



11th

***International Workshop
and Steering Meeting***

*Cape Town, South Africa
23 -28 October 2006*

PROCEEDINGS

Progress, Methods, Outputs,
Plan of Action,
Organisation

Co-sponsored by:



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Editors

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Layout

Mats Gurtner



WORLD OVERVIEW
OF CONSERVATION APPROACHES
AND TECHNOLOGIES (WOCAT)

11th

*WORKSHOP &
STEERING MEETING
PROCEEDINGS*

WOCAT Global Management:

Centre for Development and Environment (CDE, Switzerland)

World Soil Information (ISRIC, The Netherlands)

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

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
CETRAD	Centre for Training and Integrated Research in ASAL Development, Nanyuki, Kenya
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
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
IC-Pak	Intercooperation Pakistan, Peshawar, Pakistan
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
ISCWARC	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
MoF	Ministry of Forestry of the Republic of Indonesia, Jakarta, Indonesia
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
OWDM	Orissa Watershed Development Mission, Bhubaneswar, Orissa, India
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
PRC-GEF	Gansu Project Management Office, People's Republic of China – Global Environmental Facility (PRC-GEF)
RELMA	Partnership on Land Degradation in Dryland Ecosystems, PR China
SADC	Regional Land Management Unit (former RSCU), SIDA, Nairobi, Kenya
SDC	Southern African Development Community, Gabarone, Botswana
SEARNET	Swiss Agency for Development and Cooperation, Bern, Switzerland
SOWAP	Southern and Eastern Africa Rainwater Network
SWCB	Soil and Water Protection project and its organisations, Europe
SWCMC	Ministry of Agriculture, Soil & Water Conservation Branch, Nairobi, Kenya
SYNGENTA	Soil and Water Conservation Monitoring Center, MWR, Beijing, P.R. China
SYNGENTA FOUNDATION	Environmental Safety Assessments and Contracts, Jealott's Hill International Research Centre, Berks, UK
TSSRI	Syngenta Foundation for Sustainable Agriculture, Basel, Switzerland
UCL	Tajik Soil Science Research Institute, Dushanbe, Tajikistan
UK-SMI	Université catholique de Louvain, Agricultural Engineering Unit, Soil and Water Conservation, Louvain-la-Neuve, Belgium
UNEP	UK Soil Management Initiative, Mollington, UK
WASWC	United Nations Environment Programme, Nairobi, Kenya
WDCU	World Association of Soil and Water Conservation, Beijing, P.R. China
WORLP	Watershed Development Coordination Unit, New Delhi, India
WOCAT Global Management:	Western Orissa Rural Livelihood Project

LIST OF ACRONYMS

AGLL	Land and Water Development Division FAO
AGIS	Agricultural Geo-Referenced Information system
CA	Conservation Agriculture
CCD	See UNCCD
CHARM	Chittagong Hill Tracts Improved Natural Resources Management Project
CHT	Chittagong Hill Tracts
CIMMYT	International Maize and Wheat Improvement Centre
COST	European Cooperation in the field of Scientific and Technical Research
CTA	Technical Centre for Agricultural and Rural Cooperation ACP-EU
DB/ db	Database
DESIRE	Desertification Mitigation and Remediation of Land (EU Project)
DoA	Department of Agriculture
DSS / DST	Decision Support System, / Decision Support Tool
ESAPP	Eastern and Southern Africa Partnership Programme
GEF	Global Environmental Facility
GLADA	Global Land Degradation Assessment
GLASOD	Global Assessment of Human-Induced Soil Degradation (UNEP / ISRIC)
GO	Government Organisation
IBSRAM	International Board for Soil Research and Management, Thailand
IDRC	International Development Research Centre, Canada
INFASA	International Forum on Assessing Sustainability in Agriculture
ISCO	International Soil Conservation Organization
IUSS	International Union of Soil Science
IYDD	International year of Deserts and Desertification
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
L&WM	Land and Water Management
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MG	WOCAT Management (Group)
MoA	Ministry of Agriculture
NCCR	National Centre of Competence in Research (CDE, Research Partnership North - South)
NEPAD (CAADP)	New Partnership for Africa's Development (Comprehensive Africa Agriculture Development Programme)
NGO/ NGA	Non-Governmental Organisation/ Non- Governmental Agency
NRM	Natural Resource Management
PCARRD	Philippine Council for Agriculture, Forestry and Natural Resources Research and Development
PAP/RAC FAO	Priority Actions Programme / Regional Activity Centre
PARDYP	People and Resource Dynamics Project
QA	Questionnaire on Approaches
QM	Questionnaire on the WOCAT Map
QT	Questionnaire on Technologies
RSA/ SA	Republic of South Africa
RWH	RainWater Harvesting
SLM	Sustainable Land Management
SSMP	Sustainable Soil Management Programme, Nepal
SWC	Soil and Water Conservation
SWOT	Strengths, Weaknesses, Opportunities and Threats
TF	Task force
ToR	Terms of Reference
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNU	United Nations University
WFP	World Food Programme
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 eleventh annual WOCAT Workshop and Steering Meeting, held in Cape Town, South Africa, in October 2006. 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

This year, a CD-ROM is attached to these proceedings with all major Power Point presentations and photographs. The reference to the presentation file is indicated in brackets behind the speaker's name.

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 South African hosts who organized an excellent and pleasant meeting.

OBITUARY OF JOSÉ (JOE) RONDAL

Dear Reader

Just before printing these proceedings, we have received very sad news from the Philippines: Dr. Joe Rondal passed away very unexpectedly on 30 January 2007, at the age of 57.

Joe was Chief of the Soil Conservation and Management Division, Bureau of Soils and Water Management (BSWM). We got to know him when he initiated a WOCAT network in the Philippines, which he then went on to coordinate with great commitment, sharing SWC experiences as well as successfully applying the WOCAT mapping method. He was an active and enthusiastic "WOCATeer": he attended all WOCAT annual meetings since 1999 as well as several other events including national and international training workshops, where he acted as a resource person. Within the WOCAT network, achievements in the Philippines were always cited as a WOCAT success story. This is largely attributable to Joe's commitment and charismatic skills in collaborating at the national and international levels.

Most importantly, Joe was not only a good work colleague: to many of us he became a dear friend, whom it was always a pleasure to meet and be with. This is also reflected in the fact that he and Romy Labios were not only inseparable WOCAT colleagues but also best friends, which made them achieve so much. Joe's pleasant, humble and gentle character was outstanding and we learnt a lot from him. Those who have had the privilege of knowing Joe will surely miss him.

At the international WOCAT workshop (WWSM) in Cape Town, Joe and Romy kindly offered to host the next WWSM (November 2007). It is very sad to realise that Joe will not be present among us.

We offer our sincere condolences to his family, his friends and his many colleagues in the Philippines – and all over the world.

On behalf of the WOCAT community:

The WOCAT global management
Hanspeter Liniger (CDE), Godert van Lynden (ISRIC), Clemencia Licona Manzur (FAO)

The editors of these proceedings
Mats Gurtner, Gudrun Schwilch, Rima Mekdaschi Studer



Joe chairing a discussion during the WWSM in Rome (2002) and with Romy at the WWSM in China (2004)

EXTENDED SUMMARY

Topic 1: Progress reports

Exchange of experiences from a high number of participants and countries, including presentations from young initiatives (Orissa, Indonesia, Nepal, Nigeria) and new promising initiatives (SADC, Pakistan, Tanzania, Zambia).

- Training on methodology (China *PRC-GEF OP12*, Indonesia, Tibet, India).
- Data collection and documentation (Ethiopia, South Africa, Nepal, Bangladesh, etc.) are continuously going on although in some cases at rather slow pace
- Data evaluation and peer review panel established and functional (Ethiopia, South Africa, Bangladesh)
- Example of mainstreaming / integrating WOCAT in national programmes: (Soil Protection Strategy South Africa, WOCAT Orissa)
- Adaptation of WOCAT tools for national purposes (QT with soil fertility focus in Nepal, AGIS website South Africa, translation and adaptation of WOCAT tools and guidelines into Bahasa Indonesia)
- Impact of WOCAT on SWC implementation (improvement of community involvement in watershed projects in Orissa, India due to evaluation with QA, implementation of SWC technologies in Kyrgyzstan)

General conclusions

- Documentation of new technologies (Ts) and approaches (As) and quality improvement of documented Ts and As has been going on as well as the compilation of case studies overview books. The low number of case study contributions to the global WOCAT database in the past year does not reflect the much higher number of case studies documented at the national level (often in a national language).
- WOCAT is playing a role at institutional / departmental level in various countries.
- How to include more African initiatives? WOCAT started in Africa, but the involvement of these WOCATeers has unfortunately decreased over the last years (except South Africa and Ethiopia). There is a need to look for committed individuals and institutions. SADC / ACT might renew and sustain the WOCAT activities initiated in Africa.
- The overall results of the taskforces were evaluated positively, in particular the Mapping TF and the WOCAT Strategy TF.
- WOCAT budget during 2006 was still increasing due to increased national/regional project activities and funding (without the in-kind contributions of national specialists providing information to the database). WOCAT should make use of and show core competence and comparative advantages of WOCAT (eg through the WOCAT strategy) to approach donors to finance global WOCAT activities. This should also be applied on regional/national basis.

Topic 2: Overview Books

The idea of consolidating the WOCAT experience (case studies and analysis) in an overview book as an output was picked up by several collaborating institutions (in Ethiopia, Bangladesh, Central Asia, South Africa, Nepal, Eritrea) even before the global overview book 'where the land is greener' was published.

Compilation and analysis of the case studies for 'where the land is greener' has been a very lengthy and arduous process, but this process itself should also constitute a learning experience from which other WOCAT partners can learn from. In that respect a layout matrix for national and regional overview books was presented during the meeting together with a brief training on its use.

Bangladesh presented a completed and already printed example of such a national overview book. A project in Eritrea used part of the WOCAT summary format for a publication on SWC, and Ethiopia presented its draft of a national overview book.

An overview book is seen as an output with which interested audience, including and in particular decision makers, can be attracted and influenced. It is also seen as an output that documents and justifies the investments made in SWC as well as in its documentation and evaluation.

Topic 3: Conservation Agriculture and Rainwater Harvesting

UK/SOWAP: The challenge in Europe is to convince the farmer that there is a problem. The booklet 'Conservation Agriculture in Europe – An approach to sustainable crop production by protecting soil and water?' presents the current knowledge and experiences of Conservation Agriculture in Europe along with a general guide to the practical implementation of its methods across the range of European cropping systems.

Switzerland: broad legal frameworks for soil protection exist. Almost 50% of the arable land of Switzerland would be suitable for conservation agriculture, but so far only on 25% it is actually applied. Erosion Damage Mapping is a suitable tool for impact assessment. WOCAT tools are easy to apply and technologies and approaches can be well-documented.

ACT: There are effective synergies when applying the three principles of no/reduced soil disturbance, soil cover and rotation simultaneously.

Mount Kenya: Combining current CA movement with rain water harvesting provides a great opportunity to achieve food security, poverty reduction, carbon sequestration and to mitigate water conflicts. This shows the impact of sustainable soil and water resource use in achieving the MDGs.

Conservation Agriculture in the Philippines varies from initiatives of International Agricultural Research Centres over initiatives of private industries to initiatives of public institutions.

Dryland management and rehabilitation through water harvesting measures in Pakistan.

Topic 4: WOCAT Strategy

The WOAT strategy will help WOCAT to look ahead (visionary), allocate resources, focus on key points (directional), and prepare for opportunities and threats / weaknesses (conceptual).

The presented version is based on a modular approach, where the 'core' and the 'activities' modules are drafted already. Other modules such as one containing a SWOT, one focusing on WOCAT background (history and achievements) etc. might follow.

The four fields of activities of WOCAT were defined as:

- Knowledge on SWC and SLM
- Tools and methods
- Information sharing and networking
- Research, training and education

It is important that the fields of activities are separated into those at global and those at national and regional level, as this also reflects the organisation of WOCAT. The module 'activities' is only an addition to the strategy core document. The idea is that donors may pick those activities which they like to fund.

A small assessment of the demand encountered so far as well as the opportunities and strengths in respect to the identified fields of activities and objectives helped to further shape WOCAT's future course. The development of the strategy paper will provide clarity for the structure of WOCAT and the roles of the institutions.

Topic 5: Mapping strategies

The South African team demonstrated the progress made with the on-line mapping system (ARC-IMS based) and the off-line viewer. The discussion was coupled to a more general discussion about the need as well as the pros and cons of changing from the current off-line data management system to an (interactive) on-line system for the mapping as well as the technology and approaches databases. A problem however might be the lack of sufficiently fast Internet connections, but this is likely to change soon in the near future.

The option of entering WOCAT case studies in Google Earth was also demonstrated and discussed. Though there was agreement that there was considerable overlap it was decided to maintain the WOCAT World Map activity, as this allows quick addition of very basic information on new case studies through the World Map form on the Website. This form could also be used as a pre-screening form for documentation of Ts or As, a strategy that has proven successful on the S. African AGIS Website.

Topic 6: Questionnaire revision

Due to the complexity of soil and water conservation and due to difficulties to use the questionnaire for rainwater harvesting technologies, for conservation agriculture and for watershed technologies (eg dams) and up-coming new issues such as carbon, desertification, poverty, etc. a questionnaire with more flexibility is requested. A modular questionnaire could deal with these up-coming challenges. It should be kept in mind that the aim of the questionnaire revision is to build up on existing questionnaires as much as possible, as WOCAT does not want to loose all the data that it already has.

A modular on-line system for WOCAT: In the long run WOCAT aims to develop a www based, internally (users profile of questions) and externally (additional modules appended by user) flexible on-line database.

Topic 7: Special presentations

Participants had the possibility to present some of their special achievements or highlights related to WOCAT.

Topic 8: WOCAT as tool for decision support

The database allows compiling the answers of a technology grouped into selected indicators, but the weighing procedure and the matrix is done 'manually'. That's where new tools could be developed to enable the user to click through a menu and assign weights digitally.

It is important to identify possible target groups: decision makers & donors as well as land users. A task force was initiated for follow-up.

An additional issue raised by the participants was the need for an impact monitoring tool for assessment of conservation activities. WOCAT already uses a lot of indicators, but this will lead a step further to get feedback from the implementation level through a participatory approach with land users and specialists. The impact monitoring tool should be developed together with the land users and for the land users to be used by themselves. This requires reformulating the questions in such a way that it is understandable and useful for the land users. The newly established impact monitoring task force will try to develop this idea further in an externally funded project.

Topic 9: Activity Plans for Next Year(s)

National and regional work plans:

National activity plans for next year were presented and discussed and the main global activities and events planned. All countries plan to further document, evaluate, and quality assure case studies, some intend to compile and publish a national overview book (Ethiopia, Nepal). Further, training workshops on WOCAT methodology and use were mentioned, as well as taking up of mapping activities. The mainstreaming of WOCAT into national programmes, research, education and training programmes (SWC, watershed management) is becoming more and more important.

An objective for 2007 is to revive and reform the Eastern African Regional WOCAT network and to identify an institution that can assist. SADC intends to initiate a regional WOCAT network in Southern Africa.

Global workplan

The following task forces were established and their activities planned: 'Decisions support tool', 'Questionnaire revision', 'Impact monitoring', 'Mapping', 'Digital products', 'WOCAT in research, training and education' and 'Strategy'.

Funding remains a critical issue, especially at global level. More resources are needed and should be allocated for fundraising. Part of funds should be assigned to global activities to sustain the WOCAT global management.

Administrative and organisational issues

The next WWSM will be in the Philippines:

Host: Bureau of Soil and Water Management BSWM, Quezon City

Where: Manila (and Tagaytay City), Philippines

When: 12 – 17 November 2007

Special topics: Tool development: revised questionnaires, on-line digital products, etc.; special inputs (documented Ts, As, spatial info), field trip (including farmers who use WOCAT)

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 Serbia 2005, South Africa was selected to host the 11th annual workshop. The meeting was hosted by the Department of Agriculture (DoA) and the Institute for Soil, Climate and Water (ISCW) from the Agricultural Research Council.

The workshop took place at the Southern Sun Hotel in Newlands, Cape Town during 6 days from Monday 23 to Saturday 28 October 2006, whereof one day was spent in the field. Decisions regarding the planning for next year were taken on the last day during the steering meeting.

50 participants from 27 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. 12 participants from the SADC network had to leave the meeting after two days for an own workshop nearby.

Major topics of WWSM11:

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 Overview Book(s);
- TOPIC 3: Special Topic Session (Conservation Agriculture and Rainwater Harvesting);
- TOPIC 4: WOCAT Strategy;
- TOPIC 5: Mapping;
- TOPIC 6: Questionnaire Revision;
- TOPIC 7: Special National / Regional Presentations;
- TOPIC 8: WOCAT as Tool for Decision Support;
- TOPIC 9: Activity Plans for Next Year(s)

WORKSHOP PROGRAMME

Date/time	Activity/Topic	Responsibilities
Sunday 22/10	Arrival of participants; registration	
Monday 23/10		
08:30 – 09:15	Opening, welcome <ul style="list-style-type: none"> - M. Paulse (Dept. of Agriculture, Western Cape): Welcome note - Mr. B Msomi (Dept. of Agriculture, Pretoria): Opening statement - <i>H.P. Liniger</i>: WOCAT coordinator 	Chair: D. Pretorius Rapp.: M. Gurtner B. Msomi
09:15 – 09:45	Introduction, participants' expectations, approval of agenda, administrative information (incl. info about reimbursements) (<i>Group photograph</i>)	<i>H.P. Liniger / R. v.d. Merwe</i>
	TOPIC 1 PROGRESS REPORTS	Chair: D. Pretorius Rapp.: M. Gurtner
09:45 – 10:30	Activities at the global level <ul style="list-style-type: none"> - Secretariat/Management Group/CDE - ISRIC - FAO 	<i>H.P. Liniger</i> <i>G. van Lynden</i> (<i>C. Licon-Manzur</i>) <i>W. Prante</i>
10:30 – 11:00	<i>Coffee break</i>	
11:00 – 12:30	Task Forces (max. 10 min. each) <ul style="list-style-type: none"> - Mapping – QM & World map (20') - TF Q-Revision - TF Strategic (business) plan - Use of WOCAT - WOCAT in research and education 	<i>D. Pretorius, G. van Lynden</i> <i>M. Gurtner (G. Schwilch)</i> <i>G. Schwilch</i> <i>A. Abdybek, S. Khisa</i> <i>M. Zlatic, R. Labios</i>
12:30 – 14:00	<i>Lunch break</i>	
14:00 – 16:00	Presentation of regional / national progress reports and work plans (<10 min. each!)	<i>Regional and national representatives</i>
16:00 – 16:30	<i>Coffee break</i>	
	TOPIC 2 WOCAT OVERVIEW BOOK(S)	Chair: S.K. Khisa Rapp.: R. Labios
16:30 – 18:00	<ul style="list-style-type: none"> - Presentation: global (15') and national (Ethiopia (10'), Eritrea (10'), Bangladesh (10'), ICIMOD (5'), S. Africa (5'), Central Asia (5')) - Launch, distribution, marketing - Feedback of information to database - Motivation for national/regional books 	<i>H.P. Liniger, D. Danano,</i> <i>M. Gurtner, S.K. Khisa, I. Providoli, R. v.d. Merwe,</i> <i>A. Gareeva</i> <i>H.P. Liniger</i>
19:00	<i>Welcome Dinner</i>	
Tuesday 24/10		
08:30 – 10:00	National/Regional Progress reports and workplans cont'd.	
10:00 – 10:30	<i>Coffee break</i>	
	TOPIC 3 SPECIAL TOPIC SESSION	Chair: A. Gareeva Rapp.: G. Schwilch
10:30 – 12:00	WOCAT and Conservation Agriculture / Rainwater Harvesting (max.15 min. each!) <ul style="list-style-type: none"> - CA in Europe (SOWAP / ProTerra) - CA experiences in Switzerland (COST project) - CA in Africa (ACT) - CA in Kenya - CA experiences in the Philippines - CA experiences in Kyrgyzstan - RWH in Pakistan 	<i>A. Leake</i> <i>H.P. Liniger (T. Ledermann)</i> <i>M. Bwalya</i> <i>J. Ndungu</i> <i>R. Labios</i> <i>A. Asanaliyev</i> <i>I. Khan</i>

12:00 – 13:30	<i>Lunch break</i>		
	TOPIC 4 WOCAT STRATEGY		Chair: J. Rondal Rapp.: I. Providoli
13:30 – 14:15	Presentation of WOCAT Strategy document, highlighting focus and priority areas, incl. plenary discussion		<i>G. Schwilch</i>
14:15 – 15:30	Regional group meetings with discussions on national and regional strategy (incl. exercise to evaluate the demand for WOCAT fields of activities)		
15:30 – 16:00	Feedback from group meetings and short evaluation of exercise		
16:00 – 16:30	<i>Coffee break</i>		
	TOPIC 5 MAPPING		Chair: D. Danano Rapp.: W. Prante
16:30 – 17:30	Demonstration of the new tools (plenary) Google Earth		<i>C. Pretorius</i> <i>G. van Lynden</i>
17:30 – 18:00	Introduction to field trip		<i>R. v.d. Merwe</i>
Wednesday 25/10	FIELD TRIP		
Thursday 26/10			
	TOPIC 6 QUESTIONNAIRE REVISION		Chair: D. Danano Rapp.: M. Gurtner
8:00 – 8:30	Introduction to questionnaire revision		<i>G. Schwilch</i>
8:30 – 9:00	A modular system for questionnaires and databases		<i>W. Prante</i>
	Introduction to group works		
9:00– 10:00	<i>(TOPIC 5 cont'd)</i> <i>(G. van Lynden)</i> Group work on mapping strategies	<i>(TOPIC 6 cont'd)</i> <i>(G. Schwilch)</i> Group work on Q. revision	<i>Special interest groups</i>
10:00 – 10:30	<i>Coffee break</i>		
10:30 – 12:30	<i>(TOPIC 5 cont'd)</i> <i>(G. van Lynden)</i> Group work on mapping strategies	<i>(TOPIC 6 cont'd)</i> <i>(G. Schwilch)</i> Group work on Q. revision cont'd	
12:30 – 14:00	<i>Lunch break</i>		
14:00 – 15:00	Feedback from group work (plenary)		
15:00 – 16:00	Trainings in two rotating groups on A) mapping tools (C. Pretorius) B) overview book templates (M. Gurtner)		
16:00 – 16:30	<i>Coffee break</i>		
	TOPIC 7 SPECIAL NATIONAL/REGIONAL PRESENTATIONS		Chair: W. Graf Rapp.: X. Shen
16:30 – 18:00	Max. 10 min. each! - CA activities in South Africa - Soil and water conservation activities and WOCAT in CA - Use of WOCAT tools in watershed development programmes in Orissa - Strength and weakness of documented 'A' and 'T's in CHT and problems encountered during documentation, and preparation QM. - Presentation or short film about WOCAT achievements in Serbia - Soil cover crops in Tanzania		<i>R. v.d. Merwe</i> <i>A. Gareeva</i> <i>R. Prasad</i> <i>J.U.M Shoaib</i> <i>M. Zlatic</i> <i>W. Mariki</i>

Friday 27/10		
08:00 – 08:20	Questions concerning Presentations of TOPIC 7	
08:20 – 09:00	WOCAT on-line prototype (incl. discussion)	<i>W. Prante</i>
09:00 – 09:15	Conservation agriculture practices in Tanzania	<i>W. Mariki</i>
	TOPIC 8 WOCAT AS TOOL FOR DECISION SUPPORT	Chair: R. Labios Rapp.: S. Anwar
09:15 – 10:00	Presentation of ideas for <ul style="list-style-type: none"> - assessment/evaluation tool - decision support tools Plenary discussion Introduction to group work	<i>G. v. Lynden</i> <i>H.P. Liniger</i>
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:15	Group work on: <ul style="list-style-type: none"> - Decision support tools - On-line and off-line tool developments - Minimum selection of questions - Mapping tool (QM and worldmap) - Impact monitoring 	
11:15 – 12:00	Feedback from group work	
12:00 – 13:30	<i>Lunch break</i>	
	TOPIC 9 ACTIVITY PLANS FOR NEXT YEAR(S)	Chair: G. v. Lynden Rapp.: C. Pretorius
13:30 – 15:30	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) <ul style="list-style-type: none"> - 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 	
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 17:00	Short presentation of workplans (major events, improved / new Ts /As, needs from global WOCAT)	
17:00 – 18:00	First task force meetings	
Saturday 28/10	STEERING MEETING	Chair: H.P. Liniger Rapp.: G. Schwilch
08:00 – 08:45	Presentation of taskforce activity plans	
08:45 – 10:00	Global activities for next year <ul style="list-style-type: none"> - strategy reflection - major priorities - major events - funding - additional funding needs and opportunities - compilation of materials / contributions to workshop proceedings 	<i>H.P. Liniger / G. Schwilch</i>
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:00	Confirmation of global management and secretariat of WOCAT, election of host of next WWSM 2007	
11:00 – 12:00	Feedback from participants (against expectations)	
12:00 – 12:30	A.O.B.	
12:30 – 13:00	Closing	
13:00	<i>Lunch</i>	

WELCOME SPEECHES

Marius Paulse, Department of Agriculture Western Cape (Head)

Marius Paulse introduces the Western Cape region not only as a top tourist destination, a natural beauty and a biodiversity hotspot, but also as an area with high agricultural production – mainly wine and fruit: half of the agricultural export of the Republic of South Africa is coming from this region. On the other hand he points out that the region is affected by severe environmental problems such as limited water resources and water pollution; Government-initiated programmes such as “Working for Water” and “Landcare” try to respond to these problems. He considers WOCAT an important tool to exchange knowledge and contribute to more sustainable use of natural resources.

Bonga Msomi, Department of Agriculture (Director Land Use and Soil Management)

Bonga Msomi passes on greetings from the Director General from DoA, Dr. Masiphula Mbongwa, to all participants. He is happy that the SADC members accepted the invitation to join the meeting for the first two days. He considers SADC as kind of a mini-EU for Southern Africa. He also points out the water problems in the Western Cape and the important role that WOCAT plays in this regard. He underlines that the Department of Agriculture supports the use of WOCAT tools since 10 years: after a first workshop in the Northern Province in 1995 the first phase of WOCAT was approved in 1997. He highlights the major outputs: data collection for 60 QTs / QAs and the development of map tools. The new map viewer based on ArcIMS is now a fully operational system (on AGIS webpage). The map item will be included in Landcare programme to monitor effectiveness. WOCAT has a high priority within the South African Agricultural Development Programme (SAADP), part of African Agricultural Development Programme (AADP); the programme aims at providing technical assistance to African countries. He closes with the wish that the participants will leave the workshop with new ideas on how to develop WOCAT in their regions/countries.

Hanspeter Liniger; Coordinator WOCAT

Hanspeter Liniger gives a brief introduction to WOCAT for the newcomers, focusing on WOCAT's vision and mission and some main achievements. Major efforts were made so far to come up with a standardized documentation. These tools are freely available. He notes that during the ISCO conference 2006, 62 of the presentations were still on degradation and only 32 on conservation showing the on-going focus of research on degradation rather than conservation efforts.

He then reviews the involvement of South Africa in WOCAT and looks at the recent WWSMs and the general goal of these annual workshops. These are mainly personal contacts, exchange of knowledge, joint development in group work and through individual inputs, training on selected topics and planning & decision making.

He also introduces the topics of the workshop and states that this year's participation is the highest since ever (55 participants from 28 countries)

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TOPIC 1 PROGRESS REPORTS

Rapporteur: Mats Gurtner

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 September 2005 (WWSM10 Serbia) to October 2006 (WWSM11 South Africa).

1.1 Activities at the global level

1.1.1 Review 2006

Major achievements in 2006:

Overview book: Finalisation of case studies, analysis, conclusions and policy points after an intensive discussion with reviewers and donors; pre-print of the overview book ready for distribution at WWSM11, demand driven preparation of the template to present technologies and approaches on four pages, as used for the case studies included in the global overview book, to facilitate production of national overview books (Ethiopia, China).

WOCAT strategy: Based on discussions held at WWSM10 a draft of WOCAT strategy for the next 5 years was developed and sent to the reviewers for comments and feedback. The 'strategy taskforce' met also with donors to discuss the set up structure/layout and objectives of a strategy and funding plan. A reviewed strategy draft will be presented, discussed at WWSM11. WOCAT is in a critical phase to identify its long-term future. A strategy plan will help WOCAT to look ahead (visionary), allocate resources, focus on key points (directional), and prepare for opportunities and threats / weaknesses (conceptual).

Networking: Major presentations during the Conservation Agriculture Congress, Nairobi Oct 05 and ISCO Marrakech, May 06.

Training and backstopping from the global WOCAT programme to the WOCAT activities within countries have been and are expanding.

- In Ethiopia, for example, the documentation and evaluation of SWC technologies and approaches as well as the mapping of SWC is increasing.
- In China, a GEF project got involved (see below under capacity building).

New promising contacts were initiated and pursued. For example the use of WOCAT tools to document and assess Intercooperation's (IC, Swiss NGO) experience in some of the projects implemented in Pakistan and India has been discussed.

Communication with WOCAT collaborators was/is being maintained throughout the year.

Capacity building: Major WOCAT training workshop in Kenya organised by IRHA. Suitability of WOCAT tools for the two networks (IRHA and SEARNET) was discussed and adaptations needed identified, which will be considered in the Q-revision planned.

China – GEF-OP12 programme working in 6 provinces of the Loess plateau - requested a training on the WOCAT methodology and its tools which was conducted in Shangxi in April 06. There was a strong request to further develop WOCAT tools for assessment and evaluation of costs/benefits and for decision support.

Support and backstopping for the Ethiopian national overview book (the Ethiopian experience could encourage other countries to follow its example).

In Indonesia a WOCAT training workshop was held to support a national initiative.

WOCAT in research: The EU-proposal DESIRE ('Desertification mitigation and remediation of land') where WOCAT will be a major partner was prepared and approved. DESIRE is an EU funded 'Integrated Project' with 28 partner institutions mainly in the Mediterranean. CDE and ISRIC coordinate two out of six working blocks and WOCAT offers assessment tools to be implemented at 18 test sites.

An example of the link to NCCR-project in Central Asia is the terminated diploma thesis: Assessing soil erosion and conservation in the Loess area of Faizabad, Western Tajikistan, integrating WOCAT methods with GIS-based RUSLE model (Erik Bühlmann, 2006). Erik calculated for different local SWC innovations the costs and benefits in terms of erosion reduction.

In the COST 634 project in Switzerland, WOCAT has a coordinating role and the methodology is used together with other methods to assess on- and off-site impacts of soil erosion and conservation agriculture.

WOCAT in education: Two major training courses and lectures have been conducted at the University of Bern

Delays and postponements due to commitments for and setting priorities to the above mentioned activities:

- Printing of overview book
- Review panel / WOCAT label
- ToRs regional/national coordinators
- Revision of questionnaires

Objectives / Expected results	Activities	Planning 2006: Major global activities planned for Sept. 2005 – Aug. 2006 bold → top priority highlighted points → not fulfilled	Review 2006: Achievements Sept. 2005 to Sept. 2006 bold → major achievements highlighted points → add. achieved activities
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 	<ul style="list-style-type: none"> Proceedings of WWSM 10 compiled and disseminated Global overview book: preprint ready, publishing date early 2007 Dissemination strategy for overview book (launch) initiated for 2007 Reviewed draft of WOCAT strategy for the next 5 years ready Contribution to SDC's publication: Coping with drought Preparation of special poster for the IYDD and made available to WOCAT collaborators As a contribution to IYDD a poster on achievements in combating desertification was prepared and presented at ISCO 06. Attendance and/or output at conferences: Cons. Agriculture Congress, Nairobi Oct 05, UNCCD COP, Nairobi Oct.05, Infasa Bern, March 06; 4th World Water Forum Mexico, March 06; ISCO Marrakesh, May 06 Global map and mapping: offline and online map viewer improved and discussion about further steps, expansion and development of world map etc. Layout proposal for the presentation of technologies and approaches on 4 pages, as used for the 'Overview book' case studies made available in MSWord format to be used for national and regional overview books (sent to China and Ethiopia) Global database: some new representative T's and A's (UK, Tajikistan)
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 	<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 	<ul style="list-style-type: none"> Support national review panels: eg Ethiopia, Central Asia (CAMP) Support and backstop data collection and evaluation: eg China, Indonesia Address knowledge gaps: linking to research eg. COST (2 PhDs, MSc), NCCR- N-S (PhD and MSc), SOWAP Approval of EU-project proposal DESIRE

	<ul style="list-style-type: none"> ○ 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 WOCAT labels • Backstopping training and data collection depending on requests • Advance WOCAT in research and education 	
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 ○ 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, UNCB, 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"> • 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 (ToRs) • Explore potential of WOCAT activities being funded through GEF: preparatory medium term project (1 M \$) • 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) 	<ul style="list-style-type: none"> • WOCAT/CDE brainstorming about WOCAT's future (Berne Nov 8), WOCAT strategy developed further, sent to reviewers for comments and feedback; strategy taskforce meeting with reviewers and donors (Aug. 06), strategy draft to be discussed and approved at WWSM11 • Attending meetings and conferences at which new contacts are made, eg. CA Congress, Nairobi Oct 05, IAEA Vienna, March 06, ISCO 06 Marrakech, May 06, Desertification and Global Change Bern, May 06, SOWAP (Harper Adams, Nov. 05 and Prague, June 06); and WOCAT promoted: eg IC in Pakistan and India, Univ of Köln, Germany etc. • Articles in a Swiss daily newspaper and local papers • Using other networks: collaboration with Conservation Agriculture and Rainwater Harvesting (IRHA) and SEARNET • Discussions with UNCCD national programmes (Central Asia: Tacis) • Intense email communication with a great number of WOCAT collaborators throughout the year • 3-day map taskforce meeting held in Rome in June 06 with participants from South Africa, FAO, ISRIC and CDE • 1-day Q-revision taskforce pre-discussions on strategy of implementation • GEF-OP12 programme supported through backstopping • Strengthen link to research (NCCR, COST) and WOCAT's participation in EU research projects: EU proposal DESIRE approved. • Include WOCAT in education curricula • 1 WOCAT newsletters edited and distributed • Co-funding by CTA and FAO to expand the number of Overview Book copies and ensure dissemination • WWSM 11 conducted

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 ○ include and use WOCAT in training and education 	<ul style="list-style-type: none"> • Contribute to LADA training workshops • China training Workshop • Support Ethiopia Overview Book (5/06) • Conduct regional mapping training workshop (ICIMOD, India, China) • WOCAT in education: Master / PhD studies, lectures • Training modules 	<ul style="list-style-type: none"> • LADA meeting planned for Nov.06 in Rome • IRHA training workshop held in October 05 in Kenya • IAEA related training workshop held in Istanbul in October 05 • China training workshop on WOCAT methodology and tools provided, April 06 • Ethiopia training workshop on quality assurance, mapping and production of a national overview book, June 06 • Indonesia training workshop on WOCAT methodology and tools provided, August 06 • Tibet training workshop on WOCAT methodology and tools provided, June 06 • NCCR- PhD and MSc studies using and further developing WOCAT's use and tools in Tajikistan • WOCAT in education: Swiss College for Agriculture Zollikofen, lectures and field training courses in relation to COST-project, University of Berne
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"> • 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 	<ul style="list-style-type: none"> • 4 page summary for presenting and publishing Ts and As was standardised, put in appealing format and offered in MS Word • Initiation of questionnaire revision (Q professional and basic) to include global issues and address MDGs: compilation of issues to be addressed/ corrected, strategy how to realise best and implement the revision to come up with a sound and user friendly product • Identification by collaborators of weaknesses in the evaluation / assessment tool • Improving the mapping tool and QM database management system • Updated website

1.1.2 WOCAT Secretariat (administrative and logistic)

Main activities:

- Reactions to e-mails and requests for outputs such as brochures, CD-ROMs (CD-ROM v.3, CD-ROM Video);
- Co-organising of WOCAT Workshop and Steering Meetings
- 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. To promote 'decentralisation' an internet platform for information and knowledge exchange will be developed/ offered.

