



10th

***International Workshop
and Steering Meeting***

*Belgrade, Serbia and Montenegro
5 -10 September 2005*

PROCEEDINGS

Progress, Methods, Outputs,
Plan of Action,
Organisation

Co-sponsored by:



Danida

Ministry for Science and
Environment Protection
of Republic of Serbia
and Montenegro

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Layout

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WORLD OVERVIEW
OF CONSERVATION APPROACHES
AND TECHNOLOGIES (WOCAT)

10th

*WORKSHOP &
STEERING MEETING
PROCEEDINGS*

WOCAT Management Group:

Core

Centre for Development and Environment (CDE, Switzerland)

World Soil Information (ISRIC, The Netherlands)

Food and Agriculture Organization of the United Nations (FAO, Italy)

Enlarged

Bureau of Soil and Water Management (BSWM, Philippines)

International Centre for Agricultural Research in the Dry Areas (ICARDA, Syria)

International Centre for Integrated Mountain Development (ICIMOD, Nepal)

Ministère de l'Agriculture, du Développement Rural et des Pêches Maritimes (MADRPM, Morocco)

Regional Land Management Unit (RELMA, Kenya)

Soil and Water Conservation Monitoring Centre (SWCMC, P.R. China)

Tajik Soil Science Research Institute (TSSRI, Tajikistan)

Orissa Watershed Development Mission (OWDM, India) *new*

Dept. for Erosion Control, Faculty of Forestry, Belgrade University, (DEC, Serbia & Montenegro) *new*

Chittagong Hill Tracts Development Board, Bangladesh (CHTDB, Bangladesh) *new*

LIST OF COLLABORATING AND FUNDING INSTITUTIONS

ACT	African Conservation Tillage Network, Harare, Zimbabwe
ADB	Asian Development Bank, Manila, Philippines
ASC-UPLB	Agricultural Systems Cluster, University of the Philippines, Los Baños, Philippines
ASOCON	Asia Soil Conservation Network, Jakarta, Indonesia
BSWM	Bureau of Soils and Water Management, Department of Agriculture, Quezon City, Philippines
CAMP	Central Asia Mountain Programme, Bishkek, Kyrgyzstan
CDE	Centre for Development and Environment, University of Bern, Switzerland
CHTDB	Chittagong Hill Tracts Development Board, Bangladesh
CIS	Centre for International Cooperation, Vrije Universiteit Amsterdam, The Netherlands
DANIDA	Danish International Development Assistance, Copenhagen, Denmark
DEC	Dept. for Erosion Control, Faculty of Forestry, Belgrade University, Serbia & Montenegro
DED	Deutscher Entwicklungsdienst, Bonn, Germany
DoA	Department of Agriculture, Pretoria, South Africa
FAO	Food and Agriculture Organisation of the United Nations, Rome, Italy
FAO-RAP	FAO Regional Office for Asia and the Pacific - (RAP), Bangkok, Thailand
FAO-SNEA	FAO Sub-Regional Office for North Africa - (SNEA), Tunis, Tunisia
FSWCC	Fujian Soil and Water Conservation Centre, Fuzhou, China
GRI-HAS	Geographical Research Institute, Hungarian Academy of Sciences, Budapest, Hungary
GREAD	Group of Research, Studies and Actions for Development, Niamey, Niger
GTZ-CCD	Deutsche Gesellschaft für Technische Zusammenarbeit - UN Convention to Combat Desertification, Bonn, Germany
IAEA	International Atomic Energy Agency, Joint FAO / IAEA Division, Vienna, Austria
ICARDA	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
ICIMOD	International Centre for Integrated Mountain Development, Kathmandu, Nepal
ICRAF	International Center for Research in Agroforestry, Nairobi, Kenya
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics, Niamey, Niger
IFAD-GM	International Fund for Agricultural Development - Global Mechanism, Rome, Italy
InGeo	Institute of Geography, Ministry of Science, Almaty, Kazakhstan
INSAH	Institut du Sahel, Bamako, Mali
IRHA	International Rainwater Harvesting Alliance, Geneva, Switzerland
ISCW/ARC	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
ISRIC	World Soil Information, Wageningen, The Netherlands
IWMI	International Water Management Institute, Pretoria, South Africa
KAU	Kyrgyz Agrarian University, Bishkek, Kyrgyzstan
KVL	The Royal Veterinary and Agricultural University, Denmark
LDD	Land Development Department, Ministry of Agriculture and Cooperatives, Bangkok, Thailand
LOE	Dept. of Landscape Ecology, Institute of Geography University of Göttingen, Germany
MADRPM	Ministère de l'Agriculture du Développement Rural et des Pêches Maritime, Morocco
MAFS-SCLUPU	Ministry of Agriculture and Food Security, Soil Conservation and Land Use Planning Unit, Dar es Salaam, Tanzania
MoA-Ethiopia	Ministry of Agriculture, Addis Abeba, Ethiopia
NCCR N-S	National Centre of Competence in Research North-South, Switzerland
OSS	Observatoire du Sahara et du Sahel, Tunis, Tunisia
PARDYP	People and Resource Dynamics in Mountain Watersheds of the Hindu Kush-Himalayas
PASOLAC	Programa de Agricultura Sostenible en Laderas de América Central, Managua, Nicaragua
PFI	Pakistan Forest Institute, Peshawar, Pakistan
RELMA	Regional Land Management Unit (former RSCU), SIDA, Nairobi, Kenya
SDC	Swiss Agency for Development and Cooperation, Bern, Switzerland
SEARNET	Southern and Eastern Africa Rainwater Network
SOWAP	Soil and Water Protection project and its organisations, Europe
SWCB	Ministry of Agriculture, Soil & Water Conservation Branch, Nairobi, Kenya
SWCMC	Soil and Water Conservation Monitoring Center, MWR, Beijing, P.R. China
SYNGENTA	Environmental Safety Assessments and Contracts, Jealott's Hill International Research Centre, Berks, UK
SYNGENTA FOUNDATION	Syngenta Foundation for Sustainable Agriculture, Basel, Switzerland
TSSRI	Tajik Soil Science Research Institute, Dushanbe, Tajikistan
UCL	Université catholique de Louvain, Agricultural Engineering Unit, Soil and Water Conservation, Louvain-la-Neuve, Belgium
UK-SMI	UK Soil Management Initiative, Mollington, UK
UNEP	United Nations Environment Programme, Nairobi, Kenya
WASWC	World Association of Soil and Water Conservation, Beijing, P.R. China
WDCU	Watershed Development Coordination Unit, New Delhi, India
WORLP	Western Orissa Rural Livelihood Project
WOCAT Management Group	Core: CDE, ISRIC, FAO Enlarged: BSWM, ICARDA, ICIMOD, MADRPM, RELMA, SWCMC, TSSRI, CHTDB, DEC

LIST OF ABBREVIATIONS

AGIS	Agricultural Geo-Referenced Information system
CA	Conservation Agriculture
CCD	See UNCCD
CGIAR	Consultative Group on International Agricultural Research
CHT	Chittagong Hill Tracts
COST	European Cooperation in the field of Scientific and Technical Research
DB	Database
DBMS	Database Management System
DoA	Department of Agriculture
ESAPP	Eastern and Southern Africa Partnership Programme
FAO-SNEA	FAO Subregional Office for North Africa
GEF	Global Environmental Facility
GLASOD	Global Assessment of Human-Induced Soil Degradation (UNEP / ISRIC)
GO	Government Organisation
HKH	Hindu Kush - Himalaya
IRHA	International Rainwater Harvesting Alliance
ISCO	International Soil Conservation Organization
IUSS	International Union of Soil Science
IWMI	International Water Management Institute
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
MG	WOCAT Management Group
MoU	Memorandum of Understanding
MRD	Mountain Research and Development Journal
NCCR	National Centre of Competence in Research (CDE, Research Partnership North - South)
NGO	Non-Governmental Organisation
NRE	Natural Resource and Environment Division of SDC
NRM	Natural Resource Management
OSWU	Optimizing Soil Water Use Consortium
PARDYP	People and Resource Dynamics Project
PFI	Promoting Farmer Innovations
QA	Questionnaire on Approaches
QM	Questionnaire on the WOCAT Map
QT	Questionnaire on Technologies
SLM	Sustainable Land Management
SM	Steering Meeting
SWC	Soil and Water Conservation
TF	Task force
ToR	Terms of Reference
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
WOCATeer	WOCAT collaborator
WOCAT-L	WOCAT mailing list
WS	Workshop
WWSM	WOCAT (annual) Workshop and Steering Meeting

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FOREWORD

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions in order to present the results of the tenth annual WOCAT Workshop and Steering Meeting, held in Belgrade, Serbia and Montenegro, in September 2005. This document is not addressed to a broad public and therefore has not been prepared for such a purpose. It is a working document for the further development of WOCAT. Thus some of the issues are presented as reported by the rapporteurs and questions arising need to be addressed until and during the next annual workshop and steering meeting. Please give us your comments in order to improve the programme and the results presented in this document.

The proceedings include:

1. Reports on treated topics
2. Summary of major discussion points
3. Action list
4. Annex: presentations.

WOCAT would like to thank all participants and collaborating institutions for their contribution and considerable commitment before, during and after the workshop (see attached list of participants).

Special thanks go to the Serbian hosts who organized an excellent and pleasant meeting.

EXTENDED SUMMARY

Topic 1: Progress reports

Report on progresses made at the various levels (sub-national to global and taskforces) facilitated exchange of new experiences and new initiatives e.g.

- Linking WOCAT database with calculation for carbon sequestration in the Philippines
- The national programme in Ethiopia with many WOCAT activities and outputs. WOCAT has been used to analyse impact of SWC activities in Ethiopia.
- Inclusion of WOCAT into the national Soil Protection Strategy in South Africa
- Mapping in South Africa
- New WOCAT programme in Indonesia having built up a national database of 40 Technologies and 34 Approaches (in Bahasa Indonesia) within 2 years.
- Although WOCAT has been established only very recently in Bangladesh (2 years), already quite a number of outputs have been produced (Ts/As, brochure, posters, etc.) and an overview book is being planned.
- WOCAT in research in Central Asia: WOCAT plays a central role in several postgraduate studies related to assessment of degradation and conservation
- Apart from SOWAP, WOCAT has been included in a second EU-funded project (COST 634 in Switzerland)

Conclusions from progress reports:

- The activities in the countries over the last year have heavily focused on trainings, but showed in general reduced activities on documentation, evaluation and dissemination of SWC knowledge (with exceptions like the case studies for the overview book, major efforts in Indonesia, etc.)
- There is need to strengthen regional cooperation and strengthen national networking
- Global issues (eg. in relation to economic analysis at farm level) serve as nice package for selling SWC; possibility to use potential wealth of information in WOCAT database to address global issues / conventions (impact analysis), but requires further shift from the initial focus on soil to land management, including water and vegetation.
- Concrete outputs need to be pushed (eg. national overview books)
- There is a need to mainstream WOCAT within institution/government; convince government that WOCAT is a necessary tool (create awareness) and not a programme in itself.
- Make WOCAT part of bigger strategies (like soil protection strategy South Africa or LADA) to achieve spill over to other countries

Topic 2: Mapping

The South Africa WOCAT team has worked on the development of an online and offline map viewer for the current WOCAT map database (QM) and presented a first release. The main aim of the offline QM map viewer was to get independent of additional software like MapObjects LT, which often caused problems for the user. Development of the map viewer is still ongoing.

The online map viewer contains all existing QM data available so far and is available on: <http://www.agis.agric.za/agisweb/wocat> under "SWC databases" – "Search SWC map".

The WOCAT world map, containing dots with information on technologies, is also currently being developed in South Africa and first results were discussed during the workshop. The online version can be viewed on <http://www.agis.agric.za/agisweb/wocat> under "WOCAT" - "WOCAT dynamic maps" – "World map". A draft of a printed WOCAT world map showing achievements in good land management practices was received well and options for getting more data were discussed.

Topic 3: Quality assurance

Experiences on quality assurance in different countries/regions and for the overview book were exchanged and discussed. Quality assurance is a critical issue to really tap existing knowledge and cannot happen "by the way"; major efforts have to be made assuring funds, time, commitment and resources. Several national/regional review panels (eg. Ethiopia, Bangladesh, South Africa, ICIMOD) were initiated. Regional

hubs being close to national focal points could facilitate quality assurance procedure and could conduct workshops for documentation training.

Experiences showed that quality assurance procedures are strongly linked to additional training, to exchange of knowledge and to the evaluation of SWC technologies and approaches. Thus quality assurance is a process leading to capacity building and evaluation.

Topic 4: WOCAT in research and education

Progress was exchanged on linking WOCAT with research programmes including:

- European projects (SOWAP, COST)
- Swiss National Centre for Competence in Research (NCCR) North-South (Central Asia)
- Research projects in Philippines, South Africa and Serbia & Montenegro

Research also contributes to WOCAT in looking at and filling of knowledge gaps.

Achievements in including WOCAT in education at University level, primary school level (eg. in Central Asia) and in the extension service in various countries were reported.

Topic 5: Feedback and dissemination; new phase; use of WOCAT

There is still the challenge ahead on how is WOCAT being used! Presentations from South Africa, Ethiopia, China, Himalaya, Bangladesh and India gave insights into how WOCAT is used in some countries, eg. for evaluating cost-benefit of technologies in Ethiopia.

Progress was made on the compilation towards a strategic plan (business, mid-term plan). The strategic plan addresses the main focus and a (re-) orientation of the WOCAT programme based on experiences made so far and based on current "global issues" (e.g. UN conventions, Millennium Development Goals).

Linking WOCAT to global issues such as carbon sequestration, water, biodiversity, poverty, desertification was planned, including the required adjustment of the methodology.

WOCAT contributions to the International Year of Deserts and Desertification (IYDD) were also discussed and planned, e.g. showing ways to address desertification using the WOCAT technologies and approaches, producing posters and presentations, pushing the production of overview books, etc.

Topic 6: National and global activity plans

National activity plans for next year were presented and discussed and the main global activities and events planned. Most countries plan to improve quality assurance and to produce national overview books.

Funding remains a critical issue, especially at global level. Due to increased national project activities and funding the budget of WOCAT during the last year has increased to a record of over US \$ 780'000 (without the in-kind contributions of national specialists providing information to the database).

The following task forces were established and their activities planned: "Mapping", "Q-Revision / inclusion of global issues / Basic and Light versions", "Strategic (business) plan"; "Use of WOCAT", "WOCAT in research and education".

Topic 7: Administrative and organizational issues

The TOR for the Management Group was reviewed and their members elected. The next WWSM will be in South Africa:

Host: National Department of Agriculture (NDA): Coordinator: Dirk Pretorius

Where: Cape Town, South Africa

When: 23 – 28 October 2006

Special topics: Spatial aspects of SLM, International Year of Deserts and Desertification 2006 (IYDD), new tools (questionnaires revised, Q Light, etc.), special inputs (documented Ts, As, spatial info), field trip (including farmers who use WOCAT).

Some general statements

- All participants profited from networking, exchanging ideas and further developing initiatives.
- Several key players and institutions (West, North and East Africa, ICARDA) did not make it to Belgrade although intended and despite best support by the local organizers. The views of these partners could not sufficiently be reflected. Through e-mail these partners confirmed their commitment to continue or strengthen the WOCAT activities and to participate in the next event.

- Although the meeting was arranged in Europe to facilitate participation of donors, no representatives of major donors attended the steering meeting.
- An invitation of Deputy Minister of the Ministry of Science and Environment Protection of Serbia & Montenegro allowed WOCAT to present itself and to discuss possible set-ups in Serbia & Montenegro and South-East Europe.

Considering the size and the global mandate of WOCAT, the available resources can only cover part of the activities needed at the global (core) level. Commitment of the Management Group members and the positive spirit within WOCAT need to be maintained and enhanced, and additional funding needs to be solicited.



Beside an old huge oak during the field trip (Photo Hanspeter Liniger)

INTRODUCTION

Since 1996, WOCAT has organized International Annual Workshops and Steering Committee Meetings with the goal (a) to bring together the main collaborating and funding institutions and the core collaborators, (b) to assess the progress and to exchange experiences, (c) to further develop the programme, (d) to plan for the future and (e) enhance WOCAT in the host country / region.

During the previous annual workshop in China 2004, Serbia and Montenegro was selected to host the 10th annual workshop. The meeting was hosted by the Department for Erosion Control, Faculty of Forestry, Belgrade University.

The workshop took place at the Trim Hotel in Belgrade during 6 days from Monday 4 to Saturday 10 September, whereof one day was spent in the field. There was no extra steering meeting this year, since no donor representatives attended. Decisions regarding the planning for next year were taken on the last day).

30 participants from 16 countries attended the workshop in response to an invitation to all main collaborating and funding institutions, core collaborators as well as representatives from institutions that recently joined WOCAT.

Major topics of WWSM10:

The main discussion **topics** identified for the workshop were:

TOPIC 1: Progress reports on global, regional and national initiatives and task forces;

TOPIC 2: WOCAT mapping;

TOPIC 3: Quality assurance;

TOPIC 4: WOCAT in research;

TOPIC 5: Dissemination strategy; new phase; use of WOCAT

TOPIC 6: National and global activity plans;

TOPIC 7: Organisational and administrative issues



Welcome speeches (Photo: Hanspeter Liniger)

WORKSHOP PROGRAMME

Date/time	Activity/Topic	Responsibilities
Sunday 04/09	Arrival of participants; registration	
Monday 05/09		
08:30 – 09:15	Opening, welcome <ul style="list-style-type: none"> - Representative of the Ministry for Science and Environment Protection of Republic of Serbia; - Representative of Ministry for Agriculture, Forestry and Water Management, Directorate for Water; - Dean of the Faculty of Forestry; - Head of the Department for Erosion and Torrent Control; - Workshop organizer - WOCAT coordinator <i>(Group photograph)</i>	Chair: M. Zlatic <i>Deputy Minister Prof. Dr. Aleksandar Sedmak</i> <i>M.Sc. Dragomir Misailovic</i> <i>Dr. Ratko Kadovic</i> <i>Dr. Stanimir Kostadinov</i> <i>M. Zlatic</i> <i>HP. Liniger</i>
09:15 – 09:45	Introduction, participants' expectations, approval of agenda, administrative information (incl. info about reimbursements)	<i>HP. Liniger / M. Zlatic</i>
	TOPIC 1: Progress reports	Chair: J. Rondal Rapporteur: R. Mekdaschi Studer
09:45 – 10:30	Activities at the global level <ul style="list-style-type: none"> - Secretariat/Management Group/CDE - FAO - ISRIC 	<i>H.P. Liniger</i> <i>C. Licona Manzur</i> <i>G. van Lynden</i>
10:30 – 11:00	<i>Coffee break</i>	
11:00 – 12:15	Task Forces (max. 10 min. each) <ul style="list-style-type: none"> - Mapping – QM & Worldmap - WOCAT tools – QT/QA - Quality assurance / control procedures, development of WOCAT label, peer review, project support service - WOCAT in research and education - Feedback & dissemination strategies. WOCAT and conventions. Funding 	<i>G. van Lynden</i> <i>M. Gurtner</i> <i>R. van der Merwe</i> <i>M. Zlatic</i> <i>C. Licona Manzur</i>
12:15 – 13:30	<i>Lunch break</i>	
13:30 – 15:30	Presentation of regional / national progress reports and workplans (<10 min. each!) (Nomination of SWOT reviewers, announcement of regional group meetings) <i>Africa:</i> Ethiopia, South Africa <i>South Asia:</i> ICIMOD, Bangladesh, India, <i>East and South-East Asia:</i> China, Fujian, Philippines, Indonesia, WASWC	<i>G. Schwilch</i> Regional and national coordinators/representatives
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 16:50	<i>Central Asia:</i> CAMP, Kyrgyzstan, Tajikistan <i>Europe:</i> SOWAP, Serbia & Montenegro, Switzerland	Regional and national coordinators/representatives
16:50 – 18:00	Regional group meetings (3 groups: Africa, South and South-East Asia, Central Asia and Europe): <ul style="list-style-type: none"> - Discussion on problems and solutions within the countries, review of last years group work (change in problems, review of proposed solutions) - Discussion on use of WOCAT as standard tool and in implementation, quality assurance, research and outputs - Preparation of regional presentation to plenary and 1-2 poster: major achievements, problems, solutions, plans (of interest for the other regions) - Preparation of open questions where an answer is expected from the plenary 	Moderators: <i>D. Pretorius</i> <i>K. Khisa</i> <i>G. van Lynden</i>
19:00	<i>Welcome Dinner at the Faculty of Forestry</i>	
Tuesday 06/09		
08:00 – 09:00	Presentation of regional group meetings Presentation of SWOT reviewers Plenary discussion	
09:00 – 10:00	WOCAT's vision and mission statement: Brainstorming in groups on new phase	<i>HP. Liniger</i>
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:30	Presentation and plenary discussion	

11:30 – 11:45	Introduction to field trip	<i>M. Zlatić</i>
	TOPIC 2: WOCAT mapping	Chair: D. Danano Rapp.: R. van der Merwe
11:45– 12:45	Demo of the off-line QM Demo of the on-line QM Demo of the World map admin. system & viewer Implementation of WOCAT in South Africa	<i>D. Pretorius</i> <i>C. Pretorius</i>
12:45 – 14:00	<i>Lunch break</i>	
14:00 – 14:30	Plenary discussion	
14:30 – 15:00	Strategies for launching 'new' mapping initiatives in small groups (2-4 people)	
15:00 – 15:30	Plenary presentation	
15:30 – 16:00	<i>Coffee break</i>	
16:00	Travel to Predejane (4 hours)	
20:30	<i>Dinner in Motel Predejane with South Serbian trumpet music. Overnight in Predejane</i>	
Wednesday 07/09	(field trip)	
07:00	<i>Breakfast</i>	
07:30 – 09:00	Travelling to Porecje Vucje	
09:00 – 12:00	Visiting Porecje Company (example of cooperative venture); visiting their terraced area called "Igriste" with small reservoirs. Discussion with staff of company and tasting of their products	
12:00 – 13:15	Travelling to Nis	
13:15 – 15:30	Host from Nis - Water Management Enterprise "Erozija" (Erosion) preserved sightseeing and presentation about regulation of Nisava river; short sightseeing of fortress of Nis; lunch	
15:30 – 18:30	Travelling to village "Granice"	
18:30 – 20:00	Visiting farm of family Tomicevic; cellar for slivovic and wine; tasting of brandy/wine; cheese pie - home made.	
20:00 – 21:00	Travelling to Belgrade	
21:00	Dinner in Hotel Trim	
Thursday 08/09		
	TOPIC 3: Quality Assurance	Chair: D. Pretorius Rapporteur: M. Gurtner
08:30 – 09:00	Presentation of experience made in data quality assurance and presenting it in the global overview book	<i>R. Mekdaschi Studer</i>
09:00 – 10:15	Practical training for reviewers (participants)	
10:15 – 10:45	<i>Coffee break</i>	
10:45 – 11:30	Planning national consolidation of databases and production of overview books within regional groups	
11:30 – 12:00	Sharing reviewing experiences and regional outcomes	
12:00 – 13:30	<i>Lunch break</i>	
	TOPIC 4: WOCAT in Research and Education	Chair: S. Bhuchar Rapp.: C. Pretorius
13:30 – 13:45	Experiences gathered within NCCR North-South research studies in Tajikistan	<i>U. Boturov / HP. Liniger</i>
13:45 – 14:00	Research in SOWAP	<i>G. van Lynden</i>
14:00 – 14:30	Plenary discussion	
14:30 – 16:00	Group discussions on options and strategies for WOCAT in research and education	
16:00 – 16:30	<i>Coffee break</i>	
17:00 – 17:30	Presentation of group discussions	
17:30	<i>Belgrade sightseeing (organized by hosts)</i>	
20:30	<i>Dinner</i>	

Friday 09/09		
	TOPIC 5: Feedback and dissemination strategy; new phase, new face? Shift in emphasis towards use and users needs; Use of WOCAT	Chair: C. Licona Manzur Rapp.: G. Schwilch
08:30 – 08:45	Introduction to topic and to presentations on the use of WOCAT	<i>HP. Liniger</i>
08:45 – 09:00	The use of WOCAT in Ethiopia	<i>D. Danano</i>
09:00 – 09:15	The training program which will take place in Yulin, China	<i>L. Meng</i>
09:15 – 09:30	HIMCAT achievements and challenges	<i>S. Bhuchar</i>
09:30 – 09:45	Soil and Water Conserving Technologies Documented from Chittagong Hill Tracts, Bangladesh - The BANCAT Achievements and Its Future Plan	<i>S. Kanti Khisa</i>
09:45 – 10:15	<i>Coffee break</i>	
10:15 – 10:30	WOCAT activities in Orissa	<i>G.B. Reddy</i>
10:30 – 10:45	Wrap-up and introduction to group work	
10:45 – 12:00	Group work to elaborate feedback and dissemination strategies (4 different groups on the various issues)	
12:00 – 13:30	<i>Lunch break</i>	
13:30 – 14:30	Continuation of group work	
14:30 – 15:30	Presentation of group work results	
15:30 – 16:00	Plenary discussion and decisions	
16:00 – 16:30	<i>Coffee break</i>	
	TOPIC 6: National and global activity plan for next year(s)	Chair: G. van Lynden Rapporteur: R. Mekdaschi Studer
16:30 – 17:15	Finalizing national/regional workplans: indicate what will be done with own means (a), for what additional support is needed: from country/region (b) and from global WOCAT(c) - considering results of Workshop (adjust!) - concrete steps to achieve suggested results from the workshop topics (e.g. for quality assurance, outputs, use of WOCAT, etc.) List requests / expectations towards regional / global WOCAT	
17:15 – 18:00	Short presentation of workplans (major events, improved / new Ts /As, needs from global WOCAT)	
20:00	<i>Dinner</i>	
Saturday 10/09	(Steering Meeting)	
08:30 – 10:00	Global activities for next year - review WOCAT vision in 3 and 10 years - major priorities - major events - funding - formation of taskforces (topics, and members and priorities and finances) - additional funding needs and opportunities - compilation of materials / contributions to workshop proceedings	
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:30	Organisation of taskforces (first meeting to set up activity plans)	
11:30 – 12:00	Presentation of taskforce activity plans	
12:00 – 13:30	<i>Lunch break</i>	
	TOPIC 7: Organisational and administrative issues	Chair: S. Kanti Khisa Rapporteur: G. Schwilch
13:30 – 14:15	Election of Management Group members, assignment of Secretariat, next WWSM 2006	
14:15 – 15:15	Feedback from participants (against expectations)	
15:15 – 15:45	A.O.B.	
15:45 – 16:00	<i>Closing</i>	
16:30	<i>Cruising and sightseeing along river Sava ($\pm 1\frac{1}{2}$ hours); shopping, walking</i>	

WELCOME SPEECHES

Deputy Minister Prof. Dr. Aleksandar Sedmak; Representative of the Ministry for Science and Environment Protection of Republic of Serbia

Prof. Dr. Sedmak stresses the importance of international cooperation for his country, especially in the field of SWC and science. This workshop is an important occasion, also because a special programme on sustainable soil and water management is lacking in Serbia & Montenegro. He opens the workshop and wishes success.

M.Sc. Dragomir Misailovic, Representative of Ministry for Agriculture, Forestry and Water Management, Directorate for Water

Mr. Misailovic wishes a successful workshop. His Ministry will support the workshop as well as WOCAT in Serbia & Montenegro. The Ministry of Agriculture, Forestry and Water Management also has and will help experts working in the field of Soil and Water Conservation. Serbia & Montenegro should be included in the international WOCAT network; taking into account the circumstances in some areas (eg. coal mines, industrial areas).

Dr. Ratko Kadovic, Dean of the Faculty of Forestry, Belgrade University

Dr. Kadovic not only anticipates a scientifically successful workshop, but also socially. For the university, sustainable land management, SWC, erosion control, etc. are very important subjects for training and capacity building. Sustainable land management is also a crucial issue regarding food security.

Dr. Stanimir Kostadinov, Head of the Department for Erosion and Torrent Control, Faculty of Forestry, Belgrade University

The Department for Erosion and Torrent Control was formed in 1960, educating experts for erosion and torrent control. Serbia & Montenegro is a mountainous country with soil erosion problems and frequent torrential events. He is sure that this workshop will produce valuable results. He wishes the participants good success and a pleasant stay in the country.

Dr. Miodrag Zlatic; Workshop organizer, Associate Professor and Deputy Head at the Department for Erosion and Torrent Control, Faculty of Forestry, Belgrade University

During the International Year of Mountains (IYM) Conference in Belgrade (held in December 2002) WASWC emphasized WOCAT as good regional programme. It was proposed to conduct a WASWC Meeting for the Balkan region in Sofia in July 2003 to discuss more about regional cooperation and to give WOCAT more attention. There it was concluded that WOCAT should become an ongoing programme in Serbia and Montenegro and the representative of the present countries accepted WOCAT to be a regional programme.

In July 2004 a workshop was organized in Belgrade on "Community Based Rehabilitation of Degraded Lands of Central Balkan Mountains and Northern Turkey". The workshop results are the base for future projects, which will have a direct influence on the selected representative localities of the hilly-mountainous Balkan region, and which will also include WOCAT.

It is the great honour for the Faculty of Forestry from Belgrade University to organize this meeting, as there is increasing interest in implementing WOCAT programme in Serbia from year to year. We prepared this meeting in special restrictive conditions regarding travelling all over the world. That refers especially to visa requirements.

Hanspeter Liniger; Coordinator WOCAT

A short introduction to WOCAT was presented by the coordinator showing the vision and mission as well as highlighting the development of WOCAT in Europe and the role of Serbia Montenegro:

WOCAT in Europe was initiated by Miodrag Zlatic 2001, followed by EU Proposals (SOWAP and COST). The meeting in Serbia Montenegro offers a great opportunity for advancing WOCAT in Europe. SWC is important in S&MN for: Science and Environment Protection, MoA, Forestry and Water Management, UNCCD (Focal Point), Forestry and Erosion and Torrent Control.

WOCAT concern is to help national / regional programmes (method / tools, network, ...)?

Thank you for hosting us!!!

TOPIC 1 PROGRESS REPORTS

Rapporteur: Rima Mekdaschi Studer

Each year, progress at all levels is reported and compared with the workplans prepared during the previous workshop. The reports below cover the period from October 2004 (WWSM9 China) to September 2005 (WWSM10 Serbia).

1.1 Activities at the global level

1.1.1 Review 2005

Major achievements in 2005:

- **Overview book:** quality assurance of case studies (almost) finalized. Gained experience on the process of quality assurance and feedback/interaction with contributors. Draft of Analysis Chapter.
- Production of WOCAT **questionnaire “Basic”** (Approach and Technology in English and French)
- **India: contribution to Danida** training workshop in Orissa, WOCAT input to UNDP/UNCCD meeting in Delhi
- **Research:** Major efforts made to include WOCAT in research proposals / projects and to use synergies between implementation and research projects. Enhanced link to NCCR-project in Central Asia. EU-COST 634 proposal approved: On- and Off-site Effectiveness of Soil and Water Conservation in Switzerland. 4 EU-proposals prepared/assisted (pending, e.g. “Green water” EU - Coordinated Action, DryLandOptions East Africa - EU-STREP, DSS on water and land management impacts), 1 ICARDA proposal prepared (rejected for this year).
- Maintaining and **enhancing the network**, e.g. preparations to include WOCAT in the documentation for rainwater harvesting experiences.
- Inclusion of WOCAT methods and tools in the Land Degradation Assessment in the global FAO-UNEP-GEF project.

Delays and postponements:

- Printing of overview book
- WOCAT panel / label
- Feedback mechanism

Chief “problem”: enthusiastic planning during WWSM but in some cases not sufficiently assigned responsibilities and too little resources available (setting priorities).

Objectives / Expected results	Activities	Planning 2005: Major global activities planned for Nov. 2004 – Oct. 2005*	Review 2005: Achievements Nov. 2004 to August 2005
1. Output generation <i>CD- ROM versions 3 and 4, a book published on the experience of SWC from the collaborating countries, 5 publications of the WOCAT methodology and the results in international journals, proceedings of conferences and workshops</i>	<ul style="list-style-type: none"> ○ produce CD-ROM in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests ○ print a first overview of global experiences of SWC Technologies and Approaches ○ publish in journals and conference proceedings: WOCAT tools, methods, results. ○ support the production for national overviews ○ produce dissemination materials: Use of WOCAT (posters, pamphlets, videos) ○ compile a first global map on SWC achievements 	<ul style="list-style-type: none"> • Printing global overview book June 05 and dissemination • Conference papers: Conservation Agriculture Conference: 10/05, Rainwater harvesting Kenya: 10/05 • Advance with the global map compilation (to be finalized by 06) • Update WOCAT materials according to new Vision / Mission and Modular WOCAT (flyers, brochures, DBs, questionnaires etc.) • Update posters 	<ul style="list-style-type: none"> • Overview book: delayed to Jan 06 • Conference preparations (poster, paper) for Conservation Agriculture Congress and Rainwater Harvesting training workshop October 05 • Global map: strategic discussions with map taskforce, Berne, June 05 • new "Questionnaires Basic" developed (E+F) • new poster on role of WOCAT in research (for EFARD Conference)
2. Quality management <i>Good quality data made available and used for the production of national and regional outputs</i>	<ul style="list-style-type: none"> ○ further develop procedures to enhance data quality (through panels (national, regional, global) and WOCAT labelling) ○ address knowledge gaps: linking to research e.g. NCCR N-S, EU programmes (SOWAP, COST), main focus on the impact of SWC ○ support further collection of data-sets (depending on requests and Steering meetings) ○ Support the set-up of national / regional / global data reviewing panels. 	<ul style="list-style-type: none"> • Establishing global panel: project support service, label (explore procedure) • Advance WOCAT in research and education: COST proposal, SOWAP, NCCR • Backstopping data collection depending on requests 	<ul style="list-style-type: none"> • Ideas on panel further developed, on-going • COST proposal approved, 2 PhDs started using WOCAT • NCCR: 2 PhD, several MSc on Ts/As and mapping with QuickBird • SOWAP: further support towards documentation, evaluation and dissemination of investigated SWC • Backstopping data collection: Ethiopia, Nepal, India, Serbia • Overview Book case studies quality improved • National panels: Ethiopia, Central Asia (CAMP)
3. Networking <i>WOCAT Network enhanced and consolidated</i>	<ul style="list-style-type: none"> ○ Add new partners and consortium members in regions where WOCAT is not yet well established. ○ strengthen collaboration between partners and between soil management (fertility, productivity) and water management (conservation, excess water / flood management, disaster prevention) ○ Strengthen partner in the use of WOCAT ○ conduct 3 International Workshops and Steering Meetings 	<ul style="list-style-type: none"> • Expand within existing WOCAT countries / regions, new regions (Latin America through FAO / LADA) • Using other networks and Conferences e.g. C. A. and water harvesting • Conduct WWSM 2005 • Support and coordinate TF meetings • Conferences: CA Kenya, RWH Kenya 	<ul style="list-style-type: none"> • India DANIDA (Orissa) • Using other networks: collaboration with Conservation Agriculture and Rainwater Harvesting (IRHA) • Conducted WWSM 2005 in Serbia • 3-day map taskforce meeting held in Bern in June 05 with participants from South Africa, FAO, ISRIC and CDE • Inclusion of WOCAT in LADA (GEF) proposal • Intense email communication with a great number of WOCAT collaborators throughout the year

	<ul style="list-style-type: none"> ○ participate in International Conferences to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO; LADA) ○ integrate WOCAT in environmental and development processes at the global (UNCCD, UNCBD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral aid projects) ○ collaborate with other global networks e.g. conservation agriculture, rainwater alliance etc. ○ continue and enhance the WOCAT e-mail list and newsletter ○ pursue the idea of a WOCAT label and project support service 	<ul style="list-style-type: none"> ● Integrate into LADA and Desertification Convention ● E-mail and newsletter ● Pursue the idea of a WOCAT label and project support service ● Promote overview book and use of WOCAT ● ADB program in China 	<ul style="list-style-type: none"> ● 1 WOCAT newsletter edited and distributed ● ADB China programme further developed ● Funding strategy meetings/discussions: Syngenta Foundation Basel (22/23.3.05) and ISRIC/Free Univ., Amsterdam (11.4.05) ● UNDP/UNCCD meeting in India: include WOCAT in implementation of desertification programmes ● Strengthen link to research (NCCR) and initiating new WOCAT research projects: COST (approved), ICARDA and SNF (Swiss Nat. Sc. Foundation) (rejected) and 4 EU proposals (pending) ● Efforts to include WOCAT in Sahel Study (meeting in Amsterdam and Burkina Faso)
4. Capacity building <i>National and regional collaborators trained to run WOCAT programme in their countries and regions</i>	<ul style="list-style-type: none"> ○ conduct additional international "Training for National Trainers / Facilitators" workshops ○ provide support and expertise for additional national and regional initiation and training workshops, upon request from national / regional institutions 	<ul style="list-style-type: none"> ● Training for trainers: China, Bangladesh ● WOCAT in education: courses at University level 	<ul style="list-style-type: none"> ● China training: postponed to November 05 ● India: training workshop held in February 05 in Orissa ● Regional training course Kazakhstan (research) ● WOCAT in education: Swiss College for Agriculture Zollikofen ● Overview Book case study reviews
5. Tool development <i>Additional Tools for exchange of knowledge and decision support developed</i>	<ul style="list-style-type: none"> ○ improve Internet access to data and tools ○ improve database management system to enhance decision support, exchange between users and providers on knowledge ○ produce support materials, such as standards for national "overview books", guidelines for the use of WOCAT data in the development and implementation activities 	<ul style="list-style-type: none"> ● TF: QM ● DB improvement ● Adjustment of Ts and As: light, basic, professional ● Produce training manual ● Develop feedback mechanism in database ● Improve website 	<ul style="list-style-type: none"> ● Currently improving QM database management system ● new "Questionnaires Basic" developed (E+F) ● feedback mechanism: cost/benefit, need and use needs further clarification (after overview book experience) ● updated website

* **bold** → top priority

1.1.2 WOCAT Secretariat (administrative and logistic)

Main activities:

- Reactions to requests for brochures, CD-ROMs (CD-ROM v.3, CD-ROM Video);
- E-mail correspondence;
- Production of WOCAT Workshop and Steering Meeting proceedings;
- E-mails: Main persons involved in maintaining and enhancing the contacts and reacting to requests are: Franziska Jöhr, Gudrun Schwilch, Godert van Lynden, Rima Mekdaschi Studer, Mats Gurtner and Hanspeter Liniger. The sharing of information should go on amongst the different WOCATeers without necessarily involving the secretariat. There is a need to decrease the support from the secretariat and to increase involvement of the regional and national institutions.

