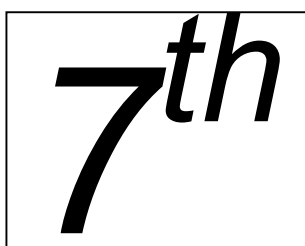


WORLD OVERVIEW OF CONSERVATION APPROACHES AND TECHNOLOGIES

Seventh International Workshop and Steering Meeting

Rome, Italy

28 October - 4 November 2002



*WORKSHOP &  
STEERING MEETING  
PROCEEDINGS*

Progress, Methods, Outputs,  
Plan of Action,  
Organisation

Co-sponsored by:

Swiss Agency for Development and Cooperation (SDC)

Food and Agriculture Organisation of the United Nations (FAO)

Syngenta Foundation

Central Asia Mountain Programme (CAMP)

Regional Land Management Unit, Kenya (RELMA)

Danish International Development Assistance (DANIDA)



**syngenta**  
Foundation



**RELMA**  
REGIONAL LAND MANAGEMENT UNIT

**Danida**

**Copyright © 2002**

**Editors**

**Address**

Centre for Development and Environment (CDE)

Mats Gurtner, Gudrun Schwilch  
with support from Hanspeter Liniger, Godert van Lynden

Centre for Development and Environment (CDE)  
Institute of Geography, University of Bern  
Steigerhubelstrasse 3  
3008 Bern  
Switzerland

Tel. +41 31 631 88 22

Fax +41 31 631 54 44

E-mail: [WOCAT@giub.unibe.ch](mailto:WOCAT@giub.unibe.ch)

<http://www.WOCAT.net>

**Layout**

Mats Gurtner

# WOCAT

WORLD OVERVIEW  
OF CONSERVATION APPROACHES  
AND TECHNOLOGIES (WOCAT)

7<sup>th</sup>

## WORKSHOP & STEERING MEETING PROCEEDINGS

WOCAT Management Group:

Centre for Development and Environment (CDE, Switzerland)  
International Soil Reference and Information Centre (ISRIC, The Netherlands)  
Food and Agriculture Organization of the United Nations (FAO, Italy)  
Regional Land Management Unit (RELMA, Kenya)  
Institut du Sahel (INSAH, Burkina Faso)  
Bureau of Soil and Water Management (BSWM, Philippines)  
(**New member**) Soil and Water Conservation Monitoring Center (SWCMC, P.R. China)  
(**Stepped down**) World Association of Soil and Water Conservation (WASWC, USA)

# LIST OF COLLABORATING AND FUNDING INSTITUTIONS

<b>ACT</b>	African Conservation Tillage Network, Harare, Zimbabwe
<b>ADB</b>	Asian Development Bank, Manila, 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>CDCS</b>	International Cooperation Centre, Vrije Universiteit Amsterdam, The Netherlands
<b>CDE</b>	Centre for Development and Environment, University of Bern, Switzerland
<b>DANIDA</b>	Danish International Development Assistance, Copenhagen, Denmark
<b>DEC</b>	Department for Erosion Control, Faculty of Forestry, Belgrade University, Yugoslavia
<b>DED</b>	Deutscher Entwicklungsdienst, Berlin, Germany
<b>FAO</b>	Food and Agriculture Organisation of the United Nations, Rome, Italy
<b>“Friends of WOCAT”</b>	Individuals without institutional backing
<b>FSSRI / UPLB</b>	Farming Systems and Soil Resources Institute, University of the Philippines Los Baños, Philippines
<b>FSWCO</b>	Fujian Soil and Water Conservation Office, Fuzhou, China
<b>GTZ</b>	Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn, Germany
<b>IAEA</b>	International Atomic Energy Agency, Joint FAO / IAEA Division, Vienna, Austria
<b>IFAD-GM</b>	International Fund for Agricultural Development - Global Mechanism, Rome, Italy
<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>ICRISAT</b>	International Crops Research Institute for the Semi-Arid Tropics, Niamey, Niger
<b>INSAH</b>	Institut du Sahel, Bamako, Mali
<b>ISCW / ARC</b>	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
<b>ISRIC</b>	International Soil Reference and Information Centre, 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>MAFS-SCLUPU</b>	Ministry of Agriculture and Food Security, Soil Conservation and Land Use Planning Unit, Dar es Salaam, Tanzania
<b>MoA, Ethiopia</b>	Ministry of Agriculture, Addis Abeba, Ethiopia
<b>NDA</b>	National Department of Agriculture, Pretoria, South Africa
<b>OSS</b>	Observatoire du Sahara et du Sahel, Tunis, Tunisia
<b>PASOLAC</b>	Programa de Agricultura Sostenible en Laderas de América Central, Managua, Nicaragua
<b>RELMA</b>	Regional Land Management Unit (former RSCU), Sida, Nairobi, Kenya
<b>SDC</b>	Swiss Agency for Development and Cooperation, Bern, Switzerland
<b>SWCB</b>	Ministry of Agriculture, Soil & Water Conservation Branch, Nairobi, Kenya
<b>SWCMC</b>	Soil and Water Conservation Monitoring Center, MWR, Beijing, P.R. China
<b>Syngenta</b>	Environmental Safety Assessments and Contracts, Jealott's Hill International Research Centre, Berkshire, UK; Syngenta Foundation, Basel, Switzerland
<b>TSSRI</b>	Tajik Soil Science Research Institute, Dushanbe, Tajikistan
<b>UCL</b>	Université catholique de Louvain, Agricultural Engineering Unit, Soil and Water Conservation, Louvain-la-Neuve, Belgium
<b>UNEP</b>	United Nations Environment Programme, Nairobi
<b>WDCU</b>	Watershed Development Coordination Unit, New Dehli, India

**WOCAT Management Group: CDE, FAO, ISRIC, SWCMC, BSWM, INSAH**

# LIST OF ABBREVIATIONS

CCD	See UNCCD
DB	Database
DBMS	Database Management System
FAO-SNEA	FAO Subregional Office for North Africa
GLASOD	Global Assessment of Human-Induced Soil Degradation (UNEP / ISRIC)
GEF	Global Environmental Facility
GO	Government Organisation
HKH	Hindukush/Himalaya
ISCO	International Soil Conservation Organization
IUSS	International Union of Soil Science
LADA	Land Degradation Assessment in Dryland Areas(FAO-UNEP)
MG	WOCAT Management Group
MoU	Memorandum of Understanding
MRD	Mountain Research and Development Journal
NCCR	National Centre of Competence in Research (CDE, Research Partnership North - South)
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
NRE	Natural Ressource and Environment Division of SDC
PFI	Promoting Farmer Innovations
QA	Questionnaire on Approaches
QM	Questionnaire on the WOCAT Map
QT	Questionnaire on Technologies
SLM	Sustainable Land Management
SM	Steering Meeting
SWC	Soil and Water Conservation
TF	Task force
ToR	Terms of Reference
UNCCD	United Nations Convention to Combat Desertification
UNCBD	United Nations Convention on Biological Diversity
UNFCCC	United Nations Framework Convention on Climate Change
WASWC	World Association of Soil and Water Conservation
WOCATeer	WOCAT collaborator
WOCAT-L	WOCAT mailing list
WWSM	WOCAT (annual) Workshop and Steering Meeting
WS	Workshop

# TABLE OF CONTENTS

<b>LIST OF COLLABORATING AND FUNDING INSTITUTIONS .....</b>	<b>IV</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>V</b>
<b>TABLE OF CONTENTS .....</b>	<b>VI</b>
<b>FOREWORD .....</b>	<b>VIII</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>WORKSHOP PROGRAMME .....</b>	<b>2</b>
<b>TOPIC 1    PROGRESS REPORTS.....</b>	<b>5</b>
1.1    Introduction .....	5
1.2    Activities at the global level .....	5
1.3    Activities at the national / regional level .....	9
1.4    New initiatives.....	18
1.5    Other presentations .....	22
1.6    Taskforces .....	23
<b>TOPIC 2    QUALITY ASSURANCE .....</b>	<b>29</b>
2.1    Introduction .....	29
2.2    Revision of Questionnaires .....	30
2.3    Quality Control of Summary Sheets .....	31
2.4    Group Work / Taskforce on Quality Assurance .....	32
<b>TOPIC 3    DIGITAL PRODUCTS .....</b>	<b>35</b>
3.1    Introduction .....	35
3.2    Improvement of digital products .....	35
3.3    Group Work / Taskforce on Digital Products .....	37
<b>TOPIC 4    WOCAT MAPPING .....</b>	<b>39</b>
4.1    World Map .....	39
4.2    Questionnaire on Mapping (QM) .....	40
4.3    Group Work / Taskforce on WOCAT mapping .....	40
<b>TOPIC 5    OVERVIEW BOOKS / USE OF WOCAT .....</b>	<b>43</b>
5.1    Introduction .....	43
5.2    Taskforce on Overview Books .....	43
5.3    Taskforce on the Use of WOCAT .....	46
<b>TOPIC 6    PLANNING NEXT YEAR .....</b>	<b>49</b>
6.1    Vision for WOCAT .....	49
6.2    Proposed Global Activities 2003 .....	49
6.3    Proposed National and Regional Activities .....	53
6.4    Budget 2002/2003 .....	54
6.5    Taskforces .....	56
6.6    Evaluation of the Workshop .....	56
6.7    Management Group Meeting .....	58

<b>TOPIC 7</b>	<b>STEERING MEETING.....</b>	<b>61</b>
7.1	Introduction.....	61
7.2	Reports on Topics 1 – 6 .....	61
7.3	Global Workplan.....	64
7.4	National and Regional Workplans.....	65
7.5	Taskforce Activity Plans .....	65
7.6	Organizational Issues.....	66
7.7	AOB.....	69
7.8	SDC Report of WOCAT Steering Meeting .....	69
<b>ANNEX 1:</b>	<b>ACTIVITY PLANS .....</b>	<b>71</b>
<b>ANNEX 2:</b>	<b>MONITORING SHEETS.....</b>	<b>87</b>
<b>ANNEX 3:</b>	<b>FIELD TRIP REPORT .....</b>	<b>116</b>
<b>ANNEX 4:</b>	<b>LIST OF PARTICIPANTS.....</b>	<b>117</b>
<b>ANNEX 5:</b>	<b>WOCAT MILESTONES.....</b>	<b>120</b>

## FOREWORD

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions in order to present the results of the seventh Annual Workshop and Steering Meeting, held in Rome, Italy, in October/November 2002. 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.

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



# INTRODUCTION

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

As agreed during the previous annual workshop in Nyeri, Kenya in September 2001, the 7<sup>th</sup> Annual Workshop and Steering Meeting was held from 28 October - 4 November 2002, near/in Rome, Italy. The meeting was hosted by the Food and Agriculture Organisation of the United Nations (FAO). FAO has been involved in WOCAT since the first workshop in Riederalp (1993) and has actively contributed to WOCAT activities in general and on the database development in particular.

40 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.

Following the one-week workshop in Grottaferrata, just outside Rome, a separate Steering Meeting was held on November 4 at FAO-Headquarter, where the main conclusions and recommendations were presented for approval by the chairs and rapporteurs of each topic.

## **Aim of the meeting**

The specific aim of the meeting was to present and discuss major developments during the last year, such as the activities at the national/regional level, achievements in the methodology, in building up the database and outputs and new national and regional initiatives. Activities and needs for the coming year were identified and the budgetary consequences considered. Collaborators were invited to contribute to the further development and promotion of these WOCAT activities.

## **Topics**

The main discussion topics identified for the workshop were:

*TOPIC 1:* Review of Activities

*TOPIC 2:* Quality Assurance

*TOPIC 3:* Digital Products

*TOPIC 4:* WOCAT Mapping: World Map, QM

*TOPIC 5:* Other Products (Overview books)

*TOPIC 6:* Planning next year / phase

# WORKSHOP PROGRAMME

Date/time	Activity/Topic	Responsibilities
<b>Sunday 27/10</b>	Arrival of participants, transfer to Grottaferrata; registration	
<b>Monday 28/10</b>		
09:00 – 09:15	Opening, welcome	
09:15 – 10:20	Introduction, participants' expectations, approval of agenda, administrative information	H.P. Liniger, W. Prante
	<b>TOPIC 1: Progress reports</b>	Chair: G. v. Lynden Rapporteur: M. Gurtner
10:20 – 10:50	a) Activities at the global level (Secretariat/Management Group)	National coordinators / representatives
10:50 – 11:20	Coffee break	
11:20 – 12:30	b) Activities at the regional/national level ( <i>NB: 5-10 min. each!</i> )	
	<ul style="list-style-type: none"> <li>Kenya</li> <li>China</li> <li>Thailand</li> <li>Philippines</li> <li>S. Africa</li> <li>Ethiopia</li> <li>India</li> <li>Tanzania</li> <li>Central Asia</li> <li>Yugoslavia</li> <li>INSAH / West Africa</li> <li>RELMA</li> </ul>	
12:30 – 14:00	Lunch break	
14:00 – 15:00	Continuation of reports on activities at regional/national level	
15:00 – 16:00	c) Task Forces ( <i>NB: &lt; 10 min. each!</i> )	
	<ul style="list-style-type: none"> <li>- Digital products</li> <li>- QM</li> <li>- Guidelines</li> <li>- SWC Categorization</li> <li>- Overviews (summary sheets)</li> <li>- Coffee table book / calendar</li> <li>- Quality assurance group</li> </ul>	
16:00 – 16:30	Coffee break	
16:30 – 17:15	Presentations of new initiatives/institutions/collaboration: Syngenta (EUCAT), IAEA, ICIMOD, FAO-SNEA/North Africa, ICARDA (DRYCAT)	
17:15 – 18:00	Plenary discussion on topic 1 (Initiatives and Task Forces)	W. Prante G. v. Lynden J. Rondal G. Schwilch H.P. Liniger H.P. Liniger M. Gurtner
19:00	Dinner	
<b>Tuesday 29/10</b>		
08:30 – 09:00	Presentation of report on Topic 1	Topic chair and rapporteur
	<b>TOPIC 2: Quality assurance, improvements and enhancement of data collection</b>	Chair: G. Kimaru Rapporteur: M. Douglas
09:00 – 09:30	Introduction to topic 2 (incl. latest QT/QA revision) and plenary discussion	M. Gurtner / H.P. Liniger / G. Schwilch
09:30 – 10:00	Individual reading through filled-in questionnaires	
10:00 – 10:30	Coffee break	
10:30 – 12:30	Continuation of individual reading through filled-in questionnaires	
12:30 – 14:00	Lunch break	
14:00 – 15:00	Reporting on experience of reading Q's, plenary discussion on conclusions and the way forward	
	<b>TOPIC 3: CD-ROM v.3 and digital products</b>	Chair: S. Sombatpanit Rapporteur: G. Schwilch
15:00 – 15:30	Introduction to topic 3: presentation of CD-ROM v.3 prototype, new WOCAT website and new database design	W. Prante / G. Schwilch
15:30 – 16:00	Plenary discussion on topic 3	
16:00 – 16:30	Coffee break	
16:30 – 18:00	Presentations of J. Benites (FAO) on Conservation Tillage and E. Chuma on African Conservation Tillage Network (ACT); discussion	
19:00	Dinner	