1.1.3 Funding

a) SDC

- The annual budget is CHF 432,000 (about USD 359,450 / EUR 283,500) for the current phase 2005-2007;
- An additional budget of CHF 29,500 (about USD 23,600 / EUR 18,600) was approved for impact analysis of conservation agriculture on crop water use and production as well as for the preparation of presentations at the Conservation Agriculture Congress Oct. 05 in Nairobi
- SDC contributed CHF 50,000 (about USD 40,000 / EUR 31,600) to the WOCAT/IRHA training workshop in Oct. 05 in Kenya

b) Syngenta Foundation

- CHF 50,000 per year (about USD 40,000 / EUR 31,600) for a three-year period (2004-2006).

c) Other donors

- CTA will contribute CHF 33,000 (about USD 26,500 / EUR 20,000) for the printing and dissemination of the overview book
- FAO will contribute CHF 12,500 (about USD 10,000 / EUR 8,200) for the printing and dissemination of the overview book
- In the SOWAP project an amount of EUR 21,000 (USD 27'700) per year is allocated (subcontract with ISRIC) for basic WOCAT activities at global level. SOWAP was terminated in July 2006.
- EU-DESIRE project CHF 500,000 (about USD 400,000 / EUR 300,000) for 5 years.
- EU-COST Switzerland research project on conservation agriculture: CHF 295,000 (about USD 236,000 / EUR 186,200) 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.
- DANIDA: Follow-up discussions with DANIDA have been initiated.

1.1.4 Financial contributions 2006

Financial Contributions to WOCAT between 10/04 and 10/06 (in USD)								
	10/04-09/05			09/92-09/05	09/05-10/06			09/92-10/06
	Cash	In-kind	Total	Total	Cash	In-kind	Total	Total
ADB/China National level/GEF		10'000	10'000	57'100	32'000		32'000	89'100
ASOCON (Indonesia)				62'000	36'028	6'000	42'028	104'028
CAMP Central Asia	26'250	190	26'440	60'640				60'640
CDE			0	70'000			0	70'000
CHTDB (Bangladesh)	5'900	100	6'000	10'700	4'000	100	4'100	14'800
CIS – Vrije Universiteit		10'000	10'000	100'000		25'000	25'000	125'000
CTA					26'500		26'500	26'500
DANIDA	66'400		66'400	355'700			0	355'700
DED (Niger)			0	6'000			0	6'000
ESAPP Ethiopia			0	39'735			0	39'735
FAO	14'000	12'000	26'000	959'240	10'000		10'000	969'240
FJSWCO China (ADB/FSWCC)	3'000	500	3'500	69'000				69'000
GTZ/OSS			0	243'000			0	243'000
HIMA - Iringa Tanzania								
IBSRAM			0	5'500			0	5'500
ICARDA				35'000				35'000
ICIMOD		15'000	15'000	44'500	2'000	9'000	11'000	55'500
ICRISAT (Niger)			0	31'000			0	31'000
IDRC			0	85'000			0	85'000
Indonesia (GOV.)	5'000		5'000	21'000	36'028	6'000	42'028	63'028
INSAH (CILSS)			0	10'000			0	10'000
ISRIC		15'000	15'000	255'000	0	10'000	10'000	265'000
Kazakhstan	7'800	7'800	15'600	25'150				25'150
LDD (Thailand)			0	51'500			0	51'500
MAFS-SCLUPU (Tanzania)			0	7'890			0	7'890
MoA, RDF/ MADRPM (Morocco)	9'000	14'000	23'000	23'000	9'000	14'000	23'000	46'000
MoA: SWC Kenya				20'500				20'500
MoA: SWC, Tanzania								
MoA: WFP, Ethiopia	1'200	6'000	7'200	43'600	8'000	4'500	12'500	56'100
NDA/ISCW (ARC) / DoA RSA	100'000		100'000	301'800	55'446		55'446	357'246
OSWU			0	4'000			0	4'000
PASOLAC/GTZ/LA (Nicaragua)			0	74'000			0	74'000
RSCU/RELMA			0	186'500				186'500
SDC	361'050		361'050	2'529'050	359'450		359'450	2'888'500
SDC-CA					23'600		23'600	23'600
SDC-IRHA					40'000		40'000	40'000
SOWAP		27'000	27'000	62'000	27'700		27'700	89'700
SWCMC (China)	8'500	3'500	12'000	17'000	21'200	8'000	29'200	46'200
Syngenta Foundation	41'500		41'500	91'500	40'000		40'000	131'500
Tajikistan	3'000	600	3'600	9'500	12'000		12'000	21'500
UNCCD-GTZ (CAMP Kyrgyzstan)				19'700	32'000		32'000	51'700
UNEP			0	100'000			0	100'000
University Belgrade	6'000	1'800	7'800	12'000	6'000	4'000	10'000	22'000
UPLB/BSWM (Philippines)	1'000	2'000	3'000	59'500	1'750	2'000	3'750	63'250
WASWC	500	1'500	2'000	15'500				15'500
WDCU India				75'000				75'000
ORISSA India					31'000	20'000	51'000	51'000
SADC						6'000	6'000	6'000
IC-Pakistan					5'000	1'500	6'500	6'500
Total	660'100	126'990	787'090	6'248'805	818'702	116'100	934'802	7'183'607

Conversion rates (1.10.06): 1\$ = 0.821 Euro, 1\$ = 1.301 CHF

1.1.5 Publicity

- WOCAT on the Internet (www.wocat.net): see statistics below;
- WOCAT newsletter (2x) and contributions to WASWC newsletters;
- WWSM10 proceedings 2005
- Presentations at meetings and workshops (name refers to person who has presented):
 - PAP/RAC - FAO workshop on Experiences in Combating Land Degradation in Mediterranean Coastal Areas: Documenting, evaluating and sharing conservation experiences - WOCAT methodology and network, SCHWILCH, Gudrun; 10-12 October 2005, Rome, Italy
 - IAEA Third Research Project Co-ordination Meeting to "Assess the effectiveness of soil conservation techniques for sustainable watershed management using fallout radionuclides": Using WOCAT tools for the CRP soil conservation, SCHWILCH, Gudrun; 27-30 March 2006, Vienna, Austria
 - 14th conference of ISCO (International Soil Conservation Organization): 'where the land is greener' - case studies and analysis of soil and water conservation initiatives worldwide, LINIGER, Hanspeter; 14-18 May 2006, Marrakech, Morocco
 - 14th conference of ISCO (International Soil Conservation Organization): 'Mapping the unknown', VAN LYNDEN, Godert, 14-18 May 2006, Marrakech, Morocco
 - III World Congress on Conservation Agriculture: Quantifying the impacts of Conservation Agriculture (CA) on water use, soil quality and productivity, LINIGER, Hanspeter, 3-7 October 2005, Nairobi, Kenya
 - LADA – FAO Project Steering Committee Meeting and Technical Workshop: 2 presentations: (a) WOCAT and LADA, (b) 'where the land is greener' WOCAT book launch, LINIGER, Hanspeter; 28 November – 1 December 2006, FAO Headquarters, Rome, Italy
- Posters:
 - III World Congress on Conservation Agriculture: Capitalizing on the vast knowledge of Conservation Agriculture measures, by SCHWILCH, Gudrun and LINIGER, Hanspeter; 3 - 7 October 2005, Nairobi, Kenya.
 - III World Congress on Conservation Agriculture: Impacts of Conservation Agriculture on crop water use and production, by GITONGA, Jeremiah Lewis; LINIGER, Hanspeter and SCHWILCH, Gudrun; 3 - 7 October 2005, Nairobi, Kenya.
 - 7th Session of the Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD): Maps identifying hot and green spots - Tools for your CCD programs! by SCHWILCH, Gudrun and LINIGER, Hanspeter; 17-28 October 2005, Nairobi, Kenya.
 - 7th Session of the Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD): Case studies identifying hot and green spots - Tools for your CCD programs! by SCHWILCH, Gudrun and LINIGER, Hanspeter; 17-28 October 2005, Nairobi, Kenya.
 - 4th World Water Forum: Global exchange of knowledge, by WOCAT; 16-22 March 2006, Mexico.
 - Infasa (International Forum on Assessing Sustainability in Agriculture) Symposium on Indicator and Assessment Systems: Addressing knowledge gaps in soil and water conservation - the WOCAT approach, by SCHWILCH, Gudrun and LINIGER, Hanspeter; 16-17 March 2006 Berne, Switzerland.
 - Infasa (International Forum on Assessing Sustainability in Agriculture) Symposium on Indicator and Assessment Systems: WOCAT tools: Solution-oriented learning, by WOCAT; 16-17 March 2006 Berne, Switzerland.
 - 14th ISCO (International Soil Conservation Organization) Conference: 'Where the Land is Greener' – Achievements in Combating Desertification. Rewarding Investments in Documenting and Evaluating SWC Knowledge, by SCHWILCH, Gudrun and LINIGER, Hanspeter; 15-18 May 2006, Marrakech, Morocco (also in French).
- Paper presenting WOCAT
 - LINIGER, Hanspeter, 2006: Quantifying the impacts of Conservation Agriculture (CA) on water use, soil quality and productivity. Paper presented at III World Congress on Conservation Agriculture, Nairobi, Kenya, 3-7 October, 2005.
 - LINIGER, Hanspeter; SCHWILCH, Gudrun; HURNI, Hans and CRITCHLEY, William, 2006: Soil and Water Conservation, Global Change, and the Millennium Development Goals – An Evaluation by WOCAT. Paper presented at the 14th conference of ISCO (International Soil Conservation Organization), Marrakech, Morocco, 14-19 May, 2006.
 - VAN LYNDEN, Godert; PRETORIUS Dirk; PRETORIUS Carin; SCHWILCH, Gudrun and LINIGER, Hanspeter, 2006: Mapping the unknown? The extent of Sustainable Land Management. Paper presented at the 14th conference of ISCO (International Soil Conservation Organization), Marrakech, Morocco, 14-19 May, 2006.

- LINIGER, Hanspeter; SCHWILCH, Gudrun; HURNI, Hans and CRITCHLEY, William, 2006: Soil and Water Conservation, Global Change, and the Millennium Development Goals – An Evaluation by WOCAT. In: 14th ISCO Proceedings 14-18 May, 2006 Marrakech, Morocco
- G. van Lynden, Ceris Jones, Kathleen Gillijns, 2005: Documentation and evaluation of case studies of soil and water protection using conservation tillage in N. and C. Europe. Paper presented at III World Congress on Conservation Agriculture, 3 - 7 October 2005, Nairobi, Kenya
- Book/Publication chapters presenting aspects of using WOCAT:
 - CRITCHLEY, William and LINIGER, Hanspeter, 2006: WOCAT: a framework for monitoring and evaluation of soil and water conservation initiatives. In: World Association of Soil and Water Conservation (WASWC: DE GRAAFF, Jan; CAMERON, John; SOMBATPANIT, Samran; PIERI, Christian and WOODHILL, Jim eds.): Monitoring and Evaluation of Soil Conservation and Watershed Development Projects. Science Publishers, Inc New Hampshire, USA.
 - Exchanging experiences and knowledge to overcome desertification. In: Coping with drought. SDC publication, pp 28-29.
- WOCAT 2007: 'where the land is greener'. Case studies and analysis of soil and water conservation initiatives worldwide. Editors: Liniger Hanspeter and Critchley, William, CTA, Wageningen (pre-print)
- Report on Rainwater Harvesting & Soil and Water Conservation for Food Security, Exposure Dialogue Programme II, IRHA/ WOCAT/ CETRAD training workshop, 10th-16th October 2005, Nanyuki, Kenya

1.1.6 WOCAT website statistics

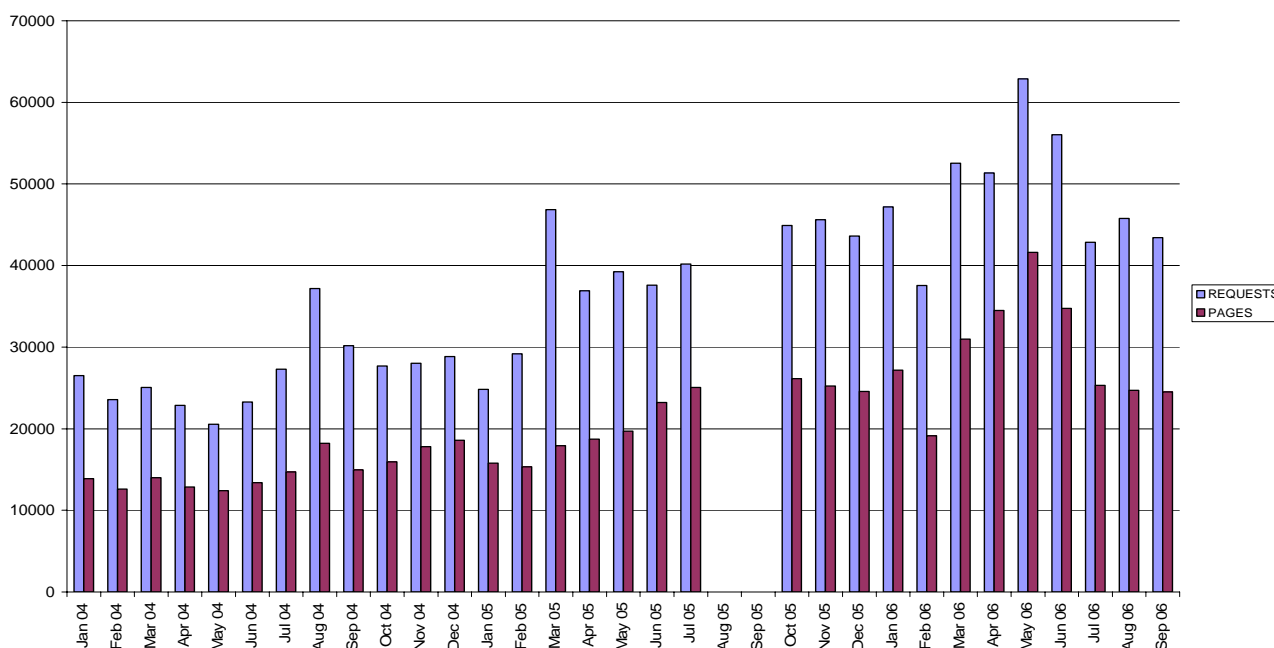
Compiled by Gudrun Schwilch

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

Website statistics Oct. 05 to Sep 06 (12 months):

- Total requests: 573,784 (1,572 / day) (2005 (10 months): 339,340 (1,116 / day), 2004: 315,129 (861 / 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: 338,603 (927 / day) (2005 (10 months): 188,003 (618 / day), 2004: 168,214 (459 / day));
- Distinct hosts: 20,620 (number of different computers) (2005: 11,256 (10 months); 2004: 10,882);
- The high level of June/July 2005 (end of last recording period) could be maintained throughout 2006. May and June 2006 were extraordinary high (maybe due to the ISCO conference in May)

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;
- Most requested pages

English:

- Home (default.asp) with 120,794 requests is the absolute leader of the requested pages! But this is rather pointless as it may indicate that many people get to the WOCAT home page but not any further.
- World map (worldmp.asp) has 2,620 hits
- Database (databs.asp): 2,617
- Introduction to WOCAT (about1.asp): 2,277
- Contact form (contact.asp):
- WOCAT process (about2.asp): 2,102
- Latest Newsletter (newslet.asp): 2,100
- There are following many with about 2000 requests, such as about3.asp, aboutwct.asp, collab.asp, newslat.asp, about3.asp, about6.asp

French:

- Carte mondiale / World map (worldmap_F.asp): 1,822
- Contact form (contact_F.asp): 1,397
- Bases de données / database (databs_F.asp): 1,385
- Accueil / Home (default_F.asp): 1,283

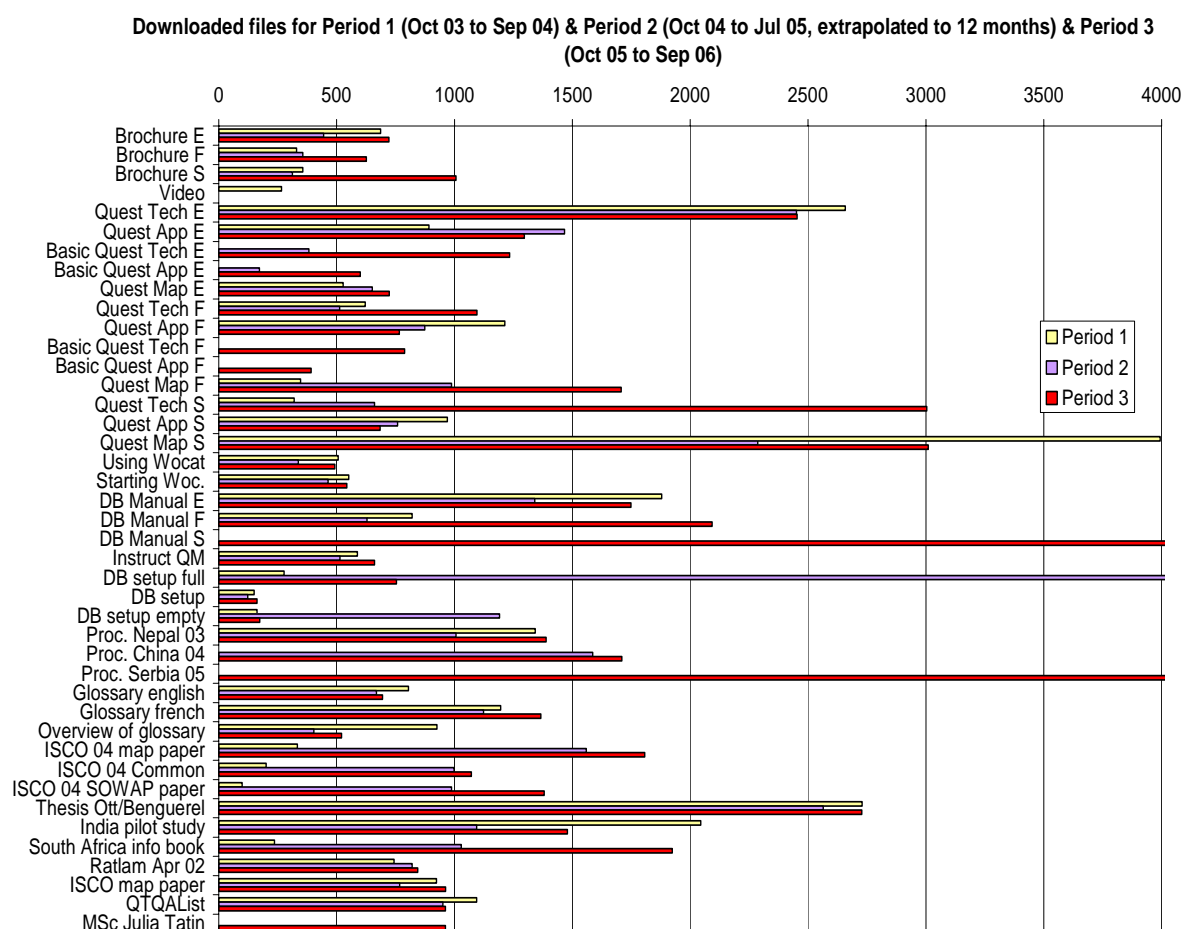
Spanish:

- Mapa global / World map (worldmap_S.asp): 2,012
- Bases de datos/ database (databs_S.asp): 1,441
- Proceso WOCAT / WOCAT process (about2_S.asp): 1,358
- Contactos / contact form (contact_S.asp): 1,338

- The most frequently downloaded files:
 - The report from the WWSM 05 in Belgrade (wwsmserbia05.pdf) is the most frequently downloaded file with 6,581 requests.
 - On the second place (4,523 requests) is the Spanish (!!) database manual (dbmanuals.pdf)
 - On the third place (3,010 requests) is the Spanish (!!) map questionnaire
 - Spanish (!!) technology questionnaire (professional): 3,004
 - The downloads of the master thesis of Ott and Benguerel 1999 are again very high (2,728 requests), even though it is only available in German
 - Technology questionnaire English: 2,454
 - French database manual: 2,094
 - South Africa Info Book: 1,924
 - ISCO-04 paper WOCAT mapping: 1,807
 - English database manual: 1,749

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 Licon Manzur, presented by Wolfgang Prante
(FAO_Report.ppt, FAO_Report_brief.ppt)

Activities related to WOCAT

- Invitation for WOCAT to participate in the PAP/RAC - FAO Experiences in Combating Land Degradation in Mediterranean Coastal Areas
 - Workshop organised by AGLL and PAP/RAC
 - WOCAT invited to participate as part of the international initiatives session
 - G. Schwilch presented WOCAT as a tool for documenting, evaluating and sharing soil conservation experience
 - PAP/RAC requested recently the possible linkage of WOCAT and PAP/RAC activities in Tunisia
- Co-funding and revision of the WOCAT book
 - FAO through LADA project contributes USD 10 000 for the printing of the WOCAT book (LoA is being processed)
 - Comments were provided on the first version, excluding technologies and approaches sheets which were reported as in final stage
- Participation in the revision of the WOCAT Strategy
 - The preparation of a WOCAT strategy paper has been on the table for two years
 - FAO produced a first draft of a "business plan" for the meeting in Serbia
 - Modifications carried out through meetings in Bern (FAO not involved) were reviewed.
 - FAO couldn't participate in the TF meeting in August 2006
 - A draft version of the revision was received recently- not on time to comment

Future activities FAO - WOCAT

Depending on the outcomes and discussions of the meeting...

- Development of web-based flexible questionnaires
- Harmonization of units to those produced by LADA (towards the end of 2007)
- Customization of questionnaires to LADA needs
- Participation of WOCAT resource person(s) in training for LADA pilot countries
- Participation of WOCAT experts in the development of curricula for LADA regional training centres
- Potential participation of WOCAT active countries in LADA directly (only a possibility at the moment)
- Role of FAO in WOCAT reconsidered

1.1.8 ISRIC

Report by Godert van Lynden (ISRIC activities 2005-2006.ppt)

- Assist in general coordination of the network
 - WOCAT Strategy document inputs & meeting Bern, August
 - Funding proposals for International Year of Planet Earth
 - WOCAT Newsletter and mailing list
- Participate actively in methodological discussions (most by Email)
 - Map meeting Rome (July) + follow-up (e.g. Google Earth)
- Regular feedback on Email requests
- Participate in meetings and trainings
 - III World Congress on Conservation Agriculture: 3 - 7 October 2005, Nairobi, Kenya
 - Presentation about WOCAT Mapping at ISCO14, Marrakech (Morocco); May
 - Participation in WOCAT training, Solo (Indonesia); September
 - Presentation about WOCAT Mapping at COST 634 meeting, Wageningen (Netherlands), October
- Co-organising WWSM11

1.2 Progress reports of taskforces**1.2.1 Mapping – QM & World map**

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

Report by Dirk Pretorius (TF Mapping_Oct06.ppt)

Background

World map:

- show selected global case studies
- promotion of WOCAT

Map questionnaire:

- land degradation assessment
- existing SWC technologies
- effectiveness of SWC technologies

Location of SWC technologies:

- show location and short overview + link to database
- extract other relevant information

Progress

Taskforce meeting – Rome – June/July 2006

World map:

- very little new data
- improved layout on AGIS website (www.agis.agric.za)
- world map to remain on AGIS server
- evaluated the use of Google Earth
- linked sample QT's

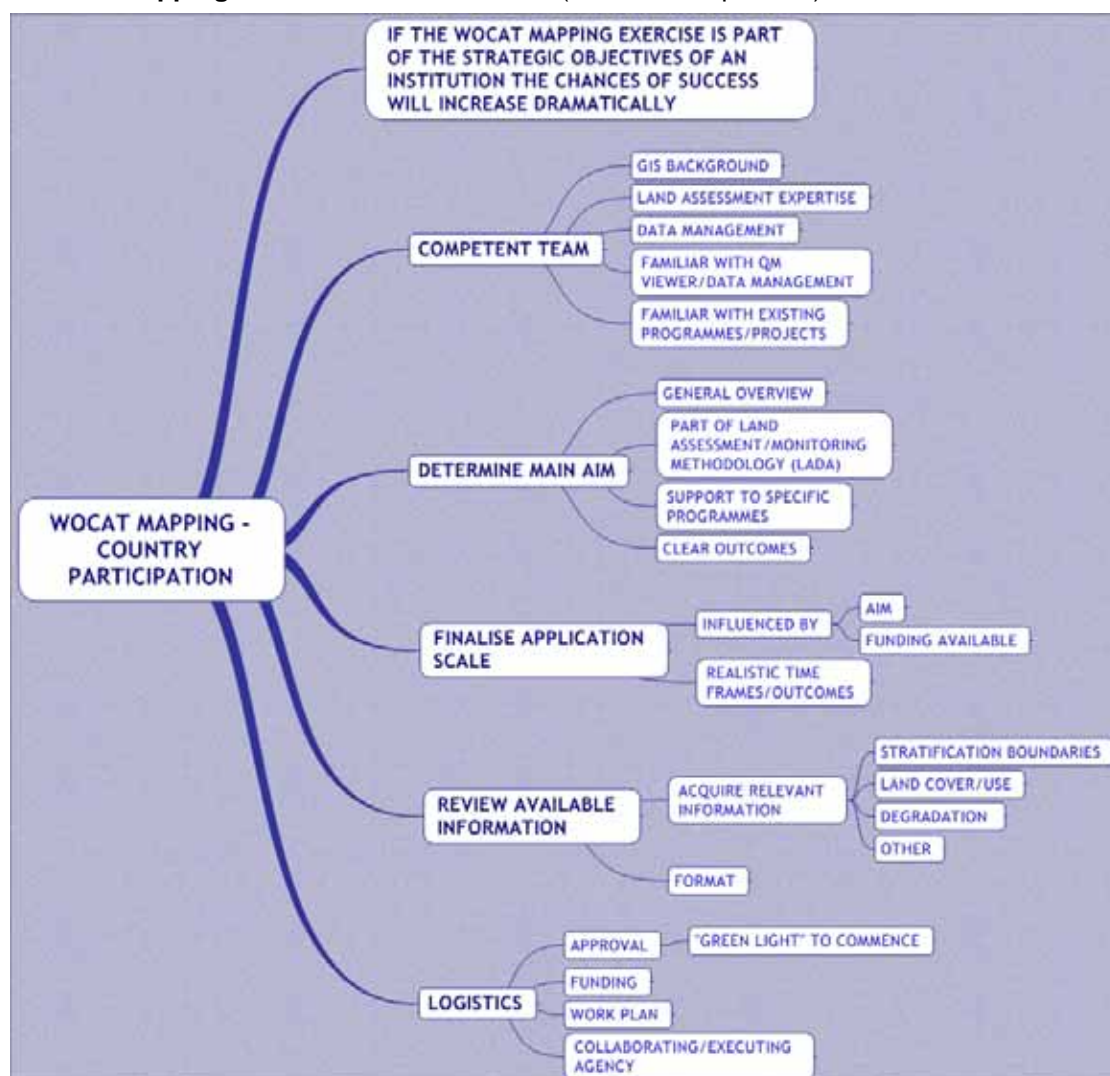
Map questionnaire – offline viewer (arc reader):

- rectified errors
- improved installation of viewer
- added functionality
- developed manual
- secured funding for the offline editing system

Location of SWC technologies:

- developed new interface (AGIS)
- linked with other spatial data

WOCAT mapping – how to ensure success (see mind map below)



1.2.2 TF Q Revision

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

Report by Gudrun Schwilch, presented by Mats Gurtner (TF Q revision.ppt)

Report of last year's activities:

Activities:

- small questionnaire (a few leading questions) sent by Rima Mekdaschi Studer to TF member in November 05 and to SOCAT (SOWAP-WOCAT) collaborators in January 06; the responses were put into the commented version of the questionnaires
- small task force meeting with Godert van Lynden, Hanspeter Liniger, Mats Gurtner and Gudrun Schwilch on 17 August 2006 (linked to strategy meeting)
- review of inputs received from various sources (by Rima Mekdaschi Studer): WOCAT-IRHA training workshop (RWH issues), China training workshop, Malcolm Douglas (China experiences), Jens Jensen (India experiences), Thomas Ledermann (Conservation agriculture experiences Europe)

The leading questions mentioned above were:

1) Problems encountered using the WOCAT questionnaires (for both basic and professional version):

Which questions did cause problems when filling in the questionnaire and why:

- problems of understanding, terminology, language
- conceptual problems
- information not available / not applicable
- other problems

How could these problems be eliminated?

→ concrete suggestions how to improve the unclear questions / explanations / definitions!

2) Selection of questions

Often it is said that the questionnaires are too long, and take too much time to be filled. Which questions do you consider not relevant in the professional questionnaire? why?

If you have worked with the basic version: are there still questions that could be skipped?

3) Cover additional topics

Is there any question that should be added, eg:

- to cover specific topics, which are not covered so far
- to get more in-depth information on certain topics

if yes: please make concrete suggestions

→ formulate questions!

Task force results:

Basic decisions need to be taken during the WWSM in South Africa:

- complete revision vs. keeping revision to a minimum
- modular system vs. one comprehensive
- taking into account the differences between paper version and digital version (i.e. regarding flexibility)

For the revision of the questionnaires, there are two levels of issues that need attention:

1) Major issues:

- inclusion of water: rainwater harvesting (RWH), watershed management
- rotation system, eg in conservation agriculture -> time aspect difficult to document

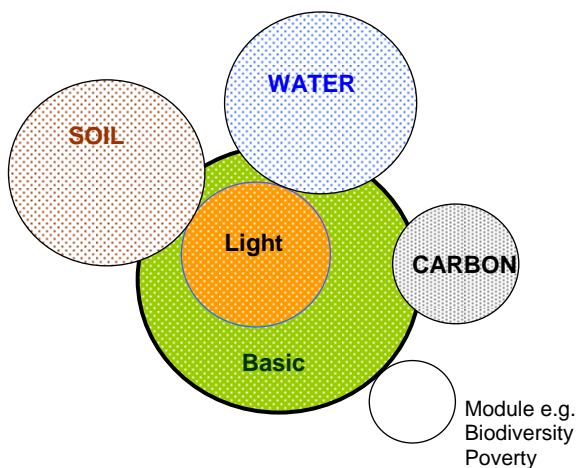
- costs when system changes: not additional, but different -> need for a comparison before and after conservation (this does not only apply to costs but also to all other aspects as well, i.e. two systems need to be compared)
- do we ask for the environmental parameters and land use before and/or after conservation? (eg soil fertility, organic matter)
- inclusion of additional global issues:
 - biodiversity
 - carbon sequestration
 - poverty
 - desertification
- additional degradation types: vegetation degradation, water degradation
- area definition (esp. difficult for watershed technologies such as dams)
- additional land use types? (eg irrigated, paddy land, etc)
- people should have more options to indicate reference/source of information for the individual answers (add 'data source' fields to questions)

2) Minor issues:

- rewording of some of the questions and explanations to make the better understandable
- additional explanations to some of the questions
- layout improvements
- asking for geographic coordinates of technology location
- reminding contributors to make use of secondary data (project documentations, soil and climate data, etc) while filling in the questionnaires

see also proceedings of WWSM 10 Belgrade!