1.1.3 Funding

a) SDC

- The annual budget is CHF 432,000 (about USD 331,000 / EUR 290,000) for the current phase 2005-2007;
- An additional budget of CHF 29,500 (about USD 22,600 / EUR 20,000) was approved for impact analysis of conservation agriculture on crop water use and production and preparation of presentations at the Conservation Agriculture Congress 05 in Nairobi
- SDC contributes CHF 50,000 (about USD 38,300 / EUR 33,000) to the WOCAT/IRHA training workshop in Oct. 05 in Kenya
- Objectives: see table above (p. 7-8).

b) DANIDA

- The current phase 2004/2005 with CHF 80,000 per year (about USD 61,300 / EUR 53,000) will end December 05. Follow-up discussions with DANIDA have been initiated.

c) Other donors

- Syngenta Foundation: CHF 50,000 per year (about USD 38,300 / EUR 33,000) for a three-year period (2004-2006)
- In the SOWAP project an amount of EUR 21,000 (USD 24'800) per year is allocated (subcontract with ISRIC) for WOCAT core activities
- DoA (Department of Agriculture), South Africa: EUR 100,000 (about USD 118,000) for map and WOCAT in South Africa
- EU-COST Switzerland research project: CHF 295,000 (about USD 226,000 / EUR 191,000) for 3 years (1.4.05 – 31.3.08) for 2 PhD and several master studies approved and an additional CHF 90,000 (USD 69,000 / EUR 58,400) for supervision requested (pending).
- Preparation for 4 EU-proposals

Due to increased national project activities and funding the budget of WOCAT during the last year has increased to a record of over USD 780'000 (without the in-kind contributions of national specialists providing information to the database).

1.1.4 Financial contributions

Financial Contributions to WOCAT between 10/03 and 9/05 (in USD)								
	10/03-09/04			09/92-09/04	10/04-09/05			09/92-09/05
	Cash	In-kind	Total	Total	Cash	In-kind	Total	Total
SDC	300'000		300'000	2'168'000	361'050		361'050	2'529'050
FAO	4'000	10'000	14'000	933'240	14'000	12'000	26'000	959'240
IDRC				85'000				85'000
RSCU/RELMA	8'000		8'000	186'500			0	186'500
UNEP				100'000				100'000
GTZ/OSS			???	243'000				243'000
CIS – Vrije Universiteit		10'000	10'000	90'000		10'000	10'000	100'000
ISRIC		20'000	20'000	240'000		15'000	15'000	255'000
CDE			0	70'000			0	70'000
LDD (Thailand)			???	51'500				51'500
PASOLAC/GTZ/LA (Nicaragua)				74'000				74'000
FJSWCO China (ADB/FSWCC)				65'500	3'000	500	3'500	69'000
ASOCON (Indonesia)				62'000				62'000
NDA/ISCW (ARC) / DoA RSA	24'300	6'100	30'400	201'800	100'000		100'000	301'800
ICRISAT (Niger)			0	31'000			0	31'000
DED (Niger)			0	6'000			0	6'000
ICARDA			0	35'000	??	??	??	35'000
INSAH			???	10'000				10'000
ICIMOD		15'000	15'000	29'500		15'000	15'000	44'500
OSWU				4'000				4'000
IBSRAM			???	5'500				5'500
UPLB/BSWM (Philippines)	1'000	3'000	4'000	56'500	1'000	2'000	3'000	59'500
DANIDA	58'000		58'000	289'300	66'400		66'400	355'700
University Belgrade	1'600		1'600	4'200	6'000	1'800	7'800	12'000
MoA: SWC Kenya	8'000		8'000	20'500				20'500
HIMA - Iringa Tanzania			0	???				???
ESAPP Ethiopia		16'500	16'500	39'735			0	39'735
CAMP Central Asia	3'200	6'500	9'700	34'200	26'250	190	26'440	60'640
UNCCD-GTZ for Central Asia	9'700		9'700	19'700				19'700
MoA: SWC, Tanzania			???	???				???
MoA: WFP, Ethiopia		18'200	18'200	36'400	1'200	6'000	7'200	43'600
WDCU India	30'000	15'000	45'000	75'000				75'000
Syngenta Foundation	35'000		35'000	50'000	41'500		41'500	91'500
ADB/China National level/GEF			5'000	47'100		10'000	10'000	57'100
SWCMC (China)	5'000		5'000	5'000	8'500	3'500	12'000	17'000
WASWC	1'000	1'500	2'500	13'500	500	1'500	2'000	15'500
Kazakhstan	8'600		8'600	9'550	7'800	7'800	15'600	25'150
Tajikistan	3'000	400	3'400	5'900	3'000	600	3'600	9'500
MAFS-SCLUPU (Tanzania)			???	7'890				7'890
SOWAP			25'000	35'000		27'000	27'000	62'000
CHTDB (Bangladesh)	4'200	500	4'700	4'700	5'900	100	6'000	10'700
Indonesia (GOV.)	15'700		15'700	16'000	5'000		5'000	21'000
MoA, RDF/MADRP (Morocco)					9'000	14'000	23'000	23'000
Total	520'300	122'700	673'000	5'461'715	660'100	126'990	787'090	6'248'805

= Estimated funds July 04 – June 05 (conversion rate 1 CHF = 0.83 USD)

1.1.5 Publicity

- WOCAT on the Internet (WWW.WOCAT.NET): see statistics below ;
- WOCAT newsletter and contributions to WASWC newsletters;
- Presentations at workshops: India UNEP/UNCCD, India DANIDA (Orissa Watershed), ...
- Poster: Schwilch G., Liniger HP.: „Addressing Knowledge Gaps in Soil and Water Conservation – The WOCAT Approach”. Presented at the EFARD (European Forum on Agricultural Research for Development) Conference in April 05 in Zürich, Switzerland.
- First awareness creation course of SMWnet (Soil and Water Management Research Network) in Kenya.
- Participation in Sahel study workshop (Success stories in natural resource management in the Sahel: their contribution to poverty reduction and sustainable land management) 13-15 February 2005 Ouahigouya, Burkina Faso.
- Proceedings 2004 (WWSM9)
- Paper presenting WOCAT in a Mountain Research Initiative, publication by H. Hurni, HP. Liniger and U. Wiesmann (2005). In: Huber, U.M., Reasoner, M.A., Bugmann, H. (Eds.): Global Change and Mountain Regions: A State of Knowledge Overview. Kluwer Academic Publishers, Dordrecht, in press.

1.1.6 WOCAT website statistics

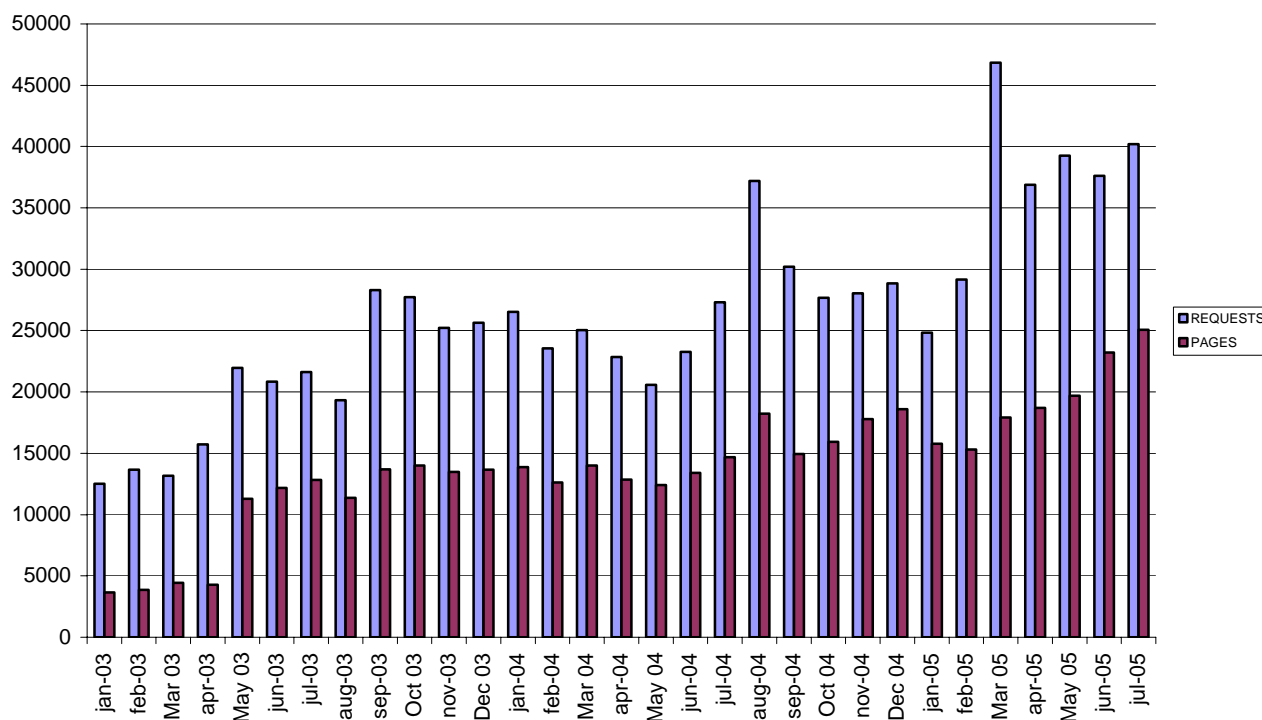
Compiled by Gudrun Schwilch

See also <http://www.fao.org/landandwater/agll/WOCAT/WOCATlog.htm>.

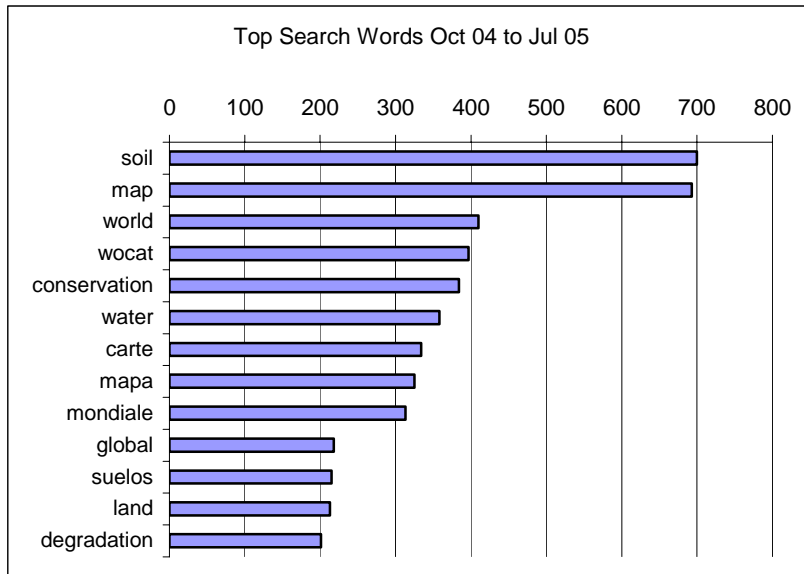
Website statistics Oct. 04 to July 05 (10 months):

- Total requests: 339,340 (1,116 / day) (2004: 315,129 (861 / day), 2003: 192'523 (528 / day)) (each file on a web page is counted separately, i.e. if there are 10 graphic files on a page, this counts as eleven requests!);
- Total pages: 188,003 (618 / day) (2004: 168,214 (459 / day), 2003: 86'317);
- Distinct hosts: 11,256 (number of different computers) (2004: 10,882, 2003: 7'513);
- The hits show a remarkable increase over the last few months (Feb 05 to Jul 05).

Web statistic for WOCAT website



- Domain or organisation analysis still not possible (unresolved IP-numbers), i.e. we don't know *who* visited our website;
- Top search words (in decreasing order):



Whereas 'map' is searched in all three languages and leads the list with 1352 hits ('map', 'carte' and 'mapa' together), the second top word 'soil' is only searched for in English and Spanish, but not in French. These top search words have not changed much over the last three years, but 'India' was less searched for and is not listed any longer.

- Most requested pages

English:

- Home (default.asp) with 95'000 request is the absolute leader of the requested pages! But this is rather meaningless as it may indicate that many people get to the WOCAT home page but not any further.
- World map (worldmp.asp) has 1867 hits
- Database (databs.asp): 1476
- Introduction to WOCAT (about1.asp): 1293
- Latest Newsletter (newslet.asp): 1035
- Questionnaires (quest.asp): 1022
- Collaborating and funding institutions (colfund.asp): 1014

French:

- Carte mondiale / World map (worldmap_F.asp): 927
- Accueil / Home (default_F.asp): 679
- Bases de données / database (databs_F.asp): 625

Spanish:

- Mapa global / World map (worldmap_S.asp): 831
- Inicio / Home (default_S.asp): 619
- CD-ROMs (cdroms_S.asp): 549

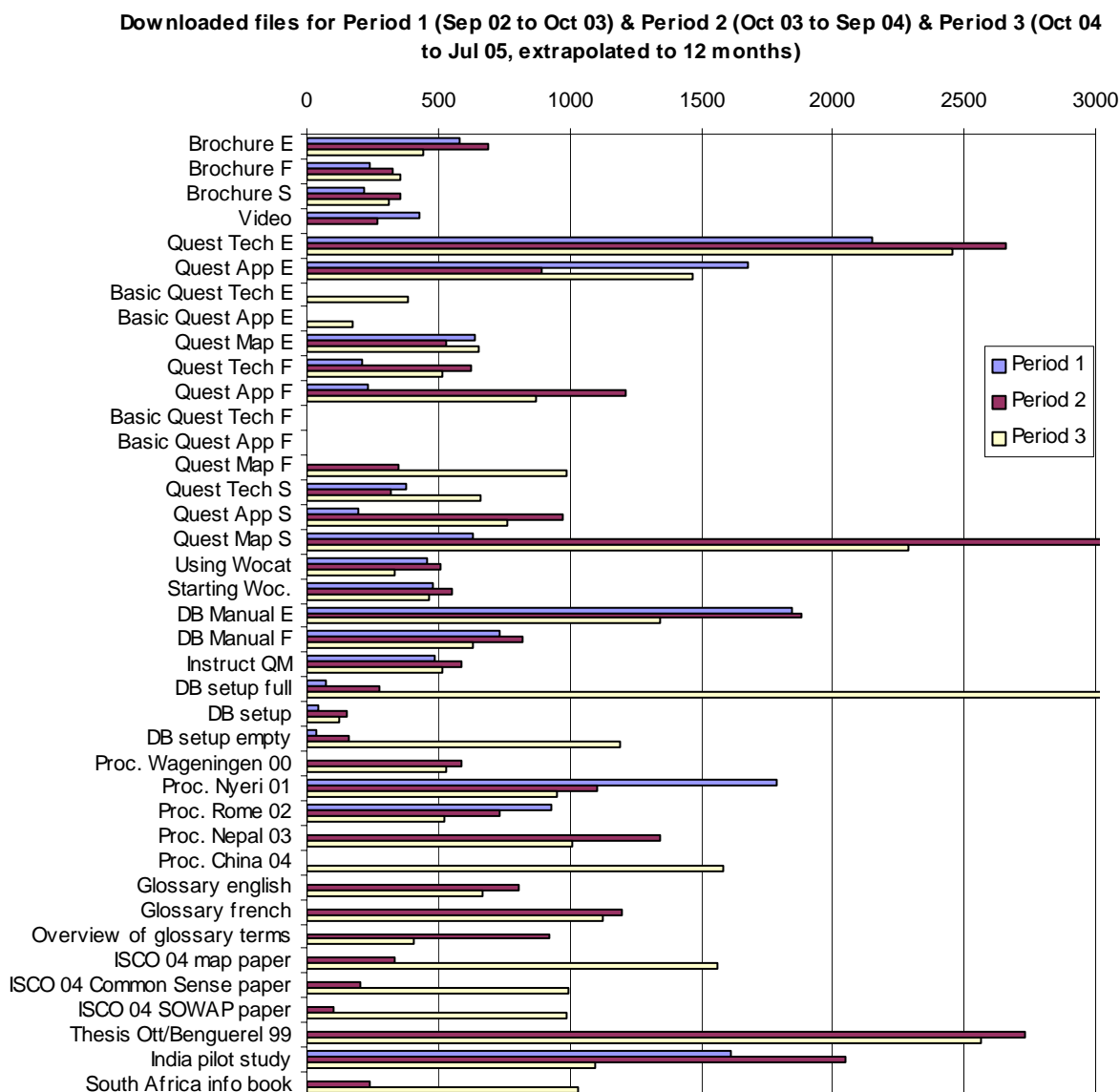
- The most frequently downloaded files:

- database/setup_full.exe is the most requested file with 9719 requests, which is remarkable!
- on the second place (2137 requests) is the master thesis of Ott and Benguerel 1999, even though it is only available in German
- technology questionnaire professional in English: 2043
- map questionnaire Spanish: 1905
- proceedings WWSM China 04: 1322
- ISCO paper on WOCAT mapping 04: 1300
- approach questionnaire professional English: 1223
- db manual: 1117

These statistics needs to be interpreted with some caution. The number of requests does not reflect the number of visitors because each graphic file on a web page counts as one request. On the other hand, certain visits are not counted, if the user has visited this page before and it is still in his cache and not refreshed. Or the Internet Service Provider's (ISP) cache has saved it, because somebody else from the

same ISP has looked at that page recently. The proportion of requests retrieved from the cache can make up to 50%, so half of the user's requests are not counted.

Further reading on www.analog.cx/docs/webworks.html.



1.1.7 FAO / LADA

Report by Clemencia Licona Manzur

LADA objectives:

- Develop and test an effective methodological approach for the assessment of land degradation in drylands;
- Assess land degradation in drylands at global, national and sub-national levels to identify:
 - the **status and trends** of land degradation in all its components, including biodiversity
 - **hot spots**: areas with greatest land constraints or under risk of degradation
 - **bright spots**: areas where degradation has been slowed or reversed through appropriate technologies.

During the last months the LADA team has been preparing the work plan, budget and completing procedures for getting the funding from UNEP, GEF and FAO (2006-2009). The LADA pilot countries have been identified (China, Cuba, Mexico, South Africa, Argentina, Tunisia, Senegal). Once the support from the countries is obtained, the project document will be submitted to UNEP council.

The project “Assessment tools of land degradation” has four components; three of them will make use of WOCAT tools:

1. Development of the LADA approach: land degradation assessment guidelines, network and information system: The overview book will be produced here
2. Carrying out global and regional land degradation assessments (GLADA initiative: assess land degradation by remote sensing of biomass (China pilot study by Bai Zhanguo, ISRIC)
3. Carrying out local assessments in hot spots and bright spots in pilot countries - Training component: training on local assessment methods and ways of documenting good practices “bright spots”; inclusion of WOCAT in training centres curriculum. Regional training centres will benefit other countries beside the LADA pilot countries
4. Carrying out a major analysis and preparation of a strategy for global action – analysis of best practices documented and use in policy making

Training on the WOCAT tools is expected in some of the regions.

1.1.8 ISRIC

Report by Godert van Lynden

Assist in general coordination of the WOCAT network

- Visit Syngenta Foundation Basel for discussions on funding
- Discussion on funding issues with Will Critchley and Hanspeter Liniger (Amsterdam, Wageningen)
- Discussions with SDC/Helvetas representatives during FAO Water Conference in The Hague

Participate actively in general methodological discussions (most by Email)

- QM taskforce meeting Bern (June)

Regular feedback on Email requests

Participate in meetings and trainings

- Participation Stephan Mantel (ISRIC) in BANCAT workshop (March)
- China training (June) postponed

Co-organising WWSM10

1.2 Progress reports of taskforces

1.2.1 Mapping – QM & World map

Task Force members: Carin Pretorius, Dirk Pretorius, Njeru Gitonga Lewis, Godert van Lynden, Wolfgang Prante, Gudrun Schwilch

Report by Godert van Lynden

ToR and activities as agreed during WWSM9 (Yichang) and how to achieve (✓ = done)

1. Investigate current structure and contents of the QM db: discuss by Email; ✓
2. Investigate available hard- and software setup at CDE, FAO, WUR: server capacities, internet config.; software (ARC-IMS, DB): discuss by Email; ✓
3. Check options for off-line data management: discuss by Email, Brainstorming; ✓
4. Prepare action plan for development of prototype: discuss by Email; ✓
5. Develop prototype Ad-hoc, discuss by Email; ✓
6. Meeting to discuss prototype and further actions needed -> held in Bern in June 05 ✓
7. Follow-up to the meeting -> to be determined: finalisation of prototype ✓

Review:

Workplan for "Map" (from "Vision and Next 3 years" (Proceedings WWSM9))

1. GIS based QM	Redesigning QM for GIS compatibility (ArcView, WebGIS)	June 2005 → done	Payment → S. African input € 25,000
	Testing / modifying redesigned QM	December 2005 → on-going	Payment for QM development group → S. African input € 25,000 (as above) + WOCAT core funds

All in all, it was a very successful taskforce, largely thanks to the efforts and enthusiasm of the South African team!

Discussion:

- There was a change in the training set-up in South Africa: Start by the Mapping, i.e. set-up the map before the Technology and the Approach.
- Confusion between global map and QM; real application of the map was not clear, has to be clearly shown.
- Nice map method technically but people have to use it and see it's usefulness.
- Is the prototype a new mapping methodology? No.
- GIS is facilitating interactions with other map data.
- Why not to use GIS based methodology (instead of WOCAT-mapping)? The WOCAT Map viewer is available to users without GIS access. The Map viewer of the prototype will also be available without special GIS software.

1.2.2 TF WOCAT tools – QT/QA

Taskforce members: Mats Gurtner, Francis Turkelboom, Ling Qin Meng, Hanspeter Liniger, Will Critchley, Wolfgang Prante

Report by Mats Gurtner

ToR Activities as agreed during WWSM9 (Yichang) and how to achieve...

1. Revision and tool adjustment (light, basic, professional);
2. WOCAT interactive feedback mechanism for comments to data and requests to authors to improve / clarify, ...

Adjustment of Ts and As: light, basic, professional

Decision to introduce shorter questionnaires was demand-driven:

- the original WOCAT Questionnaires ("professional") were considered too long, too complicated and thus discouraging by many users
- some countries already work with "short versions" (e.g. South Africa, Central Asia)

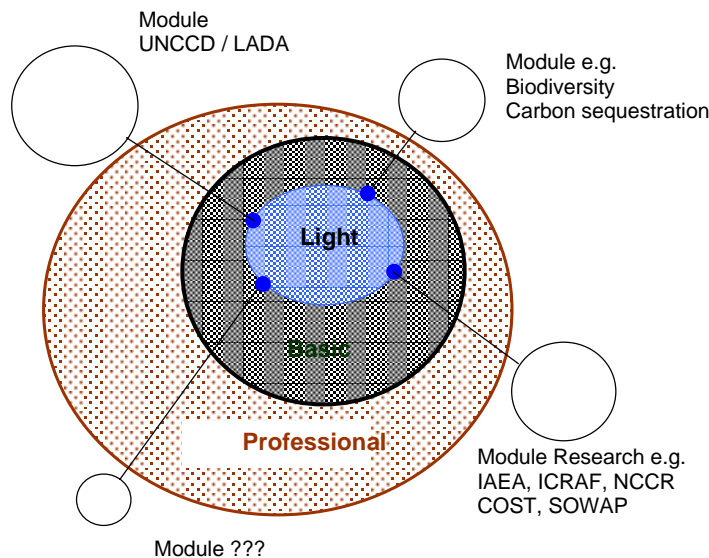
Need to have standardised formats for those short versions

- to guarantee compatibility and comparability between regions/countries
- to facilitate data management and data exchange (database)

Aim: to develop standardised questionnaires with different levels of complexity and comprehensiveness in order to meet the needs of different user groups.

The following three levels will be available for QT and QA (not for QM):

- WOCAT questionnaire "light"
- WOCAT questionnaire "basic"
- WOCAT questionnaire "professional" (original questionnaire)



Characteristics of “light”, “basic” and “professional” questionnaires

	LIGHT	BASIC	PROFESSIONAL
Target group	broad public	interested public, SWC specialists, decision makers	SWC specialists, researchers, decision makers
Level of complexity	selected information, reduced from BASIC level	basic information: contains all the key questions from professional level	comprehensive information: in-depth understanding
Use, Outputs	fact sheets / posters, basis for further documentation (basic or professional)	attractive 4 page documentation, overview books, basis for further documentation (professional)	professional use / database: capacity building, monitoring and evaluation, decision support

Development of the WOCAT *basic* questionnaire:

How to shorten the questionnaire...

- without losing essential information; and at the same time
- keeping the established concept of giving explanations to questions
- maintaining compatibility with the existing WOCAT database
- offering the possibility to extend the “basic” into “professional” dataset (when needed)

Essential information:

The “basic” questionnaire should encompass

- the questions from the automatic 4-page summary report (database tool for summarized presentation of single datasets)*
- the assessment criteria: a set of indicators (questions) used for the comparison of technologies and approaches through automatic analysis in the database*
- additional questions covering
 - suggestions for the revision of questionnaire
 - issues that came up during the process of data quality assurance for the overview book

*marked as grey shaded questions in the WOCAT professional questionnaire vs. 2003

Presentation of questions and explanations

The original structure / layout of E-pages on the left hand side and Q-pages on the right hand side was dropped in favour of a compact document with a considerably reduced number of pages.

The basic questionnaire is structured as follows:

- questions: the questions are presented in shaded boxes,
- explanations: where explanations, examples and illustrations exist, they are placed immediately after the respective question (not shaded)

→ questions and corresponding explanations are still found physically next to each other

Compatibility with the existing WOCAT tools

The WOCAT basic questionnaires had to be developed in such way that it remained compatible with the existing WOCAT database entry form. This has been achieved by:

- not adding any new questions
- avoiding rephrasing of questions
- maintaining the question numbers of the professional questionnaire: removing questions which were considered less important from the questionnaire led to discontinuous numbering of the questions.. The advantage of keeping the original numbers is that the information can simply be entered into the existing database entry form, (where “basic” questions are now presented in shaded boxes as well).
- the two levels “basic” and “professional” are compatible: the basic questionnaire can be complemented and extended at any time to “professional” status by covering the additional (“not shaded”) questions from the professional questionnaire.

Result:

- maximum of information on a minimum of pages
- very compact
- still clearly arranged
- containing all the key questions
- one (MS Word) document, no confusion when arranging hard copies based on MS Word files (E and Q pages of the professional questionnaire are in separate files)
- compatible with existing WOCAT tools (database, “professional” questionnaires)

QT	Professional	Basic	B in % of P
No. of questions	154	93	60%
No. of pages (total)	132	48	36%
No. of pages (questions)*	107	39	36%
QA	Professional	Basic	B in % of P
No. of questions	116	56	48%
No. of pages (total)	92	28	30%
No. of pages (questions)*	72	19	26%

* without introduction part / annex

Development of the WOCAT *light* questionnaires:

no standard format has been developed so far

in three countries/regions ‘light’ versions with different formats have been used:

- Central Asia
- South Africa
- Eritrea

Summary table of questions covered in different “light” versions (SWC technology only)

	Central Asia	South Africa	Eritrea
Title/name of SWC technology	X	X	X
Local name			X
Definition / short description		X	X
General information			
Location	X	X	(X)
Area covered		X	
Land use types	X	X	X
Land use problems	X		(X)
Degradation type	X		X
SWC categories		X	X
Status / origin (indigenous, introduced)			X
Specification of SWC technology			
Purpose			X

Description of the SWC technology	X	X	X
Establishment activities (steps)	X	(X)	X
Layout, technical specifications	X	X	X
Timing, equipment used	X		
Inputs needed	X		
Maintenance (steps, inputs)			X
Adaptation/modification			X
Area of applicability			X
Supportive technologies			X
Natural and human environment			
Climate	X	X	(X)
Soils			(X)
Topography, altitude	X	X	(X)
Farm size	X		(X)
Farming system, crops grown	X	X	(X)
Equipment and animals	X		
Income generation	X		
Analysis			
Acceptance, adoption; reasons behind			
Effects / impacts			
Benefits (ecological / economical)	X		X
Problems / weaknesses (ecological / economical)			X
How to overcome the problems?			X
Illustrations			
Technical drawing	X	X	
Photo(s)	X	X (many)	X
Mp		X	(X)
References			
Go-reference of case study (good example)			X
Nme of author/contributing specialist		X	(X)
Nme of farmer's key informant	X		X
Number of pages of <i>light</i> questionnaire	1	1	2
'Light' format for approach		X	

(X) described in the report (not individually for each SWC measure, since it is the same for all of them)

1.2.3 TF Quality assurance / control procedures, development of WOCAT label, peer review, project support service

Taskforce members: Yong Li, Hanspeter Liniger, Rinda van der Merwe

Report by Rinda van der Merwe

ToR Activities as agreed during WWSM9 (Yichang) and how to achieve...

1. Circulating ideas: 1st Draft outline -> e-mail;
2. Compile 2nd draft (31 Jan 05);
3. Meeting (? Only if it is combined with other tasks) / Conference phone, discuss implementation;
4. Develop implementation procedures;
5. Implement it!!!

Data collection and quality assurance:							
Country/ Contributor	How do countries organize training for data collection?	Who is looking at the information and checking?	How are the interactions with the contributors?	How are gaps and contradiction s filled?	Where are the major problems to be solved?	What solutions have been found?	Comments
ICRISAT, Niamey	National experts identify technologies / approaches to be documented	External person	Feedback	Repetition if necessary	Time consuming	Hiring external person	Quality assurance in groups not very successful Don't rush with the assurance (it needs time) Use dedicated people
Ethiopia	For those who fill in the questionnaires	Contributing SWC specialists completing the questionnaires in field	Review meeting with contributors and experts	Contributors fill gaps and checked by experts			
Philippines	Contributor assisted by WOCATEER	WOCATEER	Feedback	Repetition until satisfied			
Nepal	Contributors with help of experts	Contributors with help of experts	Feedback	Scientist assigned the task Feedback			
South Africa	WOCATEER collects data	WOCATEER Panel of experts	Feedback	Follow-up visits	Identifying potential contributors Achieving a balance in T's & A's	Identify and fill gaps as soon as possible	
Global: Overview book Team	Direct contact/exchange with contributors	International panel of reviewers Contributors with help of experts	Feedback in writing and contact by telephone or meetings	Repetition	Question all answers – review critically Cross check data Provided information is not specific for selected T/A but general	Patience (2-5 revisits to contributor) Use the Basic WOCAT Q instead of 4-page summary	Review panel worked the best Major efforts needed and this requires national & International efforts (Priority!)

For details refer to topic 3!

1.2.4 WOCAT in research and education

Taskforce members: Romeo Labios, Miodrag Zlatic, Yong Li, Zhangou Bai, Bijuan Nie

Report by Miodrag Zlatic

ToR Activities as agreed during WWSM9 (Yichang) and how to achieve...

WOCAT in Research:

a) Integration of WOCAT M&E tools

1. ADB-Fujian, China project?
2. IAEA, CAAS project (quantitative analysis);
3. EU projects: SOWAP and COST
4. NCCR N-S: Diploma work, MSc and PhD thesis;

b) Review existing research project proposals (approved and pending) to serve as example for other countries interested

WOCAT in Education:

c) Preparation of WOCAT course curriculum

1. Review existing WOCAT training modules / design;
2. Prepare course outline for undergraduate and graduate level;
3. Discussion forum for approval within the institute, university;
4. Discussion of approved course outline with WOCAT in Bern;
5. Presentation during the WWSM 05.

The taskforce has developed a **questionnaire of WOCAT in Education and Research** and sent it to all WOCATeers. The feedback to this questionnaire was rather low (15 respondents) and only trends could be stated. More feed back is needed; or can the number of answers already indicate the frequency of the use of WOCAT in Education and Research?

Regarding **courses and lectures** at universities the most important issues are: natural resources management, sustainable development, research for development, soil erosion and conservation, erosion control economics.

WOCAT materials used are: the WOCAT tools (QTs and QAs more than QMs), classification system and databases. The glossary is less used. There were 13 training courses organized on different levels (trainings, workshops,...). WOCAT in education was used in different ways but mostly for information dissemination, trainings, capacity building and evaluation/impact assessment.