<b>Wednesday 30/10</b>		
08:30 – 09:00	Presentation of report on <b>Topic 2</b>	Topic chair and rapporteur
	<b>TOPIC 4: World map / QM</b>	Chair: J. Rondal Rapp.: R. v.d. Merwe
9:00 – 09:30	Introduction to topic 4 (incl. latest QM revision)	H.P. Liniger / G. v. Lynden / G. Schwilch
09:30 – 10:00	Plenary discussion on topic 4	
10:00 – 10:30	Introduction to group work on topic 4	G. Schwilch / HP Liniger / G. v. Lynden
10:30 – 11:00	<i>Coffee break</i>	
11:00 – 12:00	Group work on topic 3 and 4	
12:00 – 12:30	Group work reporting (topic 3 and 4)	
12:30 – 13:15	<i>(Short!) Lunch break</i>	
14:00 – 16:30	Visit to Telespazio (incl. coffee break)	
	<b>TOPIC 5: Other products: Overview books</b>	Chair: Dirk Pretorius Rapporteur: D. Danano
16:30 – 17:00	Introduction to topic 5	H.P. Liniger / G. v. Lynden
17:00 – 17:30	Plenary discussion on topic 5	
17:30 – 18:30	Group work on Task Forces	
19:00	<i>Dinner</i>	
20:30	WOCAT in education / research; other subject according to interest	H.P. Liniger / S. Sombatpanit
<b>Thursday 31/10</b>		
<i>whole day</i>	<i>field trip (SYNGENTA / Teramo University)</i>	
<b>Friday 01/11</b>		
08:30 – 09:00	Presentation of reports on <b>Topic 3, 4 and 5</b>	Topic chairs and rapporteurs
09:00 – 10:30	Task Forces: Group work and presentations	
10:30 – 10:45	<i>Coffee break</i>	
	<b>TOPIC 6: Planning next year / phase</b>	Chair: F. Turkelboom Rapporteur: R. Labios
10:45 – 11:15	Vision WOCAT: Brainstorming	
11:15 – 12:45	Proposed national / regional activities	
12:45 – 14:00	<i>Lunch break</i>	
14:00 – 15:45	<i>Regional Networking (Group meetings and presentations)</i>	
15:45 – 16:00	<i>Coffee break</i>	
16:00 – 17:30	Major activities, Feedback from Participants (against expectations), AOB	
19:00	<i>Dinner</i>	
<b>Saturday 02/11</b>		(Chair: H.P. Liniger)
08:30 – 09:00	Presentation of reports on <b>Topic 6</b>	Topic chair and rapporteur
09:00 – 10:30	Preparation of Steering Meeting	
10:30 – 11:00	<i>Coffee break</i>	
11:00 – 13:00	Task Force Meetings: planning activities	Task Force members
13:00 – 14:00	<i>Lunch break</i>	
14:00 – 18:00	Free	
Evening	Free	
<b>Sunday 03/11</b>	Free; arrival of additional Steering Meeting participants	

<b>Monday, 04/11/02</b>		
<i>07:30 – 08:30</i>	<i>Transfer to FAO, Rome</i>	
	<b>WOCAT Steering Meeting</b>	Chair: H.P. Liniger Rapporteur: G. Schwilch
08:45 – 09:00	Introduction, approval of agenda	Chair
09:00 – 09:15	Topic 1: Review of activities since last SM, milestones, global and regional/national initiatives	Godert van Lynden
09:15 – 09:35	Topic 2: Quality assurance, improvements and enhancement of data collection	Gathiru Kimaru
09:35 – 10:00	Discussion of Topic 1 and 2	Chair
<i>10:00 – 10:30</i>	<i>Coffee break</i>	
10:30 – 11:00	Topic 3: CD-ROM v.3 and digital products and discussion	Gudrun Schwilch
11:00 – 11:30	Topic 4: World map and discussion	José Rondal
11:30 – 12:00	Topic 5: Other products and discussion	Malcolm Douglas
12:00 – 12:30	Topic 6: Planning next year/phase: Future of WOCAT 3-10 years (brainstorming)	Romy Labios
<i>12:30 – 14:00</i>	<i>Lunch break</i>	
14:00 – 14:30	Future of WOCAT 3-10 years: Discussion	
14:30 – 15:15	Annual work plan and priorities: activities and budgets (available and required): highlights	National/ regional/global representatives
15:15 – 15:45	Taskforces: activity plans	TF representatives
<i>15:45 – 16:15</i>	<i>Coffee break</i>	
16:15 – 17:00	Organisational issues: Election of Management Group members, assignment of Secretariat, Next International Workshop and Steering Meeting 2003	Chair
17:00 – 17:30	AOB	Chair
17:30	Closing	Chair

# TOPIC 1 PROGRESS REPORTS

*Rapporteur: Mats Gurtner*

## 1.1 Introduction

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 '01 (WWSM Nyeri) to September '02.

## 1.2 Activities at the global level

### 1.2.1 Review 2002

#### **Major achievements in 2002:**

- Building up the capacities in the partner countries (decentralization): training workshop in January 2002 for national facilitators.
- Participation, presentations and papers in international workshops and conferences (ISCO, IUSS, LADA)
- Publications: MRD Journal, proceedings of conferences, books, newspapers
- Further database and Website development
- Development and quality checking of overview books
- International Workshop and Steering Meeting in Rome with most of the partners (record participation)

### 1.2.2 Funding

#### **a) SDC**

- Extension of previous phase from September 01 up to 31 December 2001
- Preparation of long-term programme: WOCAT together with MRD and SLM under a broader umbrella. These three programmes are supported by NRE/SDC (Natural Resource and Environment Division of SDC) as programme contributions within the framework of collaboration between NRE and CDE.
- Intermediate agreement 1 January 2002 – 30 July 2002
- Approval of the first 3 years phase in October 2002

#### **Approved WOCAT programme:**

- Long term mandate!
- WOCAT is highly appreciated by SDC
- CDE seen by SDC as centre of competence to coordinate WOCAT
- Objectives: see table above
- Annual budget increased from CHF 300'000 to 400'000
- Strengthening of WOCAT secretariat: Fränzi Jöhr with 20% mandate for WOCAT

#### **b) DANIDA**

- Renewal contract for 3<sup>rd</sup> year with Poul Richardt Jensen as new contact person at DANIDA.
- 50% core, 50% country earmarked for Tanzania, India (and Eritrea)
- Reduction from CHF 100'000 to 80'000 (due to overall budget cut of DANIDA)
- Continuation after mid next year still open

## Review of global activities 2001-2002

Objectives / expected results	Activities for the 3 years period 2002 - 2004	REVIEW 2002 Major achievements September 2001 – October 2002
<p><b>1. WOCAT Network</b></p> <p><i>Objective: to further support and develop the WOCAT network: coordination, awareness rising and promotion</i></p> <p><b>Result: enhanced and consolidated network</b></p>	<p>a) <b>maintain collaboration</b> between existing partners</p> <p>b) add new partners and consortium members</p> <p>c) <b>conduct 3 International Workshops and Steering Meetings</b> (according to established procedure and guidelines)</p> <p>d) <b>participate in international conferences</b> to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO)</p> <p>e) <b>integrate WOCAT in development process</b> at the national (ongoing government, NGO and bilateral aid projects) and global level (UNCCD, UNCBD(?), UNFCCC(?))</p> <p>f) <b>continue and enhance the WOCAT e-mail list and newsletter</b></p>	<ul style="list-style-type: none"> <li>• <b>collaboration maintained and enhanced</b> (a)</li> <li>• <b>new partners:</b> India, IFAD-GM, African Tillage network, IAEA, Syngenta (b)</li> <li>• <b>Annual International Workshop and Steering Meeting (WWSM) at FAO in Rome 27.10-4.11</b> with 40 participants from 21 countries (highest number of participants and institutions present of all annual events so far. (c)</li> <li>• <b>ISCO</b> (International Soil Conservation Organisation) Beijing, May 02 7 presentations / papers/ posters: WOCAT general, map, categorization system, Ethiopia, Philippines, Tanzania, Yugoslavia, and Thailand / special WOCAT meeting (d)</li> <li>• <b>IUSS</b> (International Union of Soil Science) Bangkok, August 02: Participation of WOCAT delegation, presentations. (d)</li> <li>• <b>WOCAT integrated</b> in development process: considerably in Ethiopia, Philippines, partly in all other collaborating institutions (e)</li> <li>• <b>WOCAT mailing list</b> operational, 2 WOCAT <b>newsletters</b> and in 3 WASWC newsletters (f)</li> <li>• <b>Several presentations:</b> LADA workshop at FAO January 02, Water Conference (Rüschlikon, Switzerland); DESERTNET presentation,</li> </ul>
<p><b>2. Training</b></p> <p><i>Objective: to provide back stopping and training support for national and regional initiatives.</i></p> <p><b>Result: National and regional collaborators trained to run WOCAT programme in their countries and regions</b></p>	<p>a) conduct additional <b>2 international “Training for National Trainers / Facilitators” workshops</b></p> <p>b) provide <b>support</b> and expertise for additional <b>national and regional initiation</b> and training workshops (e.g. Central Asia, India, Eritrea, ...), upon request from national / regional institutions</p>	<ul style="list-style-type: none"> <li>• <b>Training for National Trainers (TNT): Rome Jan 2002</b> (a) 15 participants from 10 countries, 5 organizers /trainers; Objective: decentralized capacity to run WOCAT at national/regional level; Achievements: regional training without core group in Ethiopia</li> <li>• <b>2 India workshops</b> April 2002 and October 2002 in collaboration with DANIDA (b): 35 participants, most coming from CWDP (Comprehensive Watershed Development Project) in three districts in Western Madhya Pradesh (Ratlam, Jabua and Petlawad), 1 representative from the national government, 2 DANIDA representatives and 3 resource persons</li> </ul>

<p><b>3. Methodology / Tools</b></p> <p><i>Objective: to further develop the methodology, mainly the tools for knowledge exchange and decision support</i></p> <p><b>Result: Additional tools for exchange of knowledge and decision support developed</b></p>	<p>a) <b>improve Internet access</b> to data and tools</p> <p>b) <b>improve database management system</b> to enhance decision support</p> <p>c) <b>produce support materials</b>, such as standards for national “overview books”, guidelines for the use of WOCAT data in the development process</p>	<ul style="list-style-type: none"> <li>• <b>Website:</b> new layout and better access (a)</li> <li>• <b>Database management system improved</b> esp. on the map database and map viewer, removing of bugs and easier installation (b)</li> <li>• Improved drafts of summary sheets: <b>overview book:</b> draft for Kenya and concept for UNEP publication. (c)</li> </ul>
<p><b>4. Data quality</b></p> <p><i>Objective: to enhance data quality and additional data collection</i></p> <p><b>Result: Good quality data from at least 15 countries made available and used for the production of outputs</b></p>	<p>a) further develop procedures to <b>enhance data quality</b></p> <p>b) <b>support further collection</b> of data-sets in 5-10 countries where WOCAT has been initiated and additional 5 new countries (depending on requests and Steering meetings)</p>	<ul style="list-style-type: none"> <li>• screening though all data and <b>assessing quality</b> and difficulties (a)</li> <li>• <b>selection of 15 Technologies and 10 Approaches</b> for further data improvement (for UNEP book) (a)</li> <li>• <b>training national facilitators (TNF)</b> during Workshop in Rome (Jan 02) (a,b)</li> <li>• Rising awareness and setting procedures for the future WWSM (see 1) in Rome (Oct-Nov 02) (a,b)</li> </ul>
<p><b>5. Outputs</b></p> <p><i>Objective: to support the production of outputs</i></p> <p><b>Result: Outputs produced: 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</b></p>	<p>a) <b>produce CD-ROM</b> in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests</p> <p>b) <b>compile a first overview of global experiences of SWC Technologies and Approaches</b> from selected countries that have been active in the compilation of the data</p> <p>c) <b>publish in journals and conference proceedings</b> the SWC classification system, the methodological tools for database management system, decision support (guidelines for “Using WOCAT”) and for mapping</p>	<ul style="list-style-type: none"> <li>• CD-ROM vs.3, first draft, Website and database improved (a)</li> <li>• <b>WOCAT overview book Kenya</b> (draft available) <b>and UNEP:</b> first draft Nov 2002: 18 case studies (QT and QA) from 13 countries (Brk, Chn, Col, Eth, Ken, Nic, Nig, Per, Phi, RSA, Tha, Ind),</li> <li>• <b>MRD</b> (Mountain Research and Development) Journal, February 02: General WOCAT presentation / presentations from the Philippines, Thailand, Yugoslavia / interview with Letla (WOCAT person)</li> <li>• <b>ISCO</b> Beijing, May 02: 6 papers: 3 global, 3 country, posters (see 1), brochure in Chinese</li> <li>• <b>A soils agenda:</b> Contribution to publication: WOCAT as a tool for at IUSS</li> <li>• <b>Revised questionnaires</b> (English: QT, QA and QM)</li> <li>• <b>Database</b> improved</li> <li>• <b>Minor Publications:</b> SDC report on Desertification (Swiss Agency for the Environment , Forests and Landscape SAEFL); Poster presentation for DOM GOR (House of the Mountains, Kyrgyzstan); Report in the “Tages Anzeiger” and “NZZ” (major Newspapers in Switzerland); National Geographic magazine (c)</li> </ul>

### 1.2.3 Publicity

#### Major Publicity:

- MRD (Mountain Research and Development) Journal, February 02  
⇒ General WOCAT presentation / presentations from the Philippines, Thailand, Yugoslavia / interview with Letla Mosenene (WOCAT collaborator)
- ISCO (International Soil Conservation Organisation) Beijing, May 02  
⇒ 3 papers (global) / presentations Thailand, Ethiopia, Philippines / posters / brochure in Chinese / WOCAT meeting
- IUSS (International Union of Soil Science) Bangkok, August 02  
⇒ Active participation of WOCAT representatives and various presentations
- Active participation in LADA technical workshop, Rome, 5-7 November 2002?

