti-erosive structures:

- Socio-economic repercussions of land degradation.
- Evaluation of the LAE techniques, cost/efficiency.

Topic 8. Environmental effects of soil degradation:

- Safeguarding of resources, landscapes and biodiversity.
- Safeguarding of water quality.
- Erosion and silting of storage dams.
- Relationship between soil erosion and global changes.
- Desertification.

Topic 9. Institutional, legislative and socio-economic aspects of soil and water conservation:

- Institutional organization of water and soil conservation.
- Social, economic and legal problems of soil and water conservation.
- Management and farming systems and soil and water conservation.
- Watershed agencies and upstream-downstream solidarity.
- Training, research and the GCES.

Scientific Committee

M. SABIR and M. QARRO, ENFI, Morocco; M. BADRAOUI and F. BENCHAKROUN, IAV Hassan II, Morocco; R. BOUABID, ENA Meknès, Morocco; A. LAOUINA, Université Mohamed V, Rabat, Morocco; R. MRABET, INRA, Morocco; Ouafae CHERIFI, Un Cady Ayad, Marrakech, Morocco; J. ALBERGEL and G. DENONI, IRD, Montpellier, France; J. Dumanski, President and CEO, Canada; S.A. EL-SWAIFY, ISCO Board of Directors, University of Hawaii, USA; J.L. RUBIO, ISCO Board of Directors, Spain, President of ESSC; E. ROOSE, Réseau Erosion et GCES, AUF, France; M.A. NEARING, ISCO Board of Directors, USDA-ARS Tucson, USA; M. GRUNDY, ISCO Board of Directors, Australia; Bob STEWART, ISCO Board of Directors, USA; H. HURNI, ISCO Board of Directors, Switzerland; He WENYUAN, ISCO Board of Directors, P.R. China; R. CASAS, ISCO Board of Directors, Argentina; M.G. COOK, ISCO Board of Directors, USA; S.C.F. DECHEN, ISCO Board of Directors, Brazil, IUSS; F. HOLZWARTH, ISCO Board of Directors, Germany; I. Pla SENTIS, ISCO Board of

Directors, Spain; E. REINZI, ISCO Board of Directors, Argentina; D.W. SANDERS, ISCO Board of Directors, UK, WASWC. Max SCHNEPF, ISCO Board of Directors, USA, USDA, NRCS; S. SOMBATPANIT, ISCO Board of Directors, Thailand, WASWC; K.G. TEJWANI, Board of Directors, India.

LANGUAGE: The languages during the Conference will be both English and French.

Key Dates:

- | | |
|--|--------------------------|
| • Date for receipt of the intention to participate: | 28 February 2005 |
| • Deadline for receipt of abstracts and registration bulletin: | 30 June 2005 |
| • Notice of acceptance of abstracts: | 30 September 2005 |
| • Deadline for registration at reduced fee: | 30 November 2005 |
| • Deadline for receipt of accepted articles: | 31 December 2005 |
| • Publication of preliminary programme: | 28 February 2006. |

Registration Fees:

- | | |
|------------------------------|-------|
| • Northern countries: | |
| – Early registration: | €455 |
| – Late registration: | €545 |
| • Southern countries: | €270 |
| • Northern country students: | €200 |
| • Southern country students: | €100. |

The fees cover:

- Welcome cocktail
- Conference proceedings (Abstracts of papers)
- Proceedings on CD-Rom medium,
- Access to the Conference sessions
- Four lunches (on-site buffet)
- Coffee breaks
- Mid-conference excursion (bus, meal, documentation)
- Translation (English/French/English).

The payment terms and conditions will be specified afterwards.

EXCURSIONS:

- A mid-conference excursion, included in the programme will be arranged on 17 May 2006. This excursion will address aspects related to water, soil fertility and watershed management and desertification in semi-arid environments.
- Ante and post-conference excursions, payable by the participants, will be organized during 8 – 12 May and 22 – 26 May 2006. The ante-conference excursion (Marrakech-Taroudant-Agadir-Massa through Tizi N'Test) will tackle the conservation of nature in the High Atlas and Souss regions. The post-conference excursion (Marrakech-Ouarzazate-Zagora-Mhamid through Tizi N'Tichka) will concentrate on water management and desertification in arid environments (valleys of the southern flanks of the High Atlas).

ASSOCIATIONS SUPPORTING ISCO 2006 include:

European Society for Soil Conservation (ESSC),
Réseau Erosion et GCES, AUF, Paris.

Contact Address:

The organizing committee:

isco2006@wanadoo.net.ma

Telephone and Fax: 00 212 37861149

Information about Marrakech:

cherifi@ucam.ac.ma

Web site:

<http://enaweb.enameknes.ac.ma/~isco-06/>

Reminder for the next issue:

Articles and reports on any aspect of soil erosion and conservation in Europe are always welcome.

Do not forget to send in your details of the following information:

- (i) Reviews of recent conferences.
- (ii) Recent grant awards.
- (iii) Newly enrolled Ph.D. research students, title of their research topic and names of research supervisors.
- (iv) Recent staff institutional movements/promotions.
- (iv) A reference list of your 'new' international refereed scientific journal papers, which have been published recently (since and including the year 2000).

