



*12<sup>th</sup>*

***International Workshop  
and Steering Meeting***

*Manila and Bohol, Philippines  
12 -17 November 2007*

***PROCEEDINGS***

Progress, Methods, Outputs,  
Plan of Action,  
Organisation

Co-sponsored by:



Republic of the Philippines  
**Department of Agriculture**  
**BUREAU OF SOILS AND  
WATER MANAGEMENT**

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*12<sup>th</sup>*

*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

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

## LIST OF ACRONYMS

AGIS	Agricultural Geo-Referenced Information System
CA	Conservation Agriculture
CCD	See UNCCD
CHT	Chittagong Hill Tracts
COST	European Cooperation in the field of Scientific and Technical Research
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
GO	Government Organisation
ISCO	International Soil Conservation Organization
IUSS	International Union of Soil Science
KM	Knowledge Management
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
LD	Land Degradation
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
NCCR	National Centre of Competence in Research (CDE, Research Partnership North - South)
NGO/ NGA	Non-Governmental Organisation/ Non- Governmental Agency
NRM	Natural Resource Management
PARDYP	People and Resource Dynamics Project
PCARRD	Philippine Council for Agriculture, Forestry and Natural Resources Research and Development
PHILCAT	Philippine Conservation Approaches and Technologies (Philippine WOCAT initiative)
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
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
WOCATeer	WOCAT collaborator
WOCAT-L	WOCAT mailing list
WS	Workshop
WWSM	WOCAT (annual) Workshop and Steering Meeting

# LIST OF SPONSORS IN THE PHILIPPINES

Department of Agriculture (DA), Diliman, Quezon City, Philippines

Agricultural Training Institute (ATI)  
Bureau of Agricultural Research (BAR)  
Bureau of Soils and Water Management (BSWM)  
National Irrigation Administration (NIA)

Department of Agriculture – Regional Field Units

Regional Field Unit III, San Fernando City, Pampanga  
Regional Field Unit VII, Cebu City, Cebu  
Bohol Agricultural Promotion Centre (BAPC), Tagbilaran City, Bohol  
Regional Integrated Agricultural Research Center (RIARC), Ubay, Bohol  
Regional Field Unit VIII, Tacloban City, Leyte  
Regional Field Unit XII, Cotabato City, Cotabato

Department of Environment and Natural Resources – Forest Management Bureau (DENR – FMB),  
Quezon City, Philippines

Department of Science and Technology – Philippine Council for Agriculture, Forestry and Natural  
Resources Research and Development (DOST – PCARRD), Los Baños, Laguna, Philippines

International Centre for Research on Agroforestry (ICRAF) – World Agroforestry Centre – Philippines  
(WAC), Los Baños, Laguna, Philippines

Benguet State University (BSU), Baguio City, Philippines

Conservation Farming Movement, Inc. (CFMI), College, Laguna, Philippines

University of the Philippines Los Baños (UPLB), College, Laguna, Philippines

Bohol Beach Club (BBC), Panglao Island, Bohol, Philippines

Congressman Edgar Chatto, Bohol, Philippines

Governor E.B. Aumentado, Bohol, Philippines

Senator Eduardo Angara, Manila, Philippines

## PHILCAT MEMBERS

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Vice-Chair	Dir. Romeo T. Acosta	DENR-FMB
Members	Engr. Arnulfo B. Gesite	BSWM-DA
	Dr. Romeo V. Labios	UPLB
	Engr. Reynaldo Baloloy	NIA-DA
	Mr. Rolando V. Labios	BAR-DA
	Forester Jesus A. Javier	DENR-FMB
	Dr. Digna O. Manzanilla	DOST-PCARRD
	Ms. Elsa A. Parot	ATI-DA
	Dr. Wilfredo M. Carandang	UPLB
	Dir. Leandro O. Caymo	DAR - Department of Agrarian Reform
	Dr. Agustin Mercado, Jr.	WAC-ICRAF
	Prof. Jose G. Balaoing	BSU
	Dr. Virgilio O. Villancio	CFMI
	Dr. Danilo Mendoza	PSSST - Philippine Society of Soil Science and Technology, Inc

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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 twelfth annual WOCAT Workshop and Steering Meeting, held in Manila and Bohol, in November 2007. 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

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 partner institutions for their contribution and considerable commitment before, during and after the workshop (see attached list of participants).

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

# EXTENDED SUMMARY

## Topic 1: Progress reports

The main achievement at the global level was the launch and distribution of the WOCAT overview book 'where the land is greener', which enhanced SLM awareness raising and promotion of WOCAT. This in turn led to the involvement of WOCAT in the discussion of local and national degradation / conservation assessments, global and local indicators as well SLM knowledge management. Achievements were made regarding networking and integration in multilateral programmes and projects, such as LADA, GEF-initiatives or DESIRE, in which the WOCAT experience and expertise is highly valued.

Other major outputs reported were the WOCAT strategy 2008-2012, the revised questionnaires and the updated database, and including the case study locations on Google Earth. Intensive work has been carried out on the development of WOCAT tools, based on requests of partners and to address global issues and ecosystem services.

Considerable progress was reported from the taskforces on mapping, the strategy and the questionnaire revision, whereas the other taskforces reported less activity.

National progress reports demonstrated the high level of activities from a number of WOCAT participants, including new initiatives from Mongolia and Togo.

Highlights 2007:

- Documentation and evaluation with QT, QA and (a few) QM is going on in many countries, such as Bangladesh, India, Tajikistan, Nigeria, South Africa, Serbia
- Production of national overview books in Ethiopia, Nepal (fact sheets) and Central Asia. Ethiopia went through a long process of documentation, evaluation, analysis and review of good practices with the aim to use this knowledge for future implementation and upscaling.
- Promotion and use of WOCAT tools for education, e.g. in Universities (Bangladesh, Philippines, Serbia)
- Presentation and promotion of WOCAT in trainings, seminars and conferences (Bangladesh, China, ICIMOD, India, Kyrgyzstan, Philippines, Tajikistan, South Africa)
- Application and use of WOCAT knowledge in land users training and field implementation (China, Kyrgyzstan, Philippines, Nigeria, Morocco)
- Launch of own website for BANCAT (WOCAT in Bangladesh)

## Topic 2: Special topic session

Most of the presentations under this session were related to global and national overview books. The global book 'where the land is greener' got very positive feedback, but while many copies were distributed for free, sales are lower than expected. The Ethiopian overview book is almost ready for printing. It contains 33 technologies and 7 approaches of high quality. The NEPCAT fact sheets are 21 technologies and 7 approaches from Nepal, based on a simplified and adjusted summary template and jointly developed by ICIMOD and the Sustainable Soil Management Programme (SSMP). The last presentation focused on WOCAT in global initiatives like LADA, DESIRE and GEF / UN Orgs. knowledge management. The aim is to institutionalise the WOCAT method by placing / mainstreaming the WOCAT network and the tools in international organisations and programmes.

## Topic 3: WOCAT strategy

The final draft version of the WOCAT strategy (2008 – 2012) was distributed to the participants and highlights of it were presented. The WOCAT strategy gives the direction of the WOCAT programme for the next 5 years; it determines and steers at a global level and gives suggestions and ideas to effective implementation at the national and regional level. It includes the four dimensions of knowledge of WOCAT and the objectives related to them. The WOCAT strategy has a second section called the "Annex Activities". This section is not fully developed yet and at present only a draft version is available. Further input was given by all the participants, which was gathered through group work. This compilation allows the WOCAT participating institutions as well as the donors of WOCAT to select, prioritize and target their involvement.

## Topic 4: QT and QA revised

The revision of the basic version of the questionnaires is related to several types of changes. Some questions, definitions, and comments still needed reformulation to become clearer, some questions were newly added to respond to users needs related to global issues and ecosystem services, and some questions were deleted. These changes were presented in detail and were well received by the workshop participants.

The new modular approach will comprise the QT and QA basic questionnaire as a core piece with complex topics as well as topics that need more hard data and in-depth investigations (e.g. global issues) linked to it as modules. The first module in development is the 'watershed system' module by which a number of technologies can be grouped into a system, and its specifications and impact be assessed for the whole watershed.

## Topic 5: Mapping

The new mapping questionnaire (QM) was developed together with the LADA and DESIRE projects. The principle of entering information and viewing results on a map at the same time shall be maintained, but programmed with new software (South Africa). The basic principle is still the one of a 'Participatory Expert Assessment PEA'. The collaboration with LADA and DESIRE is an opportunity for QM for a 'take-off', after several years of rather low activities. The new base unit for mapping is a combination of FAO's land use system (LUS) with administrative units (e.g. districts). The assessment of degradation and conservation capture as much as possible the same issues, e.g. extent, degree/effectiveness, rate/trend, impact on ecosystem services, etc.

An on-line data management system was recently implemented by FAO and will be finalized in short time. South Africa will invest in the development of the on-line viewer based on ARCGIS server. South Africa is heavily involved in WOCAT mapping, as it is part of their Soil Protection Strategy and LandCare programme and it is also one of the LADA pilot countries.

A very practical testing of the WOCAT mapping method was done in the framework of FAO's Somalia Water and Land Information Management (SWALIM) project, where it was used to assess land degradation and conservation in 3 regions.

The group work on mapping revealed that the QM methodology is appreciated as being a participatory tool, while still using hard data as much as possible.

Beside the polygon map showing the distribution and effectiveness of SWC over a designated area (QM), WOCAT placemarks have been entered in Google Earth, showing the location of documented SWC case studies from the WOCAT database.

## Topic 6: WOCAT online database

The new online address database is 95% completed and serves as an authentication system as well as address database. Only people registered in this database can log in to the overall WOCAT on-line system, i.e. this is also needed to work with the future QM, QT, and QA databases. As soon as the system development is completed all users will receive an email with their login details (username & password). Information for the on-line database was taken from the off-line database; therefore all entries need to be checked and updated.

For the development of the online databases, a new visual identity was created, which can be applied in the various WOCAT colours for the various databases and a new website (still to be developed).

## Topic 7: Special presentations

Participants had the possibility to present some of their special achievements or highlights related to WOCAT. Presentations were given on 'WOCAT tools and its utility in watershed programmes in India', 'Functioning of Student's Forum of WASWC in Serbia', 'Natural Resource Management in Kyrgyzstan', 'Community-based forest management in the Philippines', 'Developing appropriate technologies to address poverty reduction and sustainable development in Karst landscapes' and 'The role of African LandCare Network in promoting WOCAT activities'.

## Topic 8: WOCAT as tool for decision support

WOCAT plays an important role in the new EU research project 'DESIRE – desertification mitigation and remediation of land', where QT, QA and QM are integrated in various working blocks and further developments regarding stakeholder integration and decision support are possible. A first draft of such a decision support system, based on the existing 'search by criteria' form in the QT/QA databases, was demonstrated and tested in group work. It is embedded into a stakeholder workshop with a clear methodology and a series of steps to go through and come up with a selection and decision of a measure for testing implementation. The open-source software 'Facilitator' is integrated and used for analysing the scoring of options with a number of criteria. This software was tested in groups and participants agreed to develop the methodology further, showing high interest in its use and outcome. Some hesitated to use a computer-based method together with stakeholders, but the methodology suggested allows being flexible in the intensity of computer use during the workshop.

QM will be used at the study site level, with a first training / rough testing in Cape Verde in January 2008, directly after the DESIRE plenary meeting.

## Topic 9: Activity Plans for Next Year(s)

### National and regional work plans:

National activity plans for next year were presented and discussed. Most countries plan to further document and evaluate technologies and approaches. Many want to promote the WOCAT network and its tools within the country or the region and use WOCAT for awareness raising of SLM. Those started in producing overview books plan to finalize them; others intend to initiate their own ones.

### Global activities 2008

The following task forces were established and their activities planned: 'Decision support tool', 'Questionnaire modules', 'Impact monitoring', 'Mapping', 'Digital products', 'WOCAT in research, training & education', 'Communication and promotion', 'Strategy'

Further major activities include:

- Clarifying role of CDE, FAO, ISRIC in securing funding and setting up new programmes
- Development of on-/ off-line databases. Transformation of old data into new database
- Global database: populate and complement representative Ts / As (for identified gaps: different land uses, degradation, conservation)
- Training / backstopping workshops demanded by partners:

Three year's and ten year's vision: WOCAT internationally used as the tool for SLM and KM: institutionalised, efficiently used, good network, populated database, used in research and education. Stable system of WOCAT tools (not hindering new developments).

### Administrative and organisational issues

The next WWSM will be in Switzerland:

**Host:** Centre for Development and Environment (CDE), University of Berne, Switzerland

**When:** 20 - 25 October 2008

**Special topics:** Decision support, on-line database, strategy annex, impact monitoring (local indicators), use of WOCAT, mapping tool.

## INTRODUCTION

Since 1996, WOCAT has organized International Annual Workshops and Steering Meetings with the goal (a) to bring together the main participating and funding institutions and the core partners, (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 South Africa 2006, the Philippines were selected to host the 12th annual workshop. The meeting was hosted by the Bureau of Soil and Water Management (BSWM), Department of Agriculture, Republic of the Philippines and the members of PHILCAT.

The workshop took place at the BSWM for the opening day, Monday 12 November 2007, and at the Bohol Beach Club, Panglao Island, Bohol from Tuesday 13 to Saturday 17 November 2007, 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.

52 participants from 19 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. Some of the Philippine participants were only present during the first day in Manila.

### **Major topics of WWSM12:**

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

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

TOPIC 2: Special topic session: overview book(s) and WOCAT in international programmes

TOPIC 3: WOCAT strategy;

TOPIC 4: QT and QA revised;

TOPIC 5: Mapping;

TOPIC 6: WOCAT online database;

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
<b>Sunday 11/11</b>	Arrival of participants; registration Check-in at BSWM Dormitory, and Hotel Sulo; Quezon City	
<b>Monday 12/11</b>	Venue BSWM, Department of Agriculture, Quezon City	
08:00 – 08:30	- Registration	PHILCAT secretariat
	<b>OPENING, WELCOME</b>	<i>Chair: A. Gesite</i> <i>Rapp.: C. Hauert</i>
08:30 – 10:00	- Opening Ceremony: Workshop organizer - Doxology - Philippine National Anthem - Welcome Address - Introduction of Keynote Speaker - Keynote Address: - Introduction of Keynote Speaker - Keynote Address - WOCAT coordinator - Obituary Joe Rondal  <i>Group photograph OP (BSWM Convention Hall)</i>	R. Labios / A. Gesite  Prof. Wilfredo E. Cabezon Dr. Silvino Q. Tejada, CESO IV Honorable Arthur C. Yap For. Romeo T. Acosta Honorable Jose L. Atienza, Jr H.P. Liniger H.P. Liniger / R. Labios / G. Van Lynden
10:00 – 11:00	<i>Poster Exhibit (BSWM Patio)</i> <i>Coffee break</i>	
11:00 – 12:00	Introduction, participants' expectations, approval of agenda, administrative information (incl. info about reimbursements)	H.P. Liniger / R. Labios
12:00 – 13:30	<i>Lunch break</i>	
	<b>TOPIC 1 PROGRESS REPORTS</b>	<i>Chair: Romeo Labios</i> <i>Rapp.: C. Hauert</i>
13:30 – 14:00	Activities at the global level - Secretariat/Management Group/CDE - ISRIC - FAO	H.P. Liniger G. van Lynden W. Prante
14:00 – 15:00	Task Forces (max. 10 min. each) - TF Mapping – QM & World map - TF Digital Products - TF Strategy - TF Q-Revision (Q light)	D. Pretorius, G. van Lynden W. Prante G. Schwilch R. Mekdaschi Studer, C. Hauert
15:00 – 15:30	<i>Coffee break</i>	
15:30 – 16:00	Task Forces (cont'd) - TF Decision Support Tool - TF WOCAT in research, training and education - TF Impact Monitoring	H.P. Liniger, G. Schwilch M. Zlatic; R. Labios A. Gareeva
16:00 – 17:30	Presentation of regional / national progress reports (17 countries, 10 min. each)	Regional and national representatives
18:00 – 19:30	<i>Video and cultural presentation</i> <i>Distribution of certificate and giving of souvenirs</i>	DA-BSWM PHILCAT Committee
19:30	<i>Welcome Dinner hosted by the Department of Agriculture</i>	DA-BSWM
<b>Tuesday 13/11</b>		
05:00 – 05:30	Departure from hotel to Domestic Airport	
08:00 – 09:30	Manila to Tagbilaran City; flight PR 175	
09:30 – 10:00	To Bohol Beach Club Resort, Panglao Island, Bohol	
10:00 – 11:00	<i>Check-in &amp; Coffee break</i>	
11:00 – 12:30	National/Regional Progress reports cont'd. Presentations of new initiatives	Regional and national representatives
12:30 – 14:00	<i>Lunch break</i>	

	<b>TOPIC 2 SPECIAL TOPIC SESSION</b>	<i>Chair: A. Gareeva Rapp.: C. Hauert</i>
14:00 – 16:00	<p>Overview Books:</p> <ul style="list-style-type: none"> <li>- 'where the land is greener': reactions, achievements, promotion and sale</li> <li>- News about progress of national overview books (Ethiopia, Nepal; China)</li> </ul> <p>WOCAT in LADA / DESIRE and GEF-UN Orgs. Knowledge Management: Land Initiative:</p> <ul style="list-style-type: none"> <li>- National land degradation assessment</li> <li>- Local land degradation assessment (Global indicators)</li> <li>- Development of a learning network (KM)</li> </ul> <p>Use of WOCAT: Assessing Impacts WOCAT's new visual identity</p>	<p>R. Mekdaschi Studer D. Danano, I. Providoli, H.P. Liniger H.P. Liniger</p> <p>G. van Lynden Wolfgang Prante</p>
16:00 – 16:30	<i>Coffee break</i>	
	<b>TOPIC 3 WOCAT STRATEGY – ANNEX 'ACTIVITIES'</b>	<i>Chair: S. K. Khisa Rapp.: I. Providoli</i>
16:30 – 17:00	Presentation of WOCAT Strategy – Annex 'Activities' document, incl. plenary discussion	G. Schwilch
17:00 – 18:00	Regional group meetings with discussions on national and regional WOCAT fields of activities	
18:00 – 18:30	Feedback from group meetings and short evaluation of exercise	
18:30 – 18:45	Introduction to field trip	
19:00	<i>Dinner hosted by Congressman Edgar Chatto</i>	
<b>Wednesday 14/11</b>	<b>FIELD TRIP TO VISIT ICRAF, ACIAR-BSWM, SWCF PROJECTS AND CHOCOLATE HILLS, TARSIER AND LUNCH ON LOBOC RIVER</b>	
<b>Thursday 15/11</b>		
	<b>TOPIC 4 QT and QA revised</b>	<i>Chair: D. Danano Rapp.: R. van der Merwe</i>
8:00 – 9:00	Presentation of revised questionnaires, incl. plenary discussion	R. Mekdaschi Studer
9:00 – 9:30	Introduction to watershed management module	R. Mekdaschi Studer
	<b>TOPIC 5 MAPPING</b>	<i>Chair: W. Prante Rapp.: G. Schwilch</i>
9:30 – 10:00	Presentation of WOCAT-LADA QM, incl. questions	H.P. Liniger
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:00	<p>Examples of WOCAT-LADA QM:</p> <ul style="list-style-type: none"> <li>- South Africa</li> <li>- Somalia</li> </ul>	<p>D. Pretorius J. L. Njeru</p>
11:00 – 13:00	<p>Group work and training / testing of QM: data entry, viewing, quality assurance/ harmonizing, evaluating</p> <p>Plenary discussion</p>	
13:00 – 14:30	<i>Lunch break</i>	
14:30 – 15:00	WOCAT on GoogleEarth	G. van Lynden
	<b>TOPIC 6 WOCAT ONLINE DATABASE</b>	<i>Chair: D. Pretorius Rapp.: C. Pretorius</i>
15:00 – 16:00	<p>A modular system for questionnaires and databases (online database)</p> <ul style="list-style-type: none"> <li>- Address database as an example</li> </ul>	W. Prante
16:00 – 16:30	<i>Coffee break</i>	
	<b>TOPIC 7 SPECIAL NATIONAL/REGIONAL PRESENTATIONS</b>	<i>Chair: Y. Niino Rapp.: S. Bhuchar</i>
16:30 – 18:30	<ul style="list-style-type: none"> <li>- WOCAT tools and its utility in Watershed Management in India.</li> <li>- Involvement of "Student's Forum of WASWC" in WOCAT</li> <li>- Pasture activity in Kyrgyzstan and SWCT in Central Asia</li> <li>- (Green spots as a tool to combat desertification in the Aral Sea)</li> </ul>	<p>N. Sahu M. Zlatic A. Gareeva (L. Dimeyeva)</p>



	<ul style="list-style-type: none"> <li>region)</li> <li>- "Developing Tropical Forest Resources thru Community Based Forest Management: the Nueva Vizcaya, Philippines"</li> <li>- Developing Appropriate Technologies to Address Poverty Reduction and Sustainable Development in Karst Landscapes: The SWCF Experience</li> <li>- The role of African Landcare Network in promoting WOCAT activities</li> </ul>	Jess Javier W. Granert L. Bosoga
19:00	<i>Dinner at Bohol Plaza Resort</i>	
<b>Friday 16/11</b>		
	<b>TOPIC 8 WOCAT AS TOOL FOR DECISION SUPPORT</b>	<i>Chair: S. Bhuchar Rapp.: R. Mekdaschi Studer</i>
08:00 – 8:30	Presentation of decision support tools and plenary discussion	G. Schwilch
8:30 – 10:00	Group work on further development of decision support tool	
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:30	Group work (cont')	
11:30 – 12:00	Feedback from group work	
12:00 – 13:30	<i>Lunch break</i>	
	<b>TOPIC 9 ACTIVITY PLANS FOR NEXT YEAR(S)</b>	<i>Chair: G. van Lynden Rapp.: R. Mekdaschi Studer</i>
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"> <li>- Considering the results of the Workshop (adjust!)</li> <li>- Concrete steps to achieve the suggested results from the workshop topics (e.g. revised tools, outputs, use of WOCAT, etc.)</li> <li>- List requests / expectations towards regional / global WOCAT</li> </ul>	
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 18:00	Organisation of taskforces and taskforce activity plans	
19:00	<i>Dinner hosted by Bohol Agricultural Promotion Center</i>	
<b>Saturday 17/11</b>	<b>STEERING MEETING</b>	<i>Chair: H.P. Liniger Rapp.: Ch. Hauert</i>
08:00 – 10:00	Global activities for next year <ul style="list-style-type: none"> <li>- review WOCAT vision in 3 and 10 years</li> <li>- planning and major priorities</li> <li>- major events and conferences</li> <li>- planning of publications</li> <li>- national/regional/global review panel</li> <li>- WOCAT and SDC, priority countries and regions</li> <li>- funding</li> <li>- funding needs and opportunities</li> <li>- compilation of materials / contributions to workshop proceedings</li> </ul>	
10:00 – 10:30	<i>Coffee break</i>	
10:30 – 11:00	Organisational and administrative issues: election of Global Management, assignment of Secretariat, next WWSM 2009	
11:00 – 12:00	Feedback from participants (against expectations)	
12:00 – 12:30	A.O.B.	
12:30 – 13:00	<i>Closing</i>	
13:00	<i>Lunch break and free afternoon</i>	
19:00	<i>Hosted Farewell Dinner by the Governor E. B. Aumentado &amp; BBC</i>	
<b>Sunday 18/11</b>	Departure of participants Tagbilaran City - Manila (PR 176; 09:55-11:10 or other flight)	

## WELCOME SPEECHES

### **Prof. Wilfredo E. Cabezon: Assistant Director, BSWM, Department of Agriculture**

It is a great pleasure for us to host the 12<sup>th</sup> annual WOCAT Workshop and Steering Meeting (WWSM12) and we welcome you all to this tropical country. During this time when global concerns on climate change, desertification and biodiversity have become extremely urgent, the relevance of WOCAT as an international network on land conservation has even become more significant. When the late Dr. José Rondal informed us that the Philippines (BSWM) will be hosting the coming 12<sup>th</sup> WWSM, we received the news with great pride coupled with hesitation and a certain level of panic. There was no way to include the budgetary requirements in the 2007 General Appropriations Act anymore. I would therefore like to congratulate and thank the local WOCAT network (PHILCAT), the Regional Field Units of the Department of Agriculture and other local sponsors for this seemingly magical wand, without which it would have been difficult to host this event. We recognize the importance of this meeting, not only to renew acquaintances / friendship and set targets, but also to raise awareness on the importance of sustainable land development (SLM). Considering that about 45% of the arable lands of the Philippines are moderately to severely eroded, about 5.2 million ha are seriously eroded and approximately 74% of the sloping lands are actively used for subsistence farming, surely, my country will benefit from the exchange of technical knowhow among experts as they tackle conservation issues here at the WWSM12. Again I would like to reiterate my thanks to our network members and our co-sponsors that made this international event possible and I wish a pleasant stay to everyone. MABUHAY.

### **Dr Silvino Q. Tejada, CESO IV: Chairman, PHILCAT Committee, Director BSWM, Department of Agriculture in the name of Honorable Arthur C. Yap: Secretary, Department of Agriculture**

Almost everyday, we evaluate experiences and we generate knowledge on land management, especially those that concern the improvement of soil fertility and the protection of our soil resources as part of our stewardship of agricultural resources. Yet, most of this valuable knowledge is neither documented nor easily accessible. This knowledge remains a local, individual resource, and is not available for those seeking to accomplish similar tasks. Consequently, land degradation remains a major global problem. We all recognize that good quality agricultural land is a finite resource that must be conserved and managed. As it is in other countries, Philippine agriculture is also shifting towards the marginal, more vulnerable and more ecologically fragile areas. And in addition to the traditional food, fibre, and timber that our finite and precarious land resources provide, our agricultural areas have been given the additional mandate to produce biofuels, in obvious response to the looming energy crisis. We thank WOCAT for providing this global network and facilitating the exchange of experiences. WOCAT's documentation of SWC technologies and approaches provides a wider room for a future policy direction towards conservation compliance as a requirement to avail of agricultural incentives. A conservation cost-sharing programme will improve consistency of government policies that encourage agricultural production that is so far seemingly incompatible with conservation efforts. We are in the planning process for lobbying in our congress for enactment of soil conservation law. It is indeed timely that the Philippines are hosting WOCAT.

Mr. Tejada from his side deeply apologizes for not being able to join the whole meeting. He congratulates all participants for their work in better understanding of how to promote SLM in general and in the Philippines in particular. He wishes a pleasant and memorable stay.

### **Dr. Theresa Mundita S. Lim: Director, Department of Environment and Natural Resources in the name of Dr. José L. Atienza: Secretary, Department of Environment and Natural Resources; delivered by R. Bravo: Assistant Director, Department of Environment and Natural Resources**

This morning is a great opportunity for me to re-emphasize the legitimate correlation between soil and water conservation (SWC) and the conservation of wildlife and biodiversity. Soil and water conservation is critical towards the sustainable use of natural resources. With the stripping off of natural vegetation we have lost both the soil itself and the wildlife that finds food and refuge in the vegetation. The scientific solutions to sustainable land management should involve strategies that cut across social, environmental, and political boundaries. The relevance and effectiveness of SWC measures should not depend only on the needs and pressing concerns of the agricultural sector but equally important on its relevance and effectiveness in perpetuating wildlife as well as in conserving biodiversity. Innovative techniques or solutions must be extended to create learning and sharing

environments and to improve the transfer of scientific and technological advancement to the users. Hence, this workshop proves to be timely and fitting to extend and disseminate new innovative technologies, which are deemed vital not only in improving agricultural production but also in preventing further habitat loss for wildlife and biodiversity resources.



*Mr Wilfredo Cabezon and Mr Silvino Tejada at the opening (Photos: Hanspeter Liniger)*

**Dr. Hanspeter Liniger: WOCAT coordinator, CDE University of Berne**

*(Highlights for WWSM 2007.ppt)*

Hanspeter Liniger expresses his thanks and gratitude to the organizers and participants of this workshop. WOCAT as a network exists since 1992. Today it comprises 54 institutions. The overall aim is going from red spots looking for green spots, i.e. to identify areas with best return for investments: A key issue for interventions and investments in SLM is to differentiate the 3 levels of intervention: prevention, mitigation, or rehabilitation of degraded land! Often programs are not clear about this and its implications and thus too much is spent on expensive rehabilitation of small areas rather than on prevention of vast areas. The Philippines has always been a showcase for WOCAT. It had the first map to point out green spots; it was the first country to address impact of land degradation and conservation on carbon sequestration and point out the link to climate change.

The most important recent output by WOCAT is the book 'where the land is greener' a new standard for the systematic documentation, evaluation and dissemination of knowledge on sustainable land management (SLM) and addressing issues of global concern such as poverty, water scarcity and desertification. It includes 42 case studies from more than 20 countries and detailed analysis of study results including policy points for decision makers and donors. The book shows a spectrum of the wealth of experiences and illustrates that without proper documentation, monitoring and evaluation, the needed adaptation to extreme events, to climate change and also to socio-economic change cannot take place. Eventually it is land users that are implementing good or bad land management. We from WOCAT can assist and need to raise the global concern and commitment to contribute and maintain the ecosystem services that are all related to land use.

Goal of WOCAT annual workshop and steering meeting:

- Personal contacts
- Exchange
- Joint development: Group work, individual inputs
- Training (selected topics)
- Planning & Decision making

Highlights for this WWSM 2007:

- Progress Reports, new initiatives
- **National overview books / fact sheets**
- **WOCAT in multilateral projects:** FAO-LADA, DESIRE, GEF and UN Org.: Assessing Impacts
- WOCAT Strategy – Annex 'Activities'
- Revised Basic questionnaires, modular system, technology system module
- **WOCAT-LADA QM**, WOCAT in Google Earth
- WOCAT's new visual identity, **on-line database**
- **'Decision Support System'**
- Special national/regional presentations
- Activity plans for next year(s)

### Obituary Joe Rondal

*Hanspeter Liniger (in memory of Joe Rondal.ppt, Joe\_Rondal by GvL.mpg)*

In life there are happy and sad moments. Last year Joe and Romy invited WOCAT to the Philippines, however only Romy welcomed us yesterday at the airport. Even now I have difficulties accepting that Joe has passed away. Joe was a humble and dedicated man. We feel lucky that we got to know and share moments with him. Joe (and Romy) joined the first WWSM in 1999, and together with a group of people from different institutions (ministries, universities and international institutions) in the Philippines they developed PHILCAT: a WOCAT success story, a model case for other countries to follow. WOCAT lost a dear friend and colleague but Joe left a team that carries on with the work.



*Ms Perlita Rondal and her daughter (left). Handing over by Godert van Lynden and Hanspeter Liniger of the DVD compiled in memory of Joe Rondal to Ms Perlita Rondal (right) (Photo: Hanspeter Liniger)*

### *Ms Perlita Rondal*

I am deeply moved and would like to thank you for honoring my beloved late husband. I have attended WWSM 2002 in Rome. For Joe WOCAT was like a second family. He felt deep friendship with all WOCAT members. I would like to thank the Bureau of Soil and Water Management for their warm sympathies and their support.

# TOPIC 1 PROGRESS REPORTS

*Rapporteur: Christine Hauert*

Each year, progress at all levels is reported and compared with the workplans prepared during the previous workshop. The reports below cover the period from October 2006 (WWSM11 South Africa) to October 2007 (WWSM12 Philippines).

## 1.1 Activities at the global level

### 1.1.1 Review 2007: major achievements

*Report by Hanspeter Liniger, compiled by Rima Mekdaschi Studer (global major achiev07.ppt)*

#### Output generation

**Overview book:** 'where the land is greener' was published, promoted and disseminated. A launch for 'where the land is greener' was organized by SDC on 24.01.07 at which many representatives of the different SDC sections as well as NGOs and other Swiss institutions and organisations were present. WOCAT's book was also inaugurated January 07 during an International Workshop on GEF Land Degradation Focal Area Indicators which FAO-LADA, UN organizations (UNEP, UNDP, UNU), GEF, IFAD, CIAT, IFPRI, African Development Bank, Asian Development Bank, other networks (e.g. TerrAfrica) and University programmes (e.g. ODG-DEV, University of East Anglia) attended and/or supported. It was promoted for 2 weeks during UNCCD COP8 meeting 3-14 September 07, Madrid, Spain.

**WOCAT strategy 2008-2012** was finalized and released end of June 2007. A first draft of the **annex 'activities'** to the strategy was circulated for comments.

All quality assured case studies, Technologies as well as Approaches, especially documented for the overview book were added and/or updated in the **global database**. A few new case studies were added such as from Nigeria, Syria, France and Kenya. The expansion and updating of the global database also served as a basis for the development of the **global (world) map** using Google Earth.

WOCAT **revised tools** (QM, QT basic and QA basic), although not yet completely finalized, were already applied and tested in the field (QM South Africa and Somalia, QT basic and QA basic at DESIRE workshops). The 4 page summary template, a format offered to be used in national overview books, was adapted in accordance with the revised questionnaires. A 2 page summary template was developed on request of WOCAT tool users. A light version of QT and QA questionnaires that will correspond to the 2-page summary is in development.

#### Networking

**FAO-LADA** has approved and allocated a budget for the 'national assessment of land degradation and conservation activities' for adapting and using the WOCAT mapping tool.

The WOCAT methodology succeeded to be **integrated in multilateral programmes / projects** such as FAO – LADA and GEF – UN organisations 'Knowledge Management (KM): Land Initiative' as well as in EU – projects such as DESIRE and to be mainstreamed as a methodology in national / regional programmes such as the Soil Protection Strategy in South Africa, GEF - Country Partnership Programme for Sustainable Land Management (CPPSLM) implemented through the Ministry of Agriculture and Rural Development (MoARD) in Ethiopia and SDC funded bilateral project for Coping with Desertification in Mongolia.

A new **WOCAT initiative** was started in Togo. The young Nigerian initiative (started in 2005) was able to encourage Togo to hand in a proposal and apply for seed money to get started with a WOCAT initiative. Contacts with Benin and WAFRICAT countries (Ghana, Cameroon and other West African countries) were also taken up. It is desirable that these activities would link with former WOCAT initiatives in the region such as Burkina Faso, Niger and Mali.

### Capacity building

WOCAT has contributed substantially to the discussions and development of the FAO-LADA national and local land degradation and conservation assessment project. Due to long term experience and **expertise as well as lessons learnt** WOCAT was able to give valuable inputs to the national assessment and to the development of an outline for the local assessment tool kit. WOCAT was given the lead to develop a WOCAT-LADA mapping tool.

LADA training of trainers workshops on the use of tools both for the national and the local assessment of land degradation were held in South Africa (October 2007) and Tunisia (November 2007) respectively.

Again WOCAT's technical expertise and experience in knowledge management were highly valued in the compilation of GEF land degradation global and local indicators and the development of a learning network, both objectives of a GEF-UN organisations project: Knowledge management (KM: Land Initiative) – ensuring impacts from SLM.

In response to the request of Government of Mongolia to support the national and regional efforts for combating desertification in Mongolia, SDC has decided to fund the Project for Coping with Desertification 2007–2013 starting with the entry phase of one year from April 2007 to April 2008. The overall goal of the project is to support the national capacity to effectively deal with desertification. There are 4 components and WOCAT is included in component 4: strengthening the development and application of proper technologies.

The WOCAT methodology and its tools were integrated in the DESIRE **research project**. DESIRE's approach to mitigate desertification and to remediate land includes the identification (LforS – learning for sustainability) and evaluation (WOCAT questionnaires) of existing SWC knowledge together with stakeholders and the use of it for decision support, as well as the mapping tool.

The doctoral thesis of Bettina Wolfram (CDE) on 'Land use, soil degradation and soil conservation in the Loess Hills of Central Tajikistan', integrating WOCAT methods, was successfully concluded in September 07.

### Tool development

**The revision of the questionnaires on SWC Technologies and Approaches** (QT and QA) with the aim to include global issues (e.g. biodiversity, water - esp. green water) and address MDGs (carbon, desertification, poverty, etc) was tackled. During WWSM 11 in Cape Town it was decided to elaborate on a modular system with the revised basic questionnaire as the core piece in order to keep the framework flexible and open for supplementary topics such as watershed management, water harvesting and human well-being and livelihoods (additional modules could be added according to specific interests). During 7 days of retreat in March, May and August, 2007 QT basic was revised and newly structured to include ecosystem services propagated in the Millennium Ecosystem Assessment. During 4 days of retreat in May and September, 2007 QA basic was revised and improved to emphasize gender and poverty alleviation issues. First testing of the revised questionnaires was done during the DESIRE training workshops in Morocco and Spain.