#### Minor Publicity:

- Water Conference, Rüschlikon, Switzerland
- SDC report on Desertification
- DESERTNET presentation
- Poster presentation for DOM GOR House of the Mountains, Kyrgyzstan
- Report in "Tages Anzeiger" (one of the main Newspapers in Switzerland)
- National Geographic magazine contribution
- WOCAT newsletters and contributions to WASWC newsletters

### 1.2.4 WOCAT in education / research

#### WOCAT in education / training:

not planned, but quite an involvement during the last year:

- Lectures at Institute of Geography, University of Bern
- Samran Sombatpanit and Michael Zebisch presented paper at IUSS

#### WOCAT in research:

- New WOCAT study in Switzerland: impact of different vineyards technologies on water (Master study/thesis by Nicole Güdel)
- NCCR programme (National Centre of Competence for Research Partnership North - South):
  - H.P. Liniger: scientific collaborator: making methods available, supervision of students
  - great opportunity to link WOCAT with research!
    - ⇒ assessment of degradation
    - ⇒ assessment of conservation
    - ⇒ impact on land resources (water, soil, vegetation)
- New collaboration with Syngenta
  - Proposal for collaboration: EU project N.&C. Europe (SOWAP)
  - Possibility to link with Syngenta Foundation to be further explored

### 1.2.5 WOCAT Secretariat

- Secretariat moved in April to a new place! (see new address at the back of cover page)
- Requests for brochures (English out of print), CD-ROMs (CD-ROM v.3, CD-ROM Video)
- WOCAT-L

E-mails: Gudrun Schwilch and Godert van Lynden gave great support; yet more core support is needed (e.g. to avoid delayed replies to requests); since we have a greater pool of well informed WOCATeers, the sharing of information should go on amongst the different WOCATeers without

- necessarily involving the secretariat. There is need to also decentralize the support from the secretariat to regional and national institutions carrying out WOCAT initiatives.
- Capacity of WOCAT at secretariat: after Karin Kipfer left: first there was no real replacement; then Fränzi Jöhr started work but was much engaged in other projects. New decision (at CDE): Fränzi works 20% for WOCAT



- New phase for WOCAT 2002-2004 → long term and slightly increased funding by SDC, but as WOCAT grows, decentralization and strengthening of regional/national initiatives is more and more important!

### 1.2.6 Other issues:

- English versions of WOCAT questionnaires (QT, QA and QM) were revised
- Database was improved

## 1.3 Activities at the national / regional level

### 1.3.1 Kenya

*Report by Kithinji Mutunga*

#### **Review of Nyeri, 2001 – 2002 work plan**

- 7 QTs and 5 QAs updated
- 4 page summaries printed
- Data were put on CD and sent to WOCAT
- 2 persons attended training of trainers in Rome in January 2002
- Updating of overview book to be done in November/ December 2002

#### **Reasons for not accomplishing work plan**

- Constrained by funding
- Funding commitment delayed up to June
- Time constraint by responsible persons

#### **Expenses**

- Cash U\$3,400
- In-kind U\$2,500

#### **Suggestions for discussion**

- WOCAT funding commitment on annual work plan 2003

### 1.3.2 Ethiopia

*Report by Daniel Danano*

#### **Achievements (2001 –2002)**

- In the founding conference/workshop, the workshop participants agreed that EthiOCAT (Ethiopian Overview of Conservation Approaches and Technologies) be coordinated by MOA.
- A national coordinator and a database manager were elected and assigned.
- A proposal to donors for supporting EthiOCAT was made in 2000/2001
- WOCAT sponsored the Nazareth founding workshop
- Two delegates participated in the WOCAT Workshop and Steering Meeting held in Nyeri, Kenya
- EthiOCAT annual plan for the year 2001/2002 was prepared in the Nyeri Meeting.
- WFP provided computer facilities to EthiOCAT coordination and allowed the use of the existing computer facilities in the region
- The national coordinator and data base manager participated in the training of the facilitators held on the month of January, 2002
- The plan for the year 2001/2002 was reformulated after this training
- 80% of the planned activities were accomplished

- Following the establishment of the National Coordination, Regional coordination were established in Tigray, Amhara, Oromiya, Direedawa, Benishangul Gumuz, Gambela, SNNPR (Southern Nations, Nationalities and Peoples' Nations Region), Somalia and Harari and accordingly, a Regional Coordinator and a Data Base Manager assigned for each region.
- Training for the Regional facilitators was conducted in June 2002
- In the training 2 experts each participated from Tigray, Gambela, Somalia, Oromiya and SNNPR

#### **Achievements SNNPR**

- Following the training for regional facilitators, field work commenced. The first field work started in the SNNPR.
- The collection of information on 4 QTs, 3 QMs, and 2 QAs completed in the SNNPR for two weredas
- The National coordinator and data base manager gave further training in the field and technical backstopping
- The collection of information will continue on two more weredas

#### **Achievements Oromiya**

- Two resource persons (regional coordinator and data base manager) participated in the national facilitators workshop
- Following this training nine weredas were selected to undertake the collection of information
- A three days introduction and training was given for two experts each from the weredas. 18 wereda experts were trained.
- The national EthioCAT coordinator and data base manager gave the training in collaboration with the regional coordinator.
- Each of the wereda agreed to complete at least one each of QTs, QAs
- Questionnaires distributed to each wereda and further supply of the formats continued
- The regional facilitators are expected to make close monitoring and follow up of the information collection in their respective regions

#### **Achievements Tigray**

- The collection of data and information has started in four weredas for the initial phase
- The regional coordinator and data base manager are responsible for monitoring and follow up of the activities
- The national coordinator and data base manager have plans to provide technical backstopping during the data collection
- There is a plan to train wereda experts participating in the data collection

#### **Achievements Amhara**

- Activities have not yet started in Amhara because the regional facilitators were not trained. However, there will be special training arrangement for the resource people and the wereda experts.
- Preparation is underway to start the training cum collection of data

### **1.3.3 Tanzania**

*Report by Kimamba Lyoba*

#### **Training**

- a) 2 Persons were trained on WOCAT data base handling.
- b) Two trainings were conducted to introduce WOCAT data base approaches.

#### **Documentation of Technologies and Approaches**

13 Districts were selected as pilot areas to where 13 questionnaires of technologies, approaches and maps were distributed. No follow-up activities from the 2001 HIMA- Iringa workshop with DANIDA was reported. (Paulo Tarimo to clarify).

### Information exchange

3 Persons from the Ministry of Agricultural and Food Security, Sokoine University of Agriculture and Agricultural Research Institute Tumbi attended the ISCO conference in Beijing China.

## 1.3.4 South Africa

*Report by Rinda van der Merwe*

### Progress made

- **Databases:** During this financial year 24 new Technologies and 24 Approaches questionnaires were filled-in and included in the database. The rest of the questionnaires were checked and corrections were made to most of them. More than 480 photographs and pictures are included in the database. Most of the scanned pencil sketches were replaced by computer-drawn sketches. Maps (showing the region/area of the specific case study) were included for all of the questionnaires that did not have any before. The address database was also updated. No progress was made with the map questionnaire of South Africa.
- **Workshop:** Participated in the Workshop on Training of Trainers held in Rome, January 2002.
- **Popularisation:** WOCAT posters, photos and video clip formed part of an exhibition made by the ISCW for the World Summit on Sustainable Development (WSSD) held in Johannesburg, August 2002. This exhibition also formed part of the Institutes centenary festivities this year.
- **Other:** The National Department of Agriculture approved a new project with WOCAT – SA forming part of the AGIS (Agricultural Geo-referenced Information System) webpage.

### Reasons for delay

The project halted for 2 months (June/July) after the notebook with the data was stolen.

## 1.3.5 India

*Report by Gudrun Schwilch*

Two WOCAT workshops held in 2002, starting WOCAT in India.

- **Introduction Workshop:** 9. - 11. April 2002, Ratlam, Madhya Pradesh
- **Training Workshop:** 7. – 11. October 2002, Ratlam, Madhya Pradesh

Both were organized by the DANIDA-supported Watershed Development Programme (DANWADEP), their Watershed Development Coordination Unit (WDCU) in Delhi and their Comprehensive Watershed Development Project (CWDP) in Madhya Pradesh.

In between the workshops, CWDP staff worked on 3 QT and 1 QA and got familiar with the WOCAT questionnaires through this exercise. This was an excellent basis for the training workshop.

### Completed QT/QA in Madhya Pradesh:

- QT: Silvi-pasture (structural, vegetative, management)
- QT: Doh (sunken water harvesting structure) (structural)
- QT: Dugout structure (structural)
- QA: Participatory approach for watershed development.

The 3 technologies and 1 approach were filled in by groups and all these examples were visited during the workshop, focusing on the remaining open and more difficult parts of the questionnaire (area, cost-benefits, adoption, etc) and fulfil the expected output of finalizing these questionnaires. The field visits enabled the participants to look at the possible/needed involvement of the land users in the documentation process. In general, there was agreement that WOCAT is a good methodology for documentation of SWC and the participants gained capacity in using it.

### Action plans and suggestions (summary):

#### *CWDP-MP / DANWADEP - level*

- Finalisation of filled-in questionnaires (3 QT, 1 QA): within 1 month after the October 02 workshop
- Document additional T's and A's (including indigenous T's)
- Report on pilot phase
- Test QM in the project area (with assistance from WOCAT by email)
- Feedback to land users
- Technology development based on documentation in phase II (internalisation of learning from documentation)
- WOCAT activities are part of the on-going project
- DANWADEP / WDCU is ready to promote the application of WOCAT

#### *Government of Madhya Pradesh (GoMP)/ Government of India (GoI)*

- Follow-up to be discussed in executive committee meeting (Oct./Nov. 02)
- GoMP / GoI may consider a state level / national workshop on WOCAT for an assessment of WOCAT application

## 1.3.6 Philippines

### *Report by Romeo Labios*

#### **Introduction**

The Philippine Overview of Conservation Approaches and Technologies (PHILCAT) was formally organized in September 1999 through a Special Order No. 528, by the Secretary of Agriculture. It is an Interagency Committee of eleven member agencies/institutions and two professional societies/organizations for WOCAT program and the Asia Soil Conservation Network (ASOCON) in the Philippines.

Among the activities of PHILCAT are (a) National/Regional Training Workshop on WOCAT, (b) Documentation, Assessment and Evaluation of SWC Farming Practices using the WOCAT Framework, (c) development and distribution of information, communication and extension (IEC) materials as a result of activity b, and (d) Networking and Institutional Linkages.

The Philippine Conservation Approaches and Technologies (PHILCAT) continued its planned activities for the past year. Best efforts were exerted to meet pre-set objectives and targets. To maximize the use of time and resources, PHILCAT works were tied up with other activities of the different members of the Committee.

#### **WOCAT Promotion**

WOCAT as a tool in natural resource management was given emphasis by the two National Coordinators in several National and International Fora:

- 17<sup>th</sup> World Congress of Soil Science, August 22-27, 2002, Bangkok, Thailand. Participated by J.D. Rondal
- Eight Asian Regional Maize Workshop, August 5-8, 2002, Bangkok, Thailand. Paper presentation made by R.V. Labios.
- National Irrigation Administration-Japan International Cooperation Agency, June 25, 2002, Quezon City, Philippines. Presentation made by J.D. Rondal.
- International Soil Conservation Organization Conference, May 26-31, 2002, Beijing, China. Paper presentation made by R.V. Labios
- WOCAT meeting, June 1-4, 2002, Fujian, China. Participated by R.V. Labios
- Workshop for WOCAT Facilitators, January 21-25, 2002, FAO, Rome, Italy. Participated by R.V. Labios and J.D. Rondal
- International Symposium on Sustaining Food Security and Managing Natural Resources in SE Asia – Challenges for the 21st Century, January 8-11, 2002. Chiang Mai, Thailand. Participated by R.V. Labios and S Sombatpanit.
- Conservation Farming Movement Annual Scientific Conference, U.P. Los Baños, College, Laguna, Philippines. Poster presentation made by R.V. Labios.

## Documentation

The committee has documented five approaches and nine technologies from 1998 to 2001 and are now in the WOCAT database. For the period November 2001 to October 2002, three QTs were updated, two QTs and one QA were newly filled-in ready for submission to the global WOCAT database. The two new documented QTs are:

- Vetiver Grass Technology - Vetiver grass system (VGS) is a SWC technology consisting of a simple vegetative barrier (a hedge) comprising upright, rigid, dense and deeply-rooted clump grass, in this case the vetiver grass, *Vetiveria zizanioides*, that slows down runoff, allowing sediments to stay on-site eventually forming natural terraces. VGS effectiveness is attributed mainly to the characteristics of the vetiver grass.
- Small Basin or stone-based technology – common in limestone areas of the Central Philippines and a very effective means of SWC. Loose limestone rocks are gathered and used for bunds creating a small basin for the growing of high value commercial crops.
- The new documented QA is Woodlot or “Muyong” – a traditional indigenous way of protecting the forest to sustain the rice terraces below. The approach is sustained by constant replanting and “harvest as you need” method. Legally, steep land such as this is owned by the state but the mountain people have a unique way of recognizing property rights, which has functioned for generations.
- The QM for the Philippines is being worked out this year with Mindanao island as the sample area covering about 80,000 km<sup>2</sup> for which the map is prepared.

## Project Preparation

A project titled “**Documentation And Assessment Of Soil And Water Conservation Technologies In Selected Philippine Upland Areas**” has been approved by the Bureau of Agricultural Research, Department of Agriculture through the National Soil and Water Research and Development Network. The project duration is from January 2002 to December 2003. The implementing agencies are the Farming Systems and Soil Resources Institute, College of Agriculture, University of the Philippines Los Baños and the Conservation Farming Movement, Inc. with coordination by the BSWM and the PHILCAT.

Objectives:

- To catalogue soil and water conservation technologies as practiced by farmers and promoted by various organizations and institutions;
- To document and assess the sustainability of the soil and water conservation technologies being practiced;
- To produce a directory/database of farmers practicing conservation farming technology and use them as examples to convince other farmers to follow similar practices;
- To produce new extension guides on conservation farming practices and distribute to concerned individuals and institutions; and
- To strengthen the existing conservation farming network.

Expected outputs:

- A catalogue of soil and water conservation practices implemented by upland farmers.
- An assessment of the sustainability of selected conservation farming practices.
- A directory/database of farmers who use conservation farming practices, referenced by region, province, municipality, and barangay
- Ten new extension guides each year for two years on conservation farming practices.
- Most successful farmer practitioners identified and given recognition.
- Cross-farm visits to the farms of the awardees conducted for interested farmers.

The catalogue of soil and water conservation practices and the extension guides will serve as reference information on the soil and water conservation technologies being practiced by the Filipino farmers and provide some insights on their applicability and performance in certain areas of the country. The directory of farmer practitioners will provide information on where to find specific conservation farming practice and to whom can they ask for more information. Giving recognition to successful conservation farming practitioners will hopefully encourage some farmers to adopt conservation farming practices. Cross-farm visits will provide an opportunity for farmers and extension workers to see for them actual practices on the ground.