Regarding ways of **institutionalizing WOCAT** in academic units it is mostly done through curriculum development and involvement of institutions. The most common way to institutionalize WOCAT in government/policy institutions is through the involvement of decision/policy makers and through WOCAT promotion.

Methods to use WOCAT in research are very different: Use of database, guidance for thesis work, as part of the SOWAP project (documenting conservation agriculture practices at field level), as part of the Green Water Project, used as methodology in field surveys, evaluation and documentation of case studies, preparation of dissemination materials, farmer's involvement in WOCAT dissemination, used in adapting questionnaires for PhD in similar field, used for diploma work, use of alternative media, etc.

There was a wide range of suggestions on how WOCAT can get support from national government institutions as well as how to promote WOCAT in national programmes on natural resources development.

The question of how can we motivate WOCATeers to give more feedback has risen again. A strategy on how this task force should proceed has to be worked out.

Last years activities related to WOCAT in education and research at global level:

WOCAT in education / training:

- Lectures at the Swiss College of Agriculture, Zollikofen, Switzerland
- Field training course in Kazakhstan through the NCCR N-S programme

WOCAT in research:

- **NCCR** programme (National Centre of Competence for Research Partnership North - South): PhD/MSc studies Bettina Wolfgramm, Gulniso, Erik Bühlmann: Land degradation risk assessment, Conservation approaches and technologies.
- **NCCR** regional scientific training course Kazakhstan April 05;
- Ongoing research collaboration with **SOWAP** in England, Belgium, Hungary and as new SOWAP members Czech Republic
- Collaboration **CDE – ICRAF**: Assessing (through remote sensing) land use and soil quality in Central Asia (PhD study Bettina Wolfgramm);
- Coordinated research projects (CRP) of **IAEA** on fallout radio-nuclides (FRN): WOCAT method used as a standard to document SWC technologies, which are used in their research;
- Two PhD proposals under the **COST** action 634 (European Cooperation in the field of Scientific and Technical Research) approved and started (March 05). Title: On- and Off-site Effectiveness of Soil and Water Conservation in Switzerland – Steps Towards the Integration of Scientific, Experts' and Farmers' Knowledge (PhD studies: Thomas Ledermann, Flurina Schneider).
- Supervision of MSc study in Niger on the different perceptions of farmers and SWC specialists (Susan Glättli).

1.2.5 Feedback (WOCAT internal) & dissemination strategies (external); WOCAT and conventions; Funding.

Taskforce members: Clemencia Licona Manzur, Godert van Lynden, Hanspeter Liniger, Mats Gurtner
Report by Clemencia Licona Manzur

ToR Activities as agreed during WWSM9 (Yichang) and how to achieve...

1. Compilation of institutions to involve for funding, dissemination, use of WOCAT (Clemencia, +);
2. Clarify role of WOCAT in FAO: LADA, Desertification;
3. Strategy development for WOCAT in Conventions, other org. / institutions / programmes (Conventions: Clemencia +, others: HPL);
4. Develop practical links: modules to other programmes (all).

In the last meeting, the need for improving the feedback and dissemination strategies and the expansion of WOCAT to other initiatives like the conventions were stressed.

Some brainstorming activities were coordinated by HP. Liniger and G. van Lynden. This will be used together with the discussions of the workshop to produce a "business plan" that will include issues regarding the future of WOCAT. (Vision and Mission, linkages, funding initiatives, global, regional and national use of WOCAT, WOCAT label in the UN conventions, etc.). Linkages with the conventions could include the use of WOCAT tools for measuring the successful adaptation of SWC measures and mitigation of degradation problems.

The issues addressed by this taskforce, especially the business plan, were discussed and included in these proceedings at various points throughout this meeting.

1.3 Activities at the national / regional level

1.3.1 Ethiopia

Report by Daniel Danano

Data collection: 9 QTS, 6 QAs and 8 QMs completed in Amhara, DireDawa and Harari regions

Analysis of collected data: Analyzing and interpreting the collected data and information, editing and reediting of the information, preparation of the final document and report.

Training of field staff: 18 technical staff (12 from Amhara, 3 from Harari and 3 from DireDawa regions) trained on the methods of collecting data and information using WOCAT questionnaires (QT, QA and QM).

Quality assurance: 10 QTs and 3 QAs reviewed and entered into the database.

Networking and communications: Series of communications made with RELMA and WOCATeers from East and South Africa. There is a need to strengthen regional cooperation.

Backstopping regional activities: Technical backstopping provided to regional staff participating in completing the WOCAT professional questionnaires of QTs, QAs and QMs. 4 Experts from the Ministry of Agriculture provided support in Amhara, DireDawa and Harari regions.

Draft overview book: Editing and reediting of the information and data entered into the data base was made for about 23 QTs and 10 QAs as part of the draft overview book preparation.

Ethiopia is a federal country and therefore the regions have the mandate to do their own programmes and take their own decisions. On a national level coordination and backstopping are provided/assured. WOCAT has been used to analyse impact of SWC activities in Ethiopia.

1.3.2 South Africa

Report by Rinda van der Merwe

The current WOCAT contract in South Africa was signed in February 2005 for an amount of € 78 200.

The South African team attended a Map Task Force Meeting in Bern: 13 -16 June 2005 (Carin Pretorius (ARC-ISCW), Rudolf de Munnik (Consultant), Hein Lindeman and Dirk Pretorius (DoA)). The objectives of this meeting were:

- Investigate the current structure and contents of the Access based WOCAT map database;
- Investigate the available hard- and software set up at CDE, FAO, WUR and other possible role-players;
- Evaluate the options for off-line data management;
- Prepare an action plan for development of a prototype.

After this meeting another contract "Development of a spatial interface for WOCAT on AGIS" was signed between the DoA and ARC-ISCW (for € 25 000) which will focus on the development of an internet management system. The objectives are:

- Evaluation of the current map viewer and the Map Questionnaire database;
- Development of an internet management system;
- Development of an internet mapping system spatially displaying the Technology data within the AGIS environment;
- Development of an ArcReader off-line system.

Most of these objectives have been completed.

Other achievements:

- A technology pre-selection form was developed and is available on the AGIS website: www.agis.agric.za/agisweb/wocat (50 Ts have been submitted from the LandCare Programme).
- Several online applications on the AGIS website are already being used.
- South Africa is in the process of establishing a Review Panel to ensure quality control of data (4 experts already on team). Old data sets will be checked and quality assured.
- An article on WOCAT on AGIS was sent to the ESRI and Agri-Newsletter and will be published later in the year.
- 2 new sets of QT/QA have been filled in.

1.3.3 RELMA / Kenya

Report sent by Søren Damgaard-Larsen / Hanspeter Liniger

A change in RELMA WOCAT coordination has taken place. The previous coordinator, Mr Gathiru Kimaru warmly recommended further cooperation with WOCAT. Possibilities for further cooperation are to be investigated with respect to a more streamlined relationship with ICRAF, possibly including SearNet (Southern and Eastern Africa Rainwater Network) / ACT partners, and striving towards a 'knowledge management' coordination.

During discussions at RELMA / ICRAF, Nairobi in October 2004 between Søren Damgaard-Larsen (RELMA), Hanspeter Linger (WOCAT, Switzerland), Lewis Njeru (NRMT Nanyuki, Kenya) and Maimbo Malesu (SEARNET), it was suggested to prepare a thematic input for the 3rd World Congress on Conservation Agriculture in October '05, exploring and quantifying the impacts of Conservation Agriculture on water use, soil quality and production both on small-scale and large-scale production systems. Additional resources for this activity aimed at contributing to a WOCAT kiosk and a special session during the conference were requested and approved from SDC (24'300 US\$). The WOCAT tools were used to assemble biophysical and socio-economic field data and document existing Conservation Agriculture examples.

1.3.4 Morocco / MADRPM

Report sent by Nahid Elbezzaz

WOCAT Progress:

- QTs and QAs newly filled.
- QMs not yet done but SOTER support is available such that a trial could be made.
- Numerous programs running on identifying constraints and defining new courses of action in connection with SWC.
- Plan to launch national and regional initiation and training workshops to bring together specialists of SWC and to present WOCAT methodology
- To fill in QTs and QAs by these specialists – large spread of WOCAT methodology (national, regional and local level)
- The workshops will be organized within the National Action Program for Combating Desertification
- Presentation of WOCAT's workshop in the 14th ISCO's 2006 conference, which will be held in Morocco.

Gaps Identified:

- Priority of research on natural resource sustainability is quite low in the country and there is limited national expertise in sustainability research.
- There are limitation in some fields such as research programs on sustainable soil management, water harvesting, rainfed watershed management, sustainable range management, biodiversity management and integrated natural resource management.
- Morocco still needs to focus more on national expertise in sustainable development, targeting and monitoring sustainability in rural development projects:
 - to improve and strengthen planning, management, monitoring and evaluation systems.
 - to strengthen institutions and coordinating mechanisms.
 - to create mechanisms to facilitate the active involvement and participation of communities and people at local level.

1.3.5 Niger

Report sent by Abdoulaye Soumaila

In Niger, WOCAT had already been introduced since 1995 through a workshop organized jointly by OSS, GTZ and WOCAT. In 1998-1999, two national workshops had been organized (Niamey) with the goal to reassemble actors of soil and water conservation in Niger. After this workshop, a considerable effort had been made to list technologies and approaches according to the WOCAT methodology in the setting of Niger Association for Conservation of Water and Soils (ANCES).

In 2001 after the departure of Charles Biolders and Eric Tielkes, Abdoulaye Soumaila – through a partnership between DED and ICRISAT – had the idea to organize a workshop in order (1) to validate WOCAT data collected since 1998-1999, (2) to reactivate ANCES that was in full lethargy and (3) to reactivate Niger WOCAT activities. Several partners accepted to sustain this idea: Swiss cooperation, DED Niger, ICRISAT, DAP/PNEDD/PNUD, PATECORE/GTZ Burkina Faso, WOCAT international Coordination, BALD/Catholic Mission. This workshop, organized in October 2002, had been the opportunity to present the WOCAT methodology and an evaluation of this initiative in Niger to a larger auditorium. It is necessary to specify that at the time of the preparation of this workshop a technical team under the supervision of the workshop organization committee had controlled all questionnaires.

The workshop elaborated recommendations with regard to data validation and output preparations. In total, 12 projects and institutions had filled 23 technologies questionnaires and 8 approaches questionnaires in 2002. Thereof 7 technologies and 4 approaches had been introduced into world database in October 2004.

In 2003, WOCAT activities were constituted by: 1) writing of workshop final report, 2) conception of temporary and definitive CD-ROM of workshop, 3) mobilization of development partners, and 4) correction of questionnaires. While the first two objectives have been reached, mobilization of development partners and correction of questionnaires were hindered by organizational constraints.

Since January 2005, some reflections between GREAD, ICRISAT, DED Niger and DAP/PNEDD/PNUD had been developed and these institutions had decided to reactivate WOCAT activities in Niger through available and greatly committed people in the field of SWC. This is the new challenge, as 60 institutions have indicated their strong interest in WOCAT activities so far.

1.3.6 ICIMOD – HIMCAT

Report by Sanjeev Bhuchar

ICIMOD organised a workshop in Kathmandu (June 1-6 2005) on soil and water conservation and watershed management with 40 participants from India, China, Bhutan, Bangladesh, Pakistan, Myanmar, Nepal and Tajikistan. Presentations were made on WOCAT. WOCAT brochures and CDs have been distributed to people interested in SWC and watershed management activities.

Roger White and Sanjeev Bhuchar (ICIMOD) participated in a BANCAT workshop at Bandarban (March 19-23, 2005) as resource persons.

SWC technologies and approaches have been newly documented and partly peer reviewed. Four examples from the Chittagong Hill Tracts (BANCAT), one from India (fish ponds), one from Pakistan (pitcher irrigation) and two from Nepal (drip irrigation in Nepal and rehabilitation of degraded land in Nepal and India, PARDYP) have been documented and these were presented and reviewed during the June workshop in Kathmandu. Evaluation of HIMCAT with workshop participants was very positive. Six of the technologies and five of the approaches documented were entered into the global database. Furthermore the HIMCAT extranet is being maintained. Networking among HIMCATEERS continued by organizing and supporting face to face events beside the electronic platform that is provided for sharing information and discussing issues.

Four concept notes were prepared on watershed management and networking, and training (capacity building), research (knowledge gaps) and networking (dissemination) needs in the Hindukush-Himalayas have been identified that will help develop HIMCAT network plans for the future.

ICIMOD supported Nicole Guedel in carrying out a short-term assignment on the analysis of degradation and soil and water conservation in the Jhikhu Khola Watershed, Nepal using the WOCAT mapping methodology.

HIMCAT emphasizes on building new linkages and on keeping old ones. Linkages were/are established with: Agha Khan Rural Support Programme (Pakistan), Bureau of Water and Soil Conservation (Tibet), Renewable Natural Resources (RNR) Research Center Council of RNR Research for Bhutan Ministry of Agriculture, Forest Department (Myanmar), World Bank funded watershed management (India), etc.

Use of WOCAT is helping in preparing posters and summaries of the Technologies and Approaches. Evaluation, using WOCAT tools, of the improved terrace technology by PARDYP Nepal has helped in identifying the needs and preferences of the farmers while choosing plant species for planting along their terraces.

Problems/constraints encountered with using WOCAT remain the quality assurance aspect and lack of funds to support regional and national initiatives. However the main constraint at that stage is the future of PARDYP. PARDYP is in its last phase and up to now no funds for a future phase are assured. Five proposals have been prepared on watershed management, including one on networking. The general feeling is that ICIMOD should develop as Centre of Excellence in watershed management. WOCAT will be a feature in the training curriculum.

1.3.7 Bangladesh

Report by Khisa Sudibya Kanti

Achievements

- BANCAT Working Group (WG) Meeting was held once and one to one discussions with the members of WG were held several times. Work-plan prepared and progress reviewed.
- A brochure on BANCAT was produced and two posters were printed with messages on saving Chittagong Hill Tracts (CHT) environment.
- Documentation of 20 QT, 4 QA; up-dating of 8 QT and 4 QA.
- QM: Physiographic map, soil map and administrative map of CHT were done at scale 1: 300'000.
- Quality assurance of documented Technologies and Approaches by the BANCAT WG members: Two technologies were reviewed and sent to WOCAT HQ.
- BANCAT Overview Book: drafting of short version (1-2 page summary) of documented technologies and approaches from Chittagong Hill Tracts was done. Process for its publication is underway.
- The 2nd National Training Workshop on WOCAT Tools and Methodologies of Documenting Conservation Approaches and Technologies was organized from 19 to 23rd March, 2005 at Soil Conservation and Watershed Management Centre, Bandraban where 19 participants attended.
- Hands-on-training and demonstration of Soil and Water Conserving Farming Practices to the selected communities in the three hill districts of Chittagong Hill Tracts.
- Although Bancat has been established only very recently (2 years), already quite a number of outputs and an overview book are being planned. This is a result of high input in human resources/committed WOCATeers as well as an agreement with/obligation towards financing parent institution.
- BANCAT is also cooperating with UNDP (suggestion to cooperate with Stephan Mantel of ISRIC within the context of the EU CHARM Project).

1.3.8 India

Report by Sri G. Bhaskar Reddy

An initiation and training workshop was organised in August 04 in Jeypore, which was attended by representatives from CWDP, WDCU, OWDM and WORLP and facilitated by WDCU and Mr. Ronald Benson.

4 QT and 3 QA were documented by CWDP staff as well as WORLP staff.

A capacity building cum action planning workshop was organised for the WORLP working group members in Sept. 04. An action plan was developed for the working groups in each district. The QT and QAs for both the districts were entered into MS ACCESS software.

A review workshop for finalizing the documentation, evaluation and dissemination of SWC experiences made during the DANIDA watershed programme was organised in February 05 with active facilitation of WOCAT representatives (Jens Jensen and Hanspeter Liniger). A major result was that the methodology was tested for and suggestions were made to adapt the WOCAT tools to rainwater harvesting experiences (especially concerning small dams, pans, irrigation projects).

The use of WOCAT questionnaire by the professionals (SWC, Social, Rural Development) along with community has given clarity on the process, participation of people, analysis of the technologies and approaches as per the need and demand of the people. Also the production aspects linked to each technology became clearer.

1.3.9 China -SWCMC

Report by Meng Lingqin

- The translation of the Basic Questionnaires (QT and QA) into Chinese was updated into the latest version.
- Training programme carried out on 4-8 Aug.2005 in Yulin, China. Main problem of using WOCAT tools is the language barrier. Chinese editing of the questionnaires is in good shape now and can be used as training material.

- 2 QTs were completed before 10th WWSM in Belgrade.
- Updates of technologies and approaches for the global overview book.
- The basic version of the Technology and Approach Questionnaires were found to be very useful, clear, popular and were very much welcomed by key persons.

1.3.10 China – Fujian Province

Report by Bijuan Nie

WOCAT promotion

- Presentation on WOCAT at the annual meeting of prefecture head of SWC Office of Fujian Province, June 8, 2005
- Distributed the Chinese WOCAT promotion brochures on the 22th plenary member meeting of Fujian SWC Committee, June 7, 2005
- Contact with the Fujian Agricultural & Forestry University, Environment and Resource College to discuss the collaboration with WOCAT, July 25, 2005

WOCAT data

- Translated the QM into Chinese and filling in 3 counties (total 8500 km²)
- Update the QT CHN21 (Orchard terraces with bahia grass cover) for the world overview book
- The planned new QT and QA were not implemented because of time constraints

Expenses for WOCAT

WOCAT expenses for the last year were mainly for the translation of QM and for data collection. The total expenses amounted US\$3500.

Problems

- The experts group of Fujian Province should be built up as soon as possible, it can promote WOCAT more effectively.
- The land use type requested in QM is different from our investigation data (e.g. mixed land is not available in our system).

Expected output

- Add the Chinese questionnaire version on CD-Rom
- Training of data quality assurance
- Stable databases, easy to be used by the person who is not familiar with computers
- Examples on the adoption of WOCAT in planning, research, education, etc.

Workplan for 2005

- Promotion of WOCAT methodology at the prefecture level
- Combine more firmly WOCAT activities with ordinary work
- Development of QM (fill in 3 counties), fill in 1 new QT and QA
- Holding 1 or 2 trainings & lectures
- Implementation of activities in relation to the general arrangements of a national coordinating agency, i.e. SWCMC

1.3.11 Philippines

Report by Jose Rondal

Best efforts were exerted to realize the workplan for 2005, which was developed during the WWSM 9 in Yichang, China. Despite the usual constraints in resources, particularly funding, most of the planned activities were realized.

Presentations and posters

WOCAT promotion through paper and poster presentation was made in two international symposium and conference.

- In January 2005, a presentation was made during the Symposium on the Sustainable Development of Marginal Soils, which was organized by the Bureau of Soils and Water Management (BSWM) and the Japan International Cooperation Agency (JICA).
- In May 2005, another presentation was made during the 7th Multi-Sectoral Forum on Watershed Management. The Watershed Forum is a multi-agency forum working on watershed management.
- In June 2005, a paper presentation on Conservation Tillage was made during the 7th East and South East Asia Federation of Soil Science Societies (ESAFS) conference that was held in the Philippines. In the same conference, a poster presentation on "Woodlot" was made (WOCAT light version was used as poster template).

Conservation Tillage and Woodlot are new documented case studies in the WOCAT database.

Capacity building

Four trainings were held on Sloping Land Management (SLM), which were attended by farmers and extension agents. The WOCAT materials were customized and were used as useful tools in the trainings. Technology demonstration farms on the use and benefit of Natural Vegetative Strips (NVS) and agroforestry were established in four locations.

Networking

Networking with other stakeholders continued, particularly with the State Universities and Colleges, which requested copies of the CD-ROM, but also with Syngenta Philippines on soil conservation activities. Also, the Director General of ICRISAT visited the University of the Philippines at Los Baños and was briefed on what WOCAT is all about.

A proposal was drafted titled Social Mobilization in Disaster Mitigation and Environmental Protection in the Upland of Laguna.

Education and Research

In cooperation with the other members of the Task Force on Education, a survey form was developed and circulated to various users of WOCAT. The results of the survey showed that WOCAT was used as a part of the curriculum on Natural Resource Management and they can guide WOCAT for its future course of action, particularly in education.

Soil conservation and carbon sequestration

Using WOCAT materials, a paper was prepared for presentation in an international conference in Japan on carbon dynamics and global warming in Sept. 05, demonstrating the role and importance of soil conservation on carbon sequestration. The presentation shows a typical scenario for farms with and without soil conservation:

Technology	Soil loss (per year)	Emitted carbon (per ha per year)
Up and down ploughing	100 t/ha	232 kg
Alley cropping	5 t/ha	12 kg

Natural vegetative strips can reduce erosion and carbon emission by 90 %

Residue management:

- Burning corn residue will emit 12 tons of CO₂/ha
- 2.4 million hectares of corn farms in the Philippines results in 28.8 million tons of CO₂
- Recycling crop residue will lessen the need for commercial fertilizer

Crop intensification:

- 3.2 million hectares of coconut farms
- Planting of under storey crops will increase carbon sequestration
- Total carbon sequestration potential of 139.5 million tons

This is a good example on how the WOCAT database and its' documented questionnaires can help in making a statement and contribution about global issues such as carbon sequestration (possible indicators: amount of dissociated organic matter in the soil, 20% of eroded organic matter (loss of topsoil) will be emitted).

Furthermore, it was suggested that if such global issues are combined with a cost/benefit analysis for the farmer it would give a nice package, which could support fund raising.

1.3.12 Indonesia

Report by Syaiful Anwar

The WOCAT system was already tested in Indonesia in 2000-2001 but has not been taken seriously into account since then. At a socialization programme of Indonesia National Action Programme (NAP) of UNCCD in West Nusa Tenggara in 2003 a dispute among participants from regions on the origin of “*embung*” (small reservoir) soil and water conservation technologies (traditional vs. introduced) took place and the idea to use WOCAT for clear identification and documentation of its approaches came up again.

A year after, WOCAT was (re)-introduced in 7 (seven) provinces through a dissemination workshop attended by about 30 participants, with soil and water conservation background, in each province. Its usefulness in documenting land rehabilitation techniques as well as identifying technologies to be implemented in different areas was described. Most of participants expressed their interest and thought that this is their duty and responsibility to accomplish better land management. As a result, some Watershed Management Centres (WMC) such as Cimanuk Citanduy WMC, made a new initiative to implement WOCAT involving NGO in their own territory. Through this four more technologies and approaches were identified and documented.

Ms. Julia Tatin, a postgraduate student from Cranfield University - England, under Dr. Jane Rickson's supervision, explored the strengths and weaknesses of WOCAT tools in Indonesia. WOCAT was seen as an opportunity for Indonesia to utilize existing organisations (WMC) for better soil and water conservation (SWC) implementation. WOCAT is a good monitoring and evaluation tool for future decision-making, to improve SWC organisation and to have a better understanding of the work that is being done. Furthermore, WOCAT can promote Indonesian SWC at a global scale through the global database. It allows having and sharing a worldwide knowledge; avoiding the risk to do the same mistake, open one's mind to new ideas and approaches to improve SWC technologies. A drawback is the length of the questionnaire. It will take farmers time to provide the information/data, and therefore there is a need to compensate farmers for this time invested.

WOCAT professional questionnaires (QT and QA) were translated into Indonesian to be used by staff and grass root, however filled questionnaires (40 Ts and 34 As) are not yet translated into English to be fed into the global database due to the need of standardization.

At internal meeting in 2004 concerning budgeting programme for 2005 the need of WOCAT system implementation was highlighted. The failing of its implementation and the problem faced by Cimanuk-Citanduy WMC in West Java Province in implementing WOCAT was seriously discussed. The outcome was a need to formulate a guideline for initiation of SWC identification and documentation in Indonesia to be used by staff of 31 WMCs. It is not only planned to translate the WOCAT guidelines into Indonesian but also to formulate them in a way to fit the Indonesian context.

The term WOCAT was not used prominently during its dissemination; otherwise people will refuse undoubtedly for a new unfamiliar term. Indonesia is using a term: 'Identification and documentation of land rehabilitation and soil conservation technologies and approaches' (*Identifikasi Paket Teknologi Penanganan RLKT*) to accompany WOCAT term. Funding became and becomes more and more a problem. Although fund was secured for WOCAT training in 2005, since the Tsunami in Aceh Province and increasing starvation in some part of Indonesia, money is going more and more to poverty alleviation programme, where WOCAT actually can also make a contribution. Furthermore, finances become even more limited by involving other institutions or stakeholders such as NGO's.

1.3.13 WASWC

Report by Samran Sombatpanit

- Newsletter – our flagship, ca. 20 pages, available in English, Spanish, French, Chinese and Portuguese (Bahasa Indonesia and Russian versions are coming; Arabic version is being sought for someone to translate); a 1-page column on WOCAT HIGHLIGHTS has been present constantly since 2002
- Special Publications – once a year
- WASWC Text Website: www.swcc.cn/waswc/, www.waswc.org, <http://waswc.ait.ac.th>
- Username: waswc; Password: waswc8641
- WASWC Photo Websites: <http://community.webshots.com/user/waswc>, <http://community.webshots.com/user/waswc1>
- Forum for discussion, open when there is certain issue of interest
- Contacts for professionals in various countries
- Coordination among various WASWC chapters
- Supporting conferences worldwide
- Presenting the Norman Hudson Memorial Award annually

WOCAT got very well promoted by WASWC and promised to help distributing the WOCAT overview book 2006 quickly and efficiently.

1.3.14 ICARDA (DRYCAT)

Report by Hanspeter Liniger

Francis Turkelboom and Hanspeter Liniger supported Juerg Merz (currently working with ICIMOD in Nepal) in writing a proposal for the Research Partnership Programme for Agriculture, Forestry and Natural Resources (RFPP) in Zürich, Switzerland. This proposal intended to reactivate WOCAT at ICARDA and give it a major push for the next 2 years.

Project title: Building on soil and water conservation innovators for sustainable mountain agriculture in dry areas

Summary: This research builds on the need to document, evaluate and disseminate indigenous and local knowledge on soil and water conservation (SWC) towards sustainable land management in semiarid and arid mountain areas of the Central Asia, West Asia and North Africa (CWANA) region. Often these SWC inventions are poorly understood and their potential only partly taken into account during the implementation of SWC programmes. This research therefore aims at increased livelihood resilience in the dry mountain areas of this region through sustainable land management based on SWC. It envisages to document local and traditional SWC innovations in dry mountain areas of this region and to identify the underlying reasons of their invention, adoption, conservation and dissemination success. This traditional knowledge and the improved understanding will be shared through an active SWC network to be set-up in the region amongst other means of dissemination such as print publications and a multimedia CDROM. The research will be based on a detailed review of the current understanding in addition to field based research applying the well tested World Overview of Conservation Approaches and Technologies (WOCAT) methodologies as well as livelihood, policy and stakeholder analysis. It will focus on areas with active projects implemented by the International Centre for Agricultural Research in the Dry Areas (ICARDA) and the Centre for Development and Environment (CDE).

Unfortunately the proposal was rejected even though the proposal was well prepared and presented. Follow-up initiatives will be taken up by F. Turkelboom as he believes that this project should be financed. ICARDA has additionally provided one more case study from Syria for the Overview Book.

1.3.15 Kyrgyzstan

Report by Abdybek Asanaliev

Collection and description of technologies

Collection and documentation of existing practices on soil and water conservation introduced by farmers jointly with RAS (rural advisory services) advisors. Three months were planned for trips and description; in total 15 technologies should be described by the end of 2005.

Dissemination of information and introduction of technologies

Dissemination of information and introduction of technologies in the villages with RAS support:

- a) to focus on some complex topics and long-term issues in the form of on-farm research with subsequent impact monitoring.
 - Pasture management
 - Separation of pastures and forest
 - Poplar plantation on marshy and salty soil
 - Agro-forestry approaches

CAMP received proposals from RAS of Naryn (pasture management and poplar plantation), Chuy (poplar plantation), Osh (pasture management, separation of pastures and forest, agro-forestry approaches) and Issyk-Kyl (pasture management and poplar plantation, separation pasture from forest) rayon's. CAMP will work with 8 technologies. RAS specialists will consult this work to farmers and make monitoring together with farmers. CAMP's next tasks:

1. Elaboration of the Environmental Impact Monitoring (EIM) approaches for technologies (indicators, how to measure, which tools,)
2. Training for RAS and farmers
3. Choosing and adaptation of technologies
4. Monitoring with farmers and RAS

CAMP will make special input for the pasture management. Meeting of RAS, CAMP, farmers, Helvetas and other organization will take place for discussion of long-term monitoring.

- b) to organize exchange visits on Participatory Technology Development and demonstration plots (among farmers of Tajikistan, Kazakhstan, Kyrgyzstan), 3 farmers from Tajikistan and Kyrgyzstan could visit demonstration plots in Kyrgyzstan and also 10-15 farmers from other AGOCA (Alliance of Mountain Communities of Central Asia) villages;
- c) to participate in exchanges between the mountain regions (Alps and Central Asia);
- d) to publish the brochures on SWC, which will be disseminated to farmers through RAS.

WOCAT in education at school and university level

- Include water and soil conservation in school and university curriculum (with RAS as a partner and with parallel policy dialogue with Ministry of Education and other partners like SOROS). To develop and organize one demonstrative lesson and field visit for school pupils (They can find good and bad examples of soil and water use in the village during the field visit and learn about soil and water conservation during the lesson). Develop a questionnaire on environmental problems for school children (primary school), which they will fill in with their parents at home.

Political dialogue: Involvement of national organizations and administrations

- Elaboration of strategies for soil and water conservation, which are based on the CAMP experience.
- Organization of round table to discuss the gained experience with the involvement of national organizations and administrations (jointly with CCD/GTZ and RAS). This topic could be a continuation of the first round table "Land ownership and Soil and Water conservation". (Main topics: Who has responsibility for the soil and water management and quality? How to support soil & water conservation on different level of management and forms of ownership...)
The result of these two discussions will be a base for the elaboration of a future strategy.
- Organization of the exhibition – presentation at the end of 2005.

Partners

- Farmers
- Villages
- RAS-Kyrgyzstan
- Agrarian Academy (Kyrgyzstan)
- CAMP, CCD/GTZ and other national organizations.

Expected outputs

- 15 new described technologies
- 8 introduced technologies in villages with reports
- Elaborated EIM (Env. Impact Monitoring) approaches
- 50 brochures
- Methodology and implementation of the school lesson
- Exchange visits
- Conducted round table with media coverage
- 15 A4 information sheets on technologies
- Computer version of new technologies
- Cooperation agreements with national organizations
- Water and Soil conservation technologies strategies
- Exhibition-presentation at the end of 2005

1.3.16 Tajikistan

Report by Sanginboy Sanginov (presented by Usmon Boturov)

Workshops

- WOCAT tools - Agrarian University
- Initial WOCAT Training workshop on Gully Rehabilitation

Datasets for database

- Number of Technologies (Ts): 2 new QTs (mulching and bio drainage) and 3 QTs updated (grazing land and agroforestry presented in overview book)
- Number of Approaches (As): 2 new QAs and 3 QAs updated

Production of outputs

- Soil Conservation technologies (case study summaries): 200 copies
- Report of Water Management in Sangbur watershed
- Introduction of WOCAT
- Prepared 15 posters on SWC technologies in Tajik and Russian Languages (joint project with CAMP, UNCCD)
- Soil erosion map

Other

- Synergies between an FAO project “Integrated participatory watershed management in upland areas”, NCCR and WOCAT are used for land use mapping, soil and water conservation activities on the Loess soils of the Faizabat area.
- Strong collaboration with research: SWC impact is being measured and quantified using reflectance spectroscopy and studies on the evaluation of existing conservation technologies and approaches (NCCR – North South).
- The professional questionnaire has been translated to Tajik (by Ahmadov), plans are made to translate the basic version of the questionnaires.

1.3.17 Kazakhstan

Report sent by Irina Skorintseva

Achievements:

- Database on 3 SWC technologies and 3 approaches
- Development of special questionnaires and database (related to SWC and WOCAT) for definition of problems of land use of 50 farmers of the Kyzylorda oblast
- Creation of a map of landscape – ecological zoning of Kyzylorda oblast on degree of degradation of the land, scale 1: 1000 000, which was distributed to farmers of Kyzylorda oblast in August
- Close communication of farmers and experts on SWC technologies
- Popularization SWC of technologies: presentation and distribution 25 SWC technology posters to farmers in May (together with CAMP and UNCCD)
- Training on SWC technologies in 6 farms of Almaty region in June

WOCAT meetings / workshops / presentations:

- Presentation of the WOCAT program in the Ministry of Agriculture of Kazakhstan on 23 March
- Presentation SWC technologies of Kazakhstan on June 11 in Uzbekistan

Official agreements

Memorandum of understandings (MoU) including financing made on 1 January 2005 with Ministry of Agriculture of Kazakhstan.

Use of WOCAT

Up to 28 requests for WOCAT material, methodology and training by farmers, agricultural enterprises and SWC experts as well as by various institutions like Institute for Water Management, Production Centre for Forestry, Institute of Geography, Barayev Research - Production Centre of Grain Farming, Research - Production Centre for Livestock, Husbandry and Veterinary, etc.

Benefits of WOCAT:

- Training and distribution of SWC of technologies among farmers
- Close contact of farmers to experts of SWC technologies

1.3.18 ISRIC / SOWAP

Report by Godert van Lynden

Representing WOCAT within SOWAP and ProTerra projects

Achieved

- Various ad-hoc meetings at Jealotts Hill (UK) (Dissemination Group)
- SOWAP farmers day in Leuven (Belgium)
- SOWAP-ProTerra meeting Leuven (Belgium)
- SOWAP presentation (Mike Lane), Syngenta HQ, Basel (Switzerland)
- SOWAP-ProTerra meeting Toulouse (France)
- **Conservation Agriculture Manual for Europe (CAMEO)** meeting UK
- Production of SOWAP “key messages”/ newsletter
- Coordinate “SOCAT” (special SOCAT meeting postponed till Nov. 7)
- Documentation of cases in Hungary, UK and Belgium (continued)

Not achieved (mostly because of lack of manpower / time allocation):

- WOCAT Training for SOWAP/Pro Terra staff
- New case studies documented after training (in Czech Republic; or Italy, Spain, France for ProTerra)
- Compile data for integration of results with other SOWAP data

Only partly achieved:

- Dissemination of results at field, national and European level

1.3.19 Serbia & Montenegro

Report by Miodrag Zlatić

WOCAT promotion

- University lectures on the fourth year of studying
- Establishing Student's Forum of WASWC (one of the aims: involvement in WOCAT)
- Training: Meeting at Water Management Enterprise in Nis regarding using WOCAT methodology
- Promotion at Headwater Conference: not achieved due to financial reasons
- Planned promotion at “Forest Impact on Hydrological Processes and Soil Erosion”- conference in Bulgaria (5-10 October 05)

Working on QM in Central and South Serbia

- 3 communities were done through QM matrix tables in Belgrade District: community Voždovac (149 km²), community Palilula (447 km²), community Mladenovac (339 km²) and community Sopot (271 km²).
- Seven Communities partly done through QM matrix tables: Aleksinac (707 km²), Gadžin Han (325 km²), Doljevac (121 km²), Merošina (193 km²), Niš-grad (597 km²), Ražanj (289 km²) and Svrljig (497 km²).