The process of adapting the **WOCAT mapping questionnaire** (QM) to FAO-LADA's national land degradation and conservation assessment requirements was initiated at the workshop on the development of LADA National Assessment Mapping Methodology, 14-16 March 07 in Rome. The revision of QM concerned the use of land use systems (rather than land use *types*) and the incorporation of ecosystem services. The mapping taskforce met again 5-9 July 07 in Berne and is involved in frequent e-mail discussions and teleconferences. WOCAT-LADA QM was tested in South Africa in a workshop specifically held for that purpose in October 2007 (and in Somalia).

Besides improving the layout of the WOCAT **world map** on AGIS website ([www.agis.agric.za](http://www.agis.agric.za)), case studies from the WOCAT - database were used to produce a global map presented in Google Earth.

Objectives / Expected results	Activities	Major global activities planned for October 2006 – November 2007*	Review 2007: Achievements October. 2006 to November. 2007
<p><b>1. Output generation</b>  <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></p>	<ul style="list-style-type: none"> <li>produce CD-ROM in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests</li> <li>print a first overview of global experiences of SWC Technologies and Approaches</li> <li>publish in journals and conference proceedings: WOCAT tools, methods, results.</li> <li>support the production for national overviews</li> <li>produce dissemination materials: Use of WOCAT (posters, pamphlets, videos)</li> <li>compile a first global map on SWC achievements</li> </ul>	<ul style="list-style-type: none"> <li>printing, publishing and launching of <b>the overview book</b> ✓✓✓</li> <li>dissemination strategy for Overview Book and other outputs ✓</li> <li>finalising the WOCAT <b>strategy</b> and / or business plan, including a <b>funding strategy</b> ✓✓</li> <li><b>tools</b> further developed and made available (modular system ✓, questionnaire revision ✓✓, WOCAT Light ✓✓✓)</li> <li><b>advance with global map compilation</b> ✓✓</li> <li><b>add quality assured Ts and As</b> especially documented for the overview book to the database (mainly by CDE), expand database ✓✓✓</li> <li>training manuals and teaching material</li> <li>guidelines for global and national review panels</li> <li>'ToR's and strategy for regional/national coordinators' (define regional coordination, expanded management, ...)</li> </ul>	<ul style="list-style-type: none"> <li>proceedings of WWSM 11 compiled and disseminated</li> <li>global overview book 'where the land is greener' published, promoted, distributed and launched (SDC, Jan 24, Bern; International Workshop on GEF Land Degradation Focal Area Indicators, Jan 8-9, Rome; UNCCD COP8, Sept 3-14, Madrid)</li> <li>flyer for 'where the land is greener' produced. 'where the land is greener' announced in different publications (e.g. newsletters, magazines) and on websites of organisations and networks (e.g. drylands-group /Frame)</li> <li>national overview books produced and/or initiated: Bangladesh, Nepal, Ethiopia, Mongolia, China (GEF OP12)</li> <li>WOCAT strategy 2008-2012 finalized, first draft of Annex 'activities'</li> <li>QT and QA basic revised and put in a final draft</li> <li>WOCAT-LADA QM produced and first tests undertaken</li> <li>template for 4-page summary revised and for 2-page summary developed</li> <li>global map: technologies and approaches compiled and presented in Google Earth</li> <li>global database: case studies from overview book added and/or updated</li> <li>case studies from new initiatives received and added to database (e.g. Nigeria, France, Syria, Kenya)</li> <li>on-line database (address) carried forward</li> <li>a new visual identity for WOCAT database, website and promotion products developed</li> <li>5 papers/chapters prepared for publication</li> </ul>
<p><b>2. Quality management</b>  <i>Good quality data made available and used for the production of national and regional outputs</i></p>	<ul style="list-style-type: none"> <li>further develop procedures to enhance data quality (through panels (national, regional, global) and WOCAT labelling)</li> <li>address knowledge gaps: linking to research e.g. NCCR N-S, EU programmes (SOWAP, COST), main focus on the impact of SWC</li> <li>support further collection of data-</li> </ul>	<ul style="list-style-type: none"> <li>develop <b>guidelines for reviewers</b> and conduct test training after a national workshop</li> <li>set-up a global panel to             <ul style="list-style-type: none"> <li>identify main global gaps on documented technologies/approaches</li> <li>develop guidelines for national review panels</li> <li>develop <b>WOCAT labels</b></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>WOCAT in research and education advanced by linking to research eg: COST (2 PhDs), NCCR (PhD and MSc) and EU-project DESIRE to address knowledge gaps</li> <li>support and backstopping of data collection, evaluation (e.g. Nigeria) and national review panels (Ethiopia)</li> </ul>



Objectives / Expected results	Activities	Major global activities planned for October 2006 – November 2007*	Review 2007: Achievements October. 2006 to November. 2007
	<ul style="list-style-type: none"> <li>sets (depending on requests and Steering Meetings)</li> <li>○ support the set-up of national / regional / global data reviewing panels.</li> </ul>	<ul style="list-style-type: none"> <li>advance WOCAT in research and education (DESIRE) ✓✓</li> <li>backstopping, training and data collection/reviewing depending on requests ✓✓</li> </ul>	
<b>3. Networking</b> <i>WOCAT Network enhanced and consolidated</i>	<ul style="list-style-type: none"> <li>○ add new partners and consortium members in regions where WOCAT is not yet well established.</li> <li>○ strengthen collaboration between partners and between soil management (fertility, productivity) and water management (conservation, excess water / flood management, disaster prevention)</li> <li>○ strengthen partner in the use of WOCAT</li> <li>○ conduct 3 International Workshops and Steering Meetings</li> <li>○ participate in International Conferences to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO; LADA)</li> <li>○ integrate WOCAT in environmental and development processes at the global (UNCCD, UNCBD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral aid projects)</li> <li>○ collaborate with other global networks e.g. conservation agriculture, rainwater alliance etc.</li> <li>○ continue and enhance the WOCAT e-mail list and</li> </ul>	<ul style="list-style-type: none"> <li>use WOCAT strategy document to address partners and potential collaborators including a solid funding strategy to address donors ✓</li> <li>support and coordinate TF meetings ✓✓✓</li> <li>strengthen link with LADA pilot countries (and approach FAO representative of Argentina to get into Latin America) ✓✓</li> <li>seek further collaboration with UNCCD national programmes (India, Central Asia, Indonesia, etc.) ???</li> <li>using other networks: collaboration with Conservation Agriculture (ACT) and Rainwater Harvesting (IRHA, SEARNET) networks</li> <li>explore potential of WOCAT activities being funded through GEF: preparatory medium term project (1 mio \$) ???</li> <li>elaborate further collaboration with and funding by DANIDA</li> <li>use WOCAT in EU-DESIRE project (IP Desertification) ✓✓✓</li> <li>expand within existing WOCAT countries / regions, new regions ✓✓</li> <li>conduct WWSM ✓✓✓</li> <li>e-mail and newsletter ✓✓</li> <li>WOCAT label and project support service (?)</li> </ul>	<ul style="list-style-type: none"> <li>strategy document used in funding proposal to SDC for the period of 2008-2011</li> <li>strategy taskforce meetings to finalize WOCAT strategy 2008-2012 and draft Annex 'activities' (1.2, 3.4, 10.5 and 24.5 2007)</li> <li>proposal of TF Impact Monitoring revised, promoted and forwarded to SDC for funding</li> <li>WOCAT method included in multilateral organisations' activities: FAO-LADA national and local level LD and conservation assessment, GEF-UN org. project: KM: Land Initiative – ensuring impacts from SLM</li> <li>WOCAT method included in bilateral projects: SDC Combating Degradation programme: National KM + DS to combat and cope with desertification in Mongolia</li> <li>workshops and conferences attended: International workshop on GEF Land Degradation Focal Area Indicators, 8-9 January 07 in Rome; First Expert Workshop for the KM: Land Initiative August, 27-30, Selfoss, Iceland; UNCCD COP8 meeting 3-14 September 07, Madrid, Spain; Workshop on spatially explicit modelling of land use change &amp; decision support for sustainable farming systems in the Loess Plateau 22-28 Oct, Xi'an, P.R. China</li> <li>WOCAT linked to research: COST, NCCR, DESIRE (kick-off meeting DESIRE project, 5-8 March 07 Crete; WB leaders' meeting Bern, 11-12 October), Institute of Geography, University of Berne (PhD and MSc)</li> <li>new WOCAT initiative in Togo, efforts to expand within existing and new WOCAT countries / regions ongoing</li> <li>WOCAT became 'partner' and contributed to the INFONET-BioVision farmer information platform</li> <li>WWSM12 conducted</li> <li>intense e-mail communication with a great number of WOCAT partners throughout the year</li> </ul>



Objectives / Expected results	Activities	Major global activities planned for October 2006 – November 2007*	Review 2007: Achievements October. 2006 to November. 2007
	<ul style="list-style-type: none"> <li>newsletter</li> <li>○ pursue the idea of a WOCAT label and project support service</li> </ul>		<ul style="list-style-type: none"> <li>• contacts among partners promoted</li> <li>• 2 WOCAT newsletter published (#13, December 06 and # 14, June 07)</li> </ul>
<b>4. Capacity building</b> <i>National and regional collaborators trained to run WOCAT programme in their countries and regions</i>	<ul style="list-style-type: none"> <li>○ conduct additional international "Training for National Trainers / Facilitators" workshops</li> <li>○ provide support and expertise for additional national and regional initiation and training workshops , upon request from national / regional institutions</li> <li>○ include and use WOCAT in training and education</li> </ul>	<ul style="list-style-type: none"> <li>• contribute to LADA training workshops (Argentina, and other pilot countries) ✓</li> <li>• conduct regional mapping training workshop (??? ICIMOD, India, China)</li> <li>• follow-up workshop to the IRHA workshop to adapt tools/ method to better fit the rainwater harvesting needs</li> <li>• WOCAT in education: Master / PhD studies, lectures and field courses ✓✓</li> <li>• training modules???</li> </ul>	<ul style="list-style-type: none"> <li>• contributed and offered expertise to FAO - LADA project on national and local level LD and conservation assessment. WOCAT was given lead for the national level assessment (tool development and capacity building)</li> <li>• training Workshop on implementation of new mapping methodology with participants from South Africa, FAO-LADA, ISRIC and CDE, 15-18 Oct. 07, Pretoria, South Africa; Somalia</li> <li>• training for trainers on LADA national assessment of LD tools in Tunisia (Nov 07)</li> <li>• contributed and offered expertise to GEF-UN org. project: KM: Land Initiative – ensuring Impacts from SLM (LADA – Expert Consultation in Preparation of the Local Assessment Training Programme and Tool-Kit, 4-8 June 07, Norwich UK)</li> <li>• WOCAT in research: DESIRE training workshops including WOCAT tools: training workshop DESIRE, 17-23 June 07 Rabat Morocco; DESIRE WB3 training workshop, 1-5 Oct. 07, Murcia, Spain</li> <li>• PhD and MSc studies using and further developing WOCAT tools (e.g. Bettina Wolfgramm)</li> <li>• WOCAT in education: lectures and field training (in relation to COST-project), University of Berne</li> <li>• included WOCAT in BSc curriculum</li> <li>• backstopping upon request</li> </ul>
<b>5. Tool development</b> <i>Additional Tools for exchange of knowledge and decision support developed</i>	<ul style="list-style-type: none"> <li>○ improve Internet access to data and tools</li> <li>○ improve database management system to enhance decision support, exchange between users and providers on knowledge</li> <li>○ produce support materials, such as standards for national "overview books", guidelines for the use of WOCAT data in the development</li> </ul>	<ul style="list-style-type: none"> <li>• <b>questionnaire revision</b> (professional, basic) also to include global issues (e.g. biodiversity, water esp. green water etc.) and address MDGs ✓✓</li> <li>• develop <b>on-line</b> QT and QA ✓</li> <li>• further develop <b>QM and World Map</b> ✓✓✓</li> <li>• update <b>website</b> ✓✓</li> <li>• develop and improve <b>Decision Support Tool</b> (evaluation /</li> </ul>	<ul style="list-style-type: none"> <li>• revision of QT basic to also include global issues as well as ecosystem services and address MDG's (March 1, 22,23,27; May 10, 15 and August 23, 2007). TF consulted</li> <li>• revision of QA basic also to emphasize gender and poverty alleviation issues (May 2,8,21 and Sept. 6 2007). TF consulted</li> <li>• first steps to develop modules on specific topics such as watershed management, human well being and livelihoods (March 1, Nov 5. 2007)</li> </ul>

Objectives / Expected results	Activities	Major global activities planned for October 2006 – November 2007*	Review 2007: Achievements October. 2006 to November. 2007
	and implementation activities	<p>assessment) ✓</p> <ul style="list-style-type: none"> <li>improve feedback mechanism in database, offer internet platform for documentation, quality assurance process and exchange of experience</li> <li>develop tool to support translation of database???</li> <li>training manuals and teaching material ???</li> <li>develop guidelines for reviewers ???</li> </ul>	<ul style="list-style-type: none"> <li>template for 2 page summary developed and WOCAT Light questionnaire in process</li> <li>QM revised and adapted to LADA requirements for the national LD assessment project. Map taskforce meetings: LADA National Assessment Mapping Methodology, 14-16 March 07 in Rome; meeting with TF participants from South Africa, FAO(-LADA), ISRIC(-DESIRE) and CDE, 5-9 July 07, Bern. Phone conferences and e-mail contact</li> <li>WOCAT global map in Google Earth developed</li> <li>decision support tool further developed</li> <li>improvement of on-line database management system and digital products ongoing</li> <li>mapping: offline and online map viewer further improved</li> <li>website updated</li> </ul>

\* **bold** → top priority; grey shaded items were planned but not fulfilled in 2007

Objectives / Expected results and Activities as stated in the funding proposal of the programme contribution from SDC 2005 to 2007 and in the WWSM11 proceedings.

## 1.1.2 WOCAT Secretariat (administrative and logistic)

### Main activities:

- Handling of sale and distribution of overview book
- Reactions to e-mails and requests for brochures, CD-ROMs (CD-ROM v.3, 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, Godert van Lynden, Rima Mekdaschi Studer, Gudrun Schwilch, Christine Hauert and Hanspeter Liniger. Sharing of information amongst the different WOCATeers does not necessarily involve the secretariat. There is still a need to decrease the support from the secretariat and to increase involvement of the regional and national institutions.

## 1.1.3 Funding

### a) SDC

- The annual budget is about USD 395'000 (CHF 432'000) for the current phase 2005-2007;

### b) FAO-LADA

- USD 47'500 (plus USD 10'000 for printing of overview book → total about CHF 75'000) for national and local assessment of land degradation (LD).

### c) GEF-Knowledge Management-KM

- USD 9'000 for global and local LD indicators and the development of a learning network.

### c) SDC Project for Coping with Desertification in Mongolia 2007–2013.

- USD 13'000 for entry phase of component 4: strengthening the development and application of proper technologies (April 2007 to April 2008); about USD 280'000 (CHF 300'000) for the whole phase of component 4.

### d) Other donors

- EU-DESIRE project: about USD 400'000 (EUR 300'000) for 5 years (2007-2012)
- EU-COST Switzerland research project: about USD 256'000 (CHF 295'000) for 3 years (1.4.05 – 31.3.08) for 2 PhD and several master studies approved and an additional USD 115'000 (CHF 90'000) for supervision.
- Sino - Swiss: about USD 7'000
- UNCCD COP8 (by SDC): about USD 5'300

### e) Sales of 'where the land is greener'

- about USD 40'000

### Plans and achievements with respect to funding

- Analyse monitoring sheets for next WWSM to show impacts and importance ✓✓✓
- Promotion WOCAT through LADA pilot countries ✓✓
- Proposal to GEF => **contract in 2008?**
- (Re-)establish contacts with relevant major organisations ✓✓
- A new funding proposal to SDC for 2008-2011 ✓✓✓
- **2008: need to get other major donors (apart from SDC) committed (joint effort FAO, ISRIC and CDE)**

## Budget / Expenditures global WOCAT (CDE)

WOCAT Phase 5 1.1.05 - 31.12.07												
Overview over funds from SDC and other donors												
Description	Budget	previous	Expend.	previous	Expend.	previous	Expend.	previous	Expend.	previous	Expend.	Expend.
	1.1.05-31.12.07	Expend.	1.1.07-31.10.07	Expend.	1.1.07-31.10.07	Expend.	1.1.07-31.10.07	Expend.	1.1.07-31.10.07	Expend.	1.1.07-31.10.07	1.1.05-30.9.07
	Overall	SDC	SDC	BAMBA	BAMBA	SOWAP	SOWAP	Syng.Found.	Syng.Found.	LABA	LABA	Overall
<b>Personnel</b>	2'770'000.00	603'448.50	269'118.10	60'153.50	0.00	38'410.50	0.00	45'028.75		0.00	32'441.25	1'048'600.60
Personnel CDE	1'050'000.00		269'118.10									
Non-CDE Personnel	520'000.00		0.00									
Data collection	600'000.00		0.00									
<b>Travel</b>	90'000.00	36'715.77	11'185.35	2'699.00	0.00	1'658.05	0.00	0.00		0.00	4'710.40	56'968.57
Travel expenses	90'000.00		11'185.35								4'710.40	
<b>Materials</b>	264'000.00	73'905.45	12'007.85	0.00	0.00	0.00	0.00	54'971.25		0.00		140'784.55
Computers, peripheral, software	58'000.00		7'580.95									
Production of books	100'000.00		0.00									
Production of CD-Rom	45'000.00		0.00									
Printing reports / posters	50'000.00		2'773.40									
Postage etc	11'000.00		1'653.50									
<b>Mandates</b>	1'046'000.00	201'799.99	-35'762.79	15'885.10	0.00	0.00	0.00	0.00		0.00		181'922.30
International Workshops, Steering Meetings	136'000.00		-6'516.15									
Training National Trainers Workshop	80'000.00		0.00									
Quality Control	120'000.00		8'252.96									
Mandate for support (ISRIC)	115'000.00		4'443.60									
Seedmoney, support national initiatives	45'000.00		0.00									
Other mandates not CDE	100'000.00		0.00									
National Workshops	450'000.00		0.00									
Distribution Books			-41'943.20									
<b>Total 1-4</b>	3'570'000.00	915'869.71	256'548.51	78'737.60	0.00	40'068.55	0.00	100'000.00	0.00	0.00	37'151.65	1'428'376.02
Monitoring 8%	96'000.00	34'972.55	1'479.50									
<b>GRAND TOTAL</b>	3'666'000.00	950'842.26	258'028.01	78'737.60	0.00	40'068.55	0.00	100'000.00	0.00	0.00	37'151.65	1'464'828.07

WOCAT Phase 5 1.1.05 - 31.12.07					
Overview over SDC funds: Budget and expenditures					
Description	Budget 07	previous	Expenditures	Total	Overall
	1.1.07-31.12.07	Expenditures	1.1.07-31.10.07	1.1.05-31.10.07	2007
	SDC	SDC	SDC	SDC	SDC
<b>Personnel</b>	290'000.00	603'448.50	269'118.10	872'566.60	20'881.90
Personnel CDE	290'000.00		269'118.10		
Non-CDE Personnel					
Data collection					
<b>Travel</b>	10'000.00	36'715.77	11'185.35	47'901.12	-1'185.35
Travel expenses	10'000.00		11'185.35		
<b>Materials</b>	38'000.00	73'905.45	12'007.85	85'913.30	25'992.15
Computers, peripheral, software	6'000.00		7'580.95		
Production of books	20'000.00				
Production of CD-Rom	5'000.00				
Printing reports / posters	5'000.00		2'773.40		
Postage etc	2'000.00		1'653.50		
<b>Mandates</b>	62'000.00	201'799.99	-35'762.79	166'037.20	97'762.79
International Workshops, Steering Meetings	22'000.00		-6'516.15		
Training National Trainers Workshop	10'000.00				
Quality Control	20'000.00		8'252.96		
Mandate for support (ISRIC)	5'000.00		4'443.60		
Seedmoney, support national initiatives	5'000.00				
Other mandates not CDE					
National Workshops					
Distribution Books			-41'943.20		
<b>Total 1-4</b>	400'000.00	915'869.71	256'548.51	1'172'418.22	143'451.49
Monitoring 8%	32'000.00	34'972.55	1'479.50	36'452.05	
<b>GRAND TOTAL</b>	432'000.00	950'842.26	258'028.01	1'208'870.27	173'971.99

## Financial contributions 2007

## Financial Contributions to WOCAT between 09/05 and 11/07 (in USD)

	09/05-10/06			09/92-09/06	10/06-11/07			09/92-11/07
	Cash	In-kind	Total	Total	Cash	In-kind	Total	Total
Bangladesh (CHTDB)	4'000	100	4'100	14'800	200	50	250	15'050
CDE			0	70'000	1'800	0	1'800	71'800
Central Asia CAMP				60'640			0	60'640
China (ADB/ GEF-national level)	32'000		32'000	89'100			0	89'100
China (FJSWCO, ADB/ FSWCC)				69'000			0	69'000
China (SWCMC)	21'200	8'000	29'200	46'200	250'000	100'000	350'000	396'200
CIS – Vrije Universiteit		25'000	25'000	125'000	1'350	0	1'350	126'350
CTA	26'500		26'500	26'500			0	26'500
DANIDA			0	355'700			0	355'700
DED (Niger)			0	6'000			0	6'000
Ethiopia (ESAPP)	8'000	0	8'000	47'735	12'000	0	12'000	59'735
Ethiopia (MoA, WFP)	0	4'500	4'500	48'100	0	2'800	2'800	50'900
FAO (LADA, Asia and the Pacific)	10'000		10'000	969'240	80'300	25'100	105'400	1'074'640
GTZ (OSS)			0	243'000			0	243'000
IBSRAM			0	5'500			0	5'500
ICARDA				35'000				35'000
ICIMOD	2'000	9'000	11'000	55'500		15'000	15'000	70'500
ICRISAT (Niger)			0	31'000			0	31'000
IDRC			0	85'000			0	85'000
India (ORISSA)	31'000	20'000	51'000	51'000	26'925	0	26'925	77'925
India (WDCU)				75'000			0	75'000
Indonesia (ASOCON)	36'028	6'000	42'028	104'028			0	104'028
Indonesia (GOV.)	36'028	6'000	42'028	63'028				63'028
INSAH (CILSS)			0	10'000			0	10'000
ISRIC	0	10'000	10'000	265'000		35'000	35'000	300'000
Kazakhstan				25'150				25'150
Kenya (MoA-SWC)				20'500			0	20'500
Kyrgyz Rep (Camp Alatau, UNCCD-GTZ / OECD)	32'000		32'000	51'700	45'000	5'000	50'000	101'700
Mongolia ( SDC)					19'000		19'000	19'000
Morocco (MADRPM, DESIRE)	9'000	14'000	23'000	46'000	1'500		1'500	47'500
Nicaragua (PASOLAC/ GTZ/ LA)			0	74'000			0	74'000
Nigeria (Uyo University)					500	2'000	2'500	2'500
OSWU			0	4'000			0	4'000
Pakistan (IC)	5'000	1'500	6'500	6'500				6'500
Philippines (BSWM/ UPLB/ PHIL CAT)	1'750	2'000	3'750	63'250	13'000	5'800	18'800	82'050
RSCU/ RELMA				186'500			0	186'500
SADC		6'000	6'000	6'000			0	6'000
SDC	359'450		359'450	2'888'500	359'450		359'450	3'247'950
SDC (CA, IRHA, COP8)	63'600		63'600	63'600	5'400		5'400	69'000
Serbia (Belgrade University)	6'000	4'000	10'000	22'000	15'000	5'000	20'000	42'000
South Africa (DoA, NDA/ ARC-ISCW)	55'446		55'446	357'246	13'000	14'000	27'000	384'246
SOWAP (Syn.)	27'700		27'700	89'700			0	89'700
Syngenta Foundation	40'000		40'000	131'500			0	131'500
Tajikistan	12'000		12'000	21'500	300	1'700	2'000	23'500
Tanzania (MAFS-SCLUPU)			0	7'890			0	7'890
Thailand (LDD)			0	51'500			0	51'500
Togo (University of Lomé)					4'550	1'817	6'367	6'367
UNEP			0	100'000			0	100'000
WASWC				15'500				15'500
<b>Total</b>	<b>818'702</b>	<b>116'100</b>	<b>934'802</b>	<b>7'183'607</b>	<b>849'275</b>	<b>213'267</b>	<b>1'062'542</b>	<b>8'246'149</b>

### 1.1.4 Publicity

- WOCAT on the Internet ([www.wocat.net](http://www.wocat.net)): see statistics below;
- WOCAT newsletter (2x) and contributions to WASWC newsletters;
- WWSM11 proceedings 2006
- Presentations at meetings and workshops:
  - GEF International workshop on land degradation: Focal area indicators development, 8-9 January, Rome, Italy
  - Kick-off meeting DESIRE project, 5-8 March, Heraklion, Crete
  - LADA development of national assessment mapping methodology, 14-16 March, Rome, Italy
  - LADA local level assessment workshop, 4-8 June, Norwich, England
  - First Expert Workshop for the KM: Land Initiative - Evaluation of available land degradation indicators and development of a learning network, 27-30 August, Selfoss, Iceland
  - UNCCD COP meeting, 3-12 September, Madrid, Spain
  - Workshop on spatially explicit modelling of land use change & decision support for sustainable farming systems in the Loess Plateau, 22-28 October, Xi'an, China
- Posters:
  - 8<sup>th</sup> Session of the Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD). Poster 1: 'Where the Land is Greener – WOCAT Case Studies Demonstrating Achievements in Combating Desertification - Rewarding Investments in Documenting and Evaluating SWC Knowledge'. Poster 2: 'WOCAT World Overview of Conservation Approaches and Technologies - Use of Knowledge'. 3-14 September 2007, Madrid, Spain
- Papers presenting WOCAT:
  - odi – Natural Resource Perspectives, where the land is greener – experiences contributing to sustainable land management, Gudrun Schwilch, Daniel Danano, Sudibya Kanti Khisa, William Critchley, Hanspeter Liniger
- Book/Publication chapters presenting aspects of using WOCAT:
  - No-Till Farming Systems Book (Special Publication III of the World Association of Soil and Water Conservation, in publication):
    - 'where the land is greener' - documenting and evaluating no-till knowledge and experiences. H.P. Liniger, W. Critchley, M. Gurtner, G. Schwilch., R. Mekdaschi Studer and Ch. Hauert
    - Impacts of Conservation Tillage on Soil Water and Crop production – A case study in the Northwest foot-slopes of Mount Kenya. J.L. Gitonga, J.N. Ngeru, H.P. Liniger
    - Assessing soil properties in no-till and traditional tillage systems in Switzerland. Ch. Hauert and H.P. Liniger
  - IWMI publication (forthcoming):
    - Safeguarding water resources by making the land greener: knowledge management through WOCAT'. Hanspeter Liniger and William Critchley
  - WOCAT 2007: 'where the land is greener'. Case studies and analysis of soil and water conservation initiatives worldwide. Editors: H.P. Liniger and W.R.S. Critchley, CTA, Wageningen.

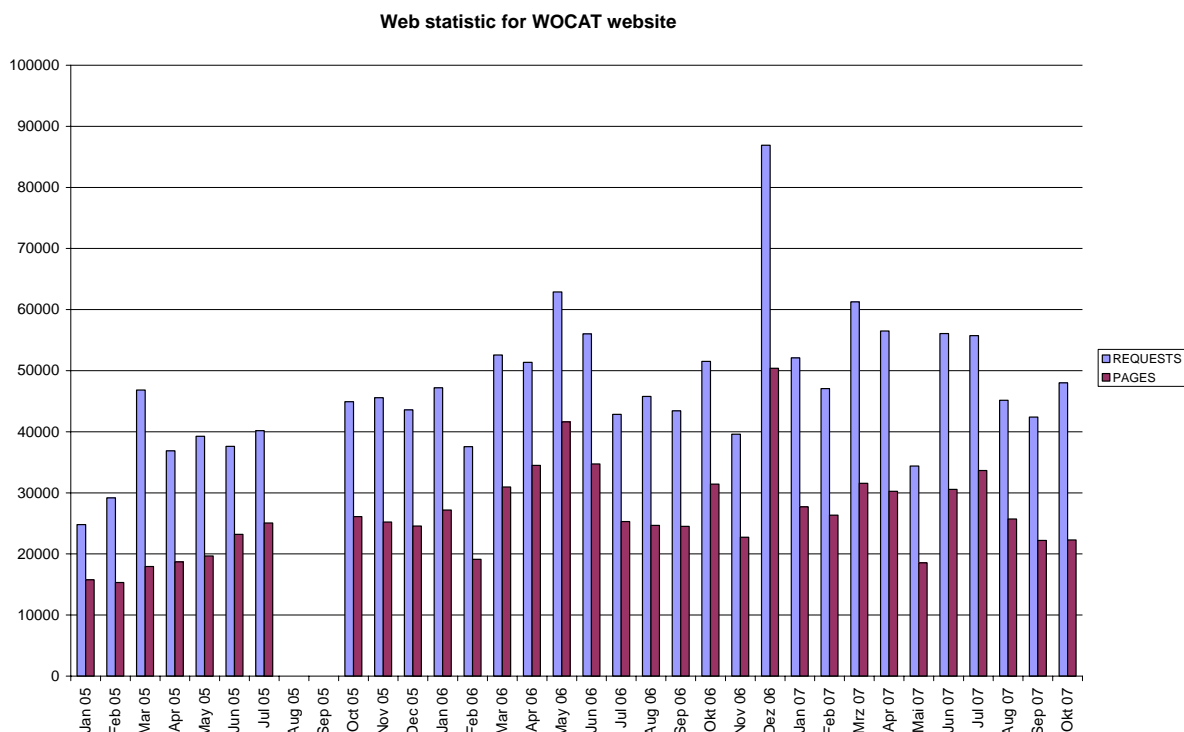
### 1.1.5 WOCAT website statistics

*Compiled by Gudrun Schwilch*

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

#### **Website statistics Nov. 06 to Oct 07 (12 months):**

- Total requests: 623,664 (1,713 / day). 2006: 573,784 (1,572 / 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: 341,204 (937 / day). 2006: 338,603 (927 / day);
- Distinct hosts: 21,488 (number of different computers). 2006: 20,620;
- Number of hits in December 2006 was exceptionally high, possibly due to the 'where the land is greener' book pre-launch at the LADA meeting in Rome (Nov. 06).



#### Most requested pages

- *English:*
  - Home (default.asp) with 135,767 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.
  - The overview book page is the second most requested, with 2,947 hits.
  - Database (databs.asp): 2,502
  - World map (worldmp.asp) has 2,141 hits
  - Introduction to WOCAT (about1.asp): 2,120
  - Latest Newsletter (newslet.asp): 1,919
- *French:*
  - Accueil / Home (default\_F.asp): 1,271
  - Carte mondiale / World map (worldmap\_F.asp): 1,203
  - Bases de données / database (databs\_F.asp): 1,031
- *Spanish:*
  - Inicio / Home (default\_S.asp): 1,231
  - Mapa global / World map (worldmap\_S.asp): 1,081
  - Proceso WOCAT / WOCAT process (about2\_S.asp): 1,077
  - Bases de datos/ database (databs\_S.asp): 1,034

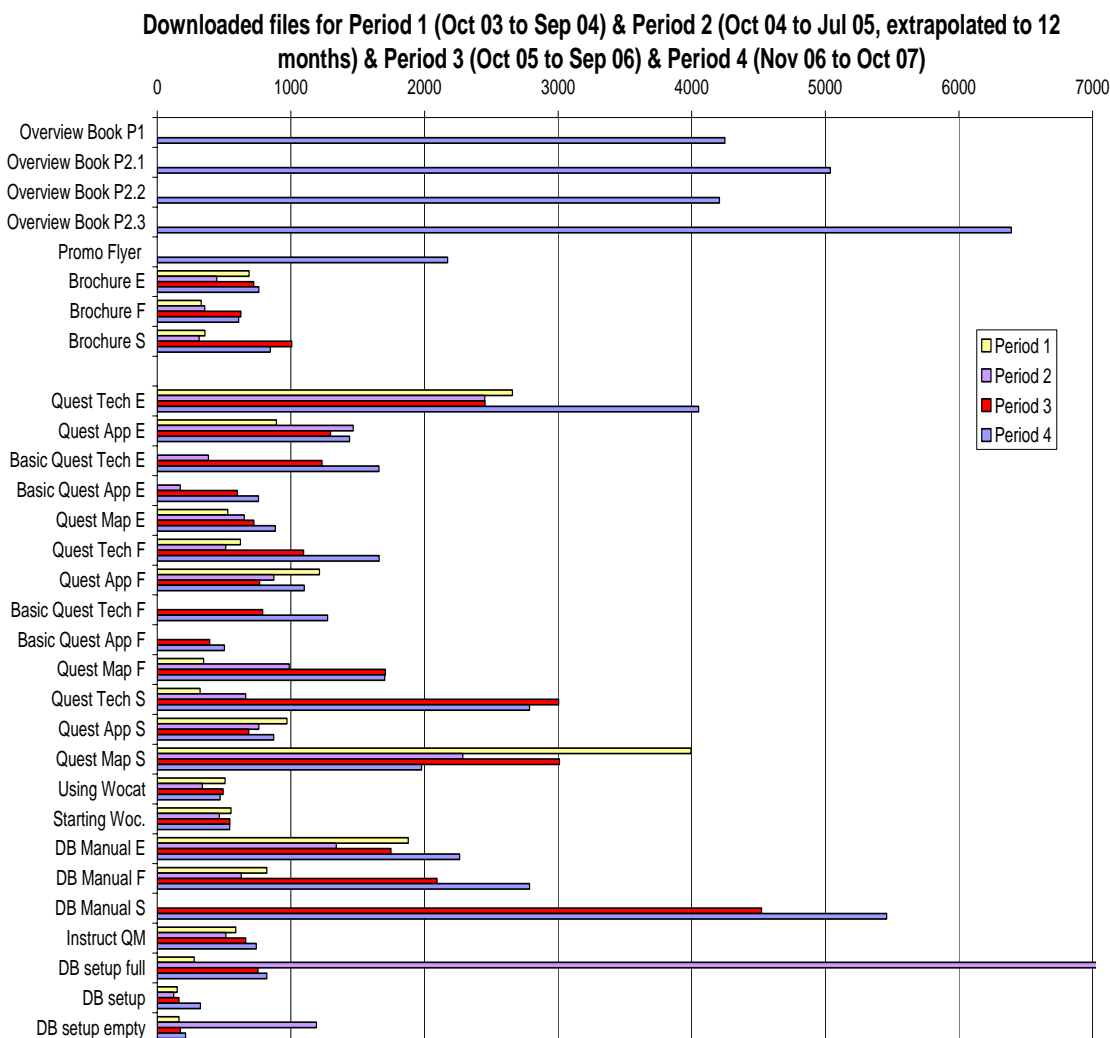
#### The most frequently downloaded files:

- The report from the WWSM 06 in Cape Town (wwsmcapetown06.pdf), with 6,761 requests.
- On the second place (6,391 requests) is part 2.3 of the book 'where the land is greener', followed by the other parts (all above 4200 downloads). We only provide a low resolution pdf, and with suppressed printing and text copying mechanism.
- WWSM Serbia 05 proceedings is with 4,986 downloads still very popular
- Technology questionnaire English has increased from 2,454 downloads to 4,051, but surprisingly not the basic version! Basic QT English: 1,659
- South Africa Info Book: 2,883 (2006: 1,924)
- Spanish technology questionnaire (professional): 2,787 (2006: 3,004)



These statistics need 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](http://www.analog.cx/docs/webworks.html).