A training proposal titled “**National Training for PHILCAT Trainers**” was submitted to BAR and ATI for possible funding. The said proposal is a joint undertaking of PHILCAT and WOCAT

### 1.3.7 Thailand

*Report by Samran Sombatpanit*

- Arranging for a Thai article to publish in the MRD Journal (October 2001 – February 2002)
- Contacted LDD for cooperation in WOCAT Program (November 2001 – May 2002)
- Presentation of a WOCAT poster at the Symposium on Future Direction for the Management of Natural Resources and SWC in Thailand, Chiang Mai, Thailand (November 20-23, 2001)
- Publicity of 'WOCAT Highlights' in every issue of WASWC newsletter
- Finalizing the manuscript of a WOCAT article to publish in the book "Ground and Water Bioengineering for Erosion Control and Slope Stabilization" (January – August 2002; publication date: February 2003).
- Presentation of a WOCAT poster at the Food Security International Symposium, Chiang Mai, Thailand (January 8-10, 2002)
- Attended a WOCAT Training for Trainers workshop at FAO, Rome, Italy (January 21-25, 2002)
- Started collecting data for QT/QA of 'Polythene mulch technology' in Yunnan Province, China (April 21-27, 2002)
- Workshop on WOCAT Map of South-East part of Thailand, with subsequent updating of data from 7 provinces (May 8, 2002)
- Presenting a WOCAT poster at ISCO in Beijing, China, with a post-conference trip-cum-mini-WOCAT workshop to Fujian Province (May 26 – June 6, 2002)
- Lecture on WOCAT at the South China Institute of Botany, Guangzhou, Guangdong Province and started collecting data on 'Vetiver grass technology' in South China (June 7-9, 2002)
- Updating QT/QA of the 'Small bench terrace' for incorporating into the book produced by WOCAT (July – September 2002)
- Co-convened a symposium on WOCAT at the 17<sup>th</sup> World Soil Congress, Bangkok. Also gave a talk on WOCAT in Education and presented a poster on WOCAT Mapping in Thailand (August 14-21, 2002)
- Workshop on WOCAT Map of Chantaburi Province at Tambon Level, with data processing in October 2002 (September 23-24, 2002)

### 1.3.8 China

*Reports by Xuezhen Yang (Fujian Province), Zhiming Niu (national level)*

#### **Activities conducted at the national level**

- Discussion on potential WOCAT development in China during 12<sup>th</sup> ISCO Beijing: the Soil and Water Conservation Monitoring Center (SWCMC) was authorized by the Ministry of Water Resources (MWR) to conduct needed initiatives;
- The collaboration proposal between WOCAT and SWCMC has been approved officially by MWR. The application for specified funding to support the program is processing;
- Mr. Cai Jianqin, Deputy Director of the centre has been appointed to be a national co-ordinator of coming WOCAT program. Two professional staff were assigned for technical supports, Dr. Niu Zhiming and Dr. Yuan Jianping;
- A national network for SWC monitoring has been built up and is available now in the Internet. National soil erosion survey has been conducted completely by MWR and results also have been released officially. They will be serving as the basic information and structure of WOCAT project in the future.

#### **Activities conducted at the provincial level (Fujian)**

- QA/QT translated into Chinese
- 5 Qs completed and submitted
- Published promotion brochures of 3000 copies
- Workshops on information exchange and extension with Fujian Agricultural University and ADB sponsored national project
- Realized linkage with WOCAT, detailed QMs of two counties

- Ms. Nie presented WOCAT in 17th International Soil Union Conference in Thailand and prompted WOCAT activities conducted in Fujian Province
- Workshop held in Wuyi Mountain after 12nd ISCO with 6 international participants

### 1.3.9 Central Asia

#### **Kazakhstan** by *Zulfira Zikrina*

- WOCATeers in Kazakhstan are choosing SWC technologies for entering it into the WOCAT database
- Consultation with the National Academic Center for Agricultural Research
- Choosing appropriate organizations, institutes, and specialists that are holders of SWC technologies in Kazakhstan
- A SWC technology worked out by the Kazakh Research Institute of Land Cultivation is suitable for entering into the WOCAT database

#### **Kyrgyzstan** by *Aibdubek Asanaliev*

Presentation of a set of technologies applied in the “Tuz”-Village. The soil erosion and river bank erosion problems in the village are due to uncontrolled grazing and wood cutting practices. Orchard plantation, grass strips, pasture rotation and improved irrigation techniques have great ecological, economical and social advantages.

#### **Tajikistan** by *Sanginboy Sanginov*

- Meetings/workshops:
  1. Initial WOCAT Training workshop on terracing and mulching with 30 participants
  2. Map Questionnaire workshop in Soil Institute with 40 participants held in May 2002
- Database inputs:
  - 2 Questionnaires on Technologies (QTs) filled in, 3 QTs up-dated (not yet available in global database)
  - 2 Questionnaires on Approaches (QAs) filled in, 3 QAs up-dated (not yet available in global database)
- Outputs:
  - Overview of WOCAT activity in Faizabad
  - Workshop report on “Introduction of WOCAT”
  - Soil erosion map
- Official agreements on ICARDA project in Central Asia
- Distribution of WOCAT brochures, contacts with various researchers and institutions
- Tajik version of WOCAT material needed!

#### **CAMP** by *Aigul Zhanserikova*

Central Asia Mountain Partnership Programme

Activities by CAMP and WOCAT in Central Asia (CA) till October 2002:

- Two workshops in Central Asia (KG, KZ, TJ):
  - 1st WS in Bishkek (Kyrgyzstan) – in September 2000
  - 2nd WS in Dushanbe (Tajikistan) – in May 2001
- Translation of Qs into Russian
- Introducing posters about WOCAT activity in DOM GOR (House of the Mountains)
- 1 QT and 1 QA from KZ have already been filled
- Presence of WOCAT working groups in each 3 countries (national level)
- Presence of regional Focal Point for CA (regional level)
- 4-5 NCCR students who will do a PhD can work with WOCAT database
- Participation of CA representatives in 6th and 7th WOCAT Annual International Workshops
- Support to find additional finance for WOCAT activity in CA (\$10000 from GTZ)
- Promotion and presentation of WOCAT activity on different levels (international, regional, national workshops, in villages etc.)



Figure 1: Aigul Zhanserikova explaining the collaboration between WOCAT and CAMP

### 1.3.10 Yugoslavia / South East Europe

*Report by Miodrag Zlatić*

#### **Finding donors for national WOCAT programme:**

- It was decided last year that Ministry for Agriculture, Forestry and Water Management (Department for Agriculture) will finance WOCAT activities, but this didn't happen because of lack of funds.
- New donors contacted: Federal Ministry for Science and Technology, Federal Secretariat of Labour, Health and Social Care – Environment Dept., Ministry for Ecology of Rep. Serbia.

#### **Translations:**

- A CD with translations of QTs, QAs and Glossary of WOCAT terms was produced. The translation of QMs is ongoing.

#### **Meetings/Workshop/Presentation:**

- Initial training for basic WOCAT procedures and tools (1 QT and 1QA)
- Presentation of WOCAT programme to persons from Ministry for Water Management, Federal Secretariat for Labour Health and Social Care, Agricultural Faculty. They promised financial support after foreign donation. We established new meeting with ministries in November.
- Meeting with Ministry for Ecology of Rep. Serbia.
- Meeting with Water Management Enterprise "Erosion" from Valjevo.

#### **Promotion of WOCAT through International Conferences:**

- International Conference "Privatisation in Forestry", organized by the Faculties of Forestry from Freiburg and Belgrade.
- International FORNET Programme, organized by DAAD Foundation.



- IYM – International Year of Mountains: Conference: “Natural and Socio-Economic Effects of Erosion Control in Mountain Regions” – to be held in December ‘02

#### **WOCAT in education:**

- Scientific Council of Faculty of Forestry accepted new subject: “Management of Sustainable Development” (some lectures are planned for WOCAT introduction).

#### **Regional WOCAT initiative:**

- Contacts with foreign donors: Humboldt Stiftung, Adenauer Stiftung, Böll Stiftung, Norway embassy, Italian embassy, UNEP, British Council (interest appears from Böll Stiftung and Norway embassy)
- New contacts with persons/institutions from Bulgaria and Slovakia

### **1.3.11 RELMA**

*Report by Gathiru Kimaru*

#### **Changes in RELMA and implications of support to WOCAT**

Currently RELMA covers six countries in Eastern Africa: Eritrea, Ethiopia, Kenya, Uganda, Tanzania, Zambia. These countries own RELMA: they generate the annual workplan, but the funding is from Sida.

Now RELMA has been restructured into a “field office” for the Natural Resources Department of Sida. This means that the country activities will no longer be supported by RELMA as before. Much of the workplan will be suggested from Stockholm, and will have to be “regional” in scope. A new Regional Advisory Committee is being put together to help reshape the future RELMA workplan.

RELMA will also have a wider geographical coverage (Sub-Saharan countries with Sida supported bilateral programmes).

#### **RELMA Support to WOCAT**

RELMA has been supporting WOCAT in Eastern Africa from 1995 when the first workshop was held at Machakos, Kenya. Since then a small budget has been set aside annually for activities generated by the different countries. These have included:

- Training workshops to introduce WOCAT to the area
- Support specialists in collecting data and completing questionnaires
- Support to a few people to revise and up-date the technologies
- Support to the writing up of a Kenya Overview Book (soon to be finalized)

#### **WOCAT in education**

Use of WOCAT in training

Biochemical and Environmental Engineering Department of the Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi, Kenya

Mr. David Mburu of JK University has used WOCAT in two different training settings during 2002:

1. Final year students taking agricultural engineering during 2002. Exposure to WOCAT methodologies in data collection and processing
2. A one-month “Irrigation Water Management Course” (February 2002) for 30 persons from Kenya, Uganda and Tanzania (10 from each country) – selected from various land management programmes. The course is organised under the African Institute of Capacity Development, which is housed at the university, and is mainly funded by Japan (through Japan International Cooperation Agency - JAICA). “WOCAT methodologies and applications” was one of the topics.

In both cases some WOCAT videos were distributed. Some more materials are required (CD-ROMs) for the next course planned for February-March 2003. We have asked Mr. Mburu to call for support from other WOCAT collaborators in Kenya organizing future courses. (E-mail contact: [dmburu@aejkuat.ac.ke](mailto:dmburu@aejkuat.ac.ke) or, alternatively [dmburu@jkuat.ac.ke](mailto:dmburu@jkuat.ac.ke))

#### **Main thematic areas for the new RELMA:**

- Farm production management (covering technologies and approaches)

- Marketing, processing and farmer organization
- Policy, legal and institutional support

#### **Future outlook**

RELMA will continue to support WOCAT as a regional programme

### **1.3.12 INSAH / West Africa**

*Report by François Lompo*

#### **Introduction**

The first national WOCAT initiative in West Africa, was launched in Niger in 1999. On the basis of the profit that Sahelian countries will have with WOCAT, INSAH and ICRISAT developed an action plan to involve the nine Sahelian countries in WOCAT activities. Mr. F. Lompo was nominated in June 2002 to replace Dr. Gaoussou Traore in the Management Group of WOCAT.

#### **Progress and development of INSAH initiative on WOCAT**

This progress is related to the workplan proposed during the 6<sup>th</sup> workshop and Steering Meeting held in Nyeri (KENYA) in 2001.

##### **1. WOCAT Promotion**

WOCAT promotion has been done during :

- The Regional Natural Resources Management (NRM) pole Committing (Nouakchott, Mauritania, 11-14 March, 2002). Particularly, the Regional Coordinator made a presentation on the WOCAT facilitators' workshop held in Rome, 21-25 January, 2002.  
It has been decided that the National NRM focal points of each of the nine countries members of INSAH is responsible for launching the process for national WOCAT activities. Each focal point has to organize an initial national training workshop on WOCAT tools.  
A regional training session will be organized for the national trainers. The facilitators of this training session will be Mahamane Laouali (Niger) and François Lompo (Burkina Faso).
- The 4<sup>th</sup> Annual Meeting of the General Directors of the Sahelian NARS was held in Ouagadougou, 19-22 August 2002. The Directors General approved the workplan proposed by the NRM pole's Coordinator. They were worried about funding.
- Discussions with the World Bank

##### **2. Testing of the Questionnaires**

Except Niger, no other countries have filled Questionnaires mainly due to the on-going restructuration of INSAH. Dr. Gaoussou Traore left INSAH, and the support of USAID (US Agency for International Development) to INSAH is in negotiation.

#### **Long term WOCAT action plan for West Africa:**

This activity has not been executed due to the same reason as mentioned before.

## **1.4 New initiatives**

### **1.4.1 FAO-SNEA / North Africa**

*Report by Radisav Pavlovic*

#### **WOCAT in North Africa: History**

- Late 90s: OSS Workshop held in Tunis

- Q's filled for some case studies, e.g. Morocco
- No follow up seems to have taken place
- « Revival » attempt in late 2001

### **National Studies**

- 2002: Launching National Studies, initially for Morocco and Tunisia
- Objectives:
  - Summarize national experiences on SWC and, in cooperation with CCD Coordinator,
  - Establish the link between WOCAT and the National Action Plans (NAP) (desertification)

### **Terms of Reference**

- Inventory of institutions and projects with experience in SWC
- Inventory of traditional and modern SWC technologies
- Analyze technologies and available data bases and
- Establish the link with WOCAT
- Analyze the opportunities to introduce/develop WOCAT and its tools in country's SWC practice
- Analyze the role of WOCAT in NAP implementation
- For 2 case studies selected: complete QTs and QAs

### **Follow-up**

- Analyze the quality of the studies
- Assess the needs for a Training Workshop (on country scale?)
- Expand the initiative to the remaining 3 countries of the sub-region: Libya, Algeria and Mauritania

### **Related Activities**

- Training Workshop on Water Harvesting (WH) for Agricultural Production in Tunis, 14-19 Oct. 2002  
→ Great interest: at national scale, and of ICARDA (to expand it at regional scale)
- Similar Workshop is likely to be held in Morocco and Libya...
- Question: Could the two activities (WOCAT, WH) be linked?

### **Proposal**

- Next WOCAT meeting in the Maghreb sub-region – Why not?
- Objective: to publicize its usefulness, for expansion into the (sub) region
- Budgetary consideration (co-funding, i.e. prospective sponsors?)

## **1.4.2 ICARDA (DRYCAT)**

*Report by Francis Turkelboom*

### **Past activities**

- In June 1999, a 6-day WOCAT workshop was organised at ICARDA.
- In total 16 people from ICARDA and Syrian NARs participated.
- WOCAT was applied to 3 conservation systems in Syria.
- Activities at ICARDA and Syria stopped after departure project leader in 2000. ☹

### **Vision for continuation of ICARDA-WOCAT collaboration**

- VISION: A region-wide WOCAT network for arid non-irrigated areas (< 400-500 mm/annum).
- Is there a need for a separate 'DRYCAT network'?
  - Soil erosion processes in dry areas has some specific features.
  - Consequently, the conservation strategy for dry areas is quite distinct from wetter areas.