The small task force meeting in August came to the conclusion that we need a modular system. This would contain a BASIC questionnaire as today. All the rest would be in separate modules.



BASIC	Questionnaire basic as today
SOIL	Remaining part of today's professional version with some additional questions
WATER	new water related module (only when strong link to land, no drinking water)
CARBON	new carbon related module
BIODIVERSITY	biodiversity related module
POVERTY	MDG-related module
GOVERNANCE?	
DESERTIFICATION? (Linked with water?)	

Which modules will be developed by WOCAT and which by others needs to be discussed. WOCAT will probably focus mainly on SOIL and WATER.

1.2.3 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*

Report by Gudrun Schwilch (TF reportStrategy.ppt)

After the WWSM in Serbia, a draft document was compiled by Gudrun Schwilch, based on the inputs from:

- Draft WOCAT business plan by Clemencia Licona Manzur, FAO, commented by Hans Hurni
- Summary of discussions so far on WOCAT future (see proceedings WWSM Belgrade)
- Further materials/ideas from "Strategic Plan 2005 – 2009 ITC" (International Trade Centre), WWSM Belgrade, etc.

A CDE - Meeting on 8. Nov. 2005 on this preliminary strategy draft (then called 'strategic action plan') with the CDE coordinators and other CDE project coordinators resulted in some useful feedback. Together with inputs from Roger White (to Business plan) and Godert van Lynden, a new draft was developed.

This draft was then sent to all the TF members as well as to Willi Graf (SDC), Andrew Bennett (Syngenta Foundation), Will Critchley (CIS), Francis Turkelboom (ICARDA) and Roger White (ICIMOD) on December 22, 2005. They were requested to comment and help to improve it. It turned out to be very difficult to find a date for a two-day meeting convenient to all, and the task force only managed to meet in August. Even then, two people had to cancel in the last moment.

Nevertheless, feedbacks to the draft version of December 2005 were received from Godert van Lynden, Sanjeev Bhuchar, Reddy G. Bhaskar, Will Critchley and Francis Turkelboom. They were included into a new draft version, distributed again on July 20, 2006.

The strategy meeting on 15/16 August in Berne:

Participants: Willi Graf (SDC), Andrew Bennett (Syngenta Foundation), Godert van Lynden (ISRIC), Hans Hurni (CDE), Andreas Kläy (CDE), Hanspeter Liniger (WOCAT-CDE), Mats Gurtner (WOCAT-CDE), Rima Mekdaschi Studer (WOCAT-CDE), Gudrun Schwilch (WOCAT-CDE). Moderation: Markus Giger (CDE).

The **aims of WOCAT strategy** were defined as:

1) determine the direction of WOCAT programme for the next 5 years, by defining

- vision and mission
- WOCAT's role within SLM
- fields of activity (with specific objectives, target groups, expected results, dissemination strategy, outcomes)
- priorities for each field of activity
- define roles and responsibilities (programme, national level)
- organisation and management
- funding

2) To use as a basic document for contacting / attracting new donors and collaborators

The group agreed on the following **fields of activities of WOCAT**:

- Knowledge on SWC and SLM
- Tools and methods
- Information sharing and networking
- Research, training and education

Some **conclusions** based on the received comments:

- show sustainability and outcome of WOCAT programme
- show evidence on demand (annex) → need for review of experiences / achievements and for monitoring procedure to prove outcome, impact, evidence of demand
- show niche / uniqueness, show comparative advantages / assumptions → identify allies / competitors

- maintain strengths/uniqueness/core competences while also venturing into new fields/opportunities (eg global issues) → modules
- document has to show clear structure: shorten strategy paper, make it concise!: 5-10 papers; includes; not 2 versions; background information → to annex
- include funding(cost-sharing)/business principles, rules of procedures (eg requirements for training WS); WOCAT is added value (not a new institution/structure)
- include organization, management, funding in frame of document and not a separate chapter at the end
- go for a pragmatic realistic organization / management (not ideal)→ renaming of executive and steering bodies
- show clear structure/responsibilities for the whole WOCAT programme, split up in:
 - basic activities
 - modules
- differentiate and show interactions/contributions between:
 - global level (steering function)
 - national level (guide/inform)
- forget about regional nodes (regional coordinators); put up a structure of active membership on two levels
- specify resources needed: human, infrastructure, money for different levels (global, national) and components (basic, supplementary modules)
- search donors for specific activities, modules...; widen funding sources: extend from traditional donors to foundations, (commercial institutions?)
- WOCAT focuses on / has impact on: (→ highlight / emphasize more)
 - productive aspects (agriculture) and
 - water
 - ecosystem services (biodiversity, carbon...)
 - capacity building / training
 → should be stated in vision/mission!

Some **questions** remained open:

- definition of basic global activities
- how to clarify roles and responsibilities within MG / WOCAT
- how to show the demand on global level, national level (users of WOCAT tools), grassroots: SWC specialists and land users
- should the global WOCAT have resources / funds to initiate/support products/prototypes at the national level (as a module?)
- decentralization/outsourcing of activities and responsibilities (to regional/national level)
- taskforces: differentiate between urgent/crucial for WOCAT (→ budget allocation) and additional issues/interest group
- rules of governance:
 - who is WOCAT?
 - who organizes WOCAT?
 - who makes decisions
- institutionalization of WOCAT (centre of excellence) in the future? (not at the moment)

The group also made an exercise in which the objectives were ranked according priority and where they were asked to identify 'demand', 'opportunities' and 'strengths' for each objective. It is planned to conduct a similar exercise with the WWSM group in Cape Town.

We also drafted a table with the following information to all fields of activities and their objectives: Motivation, target group, activities, outputs, resources needed, dissemination, outcome, opportunities and threats.

After the August meeting, Gudrun Schwilch reorganised the whole draft and developed a new version (October 06). This is now based on a modular approach, where the 'core' and the 'activities' modules are drafted already. Other modules such as one containing a SWOT, one focusing on WOCAT background (history and achievements) etc. might follow, if this approach will be accepted. Comments to this draft are outstanding.

1.2.4 TF Use of WOCAT

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

No reporting

1.2.5 TF WOCAT in research and education

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

Report by Romy Labios (TF Use of WOCAT in R&E.ppt)

TF Activity Plans and achievements

Education

- Continuation of filling up the survey on WOCAT in R&E for WOCATeers who haven't done it yet (addt'l 4 as of May 2006)
- Definitive analysis of survey on WOCAT in R&E (for presentation during WWSM 11)
- Discussion forum for final WOCAT curricula within University practical and lecturing modules (c/o Miodrag Zlatic)
- Approving curricula (c/o Miodrag Zlatic)
- Preparation of material from practice for trainings: good films, posters, presentations from the field (c/o M. Zlatic)

Research

- Integration of WOCAT M&E tools in MSc and PhD thesis as well as in national action plans: in case of
 - Serbia: (1) national project, (2) community based rehabilitation of degraded soils
 - SOWAP
 - NCCR N-S
 - COST Switzerland
 - South Africa

Survey Results on Use of WOCAT in R&E

- Respondent's profile (14 males and 3 females)
- Geographical distribution (9 Europe, 5 Asia and 4 Africa)
- Educational level (mainly professors and scientists)
- Official designation
- Years of involvement/have known WOCAT (mainly more than five years of involvement)

WOCAT in Education

- Use of WOCAT in the academe
- WOCAT tools/materials used
- WOCAT training course(s) attended
- Respondents role in training/workshop
- Institutionalization of WOCAT in academic units, government/policy institutions
- Effectiveness of WOCAT in education.

WOCAT in Research

- Use of WOCAT
- Uses, problems and issues of WOCAT
- Application of WOCAT in research at field level
- Respondents role in training/workshop
- Institutionalization of WOCAT in research institutions
- Ways of using WOCAT in Natural Resources Development programs

Institutionalization of WOCAT in research systems, academe and national government institutions calls for...

- Increased awareness among potential users of this tool through media exposure, capacity building, proper information dissemination and other communication tools
- Active involvement of various stakeholders
 - Encourage sharing of information among stakeholders
 - Patience = commitment

1.3 Activities at the national / regional level

1.3.1 Ethiopia

Report by Daniel Danano, MoA (WWSM11Ethiopia.ppt)

ETHIOCAT major mission: providing information compiled in databases, maps and overview books for regional conservation planning and decision-making processes in Ethiopia.

Activities to achieve outcomes

- Analyze information entered into the database
- Undertake additional case studies to cover wider agro-ecological and farming systems
- Interpret and synthesize data and information: checking of consistency, comprehensiveness, clarity, etc.
- Conduct regional consultation meetings for data gap filling and reaching consensus with the contributors
- Conducting national workshop for final review of the data/information and approval
- Quality control, assurance and editing
- Screening of best practices and prepare summary reports and maps

Achievements 2005/2006

- Training in SWC and WOCAT tools (27 technical people from 3 regions trained), training by doing, more and more people get familiar with WOCAT tools (also students)
- Lots of efforts in documentation (totally 52 QTs and 25 QAs in professional version now): 4 QTs, 2 QAs and 4 QMs completed in 2006
- 2 regional review meetings conducted successfully (52 participants)
- 10 QTs and 6 QAs data quality assurance made
- 1 National review workshop conducted where about 50 persons from many organizations participated
- Screening of best practices for the overview book done, 15 QTs accepted by the panel to be included in the overview book.
- SWC suitability mapping: Based on agro-ecology, technical effectiveness, adoptability, cost-benefit analysis, environmental impact
- Every day we get 2-3 requests for data!

1.3.2 South Africa

Report by Rinda van der Merwe, ARC-ISCW (Progress_RSA.ppt)

Highlights

- on-line pre-selection system operational (> 50 entries)
- off-line viewer developed
- 10 new questionnaire sets collected
- peer-review panel established and functional
- 11th WWSM (host and co-sponsor)
- SADC involvement
- WOCAT QM integrated into soil protection strategy
- WOCAT integrated into AGIS

Development of an on-line mapping system: The import of all QM data into Informix was completed by creating shape files for all available countries. Spatial layers for imported data were created and, where possible, result sheets developed. The development of an ArcIMS map viewer started but not all layers have been created. Neither the administration system nor the full search capability for QM were developed and will therefore be tackled next year.

Development of an off-line mapping system: The development of a full ArcReader viewer and the creation of an auto-run CD with the off-line viewer are still being tested and de-bugged. It is mainly the data editing / management part which is still lacking.

Development of the World Map: The planned activities of: importing data into Informix, creating World Map spatial layers, developing an administration system for World Map data, developing an ArcIMS map viewer and printing of maps were all successfully done.

Data collection: From existing LandCare projects technologies and approaches to be documented and fed into the database were identified. The LandCare project leaders filled in the questionnaires. Ten sets of questionnaires were received and 5 are in progress.

Quality assurance: A review panel of 6 persons was formed. Six out of the ten questionnaire sets were quality controlled by the panel and need revision and improvement by the specialists and land users. The updating of the fact sheets will be done after all the data of the questionnaires has been quality checked and updated.

Database management: Four new data sets were added to the database but the updating of old data sets is not terminated yet. New data were forwarded to WOCAT secretariat.

Contributions at meetings/workshops: The poster on the WOCAT World Map presented at SSSSA (Soil Science Society of South Africa) Congress, Durban, January 2006 won the price of best poster (see photo below left)



The presentation of the World Map off-line system (WOCAT Map Viewer – ArcReader 9.1 customisation) presented by Rudolf de Munnik won the first prize for the best embedded GIS application at the ESRI international user conference held between 7-11 August 06 in San Diego, USA (see photo above right)

Attending WOCAT annual workshop and steering meeting (hosting and co-sponsoring) WWSM11 in Cape Town) and participating in mapping task force workshop (June 06 in Rome).

Integrate WOCAT QM into the Soil Protection Strategy of SA: Funds to initiate projects on the evaluation of various technologies and approaches to be used in rehabilitation of erosion as well as the documentation of complete Mapping Questionnaires for priority areas to monitor effectiveness of strategy/programme were approved and will be finalised early 2007.

WOCAT in research and education: Two PhD's and 1 MSc were suggested and will be finalised early 2007. These studies will address: the use of WOCAT and GIS technology in land degradation assessment, the use of WOCAT methodology as part of the evaluation and monitoring of the LandCare projects in SA, the

use of WOCAT in land degradation mitigation and monitoring in the Eastern Cape Province (priority area) as part of the Soil Protection Strategy of South Africa.

WOCAT promotion: Articles in Newsletters (GIMS E-News, Position IT, Soils & Water Division Newsletter, ISWC Tuesday Newsletter), at meetings and seminars

1.3.3 Nigeria

Report by Ikponke Nkanta (Tropical Research and Conservation Centre, University of Uyo) presented by Godert van Lynden

Progress

WOCAT activities started fully from August 2005 and WOCAT is now about a year old in Nigeria. Much time was spent on studying and getting familiarized with WOCAT questionnaires and other materials. Some SWC specialists and some universities/institutions have been contacted to get involved in WOCAT activities, although full collaboration is still to be made.

Questionnaire Basic Approach (QA) and Technology (QT) on aerial cropping with an explanatory note have just been posted to WOCAT secretariat in Switzerland. A poster on the approach has also been designed. Aerial cropping is an indigenous technology of Soil Water Conservation practiced by some local farmers in Nigeria. Some areas of land are highly degraded; physically, chemically and biologically. To enhance soil fertility and water conservation some farmers plant (or allow) some perennial trees/shrubs in the farm. These are occasionally pruned down for organic matter and for mulching. Soil erosion is also checked through the system. The approach should be adopted or replicated in other areas. Local farmers should learn to apply the approach, as the level of technical knowledge required for the implementation of the technology is not too high. Incentives will encourage farmers to be involved in approach.

Problems of WOCAT in Nigeria:

- WOCAT methods and tools are new to most SWC specialists in Nigeria; it takes some time to be able to understand it properly.
- Filling of the questionnaire is time consuming and some data are difficult to come by.
- Some SWC specialists feel there should be some benefits or incentives allotted for the filling of the questionnaires.
- Funds are not easily available.
- Lack of reference materials since much research work on indigenous SWC technologies or approaches have not yet been done.

Possible solutions:

- There is need to connect with official government, NGOs, agricultural organizations and private enterprises for their support or contribution.
- There is need to create more awareness about WOCAT as well as WOCAT promotion in conferences and schools.
- More WOCAT brochures and other materials are needed for distribution.
- Some incentives could be provided to SWC specialists for time spent on filling questionnaires.

1.3.4 Morocco / MADRPM

Report sent by Nahid Elbezzaz, MoA, Rural Development and Fisheries (Morocco-Presentation.ppt)

WOCAT Progress:

- Numerous programmes identified constraints and defined new courses of action in connection with SWC.
- National and regional workshops to bring together specialists of SWC and presentation of WOCAT methodology were/are launched. Capacity building of national experts also to run WOCAT programme.
- Two sets of questionnaires (2 QTs and 2 QAs) were filled by these specialists – large spread of WOCAT methodology (at national, regional and local level)
- The workshops are/will be organised within the National Action Program for Combating Desertification (programme d'appui au PAN-LCD)
- First essay to use a shared workspace to fill in questionnaires

Benefits of WOCAT:

- Facilitates the analysis of the actions and projects conducted or planned in the field of SWC.
- A good tool for monitoring and evaluation of SWC programmes

Problems with WOCAT:

- A tool for evaluation is always difficult to set mainly in some conventional systems based on just project's implementation and not familiar with assessment tool

1.3.5 ICIMOD – HIMCAT

Report by Isabelle Providoli (ICIMOD-WOCAT presentation.ppt)

Experience sharing and collaboration between SDC-supported Sustainable Soil Management Programme (SSMP) Nepal and ICIMOD has been started in April 2006. The objective is to study the impact of sustainable soil management using WOCAT tools. ICIMOD helped SSMP in building their staff's capacities in using WOCAT questionnaires. The QT basic has been transformed into a QT soil fertility which SSMP uses in the field. Twenty QTs are/will be documented, of which a selection will be entered into the WOCAT database. Ultimately an overview book including these case studies will be published. Further, WOCAT was included in the overall framework of low cost SWC training module of ICIMOD.

The 10 year long project PARDYP (People and Resource Dynamics Project) conducted at ICIMOD came to an end in June 2006. No new funding for a fourth phase was available. Thanks to other available funds Madhav Dhakal, a former PARDYP collaborator, could be hired for 3 month to document technologies and approaches of the PARDYP-Nepal in WOCAT format. Nine new QT on increasing water availability, improving water user efficiency and on increasing soil fertility as well as 4 new QA on rehabilitation of degraded land, promotion of SRI, promotion of drip irrigation and on spring source protection will be documented. The goal is to transform these new QT's and QA's together with old QT's and QA's into the overview book format. This will be done in collaboration with SSMP Nepal which will also contribute their case studies. The work started end of August 2006 and is still ongoing.

In July 2006 S.K. Bhuchar, K.M. Sthapit and I. Providoli from ICIMOD visited the Chittagong Hill Tracts in. The BANCAT partners were at the end of the process to publish their overview book and the ICIMOD group (also including E. Kerkhoff from ICIMOD) gave them final inputs.

In June 2006 a WOCAT training was held in Lhasa, Tibet within the framework of the GTZ funded project "Rural infrastructure and vocational training" of the German company Integration. The resource person/trainer was Wang Yaoling and 16 participants from 7 districts documented case studies in Chinese using the basic version of the questionnaires. A problem that was mentioned is that the global database is not in Chinese.

Unfortunately the four concept notes which have been prepared last year on watershed management and networking, and training (capacity building), research (knowledge gaps) and networking (dissemination) could not get funding. Due to this the last year plans to develop HIMCAT networks were delayed. However the HIMCAT plans will hopefully be developed in 2007.

For the IYDD 2006 (International Year of Desertification) a poster about the Himalaya region has been designed and a positioning paper on desertification was prepared.

Promotion of WOCAT-HIMCAT in the Himalayas by distributing brochures and making presentations was continued during the year (CHARM workshop, Bangladesh, February 06; NERIWALM, Tejpur India, March 06; CEGIS, Dhaka Bangladesh, July 06). ICIMOD's Rangeland and IFAD Project have been briefed about WOCAT and more efforts will be made to encourage them to incorporate WOCAT in their programmes.

Benefits of WOCAT: Window to global information and experts on land management.

Problems with WOCAT: Not enough decision makers in the WOCAT network

1.3.6 Bangladesh

Report by Khisa Sudibya Kanti, CHTDB

Achievements

- Working Group (WG) Meeting was held once (17th March 2006) and one to one discussions with the members of WG were held several times. A work-plan for 2007 was prepared and the progress report of 2006 reviewed.
- Planned activities were deferred since concentrations were made on production of BANCAT Overview Book. The BANCAT Overview Book on Selected Natural Resource Conservation Approaches and Technologies in the Chittagong Hill Tracts (CHT), Bangladesh includes 39 new and updated case studies with their location maps (1:500,000). It was printed in October 06. The review of the documented case study drafts was also assisted by Dr. Sanjeev Bhuchar, Dr. Isabelle Providoli and Lies Kerkhoff of ICIMOD, Kathmandu, Nepal.
- Provided technical support to different institutions and organized farmers' training workshops.
- BANCAT databases were used in the SRDI Officers' training and CHT Farmers' training programme.

WOCAT meetings / workshops / presentations

- Training of farmers on Participatory Watershed Management at Khagrachari and Bandarban, Bangladesh funded by BARC and JICA in June 06 (150 participants).
- Training workshop on Database Management and GIS at SRDI, Dhaka, Bangladesh funded by CYMMIT, May-June 06 (90 participants).
- Resource person (Khisa) at the WOCAT-Indonesia training workshop, Solo, Indonesia, September 06 (30 participants).
- CHARM Workshop held at Rangamati, March 06 organised by ISRIC Netherlands, BCAS and CEGIS, Bangladesh (80 participants)
- Partnership Assessment and NRM workshop, April 06, organized by ICIMOD and BFRI in Chittagong

WOCAT promotion

WOCAT and BANCAT are being popularised. BANCAT provided support to a study tour of three SWC specialists from ICIMOD, Kathmandu, Nepal in CHT, Bangladesh organised during July 2006. Activities of BANCAT on the formulation of an activity-plan for the Community-based Natural Resource Management Programme in CHT were appreciated by the UNDP mission members to CHT.

1.3.7 India

Report by Raghu Prasad R., Orissa Watershed Development Mission (WOCAT INITIATIVES IN ORISSA, INDIA.ppt)

The OWDM (Orissa Watershed Development Mission) further continued the use of WOCAT tools during 2006 and has taken many actions to institutionalise this into the OWDMs' decision making structure. At the State Level the OWDM advocates the use of WOCAT tools under two main Watershed Development programmes; the DFID assisted Western Orissa Rural Livelihoods Project (WORLP) and Government of India supported 'Additional Central Assistance' (ACA, (Revised Long Term Action Plan (RLTAP)) watersheds. The documentation of various technologies and approaches were undertaken in two districts.

WOCAT core group:

To efficiently coordinate various activities with the District level the 'WOCAT Core Group' was constituted with around 15 members involving the Project Directors (PD), Capacity Building Team members (CBT), Project Support Unit specialists (PSU), Project Implementing Team members (PIA) etc. The monitoring & evaluation specialist at the PSU coordinates this group. The core group plans and implements various activities to be undertaken under WOCAT as decided by the OWDM.

Capacity building:

During 2006 two capacity building events were carried out under WOCAT. Sensitisation workshops were carried out separately in two districts (Bolangir & Nuapada) wherein around 20 project staff was exposed to the WOCAT tools. These one day sensitisation workshops were carried out on June 26th 2006.

An intensive training on QTs and QAs was carried out in Bolangir for 2 days (9th-10th Aug 2006) where in 20 project staff were trained for documentation of different technologies and approaches. During training the further action plan to document four technologies and two approaches was developed.

Documentation of technologies and approaches:

During 2006 four technologies and two approaches were documented in two districts using WOCAT tools. The list of technologies and approaches that are to be documented was decided by the WOCAT core group and was briefed to the project staff during the training conducted in August 2006. Separate working groups were constituted for documentation of each technology and approach. These working groups coordinated the field work, collection of secondary data and data entry. The following are the technologies and approaches documented:

Technologies:

1. Dug well in Chareimara of Bolangir Block
2. Farm Pond in Patnagarh
3. Sunken Gully Pit in Chahakapada of Komna Block
4. Contour V ditch in Larkii, Komna block of Nuapada district

Approaches:

1. Sustainable Livelihoods approach
2. Participatory watershed Development approach.

Benefits of using WOCAT in Orissa:

Documentation of approaches through the QAs has clearly brought out gaps in involvement of the community while implementing various SWC interventions in the watershed projects. These findings were also in line with concurrent evaluations and studies carried out by independent evaluators. As a result of this, watershed guidelines have been modified so that community involvement could be streamlined and the implementation of watershed projects become more participatory. The QTs are useful in capturing and documenting various SWC technologies implemented under watershed development projects. The QAs are also helpful in process documentation which is also a mandatory requirement of many donors. The tools have also helped project managers at various levels to analyse the comparative benefits of various SWC technologies used in various Watershed projects.

Difficulties of using WOCAT

The questionnaires are very lengthy and time consuming. Capacity of the Orissa team needs to be built for using the QMs. A need for a pool of global resource persons was identified so that capacities at national levels can be periodically updated, thus ensuring basic standards and quality.

1.3.8 China – SWCMC

Report by Feng Wei (WOCAT in China Wei.ppt)

Since September 2002, the Soil and Water Conservation Monitoring Centre (SWCMC) has joined the WOCAT family as the national coordinating agency in China.

WOCAT has developed and spread its activities in China on a national level for the last four years. During these years we have successfully held several WOCAT training workshops at a national level, which had deep impacts on soil and water conservation work at local level. In 2003, two major training workshops were organized in southern China. In 2004, another major training workshop was organized in northeast China, the 9th WWSM was held in Yichang and the website of WOCAT was linked to the website of SWCMC.

Performance of last year:

- Held a training course in Dingxi City of Gansu province during April 3-7, 2006. The course was on "Extension of technical evaluation methods of land degradation control":
 - pasture degradation: 50% pasture (1 million km²) in China degraded by soil erosion, increase by 20,000 km²/year
 - land desertification
 - land petrification
- Downloaded and translated QA, QT, QM and other WOCAT contents from WOCAT website, which had valid help in designing a feedback questionnaire for ADB TA 4404 international workshop on legal strategies
- ADB TA 4404 inception workshop from 26th -28th Aug of 2006 in Beijing

Use of WOCAT:

There is a blog (web log) to discuss soil and water conservation problems, on which more than 50 members show pretty interest in WOCAT.

The Northwest Soil and Water Conservation Institute of China and four other research institutes and official organizations are using the WOCAT database. The easy sharing and collecting of soil and water conservation information on a global scope is well appreciated.

1.3.9 China – PRC-GEF Partnership on land degradation in dryland ecosystems

Report by Xin Shen (PRC-GEF OP12_Capetown.ppt)

The PRC-GEF partnership on Land Degradation (LD) in Dryland Ecosystems seeks to conduct poverty alleviation, to combat LD and to conserve biodiversity in the western region of China. Covering a 10-year period and managed by a Country Program Framework (CPF), the Partnership is the first agreement on LD between GEF and the Government.

WOCAT helps us to...

- Improve the capacity to comprehensively monitor and assess the effectiveness of control measures;
- Increase people's knowledge of technologies and approaches that have been successfully used for LD control, and improved dryland ecosystem management

WOCAT related activities were:

- Training Workshops
 - Yulin training workshop
 - Dingxi training workshop
- Case studies
 - Zhuanglang Terrace (complete)
 - Shelterbelts (revised)
- Introduction & discussion
- Resource person for other project
 - Wang Yaolin (Tibet)

Outcomes and Impacts:

- Trained trainers
 - 50 trained and 10 well trained
 - Six provinces
 - National / regional / provincial / county level
 - Forestry, Agriculture, Environment, Water Resources, Animal and Husbandry, Land Resources Departments
- QTs & QAs
- Publicize WOCAT
 - Newsletter and Websites
 - Workshops & meetings
 - reach the range project covered

Experience gained and problem encountered:

- Shortcut of compiling a summery sheet (terrace vs. shelterbelts): the process of compiling the information either through questionnaires (terrace) or directly on the summary sheets (shelterbelts) showed difficulties when shortcut was used (directly filling information in the 4 page layout version)
- How to well document a set of Ts? What is the most appropriate way of compiling the information
- Lack of access to senior / experienced WOCATeers
- Wise choice of Ts: How to assess the different SWC technologies, a need for a decision support / assistance system

1.3.10 Philippines

Report by Jose Rondal, Bureau of Soils and Water and Water Management / BSWM (to become Philippine Institute for Sustainable Agriculture / PISA) (PHILCAT Activities 2006.ppt)

PHILCAT was first formally organised in Sept. 1999 through the issuance of a Special Order by the Secretary of Agriculture with 10 member institutions from the national government agencies, academe, professional societies and an international organization (ICRAF). Because some of the personnel originally involved are no longer involved in soil and water conservation works for some reasons or another, PHILCAT was reconstituted in January 2006 with the following members:

- Bureau of Soils and Water Management - Chair
- Forest Management Bureau - Co-Chair
- Bureau of Agricultural Research
- Agricultural Training Institute
- National Irrigation Administration
- Phil. Council for Agriculture, Forestry and Natural Resources Research and Development
- University of the Philippines at Los Baños, College of Agriculture
- University of the Philippines at Los Baños, College of Forestry and Natural Resources
- Benguet State University
- World Agroforestry Centre (ICRAF)

WOCAT promotion was a major activity during the year. Presentations were made in three major international conferences, namely:

- First Mindanao Multi-Sectoral Forum on Watershed Management, Sept. 1-2, 2005, Edens Nature Park and Resort, Davao City, Philippines
- First Visayas Multi-Sectoral Forum on Watershed Governance, Nov. 21-22, 2005, Waterfront Hotel, Cebu City, Philippines
- Conference on Watershed Management in the Philippines, May 16-18, 2006. Don Mariano Marcos Memorial State University, La Union. Output: Proceedings of the Conference on Watershed Management in the Philippines (CD and hard copy)

Also, **posters** were presented in the following meetings/conferences:

- 36th Crop Science Society of the Philippines (CSSP) Scientific Conference, May 9-12, 2006, Puerto Princesa City, Palawan.
- 9th Annual Meeting and Symposium of the Philippine Society of Soil Science and Technology (PSSST), June 1-2, 2006, Central Luzon State University, Nueva Ecija.

Efforts were exerted to make **use of WOCAT data**. PHILCAT assisted the Agricultural Training Institute (ATI) in the preparation of a standard training module on Sustainable Sloping Land Management. This will be used by ATI in its national trainings for the said subject. Also, five farmer training workshops on Sustainable Management for Marginal Areas in cooperation with the Department of Agrarian Reform with a total of 125 participants were conducted. In all these efforts, the WOCAT information was valuable.

Also, **paper presentations** were performed in the following conferences using information from the WOCAT database:

- Conference on "Ecological Analysis and Control of Greenhouse Gas Emission from Agriculture in Asia", Sept. 14-17, Ibaraki University, Japan.
- "NEDA-UNDP Disaster Risk Management" Conference, Sept. 20, 2006, Pasig City, Philippines. Output: Erosion Hazard and Its Mitigation (in CD)

Two technologies were documented (by PCARRD, BSWM and Forest Management Bureau, UPLB) using the basic questionnaires. These are (1) Windbreaks which is an indigenous practice in the northernmost province of Batanes in the Philippines and (2) "Palata" which is about the in-situ decomposition of banana stalk being practiced in the banana plantations in Mindanao, southern Philippines. Two approaches: (1) Conservation Farming Village and (2) Community-based Forest Management were documented.

Soil erosion is being recognized as a risk for disasters in the Philippines nowadays. Windbreaks serve against taifuns, together with successful fallow systems.

Other activities include the following:

- Data gathering for QM

- Submitted a proposal to the FAO country office for WOCAT training of SWC specialists.
- Established 12 SWC technology demonstration farms
- Distributed WOCAT CDs and brochures (to the conferences mentioned above and the National Science and Technology (NST) Week, Philippine Trade and Training Center, Manila, Philippines, 17-21 July 2006)
- Users that have shown interest were mostly state colleges and universities, NGOs and NGAs. PHILCAT member agencies have requested training on WOCAT methodologies.
- Use of WOCAT materials in education:
 - As reference materials in course curriculum in Agricultural Systems and Natural Resource Management
 - As reference materials in short training courses on Natural Resources Development Projects

Using WOCAT made possible the modification of some old technologies on SWC. A menu for possible approaches and technologies for soil and water conservation can/could be compiled. WOCAT provides a good tool for the monitoring and evaluation of SWC projects. However, under Philippine conditions the tool is still not tailored for the everyday use of most technicians and farmers (too dependent on the use of computers).

PHILCAT has prepared the first draft of the proposal titled "Promotion and Utilization of Soil and Water Conservation Technologies and Approaches through WOCAT Methodologies" for possible funding of the Department of Agriculture, Department of Science and Technology, Department of Environment and Natural Resources and World Agroforestry Centre. Getting projects to be funded by international agencies is a very competitive procedure. Local funding is also limited to pursue the WOCAT activities on wider scale.

1.3.11 Indonesia

Report by Syaiful Anwar, Ministry of Forestry (Indonesia Report Presentation.ppt)

Training:

A first WOCAT training workshop was held in Solo – Central Java, 7 – 9 September 2006. It involved about 76 persons including the Deputy General, Head of District and invitees. Participants consisted of 17 head of Watershed Management Centres (WMCs) on the first day and 18 technical staff of related WMCs (whole 3 days). The number of people / WMCs trained in 2006 was considerably higher than initially planned. In a second phase next year the remaining 14 WMCs will be trained.

Translations:

QT, QA, & QM were translated into Bahasa Indonesia and put together with the English version side by side (which caused some space problems). Guidelines on how to initiate INDOCAT were developed. The manual 'Getting Started with WOCAT' was partly translated and modified to make it suitable for Indonesia WMCs staff (considered as national initiatives). The translation of the software for data entry into Bahasa Indonesia was half done and will not be continued until a new version is ready.

Standardization:

The review of documented data sets (40 QTs and 60 QAs) and their translation into English, in order to be internationally recognized, have not been carried out due to priority reasons. The budget was switched into socialisation activities. The main 7 locations where WOCAT documentation is taking place in Indonesia are: Das Kapuas, Das Paluposo, Das Benain Noelmina, Das Brantas, Das Sop, Das Cimanuk Citanduy, Das Batanghari.

WOCAT tools and working material were used at the Bogor Agricultural University for educational purposes.

1.3.12 Kyrgyzstan

Report by Abdybek Asanaliev, Kyrgyz Agrarian University - CAMP

Collection and description of technologies

An agreement with the rural advisory services (RAS) was made to collect and document existing practices on soil and water conservation introduced by farmers using the WOCAT methodology. With their help one technology was documented using the professional QT and 15 new technologies described using the light version of the questionnaire. The 76 technologies previously documented and published in a short form (one page poster), were translated from Russian to Kyrgyz.