Send these details to either:

Professor Mike Fullen: m.fullen@wlv.ac.uk

or

Dr Colin Booth: c.booth@wlv.ac.uk

and they will include this information in the next issue.

PLEASE NOTE: The deadlines for submission of material for future issues are:

1 July 2006

1 October 2006

10 January 2007.

We are progressively developing to four Newsletter issues per year.

The deadlines for 2007 onwards will be:

10 January

1 April

1 July

1 October

AIMS OF THE SOCIETY

The ESSC is an interdisciplinary, non-political association, which is dedicated to investigating and realizing soil conservation in Europe. The ESSC pursues its aims in the scientific, educational and applied sectors by:

Supporting investigations on soil degradation, soil erosion and soil conservation in Europe,

Informing the public about major questions of soil conservation in Europe,

Collaborating with institutions and persons involved in practical conservation work in Europe.

The ESSC aims at co-ordinating the efforts of all parties involved in the above cited subjects: research institutions; teachers and students of geosciences, agriculture and ecology; farmers; agricultural planning and advisory boards; industries and government institutions.

ZWECK DER VEREINIGUNG

Die ESSC ist einer interdisziplinäre, nicht politische Vereinigung. Ihr Ziel ist die Erforschung und Durchführung des Schutzes der Böden in Europa. Die ESSC verfolgt dieses Ziel auf wissenschaftlichem, erzieherischen und angewandtem Gebiet:

durch Unterstützung der Forschung auf den Gebieten der Boden-Degradierung, der Bodenerosion und des Bodenschutzes in Europa,

durch Information der Öffentlichkeit über wichtige Fragen des Bodenschutzes in Europa,

durch Zusammenarbeit mit Institutionen und Personen, die an der Praxis des Bodenschutzes in Europa beteiligt sind.

Die ESSC will alle Personen und Institutionen zusammenführen, die sich für die genannten Ziele einsetzen: Forschungsinstitutionen, Lehrer und Studenten der Geowissenschaften, der Landwirtschaftswissenschaften und der Ökologie, Bauern, landwirtschaftliche Planungs- und Beratungsstellen, Industrieunternehmen und Einrichtungen der öffentlichen Hand.

BUTS DE L'ASSOCIATION

L'ESSC est une association interdisciplinaire et non politique. Le but de l'association est la recherche et les réalisations concernant la conservation du sol en Europe. L'ESSC poursuit cette finalité dans les domaines de la recherche scientifique, de l'éducation et de l'application:

en encourageant la recherche sur la dégradation, l'érosion et la conservation du sol en Europe,

en informant le public des problèmes majeurs de la conservation du sol en Europe,

par la collaboration avec des institutions et des personnes impliquées dans la pratique de la conservation du sol en Europe.

L'ESSC souhaite favoriser la collaboration de toutes les personnes et institutions poursuivant les buts définis ci-dessus, en particulier: institutions de recherche, professeurs et étudiants en géosciences, des agriculteurs, des institutions de planification et des conseil agricole, de l'industrie, et des institutions gouvernementales.

OBJECTIVOS DE LA SOCIEDAD

La ESSC es una asociación interdisciplinar, no-política, dedicada a la investigación y a la realización de acciones orientadas a la conservación del suelo en Europa. La ESSC persigue sus objetivos en los sectores científicos, educacionales y aplicados, en el ámbito europeo:

promocionando la investigación sobre degradación, erosión y conservación de suelos,

informando al público sobre los principales aspectos de conservación de suelos,

colaborando con instituciones y personas implicadas en la práctica de la conservación de suelos.

La ESSC aspira a coordinar los esfuerzos, en los temas arriba mencionados, de todas las partes implicadas: centros de investigación, profesores y estudiantes de geo-ciencias, agricultura, silvicultura y ecología, agricultores, servicios de extensión agraria, industrias e instituciones gubernamentales.

Visit the ESSC Website: <http://www.essc.sk>

MEMBERSHIP FEES

I wish to (please mark appropriate box):

- ☐ Join the ESSC
- ☐ Renew my membership of the ESSC
- ☐ Know whether I have outstanding membership contributions to pay

Membership rates:

Standard Rates:

- ☐ One year € 25.00
- ☐ Three years € 70.00

Members in Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia and Ukraine:

- ☐ One year € 10.00
- ☐ Three years € 25.00

Students:

50 % reduction on above rates for three years

Your supervisor must provide written confirmation of student status

I wish to pay my membership contribution by (please mark appropriate box):

- ☐ Eurocard / Mastercard
- ☐ American Express Card
- ☐ Visa Card
- ☐ Bank Transfer

Branch address: Fortis Bank, Zonnestraat 2, B-9000 Gent, Belgium;

International transaction codes:

IBAN - BE29 0014 5139 8064 and BIC - GEBABEBB;

Account name: European Society for Soil Conservation;

Account number 001-4513980-64

CARD NO. EXPIRY

Amount: € Date: Signature:

NAME:

ADDRESS:

E-MAIL:

MEMBERSHIP NUMBER (if known): M0

Please send this form to: ESSC Treasurer, Dr Wim Cornelis, Department of Soil Management and Soil Care, Coupure links 653, B-9000 Gent, BELGIUM.

wim.cornelis@UGent.be