### **How to proceed?**

- Is there a felt need for a 'DRYCAT' within WOCAT ?

- Is there a felt need to network on these issues among the agencies of the concerned countries? If Yes<sup>1</sup>:
- Apply WOCAT on a wider scale in Syria to strengthen capacity within ICARDA.
- Literature review of SWC measures in dry areas.
- Prepare a proposal for a DRYCAT project with goal: to support networking among interested NARs (National Agricultural Research) and international agencies<sup>2</sup>.

In addition to WOCAT: In-depth research on land degradation assessment, conservation strategies and links to livelihoods.

#### **Expected output:**

- QTs, Qas and QMs for dry areas.
- Generation of a "DRYCAT" manual + atlas.
- Local capacity building.

### **1.4.3 ICIMOD (HIMCAT)**

*Report by Roger White*

People and Resource Dynamics in mountain watersheds of the Hindu Kush Himalaya Project (PARDYP) is funded by SDC, IDRC and ICIMOD. Roger White, Regional Coordinator represented PARDYP at the planning meeting. PARDYP is a research for development project operating in five watersheds across the Himalayas in:

- XiZhuang, Yunnan Province, China
- Bheta Gad Garur Ganga, Uttaranchal State, India
- Jhikhu Khola, Kavre Palanchok District, Nepal
- Yarsha Khola, Dolokha district, Nepal
- Hilkot-Sharkul, Mansehra District NWFP, Pakistan

Each watershed is around 100 Km<sup>2</sup> and in the middle mountain belt of the Himalayas, with broadly Rice/wheat and maize cropping systems. Project activities include detailed hydro meteorological monitoring as well as assessing soil fertility and land use dynamics.

PARDYP will be used as an umbrella to introduce WOCAT methodologies for documenting and describing across the region. Participants from many associate watersheds in Sikkim, Tibet, Himachal Pradesh, NE India, Bhutan and Myanmar will take part in the first WOCAT meeting planned to take place in Kathmandu in early 2003. It is hoped that a full-fledged regional network HIMCAT will develop in 2003.

PARDYP will help initiate the regional network, which will be open to all interested institutions in the Hindu Kush Himalayas.

### **1.4.4 IAEA**

*Report by Felipe Zapata*

#### **Co-ordinated Research Projects (CRPs)**

- Assessment of soil erosion through the use of Cs-137 and related techniques as a basis for soil conservation.
- Sedimentation assessment studies by environmental radionuclides and their application to soil conservation.

#### **Project Objectives**

- To refine and harmonize the Cs-137 technique for documenting soil erosion and deposition,

<sup>1</sup> Existing network at ICARDA: on-farm water husbandry project in WANA (Algeria, Egypt, Iraq, Jordan, Libya, Morocco, Pakistan, Syria, Tunisia).

<sup>2</sup> Mandate of ICARDA is limited to the CWANA region (= Central Asia, West Asia and North Africa).

- To generate reliable soil redistribution (erosion and sedimentation) data at different scales in environments worldwide,
- To assess the effects of topography, and land use on soil erosion and to provide data to underpin the selection of soil conservation strategies.

### Outputs CRPs

- Refined the  $^{137}\text{Cs}$  technique and developed calibration models for measuring medium-term erosion / sedimentation rates at the watershed level
- World-wide field-validation of the technique in a 25-country network across a range of environments
- Methodology will assist decision makers to plan sustainable soil and water conservation strategies

### New CRP Soil Conservation

- Network: 10 Contractors and 5 Agreement holders
- Specific objectives:
  - Further develop and standardize fallout radio-nuclide methodologies, in particular the combined use of Cs-137, Pb-210 and Be-7, and
  - Utilise these techniques to assess the impact of land use types and the effectiveness of SWC measures

### Linkage to WOCAT

- Information gathering/exchange on SWC technologies and approaches
- Need for standard characterization of SWC technologies
- Creation of databases with information generated from CRP
- Wide dissemination of results.
- Impact assessment in selected case studies
- 



Figure 2: Felipe Zapata enthusiastically presenting the assessment of soil erosion through the use of Cs-137

### 1.4.5 Syngenta (EUCAT)

*Report by Mike Lane*

#### **Collaborations**

- National Soil Research Institute, UK
- Leuven Catholic University, Belgium
- National Trust, UK
- Royal Society for the Protection of Birds, UK
- Vaderstad, Sweden
- Cordoba University, Spain
- Teramo University, Italy
- EU Life-Environment
- Allerton Trust, UK
- And importantly, farmers

#### **Objectives**

The objectives of Soil And Surface Water Protection Using Conservation Tillage In Northern And Central Europe (SOWAP) are to demonstrate that:

- Minimum tillage agriculture has an economically viable role in the conservation of soil and water in Northern European Mechanised Agriculture
- Such conservation reduces pollution of surface waters by both fertilisers and pesticides
- Such conservation practices also have benefits for the environment with respect to biodiversity, terrestrial ecology and soil health
- A strategic approach to dissemination of this approach can be achieved in cooperation with farmers
- Enable WOCAT to set up shop in Europe

#### **Syngenta and WOCAT**

- Syngenta need independent review of their approaches
- Want to demonstrate support for “Sustainable Agriculture”
- Without sustainable agriculture Syngenta have no markets
- We believe in the approach of WOCAT

## 1.5 Other presentations

### 1.5.1 Conservation Agriculture

*Presentation by Jose Benites (FAO)*

#### **Conservation Agriculture**

- Reduces mechanical soil disturbance
- Maintains a complete and permanent soil cover consisting of cover crops and/or crop residues
- Promotes crop rotations to enhance water use efficiency and to avoid build-up of pests and diseases
- Plant parts not harvested act as mulch
- Leaves, stems and stalks are left on the soil surface after harvesting
- Protects the soil from erosion by wind and rain

#### **Environmental Benefits**

- Cleaner water through reduced soil erosion
- Improved air quality
- Reduced greenhouse gas emissions
- Improved wildlife habitat

**Societal Benefits: How do you really benefit?**

- Cleaner water
- Less flooding
- Less impact of extreme weather conditions
- Less cost for road and waterway maintenance

**Farmer benefits are both economic and agronomic**

- Conserves fuel, labor and time
- Causes less wear on machinery and soil
- Contributes to soil health
- Conserves water for crop production
- Improves lifestyle choices

**How do farmers increase their efficiency?**

- Farming more land
- Burning less fuel
- Less equipment wear and tear
- Increased efficiency means more time for farming, livestock, and personal leisure

**Conservation Agriculture**

- Enhances farmer productivity and profitability
- Improves the land, air and water
- Is key to the sustainability of agriculture

*Conservation Agriculture is simply profitable!*

## 1.5.2 ACT African Conservation Tillage Network

*Presentation by Edward Chuma*

**Definition of Conservation Tillage:**

All soil and water management practice, which reduce soil tillage (soil disturbance), maintain at least a minimum soil cover from crop residues or green manures/cover crops, and involving rotations. Planting is done through the mulch. While chemicals may be necessary for weed control in the first few years, this thins out as the system begins to manage a low level of weed infestation.

The purpose of the network is to enhance the dissemination of conservation agriculture practices in smallholder farming systems in Africa. The core functions are defined as support to the formation/strengthening of national networks; dissemination, mobilisation, provision and inventory of information; documentation and dissemination of the evidence of conservation tillage benefits; organisation of learning through exposure/seeing; support to lobbying at national level; support to the development of dissemination material.

FAO/ACT supports pilot activities in a number of countries, such as South Africa, Zimbabwe, Zambia, Tanzania, Uganda, Kenya and Ghana. Objective of these activities is the adaptation of Conservation Agriculture technologies in a participatory way and the extraction of lessons learned on successful dissemination approaches.

## 1.6 Taskforces

### 1.6.1 Digital products

*Taskforce members: W. Prante, G. van Lynden, G. Schwilch, H.P. Liniger, X. Yang*

*Report by Wolfgang Prante*

- New WOCAT website (including new, faster to load page design; new menu structure; more detailed menu items; dynamical 'includes' for easier maintenance; floating page width)
- First draft of WOCAT CD version 3 based on the new WOCAT website
- New WOCAT database structure (merging the three data 'containers' of QT, QA and QM into one database file)
- Training course for WOCAT facilitators with focus on digital products in January 02 in Rome
- Working session early September 02 in Berne with Wolfgang Prante and Gudrun Schwilch

## 1.6.2 QM

*Task Force members: M. Dumbrovsky, W. Prante, J. Rondal, X. Yang, D. Mburu, B. Fentaw, K. Lyoba, G. van Lynden, S. Sombatpanit, H.P. Liniger, G. Schwilch*

*Report by Godert van Lynden*

- Some further development in the programme (e.g. search by criteria); some (minor) improvements to questionnaire
- Considerable progress in implementation, especially Philippines, Thailand, modest in China, Ethiopia and South Africa stagnant
- Active Email communication with some QM TF members. No communication with a few others.

## 1.6.3 Guidelines

*Taskforce members: J. Rondal, K. Herweg, test group*

*Report by Jose Rondal, Romeo Labios*

Results of a testing of the WOCAT guidelines on "Using WOCAT data" (evaluation of Technologies/Approaches):

### **Using WOCAT Data for Determining Appropriate Farming Technologies for Erosion-Prone Areas**

**Objectives:** Sustaining agricultural productivity in a sloping / hilly area with deep acidic soils and where the total annual rainfall of 3,000 mm falls within an 8 – month period. In 2001, 82 erosive rainfall events were recorded.

**Location:** Bukidnon Province, Central Mindanao, Philippines.

**Farmers:** Corn farmers with about 1 – 2 hectare farm area. Two to three corn crops are grown in a year.

**Technology required:** Vegetative measure, low establishment and maintenance cost and assured short-term benefits.

### **Steps of Analysis**

1. Search by criteria using three criteria at a time ("Problem/means" and "Average rainfall" as two permanent criteria, third criteria variable) in the search for possible technologies. In 4 of the 5 options tried, natural vegetative strip (NVS) appeared 4 times as a potential technology in the area of interest, hence it was picked-out for evaluation.
2. Grading of 5 key indicators (economic benefits/disadvantages, acceptance or adoption, required/available knowledge, ecological benefits/disadvantages, off-site ecological benefits/disadvantages,

### **Conclusion**

NVS is the most appropriate vegetative measures in the area. However, it is more effective when implemented with complimentary technologies like Residue Incorporation, Mulching and Conservation Tillage.

Note: This evaluation procedure will be more useful when there are more QTs and QAs in the database. At this stage, one can just study the QTs and QAs individually.

Feedback from the "test group" was minimal except for the case above from the Philippines.





Figure 3: Joe Rondal reporting on the use of WOCAT data to determine appropriate farming technologies for erosion prone areas

#### 1.6.4 SWC Categorization

*Taskforce members: D. Cahill, W. Critchley, H.P. Liniger, G. Schwilch*

*Report by Gudrun Schwilch*

##### **Activities September 01 up to October 02:**

- Further enhancement of the SWC Categorization based on feedback from experts / workshops / WWSM6 up to May 02
- Presentation of the WOCAT SWC Categorization system at the 12th ISCO Conference in May 2002 in Beijing
- Finalization of the system for the revised WOCAT questionnaires September 02

##### **Changes in the system since Nyeri:**

See also the latest version of the questionnaires (QT, QM) for the full SWC categorization system.

##### **Land use types**

New: Subtypes for all land use types, also for forest land, mixed land and other land:

F: Forest / woodland:

- Fn: natural
- Fp: plantations, afforestation
- Fo: other (e.g. selective cutting of natural forests and incorporating planted species)

M: Mixed land:

- Mf: agroforestry (cropland and forest)
- Mp: agropastoralism (cropland and grazing land)
- Ma: agrosilvopastoralism (cropland, grazing land and forest)
- Ms: silvopastoralism (forest and grazing land)
- Mo: other

O: Other land:

- Oi: mines and extractive industries
- Os: settlements, infrastructure network (roads, railways, pipe lines, power lines)
- Oo: others: wastelands, deserts, glaciers, swamps, recreation areas, etc.

### **Degradation types**

New types:

- Wc Coastal erosion
- C Chemical deterioration with subtypes
- P Physical deterioration with subtypes

To describe combinations of measures, the code does not need to be repeated, but can be written in one code, e.g. C / Wt Wg / A1 A2 V1 V2.

It is possible to have up to three degradation types and up to 4 conservation types, but only 1 land use type.

### **The way forward**

- Testing use(fulness)
- Making improvements
- Seeking wide acceptance?
- Developing system for SWC approaches

## **1.6.5 Overviews**

*Taskforce members: W. Critchley, M. Gurtner, H.P. Liniger, G. Schwilch, K. Mutunga*

*Report by Hanspeter Liniger*

- UNEP-WOCAT global overview book and Kenya overview book are most advanced. Others are on the way (e.g. South Africa).
- The UNEP-WOCAT global overview book presents 10-15 selected technologies and approaches on 4 pages as case studies in a nice and attractive way together with an analysis part. Draft version available.
- Quality assurance is essential to present case studies in an overview book. This requires a lot of time (reviewing the summaries, contacting the author, collect missing information, etc.).

## **1.6.6 Coffee table book**

*Taskforce members: W. Critchley, S. Sombatpanit, M. Dumbrovsky, J. Rondal, G. Kimaru, P. Tarimo, G. van Lynden, H.P. Liniger, W. Prante*

*Report by Hanspeter Liniger*

Original idea by Hanspeter Liniger and Will Critchley, discussed at Tanzania Training Workshop (June 2001). Proposed in Nyeri workshop 2001: positive reactions → Taskforce was formed.

### **The WOCAT coffee table book:**

- Has a great potential, but...
- Would be quite expensive
- Needs a good input

- Would be published in a rather saturated market
- Was overtaken by UNEP / WOCAT overview book

### **Conclusion**

- Left alone, but did not die
- General fear (Hanspeter Liniger): lots of efforts done to promote WOCAT, make it known and sell it; when looking in-depth into the data → got scared and realized that other efforts are needed now

### **The WOCAT calendar:**

Wolfgang Prante suggested a WOCAT calendar. Hanspeter Liniger checked the market for calendars and encountered a lot of conflicting and open questions:

- Huge variety of formats
- Target group?
- IYM-calendar: lots of possible and actual WOCAT donors were involved and committed money
- Too late to produce 2002 calendar
- Great and saturated market
- What would be special?
- What would it help?
- How much needed (money and time) to identify a niche?
- How much needed (money and time) to produce?
- How much needed to distribute / market it?