Meetings and training workshops

Four meetings with RAS members in the framework of the CAMP Project were held between March and October 2006.

Two training workshops on documentation and quality assurance of documented technologies were held in March and April 2006.

Dissemination of information and introduction of technologies

With the support of RAS advisors eight SWC technologies were introduced and implemented in the villages and farmers fields.

Brochures on SWC were published and disseminated to farmers through RAS (100 in number).

A cooperation agreement between Kyrgyz RAS and the CAMP Ala-Too was made in February 2006.

1.3.13 Kazakhstan

Report by Azhar Yeszhanova, CAMP-DARA Public Foundation (WOCAT good examples in KZ.ppt)

Training and distribution of SWC technologies among villagers:

- New moderators (local language speaking) for further development of WOCAT ideas and work on village level.
- Increased dissemination of SWC technologies and approaches on the local and regional level. Posters and simple descriptions of most interesting and available SWC technologies and approaches.
- Popularization of SWC technologies and approaches for farmers and villagers. Consultation of farmers and villagers in 3 AGOCA villages (Alliance of Cenral Asian Mountain Communities) in Almaty oblast (Amangeldy, Saty, Incubator) on SWC technologies and approaches. Example: Implementation of "Californian worms" technology in Amangeldy and dissemination of this experience in other villages in frame of experience exchange between of AGOCA villages.
- Exhibition of WOCAT SWC technologies and approaches in villages of Almaty region (October 15).
- ALS (autodidactic learning for sustainability) workshops in 4 villages in Almaty oblast (Aidarly, Ulgili, Shien, Saty) on pasture management (Feb and March)
- Training on SWC technologies in farms of Kyzylorda region (June 2006)

Close contacts to experts on SWC technologies in Kazakhstan

- Contribution of Kazakhstan SWC experts (and experience) to WOCAT database on SWC technologies and approaches. Three new sets of data (QT and QA) were documented and added to the database.
- Map of landscape – ecological zoning of Akmola oblast on a degree of degradation of the land (scale 1: 1,000,000)
- Implementation of SWC technologies (on drained bottom) in Aral Sea region. A collaboration between the WOCAT team in Kazakhstan with the Ministry of Agriculture:
 1. Close communication with other experts on SWC technologies
 2. Distribution of SWC technologies
 3. Realization of the project for the sum \$8500 in Aral Sea region
- A partnership with NCCR. Project on mobilisation of community on pasture management realised in Aidarly village, Almaty oblast.
- Decreasing degradation on pastures. The regional project "Mobilization of communities on land use management" is in partnership with the UNDP office in Kazakhstan.
 1. Conducting of 3 ALS workshops in 4 villages in Almaty oblast on pasture management;
 2. Formulation of small project proposals from each of these 4 villages on pasture protection;
 3. Four projects on pasture protection were financed and successfully realised:
 - "Conservation of the soil fertility around Ulgili village";
 - "Reduction of the pressure on pastures of Saty village";
 - "Reconstruction of pits and expansion of pasture area in Aydarly village"
 - "The way to dzhailau" in Shien village
- Presentation of the WOCAT program in the Ministry of Agriculture of Kazakhstan (May 10).
- Seminars on SWC to technologies and approaches (May 24, June 10, August 12)

Use of WOCAT

More than 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. were received.

1.3.14 ISRIC / SOWAP

Report by Godert van Lynden

- WOCAT within SOWAP and ProTerra projects (SOCAT)
 - SOWAP meeting Prague (Czech Republic), June
 - Launch of Conservation Agriculture Book for EU: Brussels (Belgium), June
 - ProTerra meeting Evora (Portugal), October
 - Production of SOWAP "key messages"/ newsletter
- WOCAT in Green Water Credits project
 - Select and compare relevant case studies from database
- WOCAT in other projects: DESIRE, GLADA

1.3.15 Serbia

Report by Miodrag Zlatić, Faculty of Forestry, University of Belgrade (Serbia.ppt)

Achievements:

- 3 filled QTs without peer review and 1 in handwriting in village Slanci in Palilula Community. The documentation of SWC technologies in the Belgrade district has been continuously going on. To ensure data quality questionnaire and documented case studies must be updated and reviewed.
- Mapping activities:
 - 1. Training for QM in Nis;
 - 2. Continuing work on QM in Belgrade and Nis districts. For 10 communities data were collected in matrix tables. For 6 communities data were filled in WOCAT Database
- Contacts with national and foreign donors/institutions (national ministries, UNU, SOWAP):
 - Ministry of Science and Environment Protection - pending

WOCAT meetings:

- Meeting at Directorate for Water Management of Ministry for Agriculture and Forestry and Water Management after sending the annual report of 2005 (20.02.06)
- Meeting in WM Enterprise "Erozija" in Kragujevac regarding using WOCAT methodology (10.09.06)
- Meeting in WM Enterprise "Loznica" in Loznica regarding using WOCAT methodology (10.10.06)

Official agreements:

- Decision of Directorate for Waters (Ministry for Agriculture, Forestry and Water Management) to finance WOCAT in 2006 by 10,000 EUR (brutto) (between Directorate for Waters and the Faculty of Forestry).
- PDF A draft for MSP "Community Based Rehabilitation of Degraded Land in Balkans (among UNU; Faculty of Forestry - Belgrade, Faculty of Forestry - Skopje, Forestry Institute – Sofia and Technical Institute of Istanbul University).

WOCAT promotion:

- Promotion at Conference "Forest Impact on Hydrological Processes and Soil Erosion"- Yundola, Bulgaria (5-10 October '05)
- Promotion at Conference "Preventing and Fighting Hydrological Disasters" (June/July '06) in Timisoara / Romania
- Promotion at Conference "Forest Impact on Hydrological Processes and Soil Erosion"- Yundola, Bulgaria (5-10 October '05)

WOCAT in education:

- Education of students. Lecturing in IV year of studies at Faculty of Forestry
- Training and engaging Students Forum of WASWC in QTs
- Training in 2 Water Management Enterprises in Kragujevac and Loznica
- Film: WOCAT in Serbia for educational and popularization purposes

1.4 New initiatives

1.4.1 IC-Pakistan

Report by Munawar Khan (WOCAT pres Pakistan.ppt)

Project for Livelihood Improvement (PLI) working on Rudh Kohi irrigation system in dry areas of NWFP, Pakistan

PLI was launched in July 2003 (implemented by local partner NGOs) through people centered approaches eg PTD (Participatory Technology Development), FFS (Farmer Field School) & REFLECT in Rudh Kohi area of DIKhan. The overall goal is to enhance the socio-economic status of disadvantaged communities. The objectives are to develop coping strategies of poor communities strengthened to improve their livelihood with special reference to women.

Communities intercept hill torrents that carry water and use it for irrigation and drinking purpose through a canal system called "Rudh Kohi Irrigation" System. Rudh means a bed of hill torrent while Kohi means mountain. Total Rudh Kohi area is about 0.65 m.acres. Average rainfall is about 250mm. Flood water flow ranges from 500 cusec to 20000 cusec. Two flood seasons per year in spring and autumn. The area suffers of seasonal droughts (12 droughts in last 50 years: 5 droughts in summer and seven in winter) and of low and erratic rainfall (135mm to 250mm).

Problems encountered are: soil erosion due to high intensity of flood, high maintenance cost of the flood irrigation system, unavailability of drinking water for human & livestock, underground water is saline, and rules (Kuliyat & Riwayat-e- Abapashi) are not followed.

Water management has to take into consideration: distribution and control system of flood water, depth of water application/ No. of irrigation/ season (average depth of flood water applied by farmers ranges from 40 to 80 cm, due to large and unleveled fields), uneven land leveling status, and high sediments in flood irrigation channels (Rudh).

The approach to address water issues involves: rainwater harvesting for crop production and drinking purpose, strengthening of water users association and introduction of dry land farming technologies that improve productivity.

Project interventions include: water ponds rehabilitation for human & livestock drinking purposes that will serve about 88 villages having a population of about 0.1 million, introduction of low cost sand filter at household level, improvement in distribution system (improvement in water convenience system - diversion structure, and improvement in control of water at field - field inlet), rainwater harvesting for trees/crops production through artificial slopes, homestead vegetable production and plantation through Pitcher irrigation techniques, assessment of water availability and evaluation of water distribution system, and water strategy development for project area.

1.4.2 SADC

Report by Calvin Nhira (SADC_ L&WM Calvin Nhira.ppt)

SADC L&WM Programme structure

Conceptual Framework:

Problematic is the need to address how farmer constraints can be overcome in order to achieve high levels of appropriate L&WM technology uptake. These should be addressed through:

- improved research-extension-farmer linkages through participatory technology development methodologies,
- adoption of multi-disciplinarity in R&D (Research and Development) activities to better understand farmer constraints

Programme Logical Framework:

Programme *Objective*: to increase availability of improved and appropriate L&WM technologies to R&D institutions in the SADC region for subsequent dissemination to smallholder farmers.

Programme *Purpose*: to increase the capacity and productivity of R&D teams in the SADC region to develop L&WM technologies that are appropriate to the needs of resource-poor farmers, particularly those under water deficient conditions and improved dissemination of the results to the region.

Revised Programme Results:

- Regional Land and Water Management professional skills improved
- Regional Land and Water Management R&D information exchange network established
- Ensuring the utility of L&WM technical knowledge transfer to R&D teams by monitoring use, reviewing course materials and provision of on-farm PTD (Participatory Technology Development) research grants
- Ensuring continuation of the transfer of appropriate L&WM technical knowledge to R&D teams

Regional Computerised Database:

- To be on the status of land & water resources in the region
- To contain recommended site specific technologies to deal with observed problems
- Feasibility study conducted, which now needs to be workshopped
- Develop a plan of action including support to member states (possibility of incorporating WOCAT approach & methodology?)

There is an interest in the SADC region to seriously engage in WOCAT.

1.4.3 Zambia

Report by Charlton Phiri, Ministry of Agriculture and Cooperatives (Zambia_PRESENTATION CAPETOWN.ppt)

As Provincial Soil/water Conservation and Agroforestry Coordinator in the SCAPE (Soil Conservation and Agricultural Extension) project I have attended a WOCAT training workshop in Kenya in 1995 and made the attempt to document several SWC technologies and approaches.

The technologies ranged from simple level structures, graded bunds, gully control, ponds, small earth dams, infiltration ditches to storm drains (cut-off drains) in the category of mechanical structures. The vegetative structures included grass strips, fallows, planting of vetiver grass and shrubs. Soil improvement measures included: improved fallows (green manure), application of kraal manure, composting, and crop rotations to name a few. Since there was no more correspondence with WOCAT officials much of the information was shared within the country and among the project areas in form of reports.

After the SCAPE program came to an end in 2000, work has been going on though on a smaller scale due to insufficient funds. The funds released by government to departments are only sufficient for follow-up on work already on the ground and not for expanded work as it would be the case.

Currently, under the Technical Services Branch, I am responsible for all land management issues in 4 districts. I provide technical expertise to the staff and farmers (land users) and whenever funds permit, I conduct some training in soil and water conservation and water management. I face the challenge of collecting information and documenting indigenous and introduced SWC and rainwater harvesting technologies.

Planned activities 2006/2007

- publicity and awareness to interested parties and collaborating partners
- training of staff in WOCAT methodologies (30 from 9 districts)
- data collection
- document the most adopted soil and water technologies in the districts
- update the Zambian database
- bring about a team of experts and implementers interested to work together for the common good

With the above done, the use of the WOCAT tool would much be appreciated by others my institution. The way the information has been generated is amazing and that would be beneficial to any institution and country at large.

1.4.4 Tanzania

Report by Wilfred Mariki, Selian Agricultural Research Council; see also chapter 7.1.6

Wilfred Mariki presents SEARNET funded project and points out the importance of markets when addressing SLM options. The WOCAT database could be helpful in offering a variety of SLM options to choose.

Poster: SIMNET

Identify agricultural enterprises which optimise productivity and benefit farmers

- Market opportunity (Identification; Subsector selection)
- Soil fertility management options
- Crop and variety options
- Water management options
- *Integrated options → to achieve higher productivity of land, water, labour and capital*
- Increased marketable surplus; low cost of production per unit of output
- Competitive prices
- higher quality products → Marketing
- Poverty reduction
- Reinvestment in inputs to increase productivity and profitability



Presenting progress reports of national initiatives: 'Cindy' Shen Xin (China), Munawar Khan (Pakistan) and Aida Gareeva (Kyrgyz Republic) (All photos by Hanspeter Liniger)

TOPIC 2 WOCAT OVERVIEW BOOKS

Rapporteur: Romy Labios

2.1 Global and national overview books

2.1.1 Global Overview Book 'where the land is greener'

Presentation by Hanspeter Liniger (GlobalOverviewBook.ppt)

"Where the land is greener" includes:

- Case studies with 42 technologies and 28 approaches
- Analysis on technologies and approaches
- Conclusions and policy points

Some conclusions from the compilation of the book:

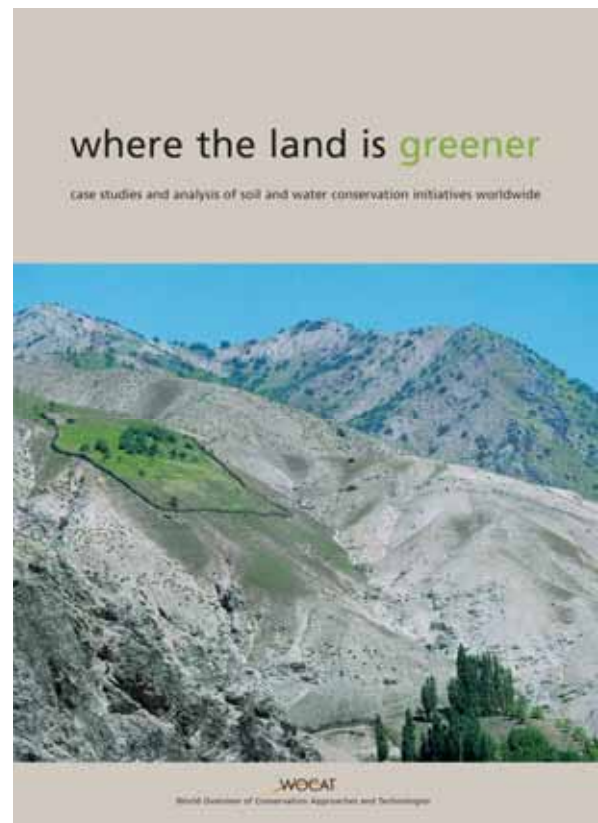
- Importance of local innovations and adaptations
- Complexity of SWC and the need to continuously adapt
- Knowledge gaps (mainly on cost-benefits, impacts, spatial extent,...) => requires research
- Lot of experiences so far not recognized, tapped and used
- Emphasis of analysis on production increase and international issues: water, desertification, carbon, mitigating poverty.
- Efforts needed for M&E and decision support (local, national, global)

Launch, dissemination and marketing:

- Printers: Stämpfli Switzerland, 5000 copies at US\$ 9 per copy
- Publishers:
 - CTA: Technical Centre for Agriculture and Rural Cooperation; The Netherlands, Distribution free of charge for African, Caribbean and Pacific region (for people requesting CTA support)(+ € 20'000 supportive funds)
 - FAO (US \$ 10'000)
 - UNEP (contribution for compilation of case studies)
- Distributors: SMI England
- 1st launch: LADA workshop: 28 Nov – 1 Dec 2006, FAO, Rom
- 2nd launch SDC Bern (Jan 07)
- Additional events: Conference Philippines?

Open issues:

- Translations into French, Spanish and other languages?
- Regional distribution centres?

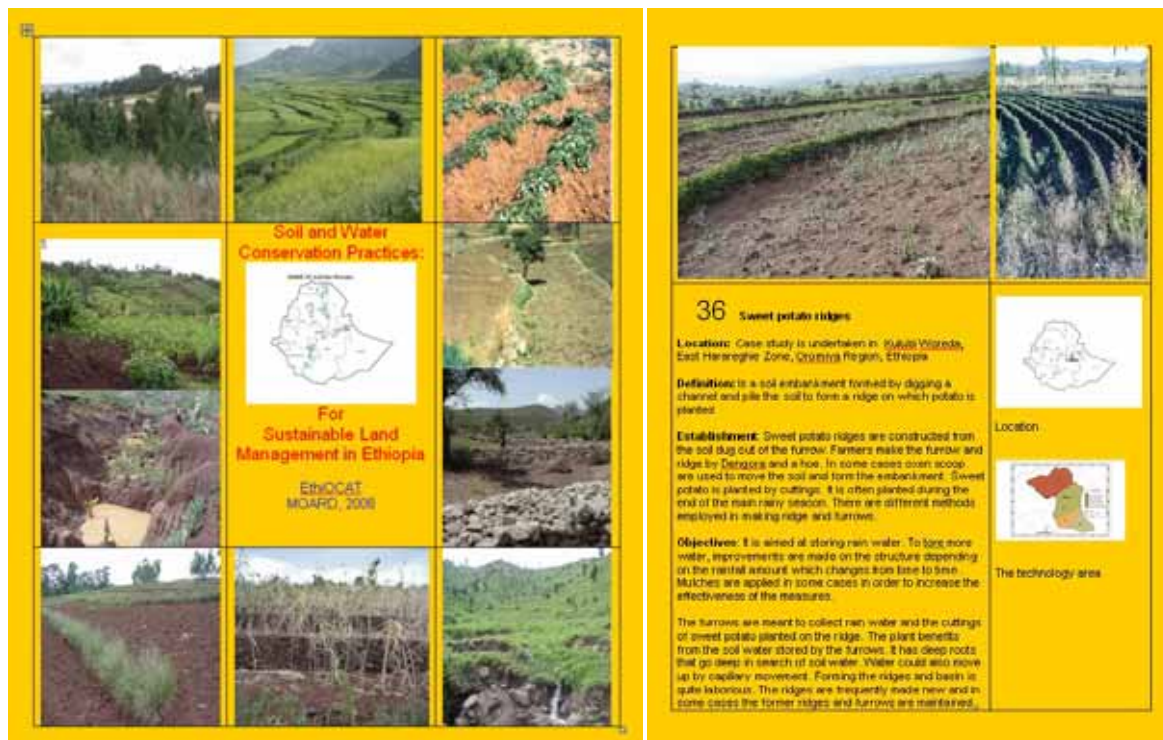


2.1.2 ETHIOCAT overview book

Presentation by Daniel Danano (*Ethiocat overview book.doc*)

The Ethiopian Overview Book contains 52 technologies and 28 approaches and, so far, some cost analysis related to the time until the investment costs are paid ('cost recovery for SWC').

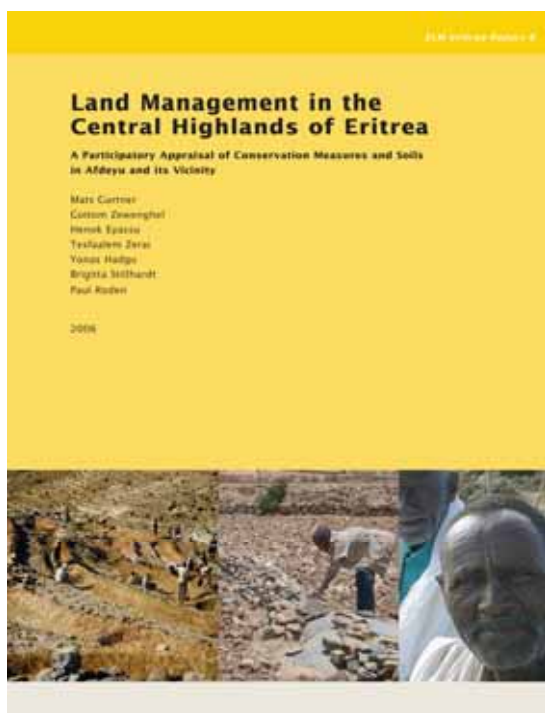
Open issues: In which format to print the Ethiopian Overview Book? To follow the layout of the global overview book?



Cover page and example of technology from ETHIOCAT overview book

2.1.3 Land Management in the Central Highlands of Eritrea

Presentation by Mats Gurtner (*Land Management Eritrea.ppt*)



'Land Management in the Central Highlands of Eritrea – A Participatory Appraisal of Conservation Measures and Soils in Afdeyu and its Vicinity' is a book (to be printed by end of 2006), where Mats Gurtner was one of the main authors. It is a 'WOCAT light' and a 'local overview book' experience, including 23 technologies in 2-page fact sheets.

Aims:

- inventory / documentation of introduced and local SWC measures
- monitoring and evaluation of the quality and effects of SWC measures
- basis for decision making on SWC implementation (locally adapted and accepted)
- participatory planning of further research activities

Cover of the report: *Land Management in the Central Highlands of Eritrea*

The WOCAT light questionnaires were used with main focus on the description of the measure, its benefits and problems. Special focus on acceptance / adoption, area coverage, condition, reasons for success and failure. A very detailed participatory mapping was carried out to visualize the spatial patterns of SWC measures (not WOCAT QM method)



Traditional stone terraces

Benches or forward sloping terraces, usually with high stone risers, developed over decades, often laid out along traditional plot boundaries and not necessarily along the contour, often staggered.

Purpose / effects

Increase in arable land reflected through leveling of steep, uncultivated lands; reduction of runoff and erosion control; moisture conservation; increase in soil fertility through siltation of eroded topsoil.

Description / establishment

Farmers in the area have a long tradition of building in stone (stone walls for traditional houses, fences, etc.). Stone terraces were built even before British colonisation. The structures are established individually and usually follow old field boundaries, which is why they are often staggered and not necessarily laid out along the contour. Traditional stone terraces are typically found in Gedera intensively used area near village, mostly on steep slopes and in valleys or on mountainous cropland. The terraces often reach a considerable height due to continuous reinforcement, but also because they must be wide enough to allow for easy turning of oxen ploughs. Possibly the oldest existing traditional SWC structure, its construction method is poorly documented. Farmers state that there are two different construction methods, even though in many cases they were probably combined. These are:

Cut and fill: 1) Establish foundation to a depth of 0.25-0.5 m. 2) Build the stone wall, placing large stones at the lower part of the structure so that they are inclined towards the slope, and small stones at the upper part and in between big stones. Width: 1-1.5 m at the bottom, narrowing towards the top. Height: not specified, varies between 1-5 m, rarely higher than 5 m. Spacing of the terraces varies according to slope, soil depth, soil fertility and expected runoff. In sloping areas and on non-fertile and shallow soils the spacing is narrow (Freeway and Herten 1999). 3) Cut and fill: dig soil from the upper part and transfer it to the lower part with support from animal power along the future terrace to move loosened soil down the slope towards the wall, at the same time compacting it.

Gradual development: 1) Start with a simple stone bank. 2) Gradually enhance the river, while a terrace slowly forms through continuous siltation.

Local name(s): Dabul / mullah (general term for terrace / bank); mullah (only bench version).

Land use type: Cropland

SWC category: Structural measure (permanent)

Type of degradation: Surface erosion by water

Combinations: Drainage furrows, contour ridges

Approach: Indigenous, has been applied for generations, individual implementation

References: Local key informant: No. 38, 67
See Table 43, page 123-126
Geo-reference: No. 1-2
See Table 47, page 129-130
Photos: SUN Extra photographs



Acceptance by farmers

Farmers in the study area have embraced the traditional stone terraces from their ancestors. The structures have been maintained and enhanced for generations and are still widely maintained nowadays, predominantly in collect and no intervention used steep slopes near the villages. The terraces are adapted to the local conditions and to the existing farming system. The condition of the structures is generally moderate, although there is great spatial variance: terraces close to settlement areas (Gedera) are usually in good condition, whereas structures in marginal, steep areas are in an advanced stage of deterioration. This is due to various reasons:

- Farmers abandon fields - often located in marginal, steep areas - where fertility has declined; therefore they also abandon maintenance of SWC structures on these fields.
- Traditional terraces are sometimes abandoned by order during SWC campaigns because they are not aligned along the contour. A new bank is usually built at the base of the old terrace.
- Reduction of a collapsed terrace section requires high labour input which can sometimes not be achieved individually. Labour input also depends on the availability of a site.
- Limited availability of stones to gradually build up the terrace over

Maintenance / modifications

Stone terraces require annual maintenance. The stone river needs to be gradually enhanced due to constant accumulation of soil behind the structures (siltation), and constant repair work (e.g. replacement of fallen stones) is necessary because frequent passing of animals and people tends to damage terraces, particularly in areas near the village (Gedera). Old terrace rivers are, in many cases, no longer reinforced with stones, particularly at the base: stones come loose and fall off due to erosion; water movement, or, in case of low availability on the field, are removed from the lower part of the river and used to increase the terrace wall. The fact that traditional terraces are not laid out along the contour can lead to lateral flow and concentration of runoff and overflowing at the lowest point. These processes lead to breaching, collapse and pipe erosion if not counteracted by leveling work. During maintenance activities in campaigns, the alignment of old terraces is abandoned where they do not follow the contour, and a new stone bank is built at the base of the terrace.

Modification observed in the field: One innovative farmer transferred ditches overgrown with grass from a combined stone and earth bank to reinforce the edge of a newly rebuilt stone terrace.

Benefits / strengths

- Converts marginal land (ditched) into cultivable, arable land; reduces land scarcity
- Protects efficiently against erosion; good conservation of soil and applied fertilizer
- High increase of water availability
- Increases soil fertility / crop yields, especially near the edge of the terrace (siltation of eroded topsoil)
- Field is cleared from stones and the slope angle is reduced, resulting in increased workability and suitability for various crops
- Reduced risk of crop failure
- As a traditional measure it was constructed carefully by individual farmers; if well-maintained, stone terraces are stable and durable

Problems / drawbacks

- Requires high labour input; men are absent due to national service and heavy work cannot be done by women / old people
- Drainage of excess water is not ensured, sometimes leading to overflow
- On heavy soils, bench terraces can cause waterlogging
- Lack of large stones to construct a stable stone wall in certain areas
- Terraces are often staggered / not continuous
- Terraces are frequently not aligned along the contour; this causes risk of overflowing and breaching and leads to difficulties in the implementation of introduced measures that follow the contour
- Terraces are old and often very high; therefore
 - they are partly unstable if poorly maintained
 - they require frequent maintenance to avoid overflowing and breaching and to keep up with siltation
 - the rivers occupy a lot of space if not properly built with a stone wall
- High terrace rivers provide a habitat for rodents; canals dug by rodents are assumed to induce pipe erosion.

Traditional Stone Terraces: a fact sheet (2-page-summary) of a SWC Technology presented in the book

Differences to the WOCAT method:

- based on land users' perspective alone
- data on environment and land use not recorded for each measure, but only general description for whole area in separate section

Summary:

- High diversity of SWC measures
- Focus on cropland (77% of all measures, local measures in particular)
- Focus on structural and agronomic measures
- Approach: local and introduced measures: combined, complementing each other!
- Area coverage of SWC measures is high
- Condition is mostly insufficient, due to lack of maintenance

Additional results:

- GIS mapping of distribution of SWC measures, their conditions, etc.
- Elaboration of key factors of acceptance

2.1.4 Overview Book - Nepal

Presentation by Isabelle Providoli (ICIMOD-WOCAT overview book.ppt)

ICIMOD plans to produce an overview book based on two projects in Nepal:

- ICIMOD – PARDYP (People Resource and Dynamic) project ended in June 2006: 9 technologies and 4 new approaches (technologies focusing mainly on increasing water availability, improving water use efficiency and increasing soil fertility).
- SSMP (Sustainable Soil Management Programme): 20 technologies based on an adapted basic technology questionnaire to better reflect soil fertility aspects.

These two projects plan to collaborate and to produce a common overview book, which might be based on the templates from the global overview book. The process will start with a meeting in November 2006.

2.1.5 CAMP posters

Presentation by Aida Gareeva (CAMPOverviewPosters.ppt)

The documentation of SWC practices is directly done with the farmers and includes household descriptions, problems, solutions, technology documentation, effects/results and some additional information. 76 technologies were documented and presented in poster format since 2003, and translated from Russian into Kyrgyz, Tajik and English.

Dissemination and awareness building:

- SWC – ALS workshops (Autodidactic Learning for Sustainability)
- Publications
- Film
- Exhibitions
- RAS (Rural advisory service) trainings (in Kyrgyzstan) and scientific institutes (Kazakhstan, Tajikistan)
- Round tables
- Through AGOZA, the Alliance of Central Asian Mountain Communities

2.1.6 South Africa info book and fact sheets

Presentation by Rinda van der Merwe (Overview book_South Africa.ppt)

Compiled by using the “four-page summaries”

Result = one-page for each questionnaire

Divided into 3 parts:

- Background / Information part,
- SWC Technologies and
- SWC Approaches.

Different T's and A's were grouped into categories, to keep T's and A's dealing with the same issues together.

Samples of the fact sheet print outs were distributed during the 9th WSSM in China and are also downloadable from the website (see <http://www.wocat.net/MATERIALS/RSInfoBook.pdf> or <http://www.agis.agric.za/agisweb/?Mlval=wocat.html>).

2.1.7 BANCAT overview book

Presentation by Sudibya Kanti Khisa (Chronology of production of BANCAT overview book.ppt)

The book entitled 'Selected Natural Resource Conservation Approaches and Technologies in the Chittagong Hill Tracts Bangladesh'; edited by Sudibya Kanti Khisa, Jalaluddin Md. Shoaib and Niaz Ahmed Khan was printed just before the WWSM and presented to the participants. The BANCAT overview book contains 30 technologies and 9 approaches.



Cover (left) and an example of documented SWC Technology: Foothill Terraces for Rice Cultivation (right)

Chronology of production of BANCAT overview book:

- 2003: Participation in WOCAT training in Nepal
- 2004: First training workshop in Bangladesh, formation of BANCAT, idea received to produce overview book from the South Africa Info Book at WWSM 9
- 2005: Second training workshop, support of other projects (CHARM, UNDP best practices)
- 2006: Production of BANCAT overview book (beside other seminars, meetings and trainings)

2.2 Comments and discussion

- Availability of global overview book as pdf on Internet: Yes, but in low resolution. It can also be included on other websites, eg AGIS website South Africa.
- ETHIOCAT overview book: Suitability and replicability of the documented technologies and approaches to other parts of Ethiopia? This depends on the environment, but the information collected will be linked to GIS base maps indicating their natural environment.
- How to include more African initiatives? WOCAT started in Africa, but the involvement of these WOCATeers has unfortunately decreased over the last years (except South Africa and Ethiopia). There is a need to look for committed individuals and institutions. SADC/ACT might renew and sustain the WOCAT activities initiated in Africa.



Presenting national overview books: Daniel Danano (Ethiopia), Sudibya Kanti Kisha (Bangladesh) and Mats Gurtner (representing Eritrea)

TOPIC 3 CONSERVATION AGRICULTURE & RAINWATER HARVESTING

Rapporteur: Gudrun Schwilch

3.1 Conservation Agriculture

3.1.1 Conservation Agriculture in the UK

Presentation by Alastair Leake (CA_UKAlastair.ppt)

The challenge in Europe is to convince the farmer that there is a problem! They usually put soil back up after erosion every year.

Practical measures to minimise erosion:

- Plough versus non-inversion
- Soil cover: cover crop; leave straw after harvest (but: looks un-tidy!)
- Soil organic matter
- Earthworms: There is a need to farm the earthworms as well, as bigger and more earthworms allow the water to sock into the soil more quickly
- Repair broken field drains
- Divert runoff from tracks
- Re-orientate tramlines
- Create buffer strips (eg grass strips to trap sediments)
- Install silt traps
- Install settlement ponds (which are also good for wildlife)
- Carry out Visual Soil Assessment: the farmer digs and looks at the soil structure before the cultivation
- Precision nitrogen system: scanning of soil colour at the back of the tractor allows more detailed spreading of fertilizer
- Aqueel roller: rollers with spikes at the back of tractor making little cups retaining the water (simple construction using old car tyres)



Aqueel roller (Photo by Alastair Leake)

Summary:

- Soil erosion is a natural process
- Point source erosion is infrequent
- Diffuse pollution is a major challenge
- Many simple techniques together can have a significant effect

In June 06 the SOWAP (Soil and Water Protection) programme has produced a booklet entitled 'Conservation Agriculture in Europe – An approach to sustainable crop production by protecting soil and water?'. This booklet presents the current knowledge and experiences of Conservation Agriculture in Europe along with a general guide to the practical implementation of its methods across the range of European cropping systems. Implications for biodiversity are also considered. It provides a balanced view of the advantages and limitations of the technology, primarily for those concerned with advising on and formulating European policies on environmental protection and agricultural support mechanisms.

3.1.2 Conservation Agriculture in Switzerland

Presentation by Thomas Ledermann (presented by Hanspeter Liniger; CA_Switzerland.ppt)

In Switzerland, broad **legal frameworks** for soil protection exist:

- Federal Law on the Protection of the Environment
- Ordinance on soil Protection
- Federal Law on Agriculture
- Ordinance on Direct Payments
- Ordinance on Assessment of Sustainability

Soil protection is a task of the cantons prescribed by federal law, but it is largely unclear how to enforce these laws. Soil protection is thus handled very differently in each canton, eg top-down and risk-oriented (based on a soil erosion risk map) in the Canton of Solothurn, top-down and damage-oriented (based on reporting of recent soil erosion damages) in the Canton of Fribourg or bottom-up and participatory-oriented in the Canton of Berne. 6 out of 26 cantons maintain payments for 'no-till systems', ranging from 200 CHF / ha / year for grassland to 600 CHF / ha / year for potatoes. Almost 50% of the arable land of Switzerland would be suitable for conservation agriculture, but so far only on 25% it is actually applied.