Continued work on QA and QT in South and West Serbia

- Continued work on QTs was done in Central Serbia (not in South and West Serbia because of lack of funding); 4 filled QTs without peer review and 0 QA. 2 QTs were done in village Djurinovac in Sopot community and 2 in village Slanci in Palilula Community.

Brochure of performed programme

- Not done (lack of investments); year will be prepared till the end of the year
- Report for Ministry of Agriculture, Forestry and Water Management AFWM (in Serbian)

Contacts of national and foreign donors (national ministries and UNU)

National level:

- Directorate for Water Management of Ministry for Agriculture, Forestry and Water Management – favourable
- Water Management Centre “Morava” of the Public Water Management Enterprises “Srbijavode” in Niš - favourable

International level:

- Preparing draft with UNU (United Nation University) for regional programme

1.3.20 IAEA

Report by Thomas Ledermann

One of the IAEA coordinated research projects goals is the need for proper documentation, monitoring and evaluation of soil and water conservation technologies and approaches using the WOCAT tools. In this frame, a 3-day WOCAT workshop is scheduled to take place in Istanbul, Turkey end of November 2005. The workshop will be attended by the Turkish research group as well as some other scientist from Turkey. It will be assisted by WOCAT staff from Berne.

The third Research Co-ordination Meeting (RCM) of the CRP (Co-ordinated Research Project) will most likely be held from 08 to 13 May 2006 in Marrakech (Morocco) (one week before the International Soil Conservation Organization (ISCO) will hold its meeting in Marrakech). WOCAT approaches and tools will be promoted through presentation of SWC technologies in these meetings.

1.3.21 Switzerland

Report by Thomas Ledermann / Hanspeter Liniger

Established EU research project: COST

Two PhD theses started in July 2005 under the new COST 634 action on "On- and Off-site Effectiveness of Soil and Water Conservation in Switzerland – Steps Towards the Integration of Farmers', Experts' and Scientific Knowledge". This research project aims at optimizing agricultural knowledge related to soil erosion by re-articulating and intensifying the interaction between researchers, experts and farmers based on social learning processes. It represents a transdisciplinary research project addressing critical questions about the improvement of interaction of the knowledge system, the lack of instruments for assessing off-site effects of soil erosion, and the need to assess impacts and the efficiency of incentives and innovative extension methods. These objectives are investigated taking into account ecological soundness, economic viability, practicability and social acceptance.

The three parties involved in this project are: (1) 'Centre for Development and Environment – CDE', University of Berne (WOCAT, Impact Monitoring), (2) 'AGROSCOPE FAL RECKENHOLZ' (Water Protection Group of the Swiss Federal Research Station for Agroecology and Agriculture) and (3) the private firm 'KNOWLEDGE MANAGEMENT ENVIRONMENT' ('from farmer - to farmer'-approach).

Scientific Meetings:

- "Soil conservation management, perception and policy". Rouen, France. 05 to 07 June 2005
- "Information exchange, co-operation, next steps". COST 634 Meeting in Berne, Switzerland. 16 June 2005
- "Reorganizing field and landscape structure in a context of building strategies for water and soil protection". Lublin, Poland. 15 to 17 September 2005

WOCAT presentations / promotion:

- Presentation of a WOCAT poster at the Scientific Meeting in Rouen, France (05-07 June 2005)
- Presentation of WOCAT at the Scientific Meeting in Lublin, Poland (15-17 Sept. 2005)
- Dissemination of WOCAT products (brochures, flyers, CD-ROMs)

Outputs:

- 1 QT "Minimum tillage in Switzerland" / 1 QA "Promotion of soil protection measures in Switzerland" in progress
- 1 Poster (including WOCAT)

1.4 New initiatives

1.4.1 IRHA

Report by Gudrun Schwilch

The International Rainwater Harvesting Alliance (IRHA) is a network of associations and individuals committed to promoting Rainwater Harvesting (RWH) as major option within Integrated Water Resource Management (IWRM).

With the support of SDC, IRHA and WOCAT were preparing a training course to be held in Kenya in October 05. The objective is to strengthen the links between RWH and SWC experiences within an IWRM approach by using WOCAT tools. This is an excellent opportunity to use WOCAT tools for documentation, monitoring, evaluation and dissemination on RWH technologies and approaches. The documentation will also include a better understanding of RWH within an Integrated Water Resources Management (IWRM); a conceptual building process central to IRHA's ongoing capacity building and awareness-raising activity.

IRHA is based in Geneva, Switzerland: <http://www.irha-h2o.org/>.

1.5 Regional Group Meetings

Tasks for Regional Group Meetings:

- 1) Review last years group work: mentioned problems and proposed solutions
 - Have problems changed? Why / why not?
 - Have solutions been applied? Why not?
- 2) Further questions
 - Has WOCAT become a standard tool for documentation in your region?
 - Have more quality-controlled data been collected?
 - Have achievements in SWC been made with the help of WOCAT (i.e. has it been used)?
 - Is it used in research? What's its role in research?

1.5.1 Central Asia

Tajikistan, Kyrgyzstan

Major good points

- **Collaboration with research** and implementation: University, Rural Advisory Service RAS, NCCR N_S (international research), CAMP, FAO (Tajik), ICARDA → good involvement of students (NCCR, Agrarian University)
- **WOCAT light** version for technologies used for posters and planned to use for brochures
- WOCAT in **curriculum** in primary school and university as well as Rural Advisory Service (Kyrgyzstan)
- **Funding partly secured** thanks to GTZ (CCD), Helvetas, NCCR, ICARDA, FAO (Tajik)

Problems and solutions

- Institutional collaboration:
 - Difficulties to connect with official government organisation → need to work on a mentality change (through round table discussions) from Soviet system thinking (industrial farming) to local small-scale farming conditions
 - Need to organise farmers associations / groups
 - Need to increase efficiency of collaboration with farmers (partly successful)
 - Institutional collaboration in Tajikistan to be improved → strengthen the collaboration and information exchange in the WOCAT group and in joint projects
- Funding:
 - Not such a big problem at the moment, but additional fund raising activities needed

- Fund raising to produce overview book for technologies in 3 Central Asian countries still needed (in 5 different languages: Kazakh, Kyrgyz, Tajik, Russian and English): requires a joint effort of the WOCAT group in Kyrgyzstan (Talant, Abdybek, Aida) and Tajikistan (Murod, Sanginboy)
- Joint project formulation involving different institutions and the main WOCAT stakeholders
- National coordinators have about a 30% involvement in WOCAT. There is a need for additional persons to help in data collection, quality assurance, production of outputs (e.g. curriculum, overview book, posters), etc. → need for additional funding project

Answers to group work questions:

- WOCAT as a standard tool in the region? WOCAT tools are being used to document technologies. Since Central Asia is in a transition phase after the Soviet time, it is hard to document approaches.
- More quality control: Yes, through CCD-CAMP and NCCR
- Achievements made with help of WOCAT (use of WOCAT): RAS (irrigation manual using WOCAT format and data), village presentation/planning
- Used in research: YES

1.5.2 South and South East Asia

Philippines, China, Indonesia, Bangladesh, India, Nepal

Issue 1: how can we capitalize in terms of achievements (data and tools)?

1. WOCAT core should invest more in strengthening the regional nodes
2. Improve the outreach/delivery systems
3. Use of WOCAT should be appealing
4. WOCAT core should support some WOCAT members to participate and present in MDG related conferences.

Issue 2: how can we address global issues?

1. Natural resource management must be livelihood based
2. Efforts should be made to include WOCAT in national action programs on the issues mentioned
3. WOCAT can be an important tool for evaluation of equity, productivity, stability and sustainability related issues (however revisit the methods to see how useful its for measuring outcomes and impacts)
4. WOCAT Qs should be simplified and customized
5. Some answers are too subjective (e.g. economic part); quantitative assessment is as important
6. Improve methods for measuring off-site effects
7. Include methods for understanding the compensation for environmental services
8. What are the opportunity costs for farmers
9. QM should be given more push and support

Problems and solutions of specific countries:

P.R.China: The problems have changed. With the translation of the questionnaires to Chinese the language barrier was lifted. However, national networking is very limited even among WOCATeers (poor e-mail communications), which makes collaboration and exchange of experience within one country difficult. It was suggested to organize a forum in order to improve networking. On an institutional level WOCAT has not become a standard tool for documentation, however dedicated persons within an institution are more and more using WOCAT tools and methodology to document and evaluate SWC Technologies and Approaches.

India: The use of WOCAT has expanded from the north to the northeast of India (Orissa). WOCAT has been institutionalised. WOCAT is not a separate entity or standardised tool in the programme but part of greater activities within the institution. Funds are available, however how to mobilise part of these funds to WOCAT activities causes a problem. Solution: have enough core funding e.g. bilateral funding DANIDA/WOCAT.

Nepal: The problems have changed as WOCAT is not an individual entity anymore, but part of a greater programme in the ICIMOD/Himalayan SWC network.

Bangladesh: Until now documentation and quality assurance was taking place only during the training period, but afterwards feedback from participants was very low. Solution: 'head hunting' for really interested, dedicated and innovative specialists/contributors who will be trained to use WOCAT methodology. For quality assurance BANCATs experience was that only a multidisciplinary panel of people/experts who are near enough to the region could assure the quality of the data. However, it is important that the coordinating regional Institution, in this case ICIMOD, is close to the national focal points. To emphasise the importance of

WOCAT in research and in addressing knowledge gaps, contact/talks have been taken up with the relevant ministry to include WOCAT tools and methodology in his programmes. Students at the University level are introduced on how to use WOCAT in their research and are realising that it is a good tool that can be adapted to various situations.

Philippines: WOCAT is not a separate entity but part of a greater programme (e.g. Watershed Forum). Up to now WOCAT is not a standardised tool for documentation and quality control.

1.5.3 Europe

Serbia and Montenegro, Switzerland, SOWAP (& ProTerra)

Review last years group work: mentioned problems and proposed solutions

Problems as identified during WWSM9 (NB: incl. Kazakhstan):

1. Institutional collaboration -> not seen as a problem (anymore)
2. Funding: improved in S&M; not a problem for SOWAP or in Switzerland
3. The awareness is growing that WOCAT is not only a tool for collecting information but also to self-evaluation and comparing information: but it still needs further improvement

Possible solutions:

1. WOCAT cannot solve institutional problems at this stage but a possible way forward could be introducing WOCAT in university curricula or promoting its use in student's works to evaluate conservation practices. Since this was not a problem, it is also not a solution, but in general a good idea, nevertheless and somehow being implemented in all programmes involved (S&M, SOWAP, Switzerland)
2. Allocate time is important, e.g. in the case of Serbia-Montenegro, only 20% of the working time could be allocated to WOCAT activities.

Further questions

- Has WOCAT become a standard tool for documentation in your region? That is quite a challenge anyway, but not the case for S&M; for SOWAP yes within the project, Switzerland no.
- Have more quality-controlled data been collected? Yes.
- Have achievements in SWC been made with the help of WOCAT (i.e. has it been used at field level)? If interpreted as achievements at the field level: one example in S&M.
- Is it used in research? What's its role in research? Yes: for S&M in PhD and Diploma study, SOWAP within the project set-up (documentation of SOWAP practice, to be completed with alternative practices on demonstration plots, to be expanded (in next phase) with "outside"-project practices); in Switzerland PhD study Thomas Ledermann (costs & benefits and on/off site impacts of cons. agric).

1.5.4 Africa

Ethiopia, South Africa

Review last years group work – new issues

- Sharing of experiences very important – difficult due to lack of regional coordination/commitment.
- WOCAT not part of regional/continental programmes (New Partnership for Africa's Development NEPAD, African Agricultural Development Programme (AADP)....).
- Very little participation in WOCAT by African countries.
- Concrete/usable outputs still lacking.
- Benefits of WOCAT not clear to all – short and long-term outputs not well defined.
- People with experience in filling in the Qs and soil and water conservation should assist in completion of Qs. This would also contribute to quality control and the value of the information in the database.
- The new format of Qs (professional, basic and light) will also contribute to the "user-friendliness" of filling in the Qs and to more reliable data.
- South Africa is trying to link WOCAT with other programmes (LandCare) – other countries can follow example.
- Attempts to make WOCAT work as part of a bigger strategy in South Africa (Soil Protection) will spill over into other African countries.

- Institutional set-up differs in regions/countries – must be considered in WOCAT implementation/approach. Modus-operandi of regional institutions differ – in some regions they act as “big brother” and if WOCAT not part of their programme it can not be implemented nationally.
- New issues must be included in Qs (Carbon sequestration, watershed management, water harvesting, biodiversity, alien vegetation, rangeland species change,....)
- WOCAT must form part of school education (curriculum, practical trials) and project planning (monitoring, implementation)

Questions

- Standard tool for documentation – no
- More data collected – yes
- WOCAT used – limited
- WOCAT in research - no

1.6 SWOT review

Some regional representatives were selected to have a special view on last years SWOT analysis (WWSM 9 Yichang proceedings p. 46/47): Daniel Danano (Africa), Cai Jianqin (China), Sanjeev Bhuchar (South Asia and Himalayas), Abdybek Asanaliev (Central Asia), Miodrag Zlatic (Europe), Jose Rondal (South-East Asia).

Their task was to review the SWOT analysis with the inputs from the country reports and regional group meetings in mind and with a main focus on output generation and use of WOCAT.

They were also asked to review the TORs of the (enlarged) Management Group: Which of the TORs have been achieved within your region? Where are problems?

Five of the above representatives have given their inputs. The following **conclusions** can be drawn:

1. Output generation:

- Main strengths: CD-ROM, website, posters.
- The insufficient quality of the Ts and As, the limited outputs (overview book not published yet) and the lack of language compatibility are still the main weaknesses.
- Additional opportunities are found in the International Year of Deserts and Desertification (IYDD) 06, the use of research, the new modular system of the questionnaires and the national overview books.
- Main threats are still commitment and funding, but the outputs are beginning to be appreciated and competent national/regional WOCAT teams are evolving.

2. Quality management:

- Main strengths: lot of available information, active national review panels including local contributors, committed WOCATeers.
- Weaknesses: the length of Qs (Professional versions) threatens the quality control; quality is a question of perceptions, no standards developed limited resources / incentives / ownership. The weakness of one person filling in the Qs is disappearing, as more Qs are getting filled in by a team.
- Opportunities: a growing pools of SWC experts to assist, use Basic Questionnaire, focus on outputs, link to other projects.
- Too much effort to do Qs is no longer a threat with the Basic and Light Questionnaire, but time and funding constraints remain.

3. Networking:

- Main strengths: Bern power, WWSM, increasing regional networking.
- But poor network system between national/regional and global level is still a main weakness. But national network is improving in some countries.
- Strengthen regional committed hubs as well as linking them with other networks or UN conventions is therefore still an important opportunity. WWSM should be kept annually.
- Lack of interest, commitment and time of individuals/organisations and limited feedback from SWC practitioners is still a main threat.

4. Capacity building:

- Main strengths: annual WOCAT meetings.
- Weaknesses: few national trainers, low awareness and lack of common understanding of certain issues, low inclusion of global issues and research. But some aspects are improving through trainings.
- The opportunities are the same as before plus to learn from other countries and to combine with other trainings on related topics.
- The main threat is still that trained people are not always available for WOCAT tasks and lack of funding.

5. Tool development:

- Weaknesses: database criticized by experts, Qs require revision also to address global issues.
- To adopt Basic Questionnaire and the QM improvements are new opportunities.
- Main threat: missing official recognition.

6. Other

- Main weakness: impatient policy makers.
- To integrate WOCAT in other (global) programmes and to create awareness among (global) users are possible opportunities.
- BUT: If WOCAT not used by people for whom it is intended (the WOCAT target group) – it will fail!

Only one representative made a review of the TORs of the Management Group. Main conclusion: WOCAT promotion and database maintenance was well done at all levels. Quality assurance is being tried at national/regional level, but regional hubs need to get strengthened. The functioning and tasks of the Enlarged Management Group is not well understood.



Careful listening workshop participants (Photo Hanspeter Liniger)

TOPIC 2 WOCAT MAPPING

Rapporteur: Rinda van der Merwe

2.1 Map Questionnaire (QM)

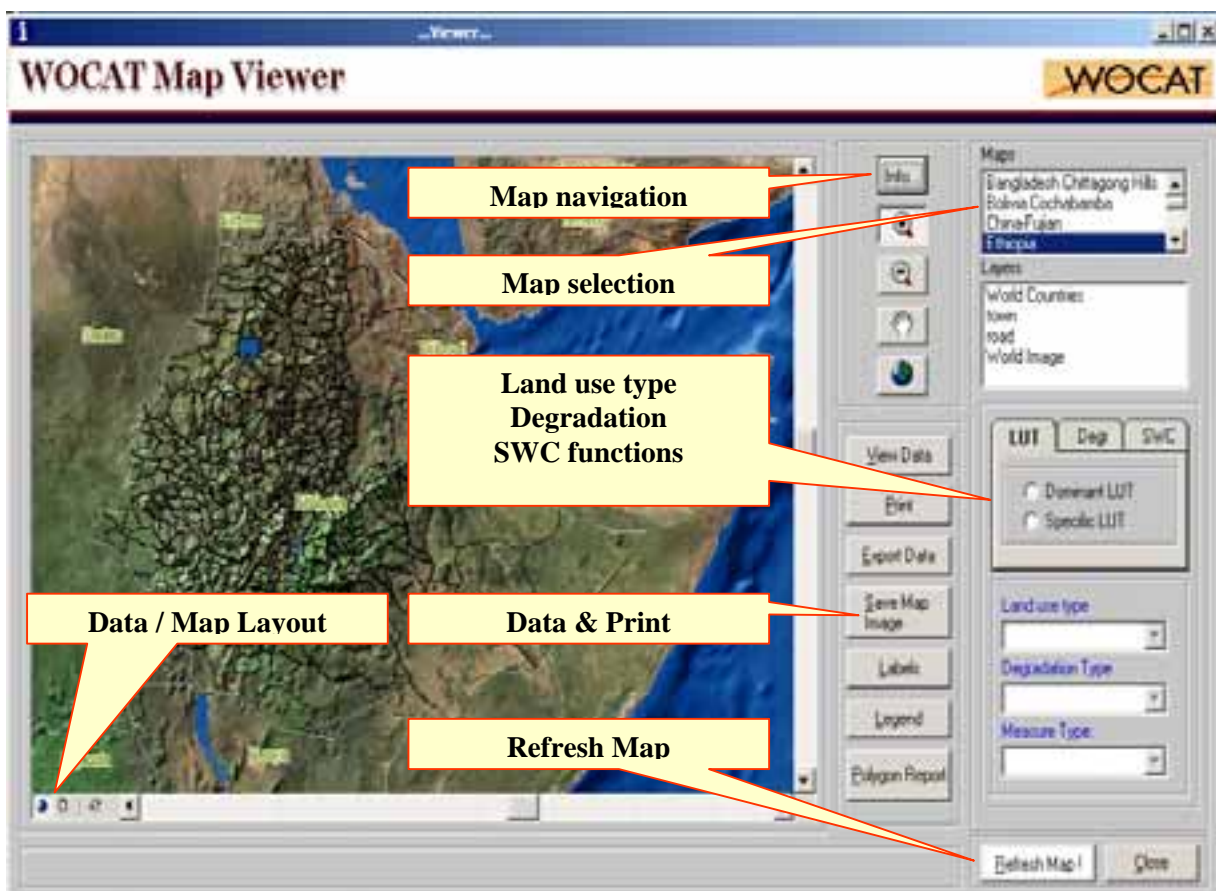
2.1.1 Offline QM

The South Africa WOCAT team has worked on the development of a map viewer for the current WOCAT map database (QM) and presented their Beta 1 release. The main aim of the offline QM map viewer was to get independent of additional software like MapObjects LT, which often caused problems for the user. Development of the map viewer is still ongoing; the current version does not include all the functionalities and some “bugs” still exist. So far it is only a data viewer, neither data adding and editing is possible yet, nor adding own shapefiles. To link the map viewer to the existing Access database is technically possible and will be implemented in order to allow data entry and editing.

Advantages and disadvantages of the proposed QM Map Viewer:

- Based on ArcReader 9.0 from ESRI, which is a free software, downloadable from the Internet
- No MapObjects Light needed
- No MS Access needed for the viewer (but for data management, viewer will be relinked to the Access database until an Access-independent data management system is programmed)
- Easy installation
- Developed in VB.NET, and therefore software-independent
- Only supported on Windows NT and above

Map viewer components



System requirements:

- CPU: Pentium 450 – 650Mhz
- RAM: 256 recommended
- Disk space: 300MB – including data
- Operating System: Windows NT and above
- ArcReader 9.0 and all dependant components installed with installation.

Installation:

- Two parts to installation: 1) QM Map Viewer installs; 2) ArcReader 9.0 installs
- Insert CD-ROM and click on Setup.exe file to execute the installation
- Follow the installation steps
- Use proposed default settings for the Beta 1 release

The map viewer has been designed similarly to the previous version in Access, but not all functions are ready yet. Labels are dynamically scaled, which is a further advantage.

Future functionality, as in previous QM system, and **next steps**:

- Polygon reports: to view all data of selected polygons
- Degradation map:
 - Extent and degree of specific degradation type
- SWC maps:
 - Extent of effectiveness of specific SWC
 - Total extent of effectiveness of SWC
- Search by criteria feature
- Adding new layers (what is needed by countries)
- Building of a data editor by linking Access QM database to viewer
- Spelling mistakes in Beta version to be corrected
- Training after changes were made to QM

2.1.2 Online QM

The South Africa WOCAT team has created an online map viewer for all existing QM data available so far from various countries.

The online QM viewer is available on the AGIS page:

→ <http://www.agis.agric.za/agisweb/wocat> (WOCAT in South Africa)

→ Click on “SWC databases” – “Search SWC map”

→ Select a country/area

→ Select a polygon

For each selected polygon you can view:

- the map (showing which polygon is selected)
- two tables with data on:
 - Land use and soil degradation
 - Soil and water conservation
- a graph with the distribution of the land use types

Compared to the offline map viewer, the online map viewer is not a dynamic map viewer so far, as you can only view the data in table format for one selected polygon and not the resulting maps of land use, degradation and conservation. The team is currently busy developing an online QM editor, but for South Africa only.

The online QM viewer will in future be hosted at CDE

2.2 World Map

2.2.1 Online World Map Viewer



The South Africa WOCAT team has also created an online viewer for the WOCAT world map. The layout with the symbols, colour and size of the dots as well as the provided data information and photos is based on proposals from Hanspeter Liniger and Gudrun Schwilch and has been discussed during the map workshop in Berne in June 05. Currently available data of 13 countries has been integrated and can now be viewed at <http://www.agis.agric.za/agisweb/wocat> under “WOCAT” - “WOCAT dynamic maps” – “World map”.

There is also an online administration system with password protection for each country under “WOCAT” – “SWC databases” – “World map – Data management”. The password can be obtained from Carin Pretorius (“register new country login”). Once registered, the data as well as the geographical location of the dots can be edited. New information can also be entered and dots can be placed interactively on the map.

The online world map viewer & admin system will in future be hosted at CDE.

2.2.2 Offline World Map Viewer

A world map poster, printed from the online world map viewer, has been presented at the WWSM. It was appreciated by the participants and they generally agreed with the layout of the draft, even though a special layout will be required compared to the digital version. A problem is also the very limited space in the oceans to place the photo and information boxes, especially when more dots become available. Many long lines to dots in landlocked countries are difficult to read.

Group work on world map strategies

How to get more data for the world map?

- Promote <http://www.wocat.org/worldmap.asp>
- FAO headquarter could help with a cover letter to the FAO country officers
- UNCCD / GEF focal points could be contacted
- Global organisations and/or national offices
- Contact co-operations of regional institutes in agricultural development
- Through CGIAR – Centres (ICARDA, RELMA, etc.)

Methods of selling the idea:

- Message: “You can not miss it to provide your technologies”
- Link to Millennium Development Goals should be clear, it should show the countries’ achievements towards the MDGs / global issues.
- Mention institutions and logos of contributors as well as of large global supporters (like FAO, UNCCD, etc.) as an incentive to potential contributors
- Technicians / SWC specialists as well as politicians / decision makers have to get satisfied
- Communication with the governments to get the data approved and to get the really representative technologies
- Criteria for selection: Area coverage, adoption, sustainability, effectiveness, etc....

A second map for approaches? This idea was not discussed and would need to be followed up later on. As ideas on how to show the technologies are rather clear, a presentation of the approaches poses a much greater challenge.

2.3 Summary

QM WOCAT Questionnaire		WORLD MAP	
Aim: All the QM data of a country/area for monitoring purposes		Aim: Selected examples of SWC measures of each country to promote awareness & for PR. Possibility to include all Ts and As which are in the global database in the online viewer / on a larger scale.	
Users: SWC specialists, national policy makers, land use planners, research institutions		Users: General public, organizations involved in SWC – e.g. FAO, UNEP, SADC, RELMA/ICRAF, ICARDA,...	
Format: digital: Internet (online) and offline		Format: Internet (online), (global) overview poster (hard copy)	
Type of information: polygon information		Type of information: point information	
Online viewer	Yes (map with polygon in red, graph with land use, soil degradation, SWC tables)	Online viewer	Yes (map to zoom to country, display spatial location with photo and limited information).
Online editor	No – will start with development for South Africa	Online editor	Yes (login per country, add/edit spatial location, photo & limited info)
Offline viewer	Busy with development, first Beta 1 release ready	Offline viewer	No
Offline editor	Will use existing MS Access system	Offline editor	No

It would be nice to have a link between the two online tools.

2.4 Mapping follow-up

1. How to get started on QM

- Determine the main aim of the QM exercise in country/region: level/scale, priority areas, etc.
- Determine what information/expertise about land assessment are available in the country to assist with QM (link to other institutions)
- Determine the stratification/mapping unit to use – linked to aim of QM
- Get expert team together to determine the above issues – must be people who understand land assessment/spatial data
- Scope of QM is different from QT/QA: There must be a need for QM in a country/region and people must realize this (like it happened in South Africa). It needs a concerted action for a certain area and a mandate from a higher level (e.g. government).

2. Training manual and workshop

Manual

- Content: Rationale, methodology, technical aspects
- More stressing the very important preliminary tasks: determine aim, experts, base map
- Different languages
- Format: CDROM (pdf), printed, website
- Responsible: WOCAT management group, task force

Workshop

- Have WOCATeers (not GIS-specialists) as participants, but possibly with a GIS background who are going to enter and interrogate data
- Also include people who will be responsible for collecting data
- For regional and national level
- Responsible: WOCAT management group, task force

3. World Map

- Develop edit manual on website (how to add/edit/query data and pictures)
- Proper layout needed for printed map – not created automatically. Layout and placing of pictures is too crowded on printed map
- Proper location of technology is important – must be provided by country (online facility available – www.agis.agric.za/agisweb/wocat)



Dirk Pretorius explaining the new mapping software (Photo Hanspeter Liniger)



TOPIC 3 QUALITY ASSURANCE

Rapporteur: Mats Gurtner

3.1 Experiences in different countries/regions

While compiling the case studies for the Overview Book, quite some progress in terms of quality assurance was made. However, the experiences made in the different countries also need to be collected and communicated.

For this purpose a short enquiry about recent experiences on how quality assurance is organized in different countries with the following specific questions was sent out shortly before the WWSM:

- (a) how is training for data collection organized,
- (b) who is looking at the information and checking: an individual expert, a group of people (a panel),
- (c) how are interactions with the contributors,
- (d) how are gaps and contradictions filled,
- (e) where are the major problems to be solved and
- (f) what solutions have been found?

Some written statements were received, but not presented during the WWSM. They are nevertheless included here.

3.1.1 ICRISAT, Niamey

Report sent by Charles Biolders

The entire process of quality assurance requires a lot of work. Filling in the questionnaire is time consuming. Checking it thoroughly also takes a lot of time, especially when it involves checking for consistency among multiple questionnaires from the same site / project, or between QA and QT. Following the review, getting a response from the authors has been very difficult in my experience: it's most likely a matter of time, and perhaps also motivation (what will it be used for / what credit do they receive from their work), on behalf of the authors. Correcting the questionnaires with their responses is not very time consuming, but can be frustrating if not all issues have been addressed or if the responses introduce new inconsistencies.

Lessons learned:

- 1) I'm not sure that quality control during group work is very efficient. A person very familiar with WOCAT still needs to go through the questionnaires afterwards anyway.
- 2) The person in charge of quality control is best 'neutral' with regards to the country, but very familiar with the environment and the technologies. This person must have the necessary time (reviewing a questionnaire is like reviewing a journal paper, it easily takes several hours).
- 3) How to get feedback from authors: this is the key issue. My experience with direct feedback between reviewer and authors is not very good. Authors work on a voluntary basis, and can only spend so much time on WOCAT, unless WOCAT has the explicit endorsement (and enforcement) from their employer. Besides this, the issue of quality assurance is also a bit sensitive. The 'sensitive' part comes from the fact that the questionnaires are usually filled in by SWC experts. The entire process requires really dedicated persons, and strong (local) institutional support.

The solution we had in Niger is quite good in principle: hiring a consultant to collect the needed information from authors and update the questionnaires on the basis of the reviewer's comments. However, this requires a motivated person, with sufficient SWC experience, a critical mind. Hiring such a person requires sufficient funding, which is often lacking.

3.1.2 Ethiopia

Report by Daniel Danano

The established procedures regarding quality assurance in Ethiopia is as follows. In different regions at least three of the procedures are followed and in some case up 4 or even 5 of them will be made depending on the availability of time and willingness from regional coordinators.

1. Training given to those who fill in the questionnaires on a given technology and approaches
2. Backstopping given in the field while completing the questionnaires in the field
3. A review meeting held where the contributors and other supporting experts sit together
4. The contributors go back and fill in the information, which was not provided initially (data gap filling)
5. Group of experts take responsibility to recheck the information provided in the questionnaires
6. Final workshop conducted at the regional level to arrive at consensus

For example in the SNNPR and in Tigray the procedures from 1-3 were made, in Oromiya from 1-4 and so on.

3.1.3 Philippines

Report by Jose Rondal

Because of logistic problem, we have not done new data collection this year. In previous years, quality assurance was done on a very personal level between us (J. Rondal and R. Labios) and the one doing the documentation or author. We asked questions and the "raw data/information" is sent back for clarification. The process is repeated until such time that we are satisfied with the grey areas and the QT or QA is then conditionally accepted for entering in the database. For the present T and A in the database, these are constantly validated as new data comes in. So far, there is no significant deviation from the original entry to warrant a revision of the database.

3.1.4 ICIMOD, Nepal

Report by Roger White and Sanjeev Bhuchar

PARDYP-ICIMOD has organized three regional level training on WOCAT tools and methods. For contribution to the WOCAT database it's the individuals (already trained) who evaluate and document. They take the help of other project team members or SWC specialists. Another approach has been to evaluate, document and present (for peer critique) case studies during the training itself (e.g. the four Ts and As during the November regional training from the Bagmati watershed in Nepal). ICIMOD also maintains an extranet (HIMCAT) where information can be shared.

For the forthcoming WOCAT Global Overview Book, there has been a lot of interaction with the contributors (SWC specialists and the land users). However, this was possible because:

- The contributors felt there was a professional benefit for them and their institutions, if their papers were accepted for a peer reviewed and important publication;
- There was facilitation by ICIMOD and WOCAT for carrying out the quality assurance tasks; a visiting scientist to ICIMOD for WOCAT (Ms. Nicole Güdel) was also assigned this task;
- The field sites were close-by and so it was easy to get new information / clarify any points;
- Land users knew the SWC specialists very well (main contributors) as they were engaged in R & D work with them;
- It was possible to have e- and non e-contacts with the main contributors;
- The main contributors were able to provide related information (published or unpublished);
- The main contributors considered quality assurance process as a learning and capacity building process;
- The main contributors had support from their institutions; and all possible help (including logistics) and encouragement was extended by ICIMOD to the authors to develop and submit the case studies because the acceptance of their papers was considered as a contribution to ICIMOD goals and objectives.

The approach adopted by the Central Asian contributors has attracted the HIMCAT members and they are more eager to produce good quality posters and other simple materials (flyers, etc.) on selected potential SWC technologies and approaches by using WOCAT Qs as reference materials for evaluation, instead of medium quality detailed databases.

PARDYP-ICIMOD has tried a different approach this year in which the potential SWC Ts and As tested and developed by the project were first identified, and later presented and discussed in a regional SWC and watershed management workshop. Following this, the studies were refined and improved in a small group with the help of an editor, and finally posters were prepared.

3.1.5 South Africa

Report by Rinda van der Merwe

Currently RSA is in the process of drawing together a panel of experts, who will be responsible for evaluating and checking the information. Interactions with the contributors was usually experienced with not much difficulty however, problems do arise once the contributor has left the organisation, thus making it extremely difficult to get hold of the new address/contact details. Where possible, gaps are filled by follow-up contact with the contributors. The major problems are identifying potential contributors, and achieving a balance in technologies and approaches. The quality is much better if the questionnaire was filled in with the help of a WOCATEER. However, in many instances where the contributor is a researcher, the questionnaire was found to be more satisfactorily and objectively completed.

3.2 Quality assurance for the overview book

Presentation by Rima Mekdaschi Studer

The compilation of the case studies for the global WOCAT overview book was an excellent opportunity to get insights into the quality assurance procedure. The presentation of the case studies in the overview book requires high-level quality standards for a global audience.

1. Main problems regarding data quality and quality control

Quality was often problematic, both from the database and from case studies specifically collected for the book (based on a template derived from the 4 page summary of the database, since 'basic' questionnaire version was not ready yet). Main points regarding data quality are listed below:

- General description: essential information was sometimes missing, the information given was not well structured (with repetitions). Contradictions to the information given in the following sections were not uncommon. The general description of QA often included technology related information (a problem of definition and understanding).
- Some questions were answered incorrectly because of confusions (not well understood / no clear definitions): e.g. 2 rainfall averages given for a very small area; lack of clarity in question on land use type: is it before and after SWC.
- Most difficult questions turned out to be: total area (hectares vs acres); costs and economics (total costs vs cost per year, cost per unit vs per area, cost/benefit), impact assessment (lack of results from evaluation and monitoring).
- Pictures were often of low resolution, technical drawings often of low quality standards.
- WOCAT categorization system (land use and/or SWC measures) was not used consistently; in some cases it was not used correctly.
- Strengths and weaknesses: there was evidence of insufficient critical questioning, preconceptions, biases (own project/technology promotion) and 'wishful thinking' (e.g. regarding benefits such as downstream effects).

Authors/contributors often cannot put themselves in the situation of the reader who looks at the technology and the approach without the local knowledge and context. Language problems and cultural differences can cause misunderstandings and make documentation and communication difficult. In some cases, the communication via email complicated and slowed down the communication between contributors and the reviewers additionally.

2. How did we address the problems?

- Within a review team of 6 persons probably a total of 3-5 person days per technology and per approach were spent checking, editing and asking questions to the contributors (3 main 'editing' stages).
- Cyclical process: new questions kept arising and the contributors were contacted for clarifications 2-5 times (by e-mail, phone and personal contacts, e.g. during WWSM).
- This process included sending manuscripts back to them for approval. In case of problems of understanding we had to 'interpret' what we thought was meant and then forwarded for approval or disapproval (disapproval only happened rarely).