### **Conclusion**

- There was no reaction from / interaction with taskforce members
- Assumption: no need at this time

## **1.6.7 Quality assurance**

*Taskforce members: W. Critchley, M. Gurtner*

*Report by Mats Gurtner*

### **Recommendations WWSM Nyeri 2001**

*Recommendations of the group discussion on quality assurance at the 6th International Workshop and Steering Meeting in Nyeri, Kenya 2001 (Chairman: Robin Barnard)*

1. There is need for enhanced data quality and quantity.
2. The data should be collected through **field investigation** rather than through workshops.
3. Distinction should be made between old and recently collected data sets.
4. There is a need to standardize the format for drawings.
5. There is a need to standardize the summary sheets for Ts and As.
6. There is a need for a **Quality Assurance Panel at National or Regional level.**
7. There is a need to improve publicity through the corporate sector to obtain corporate sponsorship.
8. Materials are needed for educational purposes.

### **Actual Situation - WWSM Rome 2002**

- **Task Force** was suspended
- **Responsibility** of quality assurance delegated to **national/regional initiatives with the task to also approve their data in the global database**
- New experiences 2002: UNEP-WOCAT **Overview Book** and Danida back-to-office report on **WOCAT Workshop in India** (see 2.1 Introduction)



# TOPIC 2 QUALITY ASSURANCE

*Rapporteur: Malcolm Douglas*

## 2.1 Introduction

### Quality Assurance, Improvements and Enhancement of Data Collection

The workshop was reminded of the conclusions of the Nyeri workshop on the importance of data quality control when completing individual QT and QA questionnaires. Quality assurance control was first and foremost a national level responsibility. However during subsequent plenary discussion it was agreed that there was a need for a process of peer review at the regional and global levels to maintain the overall quality of the data in the global WOCAT database. This needed to be discussed more fully during one of the working group sessions.

### Quality check for WOCAT/UNEP Overview Book

A group consisting of Elizabeth Migongo-Bake (UNEP), Will Critchley, Gudrun Schwilch, Hanspeter Liniger and Mats Gurtner (WOCAT) was formed during 2002 to plan and realize the production of an WOCAT Overview Book in Collaboration with UNEP, containing 12-15 case studies (Technologies and related Approaches; WOCAT data sets plus UNEP best practices transformed into WOCAT format)

**Data quality / completeness of data** was on top of the list of the criteria for the selection of Technologies and Approaches for the Overview Book (followed by geographical distribution, important partner institutions, range of Ts in terms of Land Use, Range of As, SWC measures, Agro-ecological zones)

Quality control of approved selection of SWC Technologies (CD-ROM → Approval by national programmes → *criteria?*) plus newly entered data sets

- Emphasis on short summary questions
- Based on following criteria: 1) completeness (detailed control); 2) consistency (rapid control)

### Results:

- No Questionnaire 100% complete (only regarding short summary questions!)
- A lot of gaps, missing information
- A lot of contradictory, unreliable or low quality information
- Key questions: acceptance/adoption, cost table, impacts, etc.

### Feedback from the second WOCAT Workshop 2002 in India

The main points regarding data quality of the Back to office report (India workshop) by Jens Jensen were presented including some of the key suggestions for improvements to the WOCAT data collection process.

- QTs are of little if any use, lacking vital details, classifying the technologies wrongly, and being inconsistent in the technology – production cause-effect relationship
- If this is symptomatic for the WOCAT database, then WOCAT has a very significant problem with quality control
- **WOCAT needs to re-check the quality of the entries of the databases!**
- The practice of allowing individuals to submit QTs should be discouraged, and a **more rigorous quality control system** should be established including national and WOCAT-secretariat level.
- WOCAT is accountable to the users of the WOCAT database, not the author of the QT.
- Alternatively, if WOCAT will not take responsibility in much the same way as a refereed journal (expert referees), then WOCAT should place a general disclaimer on each entry of the database published by WOCAT.

## Definition of Soil and Water Conservation

It was noted that the original WOCAT definition of a soil and water conservation technology failed to encompass some key concerns and field level activities in India, in particular those related to drainage and water storage. Likewise in Central Asia it was found that one of their major concerns, salinization, was not covered. The WOCAT secretariat had therefore reviewed the definition and had proposed the following revised version:

*Soil and Water Conservation (SWC) in the context of WOCAT: Activities at the local level which maintain or enhance the productive capacity of the land (including soil, water and vegetation (?and animals)) in areas prone to degradation through prevention or reduction of soil erosion, compaction, salinity (?and other physical and chemical degradation?), conservation or drainage of soil water, and maintenance or improvement of soil fertility.*

## Discussion

During the plenary discussion following the introductory presentations it was noted that:

- Those filling in the questionnaires often worked on their own without proper consultation with other experts and, especially, the land users;
- While many began filling in the questionnaires with enthusiasm they began to loose concentration as they went through the process resulting in many of the later sections being completed less precisely, in particular when it came to the section on costs and preparing supporting sketches;
- It could take as many as 4 person days to complete 1 QT;
- Not all of the information needed to complete individual QTs and QAs would be available to the authors during a typical WOCAT training workshop, hence there was a need for further follow up work (including PRA) to ensure data quality and involvement of others (experts and land users);
- There was still the issue of the extent to which to aggregate similar technologies and approaches or to document them separately according to differences in the agro-ecological and socio-economic circumstances in which they are adopted;
- Determining the impact of specific technologies and approaches was often based on inspired guesswork, hence there was a need for applied research and/or expert peer review to verify/clarify such assessments; and
- There was a need to consider what the incentive would be for those asked to complete the questionnaires, particularly junior research or extension agents, this required a clear understanding as to the value of the data collection and analysis process, and access to information from the WOCAT database, for the authors own work.
- WOCAT could have two standards: e.g. WOCAT-endorsed or **-labelled** where we have an international referee process and others where the national initiatives take the responsibility. We will have to discuss the costs and process for international refereed data. In the last WWSM we have decided to leave it to the national initiatives. The experience shows that we have to seriously rethink this. Who's responsibility would it be? MG? Panel? How to select it (north – south balance)?

## 2.2 Revision of Questionnaires

### 2.2.1 Introduction

As part of the continuing process of improving and enhancing the collection of data on technologies and approaches a number of major changes have been made to the QT and QA questionnaires. These were briefly reviewed in plenary session when a one-page note was circulated detailing the key sections where changes had been made. The workshop participants advised that digital copies of the revised QT and QA questionnaires, in which the changes are highlighted in correction mode, should be made available to those WOCAT members who have translated the previous versions into national languages, in order to assure that the revised part were also translated into the different languages.

## 2.2.2 Questionnaire on Technologies

### Major changes to QT since 2000

- General **introduction** to WOCAT replaced by WOCAT leaflet text
- Questions that go into the short summary are now presented in shaded boxes. They contain **key information** and should therefore be answered with the greatest accuracy.
- 1.3.1 Technology **area**: new sketch to help understanding this question.
- 1.4 **Soil degradation**: Question on indicators new as first question, with improved indicators list. Types of soil degradation to specify for the different land use types.
- 2.1.3 only **photographs** requested here (overview and details), technical **drawing** still requested in 2.4.1
- 2.2.2.1 **Land use type**: Forest / wood land, mixed land and other land subdivided into subcategories. Existing data need to be updated!
- 2.2.2.4 **Types of degradation addressed**: new to be selected from a list on page ET9 (as in SWC Categorization system).
- 2.2.2.7 **Categorization**: new system! 1 Land use type, up to 3 degradation types, up to 4 conservation types.
- 2.4.5.1 **Type of management** measure: new types (as in categorization system)
- 2.6.1 Current **population**: question deleted
- 2.6.16.1 Types of **other land**: new types (according categorization system)
- 2.7.3 **Subsidized costs** by whom: new categories (as in QA)

## 2.2.3 Questionnaire on Approaches

### Major changes to QA since 2000

- General **introduction** to WOCAT replaced by WOCAT leaflet text
- Questions that go into the short summary are now presented in shaded boxes. They contain **key information** and should therefore be answered with the greatest accuracy.
- 2.1.3.2 Main **causes** of the problem: types adapted to QM
- 2.1.5.1/2 **Decision making**: second part of question included into first part
- 3.2.6.3 Long-term impact of incentives: split up into positive and negative. Existing data need to be updated!

## 2.3 Quality Control of Summary Sheets

### Introduction

The summary sheets present a selection of WOCAT case studies (QTs and QAs) that are supposed to be included in the planned UNEP/WOCAT overview book (see Topic 5). The contents are basically identical to the 4 page summaries of the WOCAT database, whereas the layout is only preliminary and will be enhanced.

The summary sheets should look attractive, containing a lot of illustrations in the form of photos, good technical drawings and pictograms. They should tell a consistent and clear story.

### Group work

During the group work 12 summary QT and QA documents (from Nicaragua, Philippines, Niger, Thailand, Peru, Burkina Faso, South Africa, Columbia, Ethiopia and China) were reviewed by small groups of 2-3 participants as to: a) whether they contained the most important information required to understand the technology and approach; b) where the authors needed to complete missing information and/or provide clarification; c) whether they were suitable for inclusion in a global overview; and d) how their presentation might be improved. A request was also made for additional QT and QA documents for inclusion in the global overview.

## Plenary feedback

During the subsequent plenary feedback it was noted that in general the summary QT and QA documents contained much valuable information that deserved to be made more widely available. A series of detailed comments were made, on each document reviewed, as to sections where data was missing, required further explanation and/or was potentially contradictory. These comments were collected by the WOCAT secretariat and would be fed back to the authors. Key points raised included:

- The titles didn't always give a clear indication of the type of technology or approach being described, or fully differentiate between the two;
- There apparently was still some confusion among authors as to what is a technology and what is an approach;
- Information on costs was often limited and/or unclear as to currency (local or US\$) and the unit to which applied (household, plot, ha, km<sup>2</sup> etc);
- It was unclear as to how broadly should the technology be defined, in particular where there are combinations of different conservation measures to what extent should they be described separately, or categorised according to their relative importance/dominance in the soil and water conservation package;
- Descriptions, particularly of the approaches, should be more people centred;
- The problems/constraints should be differentiated according to the views of different stakeholders (not just the views of the author);
- Pictures needed to be clear as to what they show, and should have well defined captions and/or be annotated to ensure they show the key points of the technology or approach being described;
- Where appropriate photos should be included depicting the before and after, or with and without, situation;
- Include people in the photos for human interest and to stress the role of the land user;
- The summary description section needs to be improved and specially written for each document as this is not something that can be automatically generated from the full database;
- The status of the technology or approach (i.e. experimental, project/programme promoted or indigenous) should be noted as one of the first points;
- The key points presented in the summary description should be presented in the form of a series of short bullet points; and
- All of the QT and QA summary documents would benefit from the services of a good English language technical editor familiar with the technologies and approaches covered.

## 2.4 Group Work / Taskforce on Quality Assurance

### 2.4.1 Group Work

*Malcolm Douglas, Samran Sombatpanit, Kithinji Mutunga, Gathiru Kimaru, Miodrag Zlatic, Roger White, Xuezheng Yang; Mats Gurtner*

#### National Experience, Kenya:

1. Team of 8 specialists fill in questionnaires
2. "Review group" consisting of two specialists check the data sets and give it back for improvement
3. Enter into database, extract short summary and control data again
4. Contact author directly if necessary

National Workshop 1999: information update/improvement in the field, talking with land users, time needed for filling in 1 QT: 3-4 days

Limiting factor: funding (dependence on external support)

Is there really a need for SWC documentation through WOCAT, expressed by the country? Or is it an externally motivated and pushed process?

⇒ Added value of WOCAT (for the country) is a prerequisite for good work/motivation and also for funding!



- ⇒ Need for country endorsement, one person should be responsible and get accreditation (note by editors: needs clarification)
- ⇒ Emphasise, also in training workshops, the use of WOCAT as monitoring and evaluation tool (cost-effectiveness, ecological benefits...) at the field level, rather than a data collection system.

### National Experience, China

Very different situation: the QT/QA information collected is very closely related to projects, funding is no problem

Lack of data quality for different reasons:

- No procedures of quality control
- Lack of training of the consultants (contributors) who fill in the questionnaires
- Key problem: translation of WOCAT questionnaires into Chinese and translation of filled in information back into English! Huge potential for errors.
- ⇒ Need for professional language editor who has good language skills *and* technical knowledge on SWC (technical terms!)

### Conclusions:

Data Quality depends on:

- ⇒ Training of consultants / facilitators, clear questionnaires (avoid misunderstandings)
- ⇒ Methodology of data collection
- ⇒ Quality control procedures
- ⇒ Translation

### Proposed steps:

- Promote the use of WOCAT as field tool for evaluation and monitoring at the field level
- Support / promote training of consultants
- Support / promote professional translation: language editor
- Expert panel: form a clearly defined group of specialists at national level who have in-depth knowledge at field level / technical level of the situation in the country
  - ⇒ Desktop review: screening of data quality (pick out things that don't look right/figures that make no sense...)
  - ⇒ Selection of the Qs that can be sent to Bern
- Compile checklist/guidelines for quality control procedures by central committee (global level)
- Bern: concentrate more on data quality than on revision of Qs (quality is the key for survival of WOCAT programme...). Note of the Bern team: So far revision of the questionnaire was done to make the collection of good quality data easier by removing ambiguity, making questions and possible answers better understood and by providing better guidance to the use of the questionnaire, etc. We always blamed ourselves (the WOCAT tools) if the data quality was not satisfactory. By now it seems that the method has been well developed and tested and that "bad" quality if the information might rather mean insufficient knowledge rather than a poor method.

## 2.4.2 Taskforce Quality Assurance

*Roger White (Chair), Miodrag Zlatic, Samran Sombatpanit, Rod Gallacher, Francis Turkelboom, K. Lyoba, Bai Zhanguo, Zhiming Nui, Rinda van der Merwe, Sanginboy Sanginov*

### Summary of discussed issues

⇒ *Comments by editors in italics*

- Instruction from core WOCAT group needs to be strengthened, i.e. more training needed, and facilitators should make sure that participants really understand the purpose of the meeting and what they are supposed to do
- There is a need for a global committee. The question whether WOCAT's role is only the development of the methodologies or also the responsibility over the A's and T's in the global database?