Under the EU – COST action 634: "On- and Off-site Environmental Impacts of Runoff and Erosion", two PhDs have started in summer 2005: "On- and Off-site Effectiveness of Soil and Water Conservation in Switzerland – Steps Towards the Integration of Farmers, Experts and Scientific Knowledge". Their completion is planned for summer 2008. Supporting MSc and BSc thesis are working with GIS and WOCAT tools.

Erosion damage mapping:

- event-based;
- informed by farmers;
- mainly linear erosion & sheet erosion
- additional data: land use, tillage, off-site damage, wheel tracks, etc.

Results: increased erosion during winter (winter wheat) under conventional ploughing (15-30 t/ha/y), compared to no erosion under conservation agriculture.

There has been a massive increase of conservation tillage systems over the last years (eg in maize from 5 % in 1988 to 60% in 2004). The profit of no-till systems compared to plough-based systems ranges from 13% (for spelt wheat) to 93% (for rape / colza). Local variations and modifications need to be documented.

Conclusions:

- Erosion Damage Mapping is a suitable tool for impact assessment.
- WOCAT tools are easy to apply and technologies and approaches can be well-documented.

3.1.3 African Conservation Tillage Network (ACT)

Presentation by Martin Bwalya (ACT_wocat2006.ppt)

Africa's "foundation" for sustainable growth lies in enhancing the productivity of its natural resources, as soil and water quality might be the main reason that constrains productivity. ACT provides information support for enhanced adoption of Conservation Agriculture in Africa. There are effective synergies when applying the three principles of no/reduced soil disturbance, soil cover and rotation simultaneously.

Conservation Agriculture promotion efforts in Africa:

National/local Governments:

- Extension/Research Programmes (Zambia, Tanzania, South Africa, Mozambique, Burkina Faso, Nigeria, etc...)
- Policy support (Zambia, Lesotho...)

Regional Programmes

- SADC (Fund for Innovative and Regional Collaborative Projects (FIRCOP), Land Management and Conservation Agriculture)
- COMESA - the Common Market for Eastern and Southern Africa (NEPAD-CAADP (Comprehensive Africa Agriculture Development Programme) Pillar 1 implementation)

National and international NGOs

- Lesotho (e.g. Serumula)
- Zimbabwe (e.g. FAO-NGOs-Donors Relief-into-growth programme)
- Zambia (CFU – Conservation Farming Unit, Care International)
- Mozambique (Promec)

Community and faith-based institutions

- River-of-life (Zimbabwe)
- Salvation Army community support project (Siavonga - Zambia, ...)
- Catholic Church (Tanzania)

Research-Extension & Development Organisations

- CIMMYT (Zambia, Zimbabwe, Mozambique, Kenya, Malawi)
- FAO – TCPs (Technical Cooperation Projects) / CA-SARD (Sustainable Agriculture and Rural Development)

Conservation Agriculture is applicable to virtually all crops: Cucumber, sweet pepper, onions, tomato, squash, cassava, etc, but requires an integrated, holistic approach.

ACT is a voluntary association of players and stakeholders with individual commitment to through CA contribute to enhancing livelihoods. It has currently approx. 900 members in about 32 countries.

ACT – WOCAT collaboration aims at 'embracing the WOCAT tools'.

- Issues and lessons on scaling up SWC and Conservation Agriculture
- Science, facts and figures: joint studies eg on analysis for evolving knowledge and lessons, impact assessment (with livelihood and environmental parameters, assessment of (potential) contribution to the AU/ NEPAD)
- WOCAT database is where people find options

ACT and WOCAT should share common regions and common workplans.



Presenting initiatives regarding Conservation Agriculture (Martin Bwalya, Zimbabwe; Alistair Leake, UK) and Rainwater Harvesting (Irfanullah Khan, Pakistan) (All photos by Hanspeter Liniger)

3.1.4 Conservation Agriculture on the dry foot slopes of Mount Kenya

Presentation by Joseph Ndungu Ngeru (Mt Kenya CA.ppt)

Study materials and methods:

- Long term study (1986-2000): Effects of tillage on soil, water and production (2 sites (Kalalu and Matanya) with 2 tillage methods i.e. minimum tillage & mulch vs. conventional tillage)
- On farm study since 2001: Small scale farmers in self help groups. Minimum tillage and mulch using the Tido (ox drawn plough modified to rip soil)
- WOCAT assessments using QA / QT - two sets of assessments (2003 and 2004)

Long-term maize yield analysis:

- Big difference between two sites close together
- Generally high variability in yields: 0 - 8.7t/ha
- Average yield increase by mulch: 27% in Kalalu, 70% in Matanya
- Biggest increase (x4) by mulch in "medium" seasons (300-500 mm)
- Mulch reduced crop failure almost by half: from 21% to 14% in Kalalu and from 62% to 38% in Matanya.

Conservation agriculture has a great potential in reducing water loss in rainfed agriculture, which is often not perceived as being so high.

Capitalizing on surface cover = food security and poverty alleviation

- Effect of CA is gradual / i.e. not instant
- The positive effect on soils, water and food security increases with time
- Use of fertilizer can be reduced over time

WOCAT assessment revealed:

- increase in crop yield (>60%, from 1.5 to 2.7 t/ha/year in wheat)
- Fodder quantity and quality increase, more farm income
- Improved SWC/erosion knowledge and stronger community institutions
- Increase in soil moisture, better rainwater harvesting (25-60%)
- Soil loss reduction (heavy storm runoff reduced from 75 to 50% and medium storm runoff from 50 to 25%)

CA is a new way of farming for small scale farmers. Many questions need to be addressed:

Safe use of herbicides / options for mechanical weeding? What is the optimal cover? How much fertilizer / manure to use? How to manage crop rotations? How to manage cover crops? Cost benefit of CA? Adoption / non-adoption?

Challenges and outlook:

- Farmers are experimenting, learning and adapting: documentation and sharing of their experiences (impacts of different CA methods)
- Mapping of rapid spread of conservation agriculture
- Intercropping / agroforestry systems
- Linking these experiences with the global movement of CA
- Studies to fill knowledge gaps

Combining current CA movement with rain water harvesting provides a great opportunity to achieve food security, poverty reduction, carbon sequestration, mitigate water conflicts => sustainable soil and water resource use and achieving MDGs 1,7.

3.1.5 Conservation Agriculture Initiatives in the Philippines

Presentation by Romeo Labios (CAPhilippinesRomy.ppt)

CA initiatives by International Agricultural Research Centres:

- Natural Vegetative Strips through ICRAF
- Sustainable Agriculture and Natural Resources Management Collaborative Research Support Program in Southeast Asia (SANREM-CRSP SEA) assists in the creation and successful application of decision-support tools for natural resource management and planning at the community and watershed scale.
- Philippines – Australia Landcare Projects: a special joint initiative of the Philippines and Australia to help develop and evaluate Landcare in upland rural communities in the southern Philippines.

CA initiatives by private industries:

- Grassland Conservation Project, Monsanto Philippines: Introduction of conservation-tillage technology for sustainable farming on hilly grasslands in the Visayas. From initial 750 ha planted to corn, it increased to 17,000 ha after 2 years.
- Lantapan Land Care Sustainable Agriculture Project Update, Syngenta Philippines: Focuses on the application of Gramoxone Zero and Minimum Tillage Technology. Demonstrates the different application of Gramoxone, pre-plant and inter-row application, and its applicability to different crops.

CA initiatives by public institutions:

- Upland crop production in paddy fields using Small Farm Reservoirs (SFR)
- Conservation tillage systems of corn grown in paddy fields
- Vetiver Grass Technology
- Multi-Storey-Cropping

Other initiatives:

- Philippines JIRCAS (Japan International Research Center for Agricultural Sciences) Conservation Agriculture Project, 2006 to 2011, BSWM, DoA

Use of bio-fertilizer:

Advantages: enhance growth and yield of inoculated plants, promote absorption of nutrients and water, reduce chemical fertilizer input from 25% up to 85%, improve plant health, improve soil properties and soil fertility, cheap and easy to apply, environment friendly.

BioTech-UPLB's commercially available bio-fertilizers:

- Nitrogen Fixing Bacteria: BIO-N, NITROPLUS
- Phosphorus Solubilizing Fungi: MYCOGROE, MYKOVAM
- Decomposers: BIOGREEN

3.1.6 Bed planting and zero tillage in Kyrgyzstan

Presentation by Abdybek Asanaliev (Bed planting and zero tillage in Kyrgyzstan.ppt)

Bed planting and zero tillage used by Islamov Abduhakim (2005-2006)

Benefits for farmers (savings):

- Seed (sowing rate twice times lower)
- Fuel (one passage – more operations)
- Time (irrigation, field operation)
- Water (even and quick distribution)
- Improved soil fertility

3.2 Rainwater harvesting

3.2.1 Dry Land Management and Rehabilitation through Water Harvesting

Presentation by S. Irfanullah Khan (RWH Pakistan.ppt)

Traditional strategies: Highly subsidized packages (water tanker forestry):

Incur high cost in terms of labour, watering and protection, which makes it difficult for a poor farmer to adopt afforestation, in addition no participation from communities. The plantation of only 1 or 2 tree species can give output in long term which makes plantation an undesirable venture for poor farmers.

The SDC funded **Farm Forestry Support Project (FFSP)** of Intercooperation (IC, Swiss NGO) **aims** at:

Improving the livelihood conditions of small farmers & poor women in rainfed areas through promotion of improved farm forestry practices”.

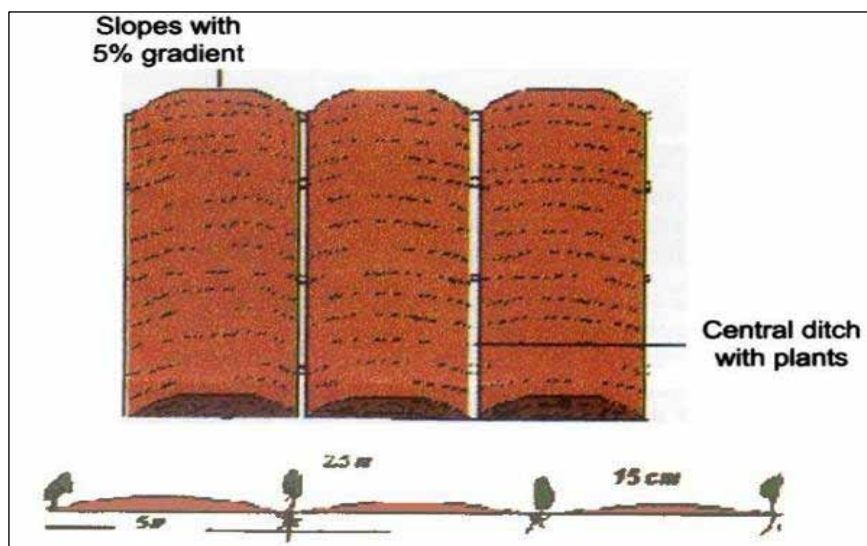
- Human & institutional development
- Farm forestry enterprise promotion
- Rehabilitation of degraded lands
- Participatory approaches.

Dryland management and rehabilitation objectives:

- Reclamation of degraded lands with the integrated efforts of farmers & their institutions, research organizations & private sector
- Reach optimum production level on marginal lands with multiple products
- Introduce low cost, simple to use & effective rehabilitation techniques

Conservation technologies (and their **costs/ha**):

- Gentle Slopes: hillside ditches (83 US\$)
- Moderate Slopes: conservation contour trenches (83 US\$)
- Steep Slopes: boat-shaped pits (33 US\$)
- Plain Area: roaded catchments (= small artificial slopes between rows of plants) (166 US\$)



Roaded catchments

What can FFSP/IC and WOCAT do together?

- Documentation of dryland rehabilitation experiences (technologies and approaches) through WOCAT tools
- FFSP/IC can use its linkages and forums for promoting WOCAT in other SWC organizations (government and private)
- Facilitate exposure visit to FFSP/IC dryland management sites in Pakistan
- Provide access to its knowledge / data base
- Facilitate replication of successful technologies

TOPIC 4 WOCAT STRATEGY

Rapporteur: Isabelle Providoli

Based on discussions held at WWSM 10 a draft of the WOCAT strategy for the next 5 years was developed and sent to reviewers for comments and feedback. The reviewed strategy draft, consisting of a core module and an activity module, was presented by Gudrun Schwilch for discussion and approval. The strategy was discussed in regional groups focusing on the national and regional chapters and further suggestions were shared. In addition, a 'questionnaire' on "WOCAT field of activities" was distributed to find out the demand for and the priority of WOCAT activities of the participants.

4.1 Draft strategy document

Presentation by Gudrun Schwilch (WOCATStrategyCoreModule.doc, WOCATStrategyDetailsActivities.doc)

See also task force report on page 32!

The proposed strategy document is divided into two modules (so far):

- Core module
- Module 'activities'

The four fields of activities of WOCAT were defined as:

1. Knowledge on SWC and SLM
2. Tools and methods
3. Information sharing and networking
4. Research, training and education

Table of content for the core module:

1. Foreword
2. WOCAT vision and mission statement
3. WOCAT's background
4. WOCAT's knowledge field: Sustainable Land Management
5. WOCAT's achievements and impacts
6. Organisation of WOCAT
7. Basic activities at global level
8. Fields of activity at global and nat./reg. level
9. Funding

It is important that the fields of activities are separated into those at global and those at national and regional level, as this also reflects the organisation of WOCAT. These activities are described in detail in the module 'activities', including

- specific objectives,
- target groups,
- expected results,
- dissemination strategy,
- outcomes,
- priorities,
- roles and responsibilities of the global and national/regional level and
- funding options

This module is only an addition to the strategy core document. The idea is that donors may pick those activities which they like to fund.

4.2 Regional group meetings on national and regional WOCAT strategies

The group results were the following:

4.2.1 South-East Asia (Indonesia, Philippines) and China

Identified priorities of the fields of activities:

1. Financial sustainability at global level (objective 12)
WOCAT should prepare concept paper for full size regional project for GEF
2. Capitalize on WOCAT tools and methods (objective 4)
How to generate new knowledge out of the WOCAT tools/methods?
 - for the DSS (decision support systems)
 - for issues like carbon sequestration, biodiversity
 - education (thesis for BSc, Msc and PhD level), capacity building
3. Coordinate network, etc. (objective 1)
Governance: National/regional levels requesting training support should provide counterpart funding on their end while global level to provide seed money.

4.2.2 Europe (UK and Serbia)

Identified priorities of the fields of activities:

1. Enhance WOCAT tools and methods (Q's, dbs, DSS)
2. Enhance quality assurance (quality procedures, peer review, label)
3. Capitalize on WOCAT network and knowledge sharing: this is the fundamental core strength of WOCAT!
4. Generate new knowledge through research: new partners needed to feed knowledge in
5. Share and enhance knowledge through training and education: to distribute new knowledge
6. Financial sustainability

The European Conservation Agriculture Federation (ECAAF) brings together fifteen national associations which promote among Europe's farmers the soil management "best practice" aspects of conservation agriculture. They might be interested in a collaboration with WOCAT.

4.2.3 East Africa (Kenya, Ethiopia)

Identified priorities of the fields of activities:

1. Capitalize on available knowledge
2. Coordinate network, maintain and update global database, support training of specialists
3. Enhance quality assurance

General comments for the strategy:

Individual approach for new WOCAT activities must be discouraged and the institutional approach should be strengthened. Kenya as an example has a lot of resources, but these institutions need to be approached. The group supported a regional coordination through a regional institution such as ACT.

Objective 1:

- The objective 1 is not satisfactory and well grown.
- The role of the "responsible", of CDE, ISRIC and FAO should be clearly defined.
- Each national data is only used by the nationals themselves for overview books.
- No financial support encourages other countries to come in, thus the global database is not well established.

Objective 2:

- Global, regional and national issues have to be qualified.
- “Output”: More new case studies should come in order to make it global.
- “Resources”: WOCAT secretariat should support the proposals prepared by the national coordinators for funding.

4.2.4 SADC (Present: Zambia, Tanzania, South Africa, SADC Secretariat, ACT, Botswana, Lesotho, Swaziland)

Identified priorities of the fields of activities:

1. data collecting and analysis tools
2. database
3. networking

General reflections of the SADC group:

1. How do we move the WOCAT agenda ahead?
2. Proposed operational structure and mechanism of WOCAT (in SADC region)
 - Initial thrust: focus on mobilisation, orientation and local buying-in
 - What to do in the region on raising awareness of WOCAT and its application/ potentials: awareness workshops; distribution of WOCAT documents (soft and hard)
 - Inventories databases (our own and other in the region) and exploit possibilities for immediate website links
 - Articulate potential additional value and service of WOCAT on national and regional SLWM knowledge management initiatives
 - Relying on “voluntary involvement” – individual commitment is the driver
 - Management structure left as informal and flexible as possible
 - SADC region facilitation arrangement (South Africa – Department of Agriculture, ACT and SADC – L&WM collaboration)
 - Initial thrust should be based on local available resources. On-going processes can apply for Knowledge Management specific funding or specialists expertise input
 - National thrust (identify country level focal point institutions – can be more than one even in one country): Take care of (i) country recognition of the selected institution (ii) long term interest (and own value) of the institution in WOCAT
 - ACT can/should be useful on (a) enhancing the institutionalisation by linking new and old initiatives to the values that are possible from WOCAT, (b) facilitating the on-going and long term running / management / up-dating of the WOCAT database and (provide or arrange) backstopping to new interests
3. WOCAT tools (QT - technologies, QA - approaches, QM – mapping)

The initial process will help to highlight (i) training needs and (ii) who to be trained. Training is also important in ensuring that standards are maintained – poor data is simply not worth the effort.

Quality control:

- training of data collectors
- peer review team (technical)
- ACT should be mandated to provide the peer review mechanism with both national and regional value
- International property rights
- Copy rights: all information published in/by WOCAT formally acknowledges the source

4.2.5 ICIMOD (Bangladesh, China, India, Nepal, Pakistan)

Identified priorities of the fields of activities:

1. Coordinate network, maintain and update global database, support training of specialists
2. Capitalize on WOCAT network and knowledge sharing
3. Generate new knowledge through research

Comments on the strategy:

Some objectives are overlapping.

Objective 1:

- Regional hubs need to be continued.
- Regional/national coordination needs to be encouraged in order to ensure continuity of WOCAT of promoting and networking at national/regional level.
- E-forums, interactive e-solutions should be expanded.

Objective 2:

- Available knowledge and database of QT's and QA's need to be put on a format for decision makers.
- "Dissemination": national and regional dissemination workshop should be carried out.

Objective 3:

- This objective is very ambitious. It needs good strategic planning and good linkages with universities, councils, etc. to cover major regions world wide.
- Large funding is needed.

Objective 4:

- "Outcome": promotion and advocacy of WOCAT tools is needed.

Objective 5:

- Various modules need to be developed to capture specific integrated management approaches like watershed / landscape management.

Objective 6:

- Training at local, national and regional level.
- Quality standardisation should be ensured and coordinated regionally.
- QT's and QM's should be screened by regional/national coordinator.

Objective 7:

- National / regional annual meetings should be organized in addition to the annual international WWSM.

Objective 8:

- Linkage with universities / research institutes by regional / national coordinator.

4.2.6 Central Asia

Identified priorities of the fields of activities:

1. Generate new knowledge through research
2. Share and enhance knowledge through training and education
3. Enhance WOCAT tools and methods

Comments on the strategy:

Objective 1:

- WOCAT should be formalized and legalized.
- WOCAT network is growing and keeping the overview in the secretariat in Bern is difficult.

Objective 2:

- Overview books and best practices have to be documented.
- This should be made in a simple, acceptable form for farmers, in local language.

Objective 5:

- Impacts of conservation activities should be accessed through participatory monitoring with farmers, including socio-economic impacts.

Objective 9:

- Good linkages with extension services should be established.
- E.g. ALS workshops.

4.2.7 FAO

Reflections from the FAO representative (Clemencia Licona Manzur), communicated through E-mail

- What has WOCAT been/done over the last ten years?
- Which have been its achievements?
- Which have been its failures (derived from previous analyses)?
- Which are the new WOCAT vision and mission?
- How does SWC link with SLM, how far is WOCAT ready to go?
- What will be the WOCAT scope and priorities over the next four years, including:
 - Is WOCAT only a repository of information? Or an active tool for information dissemination?
 - Is the information contained in WOCAT only valuable for land users/land management specialists? Or also for decision makers? If so how (the world map is a great example)
 - How does research gets into the picture?
 - Do we link to "globally" important issues like climate change, biodiversity, desertification (my answer is yes, as their greatest impact is at the local level), clarify concretely how does WOCAT contribute to different initiatives, MEAs etc..
- How do we need to work on those priorities (human resources, institutions, moneys, etc.)?
- Is the improvement of WOCAT tools a priority? (to me yes, the slimming of questionnaires, e.g. is fundamental to make it acceptable to different people that may make use of the information)
- Based on the scope:
 - How are we going to promote WOCAT? E.g. also how to convince potential users that WOCAT questionnaires won't be anymore almost impossible to fill.
 - Which can be useful ways of engaging donors, information providers and users?
 - Whom will we address to ask for funds and for which particular activities?
 - How will we improve WOCAT tools?
- What will be the role of the secretariat and other organisations?
- How can we catalyse the strengthening of regional and national nodes?

Again the WOCAT Secretariat can and should be the key player in finalisation of the strategy!



Discussions on the WOCAT strategy in the South-East Asia group (left) and the SADC group (right) (Photos by Hanspeter Liniger)

4.3 Analysis of priorities, demand, opportunities and strengths of WOCAT fields of activities

The table on the next page was distributed to the participants with the request to make a priority ranking of the fields of activities by distributing 6 points. Additionally, everybody was asked to indicate if there was a demand for these fields and if opportunities and strengths are small, medium or high. The same 'exercise' was already done at the strategy task force meeting in Berne in August 06.

The comparison of the results from the WWSM Cape Town and the strategy meeting in Berne showed the following:

- All fields of activities are accepted and important by both groups, no field is very outstanding (i.e. maximum percentage of one field is 19%, see table below)
- There are no big differences between the priority ranking of the two groups
- Funding sustainability is crucial and needs strengthening
- Information sharing and networking is a key asset

Additional conclusions are:

- Develop strategy based on achievements and strengths
- Maintain WOCAT at all levels (local – national – global)
- Enhance image and show developments of WOCAT to enlarge use of WOCAT
- Position WOCAT in research, development and international programmes (eg LADA, UNCCD, UNCCC)
- Enhance production of outputs and their dissemination

WOCAT fields of activities

Fields of activity	Priority Rate	(Berne)	Demand	(Berne)	Opportunity (proactive)	(Berne)	Strength	(Berne)
1 Basic global activities	24/24						++(+)	
Coordinate network, maintain and update global database, support training of specialists	24	?	+++		++(+)		++(+)	
1 Knowledge on SWC and SLM	15.5/31	5/10	++(+)		+++	+++	+++	++
Capitalize on available knowledge (demonstrate SLM benefits, global issues)	21 (14%)	5 (12%)	++(+)		+++	++	+++	++
Enlarge the knowledge base (areas / land mgt. types; world maps)	10 (7%)	5 (12%)	++(+)	++	++(+)	++	+++	+
2 Tools and methods	15/45	3.5/11	++	+++	++	+++	++(+)	
Capitalize on WOCAT tools and methods (share experiences in tool development, tailor to stakeholders; marketing)	17 (12%)	2 (5%)	++		++		++(+)	
Enhance WOCAT tools and methods (Q's, dbs, DSS)	16 (11%)	4 (9,5%)	++(+)		++(+)		++(+)	
Enhance quality assurance (quality procedures, peer review, label)	12 (8%)	5 (12%)	++(+)		++(+)		++(+)	
3 Information sharing and networking	18/18	6/6	+++	++	+++	++	++(+)	+++
Capitalize on WOCAT network and knowledge sharing	18 (12%)	6 (14%)	+++		+++		++(+)	
4 Research, training and education	14/28	3.5/7	+++		+++		++(+)	
Generate new knowledge through research	14 (10%)	3 (7%)	++ (+ vs +++)	+	++(+)	++	++	++
Share and enhance knowledge through training and education	14 (10%)	4 (9,5%)	+++	+++	+++	+++	+++	+++
5 Funding	25/25	8/8			+++		++	
Financial sustainability at global level and additional donors for specific fields of activities	25 (17%)	8 (19%)	+++	+++	+++		++	+
Total people	27	9						

average / total

+ = little, ++ = medium, +++ = high

Shadings: red: fields with >= 14% of importance / priority; orange: 11/12 %; yellow: <= 10%; all fields together are 100%

TOPIC 5 MAPPING

Rapporteur: Wolfgang Prante

5.1 New tools

5.1.1 On-line QM Data Viewer and WOCAT world map

Presentation by Carin Pretorius (new_tools.ppt)

Online QM viewer (<http://www.agis.agric.za/agisweb/wocat>)

By selecting a country and a polygon within the country map, this application displays the QM based land use and soil degradation information as well as SWC technologies applied in the area represented by the selected polygon. This feature is mainly available for South Africa, but also for some other countries, which have filled in QM. The QM data can be viewed in tables and graphs, but not on thematic maps (only location of polygon is shown).

South Africa Online Data Management System QT

Is a product specifically developed for on-line QT data entry needs in South Africa. Its functionality covers only a subset of the full WOCAT questionnaire. Location: to be found under the AGIS website at http://www.agis.agric.za/agisweb_adm/admin

WOCAT World Map – Online Map Viewer

Originally planned as a paper product, the online version of the WOCAT World Map displays locations in which QT and QA exercises have taken place. Clicking on a symbol representing either a QT or a QA opens up a related fact sheet.

WOCAT World Map – Online Data Management System

This is the data administration part of the Online Map Viewer allowing new locations to be added and information related to the respective technologies or approaches to be edited in an interactive way. This is open to all countries; login and password can be obtained upon request.

5.1.2 AGIS Atlas 2006

Presentation by Hein Lindemann

The South African AGIS Atlas presents the WOCAT QM filled by Tim Hoffman, the WOCAT case studies and some additional layers. As a product developed in South Africa for AGIS, it is available on AGIS' website at <http://www.agis.agric.za>. Its functionality comprises:

- customized print option including a logo's, title, north arrow, legend, scale
- bookmarks in session
- basic search
- advanced search
- query by location

A great number of thematic layers are available under 9 major categories.

5.1.3 Offline Map Viewer

Presentation by Dirk Pretorius (wocat_map_CT.ppt)

The Beta 1 release of this product was already presented at last year's workshop in Belgrade. It is recalled that it is based on ArcReader 9.1 technology and replaces an earlier version programmed in MS-Access in combination with MapObjects LT. The latter proved to be rather difficult to install and operate and lacked the software support of MapObjects' manufacturer. The present version comprises, except for the data-entry facility, the whole range of functionality of the previous map viewer plus some new features. The offline map viewer includes a QM manual and a guide/tutorial.

The Department of Agriculture of South Africa has invested Euro 50,000 for the development of the above tools for the years 2005/2006/2007.

5.1.4 WOCAT material on GoogleEarth

Presentation by Godert van Lynden

This application, managed through a Placemark file, presents a globe-based, world-wide overview of the locations of the QT case studies linking to related fact-sheets which, in turn, include a hyperlink to the respective QT in the WOCAT Online QT.

How to incorporate data into GoogleEarth: Select menu item 'Add Placemark'; locate position, fill in information (possibly using some html for more sophisticated formatting). The subsequent registration of the newly created Placemark in a Category requires a previously created user profile.

Anyone can enter data, as Google Earth is not (yet) restricted and/or being quality checked. However, decentralized data entry of WOCAT related material should follow a consensus as to the category into which information would be channelled.

5.2 Mapping strategies: group work results

A **general statement** of the group was that there is still confusion about the different mapping tools.

- QM is about the spatial distribution of SWC-Technologies and their effectiveness.
- The need must be in the country for a land degradation assessment.
- LADA can assist to create awareness on land degradation assessment.

The **main aim** of the QM is:

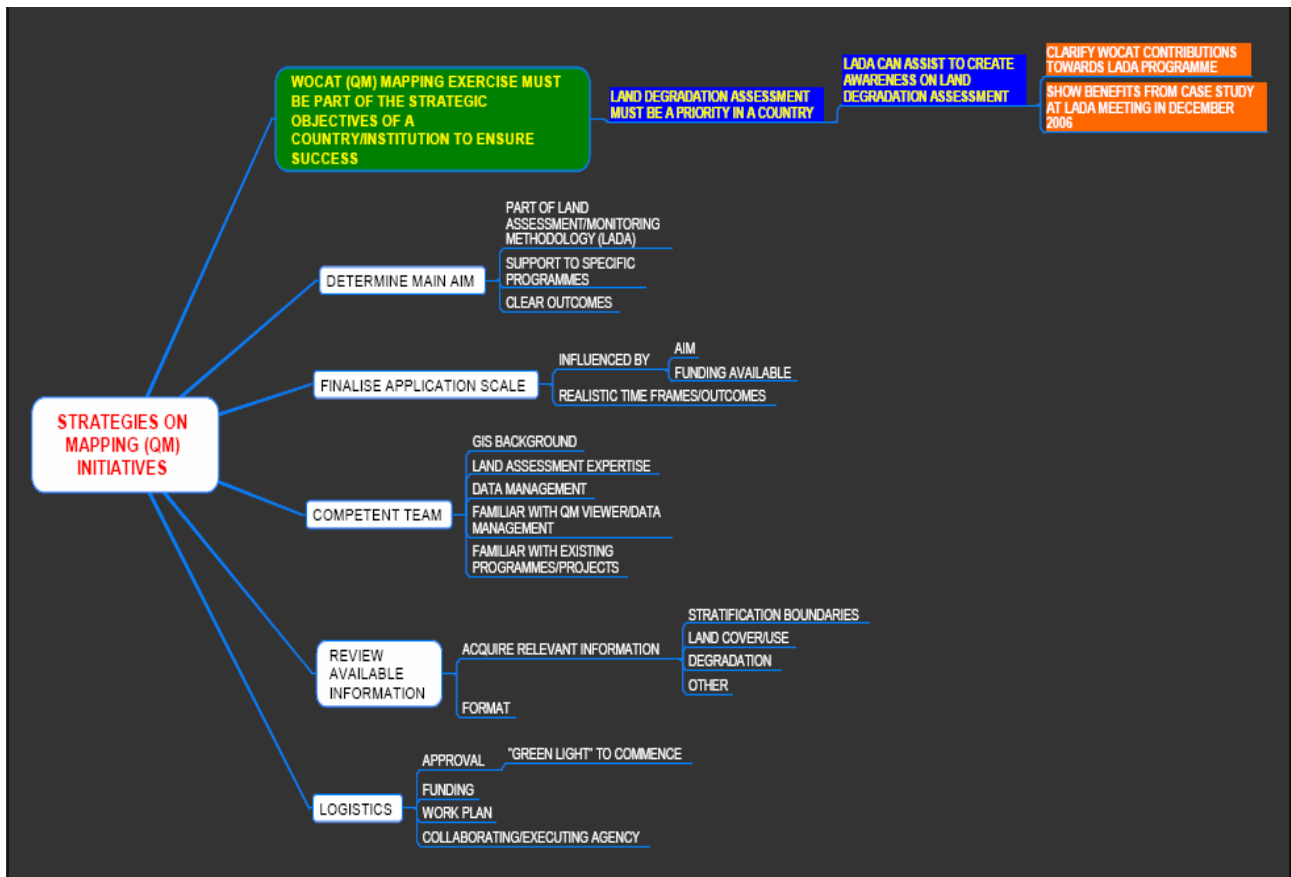
- to have a clear outcome
- QM is not scale dependent

A **competent team** is needed with:

- GIS background
- Land assessment expertise
- To be familiar with existing programs in countries

Logistics:

- Needs funding
- Approval
- Good workplan
- Collaborating agencies in countries



Mind Map showing the result of the mapping strategies group work



The South African team presents mapping tools: Carin Pretorius, Dirk Pretorius and Hein Lindemann (Photos by Hanspeter Liniger)

TOPIC 6 QUESTIONNAIRE REVISION

Rapporteur: Isabelle Providoli

6.1 Introduction

Presentation by Gudrun Schwilch (QRevIntroduction.ppt)

Due to the complexity of soil and water conservation and due to difficulties to use the questionnaire for rainwater harvesting technologies, for conservation agriculture and for watershed technologies (eg dams) and up-coming new issues such as carbon, desertification, poverty, etc. a questionnaire with more flexibility is requested. A modular questionnaire could deal with these up-coming challenges and this new modular approach was discussed in 6 groups. Each group was dealing with one module and making proposals for improvements and new questions. For this, they had the following material at hand:

- QT and QA BASIC as from 2003
- QT professional 2003 with comments included (in digital version) for improvements
- QA professional 2003 with comments included (in digital version) for improvements
- Analysis section of global Overview Book, supporting to get clear about the requested analysis and messages to be made from the data collected.
- Some inputs from the SOWAP group (mainly regarding conservation agriculture)

The aim of the group work was also to show the difficulty of the questionnaire development and to get clear about the use of the questionnaires.

For further information on the issues of questionnaire revision see also task force report on page 30.

It should be kept in mind that the aim of the questionnaire revision is to build up on existing questionnaires as much as possible, as WOCAT does not want to loose all the data that it already has.