## 1.1.6 FAO / LADA

*Report by Wolfgang Prante*

### Activities related to WOCAT

- Revision of QM
  - Commissioning of a Letter of Agreement followed by expansion and fundamental revision of the QM methodology in order to accommodate the specific requirements of the LADA project.
  - Discussion and coordination of proposed changes with stakeholders/institutions involved
  - Participation of 2 FAO staff and LADA national staff in a preparatory workshop in Berne and a questionnaire testing workshop in South Africa.
- WOCAT (and LADA for QM) online databases
  - Conceptualization of the WOCAT online databases suite (QT, QA, QM, Address and Authentication, Image databases)



- Preparation of programming specification
- Identification and contracting of consultants/programmers
- Backstopping of the programming and testing of the online WOCAT Address and Authentication database
- Backstopping of the programming and testing of the online QM database
- An extra financial contribution of 20 000 USD for the programming of the online databases through a Letter of Agreement with CDE Bern
- Contribution to a raster viewer for QM using open source software.
- Streamlining WOCAT approaches with local land degradation assessment techniques applied in LADA
- Participation of two FAO representatives in WOCAT Steering Committee in the Philippines (10 000 US\$ in kind contribution)

### 1.1.7 ISRIC

*Report by Godert van Lynden (ISRIC activities 2006-2007.ppt)*

Activities 2006-2007

- Assist in general coordination of the network
  - 2 WOCAT Newsletters
  - Maintenance of WOCAT-L (mailing list)
  - Regular feedback on Email requests
  - Participate in tools development
  - Coordinate entering of Ts and As in Google Earth
  - Contribute to QM revision
- Participate in meetings and workshops
  - QM Meeting Bern (July)
  - UNCCD COP meeting Madrid (September)
  - QM meeting Pretoria (October)
- Co-organising WWSM12
- WOCAT within other projects:
  - DESIRE
    - WOCAT mapping major component in DESIRE WB1
    - 2 DESIRE WB leaders meetings (Feb., Oct.)
    - 1st DESIRE plenary meeting, Crete (March)
  - Green Water Credits
    - Select and compare relevant case studies from database for Upper Tana Basin (Kenya)
  - GLADA

## 1.2 Progress reports of taskforces

### 1.2.1 Mapping – QM & World map

*Task Force members: Dirk Pretorius, Godert van Lynden, Carin Pretorius, Hein Lindemann, Wolfgang Prante, Gudrun Schwilch, Nada Dragovic, Irfanullah Khan*

*Report by Dirk Pretorius (PROGRESS REPORT - MAP07.ppt)*

**Work plan – 2007**

Activity	Responsible person	Timing	Costs
WOCAT strategic mapping work session <b>task completed</b>	all relevant people	as soon as possible	10,000 Euro
<b>World map</b> on Google Earth: continue to include QA and QT data <b>task completed</b>	Godert van Lynden	February 2007	900 Euro

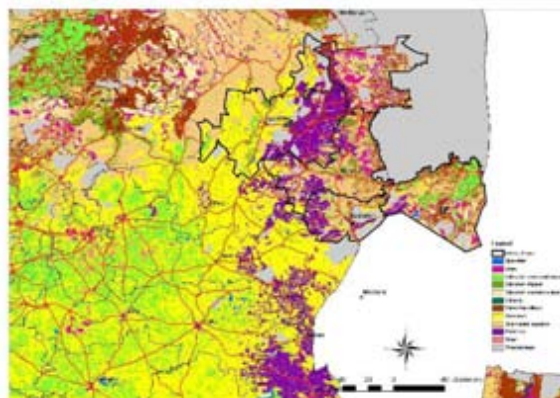
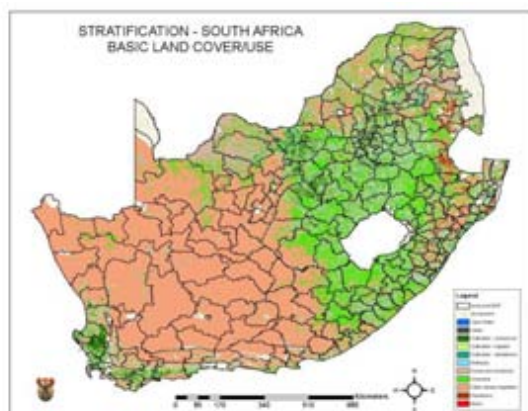
<b>World map</b> on ArcIMS: create link from <a href="http://www.wocat.net">www.wocat.net</a> and redo look more like WOCAT, but keep on AGIS server <b>task completed</b>	Carin Pretorius	January 2007	500 Euro
Review <b>QM</b> (vegetation and other issues, modular system?) <b>task completed</b>	WOCAT taskforce	2006/2007	5,000 Euro
Develop on-line <b>QM</b> : prototype for data management and viewer <b>task completed</b>	Carin Pretorius, Wolfgang Prante	Mid November 2006	2,000 Euro
Integrate Data captured in the old <b>QM</b> system into new viewer (new CD-ROMs in FAO series?) <b>task completed</b>	Gudrun Schwilch, Carin Pretorius, Rinda van der Merwe		-
Link <b>QM</b> rationale with LADA objectives <b>task completed</b>	Dirk Pretorius, Godert van Lynden, Wolfgang Prante	Nov 2006 – continue	??

### A new approach – why again?

- Align with LADA (CCD) objectives.
- Include raster base maps
- New technology available

### Base map now including Land Use Systems (LUS)

In the LADA framework a Land Use System (LUS) map is developed for each country. This will serve as base map, overlaid by district boundaries. Previously, the base map was any polygon map and Land Use Types (LUT) were then assessed for these polygons.



### New Technology

ARCIMS – not suitable for raster data

- evaluated various systems
- ARCGIS server best option
- data management system – FAO (open source)
- map viewing – DOA/ARC (AGS)

### 1.2.2 TF WOCAT Strategy

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

*Report by Gudrun Schwilch (progress report TF Strategy.ppt)*

#### Activities 2007:

- November / December 06: feedback and comments received to draft version presented during the last WWSM in Cape Town
- April 06: improved version ready, development of graphs and layout

- June 07: distribution of final 'WOCAT strategy 2008 - 2012' by Email to all participating institutions (together with the invitation for WWSM 12). Provision of version on WOCAT website: <http://www.wocat.org/MATERIALS/strategy.pdf>

#### Next steps:

Development of strategy annex on 'activities': discussions regarding global and national / regional level during topic 3 of this WWSM.

### 1.2.3 TF Decision Support Tool

*Taskforce members: Hanspeter Liniger, Lydia Bosoga, Raghu Prasad, Syaiful Anwar, Xin Shen, Charlton Phiri, Romy Labios*

*Report by Gudrun Schwilch (progress report TF DSS.ppt)*

#### Activities 2007:

- No activities by the taskforce team
- But: the development of a decision support tool for the selection and assessment of SLM implementation options is part of the EU-project DESIRE
- First ideas and tools available: tested and discussed during this WWSM (Topic 8)

### 1.2.4 TF Q Revision

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

*Report by Rima Mekdaschi Studer (progress report TF Q Rev07.ppt)*

#### Preparation:

Feedback from WOCAT Q-users (collected over the last two years) and from group work at WWSM11.

Consolidated all feedback, inputs, comments, proposed changes in one document (QT and QA professional: hard copy as well as electronically) (Jan 2007)

#### Realisation:

- Meeting March 1 in Berne (Mats Gurtner, Hanspeter Liniger, Gudrun Schwilch, Rima Mekdaschi Studer) to discuss: general issues of the Q revision and the modular system, how and where to include ecosystem services and how and which modules to develop.  
Decisions taken:
  - modular system: Q Basic with modules linked to it
  - only Basic version will be revised
  - ecosystem services to be addressed under impacts: benefits and disadvantages (3.1)
  - Q Basic is based on the layout of the 4-page summary and kept in MS Word
  - the remaining elements of Q professional will be used to develop a soil module
  - a module for a watershed technology system has priority and will be developed in Bern (keeping other possible modules in mind)
  - other modules should be developed for global issues that need more in-depth documentation, evaluation and analysis; entry points and possibilities to be linked are already available in the Q Basic
  - QT -, QA - Basic and QM should be compatible and linked
- QT Basic Revision meetings (Mats Gurtner, Hanspeter Liniger, Gudrun Schwilch, Rima Mekdaschi Studer) in Berne (6 days) to address assembled feedback, link to global issues and include ecosystem services
  - March 22, 23 and 27: went through the questionnaire question by question. Some issues were resolved directly, some issues were intensely discussed, some issues needed to be set back to allow further investigations (by internet / contacting specialists). Tasks were distributed. Discussions on QM within LADA and TF mapping meetings contributed to clarify aspects of global issues, ecosystem services, causes of degradation etc
  - May 10 and 15: went again through the questionnaire question by question and resolved most remaining concerns.
  - August 23: Some reconsideration of impacts on ecosystem services and on driving forces (causes) of degradation was done to match WOCAT-LADA QM.

- QT Basic draft finalised and layout issues corrected.
- QA Basic Revision meetings (Mats Gurtner, Hanspeter Liniger, Gudrun Schwilch, Rima Mekdaschi Studer) in Berne (4 days) to address assembled feedback, emphasize poverty alleviation, gender issues and social equity
  - May 2 and 8: went through the questionnaire question by question. Some issues were resolved directly, some issues were intensely discussed, some issues needed to be set back to allow further investigations (by internet / contacting specialists). Tasks were distributed.
  - May 21: went again through the questionnaire question by question and resolved most remaining concerns / open questions.
  - September 6: QA Basic draft finalized and layout issues corrected.
- Template for 4-page summary revised and adapted to QT and QA Basic (October 2007)
- Template for 2 page summary developed (October 2007) and WOCAT Light questionnaire in process
- Meeting Technology System Module (November 5)

#### **Consolidation:**

QT Basic draft was sent to TF members for comments and feedback (end of August)

QA Basic draft was sent to TF members for comments and feedback (mid September)

Feedback from some task force members received and processed

#### **Finalisation:**

of QT and QA Basic after WWSM12 and possible consultation with specialists

### 1.2.5 TF WOCAT in research and education

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

*Report by Miodrag Zlatic (TF WOCAT in research & education 07.ppt)*

#### **Survey on Use of WOCAT in Research & Education:**

It is necessary to continue with WOCAT in R+E, also in the face of the Bologna declaration. Very low feedback from people using WOCAT-tools in R+E. The number of respondents by country of origin was: Europe: 8, Asia: 7, Africa: 8, Middle East: 4. The survey asked for information on:

General Information:

- Respondent's profile
- Geographical distribution
- Educational level
- Official designation
- Years of involvement/have known WOCAT

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

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.

The Faculty of Forestry at the Belgrade University in Serbia has started to include SLM and modules on WOCAT in the curriculum of the studies on ecological engineering for the protection of natural resources. For a detailed listing of courses offered refer to file *nastavni plan na eng.doc* on the CD-Rom.

#### **Institutionalisation 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, keep patience and commitment

### **1.2.6 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*

*Report by Aida Gareeva (IMTF.ppt)*

#### **Project proposal “Participatory impact monitoring tool”:**

The overall goal is to develop, test and approve a ‘Participatory impact monitoring and assessment tool’.

The interim goal is collection of information and experience and development project proposal.

Steps needed for realization:

1. Establishment/consolidation of the impact monitoring task force (TF) team – *task completed;*
2. Exchange of experience and information – *ongoing;*
3. Establishment of local / national teams in the frame of the ongoing projects;
4. Screening questionnaires on technologies (QT) and approaches (QA) (WOCAT) and testing indicators with farmers in view of their accessibility (feasible, useful and practical) for farmers. Making list of indicators acceptable to farmers;
5. Formulation of the expectations from the Impact Monitoring (IM) Tool and development of the first project idea for project formulation – *funding for the preparation and finalization of project proposal accepted by SDC;*
6. Involvement of CDE because of experience in IM tool development – *ongoing;*
7. Organization of meeting of IM-TF team in March 2008 for the discussion, exchange of experience and project formulation;
8. Fundraising.

#### **Context and justification of the action**

Implementation and dissemination of soil and water conservation (SWC) activities (including WOCAT documented technologies) require the monitoring and assessment procedure for:

- Better understanding of how farmers’ activities have an impact on their life and environment, that leads to better dissemination of SWC activities.
- Better link between farmers, scientific and implementing institutions
- Documentation and evaluating feedback from the experiences made in the field for the better adaptation of soil and water conservation technologies and implementation to the different conditions.

For these goals there is a strong need to develop an instrument/tool for participatory impact monitoring and assessment at the farmers’ level. This tool should include monitoring indicators acceptable to farmers; mechanism to involve farmers and local administrations; mechanism for the development of recommendations, etc.

## 1.3 Activities at the national / regional level

### 1.3.1 Bangladesh

*Report by Khisa Sudibya Kanti, CHTDB (BANCAT-WWSM12-ProgressReport.ppt)*

#### **BANCAT Work Group Meeting:**

- Expected Output: BANCAT achievements up to October 2007 reviewed and workplan for 2008 prepared.
- Achievements: One to one and telephonic discussions with WG members were held several times. Workplan prepared and progress reviewed.

#### **Documentation of Conservation Approaches and Technologies (CATs)**

- Expected Output: One QT & QA documented.
- Achievements: Evaluation and documentation on Lac (*Kerria lacca K*) cultivation to combat 'monga' (famine), 3 QT and 1 QA updated

#### **Popularization of WOCAT tools in the Universities**

- Expected output: WOCAT tools are popularized
- Achievements: WOCAT tools were presented among different levels of stakeholder:
  - 25 students and teaching staff of Soil Science Department of Chittagong University and
  - 70 students / teaching staff of Soil, Water and Environment Department (SWED) of Dhaka University.

#### **Participation in trainings and seminars**

- Expected output: Three seminars / workshops organized and attended
- Achievements: Seminars and workshops attended
  - Land degradation organized by IECA-Bangladesh Chapter at BARC
  - Arsenic Mitigation at SRDI
  - Soil and Land Resource Database at SWED

#### **Persons/Institutions contacted:**

- Scientists/professionals (national): 98 (many),
- Institutions including NGOs (national): 25 (many),
- Decision-makers (national): 25 (many)

#### **Output production:**

- Case study on Lac cultivation to combat 'monga' in northern districts of Bangladesh
- Land degradation scenario of Bangladesh
- Proceedings-IECA workshop
- SOLARIS
- Maps on CHT natural resources (Scale 1:1m)
- BANCAT website launched
- Memorandum of understandings with BISAP

#### **Use of WOCAT:**

- Users that have shown interests in WOCAT: 95 copies of BANCAT book distributed, 15 WOCAT CD-ROM distributed
- Requests made for WOCAT data and products (CD-ROM, books): 50 BANCAT books
- No. of trained participants: WOCAT tools presented to 95 participants

### 1.3.2 China – SWCMC of MWR

*Report by Chang Dandong Wei (12th WOCAT(EN) China.ppt)*

#### **Training & Questionnaire**

- A training course on Model & Method to SWC benefit evaluation was held in Beijing from Jan. 29 to Feb. 2, 2007. 75 people from different levels attended the training program. The training material (CN/EN) was published. The questionnaires of WOCAT were answered.
- A farmer's field school training course was held in Xincheng City of Guangxi province from Jan. 22 to 28, 2007. The content mainly includes: "FFS concept and basic approach", "Key techniques of FFS and farmers group", "Karst environment rehabilitation project and procedures of community planning operated by farmers", etc.
- A farmer's field school and commonality environment education training course was held in Huangyuan county of Qinghai province from Aug. 16 to 22, 2007. Discussed the problems and exchanged the experiences concerned. Taught methods and operating techniques on the spot.

#### **Seabuckthorn Planting and Eco-rehabilitation**

- 0.03km<sup>2</sup> Seabuckthorn were planted in the last term
- Distribution map of Seabuckthorn was drawn
- Five times field training on planting technique were organized

#### **Database system on-line**

- State Spatio-Temporal Database Engine for SWC. The main function includes SWC data compilation on line, search, display, vector index, map drawing, etc.
- State Information System Net Centre Database for SWC. Includes statistic and submitting system of SWC work development.

#### **Mapping**

Many mapping methods and techniques are developed and applied. Region Manager 5.5 is one of the excellent assistant planing and design software for SWC, based on GIS, RS and GPS to analyze soil erosion, land degradation and water resources, etc., and output relevant maps. Many maps relevant to SWC were drawn.

#### **Decision Support Tool**

On the basis of GIS, plan of sediment dam, design theory of sediment dam, criteria of sediment dam, CAD technique, etc., a dam planning system with decision support for loess plateau was developed and applied.

#### **Monitoring Information System**

State Monitoring System on SWC has been developed and applied. SWC Monitoring System on fixed dots collects, transfers, handles and storages data, as well as establishes and manages databases according to the requirements of monitoring and forecasting models, resulting in enhancing the forecast precision of different grade and type of soil erosion.

### 1.3.3 ICIMOD – HIMCAT

*Report by Isabelle Providoli (ICIMOD-WOCAT presentation-oct07-final.ppt)*

The HIMCAT site was reactivated in February 2007 successfully and up to date 76 members have subscribed. Unfortunately the information on HIMCAT countries is not yet included due to delay in internal IT support. Also the contributions from members are not too many yet and somehow the passive members should be activated. The first HIMCAT newsletter has been sent out in August 2007.

The collaboration between SDC-supported Sustainable Soil Management Programme (SSMP) Nepal and ICIMOD continued and 30 fact sheets (21 QT's and 9 QA's) have been documented. The 13 QT's and 6 QA's documented by ICIMOD are also documented in the WOCAT database, whereas the QT's and QA's from SSMP Nepal are only available as summary fact sheets. The publishing of the fact sheets and a CD compilation is planned for December 2007 but might get delayed due to long pipeline waiting list.

A WOCAT module of 3 hours was integrated in ICIMOD's first international training on "Low Cost Soil and Water Conservation Techniques and Watershed Management Activities" in April 2007.

The following planned activities got delayed or did not materialise:

- The planned extension of the overview book initiative to Bhutan or other HIMCAT countries did not materialise due to other important duties.
- The requesting person from Rajasthan for WOCAT training did not show further interest and likewise the collaboration in Pakistan was not started yet.
- The GTZ funded project in Tibet started with a slight delay. The WOCAT tool will be introduced from 2008 onwards in training programmes etc.

### 1.3.4 India

*Report by Niranjana Sahu, Orissa Watershed Development Mission (WOCAT INITIATIVES IN ORISSA, INDIA.ppt)*

#### **WOCAT activities during 2007**

The OWDM further continued the use of WOCAT tools during 2007 and expanded to a new district i.e. Kalahandi. A WOCAT working group was constituted to institutionalize the use of WOCAT in this district. An NRM specialist was selected to coordinate the programme. A two day training programme was organized to train the working group and other members in Kalahandi district to enable them to document SWC technology and approach in the district. Accordingly one technology (Diversion weir) and an approach (Common Interest Group Approach) were documented. Sensitization workshops, one each in Kalahandi and Nuapada were conducted to create awareness of the WOCAT tools and its use among the stakeholders at the districts which include rural development professional and SWC practitioners. 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 involving the Project Directors (PD), Capacity Building Team members (CBT), Project Support Unit specialists (PSU), Project Implementing Team members (PIA), etc. Now, WOCAT working groups have been formed in three WORLP project districts i.e. Bolangir, Nuapada and Kalahandi. 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 2007 WOCAT expanded to Kalahandi district. A two day training programme was conducted (23rd-24th September'07) in Kalahandi to build the capacity of team members so as to enable them to document the QT and QA. Following this a one day sensitization workshop was organized on 25th Sept'07 to create awareness among the project facilitators. Similarly a one day sensitization workshop was organized in Nuapada on 9th April 2007 to create awareness among the project facilitators (Annex-II).

#### **Documentation of technologies and approaches**

During 2007 one technology and one approach were documented in Kalahandi district 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 Sep'2007. Separate sub working groups were constituted for documentation of the 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:

- 1 Technology: Diversion Weir
- 1 Approach: Common Interest Group Approach in Watershed Development

#### **Benefits of using WOCAT in Orissa**

WOCAT documentation process has been practised in Orissa since last three years. During this period the land users as well as facilitators have got a process in hand which includes technical, social, economic and environmental impacts of a technology and an approach. This has enabled the users to clearly reveal gaps in involvement of the community while implementing various SWC interventions in the watershed projects. Thus the facilitation processes as well as the guidelines have been modified to benefit the small and marginal farmers. The tools have also helped project managers at various levels to analyse the comparative benefits of various SWC technologies used in various Watershed projects. The land users/facilitators have started integrating the production components into these SWC measures so that the livelihoods of the farm families are enhanced.



### 1.3.5 Kyrgyzstan

*Report by Abdybek Asanaliev, Kyrgyz Agrarian University – CAMP (WOCAT 12th WWSM Kyrgyzstan.ppt)*

#### Collection and description of technologies

An agreement with the rural advisory services (RAS) allows 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 (by Naryn, Issyk Kol, Talas and Chui RAS's office) using the light version of the questionnaire that was designed by CAMP working group. Furthermore, with the support of RAS advisors more than 30 technologies are implemented in the villages and farmers fields each year.

#### Meetings and training workshops

ALS (Autodidactic Learning for Sustainability) workshops on SWC Technologies were held in 19 villages in Kyrgyzstan and attended by 237 participants (01.02 - 30.04.07). Fifteen RAS trainers were trained to conduct ALS seminars on SWC. 12 villagers were trained.

Six round-table discussions on Sustainable Pasture Management were conducted.

Two meetings with Central Office of RAS were held during February 2007.

#### Output and dissemination of information

An overview and case study summary on 'Soil and water saving technologies in Central Asia' was printed. It includes hundred SWC technologies which have been documented translated into Kyrgyz and English.

Meeting and workshop reports: Soil and Water Conservation Technologies (report for The Organization for Security and Co-operation in Europe - OSCE); Pasture saving technologies in Kyrgyzstan (report for UNDP).

Presentation material: Watershed management problems, Turkey; 'Soil and water conservation technologies', Follow-up Conference to the Fifteenth OSCE Economic and Environmental Forum on Main Challenges for Providing Environmental Security and Sustainable Development in the Region of Central Asia: Degradation of Land and Pollution of Soil, Tashkent, 30 - 31. October 2007.

A cooperation agreement between OSCE and the Public Foundation "CAMP Ala-Too" was made in January 2007.

### 1.3.6 Philippines

*Report by Arnulfo B. Gesite, Bureau of Soils and Water Management (BSWM) (PHILCAT Activities 2006-2007.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. A memorandum of understanding was issued in 2007 declaring:

- the month of June as "Soil Conservation Month";
- that the activities shall be undertaken by all DA Bureaus, DA-RFU's (regional and attached agencies);
- the promotion of conservation, development and management of soil and water resources of the country.

#### WOCAT Promotion

- Distribution of WOCAT material at scientific conferences and workshops (e.g. Conservation Agriculture Symposium, 9-10 February 2007, BSWM, QC, Philippines)
- At Inauguration of Small Water Impounding Project (SWIP) at Dasol, Pangasinan and tree planting of the watershed (June 2007)
- At launch of Integrated Soil Conservation Guided Farm at Limay, Bataan and tree planting of hedgerows on the contour (June 2007)

#### PHILCAT Workshops / Meetings

- Symposium on Conservation Agriculture: Research Review & Issues for Extension in the Philippines, February 27-28, 2007 organised and funded by Japan International Research Center for Agricultural Sciences (JIRCAS) and the Bureau of Soils and Water Management (BSWM) in collaboration with UPLB, PCARRD and BAR;
- PHILCAT Committee members meeting conducted regularly

### Research and technology development: use of WOCAT information

- Research Collaboration between the Japan International Research Center for Agricultural Sciences (JIRCAS) and the Bureau of Soils and Water Management (BSWM). JIRCAS and BSWM signed a five-year joint research agreement. The study is now being conducted in Ilagan, Isabela. This research will compare the effects of Conservation Tillage with the conventional farmers' practices in terms of run-off, soil erosion, soil bio-diversity and corn yield. Conservation Tillage is seen a possible option for sustainability. The effect of incorporating the cultivation of a legume in the present practice of corn mono-cropping and the farmers' reactions on the application of the legume-corn cropping pattern with conservation tillage will also be evaluated.
- Established techno-demo farms in the local government units (LGUs) applying SWC technologies and approaches;
- Trainer's Training Course on Research and Technology Development for Sloping Land Management using WOCAT information. The training course was attended by 31 participants composed of Municipal Agricultural Officers (MAO's), Agricultural Technicians (AT's), academes and Farmer Leaders from the different municipalities of the Province of Bataan.

### Use of WOCAT in education

- As part of the curriculum of courses on agricultural systems and natural resource management
- As reference material for short training courses on sustainable land management / natural resource development.

### PHILCAT production of outputs

- Paper and poster on 'WOCAT as a tool for the assessment and evaluation of soil and water conservation practices' during the Symposium and Workshop on Conservation Agriculture: Research Review & Issues for Extension in the Philippines, February 27-28, 2007

### Other Activities

- Installation of measuring devices for the monitoring of soil loss and run-off (concrete sediment trap and run-off recorder) in Mabini-Tingloy, Batangas under the World Wide Fund-Coastal Resources and Fisheries Conservation Project.

## 1.3.7 Tajikistan

*Report sent by Boturov U. and Sanginov S.R, Soil Science Research Institute*

### Achievements:

Three new technologies and approaches on zero tillage and bio drainage were documented and three already documented technologies and approaches were quality controlled and updated. The WOCAT tools could be more broadly used by SLM specialists if translated to Tajik.

Tajik soil conservation technologies in the form of case study summaries (light version) were compiled and published as part of a regional overview book.

A soil erosion map was produced.

A report on 'Watershed Management in the Zaravshah valley' was written.

### WOCAT promotion:

WOCAT tools and documented case studies (overview book) were introduced and shown at meetings and workshops.

Two documental films one on 'Soil degradation and conservation' (SSRI, CAMP Kuhiston) and the other on 'Erosion control' (SSRI, GAA) are utilized as promotion material for SLM awareness raising.

Posters designed for agricultural extension in Tajikistan to show examples of successful dissemination of knowledge about SWC measures.

### Meeting, workshop, presentation:

1. WOCAT tools - Crop Husbandry Institute: 65 participants, May 2007, Tajikistan
2. WOCAT training workshop on Slope Land Management: 70 participants, June 2007, Tajikistan

**Official agreements:**

1. Between World Bank project - Watershed Management in upland areas with the Soil Institute
2. Between ADB project - agriculture rehabilitation in Tajikistan and Soil Institute

**WOCAT in Research and Education**

In collaboration with the Soil Institute several PhD thesis were conducted that made use of WOCAT tools. WOCAT method and tools are used for education purposes at the Tajik Agrarian University.

**1.3.8 Ethiopia**

*Report by Daniel Danano, MoARD*

ETHIOCAT's major mission after compiling, documenting, evaluating and disseminating the SLM measures (technologies and approaches) is the identification of best practices, finding strategies of implementing these best practices and making them accepted by the public, politicians and the decision makers.

Eighty percent of the national overview book 'Soil and water conservation measures for sustainable land management' is completed. A first draft of the national overview book was accomplished and is in the process of reviewing and editing.

A national sustainable land management (SLM) workshop took place in June 2007 with 48 participants.

The national 'SLM document' review committee met in July. 19 reviewers went through the documented case studies to assess the quality of the data, suggest improvements and ask for corrections.

A national workshop for reviewing and improving the draft of the national overview book was held in September 2007. The workshop was attended by 23 participants.

Suitability Mapping was conducted based on agroecological zones, farmer's practices, and cost-benefit analysis (calculated and shown as a graph).

ETHIOCAT holds a great database in Ethiopia which is also being used by students and others SLM interested persons. Two new questionnaires on SLM technologies as well as approaches were documented and evaluated. The national database comprises now 51 technologies and 29 approaches.

Other achievements: The participation in conservation activities (50% are women) is growing in Ethiopia partly due to increasing awareness, knowledge about and use of WOCAT – SLM became a topic in Ethiopia.

A new memorandum of agreement between ESAPP and ETHIOCAT on 'Strategies for sustainable land management practices in highly populated areas of Ethiopia' was signed in September 2007.

GTZ is gaining interest in conservation measures in particular that of 'bamboo carpet'.

The brochure on ETHIOCAT achievements for promotion purpose could not be done, too busy with book.

**1.3.9 Nigeria**

*Report by Ikponke Nkanta, Tropical Research and Conservation Centre, University of Uyo (pilot project areal cropping Nigeria.ppt)*

WOCAT activities started in Nigeria in 2005 with an initiative named NIGCAT.

**Data collection**

Three new QTs have been filled out using the 4-page summary template:

1. Planting of a water releasing plant, corkwood – *Musanga cecropioides*, for constant availability of water in the soil in farm land
2. Application of palm fruits residues to fallow farmlands and unfertile soil.
3. Compost pits for yam planting.

**WOCAT Networking**

Through NIGCAT some SLM specialists and researchers, farmers and institutions in Nigeria have been introduced to WOCAT. Through the effort of NIGCAT, WOCAT has been initiated in TOGO at the Department of Soil Science, University of Lomé with Dr Mawussi, as the country representative. Contact has also been made with Dr Asiamah (President of the Soil Science Association of Ghana), Department of Soil Science, Institute of Soil Science, Ghana and hopefully a new WOCAT initiative will soon be put to birth. Effort has also been made to contact some SLM specialists in the Republic of Benin and in Cameroon.

### **Regional Initiative**

A proposal has been developed to set up a regional initiative (WAFRICAT) to help coordinate WOCAT activities in West African countries. The proposal includes efforts to be taken to reactivate previously highly active West African countries such as Niger and Burkina Faso.

### **Pilot project with farmers**

A pilot project has been developed with farmers in rural communities on areal cropping for sustainable soil improvement and agricultural production, one of the technologies documented by NIGCAT. The project site is Ukanafun Local Government Area in Akwa Ibom State. Farmers, youth and women were trained on sustainable tree planting in farmlands. They will be provided with seeds, especially those with economic multipurpose value such as acacia, cassia, leucana, etc. for planting on their farmlands.

## **1.3.10 Morocco**

*Report by Miloud Chaker, Faculté des Lettres, Université Moh. V, Rabat (Progress Morocco (CHAKER).ppt)*

### **Monitoring of WOCAT performance and impact**

The WOCAT methodology and tools are new to the University. The first activity was a stakeholder workshop on land degradation and desertification: Existing and potential prevention and conservation strategies, in June 2007. This stakeholder workshop is a new element combined with the use of the WOCAT questionnaires, which is applied within the framework of DESIRE.

The main problems are sheet erosion and gullies on the slopes, and wind remobilisation of the sand on the Shoul plateau surface. The erosion increases and the yield decreases! What needs to be done?

### **Do WOCAT tools and strategy take up the challenge?**

The objective of using WOCAT tools was to identify existing and potential strategies for land remediation. The stakeholders who participated in the workshop were: 6 farmers, 1 representative of the elected municipality council and one administrator of the commune, some local and some external stakeholders, engineers and technicians responsible of the services of agriculture and forest, researchers with knowledge of the experimental field and external experts on SWC and one moderator of the workshop.

### **During the 3 days several problems were discussed using the WOCAT methodology:**

- What are the major reasons of land degradation in the region?
- Which are the more efficient SWC techniques adopted by the farmers?
- What are the legal / economic / social circumstances which contribute to land degradation?
- What are the legal / economic/ social circumstances which can contribute to a sustainable management of lands?

### **Results and conclusions:**

- Chains that link causes and effects of land degradation
- Disturbances identified in the water and biomass cycles
- Causes and effects of land degradation
- Identification of indicators used by stakeholder group.

### **List of technologies / approaches to be documented and evaluated by WOCAT methodology**

- Olive plantations along the contours, separated by strips of cereals; this technique was introduced by the local project of rural development.
- Eucalyptus plantations with a high density for wood production; this technique was adopted by some big farmers on degraded pastures
- Eucalyptus plantation as a technique for gullies remediation and alluvial terraces protection against fluvial erosion

### 1.3.11 South Africa

*Report by Rinda van der Merwe - Pienaar, ARC-ISCW (Progress\_RSA.ppt)*

Planned output	Planned Activities	Achievements
Data collection	Collect data	6 sets received, still awaiting 3
Quality control of questionnaires	Quality control of questionnaire by panel	Ongoing
Database management	Data input on computer	Ongoing
Annual WOCAT Workshop	Organising WWSM11	Done
Finalize off-line viewer	Complete development	Change project
QM investigation	Investigate mapping software	Present at QM map exercise in RSA
Meeting	Date	Countries involve
LADA/WOCAT workshop in RSA	Oct 2007	RSA, Switzerland, The Netherlands, Italy
SADC Scientific Symposium in Botswana	Feb 2007	SADC countries
Combined Soil Science Congress in RSA	Jan 2007	RSA
LADA/WOCAT workshop in Bern	Jul 2007	Switzerland, RSA, The Netherlands, Italy

#### Production of outputs:

- Mapping software evaluation
- Workshop report: Attendance of 11th WOCAT Workshop and Steering Meeting. 23 – 28 October 2006, Cape Town, South Africa. ARC-ISCW Report No GW/A/2007/139.
- Final report: Development of a spatial interface for WOCAT on AGIS. ARC-ISCW Report No GW/A/2007/138.
- Meeting / workshop reports: Making use of WOCAT - Case studies and analysis of soil and water conservation initiatives worldwide by G.M.E. van der Merwe, R.O. Barnard & D.J. Pretorius PRESENTATION at SADC Scientific Symposium
- POSTER: 'Where the land is greener' – achievements in combating desertification, by Van der Merwe, GME, Koyi, S, Barnard, RO, Schwilch, G and Liniger, H.P.
- POSTER: Towards a global map of soil and water conservation achievements: a WOCAT initiative by Van der Merwe, GME, Koyi, S, Barnard, RO, Schwilch, G, Liniger, H.P. and Van Lynden, G.W.J.
- Landuse system base map linked to Soil Strategy

### 1.3.12 Serbia

*Report by Miodrag Zlatic, Faculty of Forestry, University of Belgrade (Serbian Report.ppt)*

#### Achievements:

Finalizing QM for Belgrade and Nis districts and collecting data for Kolubarski district. For 33 communities of 4 districts (11'711 km<sup>2</sup>) data were collected in matrix tables and filled in the WOCAT database: (1) Belgrade District (13 communities: 3200 km<sup>2</sup>); (2) Jablanicki District (6 communities: 2769 km<sup>2</sup>); (3) Kolubarski District (6 communities: 2474 km<sup>2</sup>); (4) Macvanski District (8 communities: 3268 km<sup>2</sup>). QM data that was collected for Nisavski district was entered in matrix tables but not in the WOCAT data base.

Work on documenting Approaches and Technologies in Serbia was continued. Three QTs in the Belgrade district were updated; data for three QTs in the village Gornje Koslje, Macvanski district were collected and entered in the WOCAT database.

A national WOCAT overview book to document the Serbian experience is in preparation.

At the end of 2007 a report for the Directorate for Waters of the Ministry of Agriculture, Forestry and Water Management was prepared.

National WOCAT workshop was not organized.

#### WOCAT promotion

Promotion at the 5th International Congress of the European Society for Soil Conservation, Palermo/Italy (June 25-30, 2007) through a presentation on WASWC activities.

Promotion at the "Erosion and Torrent Control as a Factor in Sustainable River Basin Management" international conference in Belgrade (25-28.09.07) through a key note speech: "Strategy / Policy in Soil Conservation".

Promotion at the "International Soil Forum" held in Iceland in September '07.

"Erosion Control in Serbia"- a scientific popular programme broadcasted on Serbian official TV.

Contacts to national and foreign donors: Directorate for Waters Management of Ministry for Agriculture, Forestry and Water Management – favourable (got 15 000 EUR for '07).

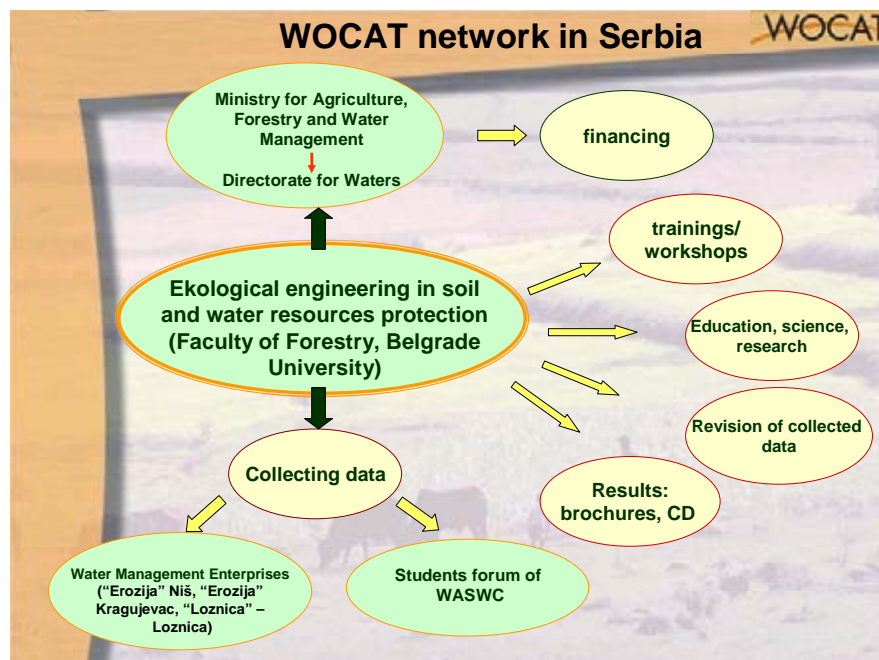
Meeting at Directorate for Water Management of Ministry for Agriculture and Forestry and Water Management: Presentation of WOCAT Programme in Serbia (February '07).