3. Lessons learned

- The contributors actually liked our critical questioning, which improved our and their understanding and also led to some feedback to land users as well as other SWC experts.
- The majority of the contributors approved our 'interpretation' and clarifications as contributors / SWC specialists were not always skilled in the written English.
- The prospect of seeing their works published, gave the contributors a strong incentive to cooperate.
- There was the need to review all answers and check if all issues have been addressed.
- Often responses to reviewer introduced new inconsistencies and questions.
- Data needed to be crosschecked with similar case studies, e.g. from the WOCAT database (e.g. to check if a figure for terrace construction is reliable). The database was also used for 'comparative credibility'.
- As the case studies were spread all over the world the training, which was invested in the person providing the case study, could only be used for one dataset. Thus a lot of capacity building was done which could not be tapped for the production of the overview book, but will be used in the national programmes. Experience has shown that the amount of work needed for one dataset can be cut down drastically if several Ts and a As are documented from one region / country involving the same persons.

4. Conclusions and advice for quality assurance in the future

Documentation

Use the Basic WOCAT Questionnaire for data collection instead of the 4 page summary format (but ideally use the professional version).

Review panel

Having a review panel worked best, passing on the case studies from one to another. It's also very valuable to have an interested non-specialist (in that particular technology/approach) on board. People very familiar with certain technologies and approaches may overlook the obvious. Review panels can be established at different levels:

- National multidisciplinary panel; e.g. established in Bangladesh (Bancat), Ethiopia (Ethiocat), South Africa
- Regional multidisciplinary panel; e.g. established for Himcat (ICIMOD)
- External reviewers

The whole issue of quality assurance is time consuming and needs motivated people and incentives. Such incentives could be:

- training of peer reviewers in quality control (certified peer reviewers which can give quality labels to case studies)
- prospects / opportunities to publish the 'labelled' case studies in an overview book or in journals.
- become a nominated/certified trainer / resource person for WOCAT workshops and SWC documentation and evaluation

Feedback from contributors / authors

Contributors / authors of WOCAT case studies work on a voluntary basis and often have no time to invest more into the reviewing process (answering / commenting on the reviewed case studies). Ways to promote feedback from contributors are:

- Making WOCAT part of their programme
- Hire a consultant to collect the needed information (motivated person, SWC experience, and critical mind). However, hiring such a person requires sufficient funding and restricts the number of trained persons who can build up the capacity for the documentation, evaluation and dissemination of SWC experiences.

3.3 Exercise and group work

The participants were asked to review a selected technology and approach, which was printed out directly from the database (4 page summary). This should help them to make own experiences on quality assurance and to learn about its difficulties and requirements (regarding time input, level of quality, etc.). Afterwards, they had to gather into regional groups and discuss the experiences as well as plan own quality assurance procedures and overview books.

3.3.1 Group 1: Bangladesh, Nepal, India, China, Indonesia, Philippines

1. Findings from the quality assurance exercise

- For the national overview books it is not necessary to follow exactly the 4 page summary format proposed by the global overview book team. It is better to textualize everything (i.e. not using graphical elements) to economize on the number of pages and printing costs (1-2 pages might be enough). Comment by the editors: it would be good to test it with the user groups, it is known that many people work graphically and that pictures can replace many words, it is also known that pictures can be misleading depending on the different background of the users (but so can words).
- Organize a writeshop to prepare the overview book in a standard and professional format (editorial training, a guideline for quality).

2. Quality Assurance procedure planning

- Appoint a professional in the relevant field who will be in charge of quality assurance and give him appropriate incentives or compensation.
- National level task force is needed with corresponding budget. Difficult if done on a voluntary basis.
- Plan the task of reviewing the database in conjunction with related trainings and workshops as WOCAT activity alone may be difficult to convene given the limited funding.
- Form a relevant multi-disciplinary peer review team on national level.

3. Overview book planning

- Compose a regional or national team.
- Select Ts and As that are representative of the country and subject them to peer review
- Follow the publication requirement of whoever is funding the publication (e.g. ICIMOD has a standard format of published materials), except if own WOCAT funds are available (e.g. BANCAT)
- For China, separate overviews will be done on specific regions because of the diversity of conditions and the size/extent of the country (e.g. Fujian to have a separate Overview Book)
- Indonesia will still have to create awareness for WOCAT and for this the WOCAT materials should be translated into the Indonesian language; technologies should be documented only after being practiced for some time (to assess impacts, etc.)
- Institutionalisation of WOCAT is important. Publication of an overview book has to be done through a national institution (service for editing, distribution, etc. available). If done on an individual or personal basis, there could be no sustainability as staff in an office come and go.
- HIMCAT has an Extranet where everybody can input information and ask for comments
- Editorial training for overview books is needed

4. How to extract data from the database, in what format?

- It depends on what you need, but the four page summary is good material

Something on the global overview book:

The Book has undergone several stages of review. Apart from the obvious mistakes like spelling and lacking information (drawing), it should be ready for publication. There will always be inconsistencies that any reviewer may find out. As long as the go signal of the authors is given, then it should be published.

3.3.2 Group 2: South Africa, Ethiopia, Serbia

Identified 2 major categories of quality problems

- a) Language: Spelling, grammar, sentence construction
- b) Technical: Lack of data, contradictions, confidentiality (between expert and land user, e.g. on financial issues)

Important conclusions

- It is crucial that quality control is addressed nationally – especially technical issues – identify coordinator to follow-up globally
- Urgent attention should be given to address language issues (spell checker; not available in MS Access) – WOCAT secretariat? It needs a dedicated person/group.

Plan of action – Quality Assurance

Ethiopia:

- Review panel in place (6 people)
- Need funding for incentives

Serbia:

- Review panel consists of 3 professors & 1 PhD
- Already operational

South Africa:

- Panel established (4 retired SWC experts)
- Funding for incentives available (100 US\$ per case study)
- Review of existing data will start soon
- Language issues already addressed through ISCW

Summaries and overview books:

- RSA – fact file to be updated and improved
- Ethiopia and Serbia – overview book still in a planning phase
- Format: designed by the national / regional initiatives

3.3.3 Plenary discussion

- Quality needs to be improved! Important information is missing, there are problems of consistency and contradictions.
- Problems of understanding; grammatical and spelling mistakes --> need for proof-reading.
- If authors are difficult to get hold of, reviewer must correct mistakes.
- Graphs: more explanations needed.
- Only technologies that were established a few years back (not newly established) to be documented / included in overview books.
- Need for a glossary to explain technical terms.
- Certain questions, such as land use rights, land ownership and market orientation should be shifted from the technology to the approach.
- Problem of SWC measure categorization: e.g. why is ripping considered an agronomic measure and not a management one.
- WASWC has established a peer review panel which could also control the quality of WOCAT data.
- How to smoothen the procedure of extracting data from the database?
- Lack of new datasets, current stagnancy is not good.
- Definition of technology / technology area is not clear.
- Develop guidelines on quality assurance.
- Avoid generalised descriptions of technologies/approaches!
- Describe a representative case study with its specific characteristics.
- Variations of a technology should be described in a separate questionnaire → costs, activities, impacts are all different it's also easier to fill in the information.

- The same applies to a technology which is used in different environments → the effects might change completely, also costs and other factors.
 - Idea of describing a benchmark case study and document/describe only the changes/variations in separate questionnaires?
 - Pre-condition of knowledge exchange: information should be understood by readers.
 - Target groups are SWC specialists / experts.
 - There should be a minimum of 'understanding' for external people who don't know the local context/environment.
 - To be sensitive in the review panel is a big task (translation of understandings/feelings from local/regional levels to a global level).
 - Quality of data sets is often not satisfactory despite of the investments made in training activities.
 - Quality control can not happen "by the way"; major efforts have to be made assuring
 - funds,
 - time,
 - commitment and
 - resources
- Need to make major breakthroughs: Mandate given to persons within institutions.
- Write shops (with editors) could be used to finalize Ts and As.
 - WOCAT is at the stage where it has to put the database at a good quality standard level and not only collect and document new data.
 - Different set of experts is needed for documentation of case studies: not the same who fill in the questionnaires (practitioners, SWC specialist, extensionists, implementers), but experts who are trained on documentation.
 - In order to really tap on existing knowledge major efforts are needed in the documentation, evaluation and dissemination and use of this knowledge, this requires national and international efforts and to declare this as a priority. So far, it has either not been done or, has been done through the national WOCAT initiative as a part time assignment, on top of all other activities that project and SWC specialists are already overloaded with. However, the experience has shown that it should become a top priority.



Listening to quality assurance issues (Photo Hanspeter Liniger)



Dr. Syaiful Anwar, Indonesia (Photo Hanspeter Liniger)



Group work (Photo Hanspeter Liniger).

TOPIC 4 WOCAT IN RESEARCH AND EDUCATION

Rapporteur: Carin Pretorius

4.1 Experiences

4.1.1 NCCR North-South research studies in Tajikistan

Presentation by Hanspeter Liniger and Usmon Boturov

How can research use WOCAT?

Presentation of PhD/MSc studies in Faizabad region of Tajikistan

Objectives of the study

- To describe SWC Technologies which peasants currently apply to mitigate soil erosion
- To assess the impact of these SWC measures on land degradation
- To identify spatial and seasonal “hot spots” and “bright spots” through estimating annual soil loss using RUSLE
- To determinate locations to where a particular SWC Technology could be spread to

For which parts of the study can WOCAT methodologies be used?

WOCAT helps:

- to understand the issue of soil and water conservation
- to classify SWC Technologies in a coherent way
- to gather the technology’s specifications and measurements
- to assess financial and labour inputs as well as advantages and disadvantages of the applied technology
- to acquire a general understanding of the natural and socio-economic context

Where can WOCAT not help and where do other methods need to complement?

Complementary methods are needed:

- to quantify soil losses from water erosion (assessment of visible erosion damage, RUSLE - calculations)
- to assess soil properties and soil fertility
- to conduct a full cost/benefit analysis (including long term observation of inputs and yields)



Case study sites in Tajikistan (Photos Liniger)

What did not work?

WOCAT classification of degradation:

Either criteria have to be defined in more detail for unambiguous classification that allows impact assessments, or classification has to be simplified: e.g. only 3 classes for degradation rating (increasing, no change, decreasing)

How can research assist WOCAT?

Research can provide:

- Methods that allow accurate and fast determination of land degradation / conservation indicators. Example: Development of spectral libraries for predicting soil properties - a method developed by ICRAF, Kenya
- Quantitative data on specific SWC technologies, like in the case of Tajikistan
- Background information: for example on soil genesis and its influence on soil degradation indicators
- Materials and methods that support WOCAT mapping (e.g. remote sensing)

What should be emphasized within the WOCAT framework?

The Evaluation of SWC technologies

- With regard to their suitability for implementation and spreading
- In comparison to other SWC technologies from the area or world wide

4.1.2 Research in SOWAP

Presentation by Godert van Lynden

NB: Text in italics taken from SOWAP project document

WOCAT role in SOWAP ("SOCAT")

1) To provide training and technical assistance to project staff in order to:

- *Document different conservation tillage practices in N. and C. Europe mechanised farming systems, using the WOCAT methodology.* First of all the tested practices on the demonstration sites will be documented. This has been done so far for the SOWAP practices only. Before the end of the current project phase the other tested practices (conventional and farmers preference) will also be documented. A first training was given in April 2004.
- *Entering and managing data in the WOCAT database.* This has been done for the documented case studies but needs updating and verification, esp. for Belgium and Hungary.
- *Explore the strengths and weaknesses of these practices to assess their practicality for ordinary farmers and other land users.* See below under "Assure data quality".
- *Assess the impact of conservation tillage practices on land and water resources.* This is actually more the responsibility of some other partners who are specifically looking into aquatic and terrestrial ecological issues.
- *Assure data quality.* The case study from Loddington has been selected for the Overview Book and has hence been scrutinized in detail. The other case studies still need detailed checking and evaluation.

2) To disseminate the acquired results to land users, planners, institutions, etc. through:

- Workshops
- Reports and other publications
- CD ROMs (1998; 2000; 2003) and Internet (through WWW.WOCAT.NET)
- Posters and presentations during international meetings
- Audiovisual materials

All of the above is being actively undertaken by the SOWAP team rather than specifically being a WOCAT task. Some posters and presentations of "SOCAT" have been prepared and presented at various conferences.

WOCATs contribution to SOWAP:

- Tools to tap from existing experiences and to avoid mistakes and duplications through:
 - *A standardised and internationally accepted method to document, evaluate and monitor SWC experience*
 - *A user-friendly database for input, querying and analysis of data*
 - *Comprehensive information about the biophysical and socio-economic context of SWC case studies*
 - *Potential and limitations (strength and weaknesses) of documented cases*
- Training support for SWC specialists and decision-makers.
- A network enabling the sharing of experiences at national and international levels.

WOCATs expectations of SOWAP

- To expand the global WOCAT database with European case studies (new agro-ecological and socio-economic environment).
- To evaluate the effectiveness of selected SWC measures (minimum tillage in particular) in England, Belgium and Hungary.
- To include European countries/institutions/companies/NGO's in the WOCAT Network.
- Detailed documentation of SWC case studies in NW Europe (technologies & approaches). NB: This will not be achieved in this phase of the project, but hopefully in a possible next phase.
- Evaluation of selected SWC measures in England, Belgium and Hungary.

Czech Republic has joined SOWAP as well. Possibilities for Switzerland and Serbia to join SOWAP in possible next phase will be explored. Also, case studies from southern Europe (Spain, Portugal, France and Italy) will be collected through SOWAPs "sister project" ProTerra.

SOWAP and ProTerra offer an excellent example/model of how to link WOCAT (SWC) issues with other important topics as identified during the WWSM, such as carbon sequestration, biodiversity, (farming) economics, water quality etc.

4.2 Group work: options and strategies for WOCAT in research and education

Tasks for group meetings on WOCAT in Research and Education

1. Identify knowledge gaps for research
2. What is already done in your country?
3. What are plans and opportunities for (additional) research and possible contacts with Universities or Research Institutions?
4. How to exchange / compile existing material for training and education?

4.2.1 WOCAT in research and education - South Asia, South East Asia, China, Central Asia

Knowledge gaps for research:

- Impacts of land degradation on environment and socio-economic conditions
- Technology adoption by farmers (why farmers adopt or reject a technology)

Current activities related to research and education:

- Networking
- Case studies documented
- Capacity building and training
- Lectures at University (China)
- Involvement of students in WOCAT as well as of WOCAT in the curriculum (Central Asia)

Plans and opportunities:

- Lobby for its inclusion in natural resource curriculum (include ministry of education)
- Don't say WOCAT; use generic terms and include WOCAT in it
- Use WOCAT images during lectures
- Organise seminars in Universities related to WOCAT
- Include students in WOCAT activities
- Include WOCAT in watershed management training modules

Material for training and education (suggestions):

- Posters
- Simple flyers
- CD-ROMs
- Films
- Papers in peer reviewed journals
- Demonstration plots
- Alternative media (puppet shows, etc.)
- E-conferences

4.2.2 WOCAT in research and education – South Africa

WOCAT is not part of research and education at the moment.

Future plans:

- Education: through Landcare programme get WOCAT as part of Technikon of Pretoria's curriculum who has been requesting suggestions to be included in their courses.
- Research: As part of Soil Protection Strategy get 1 or 2 MSc/PhD students to evaluate the use of WOCAT in the strategy (mitigation and monitoring).

Possible topics:

- a) Evaluate the use of WOCAT methodology as part of the evaluation and monitoring of Landcare projects in South Africa.
- b) Evaluate the use of WOCAT in land degradation mitigation and monitoring in the Eastern Cape province (priority area in Soil Protection Strategy) of South Africa.

4.2.3 Comments

- Indicators should be developed and covered in the WOCAT questionnaires (e.g. cost effectiveness, offsite/onsite benefits).
- How can research help us to measure / provide hard data and sophisticated analysis (e.g. soil fertility), to cover the methods / data that the farmer doesn't know / assess himself?
- Which are concrete steps of how to include research from now on?

TOPIC 5 FEEDBACK AND DISSEMINATION; NEW PHASE; USE OF WOCAT

Rapporteur: Gudrun Schwilch

5.1 Experiences on the use of WOCAT

Hanspeter Liniger made an introduction to the topic based on findings of last years WWSM 9 in China:

- Positive and negative aspects of WOCAT and observed demands (p. 44 of proceedings WWSM9)
- Overall conclusion (p. 48 of proceedings WWSM9)

There is still the challenge ahead on how is WOCAT being used! Clemencia Licona Manzur has prepared a first draft of a WOCAT business plan. WOCAT can act as a platform for exposure and learning of new developments.

The following presentations give insights into how WOCAT is used in some countries.

5.1.1 WOCAT – Part of Soil Protection Strategy for South Africa

Presentation by Dirk Pretorius

Background

- Minister of Agriculture requested the development of a “Soil Protection Strategy for South Africa” – first draft completed August 2005
- WOCAT has been accepted as part of this strategy and will form part of mitigating and monitoring phase
- Cost EUR 100,000
- Project will be expanded – 10 year plan

How serious is soil erosion in South Africa? Close to 1 million hectares of moderate to high potential agricultural land is under severe threat of serious erosion.

Long-term strategy

- Appointment of National Advisory Forum on Soil Protection
- Supported by Technical Working Groups
- Development of a National Soil Protection Strategy and Policy
- Development of action plan for identified priority areas (3 million hectares)

Short-term strategy

- Focus on priority areas in the Eastern Cape, Kwa Zulu Natal and Limpopo provinces (1 tertiary catchment per province)
- Develop integrated soil protection plan
 - Mapping land-use and erosion status
 - Land capability assessment
 - Complete WOCAT map questionnaire (determine effectiveness of interventions)
- Identify priority quaternary catchments in Eastern Cape
 - Compile Driver/Pressure/State/Impact/Responses (DPSIR) framework
 - Planning of conservation measures (use WOCAT database)
 - Compile implementation plan

What are the benefits of QM?

→ assessment of land degradation

First effort world-wide to use the WOCAT mapping methodology are found in the following publication: Hoffman T., Ashwell A., 2001: *Nature Divided – Land Degradation in South Africa*

5.1.2 The use of WOCAT in Ethiopia

Presentation by Daniel Danano

WOCAT is used for collecting information on technologies, approaches and area coverage as well as for evaluating soil conservation projects and programmes in the diverse agro-ecological zones in Ethiopia. The MERET (Managing Environmental Resources to Enable Transitions to improved Livelihoods) project of the World Food Programme (WFP) and the Ministry of Agriculture (MOARD) for example was evaluated by the use of WOCAT tools. The findings of the cost-benefit analysis conducted showed that technologies were able to provide positive internal rate of return 5-6 years after construction. Adoption rate of introduced measures ranged from 50% (high rainfall area) to 95% (low rainfall areas, where conserving water is an additional effect beside erosion control). Soil erosion by water, fertility decline and loss of vegetation cover are the most common degradation problems all over the country, aggravated through the steepness of many parts of the country. Certain landscapes are completely bare due to massive land degradation. A problem is also that animal dung is used for fuel, which results in a loss of organic matter.



Improper land use practices caused degradation



Massive land degradation (natural plus accelerated)

Traditional practices are sorghum residue mulching, agroforestry, grazing land management and traditional dryland farming by gully reclamation. Further common conservation measures are various structural, agronomic and vegetative measures, like grass-strip terraces (with 'desho', most promising technology), manually excavated bench terraces, contour stone faced bunds with eyebrow terraces (in semi-arid areas), graded terraces with stone-paved waterways and cut-off drains in high rainfall areas, earth embankment or (loose) rock check dams for gully reclamation for cultivation, elephant grass planted on gully walls, ridge and furrow cultivation, soil bunds stabilized by sweet potato, ridge-basin systems, vetiver terraces and area closure. Strip cropping of perennial (chat) and annual crops (sorghum) is widespread in east Ethiopia. In drier areas there are various structural measures for water harvesting. Further common measures are flood control and floodwater farming, using floodwater diversion structures and sediment storage dams. In good conserved catchments, springs are coming up 3-4 years after implementation.



Gully reclamation and making it productive;



Graded terraces with paved waterways: high rainfall areas (all photos by Daniel Danano)

5.1.3 Training programme in Yulin, China

Presentation by Meng Lingqin

1. Activities Sep 2004 – Aug 2005

The Chinese translation of questionnaires (QT and QA) was updated into the latest edition and basic questionnaires were produced, which required a lot of work. Two technologies and one approach were filled in, of which one technology was translated into English. QT CHN21 (Orchard terraces with Bahia grass cover) from Fujian for the Overview Book was updated.

2. The training programme on WOCAT in Yulin (Shannxi province)

The material prepared under 1 was used for the training of 35 participants in Yulin. Data collection from field (survey, measure and consulted with farmer) and documents (or from department, eg. Shannxi research institute for sand control) was carried out with district/province groups. Examples for documented technologies are gridding barrier, grazing system, water harvesting construction, forestry and irrigation ditch. The tools were then critically discussed and an evaluation of the training programme made. GEF/LADA did also make a presentation on half a day.

Advantages: Questionnaires covering all aspect, databases being an open system.

Shortages: It's difficult to get quantitative data, workload of filling in is still heavy, the questionnaires can only be filled by professional persons to ensure quality.

3. Conclusions in the process of extending WOCAT in China

Standard WOCAT training material (training manuals and presentations) not yet available in Chinese. Few English-speaking SWC specialists available in China.

4. Some suggestions

The database (latest version) should be translated into Chinese as soon as possible. The Chinese coordinators need training in using QM.

5.1.4 HIMCAT achievements and challenges

Presentation by Sanjeev Bhuchar

The formation of HIMCAT can be considered as a success. So far, 10 technologies/approaches were entered into database, e.g. on dryland management and rehabilitation. Three training workshops were organized, two in Bangladesh through BANCAT and one in Nepal. ICIMOD has hosted the 8th WWSM 2003 in Kathmandu and profited from a short-term assignment of Nicole Güdel from Switzerland. These activities are all thanks to SDC funding, aiming at regional networking PARDYP is closing by end of the year, but it is hoped that a proposal on watershed management in the Eastern Himalayas will be approved.

ICIMOD organised a workshop on soil and water conservation and watershed management in Kathmandu (June 1-6 2005) with participants from India, China, Bhutan, Bangladesh, Pakistan, Myanmar, Nepal and Tajikistan. Presentations were made on WOCAT. From this workshop, a PowerPoint presentation from Pakistan was shown. They described various technologies probably using WOCAT tools, among others the cost-benefit analysis.

Technique	Cost/ha (\$)
Hillside ditches	83
Contour trenches	83
Boat-shaped pits	33
Paved (roaded) catchments	166

As an outcome of this workshop, it is planned to develop a training module on watershed management. The participants were interested in the WOCAT method as well as the networking part of HIMCAT. ICIMOD has focal points in each country with very good links to ICIMOD and within the countries. China could also link with the ICIMOD-Nepal team. Bangladesh may not need much more support. HIMCAT still needs support on WOCAT mapping.

Discussion:

As it is not clear if the Pakistan team were really using WOCAT for its analysis, it would be nice to find out if they did and if yes, which parts they took from WOCAT. The networking aspect is important too. Through the many trainings held so far, people get together again on various levels and institutions and the network is building up.

5.1.5 BANCAT achievements and its future plan

Presentation by Sudibya Kanti Khisa

BANCAT has achieved already a lot within its two years of existence.

Vision of BANCAT:

- sustainable natural resource management
- healthy hill ecosystem
- improved and secured livelihood

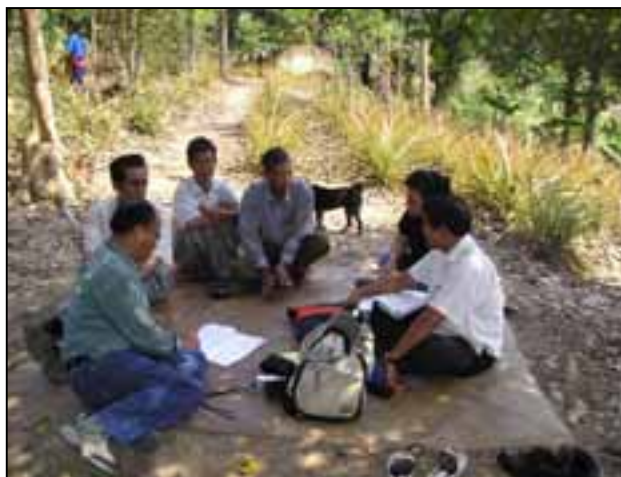
Mission of BANCAT

- Networking with national and international institutions (HIMCAT/WOCAT) for sharing of conservation approaches and technologies (CATs).
- Identify and document CATs that are in practice in Chittagong Hill Tracts (CHT).
- Facilitate SWC specialists in documentation of CATs in partnership with SWC practitioners.
- Monitor and evaluate the CAT documentation processes.
- Ensure funding for BANCAT activities and provide necessary logistic support.

BANCAT working groups on: implement the mission having the vision; scrutinize and patronize proposals from members (so far only one proposal); network with national & international organisations; assure high quality database; arrange funds; review annual progress and prepare work plan; facilitate dissemination of CATs; provide consultancy and support services.

Familiarisation with WOCAT methodologies and tools in a first training workshop 09-17 March 2004 in Khagrachari and Rangamati, Bangladesh. 25 participants documented 4 technologies/approaches in a learning by doing process:

- Hill agro-forestry technology with pineapple / participatory & innovative approach
- Valley floor paddy cultivation technology / traditional approach
- Conversion of traditional jhum technology / innovative approach
- Farm pond at valley technology / introduced approach



Familiarization with WOCAT tools



Valley floor paddy (Photos Godert van Lynden)

Second training workshop 19-25 March 2005 in Bandarban, documenting 4 CATs and releasing 2 posters and a BANCAT brochure.

- Banana-teak-fruit gardening technology / innovative approach
- Valley floor paddy cultivation with seepage water / traditional approach
- Seepage water harvesting for domestic use / participatory traditional approach
- Homestead mixed fruit gardening / innovative approach

Future plans: Publish documented CATs; institutionalise BANCAT by upgrading professionalism directing towards a national professional association of natural resource managers; commitment to documentation of CATs from CHT with funding from CHTDB / explore other source; partnership development with the stakeholders in the promotion of SWC technologies in the hilly areas of Bangladesh; make support services available to all stakeholders; provide consultancy services to CHTDF-UNDP, ADB and other donor funded

programs using the publication of CHT Best Practice Handbook; documentation of land use and land cover changes in CHT.

Discussion:

The CHT Best Practice Handbook, with step-by-step descriptions for implementation, is unfortunately not based on WOCAT, as WOCAT was not known at that time (2003), even though FAO was involved. But BANCAT is planning an overview book using WOCAT.



BANCAT brochure (left) and Chittaong Hill Tracts - Best Practices Handbook (right)

5.1.6 WOCAT activities in Orissa

Presentation by Sri G. Bhaskar Reddy

Initiation process:

- Additional Director OWDM (Orissa Watershed Development Mission) and WORLP (Western Orissa Rural Livelihood Project; DFID-funded) participated in WOCAT workshop organized by Danida assisted Comprehensive Watershed Development Programme (CWDP), Bijapur, Karnataka in 2004
- Action Plan developed for launching WOCAT documentation in Orissa

Implementation process

- Capacity Building Workshop organized by Watershed Development Coordination Unit (WDCU), New Delhi at Jeypore, Koraput in August'04
- Working groups formulated for documenting technologies and approaches in CWDP and WORLP in Orissa
- Technologies and Approaches identified by the working groups for CDWP and WORLP area
- Action plan developed for documentation in CWDP, Orissa
- Action plan developed for documentation in WORLP watersheds

Documented technologies and approach within CWDP Orissa:

- Integrated farming system technology
- Runoff management structure technology
- Participatory watershed development approach

Implementation in CWDP

- Discussion with project implementation agencies (PIAs) and other project partners to develop road map for WOCAT documentation
- Field visit and identification of the sites for technologies
- Focused discussion with the community in groups
- Documenting the QTs and QAs in hard copy
- Finalising the QTs and QAs in a WOCAT-Danida workshop held at Jeypore in Feb'05, organized by WDCU
- Triangulation and modification by the experts during their field visit and follow up workshop sharing
- Documentation in Access software

Documented technologies and approaches within WORLP

- Farm pond with contour bund technology (Bolangir)
- Participatory sustainable rural livelihood approach (Bolangir)
- Contour trench cum bund technology (Nuapada)
- Participatory sustainable rural livelihood approach (Nuapada)

Implementation in WORLP

- Learning from Jeypore workshop August'04
- Formulation of working groups
- Internal capacity building training organised for the working groups from Bolangir and Nuapada
- Watersheds and technologies identified with project partners
- Field visit conducted to watersheds for identification of sites
- The technology and approach sub groups had field visit and focused group discussions with groups from the watershed development committees (WDC), user groups (UG), self-help groups (SHGs) of the village
- Documented in hard copy
- Shared the documents between districts; received feed back and made necessary modification
- Documentation in Access software
- Sent to Orissa Watershed Development Mission OWDM
- Documents from Bolangir were shared with experts in WOCAT-Danida workshop held in Feb'05 at Jeypore, Koraput

Future plan

- Organising sharing workshop with experts from WOCAT and WORLP to triangulate and finalise the documented technologies and approaches
- Developing strategies for further expansion to other watershed programmes in Orissa. Orissa has 3000 watersheds! Watershed programmes in India exist since the 1980ies, but their focus has changed to Natural Resource Management and livelihood.

Please visit www.orissawatershed.org and www.worlp.com



Staggered Contour Trench for Water & Soil Conservation



Field bunding (Photos: G.B.Reddy)

Discussion:

- With WOCAT one can make impressive presentations with photos to show WOCAT as a monitoring tool about what really happens in the field.
- WOCAT in India has spread from Madhya Pradesh to Karnataka to Orissa. Regional hubs would help to spread even more.
- Orissa has used the professional questionnaire version.

5.2 Group work on future strategies

5.2.1 Summary of discussions so far on WOCAT future

These inputs are taken from various meetings before the WWSM 10 between WOCATeers and donors.

- WOCAT is in different stages, whereas it is established and institutionalized in some institutions / countries it has just started in others. Although having changed a lot over the last years (adapting to the needs of the collaborators), it needs to keep the partners and donors attracted by addressing and covering their needs.
- WOCAT is in a critical phase to identify its long-term future. The WWSM has to make strategic decisions together with donors about the future of WOCAT.
- Conclusions from the analysis in China 2004:
 - WOCAT started on assumption that very valuable knowledge exists and JUST needs to be assembled, however:
 - Collection of scattered knowledge is demanding for the collectors / methodology as well as for the resource persons. Data collection is not the main aim but self-evaluation, monitoring, dissemination and use. WOCAT's main focus is changing: from data collection to tool developer & to training and linking with research!

WOCAT services:

WOCAT as service provider offering **evaluation, capacity building and training** using WOCAT tools, experiences and expertise. Project/programs (local to global) request for WOCAT services to help design and/or monitor and evaluate projects.

The role of training:

What is the importance of training / capacity building as well as its implication for WOCAT?

Training is a noble thing to do and is liked by donors, however:

- Training is a long-term investment
- The link between training and improved outputs (SWC) is difficult to prove
- Training must be tuned to needs in the regions / countries which is demanding / challenging on the trainers as well as on the training materials
- Training needs to be specified, as there are many training activities in SWC. What is the special role of WOCAT: (a) documentation, evaluation, monitoring, dissemination and use of knowledge; (b) identification/filling of knowledge gaps.
- It needs to be emphasized that training is needed both in the south and north
- Target group for training: national / regional trainers, SWC specialists.

Make use of WOCAT findings and outputs:

- Meta-analysis of WOCAT findings: Ts/As, methods, tools, network of collaborating institutions, training, research
- Knowledge gained in training workshops should be "marketed" -> expertise for training, research and communication (between stakeholder levels)
- Policy guidance (ad hoc or regular), using these findings
- Develop training modules for development institutions and for university
- Produce outputs (analysis, models, tools) in relation to global initiatives using available data base (see next point)

WOCAT has gained quite some experience in data collection, evaluation and documentation (methodology and tools), it is now time to capitalise on. The potential wealth of information can help addressing global issues such as poverty alleviation, C-sequestration, biodiversity and sustainable natural resource management.

WOCAT linking to global trends:

The Millennium Development Goals (MDG) are a top issue for SDC and other donors, WOCAT should therefore clarify its role towards the MDG. The International Year of Deserts and Desertification 2006 is a great opportunity for WOCAT, e.g. to document an institution's / a nation's efforts against desertification could be a platform to show WOCAT achievements.

There are options for WOCAT to emphasize the link to:

- Soil: desertification (CCD)
- Vegetation: biodiversity / increase of production / increase of cover / :::
- Water esp. "green water": conservation and harvesting: increasing water use efficiency in rainfed and irrigated agriculture and thus reducing water demand for irrigation.
- Climate change: Contribution to carbon sequestration (increase of organic matter) and reduction of carbon emissions (see report from the Philippines)
- Poverty / MDG: reduction of crop failures, increase of production with low input.

To follow two lines: to be linked to international conventions/programmes/trends and to contribute to food security, livelihoods (MDGs), emphasizing the global role of land management for above issues and economy. WOCAT should focus on SWC needs per country (incl. cost estimates), showing the potential of SWC for the above issues.

WOCAT's contribution to MDG's is to show the potential to reverse depletion of the resource base through SWC, whereas WOCAT also provides a platform to link SWC implementation (farmers and extension) with research. WOCAT can adapt promotion and outputs to trends (MDG, biodiversity, etc.), but shouldn't change the methodology (i.e. the questionnaires) too often or too much.

WOCAT labelling and certification:

WOCAT tools should become a recognized world standard for documentation, evaluation, monitoring, dissemination of SWC in global (UNCCD, LADA) and national programmes (such as national CCD, government and NGO projects) as well as local projects. It should be the basic working tool for every institution in SWC.

Set up an international panel for data quality review (allocate funds and experts time input).

Develop WOCAT label on:

- (documentation), monitoring, evaluation
- environmentally sound production
- productive – for MDG poverty alleviation

WOCAT map:

- focus on area coverage (QM) rather than QT/QA
- produce global map!

Role of national / regional WOCAT

What will be the role of national / regional WOCAT hubs (initiatives)?

Hubs might need to be initiated and further developed depending on opportunities, capacities, and perceptions of the institutions involved. As the idea of WOCAT is not to build up parallel structures but to integrate in existing structures, different systems for the different regions will develop. Who develops them and how do they maintain the link in the network?

Funding:

What makes WOCAT attractive (financially sustainable)?

- Either a product that can be sold -> little potential at the moment
- Or an attractive public good for which organizations / donors are willing to pay
 - for both the benefit has to be obvious to the "buyers"
 - something that every institution / programme in SWC/SLM needs (should relate to other institutions' activities, people should identify with).