6.2 Questionnaire modules group work results

6.2.1 Basic questionnaire

This group was deal with all the minor issues to be improved in the BASIC QT and QA questionnaires. They also had to review if all of these questions really need to be in the BASIC version, or if some could go to one of the modules. The group made new suggestions as well as comments to existing suggestions in the questionnaires which can't be listed all in this report.

Solved issues:

- Vegetation and water degradation
- Land use: separate rainfed, supplementary irrigation, full irrigation

Unsolved issues:

- Discussion on single and combined technologies, e.g. in catchments / landscape approaches

This is where major improvements are needed, requiring a taskforce as well as time and resource persons

6.2.2 Water module

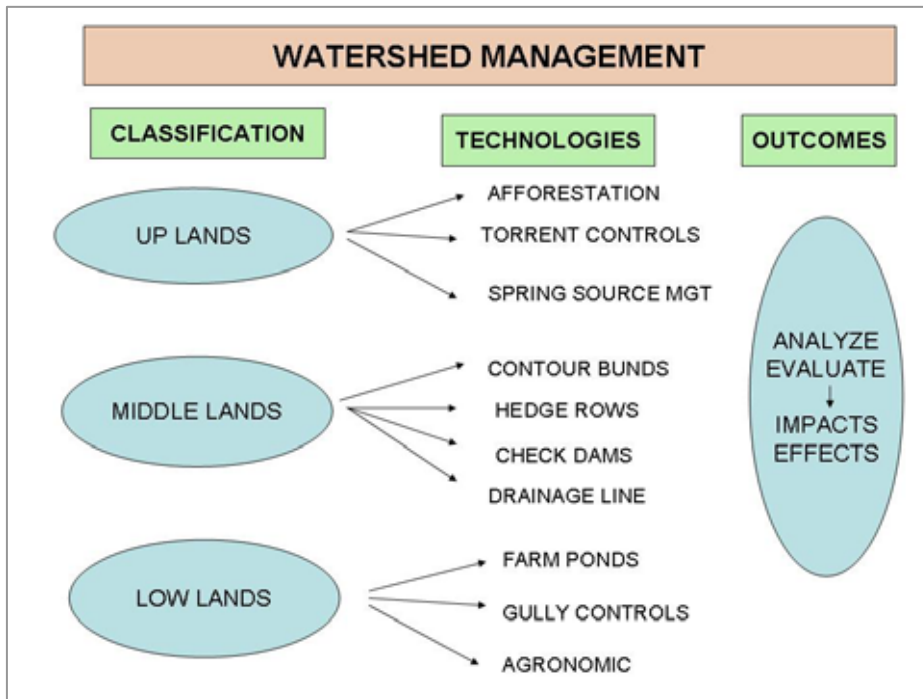
This group was developing inputs to the new module 'WATER' (only where strong link to land, no drinking water). There are already certain links to water (in the context of agriculture) in the questionnaire so far, but new questions are needed e.g. on evaporation rate. A special issues / focus is rainwater harvesting (RWH) and watershed technologies.

The QTs & QAs need to capture **Integrated Technology packages**.

- Watershed Management
- Landscape Management
- Rainwater harvesting systems
- Livelihood enhancement packages

A **possible solution** would be to:

- Classify the technologies into categories.
- Document each of these technologies in a bare minimum QT version.
- Analyze & evaluate the impacts & outcomes of these techniques holistically.



The group suggested a **way forward**:

- The QTs may need to be restructured for integrated packages.
- The QTs will have different modules for such packages.
- QA could be modified to capture such integrated packages.
- This may need a TASK FORCE under the WOCAT to develop these modules.

6.2.3 Soil module

This group was looking at the previous 'professional' version of the questionnaire and trying to compile the new module 'SOIL' with those parts not covered in the BASIC (by highlighting these questions).

Soil related questions were the following:

1.4. Soil degradation: 1.4.1, 1.4.2, 1.4.3

2. Specification of SWC technology: 2.2.2.7

2.5. Natural environment: 2.5.12, 2.5.14, 2.5.15.1, 2.5.15.4

The group made the suggestion to integrate 2.7.2 into the basic questionnaire.

Changes:

- In 1.4.1 sheet and rill erosion was separated into 2 lines and „great“ erosion was changed into „severe“.
- In 2.6.13.2 a line for „combined“ was added
- River bank erosion is missing in the questionnaire and should be added.

6.2.4 Conservation agriculture, carbon and biodiversity module

This group was looking at the special requirements regarding documenting conservation agriculture with the WOCAT questionnaires. Some of the improvements will be reflected in the BASIC, others in the SOIL module. The main issues are: rotation system (time aspect difficult to document); costs when system changes (not additional, but different). The also had some issues listed from the SOWAP group at hand.

The group also made suggestions how to integrate more questions on conservation agriculture and how to integrate carbon and biodiversity.

Carbon sequestration could be easily fit in the questionnaire as e.g. in 2.4.2.1:

- Cover cropping
- Rotation
- Addition of organic matter
- Soil fertility
- Added bio-fertiliser

The integration of **biodiversity** (soil fauna, water, plants, etc.) is more complex and needs more work. The effect of oats in vineyards on birds is one of the examples. One has to think beyond soil and water management.

Minor changes were made through out the questionnaire as e.g. in:

2.4.2.2. Soil correction: nutrient management has to be split in a) nutrient conservation, b) enhancement of nutrient c) precision application of nutrients.

6.2.5 Poverty module

The group proposed several **issues of concern** when addressing poverty:

- Land ownership
- Gender in equity therefore difference in level of empowerment
- Access to inputs

Poverty reduction is related to land management!

Some questions in the QT and QA are already addressing poverty but they are not specific enough. The group proposed **4 questions which could be added**:

1. Does the promotion of technology address the issue of land ownership (yes/no)? If yes, how was this issue addressed, i.e. providing land title deeds (QT3.2)?
2. Did the approach address the land ownership issues? If yes how?
3. How many farmers adopted the technology / approach in the area each year? This can be one of the indicators for economic and social factors.
4. What are the indicators which help farmers to come out of the poverty trap? This includes the provision of maintenance costs (QT 3.1.2.1)

6.3 A modular on-line system for WOCAT

Presentation by Wolfgang Prante (WOCATmodularWP.ppt)

The present WOCAT QT stand-alone version, based on MS-Access technology, has proven to be rather inflexible. Initial attempts to introduce more flexibility have resulted in plans to let the user choose between three different versions:

- the full, traditional version
- a basic version
- a *minimum* version

However, which questions are going to be included in the *basic* and *minimum* versions still need to be elaborated.

The idea of offering three different versions possibly offer an acceptable solution for users finding the traditional WOCAT QT too comprehensive but not for those who have specific SWC data collection needs traditionally not catered for. WOCAT therefore finds itself constantly confronted with users for whom QT just is not the 'right size' and/or does not offer the right technical focus.

Apart from the technical side, maintaining and distributing three different versions, each in three different languages, will be a major logistic challenge (*if not a real nightmare*) in the future. Uploading off-line collected data into a central, common database and eventually uploading these into the www version will turn out to be even more arduous than it already is today.

Possible solutions:

In the long run, phase out the MS-Access based stand-alone applications in favour of a www based, internally and externally flexible on-line database.

Internally flexible – by letting the users create and store a profile determining which questions of the traditional questionnaire are relevant for their work and which aren't. Those which aren't would neither appear in any on-line data entry forms nor be put out in any reports. But the user can not go below a predefined minimum version. Data entry will be done through a specially assigned code. Pre-checking of data is done for each page/chapter before submitting.

Externally flexible – by letting the user append additional modules representing their specific technical focus. Everybody can register a new module himself, but also use already submitted modules of other users.

A very embryonic prototype of that model is available at: http://www.fao.org/landandwater/agll/wocat/wocat_online

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
helping to build a world without hunger

WOCAT Technologies Online

- Home
- Online Questionnaires
- QT Profiles
- Assign Profile to a QT
- External Modules
- Assign External Module
- New Questionnaire
- Update Questionnaire
- Related Sites
- Contact

QT Profile Selection (Internal modules)

* Minimum Version

☐ 1. General Information

☒ 1.1 Contributing SWC Specialist(s)

☐ 1.2 Brief Identification of SWC Technology

☒ 1.2.1 Common name of SWC technology

☐ 1.2.2 Local or other name

☐ 1.2.3 Key words to describe technology

☐ 1.2.4 Role of contributing SWC Specialist

☐ 1.2.5 Associated SWC Approaches

☐ 1.3 Area Information

☒ 1.3.1 Definition of area(s)

☐ 1.3.2 Map of area

☐ 1.4 Land Degradation

☒ 1.4.1 Land use type specific degradation

☐ 1.4.2 Land use types surrounding SWC technology

☐ 1.4.3 Tolerable level of erosion

Contact WOCAT © WOCAT 2006

Internal flexibility allowing selecting certain questions

Major risks:

- Still too few WOCAT users have a sufficiently fast internet connection for online access to a www version.
- Financial resources are not allocated.
- Programmer/testers foreseen for this project unexpectedly become unavailable.
- Unforeseen technical problems delay development/implementation.
- WOCAT Qs get reduced/watered down to an extent that the product is still labelled WOCAT but there is 'little WOCAT in it'.

Costs:

- A minimum of 4 months programming and testing (professional, full-time, dedicated; not part-time, voluntary contribution)
- Provision of a new visual identity
- To whatever spending in real money terms that amounts to, depends on the choice of programmers/testers and the deadline for completion.

This presentation aimed to be controversial / provocative to create the kind of positive frictional energy that was always needed to take WOCAT one or a few steps further.

Discussion

Bangladesh: It is nice to have the database on-line. The minimum database version of WOCAT should be in single format and homogeneous form, to be defined by a taskforce.

Isabelle Providoli: Filling the Qs on-line is no option when internet connections are bad. We need the possibility to fill the Qs off-line and then upload it. Wolfgang responded that progress is fast, may be in one year it is feasible.

Godert van Lynden: We have to decide about the minimal version (questions that must be filled); otherwise it will become very messy. Producing external modules is good for the WOCAT community, as it gives it more in the users hands (more feeling of ownership).

South Africa: We have developed a basic module with about 10 Questions to attract people. It is kind of module to get data from contact persons including his/her telephone number, which is mandatory (see presentation below).

6.4 The technologies pre-selection form used in South Africa

Presentation by Rinda van der Merwe (preselection_RSA.ppt)

South Africa is using a form on the Internet to encourage users to submit 'their' technologies. They can fill in a few fields in an on-line pre-selection form in order to put their technologies in a nation-wide list. The South African WOCAT coordinators will then select the promising ones from this list, contact the contributor and request him/her to fill in a full questionnaire.

The pre-selection form can be found at this site: <http://www.agis.agric.za/agisweb/?Mlval=wocat.html>

The screenshot shows the 'WOCAT IN SOUTH AFRICA' website interface. At the top, there are navigation links: WOCAT, AGIS, Contact Us, News, and FAQs. A search bar is also present. Below the navigation bar, the title 'TECHNOLOGY PRE-SELECTION' is displayed. The form itself is divided into several sections:

- Technology name:** A text input field.
- Technology description:** A large text area with a character count showing 'Characters remaining: 255'.
- Measure:** A dropdown menu with options: 'agronomic', 'vegetative', and 'structural'.
- Land use type:** A dropdown menu with options: 'cropland', 'grazing land', and 'forests / woodlands'.
- Land user:** A dropdown menu with options: 'subsistence', 'commercial', and 'mixed'.
- Climate:** A dropdown menu with the text 'Select the climate'.
- Slope:** A dropdown menu with the text 'Select the slope'.
- Soil:** A dropdown menu with the text 'Select the soil'.
- Criteria for selection:** A dropdown menu with the text 'Select criteria for selection'.
- Province:** A dropdown menu with the text 'Select the province'.
- Contributor details:** Fields for 'Contributor name', 'Contributor surname', 'Contributor E-mail', and 'Contributor phone no'.
- Postal address:** Fields for 'Postal address', 'Select a Town', and 'Postal code'.
- Availability of info:** A dropdown menu with the text 'Select a value'.

A 'SUBMIT' button is located at the bottom of the form.

Technology pre-selection form

ADMINISTRATION					
PRE-SELECTION ENTRIES					
Name	Description	Technology/ Approach	Contributor	Info availability	Action taken
Deggkraal LandCare	To improve optimum production and sustainability	T	L. Moloi	Difficult	None
Clau-Clau grazing veld	Land availability for grazing	T	E.O. Nyundu	Difficult	None
Langeloo veld improvement	Intend to train and develop livestock farmers	T	S.C. Moafae	Difficult	None
Molele veld improvement	Assistance on grazing land improvement	T	Z.M. Ngwenya	Difficult	None
Manate Farmers soil conservation	Improvement of agricultural production, soil and water conservation under proper grazing management	T	Marylene Setapene	Difficult	None
Natural resource conservation in grazing and arable land	Providing quality grazing for animals	T	U.J. Khosa	Difficult	None
Masele LandCare	Rehabilitation of the area through crop production	T	Edith Masheke	Difficult	None
Phauwe LandCare	Development and protection of land	T	Moselele Stephen Mokyntha	Difficult	None
Tubase Municipality	Water harvesting	T	Isaac Setebang Setepa	Difficult	None
Makhasakal LandCare	Improving crop production	T	Kaapu M. Mashabela	Difficult	None
Elm-Shirley LandCare	Addressing soil erosion problems and reclamation of	T	Mansanyi Jabulung	Difficult	None

Pre-selection entries



Introducing the questionnaire revision (Gudrun Schwilch) and presenting new on-line tools (Wolfgang Prante, Rinda van der Merwe) (Photos by Hanspeter Liniger)

TOPIC 7 SPECIAL NATIONAL / REGIONAL PRESENTATIONS

Rapporteur: Xin Shen

7.1.1 Conservation Agriculture: a possible solution to food insecurity

Presentation by Rinda van der Merwe (CA in South Africa.ppt)

Soil erosion is a very severe problem in South Africa. For every ton of agriculture crop produced, South Africa loses 20 tons of soil in average. To address different soil erosion problems, such as wind erosion, water erosion, and soil nutrient depletion, conservation agriculture is employed in several parts of South Africa. A wealth of evidence exists of the dramatic effects that can be achieved if conservation agriculture (CA) production systems are applied. Besides general CA practices, in the drier areas of South Africa, some adaptation were made. One example is in-field water harvesting, no-tillage, basin tillage, and mulching to harness runoff and collect rainwater in micro-basins. Another example is using organic or stone mulches to increase soil water storage for crop production and reduced evaporation from soil surface. Currently the ARC-ISCW is implementing CA at 7 locations in SA. The case studies from Mlondozi district, Mpumalanga show that the production of crop is also increased greatly after applying CA as an integrated method to address land problems.

Some questions, like the applicability of CA for high value and low value products, and whether the application of fertilizer also contributes to the increased crop production, were discussed.

7.1.2 SWC activities and WOCAT in Central Asia

Presentation by Aida Garayeva (CAMP_WOCAT.ppt)

CAMP works in four main areas: resource use, product development and marketing, village development, and policy dialogue. It functions as a service and advisory centre for household, governance, NGO, and donor organizations on issues of mountain development. Water and Soil Conservation Practices are promoted in the project for the sustainable management of natural resources. Through a collection, documentation, dissemination, and application process, approximately 40 technologies are implemented each year through CAMP and partners. CAMP has organized so-called ALS workshops (Autodidactic Learning for Sustainability) which helped to choose 4-5 SWC technologies per village and develop them into a project proposal form for implementation. From 2003 till now 76 technologies were documented in Russian, and were translated into Kyrgyz, Tadjik and English languages. CAMP also gives emphasis on the monitoring and evaluation, especially the impact monitoring, to check and improve the effectiveness of project interventions at village and watershed level.

The audience was very interested in the CAMP dissemination activities.

7.1.3 Use of WOCAT tools in watershed programmes in Orissa

Presentation by Raghu Prasad (WOCAT & Watershed Development, Orissa, India.ppt)

ORISSA WATERSHED DEVELOPMENT MISSION (OWDM) is a typical watershed development project. It aims at improving livelihoods of rural poor through sustainable NRM, having objectives like improving the soil and moisture regime, improving the agricultural productivity and farm incomes, providing off farm activities for the landless, and providing greater opportunities for the rural poor in the rain-fed areas. Through a community mobilization, institution building, capacity building, and a participatory planning & implementation process, a micro-watershed development plan was made and implemented by the community and the SWC specialists. Various SWC measures were adopted and developed. WOCAT was used as a participatory evaluation tool with the involvement of primary stakeholder during documentation in the end of the project. It helped in discovering gaps in community participation while project implementation, and in turn strengthened linkages of SWC specialists with the community. Community also perceived various tangible & intangible

benefits from different SWC technologies in a better way. WOCAT is a comprehensive tool, but the lengthy QTs & QAs were recognized more researcher oriented than practitioner oriented. At project level, WOCAT was also used to document and analyze some technologies & approaches in order to examine the benefits to the community/user, its cost-benefit ratio, the acceptance, the level of community participation, the community contribution, and the evaluation and impacts.

The needs of OWDM project from WOCAT are as following:

- Modules to support the development of integrated management packages
- Customized watershed module (QT & QA)
- The tools need to capture strengths of various processes vs. community institution building, mobilization, etc.
- Standardization, data cleaning & quality control
- Global resource pool to support national teams
- Decision making support

7.1.4 Strengths and weaknesses of technology and approach documentation and mapping issues

Presentation by Shoaib Jalal Uddin (BangladeshExperiences.ppt)

A range of Bangladesh conservation technologies were introduced, such as innovative agroforestry farming practices (as transition from Jhum (Shifting Cultivation)), rainwater harvesting for multipurpose use, foothill terrace rice cultivation, transition of Jhum to Teak-Banana and mixed fruit farming, seepage water harvesting, bio-engineering measures for reinforcement of earthen dam, foothill terrace rice cultivation, Jute Geo-textile (JGT) as environment friendly bioengineering technology for landslide debris revegetation, and gully control by bamboo mat. The strengths and weaknesses of each technology were discussed in detail. The corresponding approaches were presented as well. In the training and application process of WOCAT, they encountered problems like too short training schedule, inadequate database handling knowledge, confusion on QT's and QA's, long and project-focused questionnaires, need of multidisciplinary group, follow-up difficulties and funding problems. Especially in using the QM, they had problems such as limited access to computer, limited computer know-how, missing required software (ArcView/ArcGIS), allocation of limited time during training and theoretical presentation based on imaginary map.

7.1.5 WOCAT influence on project implementation and education in Serbia

Presentation by Miodrag Zlatic (SerbiaWOCATInfluence.ppt)

Several projects prof. M. Zlatic working on **have WOCAT elements**. They are:

- "Community-Based Rehabilitation of Degraded Land in Balkan Countries"- GEF/UNEP Project Development Facility Block - A (PDF-A)
- "Evidence of erosion areas and flood control plan of Belgrade district" - Government of City Belgrade
- "Risk- and disaster-management & prevention of natural hazards in mountainous and/or forested regions – RIMADIMA"- EU-INTERREG - IIIB CADSES
- "Sustainable management of soil resources in Serbia", Ministry for Science and Environment Protection

WOCAT also plays an important role in his teaching activities, such as TEMPUS – LENNE JOINT EUROPEAN PROJECT (to develop new Masters Programme in Landscape Planning and Management for the University in Belgrade and Novi Sad in Serbia) and regular course at IV year on the department "Ecological Engineering for Soil and Water Resources Protection", Forestry University of Belgrade (WOCAT is given as a modul).

The Students Forum of WASWC is also engaged in WOCAT related activities. The members of Students Forum are exposed to SWC practices of other countries through lectures and presentations, and are involved in the documentation of practices using the WOCAT questionnaires.

7.1.6 Soil cover crops as conservation agriculture practice by small scale farmers in Tanzania

Presentation by Wilfred Mariki (Wilfred Mariki.ppt)

Introduction of conservation agriculture project is funded and facilitated by FAO - ACT and Government of Tanzania. It is conducted through the farmer field school approach. 44 farmer field schools with 1,600 farmers were set up in two years for this purpose. "SOIL COVER CROPS APPROACHES" were introduced to small scale farmers through this process.

Soil cover crops approaches have advantages of: 1) conserved soil; 2) improved soil water infiltration and retention; 3) reduced runoff and erosion; 4) improved soil fertility; 5) improved crop production per acre; 6) more income and improved livelihood (health, better housing, education etc); 7) reduced labour and costs for land preparation and weeding.

The effect of soil correction and cover crops to gain yield were tested with different treatments. Experiments show that sub-soiled plots with cover crop (mucuna or lablab) have highest maize yields. It also shows that choosing cover crops approach save labour in a long term comparing with conventional tillage in maize production. Using this approach, farmers only need to spend a bit more time in the first year. Labour input is less and less required in the following years.

There was an interesting discussion of the effect of conservation agriculture on yield. It was noticed that conservation agriculture did improve yields in Tanzania and some other countries, but hardly in Europe.



Special presentations on soil cover crops in Tanzania (Wilfred Mariki), WOCAT influence on project implementation and education in Serbia (Miodrag Zlatic), and the use of WOCAT tools in watershed programmes in Orissa, India (Raghu Prasad) (Photos by Hanspeter Liniger)

TOPIC 8 WOCAT AS TOOL FOR DECISION SUPPORT

Rapporteur: Syaiful Anwar

8.1 Introduction

8.1.1 Presentation of existing assessment tool

Presentation by Godert van Lynden (assessment.ppt)

The philosophy of using the WOCAT databases:

- To evaluate the strong and weak points of one's own SWC technologies or approaches
- To narrow the wide range of options to a reasonable number of potentially applicable approaches and technologies

Especially the second point is kind of decision support tool, allowing to weigh several indicators of a technology and compare them with other technologies.

		KEN05	KEN11	COL01	Etc.
➡	Economic benefits/disadvantages	High	Medium	Medium	...
	Acceptance or adoption	High	Medium	Medium	...
➡	Required / available knowledge	Medium	Medium	High	...
➡	On-site ecological benefits/disadvantages	Medium	Low	High	...
	Off-site ecological benefits/disadvantages	Low	Low	Medium	...
<div> ➡ : Essential indicators (in example) Best option (example) </div>					

Comparing options using the WOCAT indicator assessment tool in the database.

The database allows compiling the answers of a technology grouped into selected indicators, but the weighing procedure and the matrix is done 'manually'. That's where new tools could be developed to enable the user to click through a menu and assign weights digitally (see next presentation).

8.1.2 Presentation of ideas for decision support tools

Presentation by Hanspeter Liniger (dss.doc)

For what and for whom should we develop a decision support system (DSS)?

Selection of SWC technology(ies) / approach(es) for specific environment (→ QT, QA):

For land users and local decision makers

- Determine environmental setting
- Determine degradation problem(s): which? severity?

- Determine intervention level: single specific intervention or catchment /landscape combinations of Ts
- Determine intervention time: prevention, mitigation, rehabilitation
- Select indicators
- Determine scores for each indicator: eg 1- 5 (bad – good), 0 = killer assumption
- Determine importance for each indicator
- Present results of evaluation (for each T/A):
 - for single indicators
 - aggregated indicators
 - total score
- Compare Ts and As to select the choices

Identification of priority areas for interventions (=> QM)

For planners at higher levels

- Where to invest into SWC?
 - degradation is already advanced (rehab)
 - degradation ongoing (mitigation)
 - degradation just starting (prevention)
- Economics: Cost / benefits
 - high investments, low returns short-term ...
 - low investments & short-term benefits
- Environmental benefits: onsite or offsite
- Social: Acceptability
 - low potential / high risk
 - high potential / low risk
- Link to mapping

Points for discussion:

- What is the demand for a DSS?
- Who will be using it?
- What will be the benefits?
- What are the dangers?

8.2 Group work on Decision Support System (DSS) and other topics

Tasks:

- Discuss ideas, input to subject
- Decision about further developments and procedures
- Is there a requirement for task force?

8.2.1 Group 1: Decision Support System

Important to identify target group: decision makers & donors and land users.

Expectations from the Decision support tool:

A framework of assessment criteria with:

- pre-defined indicators
- full flexibility
- killer indicators
- weights

- final scores for each of the Ts
- A set of recommended Ts & As?
- Training & capacity building function
- Use your common sense

Conclusions:

- A taskforce is needed
- Help on fund raising needed

8.2.2 Group 2: On & off – line tool development (QT, QA, QM)

There was general agreement on the need for on-line versions of the major WOCAT database products.

However, it has to be kept in mind, that this foreseen leap in technology might initially exclude people with slow internet connections from using the WOCAT on-line systems. But there will be sufficiently fast internet connection for every country in the future, so we better start now.

A task force is required for elaborating concrete proposals and to supervise the development/implementation of an on-line system.

Two major prerequisites for initiation of work on the on-line systems:

1. New visual identity (layout)
2. Agreed and stable set of questionnaires at an agreed cut-off date

As to 1: A new visual identity, strictly speaking is not a technical prerequisite to initiate work on the online version, however, an asset that supports the further integration of the various WOCAT digital products (i.e. website, databases, QM, visual tools)

As to 2: Inception of any programming work has to rely on a final version of the set of questionnaires in order to avoid having to change already programmed modules further down the line. This should not keep us in starting the methodological development (decision on software package to be used, etc.).

Versioning and logistical efforts would be greatly reduced as there will only be one centrally stored and maintained version of the various on-line system modules.

Users would not have to struggle with data import and export.

During the transition phase the off-line systems would still be kept in place. At a later stage, an off-line viewer variant of the on-line versions could still be supported and possibly distributed on a CD-ROM.

Security of the future on-line system is seen as very important. Some people/groups need to hold edit privileges as opposed to general read privileges.

Future on-line systems should be open to various languages. Multilingualism could be established through remotely accessible and editable translation tables (difficult to implement, but feasible). While global WOCAT would provide translation into the three standard languages, any additional version would up to the users concerned.

8.2.3 Group 3: Minimum set of question

The group discussed the issue of the minimum set of questions – and of a WOCAT “light” questionnaire. In principle, the questions of the basic questionnaire are all key questions and provide crucial information (also with regard to a Decision Support System). The group reckons that the questions of the basic questionnaire should be considered the minimum set of questions. Still the basic questionnaire can be “lightened”, but in a different way: Rather than *removing* more questions certain questions should allow to be answered *more “openly”*:

For example, exact figures on technology area, biophysical parameters (natural environment; ecological benefits), economical analysis, calculation of costs and benefits, and adoption rate are often not available (especially when locally developed practices are described) and / or require special studies. Here the contributors should have the opportunity to indicate “best estimates” – or alternatively to rank according to given “qualitative” (more open) categories (see example on labour costs below):

a) **Basic questionnaire** (so far) → exact figures need to be indicated:

Inputs	<u>Establishment costs</u> * ¹		% of costs borne by land user
	Quantity	US\$ Equivalent	
Labour (person days) (voluntary and paid)

b) **New option:** Additional “more open” categories to answer the question on labour costs (tick in case you cannot give exact figures)

Labour input is high medium low

source of information:

It was decided that there is no need for a separate, standardised WOCAT “light” questionnaire. Still “light” version – i.e. questionnaires with a reduced number of questions – can be developed individually. They are useful for overview, poster, etc. Ideally they contain at least:

- Description (Dimensions/layout, Implementations and maintenance steps, Purpose)
- Drawing / Photo
- Benefits and Drawbacks

8.2.4 Group 4: Impact monitoring

WOCAT needs impact monitoring tool for assessment of conservation activities. It already uses a lot of indicators, but this will lead a step further to get feedback from the implementation level through a participatory approach with land users and specialists.

The impact monitoring tool should be developed together with the land users and for the land users to be used by themselves. This requires reformulating the questions in such a way that it is understandable and useful for the land users.

The development of such a tool raises certain questions:

- Which indicators can be used by the land users?
- How to assist land users, community members and specialists in impact monitoring?
- How to involve land users in this process?
- How to support the decision making process for land users / community level
- What information is useful and needed for WOCAT, i.e. in which form and how to collect, process and use this data on the international level?
- How are land users using WOCAT indicators / data for their region?
- How to best link land users with WOCAT?

Impact monitoring could be done at different levels: household, village, etc.

There is need for a taskforce, which could initiate the impact monitoring tool development in form of a project and through a special topical meeting. Such a meeting would allow collecting the various experiences which the countries have made (indicators, approaches) and a group of WOCAT experts could then develop a draft concept.

Discussion:

- Livelihood might be included, but this will be difficult as livelihood is not only due to soil conservation
- Will this be a kind of improvement of the existing questionnaires or new ones?
- There are already questions on impact assessment in the current questionnaires

TOPIC 9 ACTIVITY PLANS FOR NEXT YEAR(S)

Rapporteur: Carin Pretorius

9.1 National and regional workplans

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

9.1.1 Ethiopia

Ethiopia envisages the documentation and quality control of new case studies to be included in the overview book and entered to the database (3 QTs, 2 QAs and 3 QMs). An expert's panel meeting for further quality assurance work of the overview book is planned. By July 2007 the production of the Ethiopian Overview Book should be finalized.

Brochures on EthioCAT achievements during the last years will be prepared for promotion purposes.

An objective for 2007 is to revive and reform the Eastern African Regional WOCAT network and to identify an institution that can assist. A regional workshop with Kenya, Ethiopia, Tanzania and Zambia is planned.

9.1.2 South Africa

(South Africa.ppt)

Data collection for new sets of questionnaires and the quality control of 'new' and 'old' case studies by review panel will go on. The SA and international QT & QA database (SA case studies) will be updated. For 3 pilot areas of the Soil Protection Strategy QM will be filled.

Inputs towards overall online system are to be developed.

QM-online data management system (15,000 Euro secured):

- Data management, access control and editing of QM data
- Loading of new data procedures
- Create language module for English, Spanish and French
- Central update procedures
- Procedures to create an empty QM viewer and general maintenance

QM Map Viewer:

- Incorporate QT coordinates into the QM viewer
- Re-design forms and reports for QT coordinates and reports

For promotion, WOCAT will be introduced to provincial WOCAT coordinators and integrated into the LandCare awareness programme. SADCs (Southern African Development Community) plan of action envisages the possibility of incorporating WOCAT approach & methodology.

9.1.3 Nigeria

To enhance national initiation and coordination more national experts to run the WOCAT program in Nigeria need to be identified and trained. To encourage the adoption and use of the WOCAT methodology awareness raising and WOCAT promotion at meetings, conferences etc are planned. In 2007 the documentation of at least 3 QTs and QAs and the quality control of already documented questionnaires are planned. The results will be presented at the next WWSM (2007). In order to be able to ensure adequate funding for WOCAT activities in Nigeria contacts with potential donors and the development of funding proposals have to play a central role.

9.1.4 Morocco

Data collection and quality assurance of the data collected (QT, QA and QM) will continue throughout the coming year. Emphasis will be laid on capacity building. National training workshops to spread the WOCAT methodology as well as to enhance national resource persons to run WOCAT programme for local and regional experts (regional experts from North and West Africa).

The programme "Appui à la lutte contre la pauvreté, la désertification et les effets de la sécheresse (PAL-PDS)" supports the strengthening of national institutional frameworks and capacities for poverty reduction and natural resources management. The PAL-PDS is being jointly implemented by the "Ministère de l'agriculture et du développement", the "Ministère charge des eaux et forets", the "Agence de Développement Social" and the "Agence de Développement du Nord". The role of WOCAT as a network and the possible use of its tools for the documentation and dissemination of information of PAL-PDS activities are being discussed.

9.1.5 ICIMOD

(ICIMOD.ppt)

The HIMCAT extranet will be reactivated and new information about HIMCAT countries will be included on the website. In order to strengthen the HIMCAT partnership two newsletters per year will be released.

An overview book for Nepal will be prepared in close collaboration between ICIMOD and SSMP Nepal. At the moment new QT's and QA's are documented which will be put together with already documented QT's and QA's. If this overview plan will be successful we might think to extend this overview process to other countries as for example to Bhutan or Pakistan.

In order to integrate more people and partners in using WOCAT tools, these tools will be integrated in ICIMOD's "Low Cost Soil Conservation Techniques and Watershed Measures" training programme which is currently under development and which first training will be held in April 2007 at ICIMOD.

Furthermore WOCAT tools will be integrated into a new project in Tibet where ICIMOD is contributing to the erosion component of a rural infrastructure and vocational training project of the German company Integration funded by GTZ.

ICIMOD is planning to expand the informal meeting network within the region which has been started with SSMP Nepal. We are also thinking of inviting DSCWM (Department of Soil Conservation and Watershed Management) Nepal to such meetings.

Furthermore, future collaboration in Bhutan, India (Rajasthan) and Pakistan combined with WOCAT trainings will be checked out and followed up.

The WOCAT-HIMCAT team at ICIMOD will comprise Isabelle Providoli and Sanjeev Bhuchar with Isabelle as the lead / focal person.

9.1.6 Bangladesh

(BANCAT.ppt)

The activities planned for 2007 will be discussed within the BANCAT working group before implementation. The working group facilitates the coming together of the leading SWC professionals to share key observations and experiences. Roughly the activities will comprise:

Capacity building: training workshops on how to use WOCAT tools in data collection, evaluation, monitoring and dissemination with funding from Bangladesh Agriculture Research Council (BARC) are envisaged. The documentation of Conservation Approaches and Technologies from another agro-ecological zone of Bangladesh is planned. The participation of the BANCAT working group at training workshops and seminars will not only enhance their own capacity and enrich their experience but also provide a platform to promote BANCAT and WOCAT.

WOCAT in Research and Education: Presentation of WOCAT tools and methodology at the Universities of Chittagong, Dhaka and Shahjalal. The aim is to make WOCAT tools popular among the teachers and students of concerned departments at selected universities.