#### WOCAT in education:

Student's Forum of WASWC: two meetings and training workshops (July and September 07), engaging students in filling in QTs and QMs.

Lecturing in IV<sup>th</sup> year of studies at the Faculty of Forestry.

#### WOCAT network today:



### 1.3.13 FAO - Asia and the Pacific

Report by Yuji Niino, FAO Regional Office, Bangkok (FAO Land Use in Asia& Pacific.ppt)

#### Background

- Between now and 2050 the world's population will most likely increase from the near 6 billion at present to nearly 9 billion people
- Almost all of this population growth will occur in developing countries
- > 60% undernourished in Asia/Pacific
- Land resources and their use will play a vital role

#### Land scarcity

- Total land area – 3 001 million ha, 22.9% of world
- Adverse soils, climate and topographic factors – only 86% suitable for agriculture production
- Loss of soil productivity by erosion and nutrient depletion – biggest threat
- Most suitable land is already under cultivation
- Scarcity of land
  - 80% by intensification (69% higher yield, 11% intensities)
  - 20% by arable land expansion

- Only 14% of land free from soil related constraints
- Climate change – carbon sequestration in soils
- Structural change: towards biofuels – large plantations

#### Land degradation

- Increased irrigated area – salinization, water logging
- Transition from fallow to continuous cropping – nutrient depletion, compaction, acidification, erosion
- Marginal lands – soil erosion, nutrient depletion
- Sandy soils in large areas
- Urban and peri-urban agriculture lands – soil erosion, contamination

#### Recent activities

- 1st International Symposium - Sustainable Management of Tropical Sandy Soils, <http://www.fao.org/docrep/010/ag125e/ag125e00.htm>
- Improving Plant Nutrient Management for Better Farmer Livelihoods, Food Security and Environmental Sustainability - Asia Pacific Integrated Plant Nutrition Management Network (APIPNMN), <http://www.fao.org/docrep/010/ag120e/ag120e00.htm>
- Sustainable management of tropical degraded low fertility soils
- Climate Change and Land Management
- Delta 2007 – Managing the coastal land-water interface in tropical delta systems
- Regional Land Degradation Assessment – LADA, LADA-China involvement in regional activities
- Asia Soil Conservation Network – ASOCON, low activities



*Yuji Niino (FAO - Asia and the Pacific) taking part again at a WWSM. Gbénonchi Mawussi (Togo) and Mandakh Nyamtseren (Mongolia), the two new initiatives welcomed in the Philippines (Photos Hanspeter Liniger)*

## 1.4 New initiatives

### 1.4.1 Mongolia

*Report by Mandakh Nyamtseren, Institute of Geo-Ecology (WOCAT\_Manila\_Mongolia.ppt)*

#### **COPING WITH DESERTIFICATION Project, SDC in Mongolia, 2007-2010:**

To support the national capacity to improve the effectiveness of efforts on coping with desertification and promote the sustainable livelihoods in arid and semi arid areas.

Implementation principles:

- National and local capacity building (institutional and technical capacity, knowledge management)
- Intensive local community participation
- Cooperation and coordination with the national and local partners and like minded donors
- Intensive knowledge and experience sharing with other countries (Central Asia, China etc.)
- Monitoring and evaluation based on participatory principles

Expected outcomes:

- NCCD recognized as a competency centre on desertification issues in Mongolia
- The development and implementation of regional plans on integrated use of natural resources supported
- Environmental awareness and knowledge about the fragile ecosystems in Mongolia raised among the public especially the youth and behavioural changed initiated
- Appropriate technologies and methods for coping with desertification and managing arid areas developed and disseminated

Objectives and activities for technology database:

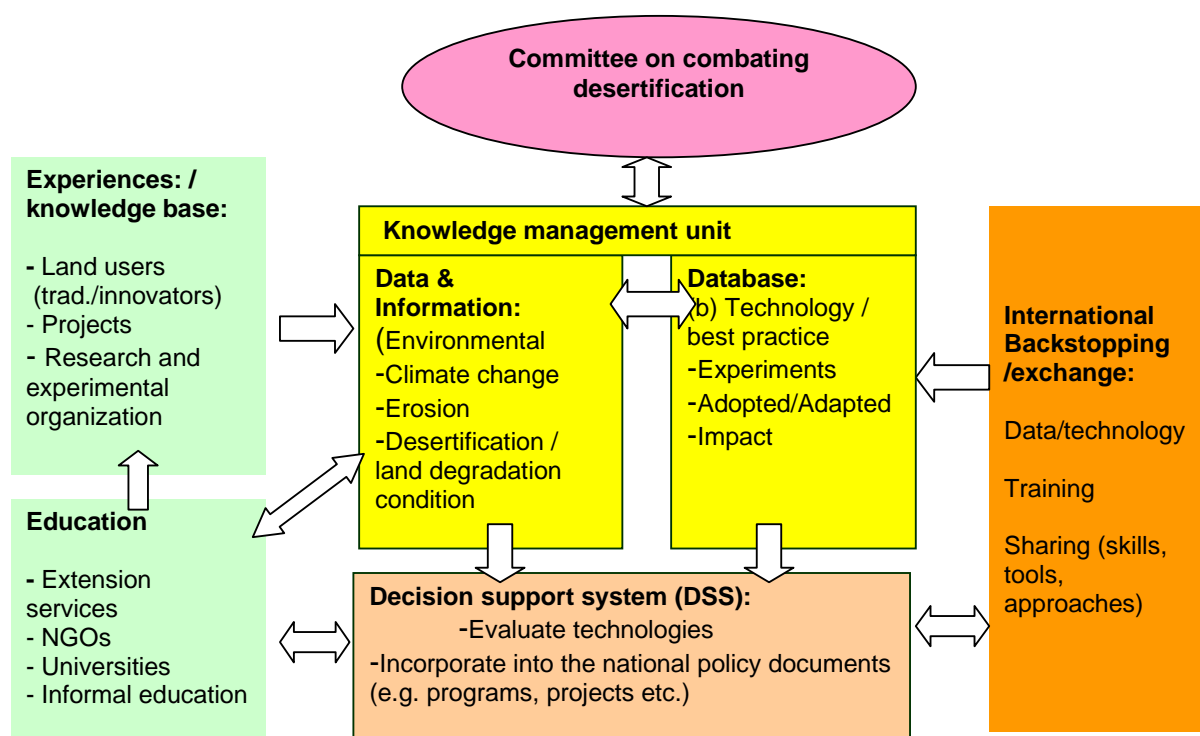
- Objectives:
  - To study, determine and preserve indigenous technologies to combat desertification and land degradation
  - To introduce nature protection new technologies, basing on the studies carried out on international technologies, techniques and methodologies to reduce aridity and desertification
  - To elaborate regional planning to combat desertification by establishing technology database
- Activities:
  - Management and organization of technology database and knowledge sharing
  - Collection and monitoring of technology information and knowledge
  - Creation of the principle to cooperate with other Components of the Project and other like minded projects and programmes
  - Elaboration of regional programmes to combat desertification

Expected impact of database development

- The knowledge management in environmental sector help Mongolia's obligation under UNCCD and other conventions will be strengthened (e.g. CBD, IPPC)
- Information, experience and knowledge sharing amongst adjacent regions will be established
- The transparency among sectors as well as players will be ensured and
- Capacity building among rural population and the public awareness to solve environmental problem will be increased



Desired structure:



## 1.4.2 Togo

*Report by Gbénonchi Mawussi, University of Lomé (presentation Togo.ppt, Togo Oral communication.doc)*

Togo is a small country in West Africa where more than 70 % of the population is working in rural areas. Agriculture contributes to approximately 38 % of the Gross Domestic Product (GDP). The agricultural soils are severely threatened by water erosion. Besides ancestral practices of soils conservation, modern technologies were introduced by development projects: UNDP (FAO-TOG 83/009 "soil and water conservation" and FAO-TOG 89/001 "soil conservation") and various NGOs.

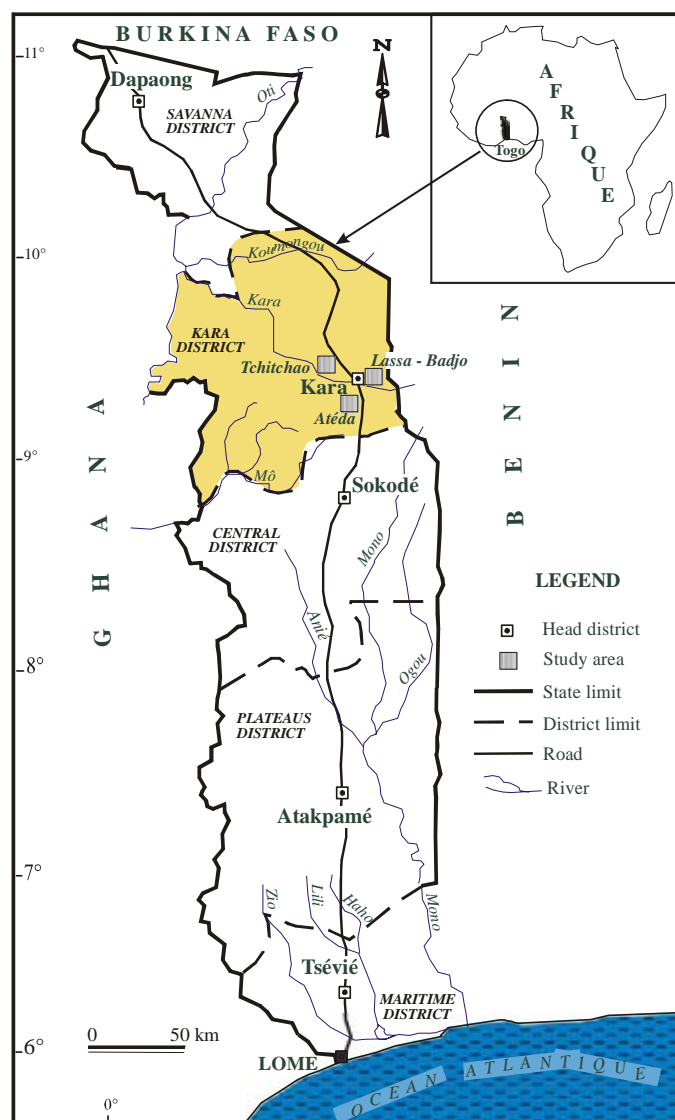
The aim of the partnership with WOCAT is to make an inventory of SWC technologies and approaches in Togo in order to make local experience available on an international scale. The study was initiated with the help of Mr Ikponke Nkanta (Tropical Research and Conservation Centre, University of Uyo, Nigeria) and seed money from WOCAT.

Identification and localities choice: Relevant literature on traditional and introduced SWC technologies and approaches were reviewed. This review combined with institutional and personal exchange allowed to identify the priority/ preferential study area. Three sites north east Kara area (catchments of Lassa-badjo, Tchitchao and Atéda), where land pressure is very high due to a high density of rural population, were chosen.

Data were collected from 45 farmers and documented using the WOCAT tools (QA and QT). The survey shows that eight SWC technologies (Traditional stone terrace walls, Modern terraces, Contour ridging, Manure pit, Pits, Tied ridges, Alley cropping, Wind break) and three approaches (Traditional approach, Participative Rural Approach, Management board approach) are applied in the 3 catchments.

The traditional approach contributed to safeguard traditional terraces. Participative rural approach was related to technologies of modern terraces, pits, tied ridges, manure pits and contour ridging. Management board approach allowed implementation of technologies of wind break and alley cropping. Togo has also other zones where SWC technologies and approaches are in application. In prospect, we intend to continue this study in the other areas in the country.

The map of Togo showing the study areas: three sites north east Kara area (Lassa-badjo, Tchitchao and Atéda)



Source : Atlas Jeune Afrique (TOGO), 1981.

# TOPIC 2 SPECIAL TOPIC SESSION

*Rapporteur: Christine Hauert*

## 2.1 Global and national overview books

### 2.1.1 Global Overview Book 'where the land is greener': reactions, achievements, promotion and sales

*Presentation by Rima Mekdaschi Studer (Book promotion & distribution.ppt)*

#### Promotion and publicity

- Launches (FAO Rome, SDC Berne)
- Conferences, meetings and workshops (ISCO 2006, UNCCD-COP8)
- Distribution of book flyer
- Press releases
- Newsletters and websites (WOCAT, InfoResources News, WASWC)
- 'Mouth to ear'
- Letters and e-mails for awareness raising to
  - libraries: national and international
  - institutes and organisations, NGOs
  - networks, virtual knowledge sharing platforms
  - bulletins, newsletters, magazines
  - associations and journals
  - press agencies and newspapers

#### Reactions

- book orders: mainly libraries, book shops, institutions
- publicity: newsletters (Our planet (UNEP), IUCN- magazine), bulletins (Rural development news), knowledge sharing platforms (Frame, dry-lands group)
- promised reviews:
  - Mountain Research and Development
  - Geographical research
  - 'the environmentalist'
  - SLM briefs
  - "The Natural Resources Forum"

#### Distribution - 5'000 book copies were printed:

- 500 to CTA - Technical Centre for Agricultural and Rural cooperation ACP-EU (contributed USD 26'500). Nationals of African, Caribbean and Pacific countries received the publication for free. How many books CTA has distributed is not known.
- 2'500 to SMI (earthprint)
  - ~344 free: book contributors, partner institutions, UN Organisations, UNEP
  - ~185 sold (6'800 USD): Univ. & CGIAR libraries, bookshops, information services, 'private' persons
  - ~2000 copies left in storage
- 1'280 to CDE
  - 502 free: CIS (W. Critchley), FAO, ISRIC, UNEP, Syngenta Foundation, DANIDA, CDE, SDC, DESIRE, ICIMOD, LD Thailand, 'private' persons, WWSM12, others
  - 548 sold: Landcare SA, FAO Library, Land Development Thailand, Farm Forestry Support Project Pakistan, UK SMI, CAMP, Dept of Environmental Sciences Iceland, ICIMOD, BSWM, ISRIC, ESAPP, DESIRE, students, others
  - 200 to be sold: students and others of/at CIS and ISRIC, the Netherlands
  - 30 copies: stock at CDE
- 720 in storage at printers

Prices:	45 \$	normal book price
	35 \$	price for partner institutions
	30 \$	FAO price (contributed to book production)
	25 \$	special offer until end of Jan 07
	20–25 \$	students

### Feedback received for the book

- “interesting and useful book”
- “one of the outstanding publications in recent times in the field of land management”
- “excellent style and build-up of the book”
- “illustrations are a great addition which makes it more legible and understandable” and “remarkable in terms of reader friendliness”
- “high credit was also given to: “the mentioning of negative results ....”
- “after reading the book one would feel more optimistic that “the planet could support its population”
- “just exemplary”

Distribution of the book has proven more difficult than expected; people don't really want to buy. The limiting factor is probably not the price of the book itself but postage. In each country someone should take the lead for distribution and promotion. Although the sales and the distribution of the book were not as expected, the book had a very positive impact on WOCAT and its international recognition.

An open question remains the translation into other languages, such as French and Spanish. If a donor can be found for the estimated costs of 16'000-20'000, a digital version could be put on the web, which would save printing and postage costs.

## 2.1.2 ETHIOCAT overview book - from documentation to strategy development and implementation of SLM

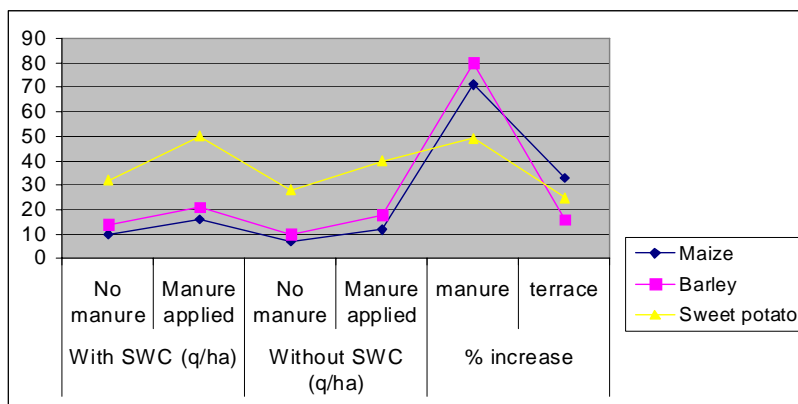
*Presentation by Daniel Danano (Ethiocat.ppt; Ethiopia SWC overview draft final.doc)*

Ethiopia has chosen to go for the professional version of the questionnaires (QA and QT) as the basis for compiling the case studies for the national overview book and that at the Woreda (district) level.

Selected information thereof is presented in the summary format: area, agro-ecological conditions and location, land degradation, technical design, definition, technical function, natural environment, socio-economic conditions, cost benefit and economic analysis, benefits (onsite, offsite), adoption and replicability. The overview book also includes suitability mapping based on agro-ecological zones, farmer's practices, and cost-benefit analysis.

### Cost benefit analysis

Benefit from conservation activities (Birr/ha)



Activities / items		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Establishment cost	Construction	1400							2000
	Maintenance and planting on terraces	175		125	100	50	0	0	
Tillage and seed bed preparations		154	154	150	150	150	150	150	
Manure		120	120	120	120	120	120	120	
Seed		90	90	90	90	90	90	90	
Cultivation		300	300	300	300	300	300	300	
Harvest		15	15	15	15	15	15	15	
Tools		20	20	20	20	20	20	20	
Total cost		2274	849	820	795	745	695	695	
Cost of SWC measures		1575	1725	1850	1950	2000	2000	2000	2000
Gross production value		2100	2300	2400	2500	2600	2700	2700	17,300
Net benefit		-	1451	1580	1705	1855	2005	2005	4010

From the 50 Technologies and 27 Approaches screened, 33 Technologies and 7 Approaches were selected for the national overview book.

Examples of technologies:

- Trashlines
- Multiple cropping
- Crop residue and stone mulch management (Konso)
- Grassland improvement in Chench
- Area closure
- Relay cutoff drains and graded soil bunds
- Traditional stone terraces and checkdams
- Vegetated stone-faced bunds
- Gully rehabilitation
- Ridges and furrows of sweet potato
- Paved and grassed waterways
- Runoff and floodwater farming

Examples of approaches:

- Mass Mobilization
- Voluntary labour assistance and labour-share
- Incentive Based Local Level Participatory Planning Approach
- Incentive Based Participatory Integrated Watershed Management
- Social Infrastructure for Soil Conservation
- Food for Work
- Self help

## Discussion

ETHIOCAT is a success story! Problems of book distribution might be encountered because of the heavy weight of the book (450 pages), but the book should mainly address people in Ethiopia where an efficient system of book distribution exists. People are generally interested in a book if they find an example from their country/region in it. However a need for national books exists.

ETHIOCAT is requested to add the WOCAT logo (as are all partners publishing results based on WOCAT).

### 2.1.3 NEPCAT fact sheets

*Presentation by Sanjeev Bhuchar (NEPCAT.ppt)*

Inspired by the latest WOCAT publication "where the land is greener", ICIMOD and the Sustainable Soil Management Programme (SSMP) in Nepal launched a joint initiative in 2006 for documenting and publishing Soil and Water Conservation Approaches (A) and Technologies (T) from Nepal following the WOCAT overview book template. In October 2007, all the selected 30 examples, comprising 21 Ts and 9 As, were finalized and sent to the ICIMOD publication team for editing and publication.

The NEPCAT publication "NEPCAT fact sheets on NRM technologies and approaches in Nepal" will include examples on:

- 1) conservation agriculture - Legume integration (T);
- 2) vegetative strips/cover - Cultivation of fodder and grasses (T);
- 3) agroforestry - Polypit for agro-forestry nursery (T);
- 4) manuring/composting - Improved compost preparation (T), Black plastic covered farm yard manure (FYM; T), Improved farm yard manure through improved decomposition (T), Improved farm yard manure through sunlight and rain/runoff protection (T), Improved cattle shed for urine collection (T), Urine application through drip irrigation for bittergourd production (T);
- 5) pest management - Organic pest management (T);
- 6) gully/rehabilitation - Gully plugging (check dams) (T), Landslip and stream bank stabilization (T), Integrated Watershed Management (A);
- 7) water harvesting / management - Low Cost Drip Irrigation (T), Participatory action research for drip irrigation (A), Low Cost Micro Sprinkler Irrigation (T), Rooftop rain water harvesting system (T), Plastic lined conservation pond for irrigation (T), System of Rice Intensification (SRI; T), Evaluation of System of Rice Intensification (SRI) through participatory research and development approach (A), Drinking water quality improvement through conservation measures (T), Community effort for drinking water quality improvement (A);
- 8) terraces - Improved terraces (T), Improving terraces with farmers (A), Traditional irrigated rice terraces (T);
- 9) grazing land management - Rehabilitation of degraded communal grazing land (T), Local initiatives for rehabilitation of degraded communal grazing land (A);
- 10) other approaches - Farmer-to-Farmer diffusion (A), Farmer led experimentation (A) and Farmers' Field School (FFS) on Integrated Plant Nutrient Systems (IPNS) (A).

For wider dissemination of the publication, ICIMOD and SSMP will organise a promotion event in Nepal in 2008. In future, more institutions and organisations in Nepal will be involved in preparing more fact sheets. It is also hoped that other countries in the Hindu Kush-Himalayas will be inspired by this output and demonstrated value of joint collaborations and implement similar initiatives.

Comment: The 4-page summary is a successful tool to produce a national product (see also example of China), however case studies and data should still be entered in the global database (Q basic).

### 2.1.4 GEF - OP12 programme in China

*Presentation by Hanspeter Liniger*

In 2006 the GEF-OP12 programme in China (Loess plateau) invited WOCAT (H.P. Liniger) to present its tools and to discuss the possibilities for documenting and evaluating the experiences made in the OP12 programme implementing SWC, especially forestry experiences in combating desertification. The initial reaction to the WOCAT tools was not too enthusiastic, because of being too complex; technical aspects already being available in Chinese manuals and WOCAT not providing a well developed decision support tool. During a revisit of H.P. Liniger in October 2007, OP12, a team under the lead of Zhang Kebin presented how they used the 4 page summary template to collect 49 technologies and 40 approaches for the Loess Plateau and that they are compiling a book using the MS-Word-4 page template with around 30 technologies and approaches. The technologies will be presented in 8 groups: sand dune stabilisation, grazing land improvement, salinization, afforestation, agroforestry, water saving, etc. The usefulness of the WOCAT format was convincing from the moment WOCAT provided the 4 page template and the book. Without first going through the questionnaire and building up a database, the filling in of the 4 pages for each technology and approach immediately shows a product of the work in a nice / attractive layout (even though one always has to go to the questionnaire to find out the relevant questions, the list of possible answers, etc.). The group working on the compilation of the SWC/SLM experiences also works with the LADA taskforce in China.



*Presenting the Chinese overview book to Hanspeter Liniger (Photos by Hanspeter Liniger)*



## 2.2 WOCAT in global initiatives

### 2.2.1 Global initiatives - WOCAT in GEF, WB, UNDP, UNEP, FAO Projects: Knowledge management, impacts, DSS

*Presentation Hanspeter Liniger (Global initiatives.ppt)*

The aim is to institutionalise the WOCAT method by placing / mainstreaming the WOCAT network and the tools in international organisations.

Mapping degradation and conservation / SLM:

- Jointly developed with LADA (FAO, UNEP, GEF) for National Assessments
- Assessment of degradation AND conservation
- Impact on ecosystem services for both
- Identify hot spots and green spots => areas with best return for investments!

GEF-UNEP-UNDP-UNU-ADB-WB-EU - using WOCAT for:

- Knowledge management – WOCAT has the lead
- Assessing and monitoring: Global (and Local) Ecosystem Services (ES) / Indicators
- Decision support tools



*WOCAT in GEF, WB, UNDP, UNEP, FAO Projects: Knowledge management, impacts and DSS. First Expert Workshop for the KM: Land Initiative - Evaluation of available land degradation indicators and development of a learning network, Iceland August 07 (Photo Hanspeter Liniger)*



*Regional group meetings on national and regional fields of activities for the strategy annex  
(Photos Gudrun Schwilch)*



*Global level group*



*Central Asia, Mongolia, China Group*



*Bangladesh, India and ICIMOD group*



*South Africa, Nigeria, Togo, Somalia/Kenya,  
Ethiopia, Morocco, Serbia group*

*Missing photo of the South-East Asia group*



# TOPIC 3 WOCAT STRATEGY

Rapporteur: Isabelle Providoli

## 3.1 Presentation of WOCAT strategy 2008 – 2012 and draft of annex ‘activities’

Presentation by Gudrun Schwilch (Topic3Strategy.ppt)

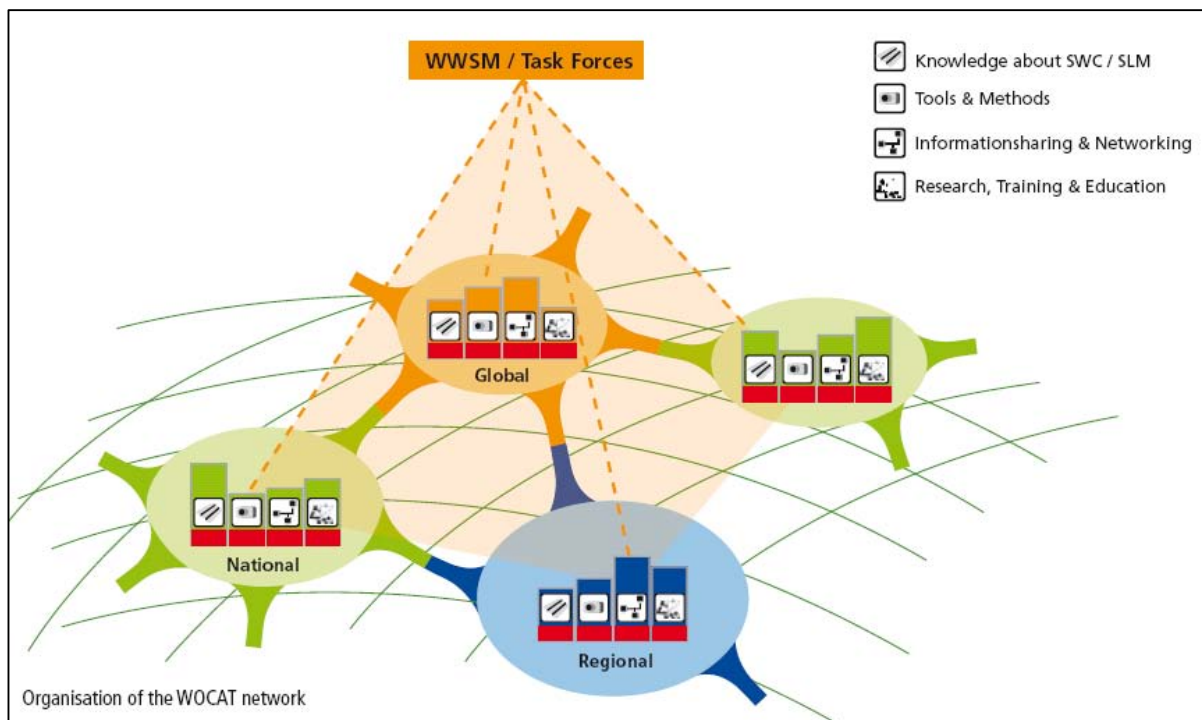
The final draft version of the [WOCAT strategy](#) (2008 – 2012) was distributed to the participants and highlights of it were presented by Gudrun Schwilch. The WOCAT strategy gives the direction of the WOCAT programme for the next 5 years including:

- the vision and mission of the programme
- WOCAT's contribution to SLM
- organisation, management and funding
- roles and responsibilities at two levels: global programme and national/regional initiatives
- fields of activity with, in the annex document, specific objectives, target groups, expected results, dissemination strategy and outcomes
- defines WOCAT's objectives at the global level
- provides guidelines for coordinating the common efforts of national and regional WOCAT participants as well as potential donors and research partners.

The strategy is operating at 2 levels, it determines and steers at a global level and gives suggestions and ideas to effective implementation at the national and regional level.



The strategy has an introductory chapter mentioning WOCAT's vision and mission, the history of WOCAT, the field of expertise on Sustainable Land Management (SLM), WOCAT's achievements and impacts and organization and funding of WOCAT.



It includes the introduction to the four dimensions of knowledge of WOCAT, which are

1. Sustainable land management (SWC/SLM)
2. Tools and methods
3. Information sharing and networking
4. Research, training and education

After these introductory sections the strategy is split up into five objectives. The first objective is at the global level whereas objective 2 to 5 are at the national/regional level, related to each of the 4 dimensions of knowledge. The objectives 1 to 5 are as follows: 1) basic enabling activities at the global level, 2) knowledge about SWC and SLM, 3) tools and methods, 4) information sharing and networking and 5) research, training and education.

The WOCAT strategy has a second section called the “Annex Activities”. This section is not fully developed yet and at present only a draft version is available and still further input is required by all the participants, which was gathered through a group work.

## 3.2 Regional group meetings on national and regional fields of activities

Five groups were built: 1) Central Asia, Mongolia and China, 2) South Africa, Morocco and Serbia, 3) Bangladesh, India and ICIMOD, 4) Philippines, 5) Global level group

For each field of activity the following sections had to be filled out by the groups:

- Responsible (i.e. global or nat./reg. level)
- Target group
- Motivation / demand
- Outputs (with timing and resources required)
- Dissemination
- Outcome

This compilation allows the WOCAT participating institutions as well as the donors of WOCAT to select, prioritize and target their involvement. The groups were asked to balance national and regional priorities.

Each group presented their findings:

### 3.2.1 Central and East Asia (Central Asia, Mongolia, China)

#### **Objective 2: Increase and capitalize on knowledge about SWC and SLM**

Target group: local communities / initiatives / NGOs, research institutes, extension services

Motivation / demand: interest to fill the knowledge gaps increased, use / application of technologies and approaches needed

Output: documentation is implemented, technologies and approaches collected and disseminated

Dissemination: workshops / trainings, exhibition / study tours / demonstration, publications

Outcome:

- Ts and As introduced and implemented
- the budgets are allocated (from GO, NGO and Donors)

Resources: 40,000-50,000 USD/yr

#### **Objective 3: Enhance and capitalize on WOCAT tools and methods**

Target group: research organizations, regional WOCAT networks, local reporters

Motivation / demand:

- the tools and methods of documentation and supplementary tools are further developed
- the QTs and QAs are simplified

Output:

- simplify documentation methodology
- discussion workshop among the regional and global stakeholders

Dissemination: workshops / trainings for trainers and info workers, technical assistance to the local initiatives

Outcome: QT and QA collection is speeded up

Resources: 30,000-50,000 US\$/yr

#### **Objective 4: Expand WOCAT network and knowledge sharing**

Target group: research organizations, local communities / initiatives / NGOs

Motivation / demand:

- need in equal participation of stakeholders of all level
- ecological processes lead us to be more connected not only nationally but internationally, to exchange experiences and knowledge gain as well as to improve / maintain / update recent elaborations

Output:

- active participation of task force members and their objectives
- within task forces determine possible implementation fields and develop project proposals
- promote the use and application of some WOCAT tools

Dissemination: newsletter, magazines, web site, workshops, trainings and exhibitions and so on

Outcome: the regional and global cooperation regarding tackle land degradation is strengthened

Resources: n/a

#### **Objective 5: Generate new knowledge through research and share and enhance knowledge through training and education**

Target group: students / professional communities, research and development organization, extension service / trainers / local initiatives

Motivation/demand: inherit knowledge, skills and experience, increase involvement in process of SLM

Output:

- integrate WOCAT tools and materials in to university curricula
- develop simplified leaflets for rural population about Ts and As
- translate the book 'where the land is greener' into possible languages
- develop exchange program among the stakeholder universities
- organize field and onsite trainings

Dissemination: workshops, trainings, manuals, handouts, develop curricula and so on

Outcome: new generation is educated, knowledge at all level increased, participation and awareness increased

Resources: n/a

### **3.2.2 Africa and Europe (South Africa, Nigeria, Togo, Somalia/Kenya, Ethiopia, Morocco, Serbia)**

#### **Objective 2: Knowledge about SWC and SLM**

Target group: national coordinators, researchers, extension workers

Motivation / demand: yes, the database is still the foundation for WOCAT

Outputs: list of possible stakeholder / coordinators, national data collection workshops

Resources: 2-3 people, US\$ 12,000 – 15,000 / region

Timing: 1 national workshop / year

#### **Objective 3: Tools and methods**

Target group: national core group (to adapt tools for countries)

Motivation / demand: yes, country tool must be tailor made

Outputs: website, video, brochure, overview book

Resources: US\$ 50,000

Timing: as required

**Objective 4: Network and knowledge sharing**

Target group: all national / regional stakeholders

Motivation / demand: yes, need all relevant national / regional role-players to be involved in WOCAT – better chance of success

Outputs: direct contact, workshops, other meetings / conferences

Resources: US\$15,000 / country

Timing: as required, 2 workshops in 5 years

**Objective 5: Research, training and education**

Target group: training and research organisations

Motivation / demand: yes

Outputs: direct contact, seminars, training workshops

Resources: US\$ 20,000

Timing: as required / annually

### 3.2.3 Bangladesh, India and ICIMOD

**Objective 2: Knowledge about SWC and SLM**

Target group: SWC specialist, practitioners (NGOs), land users, farmers, research institutions, green sector (clean technologies)

Motivation / demand: watershed programmes / projects, livelihood and NRM, disaster mitigation, climate change, CDM

Outputs:

- more T and A's documented in the region, higher geographical coverage
- database, fact sheets, overview books

Dissemination: global database, promotional events for overview books / fact sheets, flyers

**Objective 3: Tools and methods**

Target group: tool users

Motivation / demand: for documentation

Outputs:

- Q's used and adapted to local condition
- Feedback on tools to global secretariat, to constantly improve Q's
- More WOCAT tools used in Decision Support System

**Objective 4: Network and knowledge sharing**

Target group: SLM practitioners and decision makers

Motivation / demand from practitioners

Outputs: within and between institutions

- newsletter
- website / forum / HIMCAT
- mailing list
- specialised conferences, workshops
- sensitisation workshop, get new WOCAT "members"

**Objective 5: Research, training and education**

Target group: SLM practitioners

Outputs:

- Give training on WOCAT tools
- Influence universities to take it up in curriculum
- Involve research students
- Sharing curricula of different universities on SWC
- Look at research gap

### 3.2.4 South-East Asia (Philippines)

#### Objective 2: Knowledge about SWC and SLM

Output	Resources	Timing	Target Group
Seminar-workshop (technical presentations and workshop to draft the bill on soil and water conservation) → resolution	\$2,000	second quarter 2008	policy makers and legislators
Public consultations and validations submission and lobbying	\$2,000	3 <sup>rd</sup> to 4 <sup>th</sup> quarter	
Training on SWC and SLM (trainers' training), major island grouping (2 Luzon, 1 Visayas, 2 Mindanao)	\$10,000	2008 (one per quarter)	field operation personnel and extension workers
Development of information, education and communications materials (leaflets, primers, manual, audios)	\$10,000	4 <sup>th</sup> Q 2008	field operation personnel and extension workers, people's organizations and communities, Local Government Units, researchers / scientists / faculty / students
Use of ICT for networking and information dissemination (through admin order) Link with associations, societies working on SLM to expand the membership PHILCAT to include other SCUs	BSWM to assign a moderator or focal person, contribution from other agencies in manpower and fund, kind)	3 <sup>rd</sup> Q 2008	field operation personnel and extension workers, people's organizations and communities, Local Government Units, researchers / scientists / faculty / students

#### Motivation:

1. For policy makers to formulate appropriate policies and implementing rules and regulations, include multi - dimensions of approaches such as the economic, social and environmental considerations;
2. Field operations personnel and extension workers to enhance existing and acquire new knowledge, and provide options appropriate under local conditions through training, extension and other technology modalities;
3. People's Organizations and communities to adopt, promote and replicate the acquired new knowledge;
4. Local Government Units : operationalisation, implementation and monitoring

### 3.2.5 Global level group

An important point raised by the global group is how to secure funding, in addition to the SDC funds, in the longer term? They suggested that the directors from CDE, FAO and ISRIC should meet to discuss the future funding strategy. In order to get more funds good products are required such as. the global / national overview books, a good database and a good PR.