- Questionnaires are too long, rather concentrate on four-page summary. Summary should have obligatory fields (easy in digital entry form but not on hard copy).  
⇒ *In the revised questionnaire the key questions are in grey shaded boxes, whenever possible the whole questionnaire should be completed.*
- Tools for cost-benefit analysis are not in the questionnaire. Need for more advice in economic analysis (*will be provided by Roger White*). Further explanation needed, particularly in different languages.
- Further questionnaire development should have a low priority, existing methodologies are OK.
- Photographs, sketches and cost benefits are the bottlenecks.  
⇒ *Closer analysis shows that the whole assessment of socio-economic and environmental impacts provides difficulties and shows the need for applied research*
- More work needed at field level, workshop participants are often not the data collectors, so more front stopping is needed. This reflects the need for what is mentioned above (first bullet).
- To identify information gaps, polish up and update the old data
- Make the summary sheets more concise by not including blank fields. For example, the reader only needs to know the average rainfall range, not the whole choice of ranges listed in QT. That only adds graphics that take space away from other items that could otherwise be included in the available window. As we saw, the 4-page summary is becoming five or more pages that will soon be more than a "summary".  
⇒ *Summary sheets are still far from final layout. What we presented is just the format to fill in the information in a first step. The case studies presented in the overview book will have the same structure of contents but with an improved layout!*
- Quality should be checked first at WOCAT core level before submission to an international panel (for rubber-stamping).  
⇒ *Quality control procedures must be implemented basically at national level (see also recommendations made by Nyeri workshop).*
- Seed money could be necessary to develop fully committed national partners, through initial meetings and getting everyone on board.

According to the obligations at the end of the year (reports, exams, conferences, ...) we established that the discussions will start in January 2003 with an expanded document based on the 11 points listed above. Roger White will circulate this for comment. A revision will be provided within a maximum of three months incorporating comments and suggestions. This will be the subject to a second stage of revision and a final document prepared for the steering committee meeting 2003.

# TOPIC 3 DIGITAL PRODUCTS

*Rapporteur: Gudrun Schwilch*

## 3.1 Introduction

*Presentation by Wolfgang Prante / Gudrun Schwilch*

The digital products are:

- the WOCAT website
- the WOCAT CD-ROM
- the WOCAT databases

## 3.2 Improvement of digital products

### 3.2.1 The WOCAT website

New layout and new navigation structure with subtopics.

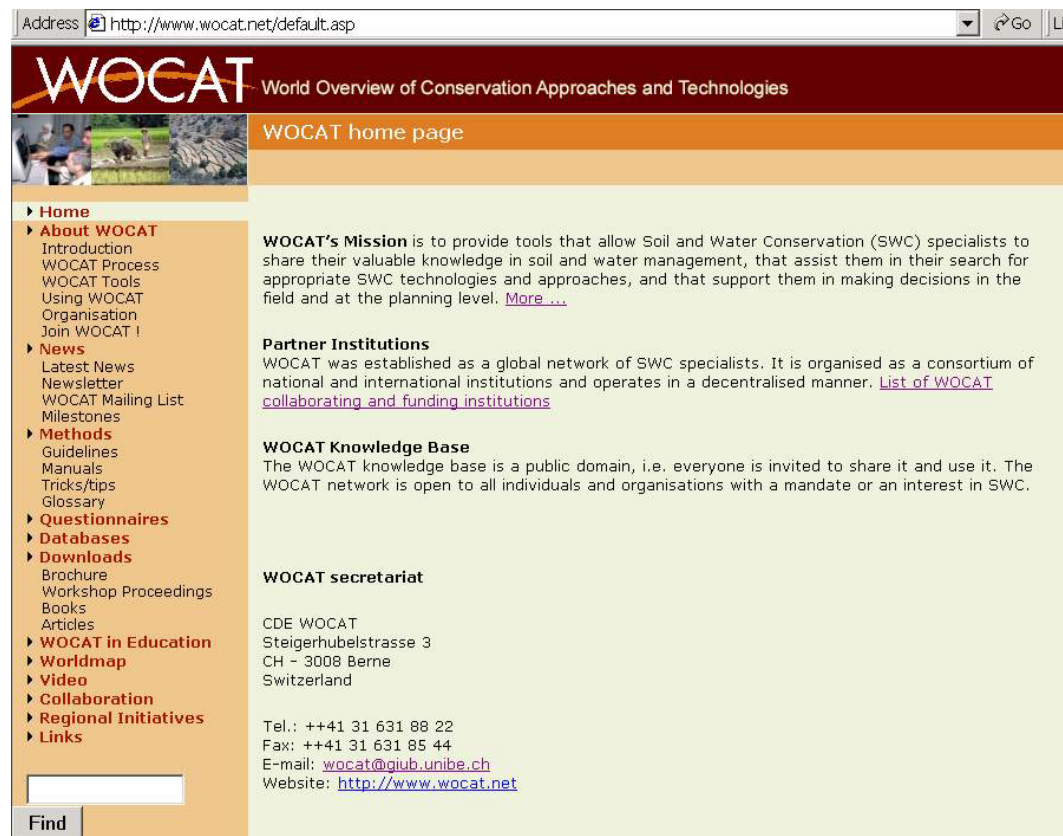


Figure 4: The new WOCAT website

The layout is much lighter with just plain colours instead of the heavy image of the WOCAT brochure. This gives a better background for added images and is less time-consuming for accessing / downloading. The small pictures on top left are currently the same for all pages, but could later be varying for each page or topic.

The new structure is now floating over the screen, i.e. its width is flexible to the screen size. It also always fits on the printer. The new find options allow searching for terms on the WOCAT website. The WOCAT brochure text is now included in the websites ("About WOCAT") and not a heavy pdf document anymore.

Technically the new website is now based on asp-pages instead of htm pages. This means that it is dynamic and therefore allows changing e.g. the navigation in one place and it will be applied to all pages at the same time. It is therefore more maintenance-friendly.

This is your website: please help improving the website, send us comments/feedbacks and send your contributions / photos / materials to the WOCAT secretariat!

Website – Statistics from December 01 till September 02:

(see also [www.fao.org/landandwater/agll/WOCAT/WOCATlog.htm](http://www.fao.org/landandwater/agll/WOCAT/WOCATlog.htm))

- Strong increase in hits in June and July 2002: due to ISCO promotion in May?
- Most hits at 10:00, 14:00, 23:00 o'clock
- Main search items: "access", "WOCAT", "runtime", "conservation", "soil", etc.

### 3.2.2 Prototype of WOCAT CD-ROM v. 3

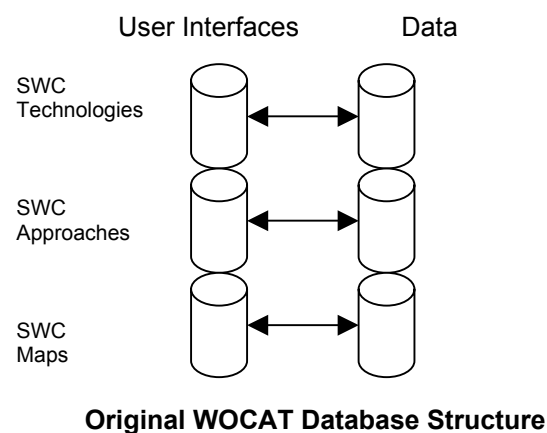
20 copies were distributed to the participants of the workshop for further testing.

After inserting into the CD-ROM drive, the CD usually starts itself. If it does not start, the file autostart.exe can be clicked. The content of the CD-ROM as well as the layout and the functioning of the menu are the same as the WOCAT website. The only difference is that on the CD-ROM there are htm pages (instead of asp on the website). But it works on any web browser (no connection to the Internet needed).

The content of the new CD-ROM is comparable to the previous version, with updates of all documents and data. Beside an introduction to WOCAT, some new presentations, reports and other materials, there are the latest questionnaires and the new databases provided. The databases can now be installed as a suite (= a complete set of QT, QA and QM), using a set-up installation software. It will install them as a programme group to the hard disk, leaving the option open to download the images or to leave them on the CD-ROM. The installation as well as the use of the databases is much more and there are no troubles anymore with the linking of programme and data.

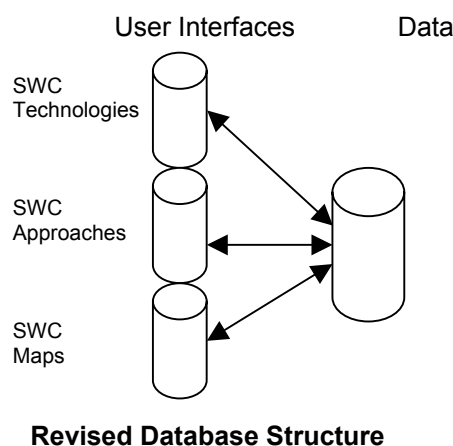
### 3.2.3 New database structure

The three main WOCAT databases have a new structure. Before, every "front-end" (programme) had its own "back-end" (= data file). Now there is just one data file for QT, QA and QM together (called "WOCATdata.mdb"), but the various front-ends remain the same (= WOCATQT.mdb, WOCATQA.mdb, WOCATqm.mdb).



all data had to be collected during the workshop, imported into the new system and redistributed to the respective countries again. **For those not being present at the WWSM or not having their latest data with them, it should be sent**

Not only due to these structural changes, but also due to the changes in the latest questionnaire revision, **all existing data needs to be imported to the new system**. This unfortunately can only be done by Gudrun Schwilch at CDE, Bern. Therefore



to **Berne** later. Gudrun Schwilch will contact those countries concerned and a mail informing about the new database will be sent through WOCAT\_L. But everybody should make sure to work on the new system from now onwards!

A remaining problem is the integration of the Image database into the QT/QA/QM suite, which will hopefully be solved for the new CD-ROM.

The participants were asked to test the distributed prototype of the CD-ROM in the group work session of Wednesday and also back home and report any bugs and feedback to Wolfgang and Gudrun.

## 3.3 Group Work / Taskforce on Digital Products

### 3.3.1 Group Work

*Wolfgang Prante, Rinda Van der Merwe, Gathiru Kimaru, Romeo Labios, François Lompo, Kimamba Lyoba, Somporn Patinavin, Kamron Saifuk*

- The latest version of the CD-ROM is much more user-friendly, as it is now easier to navigate through the files and the databases.
- After the updating of the Q's, how do we get the data exported to send to Bern? With previous version, we could extract from specific files, knowing where the data sets were on the computer. How is this done now with the automatically set-up system?
  - ➔ The new version will have an option for the user as to where to save the data files. By default they are installed under C:\WOCAT\
- Is it possible to view 2 Q's together for comparison (for example an analysis of 2 questionnaires)?
  - ➔ simply open the database twice or compare them systematically using the assessment indicator tool.
- It is the task of the National co-ordination to suggest which questionnaires to include in the latest version of the WOCAT CD-ROM and website.

### 3.3.2 Taskforce Digital Products

*Gudrun Schwilch (Chair), Wolfgang Prante, Rinda van der Merwe, Berhanu Fantaw Tereke, Zhiming Niu, Kimamba Lyoba, Godert van Lynden*

#### A) What needs to be done?

Digital products are:

- WOCAT website
- The databases: QT, QA, QM, Images, Addresses
- WOCAT CD-ROM v. 3

There is a mechanism needed on data quality assurance before a dataset can be put on the website. It needs a national committee that approves the data, but maybe also an international committee (see task force on quality assurance).

➔ a list of national database managers / contact persons should be established. These contact persons communicate with Bern on what is going into the Internet. WP/GS will coordinate this list.

Main aim of this task force is to test the digital products. Test versions of e.g. the databases are sent to the task force members through ftp.

China would like to translate the whole global database into Chinese and provide it on their website.

#### B) How to achieve it?

ToR:

- Develop the digital products (Wolfgang Prante, Gudrun Schwilch)
- Test the digital products
- Provide feedback, information on bugs, etc. to developers
- Suggest new features to be implemented

There is need to support the development group (Wolfgang Prante, Gudrun Schwilch) by other developers. Bernhard Sturm at CDE will provide support at 10%, but it might be useful to also have somebody outside Europe.

Communication of the task force through email. Provision of test versions for downloading through ftp (file transfer protocol).

**Timing:**

- New database version for the WOCAT website by March 03 (data to be sent to Bern by end of January 03).
- New CD-ROM v. 3 by October/November 03 (next WWSM).

# TOPIC 4 WOCAT MAPPING

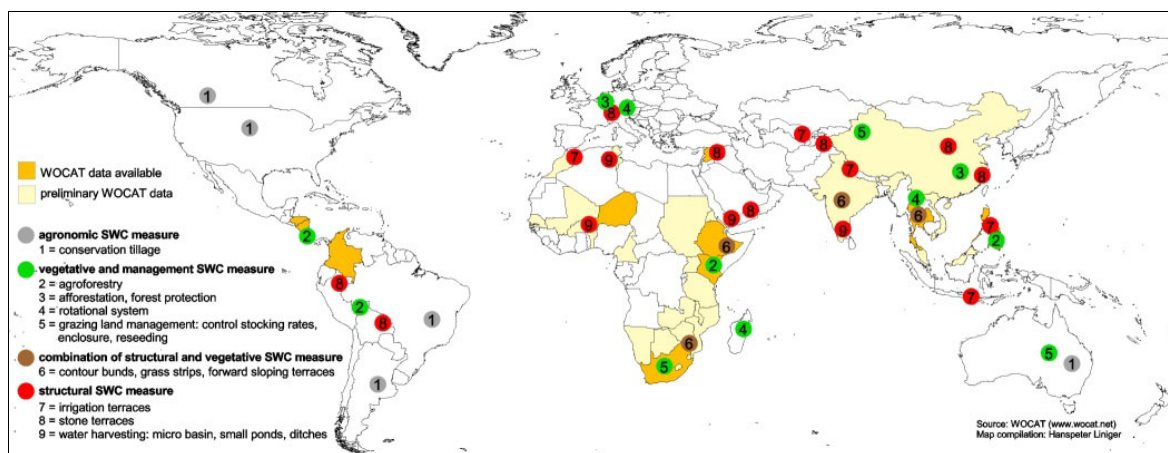
*Rapporteur: Rinda van der Merwe*

## 4.1 World Map

*Presented by Hanspeter Liniger, Gudrun Schwilch, Godert van Lynden*

The recent request from National Geographic Society to present a global overview of achievements in preventing and combating degradation shows that there is a need to present the bright side of land management on the map of the world, and show where water, soil and vegetation are used sustainably. Besides the more detailed mapping activities WOCAT has launched a global initiative for this purpose asking national soil and water conservation experts to provide information on the most important SWC technologies in their respective countries. The aim of this new initiative is to create a world map at a scale of about 1:60 million on which for the first time SWC achievements are shown with symbols in different sizes indicating the area coverage, and colour and shapes showing land use, degradation and conservation type. Photos and a brief text will illustrate each of the main SWC types. This map will be displayed on the Website and be updated regularly to show the process of data collection and SWC achievements. Each of the countries that provided information will be listed on a global map, representing Soil and Water Conservation achievement. Thus far 7 countries have reacted on the request for information from Bern. The participants are urged to give information to Bern.