BANCAT management: Feedback and hosting of BANCAT database and website.

9.1.7 India

(*india.ppt* (same as *WOCAT INITIATIVES IN ORISSA, INDIA.ppt*))

The OWDM would continue to use WOCAT tools in various programmes in Orissa. The main focus areas on WOCAT activities would involve capacity building; promotion and advocacy of WOCAT through sensitisation programmes; documentation using QAs and QTs.

Capacity building: The WOCATeers in the Orissa team would be sent on a tailor made exposure visit to the University of Berne or to any other WOCAT partner organization to get insights into the practical applications of using WOCAT as a decision making tool at various levels. Around 6 project managers involving middle and senior level functionaries would participate in this exposure visit spanning two weeks. The costs towards this would be borne by OWDM.

OWDM would also organize a sensitisation workshop in Bhubaneswar, India so as to expose senior and middle level State Government officials involved in soil and water management to WOCAT.

Documentation of technologies and approaches: During 2007 the OWDM would continue to document more technologies and approaches under its watershed projects. It is planned to document four technologies and two approaches in two new project districts. The detailed planning for the documentation consisting of field visits, collection of secondary information, data entry and finalization workshop would be done by the Orissa WOCAT core group.

9.1.8 China – SWCMC

Training program in Beijing in the middle of November (7-10 days) together with ADB TA4404 training program to

- introduce WOCAT from the aspects of its history, working scope, working manners and the ongoing programs and achievements of past years;
- introduce the knowledge of questionnaires and show trainees how to fill them;
- let trainees learn to know how to utilize and input data to WOCAT database;
- have a field work to get necessary information for soil erosion (the field work will be fulfilled in a soil and water monitoring station of Beijing outskirt)

Work in sea buckthorn: plan to cultivate 150 km² of sea buckthorn (*Hippophae rhamnoides*), this species has shown a very strong ability to protect soil erosion in dry and bad environments). Hold several training programmes to introduce and spread knowledge and techniques on how to cultivate sea buckthorn. Create a map of sea buckthorn distribution in China.

Create a feasibility map for ecological rehabilitation by nature: using annual precipitation distribution map and Chinese soil and water conservation work distribution map, assisted by WOCAT questionnaires in some typical areas.

9.1.9 China - PRC-GEF

(*China.ppt*)

Plan for next year:

- Document 30 Ts in Chinese
 - Holistic approach (1+1>2)
 - Bright spots of our project
- Presentation & distribution of Ts and As in a second international WOCAT workshop
- Some or all technologies in English
- Revise the Chinese basic questionnaires (joined efforts of three projects)
- Chinese version of database and linkage of it in the IEM-IC's website

Suggestion and request

- E-consulting
- Suggestions on "how to deal with integrated approaches"
- Quality control & advices
 - Selection criteria
 - Guide for standardized abstract
- Supports to English version

9.1.10 Philippines

PHILCAT will continue to educate various SWC stakeholders using WOCAT materials. For the past two years, PHILCAT has conducted several Farmers' Training on Sloping Land Management (SLM) particularly on the choice of appropriate technologies. The WOCAT materials were very valuable in these trainings. Proposals submitted to donors for the conduction of training for SWC specialists will be revisited.

Priority will be given to the completion of mapping (QM) activities which was suspended during the last few years due to technical problems. It is planned that the QM will be completed for the whole Philippines before the end of 2007. Data collection, documentation and updating of QTs, QAs and the database will continue throughout the next year. On-going documentation will be completed in time for the next WWSM.

WOCAT products and outputs will be continuously promoted in scientific meetings and conferences. CDs, brochures, posters and the global overview book will be introduced in these gatherings. Invitations to present WOCAT products are expected to pour in as it has been for the past few years. The use of WOCAT for instructional purposes in natural resources management will also be intensified. Students have realised the value of the WOCAT methodology in the assessment of SWC technologies

As the next host for the 2007 WWSM, PHILCAT will exert all efforts to lay the groundwork for a successful meeting.

9.1.11 Indonesia

(Indonesia.ppt)

- WOCAT training for the 14 remaining Watershed Management Centres (WMC) out of the 31 WMCs that could not attend the training conducted in 2006 (second phase)
- Follow-up training
- Translate the revised WOCAT questionnaires into Bahasa Indonesia
- Translate the Access questionnaire into Bahasa Indonesia
- Develop model of Ts and As documentation

For Asia as a region:

- Prepare a concept paper for WOCAT development in regional Asia to be submitted to GEF PDF-A (Project Preparation Financing – Block A)
- Revitalise ASOCON in the region by more active communication among members using WOCAT as a network/media. After a recent meeting with FAO-RAP, a possibility to hold an ASOCON Network Consultative Board (NCB) meeting materialized.

9.1.12 Kyrgyzstan

(Plan Camp Central Asia.ppt)

More existing SWC technologies and approaches will be documented jointly with RAS (Rural Advisory Service) advisors using the professional (1 set) and basic/light (15 technologies) questionnaires. Up to 100 documented technologies will be published in a poster format (WOCAT light). ALS-SWC (autodidactic learning for sustainability) tool will be developed and adopted.

New SWC technologies (21) will be introduced to farmers and implemented in villages with the support of RAS.

Four more training workshops for RAS advisors and farmers are planned. In addition training for RAS specialists to become ALS-SWC moderators is envisaged.

Further development of participatory impact monitoring tools for SWC implementation is intended.

9.1.13 Kazakhstan

(Workplan KZ_2007.ppt)

Data sets will be further developed by filling questionnaires on suggested Soil and Water Conservation (SWC) technologies and approaches (3 sets planned). After evaluation and quality assurance these documented case studies will be added to the WOCAT database. A map of landscape ecological zoning of Southern - Kazakhstan oblast on the degree of land degradation is planned.

For popularizing SWC and to encourage farmers and villagers to use their land more rationally, exhibitions and ALS workshops on SWC technologies and approaches as well as on best practices will be held throughout the year.

A new Kazakh-speaking generation of moderators in the field of SWC and rational land use will be trained.

Seminars on specific SWC technologies (such as: minimal tillage for cultivation of grain crops (the second and third culture after fallow), using of sewage water for irrigation, improving irrigation systems of agricultural crops on the foothills of south Kazakhstan) will be organised.

Close communication with governmental institutions for example on the preparation of a strategic document on sustainable development (in collaboration with DARA Public Foundation) for the realisation of CCD will continue.

9.1.14 Serbia

WOCAT in Serbia aims at finalizing QM for Belgrade and Nis districts, collecting QM data for Podrinjsko-Kolubarska district.

It will continue work on identifying new technologies and collecting data for QT and QA in Serbia. A national training workshop will be held. Emphasis will be put on quality control and updating of data. An overview book of the Serbian SWC experience is planned.

Contacts with national and foreign donors/institutions will be maintained.

Efforts will continue to encourage SWC activities nationally by promoting the WOCAT methodology. WOCAT promotion will also take place during conferences (Belgrade in September 07, Istanbul in October 07) and meetings.

Training of new students within the student's forum of WASWC is planned.

9.1.15 ISRIC

- Identify & analyse WOCAT case studies for Green Water Credits project
- Assist in WOCAT activities in DESIRE project
- WOCAT in SOWAP/ProTerra: collect & analyse remaining case studies
- Contact ECAF (European Conservation Agriculture Federation) to ideally promote an EUROCAT initiative
- Co-coordination of WOCAT which includes the organization of the next WWSM, assess potential donors and writing of proposals. Godert van Lynden will carry on as resource person for WOCAT trainings and activities.

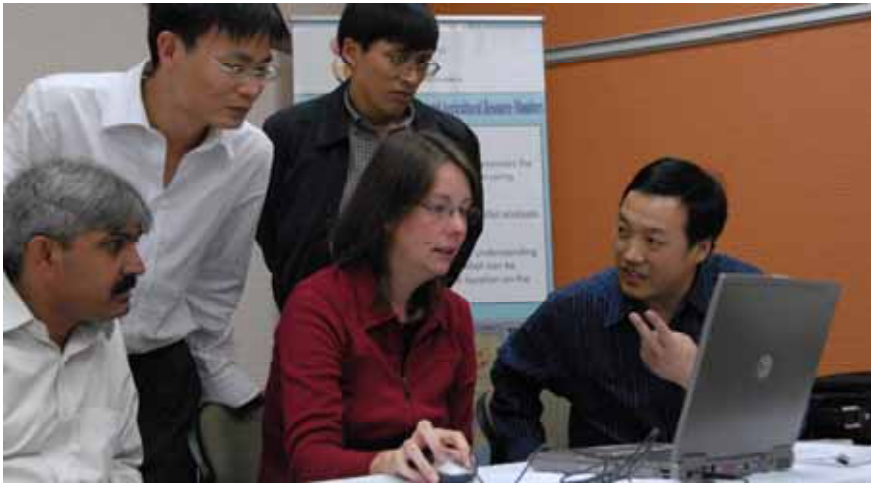
9.1.16 FAO

The unit in FAO concerned with WOCAT is in the process of being restructured. Staff members supporting WOCAT have been transferred to another division (plant production and protection, January 07) and are awaiting a formal agreement on the continuation of FAO support for WOCAT.

FAO activities will also come through LADA in-kind and in-cash contribution to WOCAT (probably mainly for online databases).



Group discussions on Impact Monitoring, Decision Support System, Tool Revision and regional issues (from top to bottom) (Photos by Hanspeter Liniger and Mats Gurtner)



STEERING MEETING

Rapporteur: Gudrun Schwilch

Taskforce activity plans

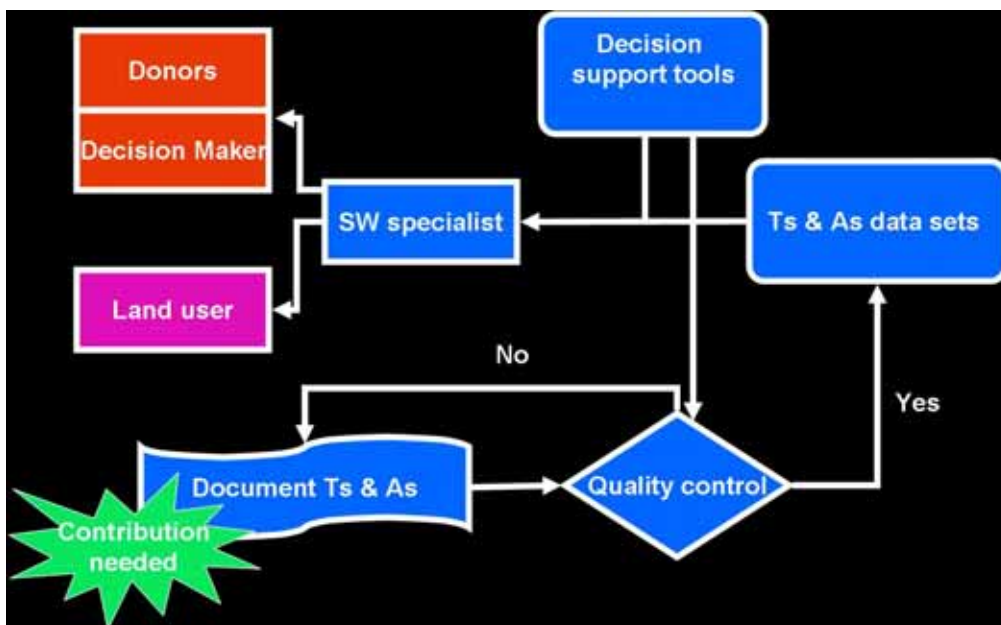
TF Decision Support Tool

Taskforce members: **Hanspeter Liniger**, Lydia Bosoga, Raghu Prasad, Syaiful Anwar, Xin Shen, Charlton Phiri, Romy Labios (DECISION SUPPORT TOOL_task force.ppt)

Target groups:

- donors and decision makers
- land users

The aim of a decision support tool is to provide more options for SWC implementations by using the database, but the system can also help to motivate for more documentation.



Flow-chart decision support tool

Modular system / software with 3 levels:

1st level:

- Pre-selection (search by criteria)

2nd level:

- Screening of data (with killer indicator)
- Loading data from database (export & import of data)
- Multi-criteria evaluation (assign weights, scoring, standardization)
- Recommend options

3rd level

- Analysis Report (sensitivity analysis, graphs, assessment of certain topic (aggregated score for indicators group))
- Recommendations and consulting with stakeholders (decision maker or land users). Final decision must be taken with stakeholders (land users)!

Important issues:

- Transparency
- Flexibility
- Common sense

Training sessions needed with awareness raising, demo with examples, operation guide

Action plan:

Develop examples (manual assessment)	TF discussion group	30 March 2007
Share experience and feed back	Wocateers	30 April 2007
Develop the prototype	Implementation group	30 August 2007
Testing of the prototype	Wocateers	Next WWSM

Implementation group = programmers (better with existing experience on Multi-Criteria Evaluation) incl. Wolfgang

Further development:

- Simulation feature
- Spatial decision support tool

TF Questionnaire revisions

*Taskforce members: **Mats Gurtner**, Rima Mekdaschi Studer, Daniel Danano, Rinda van der Merwe, Sudibya Kanti Khisa, Joe Rondal, Madhav Dhakal*

1. Preparation:

- Feedback from WOCAT Q-users with experience in data collection (Dec 2006); by email from Rinda (RSA), Kisha, Shoaib (BANCAT), Joe (PHILCAT), Madhav (ICIMOD), Daniel (ETHIOCAT), others?
- Include all comments / proposed changes into one document (Dec 2006/Jan 2007)
- QM!!!

2. Realisation:

Q-revision meeting in Bern (5 days; Jan 2007):

- Revise basic Q
- Develop important modules on CA, RWH and WM

Participants: global WOCAT and SWC specialists like Malcolm Douglas, William Critchley, Jens Jensen, specialist in CA, specialist in RWH, specialist in WM, others?

3. Consolidation:

- Send improved questionnaire to Q-users for review (Jan 07)
- Feedback (Feb 07)
- Finalisation (Feb/Mar 07)

The questionnaire users are advised not to hold on with data entry, or alternatively work on quality assurance. The main focus should be on the basic questionnaire, as there are not too many changes there.

TF Impact Monitoring

*Taskforce members: **Aida Gareeva**, Joseph Ndungu Ngeru, Azhar Yeszhanova, Miodrag Zlatic, Wilfred Mariki, Cai Jian-qin, Feng Wei, Yaolin Wang, Charlton Phiri, Munawar Khan*

Action plan:

1. Creation of the impact monitoring taskforce team
2. Connection and communication among each other
3. Exchange of experience and information
4. To create local national teams in the frame of on-going projects

5. To look through QT and QA and test indicators with farmers for the purpose of accessibility of indicators for farmers. To create a list of farmers indicators.
6. To formulate the expectations from an Impact Monitoring Tool and on this base to develop the first concept for the project.
7. To involve CDE (Karl, Hanspeter...) because of their impact monitoring tool development experiences
8. To organize a meeting of impact monitoring taskforce team after half a year for the discussion and project formulation. For 8 people to meet together for one week it would cost about 30,000 US\$ and would require extra funding sources.

The main idea is to develop WOCAT in order to have a participatory impact monitoring tool which can be used with and for land users. Some participants fear that it is not possible to extend WOCAT down to the land users / implementation level. It was designed for SWC specialists and has (too) many modules already.

TF Mapping

Taskforce members: Dirk Pretorius, Godert van Lynden, Carin Pretorius, Hein Lindemann, Wolfgang Prante, Gudrun Schwilch, Nada Dragovic, Irfanullah Khan (WOCAT MAPPING-acplan.BMP)

Activity	Responsible person	Timing	Costs
WOCAT strategic mapping work session	all relevant people	as soon as possible	10,000 Euro
World map on Google Earth: continue to include QA and QT data	Godert van Lynden	February 2007	500 Euro
World map on ArcIMS: create link from www.wocat.net and redo look more like WOCAT, but keep on AGIS server	Carin Pretorius	January 2007	500 Euro
Review QM (vegetation and other issues, modular system?)	WOCAT taskforce	2006/2007	5,000 Euro
Develop on-line QM : prototype for data management and viewer	Carin Pretorius, Wolfgang Prante	Mid November 2006	2,000 Euro
Integrate Data captured in the old QM system into new viewer (new CD-ROMs in FAO series?)	Gudrun Schwilch, Carin Pretorius, Rinda van der Merwe		-
Link QM rationale with LADA objectives	Dirk Pretorius, Godert van Lynden, Wolfgang Prante	Nov 2006 – continue	??

There was the request to send out the QM revision to all users for comments.

TF Digital products

Taskforce members: Wolfgang Prante, Carin Pretorius, Hein Lindemann, Gudrun Schwilch

There is a **set of digital products which requires new programming**, mainly in order to make the products **on-line** in future:

- (new) visual identity (for databases and website)
- WOCAT website
- Databases (technologies, approaches, images and address databases)
- Mapping (QM database and viewer)

These developments offer the opportunity to introduce a **new concept of the WOCAT website**, including:

- Specific community building tools (like blog, discussion groups)
- Content Management System (CMS) which would allow uploading of information and data for all WOCATeers and therefore increase the cohesion of the digital WOCAT community

Wolfgang, Carin and Gudrun will investigate about the development costs and options in Rome, Berne or Pretoria. The choice of software packages needs to be carefully evaluated. The new website is preferably developed in Berne. The rest is open, but databases should generally be hosted in Berne.

TF WOCAT in research, training & education (R, T & E)

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

WOCAT Qs on R, T & E:

- Revision of survey Qs to integrate training and extension activities implemented and to be implemented by national and regional coordinators (Nov 06 to March 07)
- Continuation of filling up the survey on WOCAT in R, T & E (April to August 07)
- Analysis of survey on WOCAT in R & E (September to October 07)

Note: needs additional non-academia task force members

Education (Nov 06 to June 07):

- Integration of WOCAT M&E (Monitoring and Evaluation) tools in MSc and PhD thesis
- Integration of WOCAT modules in existing SWC courses/curricula

Research (Nov 06 to Oct 07)

- Integration of WOCAT M&E tools in national action plans

Training and Extension (Nov 06 to Oct 07)

- Promotion of WOCAT materials in CDs and videos

Material such as presentations, exercises, theses, etc. should be made available on the Internet and shared among the R, T & E WOCAT community (protected through login).

TF Strategy

*Taskforce members: **Gudrun Schwilch**, Hanspeter Liniger, Godert van Lynden, Clemencia Licona Manzur, Shoaib Jalal Udin, Isabelle Providoli, Francis Turkelboom, Will Critchley, G.B. Reddy*

Planned activities:

- Feedback to current draft from TF through Email till 10 December 06
- New version till end of January 07
- Final meeting (incl. donors) in February 07

Finances:

Each person within own institution

Global activities 2007

Major global activities 2006/2007:

- Launch of Overview Book (LADA Nov 06; SDC Jan 07, Philippines Nov. 06, Belgrade conference June 07, etc.)
- WOCAT in LADA (Nov 06): on-line QM, Argentina (Sep 07)
- Finalize WOCAT strategy
- Financial sustainability: secure new & continued funding
- Approach old/new donors (DANIDA, Syngenta Foundation, SDC, GEF)
- Q-revision (basic and modules)
- Development of on-line digital products (databases, website)
- WOCAT map (QM / world map?)
- Decision Support Tools further developed
- WOCAT in research (EU-DESIRE project)

Major events and conferences:

- LADA launch (Nov 06)
- UNCCD/Biodiv./Climate Conference Philippines
- International Conference on Erosion and Torrent Control as a Factor in Sustainable River Basin Management, 25-28 September 2007, Belgrade, Serbia
- World Congress of Conservation Agriculture, February 2008, India

Waiting list:

- Training of trainers: should be done once the tools are revised. Always keep in mind what trainers are doing after the training.
- Guidelines for reviewers
- 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.
- Options for WOCAT to provide labels/certificates (?)
- T/A that works (sustainable)
- WOCAT reviewers

Remark: WOCAT secretariat to always send a reminding email to participants when we expect them to react (e.g. comments on the strategy document).

Planning table 2006/2007

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 2006/2007 are described (priorities in bold font, highlighted items are planned but probably later than 2007)

Objectives / Expected results *	Activities*	Plan Oct 06 – Nov 07
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, publishing and launching of the overview book Dissemination strategy for Overview Book and other outputs Finalising the WOCAT strategy and/or business plan, including a funding strategy Tools further developed and made available (modular system, questionnaire revision, WOCAT Light) Advance with the global map compilation Add quality assured Ts and As especially documented for the overview book to the database (for discussion: by CDE or by national initiatives???), expand database Training manuals and teaching material (???) Guidelines for global and national review panels 'ToRs and strategy for regional/national coordinators' (define regional coordination, expanded management, ...) ...
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/reviewing depending on requests Advance WOCAT in research and education (DESIRE)
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 (eg 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, 	<ul style="list-style-type: none"> Use WOCAT Strategy document to address partners and potential collaborators including a solid funding strategy to address donors Expand within existing WOCAT countries / regions, new regions Strengthen link with LADA pilot countries (and approach FAO representative of Argentina to get into Latin America) Using other networks: collaboration with Conservation Agriculture and Rainwater Harvesting (IRHA) and SEARNET, ACT, etc. Support and coordinate TF meetings E-mail and newsletter 'Explore potential of WOCAT activities being funded through GEF: preparatory medium term project (1 mio \$)' ??? 'Seek further collaboration with UNCCD national programmes (India, Central

	NGO and bilateral aid projects) <ul style="list-style-type: none"> ○ 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 	Asia, Indonesia, etc.) ??? <ul style="list-style-type: none"> • Elaborate further collaboration with and funding by DANIDA • Conduct WWSM • Use WOCAT in EU-DESIRE project (IP Desertification) • WOCAT label and project support service (?) • ...
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 ○ Include and use WOCAT in training and education 	<ul style="list-style-type: none"> • Contribute to LADA training workshops (Argentina, and ? other pilot countries) • Conduct regional mapping training workshop (??? ICIMOD, India, China) • Follow-up workshop to the IRHA workshop to adapt tools/ method to better fit the rainwater harvesting needs • WOCAT in education: Master / PhD studies, lectures and field courses • 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"> • Questionnaire revision (professional, basic) also to include global issues (e.g. biodiversity, water esp. green water etc.) and address MDGs. • Develop on-line QT and QA • Further develop QM and World Map • Update website • Develop and improve Decision Support Tool (evaluation / assessment) • Improve feedback mechanism in database, offer internet platform for documentation, quality assurance process and exchange of experience • Develop tool to support translation of database??? • Training manuals and teaching material ??? • Develop guidelines for reviewers ??? • ...

Note: Objectives / Expected results and activities as stated in the funding proposal of the programme contribution from SDC 2005 to 2007. Additional funding in order to complement the SDC funding and to support the objectives and activities listed for 2007 needs to be identified and approached.

Funding

9.1.17 Budget / Expenditures global WOCAT (CDE)

WOCAT Budget and expenditures 2006 in Swiss Francs (CHF)												
Kto	Description	Budget 06					Expenditures 06					Balance
		1.1.06-31.12.06					1.1.06-31.12.06					
		SDC	DANIDA	SOWAP	Sy. Found.	Overall	SDC	DANIDA	SOWAP	Sy. Found.	Overall	
1	Personnel	290'000.00	0.00	23'000.00	50'000.00	363'000.00	302'115.50	0.00	21'235.00	45'028.00	368'378.50	-5'378.50
11	Personnel CDE	290'000.00		20'000.00	50'000.00	360'000.00	302'115.50		21'235.00	45'028.00	368'378.50	-8'378.50
12	Non-CDE Personnel										0.00	0.00
13	Data collection										0.00	0.00
2	Travel	10'000.00	0.00	3'000.00		13'000.00	18'441.68	0.00	1'000.00		19'441.68	-6'441.68
21	Travel expenses	10'000.00				10'000.00	18'441.68				18'441.68	-8'441.68
3	Materials	38'000.00				38'000.00	111'321.25		0.00		111'321.25	-73'321.25
31	Computers, peripheral, software	6'000.00				6'000.00	2'177.50				2'177.50	3'822.50
32	Production of books	20'000.00				20'000.00	106'533.65				106'533.65	-86'533.65
33	Production of CD--Rom	5'000.00				5'000.00	18.00				18.00	4'982.00
34	Printing reports / posters	5'000.00				5'000.00	650.90				650.90	4'349.10
35	Postage etc	2'000.00				2'000.00	1'941.20				1'941.20	58.80
4	Mandates	62'000.00	0.00			62'000.00	114'052.06	0.00	0.00		114'052.06	-52'052.06
41	International Workshops, Steering Meetings	22'000.00				22'000.00	83'075.35				83'075.35	-61'075.35
42	Training National Trainers Workshop	10'000.00				10'000.00					0.00	10'000.00
43	Quality Control	20'000.00				20'000.00	30'976.71				30'976.71	-10'976.71
44	Mandate for support (ISRIC)	5'000.00				5'000.00					0.00	5'000.00
45	Seedmoney, support national initiatives	5'000.00				5'000.00					0.00	5'000.00
46	Other mandates not CDE					0.00					0.00	0.00
47	National Workshops										0.00	0.00
	Total 1-4	400'000.00	0.00	23'000.00	50'000.00	473'000.00	545'930.49	0.00	22'235.50	45'028.00	613'193.99	-140'193.99
	Monitoring 8%	32'000.00				32'000.00	17'372.55				17'372.55	14'627.45
	TOTAL	432'000.00	0.00	23'000.00	50'000.00	505'000.00	563'303.04	0.00	22'235.50	45'028.00	630'566.54	-125'566.54

Budget and Expenditures 2006: Overview in Swiss Francs and Equivalents in US Dollars				
Donors	Budget		Expenditures	
	in CHF	in USD	in CHF	in USD
SDC*	432'000	354'460	560'000	459,480
Syngenta Foundation	50'000	41'020	45'000	36'920
SOWAP** (Syngenta)	23'000	18'870	22'250	18'260
DANIDA	0	0	0	0
TOTAL	505'000	418'250	627'250	514'660

* Contract 1.1.05-31.12.07: Budget/year = CHF432'000

** In SOWAP an amount of EUR 21,000 per year is allocated (subcontract with ISRIC) for basic WOCAT activities. SOWAP was terminated in July 06

Estimated funds 2007			
Donors	Budget promised		Targeted funds
	in CHF	in USD	in USD
SDC*	432'000	359'450	
CTA (overview book)	33'000	26'500	
FAO (overview book)	12'500	10'000	
Syngenta Foundation			40'000
DANIDA			???
Planet Earth			???
TerrAfrica (GEF)			500'000
FAO/LADA			150'000
TOTAL	444'500	395'950	

* Contract 1.1.05-31.12.07: Budget/year = CHF432'000

Funding needs and opportunities:

- increase of 200 % or even 300 % needed for WOCAT at global level
- direct funding of pilot activities through global WOCAT? Eg like DANIDA did it with 50% funding to global WOCAT and 50% country contribution
- are there opportunities?
- more resources needed and allocated for fund raising

Discussion:

- Funding not only comes from classical donors, but also through common projects (like SOWAP) -> but part of funds should be assigned to global WOCAT.
- LADA pilot countries could help a lot with the promotion of WOCAT if applied successfully!
- GEF: no preparatory work done so far. An 'external' resource person would be needed to set up a proposal (eg Malcolm Douglas, Clemencia Licona Manzur)
- The annually collected monitoring sheets from all the WOCAT initiatives should get analysed for the next WWSM.
- For certain institutions / donors it is easier to support products and not people (eg FAO supporting the on-line system)
- Contacts to strong/big organisation should be (re-)established, eg also to UNEP (FAO is loosing ground to UNEP) or ADB.

Organisational issues

Recipe for successful national / regional initiatives:

Presentation by Hanspeter Liniger (Receipe for WOCAT National success.ppt)

1. C5 persons / institutions:

- Commitment (personal/ institutional)
- Continuity
- Competence
- Communication
- Collaboration

2. Allocation of resources:

- Financial (not too demanding) but...
- Time (human resources)
- Allocation of priority

3. Team

- coordination / data management; development / research

4. Incorporation into existing structure and not a stand alone program**What motivates farmers / decision makers / SWC specialists? 5 Ps:**

- Profit
- Pride
- Power
- Peace
- Pleasure

For WOCAT it is a great achievement that we manage to link development and research!

Election of MG members, assignment of secretariat

Management Group:

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

ISRIC is not sure if it can keep this role, as SOWAP support will be lacking next year.

Secretariat and global coordination: CDE

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

Ideas for new terms (to be clarified in the strategy document):

- At global level: 'global management' or 'executive management' or 'executive body' (instead of management group) and 'secretariat'
- At national level: 'collaborators' and 'national initiatives'
- At regional level: 'regional institutions' coordinating 'regional initiatives'

Discussion

There is need to clearly see and understand the role, position and mandate of each institution, but this is often not clear even for the institution itself. The development of the strategy paper should provide clarity for the structure of WOCAT and the roles of the institutions.

Early 2007: finalize strategy and organise steering event

Next WWSM

The issue of having a WWSM every year or every 2nd year was discussed again, with a strong request from FAO to meet only every other year. Funds could be used for product-oriented taskforce meetings and the development of new digital ways of communication allows organizing E-conferences. But the annual meeting allows to better keep the momentum and to join in for newcomers.

Does the CO₂ emitted through the flights of all participants justify a meeting where we talk about carbon sequestration? A calculation (after the meeting) showed that all these flights together emitted 112 tons of CO₂ (38 persons, without SADC participants). This would require a change from up and down ploughing to alley cropping in the Philippines of 510 ha (see proceedings WWSM 10 Belgrade p.22).

The workshop participants agree to have a next meeting next year and to plan and try new digital facilities one year later.

Offers for hosting:

- Kyrgyzstan
- Philippines
- India
- Switzerland

The Philippines won the vote slightly ahead of Switzerland. They have accepted and confirmed to host the meeting.

Decisions made:

Host: Bureau of Soils and Water and Water Management / BSWM, Quezon City

Where: Manila (and Tagaytay City), Philippines

When: 12 – 17 November 2007

Special topics: Tool development: revised questionnaires, on-line digital products, etc.; special inputs (documented Ts, As, spatial info), field trip (including farmers who use WOCAT)

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 mentioned by several participants were summarized in the table below.

Expectations	Average rank
Learn about WOCAT activities (in general); how to participate in / contribute to the program	3.9
Learn about WOCAT tools , and how to use them for:	2.8
- <i>decision support</i>	2.6
- <i>mapping</i>	3.1
- <i>monitoring</i>	2.9
- <i>SLM; dryland rehabilitation; soil protection</i>	3.5
- <i>Research & Education</i>	2.9
Improve/further develop tools eg.	3.1
- <i>decision support system</i>	3.0
- <i>online tools (database)</i>	3.8
- <i>mapping</i>	3.9
- <i>revision of Qs, clarify light version</i>	3.7
- <i>impact assessment/environmental impact monitoring</i>	3.2
- <i>improve data transfer MS access → MS word</i>	3.6
sharing experiences / exchange of knowledge / networking	4.6
- <i>know new technologies / successes in other countries!</i>	4.0
- <i>meet other SWC specialists</i>	4.3
good, successful workshop	4.4
national overview books : stimulate production and use for decision making	4.1
further develop WOCAT strategy: clarify roles on national/regional level	3.5

Some feedback statements from the participants:

- Expectations fully met, interaction with global WOCAT and collaborators reduced difficulties in the use of the WOCAT tools and improved knowledge and experience sharing
- Good network, carried through the great input of all participants
- Fascinating how WOCAT is functioning very good
- Good exchange of Conservation Agriculture and Rainwater Harvesting experiences with other countries
- Going back with a firm ground to re-initiate WOCAT
- To see the achievements of the other countries is very encouraging
- Hope that all taskforces will move WOCAT to a higher level
- Bangladesh expects more comments on their overview book
- All participants should be encouraged to not disconnect the established communication line during the year
- Research and education questionnaire should be filled by all participants
- Discussion of lots of new ideas within WOCAT: impact monitoring, decision support system, etc.
- Future of WOCAT not very clear
- Enjoyed social and technical level

Statement from Willi Graf, SDC

The role of the donor should not be too dominant, that's why I was rather observing than actively participating.

It was very interesting for me to get in touch with the WOCAT network. I can see the high dynamic and activities of the countries, but it is not very clear where WOCAT wants to go in future. This is the major challenge.

WOCAT is in a state where it does not need SDC, but it is based on SDC investments 14 years ago. It has a good organisation and new funds are coming in eg through South Africa. But the investment of 2.5 million Swiss francs in 14 years resulted only in 135 well documented technologies, which is not much! It sounds better to say that

- WOCAT influences the soil protection strategy in South Africa
- WOCAT has trained people in China
- WOCAT is part of the university curriculum in the Philippines

WOCAT is and needs a decentralized network. But gaining new data is a bottleneck (only 2 new technologies last year) to keep credibility, even though some countries have more in the process of reviewing or in their local languages.

SDC's funding is meant for WOCAT, not for CDE and it is therefore possible to rethink the role of CDE or to think of other ways of managing the network.

The highlight of the week is the list of contributions of you, which shows that SDC is one contributor out of many. I believe in continuity, but I'm not sure if WOCAT will go on for 20 years. And this continuity will depend on your clarity for the future: use your combined brains! There are always ways to continue also with less means.

Willi Graf was subsequently impressed by individual country representatives who approached him afterwards to explain how important the SDC support was to them and assured that WOCAT will remain an important programme to SDC.