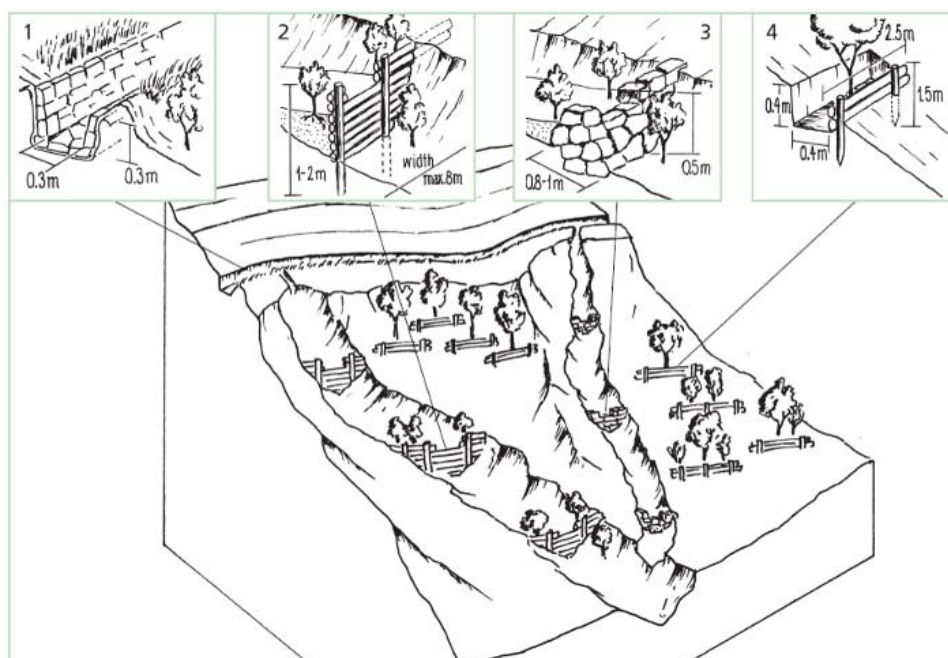
### 3.2.6 Conclusions

The group work on the "Annex Activities" was a good start, however still a lot more input is required and the version has to be improved and filled with content from the regional/national level.

The final strategy should be used by all the network members in order to attract donors.

## To Topic 4: Questionnaire Modules

An example of a watershed system from the overview book is **BOL 04 Gully control and catchment protection** - Control de cárcavas, Bolivia (bottom drawing). The separate technologies that are combined in the watershed are described separately in the case studies BOL 05-09 (inserted drawings on top)



### Technical drawing:

Gully control and catchment protection: an overview of the integrated measures.

Insert 1: Stone-lined cut-off drain with grass-covered bund and live barriers.

Insert 2: Wooden check dam: note that trees are established to further stabilise the gully (as for stone check dams).

Insert 3: Stone check dam.

Insert 4: *Biotrampa*: staggered structures which collect moisture and sediment for tree planting.

# TOPIC 4 QT AND QA REVISED

Rapporteur: Rinda Van der Merwe-Pienaar

## 4.1 Questionnaire revision

Presentation by Rima Mekdaschi Studer (Q revision.ppt)

The revision of the basic version of the questionnaires is related to several types of changes. Some questions, definitions, and comments needed reformulation to become clearer, some questions were newly added and some questions were deleted. The presentation below emphasizes new and deleted questions of QT and QA and some general decisions concerning the revision as such.

### General issues

- rewording of some of the questions and explanations to make them better understandable
- improving definitions and additional explanations to some of the questions
- improving structure, avoiding repetitions
- keeping layout in Word: explanations and examples (italic not shaded) directly after questions (shaded)
- new numbering: continuous question numbers in basic
- changing from “SWC” to “SLM” and to modular WOCAT in the introductory pages
- reminding contributors to indicate ‘n/a’ or ‘no data’ in questions rather than leave them blank
- reminding contributors to make use of secondary data (project documentation, soil and climate data, etc) while filling in the questionnaires
- giving more options to indicate reference/source of information for the individual answers (add ‘data source’ fields to questions --> identify key questions where this differentiation is needed)
- improving links: between questionnaire and 4 page summary (synchronize structure, answers/categories), among QT, QA and QM and modules.
- including ecosystem services and addressing global issues (water, biodiversity, desertification, livelihood and human well being, etc)

### Concerning QT basic and QA basic

- Area information (question 1.3 in questionnaires)
  - New question: provide the coordinates in latitude and longitude of the centre of the conservation area (boundary points or Google Earth .kmz file) (1.3.2).
  - Deleted question: indicate in the map below the area units where the SWC Technology is applied

### Concerning QT basic

- New question: Is the technology **part of a watershed** (/‘technology’ system) (1.2.3)
- Land use type **before and after** land conservation  
New: If land use has changed..., indicate land use type before and after (part of 2.2.2.1)
- Indicate the on-site benefits the technology has shown (3.1.2) (3.1.3, 3.1.4, 3.1.5)

*Only indicate quantity (before/after) if impacts are measured / based on surveys*

Several answers possible	negligible (0-5%)	little (5-20%)	medium (20-50%)	high (>50%)	quantify (indicate unit) before SWC	quantify (indicate unit) after SWC	specify / comments
3.1.2.1 Production and socio-economic benefits							
increased crop yield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	.....	.....	.....

- Land Degradation
  - Which types of land degradation are mainly addressed by the technology? (2.2.2.4): added water degradation (H) and biological degradation (B)
  - How does the technology combat land degradation? (2.2.2.6): added options of technical functions to cover (H) and (B)
  - What were the main causes of land degradation (moved from QA professional): direct and indirect causes (2.2.2.5)
- Technical specifications, activities, **inputs and costs** (2.5). New to this question is that the costs of each activity and the inputs needed for it are listed in details in the table
  - Activities, inputs and costs for agronomic measures (2.5.1.2)

Initial investment							
Input	Quantity	Total costs local currency	Total costs US\$	% borne by land user	No. of parties (sharing)	life-span of product (eg 2 years)	

Maintenance / recurrent activities							
Activity	Timing/ (frequency)*	Input select from list below	Quantity	Unit** (ha, m, dam)	Total costs local currency	Total costs US\$	% borne by land user
1.							
2.							
3.							

\* *Timing*: time, at which activity is carried out, eg after harvest of crops, before onset of rains, etc.

*Frequency*: eg annually, each cropping season, etc.

\*\* *Unit*: preferably hectares (ha) and if not possible, entity (dam) or length (eg. meter of stone line)

#### Inputs:

Labour <sup>1</sup>	Equipment	Materials	Agricultural
- person days	- machine hours <sup>2</sup> - animal traction (hours) - tools - other (specify)	- stone (m3) - wood (m3) - earth (m3) - other (specify)	- seeds (kg) - seedlings (No.) - fertilizer (kg) - biocides (kg) - compost / manure (kg) - other (specify)

<sup>1</sup> The labour cost should be based on the total person days, be they paid or voluntary. To calculate the US \$ Equivalent first indicate daily wage and then multiply the daily wage with the number of person days.

<sup>2</sup> Machine hours: calculation should be based on hiring costs; -- include costs of operation and depreciation

Specify machinery / tools: .....

The same applies to the technical specifications, activities, **inputs and costs** (2.5)

- for vegetative measures (2.5.2.2)
- for structural measures (2.5.3.2)
- for management measures (2.5.4.2)



- **Overview of costs (2.6).** Newly the overview of costs comes directly after question 2.5 on the technical specifications, activities, inputs and costs of each SLM measure and before the natural and human environment questions. It is a summary of the costs indicated in question 2.5. Here it is important that the costs are expressed per hectare for purpose of comparison and analysis.

Indicate exchange rate used: 1 US\$ equals .....; Name of local currency: .....  
 Indicate daily wage cost of hired labour to implement SWC: .....US\$ per person per day

#### 2.6.1 Establishment and maintenance / recurrent costs

Average costs (in US\$)						
Inputs	<u>Establishment costs</u> <sup>*1</sup>		% of costs borne by land user	<u>Maintenance / recurrent costs (annual)</u>		% of costs borne by land user
	<u>per unit</u>	<u>per hectare</u>		<u>per unit</u>	<u>per hectare</u>	
<u>Labour</u> (person days) (voluntary and paid)	.....	.....	.....	.....	.....	.....
<u>Equipment</u> machine hours	.....	.....	.....	.....	.....	.....
animal traction (hours)	.....	.....	.....	.....	.....	.....
tools	.....	.....	.....	.....	.....	.....
other (specify):						

\*1 Indicate duration of establishment phase: ..... month(s)

\*2 Indicate the total costs and percentage borne by land users even if you cannot give the details above!!!

#### 2.6.2 Describe the most important factors affecting the costs (eg slope, soil depth, labour etc.)

.....  
 .....  
 Indicate for which situation the above costs in 2.6.1 were calculated (eg length of structure, wind breaks, grass strips, etc. per ha of land affected / protected), indicate the date for which the costs apply and give additional comments  
 .....

- **Natural environment (2.7)**

New:

- Thermal climate classification (2.7.3)
- Soil water storage capacity (2.7.11)
- Ground water table (2.7.12)
- Availability of surface water (2.7.13)
- Water quality (2.7.14)
- Biodiversity (species richness) (2.7.15)

Deleted:

- Soil Texture (?)
- Stoniness
- Soil erodibility

- **Human environment and land use (2.8)**

New:

- Land users applying the technology (2.8.1)
- Annual population growth (migration) (2.8.3)
- Who owns the land and what are the land use rights and water use rights? (2.8.4)
- Access to services and infrastructure (2.8.7)
- Livestock density (2.8.9.3)

Deleted:

- Typical household size of the land users
- Is SLM Technology hindered if land user cannot read and write?

**2.8.1 Land users applying the technology**

Individual/household <input type="checkbox"/>	groups / community <input type="checkbox"/>	cooperation <input type="checkbox"/>	individual companies <input type="checkbox"/>	government <input type="checkbox"/>
Small <input type="checkbox"/>	medium <input type="checkbox"/>		large scale land users <input type="checkbox"/>	
Mainly women <input type="checkbox"/>	mainly men <input type="checkbox"/>		mixed <input type="checkbox"/>	
Leaders / privileged <input type="checkbox"/>	common / average land users <input type="checkbox"/>		marginalized land users <input type="checkbox"/>	

- Impacts: benefits & disadvantages (3.1)**

Covering: **Ecosystem services** (benefits obtained by people from ecosystems)

- Indicate the on-site benefits (3.1.2)
- Indicate off-site benefits (3.1.3)
- Indicate the on-site disadvantages (3.1.4)
- Indicate off-site disadvantages (3.1.5)

The list of possible production and socio economic, socio-cultural as well as ecological benefits and disadvantages was extended to cover more completely the key indicators for provisioning (food, water fibre etc), regulating (climate, floods, diseases etc), cultural (recreational, aesthetic) and supporting (soil, nutrient cycling, etc) services.

New question: Has the technology contributed to improve **livelihood and human well-being?** (3.1.7)

- Economic analysis (3.2)**

deleted questions:

- With the SWC what is today's gross production value in US\$ per ha per year
- Compared to the situation without conservation, estimate by what percentage gross production value increased or decreased 3 & 10 years after implementing SWC

- Acceptance or adoption (3.3)**

deleted questions:

- Which groups in particular implemented the technology with incentive support?
- Which groups in particular adopted the technology spontaneously?
- Maintenance
- Replicability
- Durability

**Concerning QA basic**

- Description, objectives and operation (2.1)**

New questions:

Indicate whether the SLM Approach (2.1.1.3 )

was implemented through a project/programme	<input type="checkbox"/>
or was a traditional/indigenous system/local	<input type="checkbox"/>
or innovation/ experimental	<input type="checkbox"/>
other (specify):.....	<input type="checkbox"/>

Which were the implementing bodies? (2.1.6.2)

	specify		specify
international	<input type="radio"/>	national non-government	<input type="radio"/>
government	<input type="radio"/>	local government (district, county, municipality, village etc)	<input type="radio"/>
international non-government	<input type="radio"/>	community / local	<input type="radio"/>
other	<input type="radio"/>		

- **Technical support and promotion (2.4) under Research (2.4.3)**

New question:

**2.4.3.2 Was research :**

on station ☐

on-farm ☐

both ☐

- Omitted questions from sections **Participation** (2.2), **Financing** (2.3) and **Technical support and promotion** (2.4)
  - Did land users work in groups or individually on SWC activities?
  - How adequate was the knowledge of the land users to carry out SWC on their own
- New questions in sections Methods for monitoring and evaluation (3.1), Impact analysis (3.2) and Concluding statements (3.3)
  - Were there changes in the technology as a result of monitoring & evaluation? (3.1.2.2)
  - Did the approach lead to improved livelihood / human well-being? (3.2.2.2)
  - Did the approach improve the situation of marginalized / socially weak (disadvantaged) groups? (3.2.2.3)
  - Did it help to alleviate poverty? (3.2.2.4)
  - What was the main motivation of the land user to implement SLM (3.3.1.1)
- Omitted questions in sections Methods for monitoring and evaluation (3.1) and Impact analysis (3.2)
  - Evaluation / review procedures (under 3.1)
  - Did the approach lead to changes in the management of cropland? ( under 3.2)
  - Did the approach lead to changes in the management of grazing areas
  - Did the approach lead to changes in the management and use of forest/woodlands?
  - Did the approach lead to changes in the management and use of other land?
  - Did the approach strengthen local or national institutions

#### Questions and Comments:

- New version important because current trends should be included in the questionnaires
- Is the revised QT/QA used or not? From end of year on we will use the new questionnaires.
- By end of Nov. feedback should be with Rima - those who would like to test the new questionnaires in the field should do it as soon as possible
- Be clear on which versions are being worked on during translations to other languages
- The previous professional version will be a stand alone module
- What about the users who can't remember the start date of the technology – an estimation should be give
- The database is being changed to an online system
- Changes to the data can be made by author or administration online, anytime
- A memory stick version is planned for offline work
- Send database entries already done as soon as possible to Gudrun – need to import the date into the new version

## 4.2 Questionnaire Modules

*Presentation by Rima Mekdaschi Studer ('Technology System' Module.ppt)*

Due to the complexity of SLM /SWC and due to difficulties to use the questionnaire for entire 'Technology' systems such as watersheds (catchments), water harvesting (macro), conservation agriculture and for global issues such as carbon sequestration, biodiversity, poverty (livelihood) and social equity, a questionnaire with more flexibility is needed and is in development. A modular questionnaire can better deal with these challenges (MDG, ES) as well as with the whole range of management practices:

- 'good to bad'
- comparison of two systems
- before and after: e.g. Conservation Agriculture vs. conventional practices
- 'normal' practices vs. implementing land conservation measures (red spots vs. green spots).

This new modular approach will comprise the QT and QA basic questionnaire as a core piece and complex topics as well as topics that need more hard data and in depth investigations (global issues) linked to it as modules.

How to link modules to the Basic questionnaire?

- 'Technology' System - the QTs & QAs need to capture Integrated Technology packages: new question in QT, 1.2.3: Is the technology described in this questionnaire part of a 'technology' system (e.g. in a watershed)? *If yes, fill a questionnaire for each technology plus the module "Technology system".*
- Global issues / ecosystem services: find entry points in questionnaires for specific issues and/or key questions as link to modules.
- Range of management practices: already questions in QT,
  - 2.1.3: Provide photos showing an overview and details of the technology
  - 2.2.1: Specify the major land use problems related to soil, water and vegetation in the area (without land conservation)
  - 2.2.2.1: If land use has changed due to the implementation of the technology, indicate land use type before and after,
  - 3.1.2: Indicate the on-site benefits the technology (before and after)

Among the soil module (revised 'professional' version of the questionnaire), water module, poverty module, C accounting module, the watershed module was given priority.

Watershed module

- Document each technology within the watershed in a QT Basic (bare minimum?)
- Analyse and evaluate impact and outcomes of these techniques, e.g. graded Fanya juu / cut off drain / waterway, etc, holistically (as one system, joint functioning of various technologies) in a module,
- The system should have an identifier, a name (important for search); list all technologies that are part of the watershed with reference codes
- Spatial arrangement
  - Where in the system?
  - Categories
  - Topo-sequence (upstream, downstream)
  - Watershed / catchment description
- Natural and Human environment
- Costs
- Impacts
- 1 QA for the whole watershed / catchment and indicate where differences occur between up-/downstream; another option is to fill 2 (or several) QAs when there are big differences between up-/downstream areas;

#### Questions and Comments:

- It is necessary to have watershed systems from different countries separately documented: impact of systems are usually different, as well as costs and materials used, even if it is the same technology.
- Bring in approach questionnaires to clarify technology better
- Use the same system from the QT for the QA modules
- The choice to call the module technology system is very improper and confusing. It is better to call the system by its name e.g. watershed module

Examples of watershed systems from the overview book are: BOL 04 (watershed), BOL 05-09 (separate technologies), IND 14 (forest catchments treatment).

# TOPIC 5 MAPPING

Rapporteur: Gudrun Schwilch

## 5.1 New QM and mapping applications

### 5.1.1 New WOCAT-LADA QM

Presentation by Hanspeter Liniger (WOCATMappingNationalLevel.ppt; MapQuest\_7\_Nov\_07.doc)

#### New QM version developed together with LADA

The new QM version 2007 was developed together with the [LADA](#) and [DESIRE](#) project. It allows capturing land degradation and conservation at national level and it will be tested in the 6 LADA pilot countries (Argentina, Cuba, Tunisia, Senegal, South Africa, China), and also applied in the 18 DESIRE study sites. The collaboration with LADA and DESIRE is an opportunity for QM for a proper 'take-off', after several years of rather low activities. The QM version presented here was recently tested in a workshop in South Africa (October 2007). Within LADA it links the national assessment with the local assessment through the use of common indicators.

This new QM method is still scale independent, which is one of its advantages. The principle of entering information and viewing results on a map at the same time shall be maintained, but programmed with new software (FAO and South Africa). The basic principle is still the one of a 'Participatory Expert Assessment PEA'.

#### Basic principles of the new QM

What do we want to achieve with mapping degradation and conservation? One of the aims is to know better where to make conservation interventions in an area. Crucial is the **stage of intervention**, where we differentiate between *prevention*, *mitigation* and *rehabilitation*. Often rehabilitation is carried out at high costs, whereas prevention or mitigation would pay back better.

The new **base unit for mapping** is a combination of FAO's *land use system (LUS)* with *administrative units* (e.g. districts). A global map of land use systems is available (provided by FAO), but this map needs refinement and adjustments at national level in order to provide appropriate national units in which land degradation and conservation can be described and evaluated. These basic LUS units contain a wealth of attribute information (biophysical as well as socio-economical) related to land use and land use practices which are the major drivers of land degradation. The LUS units in combination with administrative units permit the user to evaluate trends and changes in time of the land degradation and conservation practices applied. Each LUS within an administrative unit constitutes a unique mapping unit for which information on degradation and conservation should be provided in the matrix tables (one table per mapping unit).

These matrix tables consist of 3 parts: **Land use**, **degradation** and **conservation**. The assessment of degradation and conservation capture as much as possible the same issues, e.g. extent, degree/effectiveness, rate/trend, impact on ecosystem services, etc. (see summary table below).

Land Use System (LUS) (FAO)	
Type	
Area trend	
Intensity trend	
Degradation per LUS	Conservation SLM per LUS
Type	Name / Group / Measure
Extent (area)	Extent (area)
Degree	Effectiveness
Rate	Effectiveness trend
	Period of implementation
	Reference to QT
Impact on ecosystem services (type and level)	Impact on ecosystem services (type and level)
Direct causes	Degradation type addressed
Indirect causes	
Recommendation	

The land degradation types were expanded to cover all aspects of land degradation, including **biological degradation** and **water degradation**.

This new QM version differentiates between **direct causes** of degradation, such as improper land management; and **indirect causes** of degradation, such as population pressure.

A completely new section is the one related to **impact on ecosystem services**. They are derived from the Millennium Ecosystem Assessment (World Resources Institute, 2005). The same degree of land degradation can have different impacts in different places: e.g. the reduction of water availability in a semi-arid environment has much higher impacts on humans and livestock than a similar reduction in a humid environment. We differentiate 3 types of impact (with 3-8 subtypes each):

- productive services
- ecological services (regulating / supporting)
- socio-cultural services and human well-being

They are assessed regarding the level of impact of degradation (or conservation respectively) on them (6 categories from -3 to +3).

The **conservation groups**, as introduced in the book 'where the land is greener' are now also part of the conservation mapping, but were enhanced.

### 5.1.2 On-line mapping system

*Presentation by Wolfgang Prante*

#### WOCAT/LADA position in South Africa

Wolfgang Prante presented the current draft of the on-line data management system for QM, which was recently implemented at FAO. He demonstrated that this can be based on any served map, as long as 2 strings can be linked to QM data management. His presentation used a map from the Geonetwork server (InterMap = Interactive map viewer) in Rome, which shows 1 province in South Africa. It shows different LUS in different coloured units, which are clickable. It will then give information about the LUS and the administrative unit as well as a link to the QM entry form. This is the new on-line questionnaire to enter QM data. Land use, degradation and conservation data will be entered in three different tabs (subforms).

Deadline for the new data entry system: 15 December 2007.

#### Discussion

Ethiopia would like to use Woreda as administrative units -> no problem

Off-line version is requested by various countries! This is difficult for the map viewer part, but it should be possible and it will be tried to create an off-line version on a memory stick.

Old QM data can easily be transferred to the new system.

### 5.1.3 Implementation of WOCAT/LADA mapping in South Africa

*Presentation by Dirk Pretorius (wocat\_lada\_sa.ppt)*

#### WOCAT/LADA position in South Africa

- Considered as a high priority – part of CCD commitments
- Must be integrated with existing programmes/projects
- Must compliment existing programmes/projects
- Needs dedicated effort

#### Major DoA initiatives and their links to WOCAT/LADA:

WOCAT assists to determine status of resources, identification of priority areas for intervention and SWC options within the following initiatives:

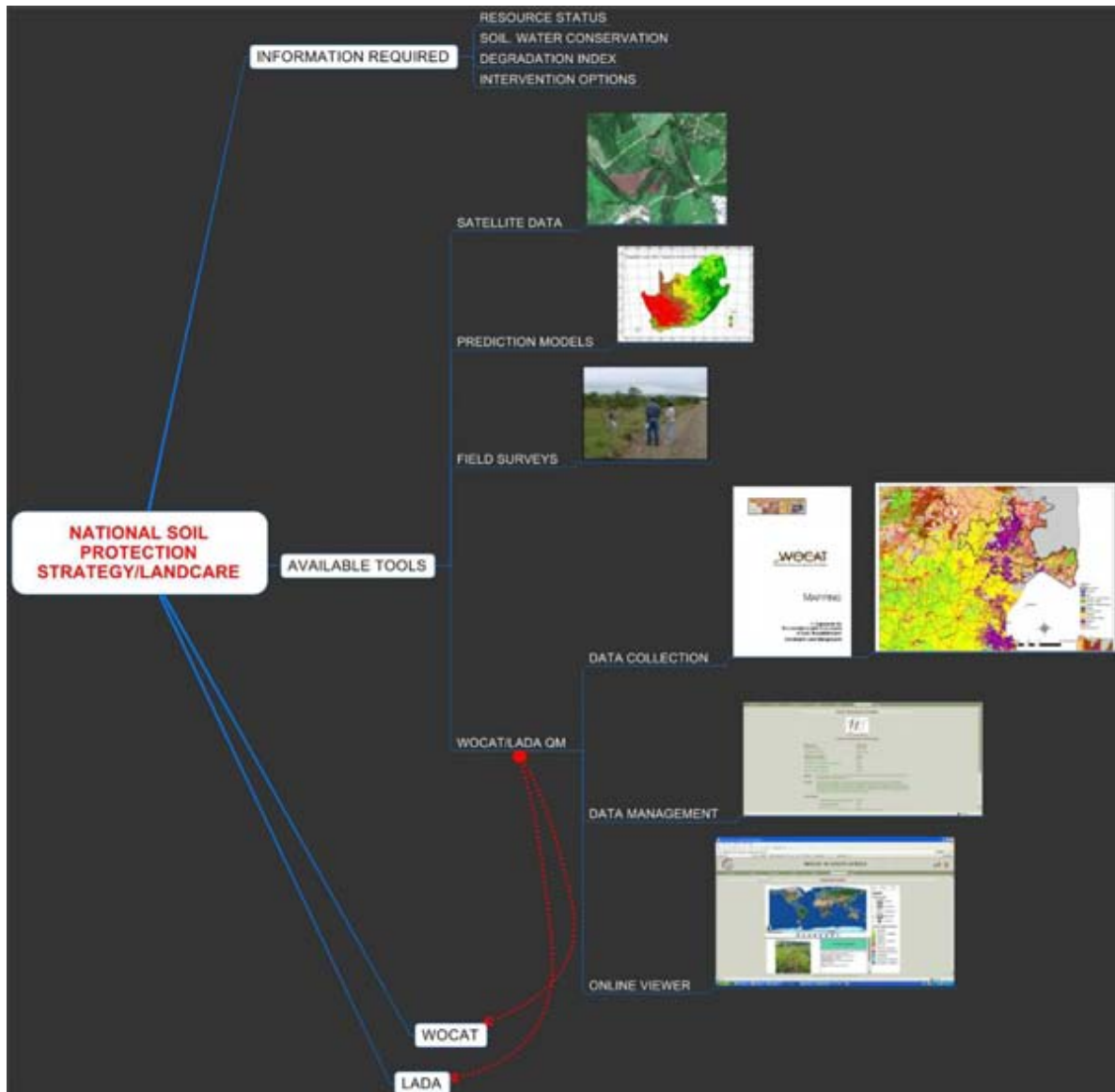
#### Soil Protection Strategy – ASGI-SA:

- The development of a national soil protection business plan for South Africa based on the DPSIR indicator framework (Drivers, Pressures, State, Impact, Response)

- Use LADA/WOCAT mapping methodology
- Develop degradation index

### LandCare programme

- Initiated in 1997 by The Department of Agriculture
- Focuses on the development and implementation of integrated approaches to natural resource management
- LandCare is a community-based and government-supported approach to sustainable land management, primarily for resource poor and disadvantaged communities
- More than R100 million has been invested in rural development projects, incentives and awareness campaigns
- DOA has created more than 8000 jobs



### The way forward - QM

- Finalise LUS map: Data to be used must be accurate! The global LUS map from FAO is available by about December 2007, but each country should use the input data they are comfortable with.
- Data collecting / capturing (provincial workshops)
- Analyse data – Soil Protection business plan (compile WOCAT / LADA DB)
- Determine mitigation options

- Assist with development of the QM – online viewer (ARCGIS server). South Africa has evaluated various systems, including open source. But still the ESRI tools perform best and offer many features.

#### 5.1.4 Using WOCAT/LADA QM to assess land degradation in Somalia

*Presentation by Jeremiah Lewis Njeru (njeru\_qm\_presentation.ppt; LADA-WOCAT Framework in Somaliland.pdf)*

SWALIM = Somalia Water and Land Information Management (see <http://www.faoswalim.org/>)

Study area = 12915 km<sup>2</sup> in north-west Somalia (part of Somaliland, which functions like a country).

##### **Somalia (some key words)**

- 3 regions: Somaliland, Puntland, Central & South Somalia
- Rainfall = 100 – 500 mm
- High livestock pressure
- Resources degradation due to charcoal exports
- Lot of soil erosion leading to increased area of badlands
- Good fruit yields (e.g. Papaya) if there is enough water

##### **Land degradation assessment process**

- LADA Land degradation process (DPSIR – Driving forces – Pressures – States – Impacts - Responses)
- Task force created in February 07 including Ministries, Agencies, NGOS
- Preparation of data (Land Use Systems, Soils, Land cover)
- 2 day rapid field assessment
- 3 day participatory workshop: 1 day training, 2 days data compilation (on paper)
- Compilation of data and mapping
- People were happy with the process and formed a task force to continue and to give feedback to the users
- Way forward ... implementation of projects

##### **Results**

- Main land degradation types: (1) Loss / change of vegetation, (2) Loss of top soil (water / wind), (3) Gully erosion, (4) Soil fertility decline, (5) Aridity increase, (6) Ground water level decline
- In the discussions the general aridity problem of the area was depreciated and the human-induced degradation problems rose.
- SWC responses: (1) Soil bunds, (2) Stone terraces, (3) Gully treatment, (4) Contour farming, (5) Sand storage dams, (6) River bank protection, (7) Tree planting, (8) Runoff check dams.
- The taskforce was surprised about the amount of already existing conservation measures.
- A combination of measures is needed within a watershed. Ditches are usually not done by pastoralists, but they saw the effect and adopted it.

##### **Some experiences**

- Needs sufficient time: 3 groups (5 people each) worked for 3 days and achieved 15 LUS – out of 38 LUS
- Indicators values: % score difficult to assess – better for enumerated values
- Need for local experiences: The more local experience the members had, the easier it was to carry out the assessment.
- Difficulties with large LUS: – may assess smaller areas and then aggregate later
- Overlapping degradation: Pre-assess, then assess i.e. list all degradation types, rank them, assess where they are combined and then assess them together
- Training and clear explanations needed
- Good printed input maps are useful: LUS and detailed legends, overlaid with soils, agro-ecology, topography, roads. Useful to separate plateau – mountains – coastal.
- WOCAT 4 page summary used to fill in one example.





*Crops are planted in the pits above the bunds. (Photo: Jeremiah Lewis Njeru)*

### Discussion

- If you have degradation maps available, you can include them. But often the QM assessment is more detailed.
- But it is also more subjective! -> Some degradation types cannot be seen from satellites, such as salinisation, crusting, vegetation degradation (species composition). SWALIM had done lot of analysis before they started to work with QM, but when they were in the field, they realized that QM is ideal, as it is participatory, but still based on other maps as input to enrich discussion.
- How was LUS map compiled in Somalia? They started with the FAO land cover map, did ground truthing in the field with GPS and asked farmers about cropping calendar, etc.

## 5.2 Mapping: group work results

### 5.2.1 Philippines

Generally, the steps indicated in QM are applicable to the Philippines, except that some modifications may be needed to suit local conditions / requirements.

Comment on step 2: How to estimate the increase / decrease of degradation and intensity of each land use system (if no secondary data available)? → going out and practically doing QM in the field will probably give us the answer.

### 5.2.2 Mongolia, China, Central Asia

1. Regarding the raster data, there is a risk to have different land use practices within one pixel. In this case how do you decide which land use exists there? How is the land use system selected?

-> This depends on the scale. Mapping always requires a generalisation process.

2. In Mongolia we have vast lands not used, but degrading. How can this be reflected in the WOCAT map? For instance protected area with high degradation but no technology inside?

-> WOCAT provides a conservation measure called 'management measure' which can be used for area protection, for example. WOCAT considers this as conservation technology.

3. The technologies and approaches we trying to map can occupy areas of 10-100 ha which theoretically and practically cannot be reliably reflected in such raster maps. How to manage that?

-> Stakeholders are often thinking of small areas and have difficulties in upgrading them. But it is also a matter of fact that some conservation measures only appear on small green spots, so this should be reflected in the map by their respective percentage.

4. Overlaying land use and administrative unit map is somehow not practical. The reasons are: 1) each administrative unit can have hills, mountains, plains, rivers; 2) over the unit the different land use practices can appear in similar environmental regions; 3) reflecting only administrative unit and land use pattern the map is useless in planning and/or decision support. It would be useful to overlay land use system map and physiographic regionalization map.

-> We had many discussions regarding this issue. For catchment level this might be true, but not for the national level. It is always a question of scale and the aim to be achieved by the exercise. Physiographic units can also have a great variety (e.g. an extensive plateau or a long mountain ridge). One could also create some additional detailed QM maps together with a national map.

5. Has FAO finished the global land cover map? The accuracy of the map is still not sufficient to use it for such purposes?

-> FAO is planning to finalize the new version of Global Land cover map by 2008. There are some countries who developed own classification systems and at this stage we recommend to use the own one.

6. Why not to use Land Cover rather than only Land Use System?

-> The aim was to identify layers which have an influence on degradation and conservation.

### 5.2.3 ICIMOD countries

Why to review 10 years changes? -> This is based on expert opinion and WOCAT thinks that 10 years is a manageable period for an expert.

The QM methodology is appreciated as being a participatory tool, but still using hard data as much as possible.

The group requests to share the process document from the Somalia and South Africa experiences, which they find very useful: What is the level of co-ordination between different organisations? What are the costs involved? Is there a national recognition of the taskforce? Is there any policy influence due to QM? -> Njeru promised to share the Somalia experience as a paper.

Some explanations would be needed regarding the ecosystem services (resource book).

A help menu for the on-line data entry is requested -> will be done

## 5.3 WOCAT in Google Earth

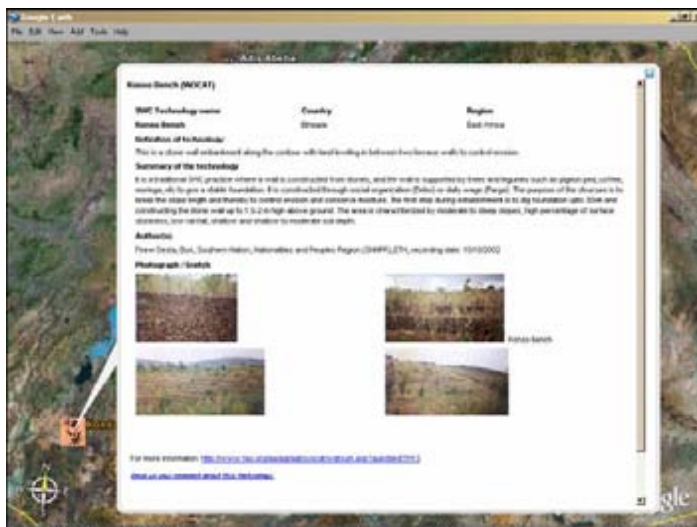
*Presentation by Godert van Lynden (WOCAT map GE.pdf; WOCAT-GE 1-11-07.kmz)*

Beside the polygon map showing the distribution and effectiveness of SWC over a designated area (QM), WOCAT has developed a global map using Google Earth, showing the location of documented SWC case studies in the WOCAT database.

All the WOCAT technologies and approaches were entered into a so-called .kmz file of Google Earth, which can be shared through the WOCAT website or even with the global Google Earth community. The WWSM participants agree to share it with the global community. See <http://www.wocat.org/GoogleEarth.asp>.

New entries can be sent with a .kmz file to WOCAT.

The Satellite images on which Google Earth is based are always as recent as possible.



# TOPIC 6 WOCAT ONLINE DATABASES

Rapporteur: Carin Pretorius

## 6.1 Online address database

Presentation by Wolfgang Prante

The new online address database is 95% completed and serves as an authentication system as well as address database. Only people registered in this database can log in to the overall WOCAT on-line system, i.e. this is also needed to work with the future QM, QT, and QA databases. Uploading and data update should be under control and therefore restricted to the WOCAT network members.

URL: <http://cdewocat.unibe.ch/wocatonline/user/login.php>

Login requires:

- Email address = Username
- Password (first password will be emailed to user, thereafter the user can change it)

System function:

- Log in (administrator or user levels)
- View your personal information
- Edit personal information and password
- Request an email when the password has been lost
- After update the user will return to the View page
- Logged in users can also search for other members and view their information
- New users can register using system

Administrators can also:

- See list of active members
- Add new user
- Use a bulk email (group mail through WOCAT L)
- Manage users
- Configure system

As soon as the system development is completed all users will receive an email with their login details (username & password). Information for the on-line database was taken from the off-line database therefore all entries need to be checked and updated.

Although the address database is a public good, an outsider to WOCAT will not be able to see the address of registered persons for keeping 'privacy' and as a protection against spam.

The screenshot shows the WOCAT online address database registration interface. At the top, there is a header with the WOCAT logo and the text 'World Overview of Conservation Approaches and Technologies'. Below this, the main content area is divided into a sidebar on the left and a main registration form on the right. The sidebar contains a 'Personal Database' section with links to 'User List', 'Register for an Account', and 'Forgot Password'. The main form is titled 'Personal Database' and includes a 'Register' button. Below the button, there is a message: 'To register, please fill in the required fields below. Please note, fields in **bold** are required. Before filling in a field, it is advised that you move your mouse over the blue question mark for an explanation of what is required in that field. This will prevent errors and make the registration process easier.' The form fields are: Title (with a dropdown menu showing 'Mr.' and 'Mrs.'), First Name, Last Name, Institution, Position, Department, Member Status (with a dropdown menu showing 'Participating institution', 'Potential participating institution', and 'Contributing specialist (national level only)'), Language (with a dropdown menu showing 'English' and 'Español'), and Address. Each field has a blue question mark icon next to it.

With the new online database the questionnaires can be filled online, but this can become very costly in case of telephone connections with payment per minute. Therefore, a USB stick will be provided for offline documentation. Once connected after completion and verification then the documented questionnaires/case studies can be uploaded quickly on the online database.

A special e-mail account will be installed for reporting bugs and problems with the database.