Explore possible synergies, alliances and innovations with other networks and initiatives such as:

- Green Water Initiative
- GEF (national / global)

- LADA / FAO/UNEP
- UNCCD
- SOWAP / ProTerra
- Conservation Agriculture
- Bio- Vision for pest and disease management (Switzerland)
- Rainwater Harvesting
- Green Water Initiative
- Carbon Sequestration
- Biodiversity

Other ideas:

- Active WOCAT collaborators (e.g. Ethiopia, South Africa, etc.) to request other countries to also work with WOCAT tools to strengthen SWC knowledge exchange (South-South exchange, South demand)
- Country – level WOCAT applications:
 - in fulfilment of conventions
 - service to projects / programmes
- Differentiate
 - basic mandate (free tools)
 - services offered (against payment)
- There is need to broaden the spectrum of donors, e.g. institutions / donors with a focus on French and Spanish speaking countries

Potential collaborators / donors

Suggestions about for WOCAT (with a history of involvement in SWC) (list to be corrected / complemented):

- IFAD
- DANIDA
- DGIS, other Dutch organizations
- SIDA
- IDRC
- CISCO
- Unilever
- IFARD
- IWMI (has swallowed IBSRAM but neglected soils)
- CIRAD: French connection
- OSTROM
- Austria
- GEF

Basically, there are 2 different groups: research and development programmes

How can WOCAT capitalize in terms of achievements (data and tools):

- strengthen the national and regional initiatives, regional coordination
- role of core and enlarged management group
- make the use of WOCAT more appealing, simplified questionnaires
- mobilize WOCAT funds to allow WOCATeers to participate at international conferences and meetings
- must be livelihood based or linked
- at national level of action programme WOCAT should be included
- WOCAT a monitoring and management tool: equity, productivity, sustainability
- develop WOCAT further to fully measure impact
- WOCAT needs to focus more on quantitative data to be part of global issues: economics, facts and figures
- Indicators of MDG
- strengthen mapping part
- crucial issues will need funding
- what do we have and what is needed or else we will fail? Need a business plan and a future strategy.

5.2.2 Group 1: Feedback & Dissemination Strategy

Godert van Lynden, Hanspeter Liniger, Rima Mekdaschi Studer

WOCAT registration / membership?

- This issue is based on incoming requests to 'how to become member', 'how to join', etc.
- Is WOCAT-L not sufficient? Or not evident / insufficiently visible?
- Option: Enable registration in WOCAT address database on-line, e.g. when people want to download specific items
- Registering is only needed to download certain products like database, questionnaires, guidelines, etc., but not for brochures, etc.
- Advantage: keeping better track of downloaded materials (by whom, what for, etc.). It would allow us to know who this 9000 people are, who were downloading the full database software last year.
- Also offers something to 'registered' WOCATeers in form of access to products
- Disadvantage: threshold for some? But if really interested not a problem
- Institutional or individual? If the former, what about access for other individuals within institution?
- What, if people don't have an own email? Or an institution a collective e-mail?
- WOCAT on-line registering into the address database could be implemented by Wolfgang Prante. Management Group and WOCAT core will develop strategy and send it for feedback.
- WOCAT address database and WOCAT_L should be more prominently on the website, maybe including a banner on 'join WOCAT!'
- A WOCAT guest book could also help to get feedback from users

Will this improve feedback from contributors? But this is another issue, because feedback mainly needed from active WOCATeers.

Flyer on 'How to start WOCAT'

- Based on requests for simple and attractive guideline/flyer instead of "too detailed" guidelines on the Internet. NB: These also started as simple guidelines but were gradually expanded
- Request for a critical review of the existing guidelines during previous WWSM (Nepal) produced no comments or suggestions at all
- Question to the meeting: do they feel a need for a shortened version? Not really. One can skip sections in the guidelines if desired. It is also a question of setting priorities.

5.2.3 Group 2: International Year of Deserts and Desertification 2006

Sanjeev Bhuchar, Abdybek Asanaliev, Syaiful Anwar

IYDD - where WOCAT could play a role:

Tentative list of activities for the celebration of the international year of deserts and desertification:

- January: Launching of the programme of celebration of the IYDD in each country
- February: Assessment and review of the UNCCD implementation at the global level. Global meeting in Argentina. Africa meeting on Youth and Environment in Mali.
- April: Women and desertification: Assessing the role of women in the implementation of the Convention. Global meeting in China.
- May: Launching of the Film Festival "Desert Nights" in Rome.
- June (early): High-level conference "The Protection of Deserts and the combat against Desertification" in Algiers. Inauguration of the Observatory of the Environment and the Combat against Desertification, Museum of the Institute of Deserts in Ghardaïa, Algeria
- 5 June: Celebration of World Environment Day
- 17 June: World Day to Combat Desertification and Drought: major media event in Algiers
- June (end): UNESCO Conference, "The Future of Arid Lands"

Possible WOCAT contributions at national level:

- Send information to WOCAT core on world map of desertification (land degradation) and ways to address desertification based on QT and QA
- Prepare summary files (Overview Book) of CATs for IYDD at national level
- Prepare posters/flyers on CATs for IYDD at national level
- Prepare PPT presentation for the national workshop on combating land degradation.
- Prepare a standardized WOCAT presentation of good quality to present on a national basis

Some planned WOCAT contributions at regional level:

- CAMP will prepare poster(s) and a manual of assessment on land degradation and rehabilitation for Central Asia during UNESCO conference and other events.
- ICIMOD will prepare position paper on land degradation issues in the Himalayas including arid watersheds for UNESCO conference.
- ICIMOD will prepare a regional (HKH) poster(s) on potential technologies and approaches for combating land degradation for any conferences during IYDD.

Possible WOCAT contributions at global level:

- Prepare the WOCAT world map for IYDD events (conferences/workshop/seminars)
- Publish overview book for distribution at IYDD events.
- Prepare a poster which highlights key global issues concerning land degradation.
- Present regional / national posters that show a regional/national overview of issues, facts and figures at global happenings.
- Provide a sticker/stamp of WOCAT
- Prepare a position paper on partnership strategies for combating and assessing land degradation based on WOCAT, SOWAP, ProTerra, etc. experiences
- Prepare a film on WOCAT for the film session

Ideas on posters:

Posters should be in high quality and not be loaded with too much data/information, but should contain large photographs, key facts and figures on degradation and conservation and the logos of the WOCAT contributors. The target group should be the decision maker/donor. People participating at the various IYDD events should carry the available posters also from (other) countries.

5.2.4 Group 3: Questionnaire revision:

Mats Gurtner, Daniel Danano, Meng Lingqin, Rinda van der Merwe, Jelena Tomicevic

Major issues that need clarification:

- Definition of SWC technology
- Definition of technology area
- Land degradation: WOCAT addresses land degradation but the questionnaire in fact focuses on soil degradation. The following degradation types should be included:
 - vegetation degradation (reduced ground cover, quantity and quality)
 - water degradation (pollution, reduced water flow)
- Land use types (LUT): LUT often changes through the implementation of SWC measures, such as:
 - management measures (eg. change from grazing to forest through area enclosure)
 - restoration of degraded land (eg. change from wasteland to cropland)

It is not clear if land use refers to the LUT at the time of applying the technology or the current land use potentially influenced/changed by the presence of the technology. Do we indicate the LUT before or after SWC implementation, or both?
- Growing season: The definition of growing season has to be clarified!
 - definition often misunderstood; often people indicate crop specific growing season (according to WOCAT it doesn't depend on crop type)
 - length of growing period is underestimated by WOCAT definition; FAO definition for example also includes residual moisture period! The definition of LGP also determines the agro-climatic zone...

Addressing global issues and Millennium Development Goals (MDG)

- Poverty alleviation:
Based on questionnaires conclusions a statement on a (positive or negative) trend can be made but not quantified. Indicators available in the questionnaire:
 - economical analysis: production increase (quantitative; QT 3.2) -> correlation to poverty alleviation? Only indirect indicator
 - increase of farm income (qualitative; QT 3.1.2.1)
 New questions needed on increase of farm income (quantitative), migration trend (although other causes play a role here) and others. Screening FRAME questionnaire (IDC/USAID) could help. Carbon sequestration: Only indirectly indicators in the questionnaire: production increase: 3.1.1 / 3.1.2.1. New questions needed e.g. on increase of soil organic matter, increased biomass production (t/ha/year), and others.
- Biodiversity: Indicator in the questionnaire on biodiversity enhancement (qualitative; QT 3.1.2.1). New questions needed on new species appeared (plant species, micro-organisms, small animals) and others.
- Water (in the context of agriculture):
Indicators in the questionnaire:
 - improved soil cover (indirect indicator, QT 3.1.2.1)
 - reduced downstream flooding (QT 3.1.3)
 - waterlogging (QT 3.1.5.3)
 New questions needed e.g. on evaporation rate
- Desertification: Not covered so far in the questionnaire. New questions needed.

Group work conclusions:

Questionnaire revision is needed! Most issues are somewhere mentioned in the questionnaires, but not sufficiently. But more detailed quantification requires special modules as well as research, but the question remains who will initiate it.

Who:

- All participants, people that have worked with the questionnaires: Feedback on encountered problems are crucial!!! Which questions cause troubles? What should be improved? Problems of understanding! Concrete proposals?
- Taskforce members: General revision of the questionnaire (see: issues that need clarification)
- Specialists:
 - consult specialists on additional questions needed in Qs to cover global issues
 - development of modules (in-depth questions/analysis on global issues)
 - for detailed data on impacts regarding global issues ('hard data'; before – after situation) additional research is needed and additional modules need to be developed which complement the WOCAT questionnaires

When: Within next 6 months? (as soon as possible!)

How: Strong and committed taskforce and maybe a special revision workshop needed

A concrete proposal for the standardized **WOCAT Light** version has already been developed during the group work and will be implemented by WOCAT-CDE. The WOCAT Light version will help to get a national overview on technologies together, but does not qualify for the database. It is also seen as helpful in education and training as well as a mean to report back to superiors.

China estimated that 20%, 50% and 30% of WOCAT users will prefer the Light, Basic and Professional version of the questionnaire, respectively.

5.2.5 Group 4: Mapping follow-up

Dirk Pretorius, Gudrun Schwilch, Nada Dragovic, Carin Pretorius, Joe Rondal, Usmon Boturov, Miodrag Zlatic, S. Kanti Kisha

See Topic 2.4: Mapping follow-up!

5.2.6 Group 5: WOCAT business (strategic) plan / new phase of WOCAT

Clemencia Licona Manzur, Cai Jianqin, G.B. Reddy, Samran Sombatpanit, Lydia Bosoga, Hans Hurni

1. Capitalize on achievements

- Need for a business plan to develop priorities and addressing what WOCAT wants to achieve and the resources required to achieve this – include funding for dedicated people to achieve specific deliverables.
- Separate voluntary achievements/deliverables from crucial deliverables that can not rely on voluntary contributions
- Development strategies to promote WOCAT services: farmers as well as donors should feel being owner of the WOCAT products; benefits need to be obvious.
- Need better regional coordination/marketing: make clear who is regional coordinator (on Web, with business cards), provide standard presentations for decision makers / planners and for farmers, maybe try to have regional workshop before WWSM.
- Include dissemination strategies into each work plan. Capacities and means for dissemination at each regional hub needed.
- Link to relevant programmes – concerted effort/dedicated persons
- Produce flyer with new vision/mission, maybe different flyers for various audience/issue (donors, MDGs, desertification, etc.)

2. How can we address global issues?

- Repackage WOCAT to fit in with global issues
- Focus on relevant outputs – allocate resources – task force?

Need to identify issues and produce concept notes at global, regional and national level.

5.2.7 WOCAT review

by Hans Hurni

WOCAT is one of the oldest programmes in existence, actually after 13 years it cannot be considered a programme anymore but rather an institution.

WOCAT open to progress and elaboration (development). At the ISCO conference in 1992 in Sydney it was decided to restrict WOCAT's activities to soil degradation and erosion in particular. However, the present methodology is flexible and can cover various land management aspects such as salinisation, compaction, etc. Nevertheless WOCAT does not want to claim that it covers everything (vegetation, water) at least up to now. However, new ideas and issues are coming up where WOCAT has to position itself. WOCAT addresses a broad group of old and new stakeholders. Participants of the annual WWSM have the chance to steer the meeting. They originate from big and small countries likewise, which gives an impression of imbalance. However, this shows that exchanging ideas and experience does not depend on the size of a country. Participants range from experienced soil water conservation specialists to freshly graduated university students.

WOCAT is growing but not financially. WOCAT has rooted itself in the countries and funding occurs mainly on a national basis.

WOCAT's history: In 1992, Hans Hurni as president of WASWC initiated WOCAT to address global problems of soil degradation. SDC provided 3 years funding. Hans' vision was to produce by 1995 a world map that shows SWC measures that are undertaken all over the world that prevent further land degradation or rehabilitate degraded land. The whole process took longer. WOCAT had to work on the methodology (questionnaires for documenting knowledge, other tools) for many years. Setting up the database also took longer than planned. By now the database includes over a 100 case studies.

Now the question is: should WOCAT focus on missing best practices in the world now, i.e. collect, document and evaluate further case studies or try to generalise which practices are suitable for which agro-ecological zones.

On a subnational, national and regional WOCAT is doing very well. However, on global level donors may show fatigue after 15 years of seeing WOCAT doing the same. WOCAT should get a new face. WOCAT should become more confident in addressing crucial global issues like climate change, water, biodiversity as well as the MDGs such as poverty alleviation. WOCAT should defend (and be proud) that it is possible to address these issues through farming communities. WOCAT is in focus of combating poverty but until now the indicators for showing this potential and gain were not clearly demonstrated yet. World Bank launched a study on how much agricultural science and technology can affect productivity and hence alleviate poverty. Take the example of C-sequestration. The improvement of soil organic matter (trees will recycle, soil carbon can in many places be increased and thus carbon will maintain) is a simple indicator of production enhancement. Or take the example of water management. Overland flow is dangerous; water will be lost and will cause erosion. Groundwater flow (infiltration) into watershed is important. Our data and indicators can help to estimate these aspects. Additionally, we also need to better quantify benefits of SWC practices in terms of “crucial global issues”, i.e. more research into (quantified) effects of various SWC practices on C-sequestration, water/moisture, biodiversity etc.

In conclusion WOCAT should continue, but the database should not be our end product but the means to address global issues. Use WOCAT in other activities and embed it in other programmes.



Prof. Dr. Hans Hurni talking about WOCAT's future (Photo Hanspeter Liniger)

TOPIC 6 NATIONAL AND GLOBAL ACTIVITY PLANS

Rapporteur: Rima Mekdaschi Studer

6.1 National and regional workplans

→ for more details refer to the workplans of national and regional WOCAT initiatives in Annex 1

Ethiopia

Ethiopia envisages documenting a number of Technologies and Approaches, now giving more importance to quality assurance, which covers the technical aspects as well as the language.

ETHIOCAT activities of the last 6 to 7 years will be compiled into a national overview book. The government would like to see outputs. A workshop on quality assurance and the overview book should be taking place tentatively in May 06.

ICIMOD

ICIMOD plans to peer review questionnaires from the region before adding them to the regional as well as the global database. They will continue with and maintain the HIMCAT extranet.

A position paper for the International Year of Deserts and Desertification will be prepared. Further efforts to ensure funding will be undertaken.

A regional training workshop on mapping is needed. For the preparation of a module for this training as well as for the funding the help from WOCAT management is needed.

WOCAT methodology and tools will be included in a module developed for a training in watershed management. Efforts will be made to include WOCAT in University curricula.

Some awareness raising and keeping up of contacts will be done (rangeland / land management programme, farmer field school on rice intensification, Department of Soil Conservation)

Philippines

Philippines will ask the South African team for assistance in using the world map as well as the QM. It is planned to fill in two new QA's and 1 QT using the basic version of the questionnaire and to compile a national overview book.

Further networking and capacity building of different stakeholders will take place.

India

The needs of different stakeholders have to be synthesized to come up with a detailed activity plan for the future. However some 'promises' can already be given. A number of questionnaires will be filled and their quality assured. QM is not very clear and a training with support from WOCAT will be needed.

It is envisaged to create a micro level WOCAT core group that will take WOCAT forward and to nominate an officer who can look after WOCAT activities on day to day basis.

Tajikistan

It is intended to review and edit already documented QTs and QAs as well as to document and evaluate new technologies. Workshops to train on using WOCAT tools and to ensure quality are envisaged.

A workshop on the use of WOCAT is planned to include WOCAT tools and methodologies in various activities of donors in Tajikistan.

Carry WOCAT in research and education further in form of PhD's and lectures to students at the Tajik Agrarian University.

China

The database will be updated and translated into Chinese in cooperation with Fujian Soil and Water Conservation Office. This will help in mainstreaming WOCAT activities into government institutions such as SWCMC. Fujian province will promote WOCAT on prefecture level and try to mainstream WOCAT activities in running programmes.

More emphasis will be placed on QM which might require a training workshop specifically on mapping. It is planned to fill in QM in 3 different counties of China, e.g. blacksoil areas.

Quality assurance will receive high priority. A multidisciplinary review panel will be composed and a training programme for quality assurance will be put together.

Filling in of at least one QT and one QA per contributing region is on the agenda.

Bangladesh

Technical support and demonstration farms are to be set up. Collaboration with Bangladesh Agricultural Institute to include WOCAT in their programme is envisioned.

The national overview book that compiles documented and evaluated approaches and technologies will be published and disseminated. Posters for awareness creation and publicity will be produced. Emphasis will be further on laid on promotion work such as at the University Department of Environmental Sciences.

Kyrgyzstan

More existing SWC technology practices and approaches will be collected and documented jointly with RAS advisors using the professional questionnaire. QMs will be filled in.

The rural advisory services (RAS) will help in creating awareness and in the dissemination of SWC technologies (pasture management, separation pasture from forest, agroforestry, poplar plantation). Demonstration plots for farmers are planned to which visits will be organized.

The policy dialogue will be carried on by organizing round table discussions at which strategies for soil and water conservation and gained experience with the involvement of national organizations and administrations (jointly with CCD/GTZ and RAS) are elaborated on.

Efforts to include water and soil conservation in school and university curriculum (RAS as a partner and parallel policy dialogue with Ministry of Education and other partners / SOROS / ...) will take place.

The cooperation with ICIMOD and the use of the HIMCAT database will be continued.

A database for pasture degradation is planned, which will need WOCAT's support.

Indonesia

Since Indonesia is a newcomer emphasis should be laid on awareness creation. More staff has to be trained to implement WOCAT methodologies and tools. Funds for these activities need to be found.

The guidelines need to be adapted to environment in Indonesia.

New QT's and QA's can be expected in 2007. Already documented case studies (QT and QA) will be reviewed and standardized and then translated from Indonesian to English to be put into the global database.

Thailand / WASWC

The Basic Version of the Questionnaires (QA and QT) is seen to be able to revive WOCAT activities in Thailand. Furthermore the new LDD administration may be more encouraging towards WOCAT.

WASWC will continue to serve WOCAT. It will report WOCAT highlights in its newsletter and stimulate members to be more alert and virulent to SWC issues.

South Africa

For further data collection a system will be put in place to identify technologies and approaches for the database. Possible candidates to fill in the questionnaires and collect the data will be identified (15 new case studies).

For quality assurance a panel of experts will be identified that will correct and complete old questionnaires as well as control new ones.

All technologies will be integrated into WOCAT/AGIS.

The on-line and off-line mapping systems will be further developed as well as the world map. For the latter step funding needs to be found and the help of the WOCAT core group is asked.

On a national level the new soil protection strategy is being developed where WOCAT can take a role.

South Africa will get more involved in WOCAT in research and education by formulating two PhDs and one MSc thesis.

ISRIC/SOWAP

Training in documentation and dissemination for SOWAP / ProTerra staff is being planned.

In November 05 a SOCAT one day meeting will be held in England at which the SOWAP documented case studies (using WOCAT tools) will be discussed and analyzed. The future of WOCAT within SOWAPs new phase will also be a point for discussion.

New SOCAT case studies will be documented coming from the newly SOWAP joined countries (France, Czech Republic and Portugal), which need to be integrated with the other SOWAP data.

Godert van Lynden will carry on as resource person and administrator of WOCAT which includes the organization of the next WWSM, assess potential donors and writing of proposals.

Serbia & Montenegro

Fund raising will remain a central issue. Therefore staying in contact with national (national ministries and UNU), regional (SOWAP) and international donors is essential. Serbia has intentions to be included in the SOWAP network.

Promotion work will carry on through education, by training and at conferences. For that purpose brochures will be prepared.

The work with QM (QM matrix tables) will continue in Central and South of Serbia. In some regions training sessions on how to use QM need to be held. Documenting technologies and approaches in the South and the West of Serbia will be carried on. Efforts to ensure the quality of the collected data will be undertaken.

Visit of WOCAT to the Deputy Minister Prof. Aleksander Sedmak, Ministry of Science and Environment Protection

- Serbia & Montenegro has a soil database, but nothing on soil management, which is degrading or improving soils (and water)
- He requested WOCAT to send a letter with a proposal for establishing a national WOCAT programme:
 - Documenting / building up of a national database (Ts/As and Map)
 - Evaluating land management: Ts / As and overview (mapping)
 - Formulation of a national land management policy
- WOCAT to provide the methods and tools
- Serbia & Montenegro as a partner in the global programme
- Serbia & Montenegro as a regional coordinator?
- 3 options for institutional set-up of WOCAT in Serbia & Montenegro were discussed

6.2 Global activity plan

Old vision statement:

Within the framework of sustainable land management (SLM),

WOCAT's vision is that local soil and water conservation (SWC) knowledge and experience is shared and used globally.

→ soil and water conservation knowledge → replaced by: knowledge on sustainable land management

→ added: to improve livelihoods and the environment (aim of knowledge sharing)

→ rejected suggestions:

- to increase productivity
- to preserve natural resources

→ open issue: drop "local" as "local knowledge" might be understood as traditional knowledge only?

New vision statement:

WOCAT's vision is that local knowledge on sustainable land management is shared and used globally to improve livelihoods and the environment.

Old mission:

WOCAT's mission is to support decision making and innovation in the field of SWC by:

- connecting stakeholders,
- enhancing capacity, and
- developing and applying standardized tools for
- documenting, monitoring, evaluating, sharing and using knowledge

WOCAT mainly addresses SWC specialists, planners and decision at the field and at the planning level.

New mission:

WOCAT's mission is to support decision making and innovation in sustainable land management by:

- connecting stakeholders,
- enhancing capacity, and
- developing and applying standardized tools for
- documenting, monitoring, evaluating, sharing and using knowledge in soil and water conservation (SWC)

WOCAT mainly addresses SWC specialists, planners and decision makers at the field (farmers, extensionists) and at the planning level.

Major global activities**Priorities 2005/2006:**

- Output: Overview Book
- WOCAT map (Global map / QM)
- UNCCD/IYDD
- ISCO
- WOCAT in research
- Guidelines for reviewers
- Global database: complement representative Ts/As (for identified gaps: different land use, degradation, conservation)
- Targeted dissemination materials: CCD, water, BD, MDG,
- Regional / national hubs
- Develop strategic (business) plan for WOCAT

Major events:

- ISCO Morocco: 14-19 May 06
- IYDD-day: 17 June 06

Options for WOCAT Labels:

- Contributor of peer reviewed T/A
- T/ A that works (sustainable)
- WOCAT reviewer

Planning table 2005/2006

In the following table the objectives and the specific activities (as listed in the project document) are listed and in a 3rd column the planned activities for 2005/2006 are described (priorities in bold font).

Objectives / Expected results *	Activities	Plan Sept 05 – August 06
1. Output generation <i>CD- ROM versions 3 and 4, a book published on the experience of SWC from the collaborating countries, 5 publications of the WOCAT methodology and the results in international journals, proceedings of conferences and workshops</i>	<ul style="list-style-type: none"> Produce CD-ROM in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests Print a first overview of global experiences of SWC Technologies and Approaches Publish in journals and conference proceedings: WOCAT tools, methods, results. Support the production for national overviews Produce dissemination materials: Use of WOCAT (posters, pamphlets, videos) Compile a first global map on SWC achievements 	<ul style="list-style-type: none"> Overview Book published Dissemination strategy for Overview Book and other outputs Paper to CDE publication: Contribution to IYDD Contribution to the Desertification Day (17 June 06) and other events related to the IYDD: Position paper how to include WOCAT in CCD programmes WOCAT Posters to IYDD WOCAT Basic including global issues WOCAT Light Poster at Conservation Agriculture Congress Oct 05 Advance with the global map compilation Paper on WOCAT mapping tool for CCD (?) Paper for ISCO 06
2. Quality management <i>Good quality data made available and used for the production of national and regional outputs</i>	<ul style="list-style-type: none"> Further develop procedures to enhance data quality (through national/regional/global panels and WOCAT labelling) Address knowledge gaps: linking to research e.g. NCCR N-S, EU programmes (SOWAP, COST), main focus on the impact of SWC Support further collection of data-sets (depending on requests and Steering meetings) Support the set-up of national / regional / global data reviewing panels. 	<ul style="list-style-type: none"> Develop guidelines for reviewers and conduct test training after a national workshop Set-up a global panel to <ul style="list-style-type: none"> identify main global gaps on documented technologies/approaches develop guidelines for national review panels develop WOCAT labels Backstopping training and data collection depending on requests Advance WOCAT in research and education
3. Networking WOCAT Network enhanced and consolidated	<ul style="list-style-type: none"> Add new partners and consortium members in regions where WOCAT is not yet well established. Strengthen collaboration between partners and between soil management (fertility, productivity) and water management (conservation, excess water / flood management, disaster prevention, ...) Strengthen partner in the use of WOCAT Conduct 3 International Workshops and Steering Meetings Participate in International Conferences to promote WOCAT (e.g. At events of UNCCD, IUSS and ISCO; LADA) Integrate WOCAT in environmental and development processes at the global (UNCCD, UNCBD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral aid projects) Collaborate with other global networks e.g. Conservation agriculture, rainwater alliance etc. Continue/enhance the WOCAT e-mail list and newsletter Pursue the idea of a WOCAT label and project support service 	<ul style="list-style-type: none"> Develop strategic (business) plan for WOCAT Expand within existing WOCAT countries / regions, new regions Link with FAO representative of Argentina to get into Latin America Support and coordinate TF meetings Conferences: CA Kenya, RWH Kenya Use the IYDD to promote the network E-mail and newsletter Establish, train and assign roles to regional and national coordinators Explore potential of WOCAT activities being funded through GEF: preparatory medium term project (1 mio \$) Seek further collaboration with UNCCD national programmes (India, Central Asia, Indonesia, etc.) Conduct WWSM 11 Elaborate further collaboration with and funding by DANIDA Prepare EU-proposal (IP Desertification with Coen Ritsema) Explore co-funding to expand the number of Overview Book copies ISCO 06 Morocco (14-19 May)

Planning table 2005/2006 (continued)

Objectives / Expected results *	Activities	Plan Sept 05 – August 06
4. Capacity building National and regional collaborators trained to run WOCAT programme in their countries and regions	<ul style="list-style-type: none"> ○ Conduct additional international “Training for National Trainers / Facilitators” workshops ○ Provide support and expertise for additional national and regional initiation and training workshops , upon request from national / regional institutions 	<ul style="list-style-type: none"> • Contribute to LADA training workshops • China training WS • Support Ethiopia Overview Book (5/06) • Conduct regional mapping training workshop (ICIMOD, India, China) • WOCAT in education: Master / PhD studies, lectures • Training modules
5. Tool development Additional Tools for exchange of knowledge and decision support developed	<ul style="list-style-type: none"> ○ Improve Internet access to data and tools ○ Improve database management system to enhance decision support, exchange between users and providers on knowledge ○ Produce support materials, such as standards for national “overview books”, guidelines for the use of WOCAT data in the development and implementation activities 	<ul style="list-style-type: none"> • Develop guidelines for reviewers • Consolidate Questionnaire Basic including link to Global Issues • Develop standard Questionnaire Light • Further develop QM and World Map • Revision of questionnaires • Training manuals

* **Objectives / Expected results as stated in the funding proposal** of the programme contribution from SDC 2005 to 2007. Additional funding through Syngenta Foundation and DANIDA has been identified in order to complement the SDC funding and to support the objectives and activities listed.

Additional ideas

- Follow up on a WOCAT promotion **video**. How WOCATeers are helping in connecting potential resource persons?
- Development of **games** that teaches mechanisms of communication, interaction between different stakeholders and the environment and how to combat desertification.

Ideas on educational simulation games on Soil and Water Conservation:

Game 1: “Act together”:

In this game, the focus is on cooperation among the different stakeholder groups. The objective is to make various stakeholder groups' tasks, interests, and motivations more transparent, and to improve cooperation among the groups.

The different stakeholder groups involved are:

- Resource users from poor and wealthy households
- Extension workers from the agricultural extension service
- Researchers
- Government officials from various ministries (Agriculture and Forestry, Environment, Civil Protection, etc.)

Type of game: Board game for up to 16 participants divided into 4 groups.

Scenario for game 1: Various stakeholder groups, each with its own perception of what is happening, intervene in a water catchment.

Game 2: “Smart farmers”:

In this game, the focus is on providing a deeper understanding of soil and water conservation. The objective is to acquaint players with the basic principles of soil and water conservation and, by doing so, increase its acceptance among resource users and create a favourable environment for the implementation of measures.

The different player groups involved are:

- Resource users (farmers) and their consultants (extension workers)
- Drops of water
- Earthworms and soil bacteria
- Soil nutrients

Type of game: Board game for up to 16 participants divided into 4 groups.

Scenario for game 2: This game reveals the impact of human activities on the soil and its water system. Interaction between the different players create varying dynamics that each have specific positive and negative consequences. This will lead to important conclusions with regard to the contents of extension work and the implementation of measures.

Game 3: Combating Desertification (Game for the International Year of Deserts and Desertification 2006):

The learning objective for players in this game is to check and expand their knowledge of soil and water conservation methods and facts.

Type of game: Combined board and card game for 3 to 5 groups of 2 to 4 players each.

Scenario for game 3: Resource users, extension workers and government representatives form mixed groups of 2 to 4 players each. Whenever a group reaches a field in the labyrinth, they have to answer a specific question. Right answers lead the players on towards the landscape under sustainable use, whereas wrong answers (or no answer) lead them towards the desert. In the course of the game, the players learn to better assess their own knowledge and knowledge gaps. The consequences of lacking knowledge become visible.

6.3 Funding

6.3.1 Budget Core (CDE)

		Review 2004/2005 in CHF			2005/2006
No.	Description	Budget 1.7.04-30.6.05	Expenditures 1.7.04-30.6.05	Saldo	Budget 7.05-6.06
1	Salaries and overheads (CDE)	395'000	445'324	-50'324	440'000
2	Travel Costs	25'000	29'108	-4'108	25'000
3	Materials	75'500	17'185	58'315	48'000
31	Computers, peripheral, software	3'500			3'000
32	Production of books	57'000			30'000
33	Production of CD--Rom	0			
34	Printing reports / posters	5'000			*5'000
35	Postage etc	10'000			10'000
4	Mandates	123'000	70'334	52'666	82'200
41	International Workshops, Steering Meetings	30'000			30'000
42	Training National Trainers Workshop	10'000			10'000
43	Quality Control	30'000			
44	Mandate for support (ISRIC)	0			
45	Seed money, support national initiatives	8'000			
46	Other mandates not CDE	30'000			**22'200
47	National Workshops	0			
48	Additional contributions	15'000			
49	Taskforces				20'000
	Total 1-4	618'500	561'952	56'548	595'200

* \$ 3600 for World map

** CA congress

Available funds 1.7.04-30.6.05		
Donors	Budget	Received
	in CHF	in CHF
SDC*	432'000	451'000
DANIDA	80'000	80'000
Syngenta Foundation	50'000	50'000
SOWAP	24'500	0
DoA RSA***	20'000	0
FAO	12'000	0
TOTAL	618'500	581'000

Estimated funds 1.7.05-30.6.06		
Donors		
	in CHF	in USD
SDC*	432'000	331'000
SDC-CA Congress 2005	29'500	22'600
DANIDA (until 31.12.05) **	40'000	30'200
Syngenta Foundation	50'000	38'300
SOWAP	24'000	18'100
FAO (overview book)	12'000	9'100
TOTAL	587'500	449'300

* Contract 1.1.05-31.12.07: Budget/year = 432'000

**new proposal? Extra 40'000???

Total SOWAP budget for CDE: 16'000 €/ year

***Contributions for overview book and mapping development. The amount of CHF 20'000 budgeted as contribution from South Africa was invested in South Africa for the development of the mapping tool and was not sent to the CDE account.

Comments to the expenditures last year, budget 05/06 and contributions:

The reporting on the budget and expenditures is preliminary as the financial year starts on 1.1. and ends on 31.12, thus budget and expenditure present a mid of the year state! The budget was overspent on the salaries due to the heavy involvement of staff for the global overview book. The savings were made on the

materials, due to the fact that the overview book was not printed. Also savings were made on the mandates. The financial reports will be made on 31. December, where details will be presented for the donors.

Next year's budget was calculated based on the planned activities and the expenditures of previous years. For DANIDA an additional funding proposal (starting from 1.1.06) will be needed.

6.4 Taskforce activity plans

6.4.1 TF Mapping

Taskforce members: Dirk Pretorius, Godert van Lynden, Carin Pretorius, Jose Rondal, Gudrun Schwilch, Nada Dragovic, Berhanu Fentaw Tareke, Wolfgang Prante

Achievements so far

1. World map online system completed (hosted on AGIS-SA)
2. First draft of printed world map completed
3. QM online system completed (hosted on AGIS-SA)
4. QM offline partially completed (SA – to fund)

Outstanding issues

World map (in order of priority)

1. Additional data collection!!!
2. Data needs editing (location, pictures, contents) – needs inputs from countries
3. Transfer of world map to CDE server (format ASP, ...)
4. Create PDF with layout on website and CD-ROM
5. Printed map needs proper layout
6. Publish in National Geographic or similar, etc.

QM (in order of priority)

1. Complete QM offline editor (SA to fund)
2. Transfer QM online to CDE (format??)
3. Include QM offline on CD-ROM
4. Include new issues in QM database (vegetation, water, wetlands, carbon..)
5. Update QM online and offline with new issues
6. Complete QM offline for S. Africa (?) (SA to fund)

Task-force plan of action

Activity	Timing	Funds (€)
Complete QM off-line editor	Late October 05	SA
Develop manuals	A.s.a.p.; partly already existing	?
Develop world map layout (on-line/printed) in collaboration with CDE	Feb. 06	3000 (CDE)
Training course on QM and world map	March 06	15000 (contributions from different partners)
In-country data collection	On-going but esp. from March 06 (required follow-up of training)	(SA + other country budgets)
Development of more user friendly indicators e.g. soil fertility, carbon, production	NB: task for map group or QT?	SA + CDE?
Assist with evaluation of newly developed products	?	SA + CDE?
Meeting in May 06 at ISCO? – evaluate progress/recommendations to Management Group	May 06	5000 or less when combined with ISCO?
World map printing hard copy	After next WWSM	10000 (different contributors to be identified)

Resources needed from WOCAT-CDE

World Map

- World map – EUR 3000
- World map layout/printing
- Create PDF, include on website and CD-ROM
- Publish World map
- Transfer of World map to CDE

QM

- Update database (new issues)
- Transfer of QM to CDE
- Produce CD-ROM
- Produce manual, provide training

6.4.2 TF Q-Revision / inclusion of global issues / Basic and Light versions

Taskforce members: **Mats Gurtner**, **Rima Mekdaschi-Studer**, **Rinda van der Merwe**, **Daniel Danano**

Activity	Timing	Funds (US\$)
Feedback from questionnaire users for the general revision of QT / QA		
Develop a small questionnaire (few leading questions) to address the general revision, find out which questions are causing problems	end of October	Within CDE core funds and in-kind contributions by partners
Send it to questionnaire users	end of October	
Expected feedback by questionnaire users	end of December 2005	
Include questions in the questionnaires that address global issues (MDG)		
Identify specialists that will help in defining indicators of the issues addressed above <ul style="list-style-type: none">Poverty alleviation: FRAME questionnaire (IRG/USAID), others?Carbon sequestration: Robin Barnard, others?Biodiversity: Michael Stocking, others?Water: HP Liniger, Christoph Studer, others?Desertification: FAO / UNEP: Clemencia Licona Manzur, ...)	end of October 2005	Within CDE core funds and in-kind contributions by partners
Specialists provide framework/questions to taskforce members	end of December 2005	
Discussion and finalization by taskforce members	February 2006	
Finalization meeting of taskforce members:		
Meeting at ISCO or at ETHIOCAT Meeting (overview book)	May 2006	
Compilation / integration into WOCAT questionnaire at CDE	June 2006	
Publication on website and dissemination of digital copies (via email)	June 2006	
Questionnaire light		
develop concrete proposal for QT English	done	
layout	end of December 2005	

6.4.3 TF Strategic (business) plan (Management Group)

Taskforce members: **Hanspeter Liniger**, **Clemencia Licona Manzur**, **Godert van Lynden** (Management Group) + **Sanjeev Bhuchar**, **Reddy Sri G Bhaskar**, **Meng Lingqin**, **Cai Jianqin**

State at the end of WWSM Belgrade: Outline of draft by Clemencia (based on meetings before and the outcome of the workshop). Note that the name has been changed from business plan to strategic plan.