Some more statements from Willi Graf and SDC (received after the WWSM):

- WOCAT is one of very few really working / functioning networks
- It's good that many institutions are involved, rather than projects
- Leadership and governance of WOCAT sometimes still unclear, and therefore also its sustainability. Responsibilities might need to be distributed broader.
- SDC looks forward to discuss and contribute to setting direction to this programme. The outcome of the strategy elaboration is very important and may allow having a 4-year phase of SDC supporting WOCAT after 2007.
- SDC is getting some positive statements related to WOCAT through other partners.

Any other business (AoB)

This year in S. Africa many participants were sponsored by WOCAT, which enabled the high attendance of the meeting. It is clear however that this cannot be repeated at this scale next year so everybody is urged to bear (or at least share) the costs of their own participation in the Philippines! Sponsoring will also be made more depending on contributions to the global WOCAT database or other WOCAT activities (e.g. Task Forces).



Organising Task Forces (Hanspeter Liniger), clarifying organisational issues (Godert van Lynden), explaining the donor's point of view (Willi Graf, SDC) (Photos by Feng Wei and Hanspeter Liniger)

ANNEX 1: WORKPLANS 2007

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WORKPLAN for: ETHIOPIA										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Data documented and quality controlled	• 3 QTs, 2 QAs and 3 QMs to be completed and entered to the database	6	1	MOARD and regional bureaus		800		Daniel	Obtained from ESAPP	2006 end
	• Preparation of Brochures on EthiOCAT achievements	4	2	SWC team, MOARD		2500		Berhanu	Obtained from ESAPP	June 2007
the folder ready	• Finalizing the production of Overview book	4	6	MOARD and Regional Bureaus		2700		Daniel	Obtained from ESAPP	July 2007
	• Experts panel meeting for quality assurance work of the overview book	6	1	MOARD and Regional bureaus		4000		Daniel	Obtained from ESAPP	January 2007

Prepared by: Daniel Danano

Total: USD 10,000

WORKPLAN for: Eastern Africa Region										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Eat African Regional WOCAT network Re-established	• Reform									
	• Conduct regional workshop	18	0.1				16500	Kenya Ethiopia Tanzania Zambia Hans P.		December-2006
	• Prepare regional work plan									
	• Identify organizations that assist the regional network									

Prepared by: Total: US \$ 16500

WORKPLAN for: Morocco										
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/Di rection of Land Management+ WOCAT Secretary+FA O	Management tools	2000	20	Lahcen LJOUAD	NAHID ELBEZZAZ	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/Di rection of Land Management+ WOCAT Secretary+FA O	Management tools (QA+QA/hard copies)	7000	7000	Lahcen LJOUAD	NAHID ELBEZZAZ	2006
Improved/New Ts/As	Fill in and review of previous Qs	15	5	Ministry of Agriculture/Di rection of Land Management	QA+QA			Lahcen LJOUAD	NAHID ELBEZZAZ	2006
WOCAT promotion	Fill in QM	1		Ministry of Agriculture	QM				NAHID ELBEZZAZ	2006

Prepared by: NAHID ELBEZZAZ

Total: US \$ 9000 US \$ 14000

WOCAT NIGERIA WORKPLAN (January – September 2007)

EXPECTED OUTPUTS	ACTIVITIES	PERSON	MONTH	INSTITUTION	MATERIAL/EQUIPMENT	Materials Acquired/Donated	FUNDING REQUIRED (C\$)	PERSON RESP.	TIME FRAME
Enhance national initiation/ Coordination	Identification of more national experts to run WOCAT program in Nigeria	1	1	Tropical Research conservation center (TRCC	Fueling of vehicle	-TRRC Donate a fairly used bus for WOCAT use during the period.	\$300	Ikponke Nkanta	Jan. –Feb 2007
Ensure adequate funding for WOCAT activities	Proposal development and contacts to potential donors	2	1	TRCC, Uyo	Communication facilities	(Telephone facilities Worth about \$ 500) Donated for WOCAT use by PREDAV GLOBAL RESOURCES NIG LTD		Ikponke Nkanta	Feb.-March. 200
Train at least 20 participants	Personal training	1	1	Dept of soil, crop & Env. Sc. Univ. of Ado	Training materials e.g video, projector etc.	(Projector Worth about \$ 800) Donated for WOCAT use by PREDAV GLOBAL RESOURCES NIG LTD	\$200	Dr. Joseph Aruleba	March 2006
Have at least 3QTs and 3Qas documented	Documenting of more QTs and QAs	4	2	Dept of soil, crop & Env. Sc. Uni. of Ado	Questionnaires Allowance for Participants, Camera, laptop comp.	-	2000	Dr. Joseph Aruleba	March-June 2007
Encourage adoption/application of WOCAT methodology	WOCAT awareness/promotion in meetings, conferences etc.	2	3	Dept of soil, crop & Env. Sc. Uni. Of Ado	Posters, flyers, stickers etc.	-	1000	Dr. Joseph Aruleba	July – August 2007
Participate /share in 2007 WOCAT Annual meeting	Preparation for WOCAT Workshop	2	2	TRCC, Uyo		-	1000	Ikponke Nkanta	September - October 2007
Total							4500		

Finally prepared by Ikponke Nkanta

WORKPLAN for SOUTH AFRICA 2006/2007

Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Data collection	Collect data - 5 new sets	1	1	ARC-ISCW		130	0	ARC-ISCW	SK	Nov 2006
Quality control of questionnaires	- Quality control of questionnaire by panel - Correct / complete questionnaires	1	1	Experts ARC-ISCW		4140	0	ARC-ISCW	RvdM	March 2007
Database mangement	- Data input on computer - Update changes	1	1	ARC-ISCW		300	0	ARC-ISCW	RvdM	March 2007
Preparation of reports	Write reports	1	0	ARC-ISCW		800	0	ARC-ISCW	RvdM	March 2007
Technology transfer	- Presentations at meetings / workshops - Update Fact Files	2	0	ARC-ISCW		100	0	ARC-ISCW / DOA	RvdM / SK / CP / DP	Jan 2007
WWSM 11	-Organise and host meeting	1	2.5	ARC-ISCW / Doa		17 000		ARC-ISCW / DOA	RvdM / DP	Oct 2006
International co-operation	Responds to CDE requests - Attend annual workshop and steering meeting and write report - Participate in task forces	2	2	ARC-ISCW / DoA		?		ARC-ISCW	RvdM / CP / DP	Sept 2007
Create an editable QM attribute data and forms	- Data management, access control and editing of QM data - Loading of new data procedures - Create language module for English, Spanish and French - Central update procedures -Procedures to create an empty QM viewer and general maintenance	1	1	GIMS		450	0	ARC-ISCW	RvdM / RdM / CP	Dec 2006 April 2007

Prepared by: Rinda van der Merwe

Total: US \$ 31030 US \$ 5000

WORKPLAN for BANGLADESH: October 2006 to September 2007										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
BANCAT Achievements as per Work-plan for 2007 reviewed	Convening BANCAT Working Group(WG) Meeting for implementation of Work-plan	4	0	CHTDB, SRDI, BFRI, IFESCU	BANCAT Overview Book	100	0	Sudibya Kanti Khisa, Jalauddin Md.Shoaib Khairul Alam	Sudibya Kanti Khisa, Jalauddin Md .Shoaib Khairul Alam	March,2007
Documentation of CATs from a different agro-ecological zones of Bangladesh	Training on WOCAT tools with funding from Bangladesh Agriculture Research Council(BARC)	5	2	CHTDB, SRDI, BFRI, IFESCU, BARC	WOCAT and BANCAT materials	0	6000	Sudibya Kanti Khisa, Jalauddin Md.Shoaib, Khairul Alam, Farid Uddin Ahmed	Sudibya Kanti Khisa, Jalauddin Md .Shoaib, Khairul Alam, Farid Uddin Ahmed	March, 2007- April, 2007
Popularization of WOCAT Tools among the teachers and students of concerned departments of selected universities	Presentation of WOCAT Tools at the Universities of Chittagong, Dhaka and Shahjalal, Sylhet	4	2	CHTDB SRDI, BFRI, IFESCU	WOCAT and BANCAT power point presentations will be used	200		Sudibya Kanti Khisa, Jalauddin Md.Shoaib,	CHTDB,BF RI, SRDI and IFESCU	December, 2006 to January,2007
Awareness on implementation on CATs	Participation in Trainings and seminars	4		CHTDB, SRDI BFRI	BANCAT Documentations will be used	-0	0	Sudibya Kanti Khisa, Jalauddin Md.Shoaib, and Khairul Alam, Farid Uddin	CHTDB, SRDI, BFRI, BARC	
Promotion of BANCAT vision and missions	BANCAT Website	2	4	SRDI, CHTDB	BANCAT documents will be used	200	0	JUShoaib and SKKKhisa	JUShoaib and SKKKhisa	

Prepared by: Sudibya Kanti Khisa

Total: US \$ 500 US \$ 6000

WORKPLAN for CHINA: 2007										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
spread	1.introduce WOCAT organization, tools, and other related informations; 2.develop WOCAT participators	2	1	Monitoring Center of Soil and Water Conservation Ministry of Water Resource of China	Training material		1000	Mr. Guo	Mr. Meng & Mr. Feng	2006-11
spread	develop 150 hm2 seabuckthorn.	2	12	Administration Center for Plant Development of Soil and Water Conservation of MWR	seabuckthorn seedling	40000		Mr. Cai	Mr.Hu	2006-1 2006-12
map	build a seabuckthorn distribution map of China	2	4	Administration Center for Plant Development of Soil and Water Conservation of MWR	Arc Info software and data base		2000	Mr. Cai	Mr.Hu	2006-8 2006-12
spread	introduce and develop knowledge and techniques on Seabuckthorn, for example: cultivation and harvesting, processing, products and developments. etc.	2	1	Administration Center for Plant Development of Soil and Water Conservation of MWR	Training materials		1000	Mr. Cai	Mr.Hu	2006-11 2006-12
map	make a distribution map of feasibility area for natural self rehabilitation to prevent soil erosion in China	2	12	Monitoring Center of Soil and Water Conservation Ministry of Water Resource of China	Arc Info software and data base(some from WOCAT datebase)		6000	Mr. Guo	Mr. Feng	2006-1 2006-12

Prepared by: Feng Wei

Total: US \$ 40000 US \$ 10000

WORKPLAN for ICIMOD: 2007										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Reactivation of HIMCAT extranet	Reactivate the HIMCAT site and include new informations about HIMCAT countries	1	1	ICIMOD		1000	0	S.K. Bhuchar, I. Providoli	I. Providoli	January 2007
Strengthening of HIMCAT partnership	Release of 2 HIMCAT newsletters per year	2	2	ICIMOD		0	500	S.K. Bhuchar, I. Providoli	I. Providoli	April 2007, October 2007
Nepal overview book (possible collaboration with SSMP Nepal)	Document new QT's and AT's and put in overview book format together with old ones.	3	3	ICIMOD		2000	6000	S.K. Bhuchar, M. Dhakal, I.Providoli	M. Dhakal, I. Providoli	January 2007
Extension of overview book to Bhutan or other HIMCAT countries ?????	Document QT and AT's and put in overview book format	3	3	ICIMOD		0		S.K. Bhuchar, M. Dhakal, I.Providoli	S.K.B., IP	May 2007
More partners applying WOCAT tools (1)	Integrate WOCAT tool in ICIMOD "Low Cost Soil Conservation Techniques and Watershed Measures" Trainings	3	2	ICIMOD		1500	1500	S.K. Bhuchar, K.M. Sthapit, I.Providoli	S.K.B, I.P.	April 2007
More partners applying WOCAT tools (2)	Include WOCAT tools in Tibet project	3	2	ICIMOD		2000		S.K. Bhuchar, K.M. Sthapit, I.Providoli	S.K.B, I.P	June 2007
More partners applying WOCAT tools (3)	Expand regional informal meeting network and may be future collaboration in Pakistan and India (Rajasthan)			ICIMOD		500	1000	S.K. Bhuchar, I. Providoli	I. Providoli	September 2007

Prepared by: S.K. Bhuchar, I.Providoli

Total: US \$ 7000 US \$ 9000

WOCAT WORKPLAN FOR ORISSA WATERSHED DEVELOPMENT MISSION - INDIA NOV'06- DEC'07										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Continued promotion & use of WOCAT tools	Advocate & institutionalise use of WOCAT tools across Orissa by strategic actions at the Government level.	1	1	OWDM		1130	--	Mr. Raghu Prasad.R, Additional Director, OWDM	Govt of Orissa, OWDM	Nov 06- Oct 07
Continue the documentation.	Documentation of various technologies & approaches using WOCAT tools in DFID assisted WORLP.	1	2	PSU (WORLP), OWDM	--	1330	--	Nodal Officer (PSU). Mr. Niranjana Sahu, M&E Spl. PSU	OWDM	Nov'06- Oct 07
Capacity Building and Exposure.	Orissa Wocateres and project managers (Six specialists) exposed and oriented on use of WOCAT tools at University of Berne/ any WOCAT partner organization.	6	0.75	OWDM		22,500		OWDM/ WOCAT Exposure visit to be organized in coordination with WOCAT secretariat.	OWDM/ WOCAT	Dec-06- Feb 07
WOCAT institutional coordination	WOCAT Core Group meeting to prepare road map on continued documentation	15	0.1	Project Directors , PSU, OWDM.	--	1000	--	M&E Specialist,PSU, CBT, PD, Watersheds,	OWDM	Nov 06- Oct 07
Orientation & Training	Multi stakeholder Training – cum-sensitization workshop for senior managers of various line dept to expose WOCAT tools	30	0.1	OWDM	LCD, Laptops.	5500		OWDM	OWDM	April- June 2007
Documentation of four QTs, two QAs.	Field work	10	1	Project Directors , OWDM	Maps Records	5,800		WOCAT Core Group members	OWDM	Sept'07- Oct'07
	Finalization Workshop	25	0.1	OWDM, PD(Watershed)	LCD Laptop	3750		OWDM M&E Spl.,PSU		Nov'07

Prepared by: Raghu Prasad.R

Total US\$ 41,010

Acronyms:

WORLP- Western Orissa Rural Livelihoods Project

PIA- Project Implementing Agency

CBT- Capacity Building Team

OWDM- Orissa Watershed Development Mission

PD- Project Director.

WORKPLAN for INDONESIA: 2007										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Trained staffs of 31 WMCs in Indonesia	Second Phase: WOCAT training for the rest of WMCs (about 14 more WMCs)	5		Ministry of Forestry and ASOCON	Computer, LCD Projector, Software, printed questionnaires	0	17000	Suhardiyono	Syaiful Anwar	August 2007
	Follow-up training	5				0	15000	Suhardiyono	Syaiful Anwar	August 2007
	Translate the revised WOCAT questionnaire	2				0	5000	Virni	Syaiful Anwar	July 2007
	Translate the Access questionnaire	2				0	10000	Virni	Syaiful Anwar	
	Model of Ts and As documentation	10				0		WMCs staffs		

Prepared by: Syaiful Anwar

Total: US \$

US \$ 30000

WORKPLAN of WOCAT group of Kazakhstan in 2007 year										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
1. Contribution to WOCAT databank	Filling of questionnaires by standard format on suggested on Soil and Water Conservation (SWC) technologies and approaches	4	2	1. Institute for Water Management of RK. 2. Institute of Geography of RK 3. Research-Production Center for Livestock Husbandry and Veterinary of RK.	Questionnaires by standard format in program Microsoft Access	-	1000	PhD. Irina Skorintseva	1. Dr. Muhamedzhanov V. 2. PhD. Irina Skorintseva 3. Dr. Ilya Alimaev 4. PhD T. Bassova 5. PhD Kaverin V.	June - November 2007
2. Creation of a map of landscape-ecological zoning of Southern - Kazakhstan oblast on a degree of degradation of the land	• Mapping of the degradation processes of the Southern - Kazakhstan oblast of RK	2	6	1. Institute of Geography of RK	Programs on drawing up of maps, pictures from space, various maps	-	1200	PhD. Irina Skorintseva	1. PhD. Irina Skorintseva 2. PhD T. Bassova	January – June 2007
3. Conducting of seminars of Soil and Water Conservation (SWC) technologies	1. The minimal tillage for cultivation of grain crops (the second and third culture after fallow). 2. Using of sewage on the irrigation 3. Perfection of technology of an irrigation of agricultural crops in foothills of the south Kazakhstan.	5	3	1. Barayev Research-Production Center of Grain Farming 2. Institute of Geography. 3. Research-Production Center for Livestock Husbandry and Veterinary.			2000	PhD. Irina Skorintseva	1. Dr. Muhamedzhanov V. 2. Dr. Ilya Alimaev 3. PhD T. Bassova 4. PhD T. Budnekova	April – June 2007
4. Preparing of strategic document on Sustainable Development + Realisation of CCD; Close communication with governmental structures	Collaboration with “DARA” Public Foundation get order from Government	5	3	1. “CAMP Consulting” PF 2. “DARA” PF 3. Governmental structures				PhD A. Zhanserikova	“DARA” PF experts	November 2006 - January 2007
5. Rational land using by farmers and villagers; Popularization of SWC technologies and approaches in the villages and farms of RK	Exhibitions on SWC technologies and approaches and active distribution of the best results of SWC technologies using			1. “CAMP Consulting” PF 2. Institute of Geography	WOCAT materials, stationery, photo camera		1000	PhD A. Yeszhanova	PhD A. Zhanserikova	January – November 2007

WORKPLAN of WOCAT group of Kazakhstan in 2007 year										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
6. New kazakh-speaking generation of moderators in rational land using field	Conducting of ALS training for moderators on Soil and Water Conservation (SWC) technologies module			"CAMP Consulting" PF	WOCAT materials, stationery, photo camera		1300	PhD A.Zhanserikova	PhD A.Yezshanova	January – November 2007
7. Rational use of village lands. Popularization of SWC technologies and approaches in the villages and farms of RK	Conducting of 3 ALS seminars of Soil and Water Conservation (SWC) technologies	6	11	1. "CAMP Consulting" PF 2. Institute of Geography	Posters on SWC technologies, stationery, photo camera, vehicle		3000	PhD A.Zhanserikova	PhD A.Yezshanova	January – November 2007

Prepared by: Aigul Zhanserikova, Azhar Yezshanova, Irina Skorintseva

Total: \$ 9500

WORKPLAN for KYRGYZSTAN: 2007										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
715 short documented technologies	15 short documented technologies	3	4	CAMP	camera		10000	3		30.10.2007
One QT	One QT	1		1				1		
100 published technologies (Short form)	100 published technologies (Short form)	4	1				1000			30.10.2007
RAS specialists will invilved in collection and documentation of SWCT	4 Trainings for RAS	3	1				1000			01.08-10.10.2007
ALS SWCT tool	ALS SWCT tool development and adoptation	2	1				1500			01.08- 10.10.2007
20 moderators of ALS SWCT	Traning of ALS SWCT moderators(RAS specialists)	3	2				1500			01.09- 10.10.2007
21implemented SWCT and near 50 SWCT disseminated	Implementation of the 21 SWCT with farmers through RAS	15	3				10000			01.03-30.10.07

Prepared by: Aida Gareyva

Total: US \$

US \$ 35000

WORKPLAN for: Philippines										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment		Available	Required		Commitment by	
Capacity building	<ul style="list-style-type: none"> Training of SWC specialists using WOCAT materials Training of farmers on SLM using WOCAT materials 	5	8	BSWM, PCARRD, DAR, BAR, ATI	Computer, LCD	5000	5000	J. Rondal R. Labios	J. Rondal R. Labios	Nov '06 to Sept '07
Completion of QM for the Phil	<ul style="list-style-type: none"> Data gathering and inputting 	4	8	BSWM, UPLB	Computer, LCD	500	2000	J. Rondal R. Labios	J. Rondal R. Labios	Nov '06 to Sept '07
WOCAT PR Materials	<ul style="list-style-type: none"> Presentation of WOCAT materials to scientific conferences 	2	6	UPLB BSWM	Computer, presentation materials	500	500	R. Labios J. Rondal	R. Labios J. Rondal	Nov '06 to Sept '07
Educational Materials	<ul style="list-style-type: none"> WOCAT use as instruction materials 	1	10	UPLB	Computer, WOCAT materials	100	0	R. Labios	R. Labios	Nov '06 to Oct '07
1QA, 1QT	<ul style="list-style-type: none"> Update and documentation 	4	6	BSWM, UPLB	Computer	200	500	J. Rondal R. Labios	J. Rondal R. Labios	Nov '06 to Sept '07
Project proposal on WOCAT	<ul style="list-style-type: none"> Preparation and submission of proposal to funding agency 	2	6	BSWM, UPLB	Computer/ WOCAT literatures	200	1000	J. Rondal R. Labios	J. Rondal R. Labios	Nov '06 to Sept '07

Prepared by: Romeo V. Labios/Jose Rondal

Total: US \$ 6,500

US\$ 9,000

WORKPLAN for SERBIA: 2007										
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	2	4	Dept. for Ecological Engin. (Fac of Forestry)			1500	Miodrag Zlatic, Nada Dragovic	Dept. for Ecological Engin. (Fac of Forestry)	Nov. '06 - Feb. '07
WOCAT promotion	- Training of new students (Student's Forum of WASWC); - Promotion at Conf. in Belgrade - Promotion at Conf. in Istanbul - National Wocat workshop	10	2	Dept. for Ecological Engin. (Fac of Forestry)			8000	M. Zlatic, N. Dragovic, S. Kostadinov	Dept. for Ecological Engin. (Fac of Forestry)	Sept '07 - Oct. '07
Further action on QM	Finalizing QM for Belgrade and Nis districts and collecting for Podrinjsko-Kolubarska district	5	4	- Dept. for Ecological Engin. (Fac of Forestry) -Stud. Forum			5000	M. Zlatic, N. Dragovic, S. Kostadinov, M. Todosijevec J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	Dec'06 - March '07
Further action on QT, QA	Continuing work in Serbia	5	3	Dept. for Ecological Engin. (Fac of Forestry)			5000	M. Zlatic, N. Dragovic, M. Todosijevec, J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	April 07 - Jun '07
Quality control	Feedback meeting	5	1	Dept. for Ecological Engin. (Fac of Forestry)			1000	M. Zlatic, S. Kostadinov, R.Kadovic, N. Dragovic	Dept. for Ecological Engin. (Fac of Forestry)	July 2007
Preliminary WOCAT overview book of Serbian experience	Preliminary WOCAT overview book of Serbian experience	4	2	Dept. for Ecological Engin. (Fac of Forestry)			2000	M. Zlatic, N. Dragovic, M. Todosijevec J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	Aug '07 - Sept '07

Prepared by:

Total: US \$

US \$ 22500

ANNEX 2: LIST OF PARTICIPANTS

Nr.	Name	First Name	Company / Institution	Actual address	Country	E-mail	Tel	Fax
1	Anwar	Syaiful	Ministry of Forestry	Manggala Wanabakti Building Jl. Gatot Subroto - Senayan, Jakarta10270	Indonesia	sanwar@cbn.net.id ; sanwar@dephut.go.id	+62.21.5730151	+62.21.5700263, 5731839
2	Asanaliev	Abdybek	Kyrgyz Agrarian University	68, Mederov St., Kyrgyz Agrarian University, Bishkek	Kyrgyz Republic	asanaly61@mail.ru	+996 312 66 04 09 / 312 46 21 69; mobil 0 502 20 17 32.	+996 312 66 59 53
3	Barnard	Robin	ARC-ISCW	P/Bag X79, Pretoria, 0001	South Africa	robin@arc.agric.za	+27 12 3102459	+27 12 3231157
4	Bosoga	Lydia	Department of Agriculture, National	Cnr Annie Botha & Union Street, Riviera, Pretoria, 0002	South Africa	lydiab@nda.agric.za	+27 12 319 7656	+27 12 329 5938
5	Brito	Rui	University Eduardo Mondlane	Faculdade de Agronomia e Engenharia Florestal	Mozambique	ruibrito@zebra.uem.mz	+258 21 492 177	+258 21 492 176
6	Bwalya	Martin	African Conservation Tillage Network (ACT)		Zimbabwe	mbwalya@africaonline.co.zw	263 4 339101	263 4 339101
7	Danano	Daniel	Ministry of Agriculture and Rural Development	Addis Ababa	Ethiopia	ethiocat@ethionet.et	+251-1-5151441	
8	Dragovic	Nada	Faculty of Forestry University of Belgrade	Kneza Viseslava 1, 11030 Belgrade	Serbia	nadad@verat.net	+381 11 3553122; +381 64 111 6478	+381 11 2545485
9	Fentaw	Berhanu	Ministry of Agriculture and Rural Development	P.O.BOX 23497 Code 1000 Addis Ababa, Ethiopia	Ethiopia	berhanuf@ethionet.et	+251 911663606 / 116603576	
10	Gareeva	Aida	CAMP Ala-Too Public Foundation	36,Oshskaya,Bishkek, 720035	Kyrgyz Republic	aida@camp.elcat.kg	+996(312) 540573, 542346	+996((612) 909703
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Highlighted: SADC participants who attended the first two days



Back row: Carin Pretorius, Hanspeter Liniger, Aida Gareeva, Gudrun Schwilch, Alastair Leake, Rinda van der Merwe, Wolfgang Prante, Daniel Danano, Hein Lindemann, Mharapara Isiah, Feng Wei

Middle row: Asanaliyev Abdybek, Moroke Scott Mulenga, Alfred Mapiki, Dr. Absalom Manyatsi, Raghu Prasad, Nhira Calvin, José Rondal, Msomi Bonga, Phiri Charlton, Martin Bwalya, Mats Gurtner, Sinethemba Koyi, Kanti Khisa Sudibya, Isabelle Providoli, Munawar Khan, Azhar Yeszhanova, Dirk Pretorius, Irfanullah Khan, Lydia Bosoga, Romeo Labios, Anwar Syaiful, Cai Jian-qin

Front row: Maleoa Mohloboli, Robin Barnard, Jumaa Ley George, Jalal Uddin Md. Shoaib, Godert van Lynden, Pete Liebenberg, Xin (Cindy) Shen, Berhanu Fentaw

Missing on the photo: Willi Graf, Nada Dragovic, Miodrag Zlatic, Yaolin Wang, N.J. Ngeru Joseph, Wilfred Mariki, Andrei Rozanov

ANNEX 3: FIELD TRIP REPORT

A full-day field trip was held on the Wednesday halfway during the workshop to the areas N and NE of Cape Town. After a visit to a recent conservation area where planted Eucalyptus trees were killed / removed to give way to the original (and more water-efficient) “Veenbosch” vegetation, we traversed the Swartland region with large areas under Conservation Agriculture for wheat (with some vineyards and olive orchards), later the Wynland with – as the name indicates – extensive wineries and olive orchards, again much under Conservation Agriculture, and some annual cropping.



ANNEX 4: CONTENT OF CD-ROM

1. Proceedings: ProceedingsWWSM06.pdf

2. Photo selection

3. Presentations (see below)

WOCAT opening v3.ppt

Topic 1: Progress Reports

- 1.1 Activities at the global level
 - WOCAT global progress report 06.ppt
 - FAO_Report.ppt, FAO_Report_brief.ppt
 - ISRIC activities 2005-2006.ppt
- 1.2 Taskforces
 - TF Mapping_Oct06.ppt
 - TF Q revision.ppt
 - TF reportStrategy.ppt
 - TF Use of WOCAT in R&E.ppt
- 1.3 Activities at the national/regional level
 - WWSM11Ethiopia.ppt
 - Progress_RSA.ppt, WOCAT-RSA-Workplan.ppt (includes highlights)
 - Morocco-Presentation.ppt
 - ICIMOD-WOCAT presentation.ppt
 - WOCAT INITIATIVES IN ORISSA, INDIA.ppt, WOCAT INITIATIVES IN ORISSA -INDIA.doc
 - PRC-GEF OP12_Capetown.ppt, WOCAT in China Wei.ppt
 - PHILCAT Activities 2006.ppt
 - Indonesia Report Presentation.ppt
 - WOCAT good examples in KZ.ppt
 - Serbia.ppt
 - (GIS and the Agricultural Natural Resources_v4.doc)
- New initiatives
 - WOCAT pres Pakistan.ppt
 - SADC_L&WM Calvin Nhira.ppt,
 - Zambia_PRESENTATION CAPETOWN.ppt

Topic 2: Overview books

- GlobalOverviewBook.ppt
- Ethiocat overview book.doc
- Land Management Eritrea.ppt
- ICIMOD-WOCAT overview book.ppt
- CAMPOverviewPosters.ppt
- Overview book_South Africa.ppt
- Chronology of production of BANCAT overview book.ppt

Topic 3: Special presentations CA & RWH

- CA_UKAlastair.ppt
- CA_Switzerland.ppt
- ACT_wocat2006.ppt
- Mt Kenya CA.ppt
- CAPHilippinesRomy.ppt
- Bed planting and zero tillage in Kyrgyzstan.ppt
- RWH Pakistan.ppt

Topic 4: WOCAT strategy

- WOCATStrategyCoreModule.doc
- WOCATStrategyDetailsActivities.doc

Topic 5: Mapping

- new-tools.ppt
- wocat_map_CT.ppt

Topic 6: Questionnaire revision

- QRevIntroduction.ppt
- WOCATmodularWP.ppt
- preselection_RSA.ppt

Topic 7: Special presentations

- CA in South Africa.ppt
- CAMP_WOCAT.ppt
- WOCAT & Watershed Development, Orissa, India.ppt
- BangladeshExperiences.ppt
- SerbiaWOCATInfluence.ppt
- Wilfred Mariki.ppt

Topic 8: DSS

- assessment.ppt
- dss.doc

Topic 9 Activity plans

- South Africa.ppt
- ICIMOD.ppt
- BANCAT.ppt
- india.ppt (same as WOCAT INITIATIVES IN ORISSA, INDIA.ppt), WOCAT INITIATIVES IN ORISSA-INDIA.doc
- China.ppt
- Indonesia.ppt
- Plan Camp Central Asia.ppt, Workplan KZ_2007.ppt
- FAO_Report.ppt, FAO_Report_brief.ppt

Steering Meeting

- DECISION SUPPORT TOOL_task force.ppt
- WOCAT MAPPING-acplan.BMP
- Receipe for WOCAT National success.ppt

ANNEX 5: WOCAT MILESTONES

WOCAT Milestones 1992-2006		
2006		
October, 23-28	Cape Town, South Africa	11th Annual International WOCAT Workshop and Steering Meeting, attended by 50 participants from 26 countries
September, 6-9	Solo, Indonesia	Training workshop on WOCAT tools and methodologies
August, 15-18	Berne, Switzerland	WOCAT strategy (taskforce) meeting with reviewers and donors, Q- revision meeting
June, 26-28	Rome, Italy	Map taskforce meeting with participants from South Africa, FAO, ISRIC and CDE
June, 20-25	Nazareth, Ethiopia	National workshop organised by MoARD on quality assurance, mapping and production of a national overview book
June, 19-23	Lhasa, Tibet	Training workshop on WOCAT tools and methodologies
June, 6-8	Prague, Czech Republic	SOWAP Plenary Meeting
June, 5	Kathmandu, Nepal	HIMCAT internal IYDD poster for World Environment day
May, 15-18	Marrakech, Morocco	14th ISCO Conference: participation, presentation of two papers (on mapping and on SWC/global change/millennium development goals) and a poster on achievements to combat desertification
May, 1-10	Dushanbe, Tajikistan	NCCR regional training course in Tajikistan with Tajik WOCAT team
April, 27	Brussels, Belgium	DESIRE project accepted for contract negotiations. 'Desertification mitigation and remediation of land (DESIRE)' is an EU funded project with 28 partner institutions mainly in the Mediterranean
April, 3-7	Dingxi City, Gansu Province PR China	Training workshop on WOCAT methodology and tools (requested by GEF-OP12 programme working in 6 provinces of the Loess plateau)
March, 27-30	Vienna, Austria	Participation and presentation at the IAEA Third Research Project Co-ordination Meeting to "Assess the effectiveness of soil conservation techniques for sustainable watershed management using fallout radionuclides".
March, 16-22	Mexico	4th World Water Forum: poster presentation of WOCAT
January	Badplaas, South Africa	Combined Congress (Soil and Plant Societies): Presenting two WOCAT posters
2005		
November 23-25	Istanbul, Turkey	WOCAT training workshop, organized under the frame of the IAEA Coordinated Research Project ("Assess the effectiveness of soil conservation techniques for sustainable watershed management using fallout radionuclides") by the Energy Institute of the Istanbul Technical University
November 7-11	Harper Adams Univ., UK	SOCAT quality control meeting, SOWAP Plenary Meeting
October 17-28	Nairobi, Kenya	Poster presentation at the 7th session of the COP (Conference of the Parties) of UNCCD
October 10-12	Rome, Italy	WOCAT introduction at the regional workshop to present PAP/RAC-FAO experiences in combating land degradation in Mediterranean coastal areas
October 10-16	Nanyuki, Kenya	WOCAT-IRHA training workshop: "Rainwater Harvesting & Soil and Water Conservation for Food Security" with participants from Cameroon, Colombia, Eritrea, Ethiopia, Ghana, India, Kenya, The Netherlands, Nigeria, Rwanda, Somaliland, Switzerland, Tanzania.
October 3-7	Nairobi, Kenya	3rd World Congress on Conservation Agriculture: WOCAT participation, paper and poster presentation
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	Jeypore, 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 EUROSIL 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, Khazhakstan, 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 an 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