A general question was raised on who is really using the current database and for what, and who is using the WOCAT website. A quick survey was done and the results are summarized as follows:

- Use of the website: 21 out of 24 are using the WOCAT website, mainly browsing and downloading of information (e.g. collaborating institutions), products (e.g. proceedings), tools, news and to check recent updates. Some participants use the website as an aid to prepare training sessions, presentations and research proposals for undergraduate and graduate students.
- Use of database: 12 out of 25 are using the WOCAT databases, mainly to fill in data, but also for searching for technologies and approaches, identify options for recommendations, disseminate SWC, etc.

## 6.2 WOCAT's new visual identity

*Presentation by Wolfgang Prante*

With the development of the online database the need for a 'face-lifting' of WOCAT's visual identity became obvious. The different colours for QT (green), QA (red), QM (yellow) should also be visible on the website; consistency of colours should be maintained for the new database system. The new visual identity was presented (see address database above).

The question of with or without the WOCAT cat cartoon came up. The general feedback of the participants was that it looks more professional without the cat, at least on the website. A professional website is very important, especially the first glance of a site. However, it was suggested to leave the cat in the questionnaires, there it serves as an animation and a funny distraction. A vote for or against the WO - cat on the website among the participants gave a result of 9 for keeping the WO – cat and 10 against.

Various and different opinions about the new WOCAT visual identity were expressed. It was suggested to send further suggestions per e-mail.



*Wolfgang Prante initiating the discussion around WOCAT's new visual identity and showing it on-line connected directly with the CDE server in Berne (Photos Hanspeter Liniger)*

# TOPIC 7 SPECIAL NATIONAL / REGIONAL PRESENTATIONS

*Rapporteur: Sanjeev Bhuchar*

## 7.1.1 WOCAT tools and its utility in watershed programmes in India: Orissa experience

*Presentation by Niranjana Sahu (WOCAT tools and its utility in WD in India.ppt)*

### Introduction

Watershed programmes in Orissa (one of the Indian states) were initially interstate river valley projects focusing mainly on silt detention. The programmes later started addressing water management and conservation needs in drought prone areas and looked at productivity enhancement/stabilization issues. The newest generation focuses on livelihoods security and poverty reduction and serves as platform for rural development.

In Orissa watershed projects are implemented at micro-watershed levels. Each micro-watershed has an area of about 500 ha. Micro-watershed plans include social and human dimensions and are implemented by Watershed Associations. Each watershed project is of 5 years duration and one micro watershed project has an outlay of USD 60,000. The main objectives of watershed projects in Orissa are: 1) improve soil and moisture regime; 2) water resource development; improved production and productivity of land; and 3) providing sustainable livelihoods to the poor and vulnerable. There are three components, namely livelihoods improvement; capacity building and enabling environment.

### Utility of WOCAT

From community perspective, the project finds WOCAT useful for:

- selection and implementation of technologies with community;
- ensuring that the equity and acceptance issues are addressed;
- ensuring greater ownership of the technology by the communities;
- understanding how a technology is adopted and how and who are impacted by the technology;
- getting information on cost effectiveness; and
- gaining users' perspective.

From a SWC professional point, WOCAT tools and methods are useful for:

- getting comprehensive documentation and analyses of Ts and As;
- sensitization of the project toward community needs;
- reviews/studies/impact assessment;
- redefining strategies and approaches.

Overall, use of WOCAT tools and methods in the project has:

- increased community participation;
- helped in integrating livelihood components to the SWC interventions;
- helped in effective investments on the technology;
- led to identification and predefining of approach for a specific technology;
- strengthened monitoring and evaluation system; and
- enabled better decision making.

### Comments and discussion

- What was the approach of using WOCAT for the benefit of the communities and professionals and how were decisions influenced? Sahu gave two examples: one relating to the traditional field bunds and introduced contour bunds. The farmers did not like the latter but by analysing these two through WOCAT



methods it was possible to combine the two technologies. The second example was about the use of WOCAT tools in developing project guidelines for including the landless in the watershed project.

- Why have other programmes in India not been influenced by WOCAT? Sahu clarified that the project was only 3 years old and that the lessons learned would be shared and hopefully in future be incorporated at national level as well.

### 7.1.2 Functioning of Student's Forum of WASWC in WOCAT - 2007

*Presentation by Miodrag Zlatic (Zlatic - Special presentation.ppt)*

#### Introduction

WASWC (World Association of Soil and Water Conservation), of which Dr. Miodrag Zlatic is the President, has introduced a new unit named as the Student Forum of WASWC. The first Student Forum has been formed at the Ecological Engineering in Soil and Water Resources Protection (Faculty of Forestry, Belgrade University, Serbia). This forum is involved in training and education, collecting data and entering data using WOCAT. The importance of involving youngsters in WOCAT and WASWC, as they are our future experts who could continue this work, was emphasised.

The presentation gave examples of how the Student Forum was using WOCAT in terrain research, getting in connection with local communities and trying to understand their land use and land management practices (e.g. contour planting and crop rotation using maize – potatoes – grasses system). WOCAT is considered as a good decision support system for communities. The students were also learning to enter data in the WOCAT database and were learning to enter and operate mapping tools. The mapping of six communities/districts was completed using community units for QM. Furthermore, 160 communities in Serbia had filled 33 Qs; some needed updating. The students were furthermore working on WOCAT in a qualitative sense: e.g. in using data for community units from local statistics for the period of 10 years for land use types and for degradation by converting method of Gavrilovic into WOCAT.

#### Key features

The student's main interests in the Student Forum of WASWC are:

- to collect data for diploma work;
- undertake Master's and Ph.D. work;
- experience high feeling for work/practice in WASWC

Presently the WASWC Student Forum exists only at the Belgrade University. In future it will be expanded in other Balkan countries - in Macedonia at Skopje University (establishing); in Turkey at Istanbul University (in perspective).

#### Comments and discussion

- Any plans to move to the proposed Land Use Systems for mapping? Miodrag considers mapping at community level easier as it is easier to collect data at smaller scale.
- The concept of engaging students was supported, as it would help in identifying new issues in Sustainable Land Management.
- It was suggested that a document with concrete examples on how WOCAT can be used in research and education should be prepared so that students and teachers understand how they can be involved in WOCAT. All research/education activities should be put into proceedings of next year.
- It was suggested to give recognition/fellowships or even awards to students who have used WOCAT and to list the PhD and Master thesis on the WOCAT website. There are two possible options – 1) provide financial support to students 2) To sponsor their attendance in WOCAT annual workshops (as an award). Many theses can already be found on the WOCAT website (see <http://www.wocat.org/books.asp#theses>).

### 7.1.3 Natural Resource Management in Kyrgyzstan

*Presentation by Aida Gareeva (CAMP Alatoo.ppt)*

#### Introduction

CAMP Alatoo is a non-profit and non-governmental organization founded in 2005 promoting sustainable development in the mountain regions of Kyrgyzstan. CAMP Alatoo is a successor of the Central Asian

Mountain Partnership (CAMP) Programme, financed by the Swiss Agency for Development and Cooperation (SDC). Jointly with its partner organizations in Kazakhstan and Tajikistan, CAMP Alatoo forms part of the CAMP network which employs about 25 people. The overall goal is to contribute to the improvement of people's livelihoods in the mountain villages of Kyrgyzstan by encouraging a more sustainable use of natural resources through the development, adaptation and use of the world and local practical experience.

The main activities of CAMP Alatoo include organising 'Learning for Sustainability' workshops on sustainable resource use, documentation and dissemination of water and soil conservation technologies (WSCT) and approaches, promotion of sustainable pasture management and introduction of energy saving activities. WSCT and approaches activities comprise the steps of data collection, documentation and dissemination to achieve sustainable natural resource management. Since 2003, more than 100 WSC technologies have been documented and translated from Russian into Kyrgyz, Tajik and English languages. WOCAT tools and methods are used in all these aspects. Approximately 40 technologies are implemented each year through CAMP and partners.

### **Dissemination activities**

Dissemination activities in CAMP Alatoo comprise awareness building activities (e.g. Learning for Sustainability Workshops on WSCT; organizing exhibitions, round table discussions, video shows through partners namely Rural Advisory Service (RAS) in 7 regions, Kyrgyz Agrarian University (KAU), Territorial Public self-governance (TPS). Monitoring and evaluation is done at two levels – i) local level in which local commission for monitoring and control in a village meeting is created; ii) Environmental impact monitoring and evaluation which is participatory involving RAS, farmers and specialists; working at village/watershed level and through interdisciplinary teams at the programme level.

The programme has adopted an interesting approach to sensitizing and training local communities. They call the workshops as "Learning for Sustainability - Sustainable Pasture Management". These are of 3-4 days workshops in which pasture management concepts and fodder production technologies are introduced and farmers to farmer exchange organised. Participants also play simulation games for pasture improvement. CAMP Alatoo has more than 7 donors and partners, including SDC, GTZ, CDE, CAMP, TPSs, village level based NGO's and local self government bodies.

### **Comments and discussion**

- Process of documentation of 100 Ts started in 2003. CAMP has its own questionnaire and they are presenting one technology on one page in an A0 size poster form. Findings are presented in farmer's language. Each year 15 Ts are collected.
- Cost of collection of 15 Ts is 3000 Euro and the bigger part is spent on collection and documentation.
- WOCAT recognizes the need for documenting more pasture management technologies and approaches from across the globe.
- WOCAT should always be mentioned as partner and it is hoped that such programmes will try to adhere to a uniform method for data management.
- Criteria for terming SWC technologies was discussed as some technologies are harmful for SWC but good otherwise. Aida told that for CAMP the main criterion was that the technology should be environment friendly.

## **7.1.4 Developing tropical forest resources through community-based forest management (CBFM): the Nueva Vizcaya, Philippines experience**

*Presentation by Jesus Javier (PHILIPPINES\_CBFM.ppt, SUMMARY OF PHILIPPINES PRESENTATION.doc)*

### **Introduction**

Mr. Jesus Javier of the Philippines Department of Environment and Natural Resources – Forest Management Bureau presented "Developing Tropical Forest Resources Through Community-Based Forest Management (CBFM): The Nueva Vizcaya, Philippines Experience". In his introduction, Mr. Javier briefed on the land resources of the Philippines citing that the country has 15.8M ha of forestlands out of the 30M ha total area of the country, and the forest cover changed thru time, with a current figure of 7.2M hectares or 25% of the total land area. The country has important river basins/watersheds and the government adopts community-based forest management as a national strategy for sustainable forest management.

The project lies between 121°2' and 121°6' east longitude; and between 16°26' 30" and 16°29' north latitude. It covers 3,000 hectares of state owned land located in Nueva Vizcaya. It is within the headwaters of the Upper Magat and Cagayan River Basin in North-eastern Luzon which is the source of water supply for

irrigation and hydropower generation. The main objective of the International Tropical Timber Organisation (ITTO) - assisted project (five year: 1998 – 2002) was to improve the productivity of degraded and regenerating forest land thru community-based forest management. The components included among others the following: a) community organizing; b) information, education, and communication, c) training; d) land tenure and resource access; e) research and plantation development; f) enterprise development assistance; g) agroforestry development (using soil and water conservation technologies like Natural Vegetation Strips and terracing); and h) Infrastructure development.

### Results and achievements

In terms of results and achievements, the project has accomplished the following: experimental plantations established, 100 hectares of new plantations established; planting of Rattan (*Calamus* sp.) within 100 ha regenerating natural forest, 1,300 ha of grassland and brush lands placed under management and federation of CBFM Peoples' Organizations.

In the main, the project impacts were summarized as follows: a) increased forest cover and improved microclimate, b) maintained natural and regenerating forest and improved biodiversity, c) participation of larger community in forest protection, plantation management and agroforestry, d) ability of Federation to network for assistance, e) collaboration among local project partners, f) transfer of learning through site-cross-visit and practicum, and g) secured land tenure and availability of livelihood support.

In closing, the Philippines mentioned that there are other potential initiatives like "Conservation Farming Village (CFV) – A Modality for Farming Technologies Transfer" and the "Sustainable Vegetable Terrace Farming in the Highland Northern Philippines: A Documentation", which were identified as additional inputs for WOCAT.

### Comments and discussion

What is the implementation procedure of CBFM? Javier explained that in the Philippines seven institutions are partners in the CBFM. The forest is handed over to the communities for 25 years which is renewable for another 25 years. Communities prepare their plans and in them there is provision for involvement of academicians for research purpose and implementation of other non-forestry programmes, e.g. medical assistance, to be integrated. The programmes use quality seeds and good soil amelioration methods, e.g. use of bio fertilisers.

## 7.1.5 Developing Appropriate Technologies to Address Poverty Reduction and Sustainable Development in Karst Landscapes: The SWCF Experience

*Presentation by William G. Granert (Executive Director Soil and Water Conservation Foundation; SWCF) (SWCF\_Experience\_Philippines.ppt)*

### Introduction

Karst is a terrain characterized by landforms and drainage systems developed due to the greater solubility of certain kinds of rocks (notably carbonate rocks such as limestone, dolomite or magnesite). The term karst comes from the name "kras" from part of the karst terrain of Slovenia in Eastern Europe. It is best known for its underground drainage systems or solutional cave systems. Surface features include: sculptured rock surfaces (karrens), blind valleys, sink holes, sinking streams and springs. The advantages of Karst systems are:

- Major source of water resources
- Building materials for roads, churches
- Biodiversity richness
- Historical cultural records (caves)
- Good soils

The general Karst map of Bohol was shown and major source of income for the people presented. These included eco-tourism activities (recreation, aesthetic value), logging, mining, quarrying, wildlife collection, food sources, fuel, medicines, clothing and shelter, gene bank for endemic species, and pasturing livestock. Some of the examples of Karst landscapes in Bohol are the Chocolate Hills (which were all forested in the 19<sup>th</sup> century!), Taytay Duero, San Isidro (Sierra Bullones). The Chocolate Hills are disappearing because fire is being used as a management tool. Karst soils in Bohol are good but shallow with rock exposures.



### Soil and water conservation options

Appropriate Soil and Water Conservation technologies and approaches of SWCF were also presented and they are:

- 1) Forest restoration using Assisted Natural Regeneration (ANR)
- 2) Forest restoration using 'Rainforestation'
- 3) Natural Resource Management at Farm Level: This includes potable water development and livestock management (goat). Farmers acquired better learning skills through various trainings that employed 80% practical experience in goat and pasture management. Trainings increased farmer's self-esteem and confidence to implement the technologies taught and brings about change. Trained farmer instructors cited that a semi-confinement system of housing goats proved better than total confinement especially during the rainy season. Cross-visits to see improved pasture grasses motivated farmers' interest in planting more forage crops to supply the goat's feed requirements. Furthermore:
  - integrating livestock in the farming system proved a better and effective strategy to promote organic farming in the area;
  - the use of leguminous tree crops as hedgerow materials in contour lines not only reduced soil erosion but also provided ample feed supply for livestock;
  - improved goat and pasture management practices were brought about by better linkages with researchers and government institutions;
  - there were improved goat health management practices due to well-trained and well equipped farmer livestock technicians at the barangay level.
  - the other technologies are Organic Farming, System of Rice Intensification, Agroforestry, Testing Native Rice Seed Varieties.
- 4) Natural Resource Management – Farm Level Soil Conservation: The technologies are A-Frame Transit, Contour hedgerows, Contour rock walls, Check Dams, Drainage systems, Contour canals, Terracing
- 5) Farmer based extension system
- 6) Forest Restoration- Dipterocarp Tree Conservation
- 7) Environmental Awareness (IEC) – Bat Conservation
- 8) Environmental Awareness – Cave Management
- 9) Environmental Awareness – Biodiversity Inventories
- 10) Community Level Biodiversity Monitoring System

### Ten ethical principles

SWCF lays emphasis on the importance of addressing the ethical basis for decision making, especially by those in power. According to SWCF, the ten ethical principles underpinning sustainability are:

- a) Intergenerational justice and the chain of obligation.
- b) Distributional equity
- c) The precautionary principle
- d) The reversibility principle
- e) The polluter pays principle
- f) Protecting the vulnerable
- g) Rights of the non-human world
- h) Respect for nature
- i) Development of the land ethic
- j) Sustainable decision-making versus once-off decision-making

## 7.1.6 The role of African LandCare Network in promoting WOCAT activities

*Presentation by R. Lydia Bosoga (ROLE OF ALN IN WOCAT.ppt)*

### Introduction

Since 1997, the National Government has been working together with the provincial to strengthen implementation of LandCare Programme in South Africa (SA). For SA, launching of the program was propitious due to political and government system changes after the apartheid regime. The constitution

places emphasis on the need for community participation. South Africa had concerns regarding the visible degradation of the agricultural base and saw the need to involve the community hence LandCare.

Why LandCare: 13% of land in SA is arable. Of this 13% only 3% may be regarded as high potential land for agricultural production. 7% is depreciating due to erosion, overgrazing, alien plant infestation and nutritional deficiencies. Millions of children under the age of six years are stunted due to chronic malnutrition. The goal of LandCare is to optimize productivity and sustainable use of natural resources. The organizational structure of LandCare is participatory in nature and represents both communities and government interests.

There also exists an African LandCare network which is linked to the international committee. The objectives of this network are to deliver MDGs; promote LandCare approach and address regional issues. In the LandCare approach the most important element in SLM is when people have knowledge on how to manage the resource. It is significant because it involves mind set-up: knowledge based peer learning allows land users to make informed decisions. It is a form of securing future. For LandCare, WOCAT research that involves people will bring greater results and benefits.

ALN activities include, though not limited to, the following:

- Regional LandCare Awards
- Junior LandCare programme
- Facilitating National Institutional development
- Hosting the annual strategic planning meeting
- Study tours/ cross visits facilitating peer learning

### WOCAT and ALN

Purposes of the ALN in relation to WOCAT include:

- Collection of success stories (moving from red to green areas)
- Sharing of best practices
- Interactive learning (youth are also involved)
- Promotion of best practices

In conclusion, ALN expects that their collaboration with WOCAT will enhance communities' livelihoods through available technologies thereby providing economic savings. For more information please visit <http://www.agis.agric.za/agisweb/landcare>



*Presenters of the special national / regional contributions in order (Photos Hanspeter Liniger)*

# TOPIC 8 WOCAT AS TOOL FOR DECISION SUPPORT

*Rapporteur: Rima Mekdaschi Studer*

## 8.1 Development of decision support tools for DESIRE and WOCAT

### 8.1.1 EU-Project DESIRE

*Presentation by Gudrun Schwilch (DesireIntro.ppt)*

#### **Desertification Mitigation and remediation of land – a global approach for local solutions**

The DESIRE project aims to establish promising alternative land use and management conservation strategies in sixteen degradation and desertification hotspots in the Mediterranean and around the world, based on a close collaboration of scientists with local stakeholder groups. WOCAT plays an important role in working block 1, where it is intended to apply the WOCAT mapping methodology, and in working block 3, where QT and QA are used to document 3-5 strategies in each study sites and where a decision support tool will be developed and applied. See also <http://www.desire-project.eu/>. Alterra (Wageningen University and Research Centre (WUR), The Netherlands) is the principal coordinator of the programme which includes 26 partner institutions. Working block 1 is coordinated by ISRIC and working block 3 is coordinated by CDE.

#### **Working block 3: Defining promising prevention and remediation strategies**

The general aim of WB3 is to identify, evaluate, document and share existing and potential SLM strategies and to select and negotiate promising measures for test implementation. WB3 is developing methodologies and providing training in order to allow each study site to fulfil the following 3 objectives:

1. To identify existing and potential strategies with a participatory learning approach (stakeholder workshop 1)
2. To evaluate, document and share strategies with the WOCAT tools
3. To select most promising strategies with a decision support tool (stakeholder workshop 2)

The WB3 methodology is based on already existing methodologies, developed by CDE, namely:

1. WOCAT framework for the documentation and evaluation of SLM technologies and approaches (questionnaires and databases)
2. Learning for Sustainability (LforS) approach (see [http://www.cde.unibe.ch/Tools/ALS\\_Ts.asp](http://www.cde.unibe.ch/Tools/ALS_Ts.asp))

These methodologies needed to be combined, further developed and specifically focused on the DESIRE objectives, before they could be used for the WB3 work packages.

In DESIRE existing strategies as well as potential strategies (identified by land users and experts in stakeholder workshop 1) are documented with the help of the WOCAT questionnaires and a simple documentation format for potential options.

#### **WB3 methodological material**

- Guidelines for stakeholder workshop 1, including background information about the learning approach, invitation of stakeholders, detailed description of exercises, didactic guidance, thematic sheets on various issues and a template for the workshop report
- Guidelines for assessment of solutions, explaining to the study site facilitators how to use the WOCAT questionnaires and databases and how to assure quality of the data.
- WOCAT questionnaires and databases, including an additional format for potential strategies
- Guidelines for the second stakeholder workshop and the decision support tool are currently being developed!

## 8.1.2 First draft of a decision support tool for DESIRE/WOCAT

*Presentation by Gudrun Schwilch (DecisionSupport.ppt)*

### **Concept:**

- 2-days workshop with stakeholders
- Prepared and lead by trained specialists
- Guidelines for steps to conduct before and during workshop
- Tools for each step

### **Workshop introduction**

- Present and discuss result from stakeholder workshop
- To prepare common ground of knowledge and to refresh memories.
- To reflect about problems (with causes and impacts) and solutions discussed in stakeholder workshop 1 and to identify still existing unsolved problems -> to get aware about what / where to look for 'new / external' solutions
- To reflect about the objectives defined for the strategy development: are they still the main objectives?
- Define objectives (e.g. 'reduction of runoff') (1-3)

### **Step 1: definition of options**

Based on 'search by criteria' - form of WOCAT databases, but improved to facilitate search for potential technologies and approaches by leading through a series of key questions to limit the selection of option to 5-10. The pre-selection of these option needs to be done before the stakeholder workshop and all 3-10 viable options need to be prepared for presentation: translate and print posters (= 2 page format) and playing cards (= 1 image and a few key info). These options are presented to stakeholders to make sure everybody understands them fully. First reactions are discussed and first adaptations are made, if needed.

### **Step 2: Identification of criteria**

From here the steps of an existing software are followed, which needs to be adapted for WOCAT/DESIRE use: 'Facilitator' (developed in Australia)

Criteria to evaluate options are defined with the help of a brainstorming during stakeholder group work. These include for example:

- Social criteria: effects on people, acceptance
- Environmental: effectiveness at addressing the objective, sustainability
- Economic: costs, productivity, labour

The criteria should reflect the most important qualities which the options should have and are possibly based on the evaluation list in QT section 3.1.

The score (e.g. 1 to 10) as well as the interpretation (e.g. 'the more the better') are defined for each criteria.

### **Step 3: Scoring options**

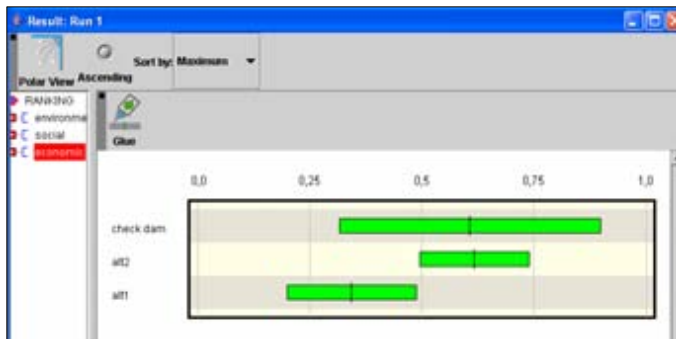
During a game-like exercise the stakeholders are asked to score all options against all criteria. They look at one criterion at a time and score all options against this criterion. Sometimes additional info is needed (e.g. expected yield increase) which can be obtained from an info desk (with access to WOCAT database). Some supplementary info is prepared by experts (e.g. what would a certain technology cost in this local area?). All scores will then be entered into the software.

### **Step 4: Ranking criteria**

Criteria are organised and ranked with big paper on wall and criteria cards. They are grouped into environmental, economic, social criteria. Each criterion is then ranked under each group according importance, which will assign weights to the criteria. Those equally important are put on same level.

### **Step 5: Analysis**

After running the analysis, the software produces graphs of options, which give a visual representation of their relative merits.



*Analysis graph of software 'facilitator', displaying the merits of the various options.*

### Step 6: Decision making

The result of the analysis is discussed and improved, if necessary. The whole process is iterative, i.e. it is needed to revisit criteria, options, scores and rankings several times before everybody is happy with the decision. The group will then start negotiating the best option and tries to find final agreement. Those options which score well socially, economically and environmentally are most probably to best options.

### Discussions and comments:

A number of decision support tools are available and a thorough survey and research about the suitability of existing software was done. "Facilitator" is one of them which can be used in a very participative manner with stakeholders. However, it still needs further development and adaptation to our needs. DESIRE will develop the basic version and then within WOCAT this tool will be further developed.

What about the already existing WOCAT data analysis with its option to compare the technologies according to assessment indicators? The suggested DS tool depends on the software "Facilitator" which seems complicated, is a process always involving stakeholders, uses games etc. → Stakeholders have no problem to work with the complexity if they know that the outcome is for their good, therefore it is not really necessary to go for simplicity. Further the success of using software with stakeholders depends on the size of the group, the amount and quality of additional information available and the level of literacy. Variety of stakeholders is a great challenge but also an opportunity. The suggested software is embedded into a workshop, where it can be applied directly or indirectly, depending on the literacy level.

A suggestion came to use a DS tool at two levels. One level is the experts who collect the needed information, do the analysis by using the software and identify the technology. The other level is the land users for whom a simpler 'decision making tool' need to be developed.

The DS tool under development is intended to become a stand alone tool not linked to a specific database.

Is this software for one technology or is a combination of technologies also possible? → There should be the option to combine technologies and do adaptations according to the given situation. Flexibility should be inbuilt.

DS tool in Mapping might be also important → In the suitability mapping for Ethiopia such a tool could be used to give recommendations.

## 8.2 Group work on decision support tool

### Tasks:

1 group on improvement of search for options: Define key questions (tree).

4 groups on evaluating and scoring options (with software Facilitator): Each group with a moderator and several stakeholders. Try out software on laptop, test feasibility of method and develop ideas for further development.

### 8.2.1 Group 1: Definition of key questions

**Team members:** Godert, Daniel, Yuji, Rima, Abdybek, Jesse  
Improvement of search for options: Define key questions (tree)

The WOCAT database has a 'search by criteria' form which allows searching for technologies (and approaches) based on selected criteria. A possibility of a data analysis through comparison of the technologies according to assessment indicators also already exists in the present WOCAT database. But there is no feature with which options can be scored and decision making can be supported within a group.

The current query ('search by criteria' form) as it is now is OK.

Key questions should be created and should come from the workshop participants: Find the gap and priorities of the stakeholders, define the criteria of the different stakeholders, find the key problems that need solving.

Scaling down of the criteria: in form of a tree with an entry point and branches:

1. agro-climatic zones
2. socio-economic environment
3. type of land degradation / problem
4. climate
5. landuse

There is a ranking algorithm needed with which the order can be changed. The criteria should not limit the search too much.

Instead of comparing all the database case study options, compare per country / a specific area or per list of selected case studies after going through the assessment or looking for options. Search for a basket of options. These options always need to be adapted to the new environment!

## 8.2.2 Group 2: Testing Facilitator

**Team members:** Mandakh (Mongolia), Zaya (Mongolia), Kisha (Bangladesh), Mawussi (Togo), Christine (Switzerland), Isabelle (Switzerland)

Assigned task for group exercise:

Facilitator: Isabelle

Landuser: Mandakh, Kisha

Small scale farmer: Christine

Large scale farmer: Mawussi

Hydrologist: Sahu

Community leader: Zaya

Environmental setting:

- Hilly region which has erosion problems (water erosion) / landslides
- Crop land: rice, maize, corn
- Climate zone: tropical, sub-tropical

Selected Technologies:

- Conservation terraces
- Soil cover
- Vegetative strip
- Contour hedgerows (legumes)

Selected criteria:

- Cost (economic)
- Increase crop yield (economic)
- Reduce runoff (environment)
- Acceptance by land users (social)

The result of the programme run is:

- In general: 1) soil cover, 2) vegetative strip, 3) contour hedgerows, 4) conservation terraces
- Social: 1) soil cover
- Economic: 1) soil cover and vegetative strips
- Environment: 1) cons. Terraces, 2) soil cover

**General comments of the group:**

- Software is a good tool and easy to understand
- However, the results of the analysis have to be carefully assessed. There is the risk to get a professional bias and influence in the result.
- Tool not appropriate if knowledge is limited.

- There is a limitation in the programme based on the quality of information you put in: quality of input -> quality of output
- More criteria are required in order to get better results
- After the selection of the technologies there has to be a field testing

### 8.2.3 Group 3: Testing Facilitator

**Team members:** Carin, Rinda, Dirk, Nada, Miodrag, Wolfgang

Issue	Recommendation/concern
QT & QA - Database	Database need to be expanded to support a functional decision support system
Software	Open-source software normally contain bugs/specific requirements for running (Java), limited support
Existing QT & QA analysis	Investigate to include advanced analysis (dec. sup.) in existing database – include criteria selection, scoring and weighting options – not use additional software
Development of the system	SA is developing an index to assist with the prioritisation of areas in QM – will assist Gudrun with development

The group struggled with the software. When more than 3 criteria were added the system froze. It seems the version plays a role. There are errors in the software.

The principle of the DSS is excellent. Analysis part of QT already takes you halfway in the decision support process. Expanding the data in the database is a necessity. We do not want to tell people what is best but take them only one step further.

Recommendation: Do not use new software but develop QT data analysis system further.

### 8.2.4 Group 4: Testing Facilitator

**Team members:** Lydia, Scott, Njeru, Ikponke, Aida, Chang

Points of consideration	Recommendation
1. Assumption that land user already know about the problem	Ensure that workshop is introduced at the relevant stage where land users are looking for solutions
2.1 Level of making use of the tool <ul style="list-style-type: none"> <li>• National - use with caution</li> <li>• Local - relevant</li> </ul> 2.2 Mechanism of implementation	<ul style="list-style-type: none"> <li>• only suggestions could be made</li> <li>• specific decision can be made</li> <li>• consider experimentation at local level</li> <li>• use of local forum</li> </ul>
3. Time frame	<ul style="list-style-type: none"> <li>• ensure that land users understand SLM – initial workshop will require more time – participants need to be clear of why making a decision</li> <li>• understanding of a technology at a time</li> </ul>

Testing of software was done with grass strips and soil bunds as options, costs and acceptability as criteria. Economic and social criteria are very important in the ranking.

The tool can be used at any level, but one has to think at which level it is most useful (see point 2.1 above).

### 8.2.5 Group 5: Testing Facilitator

**Team members:** PHILCAT members

The group struggled first. The tool is not convenient in the field since it is computer based.

If the technology is unknown or not well known beforehand, the whole scoring exercise will be problematic. There is no previous experience on how the technology will perform in the field.

On the other hand the whole exercise should remain as participative as possible in order to diminish the bias and influence of professionals.

It is important to increase and populate the database as much as possible.





Group discussions and taskforce activity planning (Photos Hanspeter Liniger, Gudrun Schwilch and Isabelle Providoli)





# TOPIC 9 ACTIVITY PLANS FOR NEXT YEAR

*Rapporteur: Rima Mekdaschi Studer*

## 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 Bangladesh

The activities planned for 2008 will be discussed within the BANCAT working group (CHTB, SRDI, BFRI, IFESCU) before implementation. Roughly the activities will comprise:

If funds are available (4500 \$) HIMCAT is planning to document and evaluate conservation approaches and technologies (CATs) from different agro-ecological zones. Bangladesh has 29 agro-ecological zones until now only one was documented.

Popularisation of WOCAT tools: presentation of WOCAT tools and methodology at Universities e.g. of Chittagong, Dhaka and Shahjalal.

Awareness raising: participation in different training workshops and seminars to raise awareness on how to use WOCAT tools for data collection, evaluation, monitoring and dissemination.

BANCAT management: BANCAT website regularly updated. The national overview book will be put on the website.

### 9.1.2 China – SWCMC

Training Program and Questionnaire

- Hold several training programs in Beijing, introduce:
  - the history, scope and way of the working of WOCAT;
  - the knowledge of questionnaires and the methods to fill in;
  - how to make use of WOCAT database.
- Hold a farmer's field school in Beijing outskirts, to spread techniques and methods combating soil erosion and non-spot pollution.
- Do questionnaire by use of training course.

Work in Seabuckthorn

- Seabuckthorn has showed its strengths combating soil erosion in Pisha rocky region; we are going to plant 0.03km<sup>2</sup>.
- Hold five training programs to spread planting knowledge and technique of Seabuckthorn.

We are going to:

- Establish a SWC Database
- Develop a monitoring technique and method
- Do mapping
- Make use of decision support tool

Experience

- Excellent coordinating organization
- Professional staff
- High-level experts from home and abroad.
- Sufficient finance and policy support
- Widely cooperate with other relevant projects

### Suggestions

- Enhance links between WOCAT and Chinese eco-strategy
- Establish relationship between SWC and other relevant fields
- Create more chances among experts from home and abroad
- Encourage innovation and update the database
- Hold Annual International Workshop in the near future
- Widely cooperate with other relevant projects

### 9.1.3 ICIMOD

The HIMCAT extranet will be continued and further activated and new information about HIMCAT countries will be included on the website. The publishing of two HIMCAT newsletters per year (in spring and autumn) will be further continued. Hopefully we will be able to get more contributions from the members who are at present very passive and information on HIMCAT countries will be included. We will try to moderate the site a little bit more.

The published 30 NEPCAT fact sheets by SSMP Nepal and ICIMOD will be promoted through a promotion event in Kathmandu. We also try to involve other institutions and partners to document their technologies or approaches as well in order to enlarge the fact sheet pool.

A WOCAT module of 3 hours will be integrated in ICIMOD's second international training on "Low Cost Soil and Water Conservation Techniques and Watershed Management Activities" in April 2008.

The WOCAT tools will be included in the GTZ funded project in Tibet from 2008 onwards in training programmes, etc. In June 2008 a regional workshop on "Erosion control in arid/semiarid areas of the Himalayas and other mountain ranges" is planned where WOCAT should also be involved.

In order to expand WOCAT in the region WOCAT training on demand will be promoted. A WOCAT training in Meghalaya (India) had to be postponed and will be carried out hopefully in 2008. Further WOCAT initiatives will be started in Bhutan and in Nepal. WOCAT tools will be included in the curriculum of Kathmandu University (KU) and Tribhuvan University (TU).

In the new strategy of ICIMOD (2008 – 2012) WOCAT has been institutionalised in the Environmental Change and Ecosystem Services (ECES) section in the Action Area Integrated Watershed Management which is a great achievement for WOCAT/HIMCAT.

### 9.1.4 India

The OWDM would continue to use WOCAT tools in various programmes in Orissa. During 2008 WOCAT activities will be expanded to Bargarh district so that WOCAT is implemented in all the four WORLP districts. The main focus areas on WOCAT activities would involve:

#### CAPACITY BUILDING ACTIVITIES:

OWDM plans to organize a sensitisation workshop in Bhubaneswar, India so as to expose senior and middle level State Government officials involved in Soil and Water management (research institutes), universities and project staff to WOCAT involving WOCAT experts as resource persons (June-July 2008).

Sensitisation workshops in all the project districts to keep the momentum and keep them informed about the new initiatives by WOCAT. A three day training programme will be organized to launch the WOCAT initiatives in Bargarh and document few technologies and approaches.

#### DOCUMENTATION OF TECHNOLOGIES & APPROACHES:

During 2008 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 one new project district. This would be coordinated by the WOCAT Core Group. The detailed planning for the documentation consisting of field visits, collection of secondary information, data entry and finalization workshop would be done by the WOCAT Core Group.

#### BUDGET PROVISION FOR 2008:

In order to undertake various WOCAT activities, the OWDM would provide around US\$ 41,210. This would involve staff costs, equipment costs, training costs, travelling costs, field visits and other incidental expenses.

### 9.1.5 Kyrgyzstan

Learning for sustainability (L4S) workshops are planned in 10 villages for awareness raising of farmers on SLM/SWC.

For the conservation of natural resources simple demonstrative technologies and approaches at the village level are going to be implemented in 10 villages.

By monitoring the SLM/SWC technologies, the impact of the 44 implemented technologies will be assessed.

Ten SLM/SWC technologies and approaches will be documented and summarized in a WOCAT light form, ie A0 poster.