Next steps (Funding provided by each TF member through his/her own institution)

- Further Development by CDE (End of October) and sent to TF members for contributions

- Consult a professional (retired) person (e.g. Brinkman) to make the document look appealing and professional (should be shaped to make it fit a GEF profile)
- Finalizing of strategic plan by CDE supported by FAO (end of March)
- Initiation of GEF proposal by ??? (needs to be followed up by core management group members: CDE, ISRIC and FAO)

6.4.4 TF Use of WOCAT

*Taskforce members: **Samran Sombatpanit**, Abdybek Asanaliev, Sudibya Kanti Khisa, Lydia Bosoga, Mira Todosijevic, Usmon Boturov, Syaiful Anwar, Stanimir Kostadinov*

Materials that should be produced for WOCAT include:

- WOCAT CD v. 4
- Global Overview book
- Regional Overview books (referring to WOCAT in the publication)
- National Overview books (referring to WOCAT in the publication)
- WOCAT brochures and flyers

These materials are useful for:

- Training officers in land management
- Research and education
- Popularize WOCAT in various meetings
- Decision making (politicians should be invited to join meetings at various occasions)

It was strongly suggested to have a good manual for the transfer of technologies to various countries.

According to the discussion it is hoped that the plan should be finalized by March 2006.

6.4.5 TF WOCAT in research and education

*Taskforce members: **Romy Labios**, **Miodrag Zlatic**, Abdybek Asanliev*

Education:

- Continuation of filling survey on WOCAT in research and education for WOCATeers who haven't done it yet (deadline: end of 05)
- Definitive analysis of survey on WOCAT in R&E (deadline: end of January 06)
- Discussion forum for final WOCAT curricula within University practical and lecturing modules (or other levels: Elementary School, High School) (January to March 06).
- Approving curricula (April to June 06)
- Preparation of material from practice for trainings: good films, posters, presentations from the field (Jun/July 06)

Research

Integration of WOCAT M&E tools in MSc and PhD thesis as well as in national action plans: in case of

- Serbia: (1) S&M national project, (2) community based rehabilitation of degraded soils (3)
- SOWAP (October 05 - Jun 06).
- NCCR N-S (ongoing)
- COST Switzerland (ongoing)
- South Africa (including new studies for mapping and using WOCAT in implementation programmes)
-

Exchange of opinions (analysis, discussion forum, approval) will be organized on-line / through e-mails.



Wine tasting at the Tomicevic home (Photo Hanspeter Liniger)



Welcome dinner at the University of Belgrade (Photo Hanspeter Liniger)

TOPIC 7 ADMINISTRATIVE AND ORGANISATIONAL ISSUES

Rapporteur: Gudrun Schwilch

7.1 TOR for MG core and enlarged

The list from WWSM 9 China was reviewed during a Management Group Meeting. Changes/additions are in *italic*.

A: core MG B: enlarged MG

1. Technical responsibility

- Coordinating development and functioning of tools and other technical products / outputs. (A/B)
They also need to work at the regional level (e.g. HIMCAT extranet, overview books, etc.).
 - *Maintenance of database (global and regional?)* (A)
 - *Develop guidelines for training of trainers* (A)
 - *Development of guidelines for quality assurance* (A)
 - *Development of guidelines about production of outputs* (A)
 - *Regional quality assurance (and database management?)(not done so far)* (B)
- We need guidelines/procedures/possibilities on how the above issues can be handled for the local, country, regional and the global level. -> Task for management group or for a new task force.*

2. Organizational responsibility

- MoUs (A/B))
- Linkage to regional / national initiatives (geographically and ad hoc): *Core management group deals with global coordination, enlarged management group more with regional coordination*(A/B)
- Organization of Annual Workshops and Steering Meetings (A)
- Respond to requests, comments, suggestions: *one person of enlarged management group responsible for each region to screen requests first.* (A/B)

3. Coordination responsibility

- Pursue global / *regional* vision (A/B)
- Promotion of WOCAT (A/B)
- Motivation of and feedback to regional / national initiatives (A/B)
- Representation at international conferences, in international programmes (A/B)
- Publications (A/B)
- Guide / push task forces (A/B)
- Responsible for WOCAT-L and newsletter (A)

4. Funding responsibility (acquisition and coordination)

- Initiation of core funding proposals (A/B)
- Support for national / regional funding proposals (B/A)
- Responsibility and signatories for funding agreements (at global level) (A)

5. Training and Education

- Provide support and backstopping for regional / national training courses (A/B)
- Initiate courses and lectures at University / colleges and for extension services (A/B)

Operation

- Through e-mail, exploring possibilities to enhance networking through "e-tools" (A/B)
- Physical meetings: during Annual Workshops and other events (where many WOCATeers get together) (A/B)

ToR for secretariat

- Act on requests of the MG (core);
- Respond to correspondence and requests (and distribute to MG when needed);
- Distribution of materials, tools;
- Host the global database;
- Assist on organization of global workshops and steering meetings.

Each person in the MG should be assigned to a region and a taskforce to have a special ear for them and follow-up what is happening.

7.2 Election of MG members, assignment of secretariat

MG Core

- CDE: Hanspeter Liniger (global coordination; secretariat)
- ISRIC: Godert van Lynden
- FAO: Clemencia Licona Manzur

MG Enlarged

Institution	Region	Representative
• BSWM	South-East Asia	Joe Rondal (so far)
• ICARDA	Near East	Francis Turkelboom (so far)
• ICIMOD	Himalaya	Sanjeev Bhuchar (so far)
• MADRPM	North Africa	Nahid Elbezzaz (so far)
• RELMA	East Africa	Soren Damgaard-Larsen (so far)
• OWDM	South Asia:	India: Sri G Bhaskar Reddy; Bangladesh: Sudibya Kanti Khisha
• SWCMC	China	Cai Jianqin (new)
• TSSRI	Central Asia:	Sanginboy Sanginov (so far)
• FAO	Latin America:	Jose Benites (to be contacted)
• ICRISAT	West Africa:	?
• ?	Southern Africa:	?
• ?	Europe:	?
• ?	South-East Europe:	Miodrag Zlatic
• ?	North America:	?
• ?	Australia:	?
• ?	Pacific:	?

Secretariat and global coordination: CDE

The workshop participants approved the proposed MG structure and endorsed CDE as the institution to continue hosting the secretariat.

7.3 Next WWSM

The issue of having a WWSM every year or every 2nd year was discussed again. Everybody agreed to continue with an annual meeting in order to track progress, get the country inputs and to keep the enthusiasm going.

Offers for hosting:

- Tajikistan (offers since several years)
- South Africa

There was the feeling that the assignment to coordinate and host the next WWSM could only be given to MG members who are present. Additionally, Tajikistan is not so easy to reach (not too many flights and airlines which can be used). Visa issues may be problematic as this year in Serbia. The plenum decided to move the offer from Tajikistan to the next WWSM and to give Sanginboy Sanginov a chance to convince the WOCATeers that all these difficulties can be overcome. Definitely, Tajikistan has a lot to offer in terms of challenges for WOCAT to contribute to the reduction of land degradation and to assess the role of research in WOCAT. All participants like to express the gratitude to Prof. Sanginov for the offer and like to invite him to present his invitation during the next WWSM in 2006.

South Africa was offering to host the next WWSM based on the following facts: SA has been a long-term and very active partner in WOCAT, has developed a strong national WOCAT programme, has a considerable database on Ts and As and recently made a major effort to push the further development of the mapping. The hosting of the next meeting would provide an excellent opportunity to consolidate and strengthen WOCAT's role as a national programme in South Africa (e.g. the National Soil Protection Strategy) and to show the progress of mapping.

Decisions made:

Host: National Department of Agriculture (NDA): Coordinator: Dirk Pretorius

Where: Cape Town, South Africa

When: 23 – 28 October 2006

Special topics: Spatial aspects of SLM, International Year of Deserts and Desertification 2006 (IYDD), new tools (questionnaires revised, Q Light, etc.), special inputs (documented Ts, As, spatial info), field trip (including farmers who use WOCAT)

Discussion:

In future try to use WWSM more as a platform to share information and WOCAT outputs, try to take advantage of the experience of the host country and try to show the WOCAT achievements including the database and the mapping by preparing special presentations and a field visit to documented and mapped technologies and approaches.

7.4 Feedback from participants

The participants were asked to rank their expectations expressed at the beginning of the workshop (from 1 = 'not fulfilled at all' to 5 = 'excellent'). The topics on top of the list were mentioned by several participants.

	1 very bad	2	3	4	5 excellent	Average grade
Exchanging/sharing knowledge and experiences (from WOCAT activities) in different countries/regions (8)	0	0	0	13	6	4.3
Learn generally (more) about WOCAT (7)	0	1	2	12	3	3.9
Learn more about SWC technologies and approaches (3)	0	1	9	5	1	3.4
Networking, partnership building; find new contacts/ meet other WOCATeers (4)	0	0	2	9	8	4.3
Good fun with old and new WOCATeers (in comb. with good work) (2)	0	0	0	6	11	4.6
Stronger regional cooperation (regional groups, e.g. South East Asia, Central Asia, ICIMOD, etc.) international regional WOCAT initiatives / activities (3)	1	2	7	4	3	3.4
Improve feedback mechanism	1	2	6	6	1	3.4
Strengthening of the enlarged MG WOCAT	0	3	3	8	0	3.4
Map:						
• Review of mapping tool (2)	0	1	2	9	1	3.8
• Show achievements of QM taskforce and the development done in South Africa	0	1	0	9	5	4.2
• Have an insight on mapping WOCAT activities	0	2	2	6	2	3.7
• Learn more about WOCAT map – and make publicity in WASWC newsletter	0	2	3	5	1	3.5
Overview books:						
• Review of overview book	0	0	5	8	6	4.1
• Definitive date for publication of overview book	0	0	7	7	2	3.7
• Experience of other countries on overview book production	0	0	8	7	1	3.6
Share information on quality assurance experience	0	2	5	9	0	3.4
Organise input of WOCAT in LADA	0	4	3	6	0	3.2
Realistic planning, strong commitment by WOCATeers / institutions to realize planned activities and decisions taken (during planning phase 2005-2006) (3)	0	0	5	8	2	3.8
Clarify future orientation /development of WOCAT, globally and in Europe (Serbia and Montenegro as a show case) (2)	0	0	4	9	4	4.0
First ideas for business plan	0	0	4	10	4	4.0
Good impression of (SWC in) Serbia/Montenegro	0	0	3	10	5	4.1
Receive methodical assistance from CDE to use questionnaires (QT, QM) to learning study WOCAT	0	0	5	3	2	3.7
Develop networks on how to disseminate (WOCAT) info to poor resource user	1	2	6	7	0	3.2
Examples of adopting WOCAT in planning, research and education	0	1	8	8	1	3.5
Learn on experiences as how documented WOCAT knowledge is implemented in the field	1	4	6	4	2	3.1
Put WOCAT in long term on ministry level (in Serbia – Montenegro)	0	0	1	10	4	4.2
Be able to implement WOCAT in the country (Indonesia) systematically, to identify and document SWC practices, especially mapping.	0	0	1	10	4	3.7
Hear of the WOCAT products used for planning and implementing development works in various countries (SS)	0	3	3	4	2	3.4
Brochures about the QT, QA and QM	0	4	6	4	1	3.1
Cell values indicate number of participants rating!					overall average	3.8

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WORKPLAN for: ETHIOPIA , 2006									
Expected outputs	Activities	Input			Materials / equipment	Funding		Responsible person(s)	Timetable
		Person x months/ Institution				Available	Required		
2 QTs , 2 QAs and 2 QMs completed	Documenting of more QTs and QAs from Amhara and Diredawa regions	4	1	MOARD / WBOA		670		Regional BOARD staff ESAPP	1/2006
Quality checking and maintaining technical standards of 9 QTs, 5 QAs and 9 QMs made	Analysis, interpretation and quality checking of data from the Amhara and Diredawa regions	8	3	MOARD		1524		Experts in the MOARD ESAPP	1-3/2006
2 meetings of expert panel	Critical work on quality control	6	2	BOARD WBOA/ MOARD		2345		ETHIOCAT and RELMA	7-8/2006
Analysis and interpretation work of 28 QAs, 15 QAs and 20 QMs done	Further analysis and interpretation of data and information collected and entered into the data base from SNNP, Oromiya and Tigray Regions edit and reedit the product	10	1	MOARD		4720		Daniel /Berhanu	4/2006
Technologies and approaches to be included in the overview book are identified	Screening of best practices and prepare summary report	4	1	MOARD / RELMA/ WOCAT / CDE		5120		Daniel and expatriates from WOCAT and RELMA	5/2006
The product for the overview book is reviewed and edited	Conducting of a national workshop for final review of the product and approval	40	0	MOARD / RELMA/ WOCAT /		5081		Daniel / WOCAT CDE	5-6/2006
Experts from WOCAT / CDE facilitated the overview book task	Moderator from WOCAT / CDE Shaping up the product in an overview book with support and backstopping by expatriates from the WOCAT coordination office	2	0	WOCAT/ CDE				WOCAT / CDE	5-6/2006
An overview book ready	Getting ready the overview book for publication Getting the overview book published	2	4	MOARD		2540		Daniel	12/2006

Prepared by: Daniel Danano

Total: US \$ 22000

US\$

WORKPLAN for: MOROCCO , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Support for national initiation and training workshops	Enhance national experts capacity to run WOCAT programme	4		Ministry of Agriculture/Directio n of Land Management+ WOCAT Secretary+FAO	Management tools	2000	20	Lahcen Ljouad	Nahid Elbezzaz	2005-2006
Regional collaborators trained to run WOCAT programme (increase awareness)	Conduct national training for local and regional experts (spreas WOCAT methodology (+regional experts= North and West Africa)	2	2	Ministry of Agriculture/Directio n of Land Management+ WOCAT Secretary+FAO	Management tools (QA+QA/hard copies)	7000	7000	Lahcen Ljouad	Nahid Elbezzaz	2005-2006
Improved/New Ts/As	Fill in and review of previous Qs	15	5	Ministry of Agriculture/Directio n of Land Management	QA+QA			Lahcen Ljouad	Nahid Elbezzaz	2005-2006
WOCAT promotion	Fill in QM	1		Ministry of Agriculture	QM				Nahid Elbezzaz	2005-2006

Prepared by: Nahid Elbezzaz

Total: US \$ 9000

US\$

WORKPLAN for: NIGER , October 2005 – December 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment	Available	Required		Commitment by		
10 new Technologies and Approaches introduced into World database	- evaluation of 2002 questionnaires quality data - preparation of WOCAT questionnaires - collection of data - validation of data - entrances of data	1	3	GREAD	Questionnaires, vehicle, WOCAT documents, computer, printer, etc.	500	4,500	Abdoulaye Soumaila	GREAD	October 2005 – March 2006
		1	3	ICRISAT						
		1	3	GREDES						
Creation of seven (7) WOCAT regional focal points (Agadez, Diffa, Zinder, Maradi, Tahoua, Tilabéri, Dosso)	- Information and awareness missions with partners - identification of potential focal points by region - selection of WOCAT focal points - formation of 1 agent by region to WOCAT methods and instruments - monitoring of focal points activities	1	2	GREAD	WOCAT guidelines, vehicle, WOCAT information documents,	200	2,800	Fatondji Dougbedji	ICRISAT	January – February 2006
		1	2	ICRISAT						
		1	2	CAPED/PNEDD/ GREDES						
Under-regional WOCAT activities (Burkina Faso, Mali, Chad, Senegal, Ivory Coast, Benin, Togo, Ghana, Nigeria)	- preparation and organization of workshop on WOCAT, 14 to November 17, 2006 – Niamey - preparation and organization of field visit, 18 to November 19, 2006 Thematic of Workshop: WOCAT database: quality of data, development of products, presentation of countries experiences, regional WOCAT coordination	1	6	GREAD	Workshop materials and equipments	5,000	25,000	Abdoulaye Soumaila	GREAD	January – December 2006
		1	1	ICRISAT						
		6	1	Other partners						

Mobilization of human resources and institutions	- Information and sensibilisation of NGO'S and local Associations	2	2	GREAD	WOCAT information documents, workshop material and equipments, etc.	1,500	12,000	Adamou Halidou	GREDES	October 2005 - December 2006
	- Information and Sensibilisation of research Institutes, international Institutions and development programs	2	2	ICRISAT						
	- organization of monthly thematic discussions on conservation of water and soils and especially on quality assurance of data - organization of 3 workshops of formation of development agents of NGO'S, associations and projects - production of papers for international reviews, information documents, books	2	2	CAPED/GREDES /PNEDD						
Participation to 2006 WOCAT annual meeting in South Africa	Preparation of Niger WOCAT Activities	1	1	GREAD		0	7,000	Abdoulaye Soumaila Fatondji	GREAD	September 2006?
		1	1	ICRISAT					ICRISAT	

Prepared by: Abdoulaye Soumaila, GREAD, Niamey Niger

Total: US\$ 7,200 US\$ 51,300

GREAD Group of Research, Studies and Actions for Development
 ICRISAT International Crop Research Institute for Semi Arid Tropics
 GREDES Group of development and environmental Study in Sahel
 CAPED Development prospective and analysis unit
 PNEDD National program for sustainable environment and development

NB: all activities will be done in accordance with JIRCA'S soil program/ICRISAT, Desert margin program/ICRISAT, DED Niger, Niger Ministry of Environment, FAO, UNDP and other partners of GREAD. National experts will be associated to all technical activities.

WORKPLAN for: RSA , 2005/2006										
Expected outputs	Activities	Input			Materials / equipment	Funding		Responsible person(s)		Timetable
		Person x months/ Institution				Available	Required		Commitment by	
Data collection	- Put system in place to identify technologies and approaches for database - Identify possible candidates to fill in questionnaires - collect data (15 new)	1	2	ARC-ISCW		4100	0	ARC-ISCW	RvdM	June-Oct'05 2005-2006
Quality control of questionnaires	- identify a panel of experts - quality control of questionnaire by panel - correct / complete questionnaires	1 5 1	1 2	ARC-ISCW Experts		11500	0		RvdM / RB	June-Oct'05 2005-2006
Database management	- data input on computer - Update changes	1	2	ARC-ISCW		4000	0	ARC-ISCW	RvdM	2005-2006
Preparation of reports	Write reports	1	0.5	ARC-ISCW		2400	0	ARC-ISCW	RvdM	Sept'05 & 06
Technology transfer	- presentations at meetings / workshops - update the Fact Files	1	1	ARC-ISCW		3800	0	ARC-ISCW / DoA	RvdM	Jan – Sept '06
International cooperation	- Responds to CDE request and forward new data - attend annual workshop and steering meeting and write report - participate in task forces	2	2	ARC-ISCW DoA		7400	0	ARC-ISCW / DoA	RvdM / CP / DP	2005-2006
Training experts in the WOCAT methodology	-Organise a workshop to train personnel -Hold workshop & write report	1	1	ARC-ISCW / DoA		2300	0	ARC-ISCW / DoA	RvdM / RB	Oct '05
WOCAT on AGIS	-Finalise and use internet data management system -Updating other relevant spatial data	2	1	ARC-ISCW / DoA		1500	0	ARC-ISCW / DoA	RvdM / CP	Oct – Dec '05
Development of an on-line mapping system	-Development of an administration system for QM - Import all QM data into Informix (all countries) -Create spatial layers for all imported data -Development of a full search capability -Development of a result sheet -Development of an ArcIMS map viewer	2	1	ARC-ISCW / GIMS		15500	0	ARC-ISCW	CP/ GIMS	Aug – Oct '05
Development of an off-line mapping system	-Development of a full ArcReader viewer -Create auto run CD with off-line viewer	2	1	ARC-ISCW / GIMS		7700	0	ARC-ISCW / GIMS	CP / GIMS	Aug – Oct '05

Development of the World Map	-Import data into Informix -Create World Map spatial layers -Development an administration system for World Map data -Development of an ArcIMS map viewer -Printing of Maps	1	1	ARC-ISCW / GIMS		0	3600	ARC-ISCW / GIMS	CP/ GIMS	Aug – Oct '05
Integrate into the Soil Protection Strategy of SA	-Evaluate various technologies and approaches to be used in rehabilitation of erosion -Complete QM for priority areas to monitor effectiveness of strategy/programme	1	12	DoA		100 000	0	DoA	DP	Sept '05 – Oct '06

Prepared by: Rinda van der Merwe

Total:

US \$

US\$

WORKPLAN for: BANGLADESH, 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
BANCAT Achievements up to June,2005 reviewed and Work-plan for 2006 prepared	Convening BANCAT Working Group(WG) Meeting, Preparation of Progress Report and Work-plan	12	1	CHTDB, SRDI, BFRI, IFESCU, TAUNGYA	BANCAT Materials	100	-0	Sudibya Kanti Khisa, Jalauddin Md. Shoaib, and Khairul Alam	Sudibya Kanti Khisa, Jalauddin Md .Shoaib, and Khairul Alam	August 2005
Quality Assurance of documented CATS and Overview Book	Reviewing of Drafts and printing	2	2	CHTDB, SRDI, BFRI	Documented CATS	1000	-0	Sudibya Kanti Khisa, Jalauddin Md. Shoaib, and Khairul Alam	Sudibya Kanti Khisa, Jalauddin Md .Shoaib, and Khairul Alam	Sept., October, 2005
Colour Posters depicting BANCAT activities	Preparation of database/messages and design and printing	2	5	CHTDB SRDI	CHTDB and SRDI Data will be used	-0	500	Sudibya Kanti Khisa, Jalauddin Md. Shoaib	Mr. Wadud Bhuiyan	Nov. 2005 to March 2006
Partnership with the Communities for the Promotion of SWC Technologies	Hands-on-training and on-farm demonstration, technical support services	6	5	CHTDB, SRDI BFRI	A-frame and other equipments for field preparation	-0	7500	Sudibya Kanti Khisa, Jalauddin Md. Shoaib, Khairul Alam	Mr. Wadud Bhuiyan, Chairman CHTDB	February,2 006 to June, 2006

Prepared by: Sudibya Kanti Khisa and Jalaluddin Md.Shoaib,

Total: US \$ 1100 US\$ 8000

WORKPLAN for: CHINA , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Training 30 participants	Training	10	1	SWCMC	WOCAT production		0			5 August, 2006
Two QTs	Fill in questionnaires	7	1	SLWR					Meng Liingqin	Before Sep. 2006
One QA	Fill questionnaire	3	1	SLWR					Meng Liingqin	Before Sep.2006

Prepared by: Meng Lingqin

Total: US \$ 10,000 US\$

WORKPLAN for: FJCAT China , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
QM	collect 3 counties data	2	1	fjswco	PC & GIS	1500	1500	Nie, Zheng	Yang	July,2006
QT	new 1	3	1	fjswco	PC,digital camera, vehicle	1000	1000	Nie ,Chen, Zheng	Yang	Oct.2006
QA	new 1	3	1	fjswco	PC,digital camera, vehicle	1000	1000	Nie, Chen, Zheng	Yang	Oct.2006
Lecture & training	presentation, distributing brochures	2		fjswco	Projector, PC,room, brochures	3000	2500	Yang, Nie	Yang	Dec.2005

Prepared by: Nie Bijuan

Total: US \$ 6500 US\$ 6000

WORKPLAN for: ICIMOD , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
At least 4 QTs and QAs submitted to the WOCAT database	Peer critique	1	1	ICIMOD		1000		S. K. Bhuchar, M. Dhakal, R. White	S.K. Bhuchar	June 2006
More partners applying WOCAT tools	Introducing WOCAT and its use to DSCWM (Nepal), Watershed management programs in the Himalayas, Rangeland Programs in the Himalayas	1	1	ICIMOD		2000		S. K. Bhuchar	S.K. Bhuchar	September 2005
WOCAT in Education and research	Develop training curriculum on watershed management	3	5	ICIMOD			10000	R. White, S.K. Bhuchar, K.M. Sthapit	R. White	October 2006
Participate in WOCAT global event	Prepare presentations and participate	1	1	ICIMOD			3000	R. White/S.K. Bhuchar		
Ensure funding	Develop proposals/concepts	3	1	ICIMOD		1000		R. White/S.K. Bhuchar	R. White	June 2006
Dissemination materials prepared	Prepare a position paper and a poster on Himalayas for IYDD 2006	3	1	ICIMOD		500		R. White, S.K. Bhuchar, K. Sthapit	S.K. Bhuchar	January 2006

Prepared by: S. Bhuchar

Total: US \$ 4500 US\$ 13000

WORKPLAN for ORISSA WATERSHED DEVELOPMENT MISSION: ORISSA: INDIA , NOV'05 - DEC'06										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment		Available	Required		Commitment by	
Coordinate events and processes for Grounding and implementing WOCAT tools in Orissa	Nodal officer at Mission level identified	1	2	OWDM*	--	--	--	Mr. Niranjana Sahu, M&E Spl. PSU identified as Nodal Officer		
WOCAT Core Group of approximately of 20 persons reconstituted	Strive for a micro Core WOCAT group. Persons from different WORLP districts identified. The group is reconstituted. OWDM approves the group.			PD (Watersheds) OWDM	--	--	--	CBT OWDM M&E Spl.PSU		Nov'05
25 persons from WORLP districts are sensitized on WOCAT tools	Experience Sharing cum Sensitization of different stakeholders	25	0.1	PD (Watershed) OWDM	LCD Lap Top	--	3750	OWDM M&E Spl.PSU		Dec'05
20 Persons receive training on QTs, QAs and QM. QTs , QAs and QMs identified and action plan developed.	Training workshop for hands on training on QM with the support from WOCAT HQ	20 2 3	0.2 5	OWDM WDCU WOCAT	CD-ROM LCD LapTop	--	11250	OWDM M&E Spl.,PSU		April'06
Photographs and maps are documented by the photo group.	Formation of 5 member Photo group as a strategy towards information dissemination.	5	1.5	PD (Watershed)	Digital Camera	--	--	WOCAT Core Group members		April'06
Two QTs , 1 QA and 1 QM in each WORLP district documented	Field work	20	1.5	PD (Watershed) OWDM	Maps, Records, CDs	--	100	WOCAT Core Group members		Sept'06-Oct'06
	Ind Workshop	25	0.1	PD (Watershed) OWDM	LCD Lap Top		3750	OWDM M&E Spl.PSU		Nov'06
	Finalization of the QT's, QA's	20 2 3	0.2 5	OWDM WDCU WOCAT	CD-ROM LCD LapTop	--	11250	OWDM M&E Spl.,PSU		Dec'06
Events and processes documented and monitored. Monthly review organised.	Efforts for Quality assurance of the data. Review at Dist and State level for proper editing.	20	1	PD(Watershed)	Documents Computers	--	1200	WOCAT Core Group members		April05-Dec 06

Prepared by: Mr. G. B. Reddy

Total: US \$ US\$ 31300

*Acronyms: see page 97

Acronyms Workplan India

WDCV	Watershed Development Central Unit (DANIDA)
CWDP	Comprehensive Watershed Development Programme
WORLP	Western Orissa Rural Livelihoods Project
PIA	Project Implementing Agency
CB	Capacity Building
CBT	Capacity Building Team
FGD	Focussed Group Discussion
WDC	Watershed Development Committee
UGs	User Groups
SHG	Self Help Group
OWDM	Orissa Watershed Development Mission

WORKPLAN for: INDONESIA , 2005/2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment	Available	Required		Commit- ment by		
Trained staffs of 31 Watershed Management Centres	First phase: Conduct a WOCAT training for 20 participants from 10 Watershed Management Centres	2		Ministry of Forestry and Bogor Agricultural University	Computer, Questionnaire, etc.	1500	8000	Suhardiyono	Syaiful Anwar	July 2006
Guideline for SWC identification and documentation	Translate WOCAT guideline into Bahasa Indonesia, and reformulate to make it suitable for Watershed Management Centre staff and printed for 100 copies	2		Ministry of Forestry	WOCAT guideline, komputer, dictionary, etc	200	800	Virni	Syaiful Anwar	February 2006
Standardised T&A document	Reviewing the data/information documented already and translated into English	2		Ministry of Forestry	WOCAT Overview book, WOCAT database, computer, etc.	200	0	Virni	Syaiful Anwar	December 2006

Prepared by: Syaiful Anwar

Total: US \$ 1900 US\$ 8800

WORKPLAN for: Kazakhstan , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Ava ilabl e	Requi red		Commitment by	
1. Creations of a databank on Soil and Water Conservation (SWC) technologies and approaches	Filling of questionnaires by standard format on suggested on Soil and Water Conservation (SWC) technologies (3) and approaches (3) 1. The technology of water conservation for the irrigation of rice. 2. Using of sewage on the irrigation 3. The technology of resource conservation of the furrow watering of the winter wheat at crest way of crop	2	1	1. Institute for Water Management of RK. 2. Institute of Geography of RK 3. Research-Production Centre for Livestock Husbandry and Veterinary of RK.	Questionnaires by standard format in program Microsoft Access	500		PhD. Irina Skorintseva	1. Dr. Myhamedzhanov V. 2. PhD. Irina Skorintseva 3. Dr. Ilya Alimaev	February-June 2006
2. Development of database of farmers in Kazakhstan	Inspection of farms RK	6	6	1. Institute of Geography of RK. 2. Institute for Water Management. 3. Production Centre for Forestry.	Database of farmers in Program Microsoft Excel	500		PhD. Irina Skorintseva	1. Dr. Myhamedzhanov V. 2. PhD Kaveren V.	January - June 2006
3. Creation of a map of landscape-ecological zoning of Akmola oblast on a degree of degradation of the land	Mapping of the degradation processes of the Akmola oblast of RK	2	6	1. Institute of Geography of RK	Programs on drawing up of maps, pictures from space, various maps	1500		PhD. Irina Skorintseva	PhD T. Budnekova	January – June 2006
4. Conducting of 3 seminars of Soil and Water Conservation (SWC) technologies	1. Carrying out of seminar and training in farms on technology of creation zoo-melioration plantings in Kazakhstan. 2. Carrying out of seminar and training in farms on using of a polyethylene film for prevention of water soil erosion and preservation of irrigation water. 3. Carrying out of seminar and training in farms on creation of artificial pastoral phytocenosis	6	3	1. Institute for Water Management. 2. Institute of Geography of RK. 3. Research-Production Centre for Livestock Husbandry and Veterinary.		3000		PhD. Irina Skorintseva	1. Dr. Myhamedzhanov V. 2. Dr. Ilya Alimaev	April – May 2006

5. Popularization of SWC technologies and approaches in the farms of RK	Popularization of SWC technologies and approaches in the farms of RK	6	11	1. Institute for Water Management. 3. Institute of Geography of RK. 4. Barayev Research-Production Centre of Grain Farming 5. Research-Production Centre for Livestock Husbandry and Veterinary. 6. Institute of Geography RK.	Posters on SWC technologies , format – A4 (25)	1000		PhD. Irina Skorintseva	1. Dr. Myhamedzhannov V. 2. PhD Kaveren V 3. PhD. Irina Skorintseva 4. Dr. Gossen I. 5. Dr. Ilya Alimaev	January – November 2006
6. Training on SWC technologies in farms of RK	1. The technology of water conservation for the irrigation of rice. 2. Using of sewage on the irrigation 3. The technology of resource conservation of the furrow watering of the winter wheat at crest way of crop	6	9	1. Institute for Water Management. 2. Institute of Geography of RK. 3. Barayev Research-Production Centre of Grain Farming 4. Research-Production Centre for Livestock Husbandry and Veterinary. 5. Institute of Geography of RK.	Knowledge of technologies	2000		PhD. Irina Skorintseva	1. Dr. Myhamedzhannov V. 2. PhD Kaveren V 3. PhD. Irina Skorintseva 4. Dr. Gossen I. 5. Dr. Ilya Alimaev	January – September 2006

Prepared by: Irina Skorintseva

Total: US \$8500.. US\$ 0

WORKPLAN for: Kyrgyz Republic, 2005-2006										
Expected outputs	Activities	Input			Funding in Euro		Responsible person(s)		Timetable	
		Person x months/ Institution		Materials / equipment	Available	Required		Commitment by		
15 technologies (WOCAT QT light). 2 QTs and 1 QA (professional)	Collection and documentation. Translation into English	3	8	CAMP		4300	Asanaliev / Sydykbaev Gareeva	Gareeva	March-Nov.	Sept.-October
		1	2							
Dissemination of information and introduction of technologies	Demonstration plots (SWC measures), organize exchange visits together with RAS									
Manual, Posters, Brochures Reports	Publication Preparation Publication	3	2	CAMP		800	Gareeva Asanaliev / Shapovalov Gareeva	Gareeva	Jan.- Feb.	August
		3	1			450				
						400				
		3	1			500				
WOCAT in Research	Integrate 2 modules into Agrarian University curriculum, include into lectures for PhD students									
Political Dialogue: involve national organisations and administrations	Roundtable to come up with draft for national strategy to combat Land Degradation. Manual for assessment of land degradation and rehabilitation	3	1	CAMP		1000	Gareeva	Gareeva	June	

Prepared by: Abdybek Asanaliev

Total:

Euro

Euro

WORKPLAN for: Philippines, 2005-2006 BSWM										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Capacity building	Training of farmers on Sloping Land Management using WOCAT Materials	5	2	BSWM, PCARRD, Dept. of Land Reform	Computer, LCD	5000	5000	Jose Rondal	Jose D. Rondal	Sept. 2005 to June 2006
Filling of 2 QAs, 1 Qt	Data gathering, inputing	4	3	BSWM, Xavier University, PCARRD	computer	2000	4000	Jose Rondal, Victor Tagupa, Digna Manzanilla, Romeo Labios	Jose Rondal, Romeo Labios	Oct. 2005 to March 2006
WOCAT Promotion	Presentation of WOCAT in scientific gatherings/meetings	1	4	BSWM	Computer	500	1000	Jose Rondal	Jose Rondal	Jan. -Sept. 2006
WOCAT Promotion	Distribution of WOCAT Materials (CD, flyers, etc)	2	2	BSWM, ASC-UPLB				Jose Rondal	Jose Rondal	Oct. 2005 to Aug. 2006
Technology Promotion and monitoring	Establishment of technology demonstration farms and monitoring	5	5	BSWM, Dept. of Land Reform	Farm inputs	1000	2000	Jose Rondal	Jose Rondal	Sept. 2005 - Aug. 2006
QM	Data gathering and inputing	4	8	BSWM, ASC-UPLB	computer	500	2000	Jose Rondal, Romeo Labios	Jose Rondal, R. Labios	Jan. 2006 to July 2006

Prepared by: Jose Rondal

Total: US\$ 10000 US\$ 16000

WORKPLAN for: Philippines, 2006 ASC-UPLB										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
WOCAT PR Materials	Presentation of WOCAT materials to scientific conferences	1	2	ASC-UPLB	Computer, presentation materials	100	500	R. Labios	R. Labios	Oct '05 to August '06
Educational Materials	WOCAT use as instruction materials	1	10	ASC-UPLB	Computer, WOCAT materials	100	0	R. Labios	R. Labios	Oct '05 to Sept'06
1QA, 1QT	Update and documentation	2	4	ASC-UPLB	Computer	200	500	R. Labios	R. Labios	Jan-Sept'06
Analysis on Use of WOCAT in R&E	Consolidation of survey forms/ responses	2	3	ASC-UPLB	Computer/ Survey Forms	100	200	R. Labios	R. Labios	Oct-Dec '05

Prepared by: Romeo V. Labios

Total: US \$ 500 US\$ 1200

WORKPLAN for: Tajikistan , 2006									
Expected outputs	Activities	Input				Funding, USD		Responsible person(s)	Timetable
		Person x month/ Institution			Materials/ equipments	Available	Required		
Training course	WOCAT methodologies and application	3	6	Tajik Agrarian Academy	-	100	-	Boturov U	2006
To include WOCAT tools and methodologies in the donors activities	Workshop on the use of WOCAT database for investment project in Tajikistan	3	5	Soil Research Institute and CAMP, FAO Tajikistan		-	3000	Sanginov S Ergashev M	2006
QT	Review and editing	3	6	Tajik Soil Science Research Institute and CAMP	Computer	200	-	S.R.Sanginov Akramov U	2006
Testing QA's	Review and editing	2	10	SSRI and CAMP		200	-	R.Kabilov	2006
WOCAT lecture to students	Lecture at TAU	2	3	TAU	-	200	-	Boymurodov R	2006
Documentation of technologies	Documentation	3	6	SSRI	Computer, GIS	200		Nekushoeva G Boturov U	2006

Prepared by: Sanginov S.

Total: US\$ 600 US\$ 3000

WORKPLAN for: WASWC 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		/ Institution		Materials / equipment		Available	Required	
4 times a year	Publishing of WOCAT Highlights in WASWC Newsletter	1	0.5	WASWC	Computer	\$500	-	Samran Sombatpanit		Sept 05 – Sept 06
2 each of QA & QT	Keying QTs & QAs that have been documented, using Basic questionnaire	1	0.25	WASWC	Computer	\$300	-	Samran Sombatpanit		Sept 05 – Sept 06
2 each of QA & QT	Documenting new QTs & QAs, using Basic questionnaire	1	0.5	WASWC	Computer and travel up country	\$1,000	-	Samran Sombatpanit		Sept 05 – Sept 06
Lecture at universities/ research institutes	At certain universities and research institutes in Vietnam	1	0.25	WASWC	-	\$700		Samran Sombatpanit		Sept 05 – Sept 06


Prepared by: Samran Sombatpanit

Total: US\$ 2,500

WORKPLAN for: SERBIA and MONTENEGRO , 2006										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Further activities	Contacts with national and foreign donors/institutions (national ministries, UNU, SOWAP)	3	3	Dept. for Erosion Control (Fac. of Forestry)			1000	M. Zlatic, Nada Dragovic	Dept. for Erosion Control	Oct. - December 2005
WOCAT promotion	1. Education of students 2. Training of of Students Forum of WASWC 3. Promot at Yundola meeting	12	0	Dept. for Erosion Control			3000	S. Kostadinov, N. Dragovic,	Dept. for Erosion Control	Oct. '05 - February '06
Further action: QM	1. Training for QM in Nis 2. Continuing work on QM in Belgrade and Nis districts	6	3	1. Dept. for Eros. Control 2. Stud. Forum 3. NGO CEKOR			4000	M. Zlatic, S. Kostadinov, N. Dragovic, n J. Tomicevic, M. Todosijevec	1. Dept. for Erosion Control 2. NGO CEKOR	Oct. '05 - February '06
QA, QT	Continue work in Serbia	6	3	Dept. for Erosion Control			5000	M. Zlatic' S. Kostadinov, N. Dragovic, J. Tomicevic, M. Todosijevec	Dept. for Erosion Control	March - May '06
Quality Control	Feedback meeting	4	1	Dept. for Erosion Control			1000	Zlatic, Kostadinov Kadovic, Dragovic	Dept. for Erosion Control	July '06
Brochure	Brochure of perf. programme	4	1	Dept. for Erosion Control			1000	Zlatic, Kostadinov, Kadovic, Dragovic, Todosijevec, Tomicevic	Dept. for Erosion Control	July, August '06

Prepared by: Miodrag Zlatic

Total: US\$ US\$ 15000

WORKPLAN for: ISRIC / SOWAP, 2006										
Expected outputs	Activities	Input			Materials / equipment	Funding		Responsible person(s)		Timetable
		Person x months/ Institution				Available	Required		Commitment by	
(SOWAP / ProTerra): <ul style="list-style-type: none"> • More people trained • Case studies analysed • More cases documented in UK, BE,HU • New case studies documented in CZ, FR,SP,IT • Integration of results with other SOWAP data • Dissemination of results at field, national and European level 	<ul style="list-style-type: none"> • SOCAT meeting • Training for SOWAP/ProTerra staff • Evaluation • Documentation (cont'd) • New documentation after training • Compile data • Dissemination 	2	0,1	ISRIC, CDE / CIS		YES (p.m. , SOWAP budget)			All SOCAT	Nov. 05
		2	0,5						ISRIC, CDE / CIS	(?)
		2	1,5						Idem, with Nat. coord.'s	March 06
		1	0,5	Idem, with Nat. coord.'s					Nat. teams	Sept. 06
		1	0,5	GVL and SOWAP					Nat. teams	Oct. 06
		1	2	Communications team					GVL	ongoing
		1	2						GVL and SOWAP Communications team	ongoing
WOCAT coordination	<ul style="list-style-type: none"> • React to requests and queries per Email or otherwise • Promote WOCAT during meetings, conferences, etc. • Participate in WOCAT meetings and trainings as resource person 	1	1			YES From SOWAP contribution €21.000				
		1	1							
		1	1							
WOCAT fund raising	<ul style="list-style-type: none"> • Assess and contact potential donors • Assist in funding prop's 	1	1			YES From ISRIC contribution ± €12.000				

Prepared by: Godert van Lynden

Total: US \$ 43000

ANNEX 2: LIST OF PARTICIPANTS

WOCAT 10th International Annual Workshop and Steering Meeting								
Belgrade, Serbia and Montenegro, 05 September - 10 September 2005								
Name		Institution	Address	Country	Email-Address	Telephone	Telefax	
Anwar	Syaiful	ASOCON Programme Officer and Head of Watershed data and Information	Directorate for Watershed Management, Ministry of Forestry, Mangala Wanabakti Building 13th floor, Jakarta	Indonesia	sanwar@dephut.go.id, sanwar@abn.net.id	+62.21 5730151	+62.21 5700263	
Asanaliev	Abdybek	Kyrgyz Agrarian University	68, Meferov St. 720005, Bishkek	Kyrgyz Republic	asanaly61@mail.ru	+996 312 660409	+996 312 680520	
Bhuchar	Sanjeev	International Centre For Integrated Mountain Development	Assistant Program Coordinator (Pardyp), ICIMOD, Po Box 3226, Khumaltar, Lalitpur	Nepal	sbhuchar@icimod.org.np	+977 1 5525313	+977 1 5524509 / 5536747	
Bosoga	Lydia	Department Of Agriculture - South Africa	Delpen Building, Room 204, Corner of Annie Botha and Union Streets, Riviera, Pretoria	South Africa	lydiab@nda.agric.za	+27-12-3197656	+27-12-3295938	
Boturov	Usmon	Soil Science Institute	734025, Dushanbe, Rudaki 21A	Tajikistan	soil2004@mail.ru, usmon_bt@yahoo.com	+992-372-271979	+992-372-213207	
Cai	Jianqin	SWCMC	Baiguang Road 2, Xuanwu Beijing, MWR	P.R. China	Cai_jq111@sina.com	+8610-69828515	+8610-63203548	
Danano Dale	Daniel	Ministry of Agriculture and Rural Development	P.O.Box 62758, Addis Ababa	Ethiopia	ethiocat@telecom.net.et; danidandl@yahoo.com	+251-1-151441, +251-9-120426	+251-1-514190	
Gurtner	Mats	CDE - Centre for Development and Environment	Steigerhubelstrasse 3; 3008 Berne	Switzerland	mats.gurtner@cde.unibe.ch	+41 31 631 88 45	+41 31 631 85 44	
Hurni	Hans	CDE Centre For Development And Environment	Steigerhubelstrasse 3, 3008 Berne	Switzerland	Hans.Hurni@cde.unibe.ch	+41 31 631 52 72	+41 31 631 85 44	
Khisa	Sudibya Kanti	Chittagong Hill Tracts Development Board	Khagrachari-4400	Bangladesh	Skhisha@yahoo.com; sudibya.khisa@undp.org	+880-2-8118600 ext: 2640	+880-1-87051003	
Licon-Manzur	Clemencia	FAO - AGLL	Via delle Terme di Caracalla, Rome	Italy	Clemencia.LiconManzur@fao.org	+39 0657055044	+39 0657056265	
Liniger	Hanspeter	CDE Centre For Development And Environment	Steigerhubelstrasse 3, 3008 Berne	Switzerland	Hanspeter.Liniger@cde.unibe.ch	+41 31 631 88 45 / 22	+41 31 631 85 44	
Mekdaschi Studer	Rima	CDE - Centre for Development and Environment	Steigerhubelstrasse 3, 3008 Berne	Switzerland	rima.mekdaschi_studer@cde.unibe.ch	+41 31 631 88 45	+41 31 631 85 44	
Meng	Liingqin	Songliao Water Resources Commission, SWR. China	No.888 Gongnong Road, Changchun P.C:130021	P.R. China	slwmlq@yahoo.com.cn	+86 431 5607181	+86 431-5607132	

Nie	Bijuan	Fujian Soil and Water Conservation Experimental Station	6 TongPan Road, Fuzhou City, Fujian Province	P.R. China	fjswc@fjstbc.gov.cn	+86 591-87812785	+86 591-87812785
Pretorius1	Dirk	Department Of Agriculture - South Africa	Delpen Building, Room 282, Corner of Annie Botha and Union Streets, Riviera, Pretoria	South Africa	Dirkp@Nda.Agric.Za	+27-12-3197545	+27-12-3295938
Pretorius2	Carin	Agricultural Research Council - Institute for Soil, Climate and Water (ARC-ISCW)	Private Bag X79, Pretoria 0001	South Africa	carin@arc.agric.za	+27-12-3102585	+27-12-3231157
Reddy	Sri G Bhaskar	Orissa Watershed Development Mission	Near Ouat Hostel No.9, Siripur, Bhubaneswar, Orissa, Pin - 751003	India	Bhaskar@Worlp.Com	+91-674-2404179,2404181,2407538	+91-674-2407988
Rondal	Jose	Bureau Of Soils And Water Management	Elliptical Road, Diliman, Quezon City	Philippines	Joserondal@Yahoo.Com	+632 923 0459	+632 920 4318
Schwilch	Gudrun	CDE - Centre for Development and Environment	Steigerhubelstrasse 3, 3008 Berne	Switzerland	gudrun.schwilch@cde.unibe.ch	+ 41 31 631 88 45	+ 41 31 631 85 44
Sombatpanit	Samran	WASWC	67/141 Amonphant 9, Soi Sena 1, Thailand Bangkok 10230		Sombatpanit@Yahoo.Com	+66 25703641	+66 25703641
Van Der Merwe	Rinda	ARC-ISCW	Private Bag # 79, Pretoria 0001	South Africa	rinda@arc.agric.za	+27 12 - 310 2564	+27 12 - 323 1157
van Lynden	Godert	Isric-World Soil Information	P.O. Box 353, 6700 AJ Wageningen	The Netherlands	Godert.vanlynden@wur.nl	+31 317 471735	+31 317 471700
Zheng	Yuhuan	Fujian Soil and Water Conservation Office	6 TongPan Road, Fuzhou City, Fujian Province	P.R. China	fjstzyh@163.com	+86 591-87514325	+86 591-87514325

Domestic participants

Zlatic	Miodrag	Faculty of Forestry University of Belgrade	Kneza Viseslava 1; 11030 Belgrade	Serbia and Montenegro	Mizlatic@Yubc.Net	+381 11 3553 122	+381 11 545 485
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Front row: Hanspeter Liniger, Jose Rondal, Mats Gurtner, Sanjeev Bhuchar, Stanimir Kostadinov, Syaiful Anwar, Zoran Gavrilovic

ANNEX 3: FIELD TRIP REPORT

The mid-workshop field trip for the WWSM10 had been meticulously planned by Miodrag Zlatic, our host. Though it covered a distance of 400 km and it took only little more than one day, participants had a chance to see the countryside with different topographic features on the way, visit sites of technical interest and last but not least enjoying a cultural / musical evening performance.

The trip led in SE direction late afternoon of Sept. 6 along the main highway through a maize growing area with generally rolling topography and farms applying various conservation measures. At about half way near the city of Niš the land became relatively flat, but finally hillier towards Predejane where the night was spent. Here we were treated with ear-pleasing band of nine trumpeters at the dinner.

The next morning we went to see check dams that have been constructed along the creeks not far from Predejane, to prevent flash floods from damaging the important N/S road and railway connections, and to keep water for the dry season. As many as 130 dams were built in an area of few km² since flooding occurred frequently in the past and (rail) roads were as often damaged.

After that a visit was paid to Vučje town where several kinds of fruit trees including cherry, apple and pear are grown in a large area. The produce from there is generally processed into several kinds of soft and hard drinks. It was a good walk uphill to see the broad landscape and observe land management; the use of farmyard manure is rather widespread and the tree rows are placed on terraces. At the factory in Vučje we were shown how the fruits are preserved to make jam, ketchup and brandy. We were shown how the fermentation was done and we had a chance to taste their alcoholic drinks, made from cherry, strawberry, apple and pear.

In Niš city we met the manager of the Water Management Enterprise "Erozija" at the bank of Nišawa River. Niš is the second largest city of Serbia, with a large old fortress near the Morava River. We were shown how this river, with a watershed of about 3,000 km² has been regulated in order not to cause too much scouring on the river bed. The visit to Niš was concluded with a delicious lunch, graciously sponsored by Erozija, for which the WOCAT group was very grateful, taking the several toasts as a measure.

Before arriving in Belgrade we visited the family of Dr. Jelena Tomicevic (one of the domestic WWSM participants). They live in a fine house in Granice village. Her parents, Tihomir and Danica, welcomed us, and showed us the vineyard (at night!). We were later treated with very good wine brought up from their cellar, and with homemade pies. Moreover, each of us was treated with a bottle of the famous Slivovic brandy to bring home!



ANNEX 4: WOCAT POSTER PHILIPPINES

AN INDIGENOUS APPROACH TO SUSTAIN WATER AVAILABILITY TO THE RICE TERRACES IN THE CORDILLERA



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BACKGROUND

The Cordillera is a mountainous region in Northern Luzon comprising of six (6) provinces. Agricultural land is limited and poverty is prevalent at 31.1 percent, higher than the national average of 28.4 percent. To sustain them, the indigenous people of the region has mastered the art of constructing and maintaining rice terraces at the steep mountain slopes. Farm size is generally small.

PROBLEMS

Because of the mountainous topography, the development of irrigation for the terraces is difficult. Rice crop mainly depends on impounded rainfall within the terraces. Lower positioned terrace benefit from over-flow from the upper terrace.

A considerable source of moisture for the terraces is seepage water from the upper slopes. During period of moisture deficits, this seepage moisture can mean the success or failure of a crop. To sustain this source of moisture, the water infiltration and moisture storage capacity of the upper slope must be enhanced. For this, adequate cover is important in the hydrology and stable water supply of the terraces.



BENEFIT

The approach resulted in the conservation of forest cover of areas critical for the sustenance of the terraces. It also enabled the residents to have a sustainable source of wood for construction, handicrafts and other uses. Also woodlots in the Cordillera are within the headwaters of the major river systems.

RECOMMENDATION

The approach should be adopted in other areas. Forest dwellers must realize the importance of effective forest cover for stable water supply. Making them co-owner of the forest resources and enabling them to have usufructuary right will go a long way in enhancing forest cover of degraded watershed. The promotion and expansion of woodlots can have very positive impact on downstream water supplies.



SOLUTION

The conservation, protection and enhancement of the forest cover, particularly in the upslope of the terraces is necessary for a stable water supply.

The indigenous people in the Cordillera has a unique means of forest conservation called woodlot or "muyong" in the local dialect. The establishment of woodlot started during the Spanish period. It is generally believed that the practice began when it became apparent that the source of fuelwood near homes was becoming difficult to find. It is also clear, however that people saw the positive relationship of forest and stable water supply.

The management of the woodlot is governed by indigenous customs and traditions. Harvesting of wood is "as you need" it basis. Regular maintenance by underbrushing and replanting is done regularly. Boundary dispute is settled amicably using laws unheard in the lowlands.

Almost all woodlots fall within areas classified as public land. However, most have been privately managed and covered with tax declaration since people saw the advantage of this in terms of security of tenure.



ANNEX 5: WOCAT MILESTONES

WOCAT Milestones 1992-2005		
2005		
September 5-10	Belgrade, Serbia & Montenegro	10th Annual International WOCAT Workshop and Steering Meeting, attended by 29 participants from 15 countries
August 19	Nis, Serbia & Montenegro	Promotional WOCAT meeting in public enterprise "Srbijavode" – Water Management Centre "Morava" - Nis
June 13-15	Berne, Switzerland	Map Task Force Meeting with participation from South Africa, ISRIC, FAO and CDE
June 1-5	Kathmandu, Nepal	PARDYP-ICIMOD workshop on Soil and Water Conservation and Watershed Management with participants from 8 countries
May 3-6	Budapest, Hungary	SOWAP Plenary Meeting
April 27-29	Zurich, Switzerland	Poster Presentation at EFARD Conference (European Forum on Agriculture Research for Development)
April 26-30	Almaty, Kazakhstan	NCCR regional training course in Kazakhstan with Kazakh WOCAT team
March, 19-23	Bandarban, Bangladesh	2 nd BANCAT training workshop on WOCAT tools and methodologies
March	Berne, Switzerland	COST-WOCAT project on on-site and off-site impacts of soil and water conservation in Switzerland approved
February 7-12	Jeyapore, India	WOCAT training workshop in Orissa State
February 2	Delhi, India	Presentation in UNEP/UNCCD meeting
February 13-15	Ouahigouya, Burkina Faso	Participation at the « Atelier lancement de l'étude Bilan des efforts de gestion des ressources naturel (GRN) au Sahel » (www.etudesdusahel.org)
January 11-12	Amsterdam, The Netherlands	Coordination meeting for the collaboration of WOCAT in the Sahel Studies carried out by Vrije Universiteit Amsterdam.
December 28 – January 3	Nazareth, Ethiopia	EthioCAT training workshop with 16 participants from Amhara and Hariri Region
2004		
November	Switzerland	Touring exhibition presenting Swiss Cooperation in Kyrgyzstan and Tajikistan, including case studies using WOCAT tools.
November 8-13	Yichang, P.R. China	9th Annual International WOCAT Workshop and Steering Meeting
November	Switzerland	SDC / NRU approved continuation for WOCAT funding for next phase (01.01.2005 - 31.12.2007). CHF 400,000 per year.
October 5-7	Stamford, England	SOWAP Plenary Meeting (2004): Do WOCAT tools need some adaptation for SOWAP use?
October 4-8	Istanbul, Turkey	Participation and presentation at the IAEA Second Research Project Co-ordination Meeting on "Assess the effectiveness of soil conservation techniques for sustainable watershed management using fallout radionuclides". It emphasized the need for proper documentation, monitoring and evaluation of soil and water conservation technologies and approaches using the WOCAT tools (21 participants from 17 countries).
September 13-18	Kairouan, Tunis	FAO Regional WOCAT training workshop attended by 23 participants from Tunisia, Morocco, Mauritania and Algeria
September 9	Freiburg, Germany	WOCAT presentation during the IASUS symposium at the EUROSOL meeting: Bringing WOCAT into the global agenda
July 4-8	Brisbane, Australia	13th ISCO Conference: participation, paper presentation (WOCAT, SOWAP) and poster on WOCAT World Map.
July	FAO, Rome	CD-ROM version 3 printing and distribution
May/June	Bishkek, Kyrgyzstan and Dushanbe, Tajikistan	"Dom Vody" (House of water) on wheels, a happening for the International Year of Fresh Water: poster presentation of examples of case studies documented using WOCAT tools
May 17-21	Bijapur, India	Karnataka WOCAT training workshop, organized by the DANIDA assisted Karnataka Watershed Development Project (KWDP)
May 1-18	Dushanbe, Tajikistan	NCCR regional training course including WOCAT use in research and documentation of case studies.
April 20-23	Leuven, Belgium	SOCAT workshop: WOCAT training workshop for SOWAP collaborating countries, attended by 9 Participants from UK, Belgium, Hungary (+ Netherlands, Switzerland)
March 30-April 2	Berne, Switzerland	Dare to Share Fair 2004: participation and poster presentation of WOCAT
March 25-26	Lausanne, Switzerland	Presentation of WOCAT at the Swiss Soil Science Society
March 20-27	Kathmandu, Nepal	First regional WOCAT meeting for South and Central Asia region: Himalayan Conservation Approaches and Technologies (HIMCAT), organized by ICIMOD, attended by 17 participants from Nepal, India, Pakistan, Bangladesh, China, Tajikistan and Kyrgyzstan.
March 9-17	Rangamati, Bangladesh	National training workshop on WOCAT tools and methodologies in Bangladesh , organized by the Chittagong Hill Tracts Development Board.
January	Switzerland	Approval of funding by SYNGENTA Foundation for 01.01.2005 - 31.12.2007 (CHF 50'000 per year)
January	Denmark	Approval of DANIDA funding for 01.01.2005 - 31.12.06. Contribution to core activities and earmarked activities in DANIDA supported countries (approx. US\$ 50'000 per year).

2003		
November 3 – 8	Kathmandu, Nepal	WOCAT training for ICIMOD countries
October 28 – November 2	Kathmandu, Nepal	8th Annual International WOCAT Workshop and Steering Meeting, attended by 23 participants from 13 countries
September 11-26	Tajikistan and Kyrgyzstan	Presentation of WOCAT as research tool and setting up research collaboration with NCCR North-South: impact of land use on natural resources. Workshop and field work on SWC Ts and As in Central Asia.
August 19-21	CDE Berne, Switzerland	Task force meeting “global overview book”
May, 19-23	Vienna, Austria	IAEA research coordination meeting: “Assess the effectiveness of soil conservation techniques for sustainable watershed management and crop production using fallout radionuclides”. Inclusion of WOCAT in the international research projects of IAEA.
March 22-25	Almaty, Kazakhstan	WOCAT initiation workshop in collaboration with CAMP (Central Asia Partnership Programme) and national institutions.
March 20-21 and 26-27	Bishkek, Kyrgyzstan	WOCAT training of 20 Central Asian students in collaboration with NCCR North-South (Swiss National Centre of Competence in Research)
February 24 – March 4	Kathmandu, Nepal	Presentation of WOCAT in Symposium and Research Workshop on Renewable Natural Resources Management for Mountain Communities and WOCAT Workshop in Kathmandu and Pokhara/Landruk
2002		
November 5-8	Rome, Italy	Presentation of WOCAT methodology at the LADA workshop at FAO: acceptance of WOCAT as a tool for the documentation and assessment of Land degradation (and conservation)
October 28 – November 4	Rome, Italy	7th Annual International WOCAT Workshop and Steering Meeting, attended by 40 participants from 22 countries
October 7 – 11	Ratlam, India	WOCAT Training Workshop organized by the Comprehensive Watershed Development Project (CWDP) with the support of DANIDA in Ratlam district, Madhya Pradesh State, India.
June 1 – 5	Fujian Province, China	Visit of 7 WOCATeers to Fujian Province.
May 26 – 31	Beijing, China	Participation of several WOCATeers at the 12th ISCO Conference in Beijing, China.
April 9 – 11	Ratlam, India	Introductory WOCAT workshop, organized by the Comprehensive Watershed Development Project (CWDP) with the support of DANIDA in Ratlam district, Madhya Pradesh State, India with 35 participants from 3 districts.
January 23 – 25	FAO, Rome	Presentation of WOCAT at the steering meeting of the LADA project (Land Degradation Assessment in Dryland Areas)
January 21 – 25	FAO, Rome	Workshop for WOCAT Facilitators with 15 delegates from 10 countries. In-depth treatment of the WOCAT methodology for those responsible for the co-ordination and implementation of regional / national data collection.
2001		
September 28 - 29	Nyeri, Kenya	Presentation and Meeting with RELMA regional Advisory Committee members from 6 Eastern African countries: Eritrea, Ethiopia, Kenya, Tanzania, Uganda, Zambia
September 24 - 28	Nyeri, Kenya	6th Annual International WOCAT Workshop and Steering Meeting attended by 30 participants from 15 countries
September 21	Nairobi, RELMA; ICRAF	Presentation of WOCAT and its use to national and international institutions
September	FAO, CDE	Finalizing of WOCAT video and printing & publishing it in the FAO Land and Water Digital Series No 16: on a CD-ROM in 3 languages: E, F, S
June 11-14	Iringa, Tanzania	National WOCAT Training Workshop in Iringa, Tanzania, initiated through the HIMA project and the Ministry of Agriculture, sponsored by DANIDA.
May 21-24	Dushanbe, Tajikistan	Regional WOCAT Training Workshop for four Central Asian countries (Tajikistan, Kyrgyzstan, Kazakhstan, Uzbekistan) on Technologies and Approaches, organized by CAMP and UNCCD/GtZ.
April 23-27	Nazret, Ethiopia	National WOCAT Training Workshop in Nazret, Ethiopia with 39 representatives from 9 regional Bureau's of Agriculture, NGOs, Universities and other research institutions. Initiation of ETHIOCAT.
March 8	Bern	WOCAT presentation in a special Swiss forum for sustainable soil management (NBN-Forum) with representatives of SDC, different NGO's, research institutions
January 22-31	Bern, CDE	WOCAT Task Force meeting: QM methodology and database improvement, WOCAT website, address database, WOCAT in education, administrative issues.
2000		
December 11 – 22	Bonn, UNCCD	Participation of WOCAT in the UNCCD Conference of the Parties (COP4) in Bonn (side event and stand with posters and CD-ROM)
November	Pretoria, South Africa	WOCAT as an important part in the ITC/ISRIC refresher course
October 23-28	Buenos Aires, Argentina	ISCO conference: various WOCAT presentations and WOCAT/ISRIC/FAO corner in the poster hall
September 26 – 29	Bishkek, Kyrgyzstan	WOCAT information and training workshop in Bishkek, Kyrgyzstan for five countries in Central Asia (organized by CAMP and NCCD)
September 4 – 11	Wageningen, ISRIC	5th International Annual Workshop and Steering Meeting
September	Rome, FAO	WOCAT on internet (CD-ROM on internet)
September	Rome, FAO	Printing of CD- ROM Version 2
June 12 - 20	Pretoria, South Africa	Workshop WOCAT South Africa: testing the map methodology, quality control QT/QA, outputs Approaches/Technologies.
June 9	Berne, CDE	Printing WOCAT brochure 2000 (English, French, Spanish)
April 10 – 12	Rome, FAO	WOCAT meeting: organisational set-up, funding strategy, planning.

1999		
September 6 – 10	Bangkok, Rayong Thailand, IBSRAM, DLD, WASWC	4th International Annual Workshop and Steering Meeting
June 6-13	Aleppo, Syria	Regional WOCAT training workshop for ICARDA countries
May 3 – 7	Nairobi, Kenya	Workshop for collection of Technologies and Approaches of Kenya
May 3 – 7	Niamey ICRISAT	WOCAT training workshop for finalizing the datasets for Niger and initiating the process for CILSS - INSAH countries
April 19 – 24	Bern, CDE	WOCAT meeting: Database management System esp. QM, different language versions, new brochure, Guidelines etc.
March 15-19	Stanger, South Africa	WOCAT workshop South Africa: Training of 34 participants from 9 Provinces WOCAT to be used as a national tool to gather and exchange SWC experience
March 9-10	Managua, PASOLAC	Introduction to WOCAT at National Seminar on SWC in Nicaragua
January 18 – 21	Nanyuki, Kenya	Taskforce Meeting for WOCAT Kenya and East Africa: setting –up of program to collect 14 SWC Technologies and 10 Approaches from Kenya.
1998		
December	Bern, CDE	Finalizing revision and printing of revised version of QT and QA
September – October	Bern, CDE	Proposal for funding to SDC: 3rd phase of WOCAT funding approved by SDC: from 1/9/98 - 31/8/01
August 25– September 1	Twann, CDE	International Workshop and Steering Meeting
August 17-21	Manila, DANIDA	New initiative: National WOCAT Workshop in the Philippines
July	Rome, FAO	Distribution of WOCAT CD-ROM to all WOCAT collaborators and contributing specialists
June-Aug	Niamey, ICRISAT	WOCAT studies in Niger by two students of CDE Bern
May-Aug	Cali, CIAT	WOCAT studies in Colombia by two students of CDE Bern
April-May	Bern, CDE	WOCAT Review: external evaluation of the WOCAT programme for SDC
April-June	Rome, FAO and CDE	Preparation of WOCAT CD-ROM version 1.0 which illustrates the WOCAT methodology and shows preliminary data sets and results
April	Bern, CDE	Final Revision of questionnaires on Technologies, Approaches and Map
April	Paris, OSS and Colombia, GTZ	Translation of latest versions of questionnaires into French and Spanish
March 31–April 1	Bogota, GTZ	WOCAT Workshop Colombia with 12 experts of GTZ, CIAT and University of Colombia
March	Bern, CDE	New initiatives of ICRISAT Niger and PASOLAC Nicaragua: First discussions
February	Bern, CDE, ISRIC, FAO	Development work on Database Management System for QT, QA, QM and integration of QT / QM
February	Bern, CDE	WOCAT Database Training for 3 delegates from the Fujian SWC Centre, China
1997		
December	Rome, FAO	Management Board Meeting
November 17-21	Fuzhou, ADB	National Initiation and training workshop in Fuzhou, Fujian Province: 26 participants of six Red Soil Provinces in China
October	Rome, OSS	WOCAT multimedia presentation at the CCD conference
Aug 26- Sept 2	Murten, CDE	International Workshop and 2nd Steering Committee meeting
July	ADB, CDE	New initiative: China: Preparing translation into Chinese, proposal for WS in Nov'97
July	GtZ, CDE	New initiative: Latin and Central America: Translation into Spanish, Contacting institutions, starting process
June	Paris OSS and CDE	Entry of N-Africa and W-Africa data into old DB: 26 Technologies, 16 Approaches
May	CDE and ISRIC	Presentation of WOCAT in Desertification Atlas of UNEP
May-Aug	FAO and CDE	Development of new database and data analysis system
May	Bern, CDE	Production of WOCAT brochure
May	Bern, CDE	Revision of questionnaires on Technologies and Approaches
March	Bonn (GtZ)	Meeting: GtZ – FAO – CDE: Discussion of progress and issues to be addressed during Next SC meeting
1996		
Sept. 15-21	Thailand (DLD)	National WOCAT Workshop: Launching Asian data collection with national funding: 21 Technologies and 14 Approaches
August 26-30	Bonn	ISCO Conference: Presentation of WOCAT Africa to date (paper), Poster presentations in Dare to Share Fair, meetings to and feed-back from SWC specialists worldwide
June	Tunis, Tunisia; OSS	4th Regional workshop (Northern Africa): Including Tunisia, Algeria, Morocco and Mauritania. Organized by OSS.
May 6-14	Sigriswil	International workshop and Steering Committee (SC) meeting with main collaborating institutions and donors: Development of the programme, finalizing outputs of WOCAT, Formation of a WOCAT Consortium and Steering Committee
Febr.- May	Bern, CDE	Meetings: Evaluation of results, drafting of outputs, revision of method
January	Bern, CDE	Proposal for funding to SDC: 2nd phase of WOCAT funding approved by SDC: from 1/9/95 - 31/8/98

1995		
December 11-15	Magoebaskloof, South Africa	3rd Regional workshop (Southern Africa) 28 SWC specialists from 8 countries, 4 facilitators, collection of 22 Technologies and 17 Approaches and regional map
November 6-11	Ouagadougou Burkina Faso, OSS/GTZ	2nd Regional Workshop (Western Africa): 30 participants from 4 countries: Launching of WOCAT and testing of methodology in Western Africa: sponsored by OSS/GTZ, FAO and SDC
August	CDE-UNEP	Proposal for funding of Regional Workshop. UNEP approval for funding of Southern African workshop
June 26-July 1	Machakos, Kenya collaboration RSCU - CDE	1st Regional Workshop (East Africa): 27 SWC specialists from 7 countries and 10 facilitators: 30 Technologies and 19 Approaches and regional map; sponsored by RSCU, CDE, FAO, GTZ
May	Bern, CDE	Finalizing QT, QA and QM / Printing of 1st version of QT, QA and QM
March 13-14	Rome, FAO	Meeting on map with ISRIC and CDE Further development of objectives and outputs of the map
1994		
December 12-15	Bern, CDE	Workshop for Core Group Members Final draft of Qs, change of methodology: towards regional workshops.
October 20-21	Wageningen, ISRIC	Meeting on database and expert system, ISRIC, CDE, SOCOX. First version of D-CAT (database of WOCAT) and development of X-CAT (expert system)
August- November	Kenya, Ethiopia, Niger, S.A.	Testing of QT, QA by WOCAT task force members Feedback from testing in Africa, suggestions for improvements
August	Bern CDE	CDE coordination. Drafts of QT, QA, QM compiled
August	Bern at CDE	Task force map. 1st draft of QM
June	Bern at CDE	Finalizing 1st drafts of QT/QA
March 13-15	Wageningen ISRIC	Task force meeting: Technologies 1st draft of questionnaire on Technologies
January 13-14	Thika, Kenya RSCU	Task force meeting: Approaches 1st draft of report on approaches (guidelines)
1993		
October 11-15	Riederalp Switzerland, CDE	International Workshop: 19 specialists from 13 countries Definition of WOCAT objectives, methodology; splitting up into three Qs: QT, QA, QM, to be developed by 3 task forces.
1992		
October 1	Sydney; Australia	ISCO Conference: 24 SWC specialists from 16 countries 1st international meeting to define overall goals
	Bern	Proposal for funding to SDC: WOCAT funded by SDC: from 1/9/92 - 31/8/95