### 9.1.6 Mongolia

#### **Vision Mongolia**

1. Introduce some WOCAT tools in Mongolia in order to:
  - a. Document
  - b. Support
  - c. Share information, experience and knowledge
2. Introduce Mongolia to WOCAT. For instance, share information regarding
  - a. Pasture related technologies
  - b. Dryland agriculture in temperate zones

#### **Activity plan 2008 (-2009)**

Methodology for knowledge management introduced and capacity building for knowledge management provided:

- Provide access to international expertise in KM
- Introduce WOCAT methodology in knowledge management unit
- Training for data collectors and managers

Collection and compilation of data regarding appropriate technology and approach

- Collection of appropriate technologies and approaches
- Enter data into database

Active dissemination and sharing of knowledge

- Knowledge sharing events
- Publications
- Website

### 9.1.7 Philippines

National training workshops are planned for end of 2007 and 2008. A 2½ - days PHILCAT training for inter-agency members has already been fixed (Nov. 19-21, 2007). The training consists of a detailed introduction to the WOCAT tools in general and the questionnaires in particular including a field visit and practical exercise to fill in a Technology, Approach and Mapping Questionnaire. Furthermore regional trainings on SWC and SLM are planned between April and December 08.

Data collection, documentation and updating of QTs, QAs and the database will continue throughout the next year. Priority will be given to mapping (QM) activities which were suspended during the last few years due to technical problems.

To help further the promotion of WOCAT an inventory of institutions and organizations concerned with SLM in the Philippines will be made. These bodies might be contacted, made aware of WOCAT as a network and the method/tools it offers and cooperation looked into. WOCAT products and outputs will be continuously promoted in scientific / technical meetings and conferences.

WOCAT's use for instructional purposes in natural resources management will be ongoing at University of the Philippines Los Baños (UPLB) and Benguet State University (BSU).

### 9.1.8 Tajikistan

The documentation of new technologies is planned for 2008. Already documented QT's and QA's will be reviewed and edited and then added to the global database.

Training workshops will be offered on WOCAT tools and quality assurance.

A lecture on WOCAT to the students of the National State University is envisaged.

To promote WOCAT tools and methodologies in the donors' activities a workshop on the use of the WOCAT database for investment projects in Tajikistan is planned.

### 9.1.9 Ethiopia

Ethiopia plans to complete QAs and QTs from new areas where no data was collected up to now. Six new technologies and 3 approaches will be documented.

Ethiocat will undertake surveys in 3 woredas to critically assess socio-cultural problems that constrain sustainable land management. The results of the survey in the three woredas will be analysed and reported. A stakeholder's workshop will be held in each woreda to review the assessment.

A strategy for the up scaling of six technologies in highly populated areas will be worked out. One document on strategies will be developed. A national stakeholder workshop on the strategies developed will then be conducted.

Last but not least the Ethiopian overview book will be finalized, published and disseminated.

### 9.1.10 Nigeria

NIGCAT will put more effort in encouraging the West African initiative (WAFRICAT). Already SLM specialists from Cameroon and Ghana have expressed interest in joining the initiative, which up to now includes members from Nigeria, Togo and Benin. West African countries in which WOCAT was previously very active will be contacted and hopefully reactivated. The objective of a regional initiative is to ensure knowledge sharing and future sustainability of WOCAT activities in West Africa. A request for seed money to assist in the following steps will be sent to WOCAT management.

1. Identification of partner institutions, SWC specialists working on SWC in West Africa
2. Identification of donors that could be interested in funding SWC activities in West Africa. Develop proposals, allocate and send proposals to donors.
3. Identify key persons to act as national as well as regional co-coordinators.

For Nigeria the documentation of more QTs and QAs and the quality control of already documented questionnaires to populate the global database are planned in 2008. The results will be presented at the next WWSM (2008). To encourage the adoption and use of the WOCAT methodology awareness raising and WOCAT promotion at meetings, conferences will carry on.

The project on areal cropping for sustainable soil improvement and agricultural production will be carried on a step further, Seeds will be provided to farmers, especially those with economic multipurpose value such as acacia, cassia, leucaena, etc for planting on their farmlands. Further training on maintaining the tree crop will be offered.

### 9.1.11 Morocco

The activities in 2008 in Morocco are mostly within the framework of the DESIRE project. For the DESIRE work package 3.2 it is planned to fill in 3 QT and 3 QA together with students, professionals and land users. In April 08, DESIRE will organize a training workshop on the stakeholder workshop 2 and the use of the decision support tool (work package 3.3), where the Moroccan study site will participate. Thereafter the stakeholder workshop 2 will be organized in June 08 with the result that a decision can be taken regarding the technology/approach to be applied for test implementation.

It is also planned to reactivate WOCAT at the national level and maintain contact with the Ministry of Agriculture.

### 9.1.12 South Africa

Expected outputs 2008:

- Data collection: three new data sets to be collected
- Quality control of questionnaires by panel. Correct and complete questionnaires
- Database management: update data
- International co-operation: attend WWSM and write reports, participate in task forces
- Develop new QM mapping system: on-line mapping viewer
- Promotion of WOCAT: organize and conduct two information workshops

Complete QM for SA:

- Link QM survey to the Soil Protection Strategy
- Conduct data capturing workshops
- Update QM database
- Analyse data
- Publish report

#### LANDCARE CONTRIBUTION

Landcare programme is one of the strategic programmes within the Department of Agriculture. Nationally it encourages communities to participate in natural resources management through the up take of best practices. The South Africa LandCare programme is linked to the regional network referred to as African LandCare Network that also reports to the International LandCare Steering committee.

The programme through African LandCare Network therefore intends to collaborate with and embed WOCAT, which supports sustainable natural resource management. It also encourages capacity building and knowledge sharing activities on natural resource management related matters in order to deliver the millennium development goals in Africa. The collaboration with WOCAT will therefore be focused on promotion of best practices and sharing experiences from other African context.

### 9.1.13 Togo

Togo has zones where SWC technologies and approaches are applied traditionally or were introduced but are still not documented and/or evaluated. It would be desirable that a similar study also covers these zones. In order to increase on the critical mass of case studies compiled and entered in the database from Togo, TOGCAT plans completing WOCAT questionnaires on technologies, approaches and mapping in new areas where no data has been collected yet.

After WOCAT gets established and well integrated in the activities of the University of Lomé the intention is to promote TOGCAT in other organisations and institutions in Togo and in West Africa. National and international contacts will be taken up also as a possible source of funds. At the upcoming WOCAT workshop and steering meeting progress will be submitted and the status of WOCAT in Togo presented.

### 9.1.14 Serbia

Contacts with national and foreign donors/institutions will be maintained

WOCAT promotion: After the good experience with the Student's Forum of WASWC further training of new students is planned; Promotion of WOCAT at ISCO Conference in 2008 in Budapest.

Further action on QM: updating QM for 4 districts and collecting data for 2 more districts are envisaged.

Further action on QT, QA: documentation of technologies and approaches will be ongoing in Serbia.

Quality control: a feedback meeting is planned.

An overview book of Serbian experience is being assembled for publishing.

A Serbian WOCAT website is planned.

Serbia plans to make use of the developed decision support tools and asks for backstopping from WOCAT management.

### 9.1.15 FAO – Asia and the Pacific

FAO – Asia and the Pacific will support the Asia Soil Conservation Network ASOCON to become more active in the region by promoting WOCAT and encourage its tools to be adopted by countries in the region. An ASOCON workshop is being planned for early 2008 and will be organized in collaboration with WOCAT member countries in the region.

FAO – Asia and the Pacific will join the FAO-LADA team. A visit to LADA-China to get introduced to their involvement in regional activities and to monitor LADA China project activities is set very soon. WOCAT methodologies are tested in LADA China project.

FAO – Asia and the Pacific will formulate project proposals for national activities; several project concepts are listed in pipelines

## 9.1.16 FAO

### Future activities FAO - WOCAT

- Launch of the WOCAT Address and Authentication database
- Backstopping of the programming and testing and finalization of the QM online application
- Backstopping of programming activities regarding online QA, QT and (if approved) also of the online Image Database
- Translation of QM into French and Spanish
- Application of LADA/ WOCAT QM manual in 6 countries (Cuba, Argentina, China, Tunisia, Senegal and South Africa)

## 9.1.17 ISRIC

- Use WOCAT QM in DESIRE and GLADA projects
- Investigate on Use of WOCAT
- Continued WO-co-co-ordination, mailing list, newsletter
- Contribute to training and backstopping where required, esp. in mapping
- Promotion Video / CD – Rom of last 8-9 WWSMs (Godert)



*Group Photo of participants during the dinner hosted by the Bohol Agricultural Promotion Center  
(Photo Hanspeter Liniger)*

# STEERING MEETING

Rapporteur: Rima Mekdaschi Studer

## Taskforce activity plans

### TF Decision Support Tool

Taskforce members: **Gudrun Schwilch**, Nestor Garcia, Lydia Bosoga, Miodrag Zlatic, Jeremiah Lewis Njeru, Yuji Niino, Isabelle Providoli, Romy Labios, (Raghu Prasad, Syaiful Anwar, Charlton Phiri) (TF Decision Support Tool.doc)

#### Special interests / potential contributions

- Njeru: willing to give support for the tool development
- Nestor: uses PRA, has experience in work with stakeholders, has learned about 'facilitator' before (training in Queensland, many years ago)
- Isabelle: to see how database can be used for implementation

#### Workplan

Activities	Timing
Share outcome of WWSM discussion with taskforce	November 07
Share other potential DSS with taskforce (e.g ICRAF Netica, anything from ICIMOD?, etc.)	November 07 / December 07
Trials with local teams of taskforce members (as during WWSM)	December 07 / January 08
Programming with support of selected taskforce members	January 08
Send first draft of guidelines to taskforce members for comments	February 08
DESIRE training workshop with first version	April 08
Present these first results (methodology and experiences) to potential donors for sponsoring further development within WOCAT	June 08
Present improved first version, results from DESIRE experiences and continuation of development	WWSM 13

### TF Questionnaire modules

Taskforce members: **Rima Mekdaschi Studer**, Sanjeev Bhuchar, Daniel Danano, Rinda van der Merwe - Pienaar, Sudibya Kanti Khisa, Gbénonchi Mawussi, Nada Dragovic, Madhav Dhakal

#### Decisions

1. The TF aims to develop a module on watershed management. The proposal is not to call it 'technology systems', but 'watershed system'.
2. The module will build on the presentation by Rima, but it will include both the technical and human aspects of watershed management.

#### Workplan

Activity	Time	Responsible
First draft prepared and circulated to TF members	End of Feb. 08	Sanjeev
Feedback from TF members	15 April 08	TF members
Final Draft prepared	End of April 08	Rima/Sanjeev
Circulation of draft module to WOCATeers for feedback	First week of May 08	Rima
Feedback from WOCATeers	End of August 08	Feedback to TF
Final preparation of the module	September 08	Rima/Sanjeev
Presentation of the module	13 <sup>th</sup> WOCAT workshop	Rima/Sanjeev

## TF Impact Monitoring

*Taskforce members: Aida Gareeva, Ermek Baibagyshov, Hanspeter Liniger, Jesus Javier, Mandakh Nyamtseren, Niranjana Sahu, Digna Manzalia, (Azhar Yeszhanova, Wilfred Mariki, Cai Jian-qin, Feng Wei, Yaolin Wang, Charlton Phiri, Munawar Khan)*

### Workplan

Activity	Time	Countries and organization
Screening of WOCAT questionnaires (QT, QA, QM) and choosing indicators in view of their accessibility (feasibility, usefulness and practicability) for land users. Making list of indicators acceptable to land users.	Till the end of February 2008	Mongolia, India, Philippines, Switzerland, Kyrgyzstan, China(?), ICIMOD, LADA
Involvement of CDE because of their experiences in impact monitoring tool development		
To collect and analyze local and global (HPL) experiences	Till the end of February 2008	Mongolia, India, Philippines, Switzerland, Kyrgyzstan, China(?), ICIMOD, LADA
Formulation of the expectations from the Impact Monitoring (IM) Tool	Till the end of February 2008	Mongolia, India, Philippines, Switzerland, Kyrgyzstan, China(?), ICIMOD, LADA
Exchange of information	Till the end of February 2008	Mongolia, India, Philippines, Switzerland, Kyrgyzstan, China(?), ICIMOD, LADA
Organization of a meeting of the IM-TF team in March 2008 for the discussion and the exchange of experiences and for the formulation of a project concept (5 days).	March 2008	CDE
Finalization of the project proposal	April 2008	Mongolia, India, Philippines, Switzerland, Kyrgyzstan, China(?), ICIMOD, LADA
Fundraising in 2008	2008	
Presentation of interim results at the WOCAT meeting in Switzerland in 2008	2008	

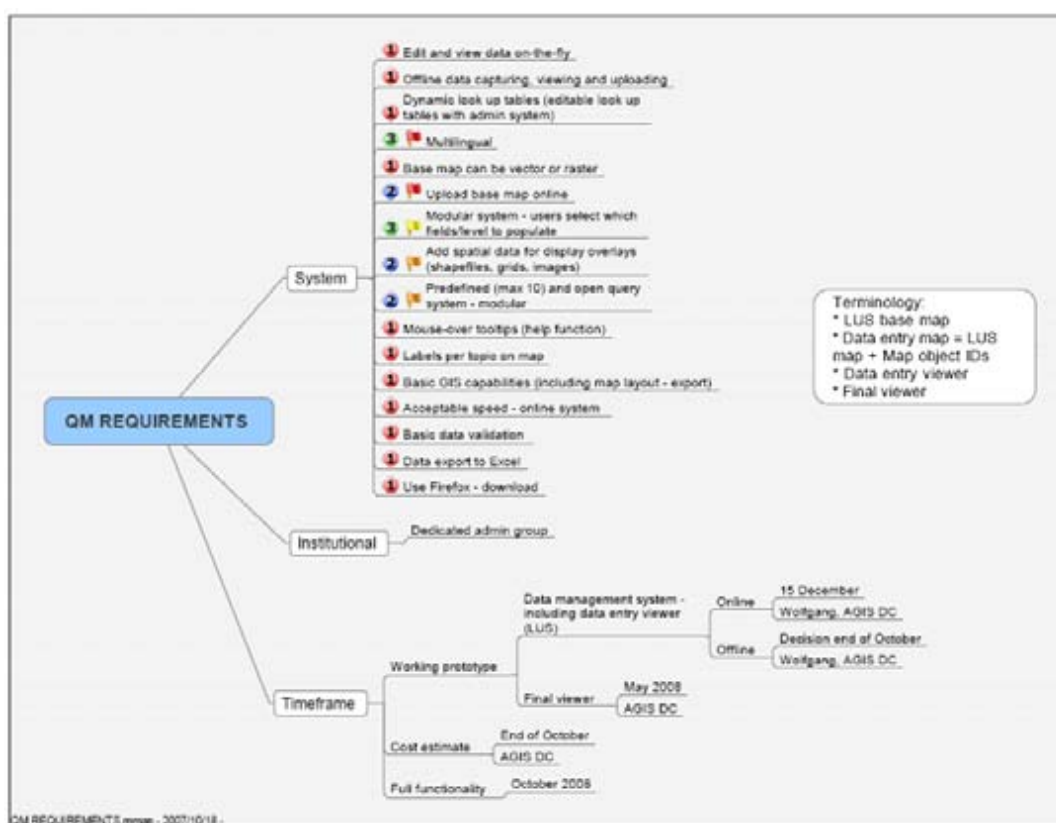
## TF Mapping

*Taskforce members: Dirk Pretorius, Godert van Lynden, Carin Pretorius, Wolfgang Prante, Hanspeter Liniger, Mandakh Nyamtseren, Nada Dragovic, Yuji Niino, (Shoaib Jalal Udin, Irfanullah Khan, Freddy Nachtergaele)*

### Workplan

Activities	Responsible person	Timing	Cost (US\$)	
			Available	Required
QM - online data management system	Wolfgang	Dec 2007	FAO	0
Investigate & report on feasibility of off-line data management system	Wolfgang	Dec 2007	FAO	0
Develop on-line map viewer	Dirk/Godert/Carin	May/Oct 2008	5000 (DoA)	12000–15000
Investigate and develop off-line map viewer	Carin/Wolfgang	Dec 2007	7000	
Google Earth updated / reviewed (locations)	Godert	Oct 2008	1000	
TF meeting – review prototypes (WOCAT/LADA)	Dirk/Godert	June 2008		6000





## TF Digital products

Taskforce members: **Wolfgang Prante**, Carin Pretorius, Gudrun Schwilch, Rinda van der Merwe - Pienaar, Dirk Pretorius, Godert van Lynden, Jeremiah Lewis Njeru, Christine Hauert

Activities	Responsible person	Timing	Cost	
			Available	Required
Google Earth	Godert	Oct 2008	\$1000.00	
WOCAT website	Wolfgang/Gudrun	Oct 2008	? FAO/CDE	? \$4000
Online QT, QA, QM data management system	Wolfgang/Carin/Gudrun	May 2008??	? FAO/CDE	? \$8000
Online QT, QA, QM user interface (query system)	Wolfgang/Carin/Gudrun	Oct 2008	? FAO/CDE	? \$8000
Off-line QT, QA, QM data management system	Wolfgang/Carin	May 2008		? \$8000
Investigate promotional CD-ROM	Carin/Gudrun	Oct 2008	\$0	? \$1000

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

Taskforce members: **Miodrag Zlatic**, Romy Labios, Abdybek Asanaliev, Joe Balaoing, Hanspeter Liniger, Lydia Bosoga, Aida Gareeva, Ikponke Nkanta

### Duties and responsibilities of the taskforce

To facilitate and consolidate information and data gathering on R, T & E development from the different countries using WOCAT tools. Survey will be improved.

Research - quantification of SWC activities in relation to national and regional budgets for SWC.

### Planned activities

1. WOCAT survey and questionnaires on R, T & E

1.1 Continue with analysis of respondents

2. Education

2.1 Continue with Integration of WOCAT in M & E tools in MSc and PhD - add programs on the web

2.2 Integration of WOCAT modules in existing SWC courses/curricula

3. Research

3.1 Integration of WOCAT tools in national action plans - LandCare programme, ARC/ISCW

4. Training and extension

4.1 Listing trainings conducted and development of templates

As was suggested during session 1 (progress of the taskforces) a flyer or a brochure on how to include WOCAT in research and the curriculum of an educational institution should be put together.

## TF Communication (internal and external) and Promotion

*Taskforce members: **Wolfgang Prante**, Hanspeter Liniger, Yuji Niino, Miodrag Zlatic, Chang Dandong, Christine Hauert*

### Planned activities

- a) How to communicate among taskforce members?
  - First by e-mail, later through Blog or Forum
  - Blog for the whole WOCAT community?
- b) Identification of different kinds of communication

## TF Strategy

*Taskforce members: **Rima Mekdaschi Studer**, Christine Hauert, Hanspeter Liniger, Godert van Lynden, Isabelle Providoli (Clemencia Licona Manzur, Shoaib Jalal Udin, Francis Turkelboom, Will Critchley, G.B. Reddy)*

Only a first draft of the strategy annex 'activities' was available, it needed to be filled with content during WWSM 12

Activities	Timing
Regional group meetings on national and regional fields of activities For each field of activity the following sections were filled out by the groups: <ul style="list-style-type: none"> <li>• Where, when and how are you contributing to WOCAT's objectives?</li> <li>• Responsible (i.e. global or nat./reg. level)</li> <li>• Target group</li> <li>• Motivation / demand</li> <li>• Outputs (with timing and resources required)</li> <li>• Dissemination</li> <li>• Outcome</li> </ul>	WWSM Nov 07
Check if 3 and 10 years vision of countries/partners is reflected in strategy annex 'activities' and if not, try to integrate them (for visions see below)	
Compilation and integration of the findings into the draft document	March 08
Send draft document to taskforce members and members of the regional groups of WWSM12 for feedback	March 08
Compilation of received feedback and preparation of final draft This compilation allows the WOCAT participating institutions as well as the donors of WOCAT to select, prioritise and target their involvement	July 08
Present and finalise draft at WWSM 13	WWSM 13

## Global activity plan 2008

### Review of national and global 3 years / 10 years Vision

Country	3 years' vision	10 years' vision
Philippines	Impact monitoring tool adapted Tools functioning perfectly Incorporate WOCAT in University curricula Wider dissemination and mainstreamed in conservation programmes Database populated and T & A implemented Updated CD PHILCAT more formal with a corporate identity	Impacts monitoring tool applied globally Tools simplified and used Establish linkages with other conservation group acts and UN conventions (e.g. desertification, climate change and biodiversity) More countries within the network
Morocco	Expand in Mediterranean area	Tools used in government institutions, NGO's and organisations
Kyrgyzstan	Translation of overview book to Kyrgyz More technologies on pastures documented Impact monitoring tool developed and tested	Involve other institutions WOCAT part of policy dialogue on national level
South Africa	QM implemented in at least 5 countries Database (QT and QA) more expanded and quality assured A fully functional internet database management system. 50% of gov. institutions know of WOCAT	QM used as DSS by decision makers A populated spatial and non spatial database with data from all the countries of the world Main tool to start new SLM projects. WOCAT knowledge in SLM programmes 30% of SA documented in the WOCAT database
Mongolia	Documentation and evaluation of technologies and approaches	Populate database with case studies from the temperate zone and of pastures
Somalia	WOCAT tools integrated in DSS	Donors and experts accept WOCAT as a method to assess SLM
Nigeria	Use and institutionalisation of WOCAT tools	National / regional SLM database
China	Establish a link between WOCAT website and other websites of institutions worldwide	Enhance relation and cooperation between WOCAT and institutions (e.g. universities) and among government institutions
Ethiopia	More case studies documented Strategy for upscaling of Land Mgt practices	WOCAT outputs have an impact on policies
ICIMOD	HIMCAT self-sustaining initiative Enlarged database used and implemented, showing impact	WOCAT knowledge for implementation of SLM programmes at local, regional and global level Good global coverage WOCAT institutionalised and used effectively
India	WOCAT network established in India	More collaboration at regional level
Bangladesh	More case studies documented and published	WOCAT tools used by gov, NGOs, donors in evaluation and monitoring of programmes
Serbia	Incorporate WOCAT in University curricula Adjust local map system to WOCAT mapping	WOCAT considered in national action plans
Global	Go by WOCAT strategy (core and annex), identify milestones and deliverables, keep schedule Stable system of WOCAT tools used in 30 countries. Mapping accepted as a standard tool with examples from 10 countries and at different scales Global network enhanced	WOCAT the global standard for SLM knowledge management and used for decision making at local, national (and global) level WOCAT an established and well-know network Sustainable funding achieved

**Priorities 2008:**

- Coordinating Taskforce activities
- Clarifying role of CDE, FAO, ISRIC in securing funding and setting up new programmes (possible donors: JIRCAS, IFAD, GEF, UNCCD, DANIDA, SIDA/CIDA, GTZ, Bill Gates Foundation, ....)
- Finalizing WOCAT strategic plan Annex 'activities'
- Revised QT and QA basic finalized and translated to French and Spanish (3/08, 6/08)
- Questionnaire modules - final draft of modules: watershed management (final draft 9/08; Sanjeev)
- WOCAT in LADA: finalizing QM (1/08), training guidelines (?), training for pilot countries (?)
- Development of on-/ off-line database (QT: 31/3/08) QA: 31/5/08 QM: 1/08) (=> TF)
- Decision Support Tools developed (=> TF)
- WOCAT in education and research (DESIRE, COST, NCCR): tool development, filling gaps (ongoing)
- Global database: populate and complement representative Ts / As (for identified gaps: different land uses, degradation, conservation) (ongoing)
- Training / backstopping workshops demanded by partners:
  - Philippines: 19-22 November 07
  - India: June/July
  - Ethiopia; end of August 08
  - Tibet/Nepal: 22-27 June (little flexibility)
  - DESIRE: Jan + April 08
  - LADA training for trainees?
  - Mongolia: October?
  - South Africa LandCare Conference: Sept 08
- Webpage update (ongoing): e.g. changes in QT/ QA/ QM and downloads (incl. translations)
- Transformation of old data into new database (from 7/08)
- Publications/ Papers: ISCO, Mapping tool

**Additional tasks:**

- Overview Book further distribution efforts
- Corrections of major bugs in 'where the land is greener' and new pdf in website (3/08)
- Layout prototype for translation of 'where the land is greener' into French, Spanish, (Russian?, Chinese?, Mongolian?)
- Updating WOCAT global map (world map not Google map)
- Upload MSc, PhD studies (Award?)
- Logo and preface about WOCAT in national books?
- Request: whenever you have something important sent it to "burn" (Bern)

**Major events:**

- ISCO 2008
- GEF indicators and knowledge management meeting(s)

**Additional ideas and waiting list**

- Organization of a bigger WOCAT conference if possible soon (choice of host country important, should allow the participation of a high number of countries and persons)
- Assess how much is annually invested in SLM
- Training of trainers; training manuals and teaching material
- Set-up a global panel to
  - identify main global gaps on documented technologies/approaches
  - develop guidelines for national review panels and conduct test training after a national workshop
  - WOCAT label, certificates and project support service
- Improve feedback mechanism in database, offer internet platform for documentation, quality assurance process and exchange of experience
- 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.

## Planning table 2008

In the following table the objectives and the specific activities (as listed in the project document\* and based on the 4 dimensions of knowledge\*\*) are listed and in a 3rd column the planned activities for 2008 are described (priorities in bold font).

Objectives / Expected results **	Activities*	Plan 2008
<b>1. Knowledge about SWC and SLM</b> <i>Support (backstopping) for the production of outputs at national and regional level. Analysis and synthesis regarding emerging global issues.</i>	<ul style="list-style-type: none"> <li>• support the production of national overviews</li> <li>• produce dissemination materials: Use of WOCAT (posters, pamphlets, videos)</li> <li>• develop a world map on the major SWC measures</li> <li>• enlarge the number of documented and evaluated technologies and approaches in the global database</li> <li>• assess / analyse SLM knowledge gained through WOCAT and show their contribution to global issues</li> <li>• promote and support the establishment and operation of national peer review panels to ensure and enhance the quality of the information</li> <li>• compile an inventory of global prototype technologies (covering the spectrum according to WOCAT SWC categorization system)</li> <li>• produce prototypes of conservation maps at different scales, for different AEZ/continents.</li> <li>• analyse successful technologies on their applicability for different natural and human environments</li> <li>• develop WOCAT label and standards</li> </ul>	<ul style="list-style-type: none"> <li>• improve dissemination of 'where the land is greener' (lessons learnt) and capitalize from the knowledge about SLM in it</li> <li>• support and backstopping to the production of national overview books</li> <li>• produce of dissemination materials upon request</li> <li>• update and improve world map</li> <li>• <b>add quality assured Ts and As</b>, expand database</li> <li>• support national peer review panels and enhance quality of the information</li> <li>• finalising the WOCAT strategy Annex activities</li> </ul>
<b>2. Tool (and method) development</b> <i>Additional and enhanced tools for exchange of knowledge and decision support developed</i>	<ul style="list-style-type: none"> <li>• elaborate questionnaire modules on issues like watershed management, poverty alleviation, carbon sequestration and other upcoming important issues</li> <li>• further develop and adapt the SWC categorization system to include newly integrated issues of the revised questionnaires</li> <li>• make available prototype of overview books (guidelines, templates)</li> <li>• develop analysis tools to assess the impact of technologies / approaches / and their spread with regard to global conventions and MDGs</li> <li>• develop enhanced data analysis and evaluation tool -&gt; decision support tool (validation/evaluation of SLM, planning of SLM)</li> <li>• adapt database to new questionnaire developments (in new on-line software)</li> <li>• advance mapping system (new software/mapping tool in cooperation with FAO/UNEP to incorporate GIS/RS as well as expert knowledge on spatial distribution of degradation and conservation)</li> </ul>	<ul style="list-style-type: none"> <li>• revised QT and QA in English, French and Spanish</li> <li>• progress in module formulation</li> <li>• develop standard Questionnaire Light</li> <li>• adapt categorization system</li> <li>• further develop and improve <b>Decision Support Tool</b> (evaluation / assessment)</li> <li>• adapt database to recent developments</li> <li>• WOCAT-LADA QM tested, revised QM for WOCAT??</li> <li>• further advance mapping system (e.g. new software)</li> <li>• carry forward on-line database system</li> <li>• backstopping, training and data collection/reviewing depending on requests</li> <li>• advance WOCAT in research and education (DESIRE: holistic methodology)</li> </ul>

Objectives / Expected results **	Activities*	Plan 2008
	<ul style="list-style-type: none"> <li>• develop new database system (new software), including feedback mechanism for quality assurance</li> <li>• build an interactive data entry, viewing and updating system</li> <li>• develop holistic methodology including (a) SWC identification through stakeholder workshops, (b) SWC documentation and evaluation with questionnaires and (c) comparative analysis of SWC options with the help of a decision support tool</li> <li>• develop method and identify indicators for local level assessment (jointly with University of East Anglia, FAO/ UNEP/ UNU/ GEF/ UNDP)</li> <li>• develop guidelines for documentation, evaluation and use of SLM knowledge (also for global and national review panels)</li> <li>• set up training modules on SLM knowledge management using WOCAT tools</li> </ul>	
<b>3. Information sharing and networking</b> <i>WOCAT Network enhanced and consolidated</i>	<ul style="list-style-type: none"> <li>• strengthen partner in the use of WOCAT</li> <li>• add new partners and consortium members in SDC priority regions where WOCAT is not yet well established.</li> <li>• sponsor participation of WOCAT partners at WWSMs to enhance exchange, contacts and cooperation between different countries</li> <li>• participate in International Conferences and meetings to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO; LADA)</li> <li>• integrate WOCAT in environmental and development processes at the global (UNCCD, UNCCD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral projects). Give special attention to SDC priority countries</li> <li>• continue and enhance the WOCAT e-mail list and newsletter</li> <li>• establish and maintain links to other networks</li> <li>• regional / international exchange visits</li> <li>• improve platforms for communication to facilitate contacts and knowledge sharing between WOCAT partners</li> <li>• add new partners and consortium members in regions where WOCAT is not yet well established.</li> </ul>	<ul style="list-style-type: none"> <li>• use WOCAT Strategy and Strategy Annex 'activities' documents to address partners and potential collaborators including a solid funding strategy to address donors</li> <li>• expand within existing WOCAT countries / regions, new regions</li> <li>• WOCAT in LADA and other multilateral organisations</li> <li>• strengthen link with LADA pilot countries</li> <li>• WOCAT in Mongolia, SDC priority region, strengthen link to SDC priority countries</li> <li>• use WOCAT in EU-DESIRE project (IP Desertification)</li> <li>...</li> </ul>
<b>4. Research, training and education</b> <i>Partners trained to run WOCAT programme in their countries and regions. Use of research to support WOCAT's mission and develop tools and outputs</i>	<ul style="list-style-type: none"> <li>• conduct additional international 'Training for National Trainers / Facilitators' workshops</li> <li>• provide support and expertise for additional national and regional initiation and training workshops, upon request from national / regional institutions</li> <li>• facilitate / assist in links to research (e.g. DESIRE, COST, NCCR)</li> <li>• publish in appropriate journals</li> <li>• promote and provide supervision for MSc, PhD thesis addressing knowledge gaps</li> </ul>	<ul style="list-style-type: none"> <li>• contribute to LADA training workshops (Tunisia, .....)</li> <li>• conduct regional mapping training workshop (??? ICIMOD, India, China)</li> <li>• WOCAT in education: Master / PhD studies, lectures and field courses</li> <li>• follow-up workshop to the IRHA workshop to adapt tools/ method to better fit the rainwater harvesting needs</li> <li>• training modules???</li> <li>• ...</li> </ul>

Objectives / Expected results **	Activities*	Plan 2008
	<ul style="list-style-type: none"> <li>develop training modules, manuals and teaching material for universities and extension services</li> </ul>	
<b>5. Basic enabling activities at the global level</b> <i>Keep the WOCAT programme and network running at a basic level</i>	<ul style="list-style-type: none"> <li>maintain and update global DB</li> <li>organize one international WOCAT Workshop and Steering Meeting (WWMS) per year followed by proceedings</li> <li>produce newsletter (half-yearly, with active participation of national/regional initiatives)</li> <li>enhance e-mail communication and mailing list (WOCAT-L)</li> <li>keep website up-to-date</li> <li>build up a pool of trainers and trained specialists</li> <li>coordinate programme, and maintain good relations to donors</li> <li>update brochures, flyers, etc. (promotion of WOCAT)</li> <li>update WOCAT CD-ROM (every 3-4 years)</li> <li>invest in finding new donors</li> </ul>	<ul style="list-style-type: none"> <li>update global database</li> <li>organize WWMS13</li> <li>support and coordinate TF meetings</li> <li>produce newsletter</li> <li>backstopping and e-mail communication</li> <li>update <b>website</b></li> <li>offer training upon request</li> <li>programme coordination</li> <li>find new donors</li> <li>update promotion material using new visual identity</li> </ul>

\*Objectives / Expected results and activities as stated in the funding proposal of the programme contribution from SDC 2008 to 2011. Additional funding beside (FAO- LADA and SDC Mongolia bilateral) in order to complement the SDC funding and to support the objectives and activities listed for 2008 needs to be identified and approached.

\*\*The 4 dimensions of knowledge as described in the WOCAT strategy (2008-2012)

## Funding

### Funding 2008

- A proposal was submitted for a 4 year period from 2008-2011 applying for a financial contribution of CHF 432,000 (about USD 390'000) per year.
- Possibilities of additional funding through the geographical sections of SDC (bilateral) were discussed. WOCAT has its contacts and partners in the different national institutions (point of entrance for applied field work) which is seen as a comparative advantage.

### Estimated funds 2008

Donors	Budget promised		Targeted funds
	in CHF	in USD	in USD
SDC*	432'000	390'000	
FAO - LADA		60'000	
SDC Mongolia	30'000	28'000	
GEF KM			???
SinoSuisse			???
Impact monitoring (SDC)	40'000	35'000	
Overview book sales			???
TerrAfrica			60'000
<b>TOTAL</b>		<b>513'000</b>	

\* Contract 1.1.2008-31.12.2011: Budget/year = CHF432'000

Average expenditure 05-07: CHF: 500'000/yr

Expenditure – 31.10.2007: CHF: 300'000

### Discussion:

- More resources need to be allocated for fund raising
- More resources needed to engage another person in Berne
- Need for additional donors! Emphasis on sustainable donor management.
- WOCAT should be supported by and depend on 'three legs' like a stool to be stable and not to tip over (CDE, ISRIC, FAO)
- Taskforces should be more involved and take over the bulk of the work. One of the institutions of global management will be part of each taskforce.
- It is not institutions who are involved and committed to WOCAT but persons backed up by their institutions

## Organisational issues

### Election of global management, assignment of secretariat

#### Global Management

- CDE: Hanspeter Liniger (global coordination; secretariat), confirmed
- ISRIC: Godert van Lynden, confirmed
- FAO: Freddy Nachtergaele, ?
- Secretariat: CDE as the institution to continue hosting the secretariat, confirmed



## Next WWSM

The issue of having a WWSM every year or every 2<sup>nd</sup> year was discussed again.

The general consensus among the participants again was that a WWSM on a yearly basis is important to hold ones' commitment (deadlines), keep the momentum going and enhances the 'we feeling' within the global network. For newcomers the sharing and gaining of experience on a yearly basis was seen as important.

A suggestion was made to hold one year a WWSM and one year an extended 'taskforce meeting'. The WWSM will get more an international focus at which the newly developed and finalized tools and new products are presented (conference) and at the 'taskforce meeting' the activities and progress of the taskforces are more emphasized.

**Decisions made:** next meeting will be a WWSM with one day open for donors and interested institutions to attend

**Host:** CDE, Switzerland

**Where:** Switzerland

**When:** 20 - 25 October 2008

**Special topics:** DSS further developed, strategy for implementing good practices, WOCAT – LADA mapping, impact monitoring proposal finalized



*Tribute given at the opening and at the closure of the 12<sup>th</sup> WOCAT workshop and steering meeting. Distribution of certificates (left). Thanking the Philippine partners for a successful and pleasant workshop (below) (Photos Hanspeter Liniger)*



## 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	RANK	Number
<b>learn about WOCAT activities</b> (in general); how to participate in / contribute to the program	<b>4.3</b>	<b>12</b>
<b>learn about WOCAT tools, and how to use them for:</b>	<b>3.9</b>	<b>15</b>
- <i>monitoring</i>	<b>3.6</b>	<b>7</b>
- <i>SLM; dryland rehabilitation; soil protection</i>	<b>3.7</b>	<b>7</b>
- <i>watershed management</i>	<b>3.3</b>	<b>7</b>
- <i>mapping</i>	<b>3.3</b>	<b>7</b>
- <i>decision support</i>	<b>3.6</b>	<b>7</b>
- <i>research &amp; Education</i>	<b>3.8</b>	<b>6</b>
<b>Improve / further develop tools eg.</b>	<b>3.8</b>	<b>16</b>
- <i>revision of QT-, QA basic, questionnaires modules</i>	<b>4.4</b>	<b>7</b>
- <i>WOCAT- LADA QM</i>	<b>4.0</b>	<b>7</b>
- <i>online tools (database ) / digital products</i>	<b>3.3</b>	<b>7</b>
- <i>decision support tool for implementation</i>	<b>3.6</b>	<b>7</b>
- <i>participatory impact monitoring</i>	<b>3.0</b>	<b>7</b>
<b>sharing experiences / exchange of knowledge / networking</b>	<b>4.5</b>	<b>16</b>
- <i>learn about new technologies / successes in other countries!</i>	<b>4.6</b>	<b>7</b>
- <i>special topics</i>	<b>4.0</b>	<b>7</b>
- <i>meet other SLM specialists, organisations</i>	<b>4.9</b>	<b>7</b>
<b>plan training and backstopping</b>	<b>3.3</b>	<b>16</b>
- <i>training for trainers</i>	<b>3.2</b>	<b>6</b>
- <i>national trainings</i>	<b>3.8</b>	<b>6</b>
<b>use of WOCAT</b>	<b>3.7</b>	<b>15</b>
- <i>application at land users level</i>	<b>3.7</b>	<b>7</b>
- <i>SLM</i>	<b>3.4</b>	<b>7</b>
- <i>decision making level</i>	<b>3.6</b>	<b>7</b>
<b>implication on the global issues (climate change,...)</b>	<b>3.5</b>	<b>20</b>
<b>identify needs and expectations of partners</b>	<b>3.6</b>	<b>20</b>
<b>make and implement plans at national and at global level</b>	<b>3.8</b>	<b>20</b>
<b>good, successful workshop</b>	<b>4.5</b>	<b>19</b>
<b>Overall average</b>	<b>3.8</b>	

Summary: better understand how WOCAT works and is being used, intensify cooperation and collaboration, tools developed and in development (on – line database, DSS, impact monitoring) and a strategy how to get all down to the land user.

## Any other business (AoB)

The WASWC meeting in the Tara Mountains of Serbia in 2009 was announced. WOCATeers are expected to attend.

The publication of WASWCs No-Till book was announced.

The importance of filling and submitting the monitoring sheets and workplans for the sake of impact monitoring was re-emphasised. It was suggested to make a summary of the progress made and the activities planned of each country in the very beginning of the proceeding (like with the extended summary).

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<b>WORKPLAN for Bangladesh: December 2007 to November 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
BANCAT Achievements upto October, 2008 reviewed and Work-plan for 2008-09 prepared	Convening BANCAT Working Group(WG) Meeting, Preparation of Progress Report and Work-plan	12	1	CHTDB, SRDI, BFRI, IFESCU	BANCAT Overview Book	100	0	Sudibya Kanti Khisa, Jalauddin Md.Shoaib	Sudibya Kanti Khisa, Jalauddin Md .Shoaib	October,2008
Documentation of CATs from different agroecological zones of Bangladesh	Training and docuentation of CATs from different agroecological zones subject to the availability of fund	12	2	CHTDB, SRDI, BFRI, IFESCU	WOCAT tools	0	4000	Sudibya Kanti Khisa, Jalauddin Md.Shoaib, and Khairul Alam	Sudibya Kanti Khisa, Jalauddin Md .Shoaib, and Khairul Alam	December, 2007- April, 2008
Popularization of WOCAT Tools	Presentation of WOCAT Tools	4	0	CHTDB SRDI, BFRI, IFESCU	WOCAT and BANCAT power point presentation s will be used	-0	500	Sudibya Kanti Khisa, Jalauddin Md.Shoaib,	Mr Wadud Bhuiyan	December, 2007 to November,2008
Awareness raised about WOCAT and BANCAT	Participation in different Trainings and seminars	2	12	CHTDB, SRDI BFRI	WOCAT and BANCAT brochures will be used	0	0	Sudibya Kanti Khisa, Jalauddin Md.Shoaib, and Khairul Alam	J.U.Shoaib and S.K.Khisa	December, 2007 to November,2008
BANCAT website regularly updated	Updating of BANCAT website	2	12	SRDI-BISAP	BANCATem aterials will be used	100	0	J.U.Shoaib and S.K.Khisa	J.U.Shoaib and S.K.Khisa	December,2007 to November, 2008

Prepared by: Sudibya Kanti Khisa and Jalaluddin Md.Shoaib

Total: US \$ 200 US \$ 4500

<b>WORKPLAN for China: 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
240 people	training programme	20	11	SMCMC	Training manual	40'000	20'000	50	SMCMC	1.1 – 30.11.08
240	questionnaire	20	11	SMCMC	questionnaires	10'000	6'000	50	SMCMC and Datum	1.1 – 30.11.08
improve	database	200	12	Beijing Datum	Computer working station	500'000	200'000	100	SMCMC and Datum	1.1 – 30.12.08
improve	monitoring technique	100	12	Beijing Datum	Computer working station	25'000	130'000	100	SMCMC and Datum	1.1 – 30.12.08
improve	mapping	150	12	Beijing Datum	Computer working station	200'000	100'000	100	SMCMC and Datum	1.1 – 30.12.08
establishment	decision support tool	150	12	Beijing Datum	Computer working station	200'000	100'000	100	SMCMC and Datum	1.1 – 30.12.08

Prepared by: Chang Dandong

Total: US \$ 975'000.. US \$ 556'000

<b>WOCAT WORKPLAN FOR OWDM ORISSA, INDIA: NOV'07- DEC'08</b>										
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 G B Reddy , Director& Mr. Raghu Prasad.R, Additional Director, OWDM	Govt of Orissa, OWDM	Nov 07- Oct 08
Expand & institutionalize use of WOCAT tools in Bargarh district	Constitute WOCAT working group to promote use of wocat in the district	1	0.25	OWDM		200	---	Nodal Officer (PSU). Mr. Niranjana Sahu, M&E Spl. PSU	OWDM	Jan 08
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'07- Oct 08
Capacity Building and Exposure.	Orissa Wocaterees and project managers.	6	0.75	OWDM		22,500		OWDM/WOCAT T 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 07- Oct 08
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/ WOCAT	OWDM	Junel- July 2008
Documentation of two QTs, one QAs.	Field work	10	1	Project Directors , OWDM	Maps Records	5,800		WOCAT Core Group members	OWDM	Sept'08-Oct'08

	Finalization Workshop	25	0.1	OWDM, PD(Watershed)	LCD Laptop	3750		OWDM M&E Spl.,PSU		Nov'08
					TOTAL COSTS	<b>US\$ 41,210</b>				

<b>WORKPLAN for ICIMOD: 2008</b>										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
HIMCAT extranet maintained	Continue HIMCAT extranet	1	1	ICIMOD		1000		S. Bhuchar, I. Providoli	I. Providoli	Nov 07- Oct 08
2 HIMCAT newsletters	2 newsletters prepared	1	1	ICIMOD		1000		S. Bhuchar, I. Providoli	I. Providoli	Spring and autumn 08
NEPCAT fact sheets	publish 30 NEPCAT fact sheets	4	1	ICIMOD, SSMP Nepal		8000		S. Bhuchar, I. Providoli, M. Dhakal, J. Merz	I. Providoli	Dec07/Jan08
NEPCAT promotion event	Organise NEPCAT promotion event in Kathmandu	2	1	ICIMOD, SSMP Nepal		200		S. Bhuchar, I. Providoli, M. Dhakal, J. Merz	I. Providoli	Jan/Feb 08
More partners applying WOCAT tools (1)	Integrate WOCAT tool in ICIMOD 2nd int. training on LCSWC	2	1	ICIMOD		500		S. Bhuchar, I. Providoli	S. Bhuchar, I. Providoli	April 08
More partners applying WOCAT tools (2)	Include WOCAT tools in Tibet project, e.g. in the regional workshop in June 08.	2	1	ICIMOD		1000		S. Bhuchar, I. Providoli,	I. Providoli	June 08
More partners applying WOCAT tools (3)	Expand regional informal meeting network and provide WOCAT training in Bhutan and in other countries on demand	2	1	ICIMOD		2000		S. Bhuchar, I. Providoli, M. Dhakal	I. Providoli	on demand
More partners applying WOCAT tools (4)	Include WOCAT tools in curriculum of Kathmandu University (KU) and Triubhuvan University (TU) in Nepal	2	1	ICIMOD		200		S. Bhuchar, I. Providoli	I. Providoli	March 08

Prepared by: S. Bhuchar and I. Providoli

Total: US \$ 13'900 US \$

<b>WORKPLAN for Kyrgyzstan: 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment		Available	Required		Commitment by	
Awareness building of farmers on SWC	<ul style="list-style-type: none"> <li>Conducting of L4S (Learning for Sustainability) workshops in 10 villages</li> </ul>	4 person	6 month	CAMP Alatoo / RAS Naryn	Posters, stationary etc.			EB	EB	March – April
Conservation of natural resources through implementation of simple demonstrative technologies at village level	<ul style="list-style-type: none"> <li>Implementation of SWC technologies and approaches in 10 villages</li> </ul>	4 person	8 month	CAMP Alatoo / RAS Naryn and farmers	All 22 technologies , each of them about 250 Euro			EB	EB	April – August
Assessment of impact of the implemented technologies (22 from 2007, 22 in 2008)	<ul style="list-style-type: none"> <li>Monitoring of 44 SWC technologies</li> </ul>	2 person	1 month	CAMP Alatoo / RAS Naryn				EB	EB	September - October
10 SWC technologies are described	<ul style="list-style-type: none"> <li>Collection and describing of 10 SWC technologies and approaches and printing them as poster (format A0)</li> </ul>	2 person	4 month	CAMP Alatoo				EB	EB	May - August

Prepared by: Ermek Baibagyshov (Project Coordinator of CAMP Alatoo)

Total: 22 000, 00 US \$



<b>WORKPLAN for Mongolia: 2008 (-2009)</b>								
Expected outputs	Activities	Input		Funding		Responsible person(s)		Timetable
		Person x months/ Institution	Materials / equipment	Available	Required	partner	Involved partner	
Methodology for knowledge management introduced and capacity building for knowledge management provided	<ul style="list-style-type: none"> <li>Provide access to international expertise in KM</li> <li>Introduce WOCAT methodology in Knowledge management unit</li> <li>Training for data collectors and managers</li> </ul>	International consultant 1 week National/2 persons 1 month each  International consultant 1 week  10 per for 2 weeks International consultant 1 week		I do not know yet how much it will require. ????		UNDP, SDC	WOCAT CDE???	April 2008-...
Collection and compilation of data regarding appropriate technology and approach	<ul style="list-style-type: none"> <li>Collection of appropriate technologies and approaches</li> <li>Enter data into database</li> </ul>	Data entered into database (30 technologies) 100 persons day  By regular staff of Unit	Database	???? not clear yet		UNDP, SDC		
Active dissemination and sharing of knowledge	<ul style="list-style-type: none"> <li>Knowledge sharing events</li> <li>Publications</li> <li>Website</li> </ul>	2 events per year for sharing best practices among service providers Book, leaflets Design, IT, updating		???? not clear yet		UNDP, SDC		

Prepared by: Batzaya Tsegmid

Total: ..... US \$

<b>WORKPLAN for Philippines: Nov 2007 – October 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment		Available	Required		Commitment by	
WOCAT Promotion	• Inventory of institutions/ organization concerned with SLM	12	12	PHILCAT	Computer	100	500	PHILCAT members	A. Gesite & R. Labios	Dec '07 to Nov '08
	• Distribution of WOCAT PR materials	12	12	PHILCAT	Computer, presentation materials	100	500	PHILCAT members	A. Gesite & R. Labios	Dec '07 to Dec. '08
	• Presentation of WOCAT materials in scientific/ technical conferences	2	2	PHILCAT	Computer, presentation materials	100	500	PHILCAT members	A. Gesite & R. Labios	Dec '07 to Dec '08
Educational Materials	• WOCAT use as instruction materials	4	10	UPLB,BSU	Computer, WOCAT materials	100	500	UPLB,BSU	R. Labios/ J. Balaoing	Dec '07 to Nov '08
1QA, 1QT, 1QM	• Update and documentation of SLM approaches and technologies	2	6	PHILCAT	Computer	200	1000	PHILCAT members	J. Balaoing J. Javier D. Manzanilla A. Gesite	Jan-Nov '08
National WOCAT Training	• PHILCAT training for inter-agency members	2	3	PHILCAT	Computer/ WOCAT literatures	800	1000	PHILCAT/ WOCAT	A. Gesite & R. Labios	Nov. 19-21, 2007
	• Regional Training on SWC and SLM	6	3	PHILCAT	Computer/ WOCAT literatures	250	10000	PHILCAT	A. Gesite & R. Labios	Apr-Dec ' 08

Prepared by: Romeo V. Labios &amp; Arnulfo Gesite

Total: US \$ 1650

US\$ 14000

<b>WORKPLAN for Tajikistan: 2008</b>									
Expected outputs	Activities	Input				Funding		Responsible person(s)	Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		
Training course	WOCAT Technologies and Approaches	4	6	Soil Research Institute of Tajik Agrarian Academy	-	300	-	Boturov U. Kurbanov R., Ergashev M., Nekushoeva G.	2008
To include WOCAT tools and methodologies in the donors activities	Workshop on the use of WOCAT database for investment project in Tajikistan	4	5	Soil Resaerch Institute, CAMP Kuhiston IFAD		-	4000	Sanginov S.R. Ergashev M.	2008
Taj QT	Review and editing	3	6	Soil Resaerch Institute, CAMP Kuhiston	Computer	300	-	Sanginov S.R. Akramov U.	2008
Testing QA	Review and editing	2	8	Soil Resaerch Institute, CAMP kuhiston		300	-	Kobilov R. Kurbanov R	2008
WOCAT lecture to students	Lecture at National State University	2	4	TAU	-	400	-	Boymurodov R. Hotamov M	2008
Documentation of technologies	Documentation	3	6	Soil Resaerch Institute	Computer, GIS	300	-	Nekushoeva G. Boturov U.	2008

Prepared by: Sanginov S.R.

Total: 4'600 US \$

WORKPLAN for FAO Asia and the Pacific: 2008										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
WOCAT promoted and adopted by countries in the region	• ASOCON workshop organized in collaboration with WOCAT member countries in the region	1	1	FAORAP ASOCON		\$30,000	\$30,000	Niino	Niino	May - Jun 08
WOCAT methodologies tested in LADA China project	• Monitor LADA China project activities	1	0.5	FAORAP China LADA team		0	0	Niino	Niino	Jan. – Dec. 08

Prepared by: ...Yuji Niino.....

Total: US \$30,000

<b>WORKPLAN for South Africa: 2007/2008</b>										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Data collection	Collect data - 3 new sets	1	1	ARC-ISCW		2100		RP	RP	Jan 08
Quality control of questionnaires	- Quality control of questionnaires by panel - Correct/complete questionnaires	2	1	ARC-ISCW		2100		Panel & RP	RP	Feb 08
International co-operation	- Attend WWSM and write report - Participate in task forces	2	1	ARC-ISCW / CEIT / DOA		10000	10000	RP / CP / DP	RP / CP / DP	Nov 08
Develop new QM mapping system	- Add/edit and view data on the fly - Labels per topic on map - Offline data capturing, viewing and uploading - Use Firefox - Base map can be vector - Base map can be raster - Acceptable speed online system - Basic data validation - Basic GIS capabilities - Data export - Mouseover tooltips - Predefined and open query system modular - Add spatial data for display overlays - Upload base map online - Add Int. Expl. compatibility - Manual on how to use system - Multilingual	2	3	CEIT		5500	14800	CP	CP	
Complete QM for SA	- Link QM survey to the Soil Protection Strategy - Conduct data capturing workshops - Update QM database	3	6	DoA/ISCW		50000		DP	DP	Nov 2008

	-Analyse data -Publish report									
Database management	Update data	1	1	ISCW			2000	RP	RP	March 2008
Promotion of WOCAT	-Organise/conduct two information workshops	2	1	DoA	-Posters -CD's	30000		LB	LB	Jun 2008

Prepared by: Rinda Pienaar

Total: US \$ 99'700 US \$ 26'800

<b>WORKPLAN for Ethiopia: 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
6 new technologies and 3 approaches documented	completeing QAs, QTs from new areas where no data is collected	12	3	MOARD / WOARD	questionnaires	1150	0	Daniel Danano, Solomon Kifle		
3 woreda survey results analysed and reported	undertaking survey in 3 woredas to critically asses socio-cultural problems constraining sustainable land management	15	3	MOARD / WOARD		1250		Daniel Danano Daniel Dentamo		
1 workshop conducted in woredas	conduct stakeholders workshop to review the assessment	30	-0	MOARD / WOARD		2250		Daniel Danano		
1 document on strategies developed	Developing strategy for up scaling 6 technologies in highly populated arfesa	2	2	MOARD / WOARD		3750		Daniel Danano		
	conducting National stakeholders workshop on the strategies developed					5000				
Total						12500				

Prepared by: Daniel Danano

Total: US \$ 12500 US \$

<b>WORKPLAN for Morocco: 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
3 QT, 3 QA	fill QT/QA with students, professionals and land users			Chair UNESCO-GN						Jan - April 08
Be able to conduct stakeholder workshop 2	Participate in training workshop on decision support tool (DESIRE WP3.3)			Chair UNESCO-GN						April 08
Decide on solution for implementation	Conduct stakeholder workshop 2			Chair UNESCO-GN						May / June 08
Reactivated WOCAT on national level	Maintain contact to Ministry of Agriculture			Chair UNESCO-GN						Nov 07 to Oct 08

Prepared by: Miloud Chaker

Total: US \$

US \$

WORK PLAN FOR NIGERIA: DEC 2007 - OCT 2008										
Expected Outputs	Activities	Inputs				Funding (US Dollar)		Responsible person(s)		Time table
		Person x months		Institution	Materials/ equipment	Available	Required		Commitment by	
WOCAT Introduced in more countries, (Data from more countries added to data base)	-Regional Initiative Establishment- Introducing WOCAT to more institutions/SWC specialists in West Africa	3	2months	TRCC	Funds, time Brochures		\$4,000	Ikponke Nkanta Dr Joseph Aruleba	Ikponke Nkanta	Dec2007-Feb 2008
knowledge transfer for Sustainable land use	Pilot project/ trainings for farmers	2	2 months	TRCC	Funds, time Brochures	\$2000 (expected)		Ikponke Nkanta Ufon Alex	Ikponke Nkanta	March-April,2008
Ensure good outputs	Quality control	2	2months	TRCC	SWC Specialists With different backgrounds		\$100	Ikponke Nkanta Ufon Alex	Ikponke Nkanta	May-June 2008
More data added into the data base	Documentation of more QT s/ATS	2	2months	TRCC	SWC Specialists/ volunteers		\$200	Ikponke Nkanta Ufon Alex	Ikponke Nkanta Ufon Alex	
Ensure funds availability/ Technical assistance	Proposal to donors/potential institutions for collaboration	3	3 months	TRCC	Communicati on materials		\$200	Ikponke Nkanta Ufon Alex	Ikponke Nkanta	June –August 2008
Present report at WOCAT Annual meeting - Switzerland	Preparation of annual report	1	1 month	TRCC	Time ,papers etc		\$100	Ikponke Nkanta Ufon Alex	Ikponke Nkanta	September 2008
Total						\$2000	\$4600			

Prepared by: Ikponke Nkanta, Tropical Research/Conservation Centre (TRCC)

<b>WORKPLAN for Togo: 2008</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
WOCAT installation in Togo : TGCAT	Contacts, workshop and steering meeting	2	3	University of Lome and local partners like: IFDC, ITRA, ICAT, NGO's	Phone, vehicle, fuel, meeting room, projector, Camera			MAWUSSI Gbénonchi AYEVA Tchatchibara		
Other SWC technologies and approaches using in Togo	Completing WOCAT questionnaires QTs, QAs and QM in new areas where no data is collected	10	5	University of Lome, and local partners like: IFDC, ITRA, ICAT, NGO's	WOCAT tools questionnaires QTs, QAs, QM			MAWUSSI Gbénonchi AYEVA Tchatchibara		
WOCAT promote in Togo and in West Africa	National and international contacts, workshop and steering meeting, conduct stakeholders surved in national scale	16	6	University of Lome, local and regional partners in west African countries	phone, vehicle, fuel, meeting room, projector, workshop, camera, fee of flight travel					
Total										

Prepared by: MAWUSSI Gbénonchi

Total: US \$

US \$



<b>WORKPLAN for Serbia: 2007/2008</b>										
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)	Dec. '07 - Feb. '08
WOCAT promotion	- Training of new students (Student's Forum of WASWC); - Promotion at ISCO Conf. in Budapest	10	2	Dept. for Ecological Engin. (Fac of Forestry)			5000	M. Zlatic, N. Dragovic, S. Kostadinov	Dept. for Ecological Engin. (Fac of Forestry)	Sept '07 - Oct. '07
Further action on QM	Updating QM for 4 districts and collecting data for 2 more	5	4	- Dept. for Ecological Engin. (Fac of Forestry) -Stud. Forum			8000	M. Zlatic, N. Dragovic, M. Todosijevic J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	Jan '08 - July '08
Further action on QT, QA	Continuing work in Serbia	5	3	Dept. for Ecological Engin. (Fac of Forestry)			6000	M. Zlatic, N. Dragovic, M. Todosijevic, J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	April '08 - July '08
Quality control	Feedback meeting	5	1	Dept. for Ecological Engin. (Fac of Forestry)			1500	M. Zlatic, S. Kostadinov R.Kadovic, N. Dragovic	Dept. for Ecological Engin. (Fac of Forestry)	July 2007
Overview book of Serbian experience	Overview book of performed programme	4	2	Dept. for Ecological Engin. (Fac of Forestry)			3000	M. Zlatic, N. Dragovic, M. Todosijevic, J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	Aug '08 - Oct. '08

Prepared by: Miodrag Zlatic

Total: US \$

US \$ 25000

## ANNEX 2: LIST OF PARTICIPANTS

Name	First Name	Company / Institution	Actual address	Country	E-mail	Tel
Armada*	Adoracion B.	Department of Science and Technology, Philippine Council for Agriculture, Forestry and Natural Resource Research and Development (DOST-PCARRD)	Paseo de Valmayor, Los Banos, Laguna 4030	Philippines	<a href="mailto:abarmada@yahoo.com">abarmada@yahoo.com</a>	
Asanaliev	Abdybek	Kyrgyz Agrarian University	Bishkek, 68 Mederov St. 720005	Kyrgyz Republic	<a href="mailto:asanaly61@mail.ru">asanaly61@mail.ru</a>	+996 (312) 406121, (502) 201732 (mobile)
Atienza*	Redia N.	Legislative Support Committee Service "C", Senate of the Philippines	3rd floor, GSIS Financial Centre, Roxas Blvd, Pasay City	Philippines	<a href="mailto:redia_neypes@yahoo.com">redia_neypes@yahoo.com</a>	+632-552-6601 to 80
Balane	Roy Joseph B.	International Center for Research on Agroforestry (ICRAF) Philippines	Totolan, Dausi, Bohol	Philippines	<a href="mailto:rojbalane@yahoo.com">rojbalane@yahoo.com</a>	
Balaoing	Jose G.	Benguet State University	La Trinidad, Benguet	Philippines	<a href="mailto:joe_balaoing@yahoo.com">joe_balaoing@yahoo.com</a>	
Baloloy*	Reynaldo I.	Department of Agriculture-National Irrigation Administration (DA-NIA)	5th Flr. NIA Bldg., EDSA, Diliman, Quezon City	Philippines	<a href="mailto:rbaloloy@yahoo.com">rbaloloy@yahoo.com</a>	
Batzaya	Tsegmid	Swiss Agency for Development and Cooperation	P.O Box-10, P.O-38 Ulaanbaatar 211238	Mongolia	<a href="mailto:zaya@greenmongolia.mn">zaya@greenmongolia.mn</a>	+976-11-326491
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Bosoga	R. Lydia	DoA: LandCare Programme	P/Bag X 120, Pretoria, 0001	South Africa	<a href="mailto:lydiab@nda.agric.za">lydiab@nda.agric.za</a>	+ 27 12 319 7656
Cabezon*	Wilfredo E.	Assistant Director, Bureau of Soils and Water Management - Dept of Agriculture -(BSWM-DA)	SRDC Bldg. Elliptical Road cor. Visayas Ave., Diliman, Quezon City	Philippines	<a href="mailto:wilfredocabezon@yahoo.com">wilfredocabezon@yahoo.com</a>	+632-923-0478
Carating	Rodelio B.	Department of Agriculture-Bureau of Soils and Water Management (DA-BSWM)	SRDC Bldg. Elliptical Road cor. Visayas Ave., Diliman, Quezon City	Philippines	<a href="mailto:rodelcarating@yahoo.com.ph">rodelcarating@yahoo.com.ph</a>	
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**Middle row:** Elsa Parot, Romeo Labios, Aida Gareeva, Digna Manzanilla, Alyn Garces, Godert van Lynden, Redia N. Atienza, Steve Ellis, Christine Hauert, Kiyoshi Ozawa, Gbénonchi Mawussi, Rinda van der Merwe - Pienaar, Batzaya Tsegmid, Lydia Bosoga, Lewis Njeru, Arnulfo Gesite, Dirk Pretorius, Sudibya Kanti Khisa, Sophis Liniger, Carin Pretorius, Ikponke Nkanta, Wolfgang Prante, Niranjana Sahu

**Front row:** Wilfredo Cabezon, Gudrun Schwilch, Rima Mekdaschi Studer, Nada Dragovic, Adoracion Armada, Mandakh Nyamtseren, Silvino Tejada, Perlita Rondal, Hanspeter Liniger

**Missing on the photo:** Isabelle Providoli, Sanjeev Bhuchar, Filipina Ventigan, Rodelio Carating, Antonio Rivera, J Balane, J Balaoing, E Lopez



*Some recreational activities: enjoying (cultural evening presented by University students), singing, playing and eating (Photos Gudrun Schwilch, Rima Mekdaschi Studer and Hanspeter Liniger)*



## ANNEX 3: FIELD TRIP REPORT

On the way from Panglo Island to Tagbilaran City stretches of highly eroded hills planted to corn are so eroded that stone outcrops are visible. These same stones were collected by residents and used as contoured stone bunds for terracing and the control of soil erosion.

The first stop was a visit to an ACIAR/BSWM soil conservation project where agricultural diversification was tested, with higher-value crops and various SWC activities. Watershed degradation is a major environmental concern in the steeply sloping uplands of Bohol. Land use here is dynamic and this brings about equally dynamic impacts on other resource users in the watershed. The shallow calcareous soils combined with intense rainfall events, and traditional land-use practices bring about high levels of erosion and land degradation. Soil fertility declines and subsistence farmers find it more and more difficult to economically till the land.

The next stop was at the Chocolate Hills in Carmen.

These are conical karst hills, mostly between 30-50 meters high. They are covered with grass which at the end of the dry season, turns chocolate brown. At other times, however, the hills are green and the association with chocolate brown is quite difficult to make.

However, up to this date, even geologists have not reached consensus on how they were formed. The most commonly accepted theory is that they are the weathered formations of a marine limestone on top of an impermeable layer of clay.

The trip continued through the man-made forest in Bilar.

Thousands of mahogany trees were planted more than forty years ago during the time of Governor Lino Chatto on a cleared area of 857.4 hectares as part of the reforestation program of the government, to prevent flash floods in the area, and maintain the ecological balance of the remaining natural forests. To these days, the trees stand as a verdant reminder of the importance of trees in the maintenance of the ecosystem and is the largest man-made forest in the country.

The next stop was lunch on a floating restaurant on the Loboc river.

Loboc is also known for its tarsier, a small nocturnal animal with large eyes, and one of the world's smallest primates.





The very last stop was at the **Ubay Agricultural Research Station**

Ubay is home to a number of agricultural research centres like the Bohol Experiment Station, the Ubay Stock Farm, and the Ubay Brackish Water Fish Farm. There is also a government irrigation project in Ubay.





# ANNEX 4: CONTENT OF CD-ROM

## 1. Proceedings: ProceedingsWWSM07.pdf

## 2. Photo selection

## 3. Presentations (see below)

Highlights for WWSM 2007.ppt  
in memory of Joe Rondal.ppt  
Joe\_Rondal by GvL.mpg

### Topic 1: Progress Reports

- 1.1 Activities at the global level
  - global major achiev07.ppt
  - ISRIC activities 2006-2007.ppt
- 1.2 Taskforces
  - PROGRESS REPORT - MAP07.ppt
  - progress report TF Strategy.ppt
  - progress report TF DSS.ppt
  - progress report TF Q Rev07.ppt
  - TF WOCAT in research & education 07.ppt
  - IMTF.ppt
- 1.3 Activities at the national/regional level
  - BANCAT-WWSM12-ProgressReport.ppt
  - 12th WOCAT(EN) China.ppt
  - ICIMOD-WOCAT presentation-oct07-final.ppt
  - WOCAT INITIATIVES IN ORISSA, INDIA.ppt
  - WOCAT 12th WWSM Kyrgyzstan.ppt
  - PHILCAT Activities 2006-2007.ppt
  - pilot project areal cropping Nigeria.ppt
  - Progress Morocco (CHAKER).ppt
  - Progress\_RSA.ppt
  - Serbian Report.ppt
  - FAO Land Use in Asia& Pacific.ppt
- New initiatives
  - WOCAT\_Manila\_Mongolia.ppt
  - presentation Togo.ppt,
  - Togo Oral communication.doc

### Topic 2: Special Topic

- Book promotion & distribution.ppt
- Ethiocat.ppt;
- Ethiopia SWC overview draft final.doc
- NEPCAT.ppt
- Global initiatives.ppt

### Topic 3: WOCAT Strategy

- Topic3Strategy.ppt

### Topic 4: QT and QA revised

- Q revision.ppt
- 'Technology System' Module.ppt

### Topic 5: Mapping

- WOCATMappingNationalLevel.ppt
- wocat\_lada\_sa.ppt
- njeru\_qm\_presentation.ppt
- LADA-WOCAT Framework in Somaliland.pdf
- WOCAT map GE.pdf;
- WOCAT-GE 1-11-07.kmz

**Topic 6: WOCAT online database****Topic 7: Special national and regional presentations**

- WOCAT tools and its utility in WD in India.ppt
- Zlatic - Special presentation.ppt
- CAMP Alattoo.ppt
- PHILIPPINES\_CBFM.ppt
- SUMMARY OF PHILIPPINES PRESENTATION.doc
- SWCF\_Experience\_Philippines.ppt
- ROLE OF ALN IN WOCAT.ppt

**Topic 8: WOCAT as tool for decision support**

- DesireIntro.ppt
- DecisionSupport.ppt

# ANNEX 5: WOCAT MILESTONES

WOCAT Milestones 1992-2007		
2007		
November, 19 - 22	Manila, Philippines	PHILCAT training workshop on WOCAT tools and methodology
November, 12 -17	Manila & Bohol, Philippines	12th Annual International WOCAT Workshop and Steering Meeting
October, 22-28	Xi'an, China	Workshop on spatially explicit modelling of land use change & decision support for sustainable farming systems in the Loess Plateau
October, 15-18	Pretoria, South Africa	Training Workshop on implementation of new mapping methodology with participants from South Africa, FAO-LADA, ISRIC and CDE
October, 1-5	Murcia, Spain	DESIRE WB3 (Defining potential prevention and mitigation strategies) training workshop for study site facilitators
September, 22-28	Ulaanbaatar, Mongolia	Preparation of SDC Combating Degradation programme: National KM + DS to combat and cope with desertification
September, 3-14	Madrid, Spain	UNCCD COP8, stand of WOCAT, SDC and ISRIC, promotion of 'where the land is greener'
August, 27-30	Selfoss, Iceland	First Expert Workshop for the KM: Land Initiative - Evaluation of available land degradation indicators and development of a learning network (using WOCAT for KM)
July, 5-9	Berne, Switzerland	Map taskforce meeting with participants from South Africa, FAO(-LADA), ISRIC and CDE
June, 29	Berne, Switzerland	Release of WOCAT strategy 2008 - 2012
June, 17-23	Rabat, Morocco	Pilot stakeholder and training workshop DESIRE
June, 4-8	Norwich, England	LADA local level assessment workshop
March, 14-16	Rome, Italy	LADA development of national assessment mapping methodology
March, 5-8	Heraklion, Crete	Kick-off meeting DESIRE project. WOCAT, through CDE and ISRIC, is one of the main partners in the project
February	Kathmandu, Nepal	HIMCAT extranet reactivation
January, 24	Berne, Switzerland	'where the land is greener' book launch at SDC
January, 8-9	Rome, Italy	International workshop GEF on land degradation. Focal area Indicators development
2006		
November 28-December 1	Rome, Italy	LADA Project Steering Committee meeting and technology workshop
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 <sup>nd</sup> 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 » ( <a href="http://www.etudesdusahel.org">www.etudesdusahel.org</a> )
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
<b>2004</b>		
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, <a href="#">paper</a> presentation (WOCAT, SOWAP) and poster on WOCAT World Map.
July	FAO, Rome	<a href="#">CD-ROM version 3</a> 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 <a href="#">SOWAP</a> collaborating countries, attended by 9 Participants from UK, Belgium, Hungary (+ Netherlands, Switzerland)
March 30-April 2	Berne, Switzerland	<a href="#">Dare to Share Fair</a> 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 ( <a href="#">HIMCAT</a> ), 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 <a href="#">Bangladesh</a> , 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 ear marked activities in DANIDA supported countries (approx. US\$ 50'000 per year).
<b>2003</b>		
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
<b>2002</b>		
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.
<b>2001</b>		
September 28 - 29	Nyeri, Kenya	Presentation and Meeting with RELMA regional Advisory Committee members from 6 Eastern African countries: Eritrea, Ethiopia, Kenya, Tanzania, Uganda, Zambia
September 24 - 28	Nyeri, Kenya	6th Annual International WOCAT Workshop and Steering Meeting attended by 30 participants from 15 countries
September 21	Nairobi, RELMA; ICRAF	Presentation of WOCAT and its use to national and international institutions
September	FAO, CDE	Finalizing of WOCAT video and printing & publishing it in the FAO Land and Water Digital Series No 16: on a CD-ROM in 3 languages: E, F, S
June 11-14	Iringa, Tanzania	National WOCAT Training Workshop in Iringa, Tanzania, initiated through the HIMA project and the Ministry of Agriculture, sponsored by DANIDA.
May 21-24	Dushanbe, Tajikistan	Regional WOCAT Training Workshop for four Central Asian countries (Tajikistan, Kyrgyzstan, Kazakhstan, Uzbekistan) on Technologies and Approaches, organized by CAMP and UNCCD/GIZ.
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.
<b>2000</b>		
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 UNCCD)
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.
<b>1999</b>		
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.
<b>1998</b>		
December	Bern, CDE	Finalizing revision and printing of revised version of QT and QA
September – October	Bern, CDE	Proposal for funding to SDC: 3rd phase of WOCAT funding approved by SDC: from 1/9/98 - 31/8/01
August 25– September 1	Twann, CDE	International Workshop and Steering Meeting
August 17-21	Manila, DANIDA	New initiative: National WOCAT Workshop in the Philippines
July	Rome, FAO	Distribution of WOCAT CD-ROM to all WOCAT collaborators and contributing specialists
June-Aug	Niamey, ICRISAT	WOCAT studies in Niger by two students of CDE Bern
May-Aug	Cali, CIAT	WOCAT studies in Colombia by two students of CDE Bern
April-May	Bern, CDE	WOCAT Review: external evaluation of the WOCAT programme for SDC
April-June	Rome, FAO and CDE	Preparation of WOCAT CD-ROM version 1.0 which illustrates the WOCAT methodology and shows preliminary data sets and results
April	Bern, CDE	Final Revision of questionnaires on Technologies, Approaches and Map
April	Paris, OSS and Colombia, GTZ	Translation of latest versions of questionnaires into French and Spanish
March 31–April 1	Bogota, GTZ	WOCAT Workshop Colombia with 12 experts of GTZ, CIAT and University of Colombia
March	Bern, CDE	New initiatives of ICRISAT Niger and PASOLAC Nicaragua: First discussions
February	Bern, CDE, ISRIC, FAO	Development work on Database Management System for QT, QA, QM and integration of QT / QM
February	Bern, CDE	WOCAT Database Training for 3 delegates from the Fujian SWC Centre, China
<b>1997</b>		
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
<b>1996</b>		
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
<b>1995</b>		
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
<b>1994</b>		
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)
<b>1993</b>		
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.
<b>1992</b>		
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