Draft of such a map can be seen at : <http://www.WOCAT.net/worldmap.asp>



*Figure 5: First draft of a possible WOCAT worldmap*

There are different types of technologies and these are spread in different parts of the world. WOCAT will try to map some success stories within 2-3 years. This could include photographs showing the different categories e.g. structural, vegetative, combinations, etc. This data should compliment the QM by showing the distribution of SWC world-wide. It was also suggested to make sure that the latitude and longitude in the QT's are filled in and to show these examples as dots on the world map.

The possible layout of the website, where the WOCAT world map could be presented interactively, was introduced (see <http://www.WOCAT.net/worldmap/index.html>). It shows examples of how the information for countries (polygons) and SWC technologies (points) could be presented and information obtained by clicking these objects on the map.

How to get information from countries missing on the map (and not participating in WOCAT)? This question was not answered yet.

## 4.2 Questionnaire on Mapping (QM)

The biggest progress on QM during the past year was the data collection in the Philippines, Thailand, China, Ethiopia and South Africa.

What does QM tell us? Users, such as decision-makers, can see what percentage of the land is degraded and what is not, what kind of SWC is implemented where, including its effectiveness and extent. The achievements of the Philippines were presented using the map viewer of QM.

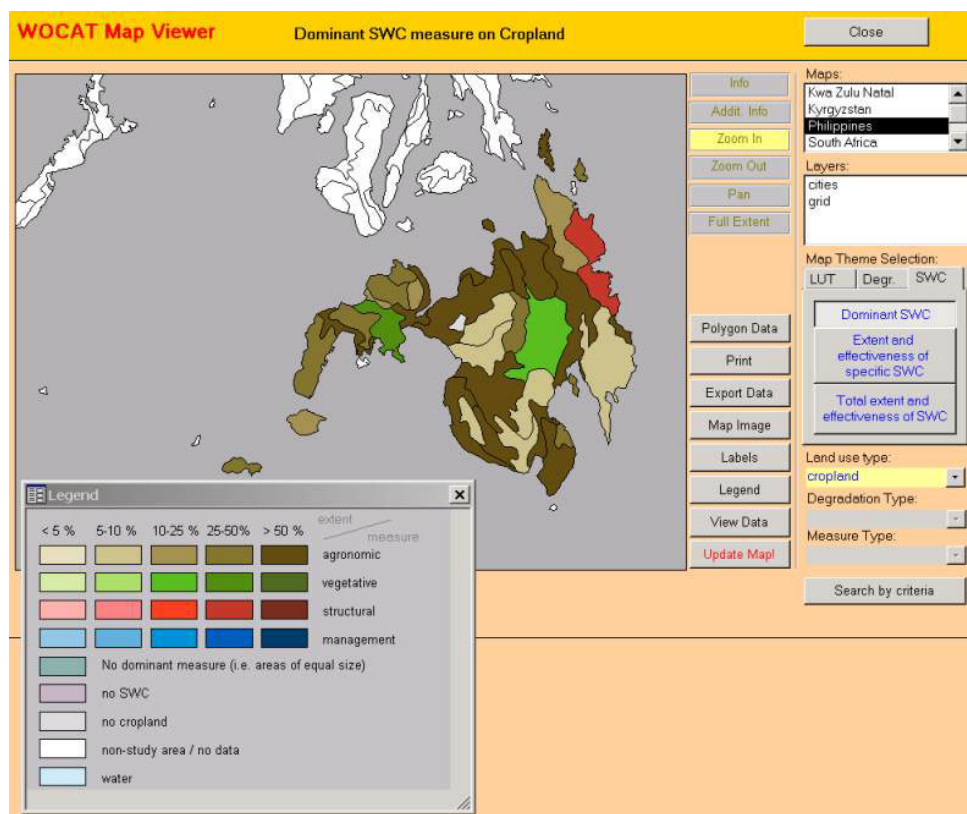


Figure 6: The WOCAT map viewer showing dominant SWC measures on cropland, Philippines

## 4.3 Group Work / Taskforce on WOCAT mapping

José Rondal (Chair), Hanspeter Liniger, Godert van Lynden, Dirk Pretorius, Kamron Saifuk, Francis Turkelboom, Michael Lane

### QM

- It constitutes the geographical component of WOCAT which shows us the land use of an area, the degradation that is occurring, the actions being taken to address this degradation, and productivity trends caused by degradation or conversely, by conservation measures.
- It provides an overview of SWC activities in a country, region or worldwide.
- It can use any geo-referenced base map (administrative units, soil and physiographic units, etc).
- Considerable progress has been made in the Philippines, Thailand, South Africa, and Ethiopia during the past year. Finally a real QM output can be shown after many years of presenting a fictitious map.
- The question was asked as to who is filling in the QM data. There is no fixed answer to this and this will depend on the countries. Potential contributors are geographers, national resource experts, soil scientists (conservationists), etc.



- With the strengthening of the methodology, it is expected that many WOCAT countries will make considerable progress very soon.
- The possibility of pinpointing QA's and QT's on the map: this can be done by adding an extra layer on the map using the co-ordinates of QT's and QA's.
- There should be no more revisions on the questionnaire for the time being but requested features for the database can still be included to enhance the usefulness of the output.
- If there is a technical problem, Bern should be contacted, particularly Gudrun ([Gudrun@giub.unibe.ch](mailto:Gudrun@giub.unibe.ch)), with cc to Godert ([vanlynden@isric.nl](mailto:vanlynden@isric.nl)). Feedback on the operation of QM is very much appreciated and needed!.
- There is a possibility of a training for QM data managers.
- Data from previous versions of QM could still be exported into the new version. Contact Gudrun.

### Global Map

There are two objectives :

- a) Show success stories for some countries in the short term. This will hopefully raise awareness on degradation problems and the efforts being made to address these. This will be important for different interest groups, like donors and policy makers. The time frame is 1.5 – 2 years.
- b) Over the long term, a comprehensive atlas of soil and water conservation could be produced.

### Tasks:

- Put up a world map on successful technologies being practiced world-wide on the Website.
- Select examples from the QT's for countries that have these data in the database.
- Additional information to be collected from WOCAT countries and regional groups:
  - ⇒ **21 countries** actively involved in WOCAT
  - ⇒ **9 Regional groups** and their representatives:
    - ICIMOD – Roger White
    - ICARDIA – Francis Turkelboom
    - RELMA – Gathiru Kimaru / Kithinij Mutunga
    - ACT – Edward Chuma
    - INSAH – François Lompo
    - FAO-SNEA/ North Africa – Radisav Pavlovic
    - FAO / IAEA – Felipe Zapata
    - ASOCON – Joe Rondal
    - CAMP – Aigul Zhanserikova
    - Syngenta – Michael Lane
- Deadlines for the first contributions to the World Map:
  - WOCAT active countries – end of November 2002
  - Regional groups – end of January 2003
- There is no need for a special task force, an e-mail group will be established for the map (QM and World map), Godert van Lynden will coordinate this
- Bern (Hanspeter Liniger and Gudrun) will be in charge of following up the country contributions to the world map
- The world map output will be initially on the Internet early next year
- Over the long term (10 years), a world atlas of soil and water conservation technologies is envisioned



# TOPIC 5 OVERVIEW BOOKS / USE OF WOCAT

*Rapporteur: Daniel Danano*

## 5.1 Introduction

*Presentation by Hanspeter Liniger*

Currently WOCAT, jointly with UNEP, is involved in producing a first overview book showing selected examples of SWC covering different land use, geographical and ecological and socio-economic environments. The book is aimed at a broad public interested in sustainable land management, SWC and combating degradation. It will be printed in an attractive format with colour photographs and drawings.

About 10-15 SWC Technologies and Approaches worldwide have been selected, from the WOCAT database as well as from UNEP sources ("success stories"). The book will have two parts, the first being an analysis of SWC including the selected examples but also with an attempt to relate those to additional SWC activities worldwide. In the second part each of the case studies will be presented in a attractive 4 page summary. This book aims at promoting further documentation, evaluation and dissemination of SWC knowledge and to provide a basis for national overview books and presentations of SWC.

The project has become broader in ambition over time and it has been expanded financially using WOCAT's own funds to supplement those of UNEP.

### Table of contents of UNEP-WOCAT overview book

1. Moving away from degradation towards soil and water conservation and sustainable Land management
2. SWC Technologies - the measures to combat land degradation
  - 2.1 Analysis of SWC Technologies
  - 2.2. Case studies of SWC Technologies
3. SWC Approaches - the ways and means to implement SWC
  - 3.1 Analysis of SWC Approaches
  - 3.2. Case studies of SWC Approaches
4. Conclusions

### Criteria for the Selection of Technologies (Ts) / Approaches (As) from the database

- Quality / completeness of data
- Geographical spread
- Different / main partners (UNEP, Philippines, South Asia, Ethiopia, Kenya, Latin America, China, West Africa)
- Range of Ts: land use / measures (Agron., Veg., Struct., Manag.) / agro-ecological zones
- Range of As: ?
- Old / new data sets: variety!

## 5.2 Taskforce on Overview Books

### Taskforce members

*Kithinji Mutunga – (Chair), Daniel Danano Dale, Gathiru Kimaru, Sanginboy Sanginov, François Lompo, Mats Gurtner (Task force link to WOCAT team in Bern), Edward Chuma (rapporteur and link to other initiatives)*

### Key tasks

- Facilitate and coordinate the production of overview books and other products
- Assess progress made with current initiatives (UNEP, Kenya, SA)
- Provide guidelines on structure and content of overview books
- Compile experiences on the process of production of overview books
- Prepare guidelines on overview books production process e.g. how to use information in WOCAT data base to produce overview books
- Identify and propose other products

### Methods and process to achieve tasks:

- Formation of task force at the Rome meeting.
- Identification of other members to be co-opted in the task force e.g. peer reviewers
- Facilitate e-mail discussion of each task and produce summary reports.
- Review progress bi-monthly and compile progress reports (each member from time to time will be allocated areas to report on)
- Compilation of annual report to be commented and approved by all members

NB: It is necessary to define roles and responsibilities. For example for national products, the planning and funding, etc. should all be at national level and WOCAT global management is mainly supporting.



Figure 7: Ktihinji Mutunga presenting the results of a taskforce session on WOCAT Overview Books

### Current key products

- Kenya book
- UNEP book
- South Africa
- Central Asia draft

**Proposed general outline of overview books:**

- 1) Introduction
  - Background
  - Justification
- 2) Technical description
  - Categorization and purpose
  - Technical details
  - Operational maintenance
- 3) Assessment
  - Cost benefits
  - Adoption
  - Impact
- 4) Concluding remarks

**Other issues:** number of technologies not necessarily same as number of approaches. Whereas the general rule still stands that a technology is linked to an approach, there are cases when one approach could be linked to several technologies and vice versa.

**Time Plan of key products**

Product	Key tasks	Target dates	Responsible person(s)
Kenya book	<ul style="list-style-type: none"> <li>• Receive comments from WOCAT management group</li> <li>• Update and incorporate comments</li> <li>• Editing type setting, and printing</li> </ul>	4 November 2002  End of Dec. 2002 March 2003	Mutunga Mutunga et. al RELMA/Kimaru
UNEP book	<ul style="list-style-type: none"> <li>• Identify additional material required and identify authors for the materials</li> <li>• Collect additional material for inclusion in book</li> <li>• Identify gaps and fill in the gaps</li> <li>• Final Editing and printing</li> </ul>	November 2002  January 2003  March 2003 September 2003*	Hanspeter/Mats/ Gudrun/Will Critchley Ditto Ditto Ditto/UNEP
South Africa	<ul style="list-style-type: none"> <li>• Finalize script</li> </ul>	March 2003	Rinda/Dirk
Central Asia	<ul style="list-style-type: none"> <li>• Review technologies presented for database</li> <li>• Collect cases for production of book</li> <li>• Review quality and quantity of materials</li> <li>• Present status at the next annual review meeting</li> </ul>	End of January 2003 May 2003 June 2003 October 2003	Sanginboy  Sanginboy Task force Task force leader
Other products	<ul style="list-style-type: none"> <li>• Identify products required by different target groups</li> <li>• Collect experiences on production and use of different products.</li> <li>• Prepare presentation for next meeting</li> </ul>	March 2003  May 2003  September	Task force (E. Chuma to lead) Task force (E. Chuma to lead) Task force leader

\* Due to the discussions on overview books and quality assurance it was agreed to improve the quality of the summaries and to include more case studies in order to really produce a *global* overview. The production of the global overview book was therefore postponed from December '02 to September '03. It will now include around 20 case studies of technologies and approaches:

**Case studies overview for global overview book:**

SWC Technologies	SWC Approaches	Country
Silvo-agricultural System	Integrated Rural Community Development	Colombia
Area Closure	Local Level Participatory Planning Approach	Ethiopia
Forest Catchment Treatment	Joint Forest Management	India
Organic Manure from Earthworm Culture	Participatory Community Appraisal	Nicaragua
Stem Cutting Check Dams	Farmer to Farmer	Nicaragua
Stone Lines and Tassa	Participatory Approach for Collective Land Rehabilitation	Niger
Rehabilitation of Stone Level Bench Terrace System	Community Action for Rehabilitation of Traditional Stone Terrace Systems	Peru
Natural Vegetative Strips	LANDCARE	Philippines
Multi-storey Cropping		Philippines
Traditional Stone Terrace Walls	Traditional: Institutionalised in Community	South Africa
Vetiver Grass Soil Conservation System	Self Teaching	South Africa

<b>Additional Case Studies</b> (planned for final document September 2003)		
<i>Composting and Application in Planting Pits</i>	<i>Agroecological Programme of a Women Association</i>	<i>Burkina Faso</i>
<i>Small Level Bench Terrace</i>	<i>Farmers Initiative to Develop Small Bench Terraces</i>	<i>Thailand</i>
<i>Orchard Interplanted with Bahia Grass</i>	<i>Approach to Implement Orchards Interplanted with Bahia Grass</i>	<i>China</i>
<i>Doh (waterholes)</i>	<i>Comprehensive Watershed Development</i>	<i>India</i>
<i>Fanya Juu</i>	<i>Catchment Approach</i>	<i>Kenya</i>
<i>Agroforestry with Grevillea</i>	<i>Individual Farmer Initiative</i>	<i>Kenya</i>
<i>Vegetative Management on Grazing Land</i>	<i>Vegetative Management on Grazing Land</i>	<i>South Africa</i>
<i>Minimum Tillage, large scale</i>		<i>Europe</i>
<i>Minimum Tillage, small scale</i>		<i>Southern Africa</i>
<i>Rice Paddies on Irrigation Terrace</i>		<i>China</i>
<i>Agroforestry</i>	<i>Agroforestry Extension</i>	<i>Costa Rica</i>
<i>Trashlines</i>	<i>Promoting Farmer Innovation</i>	<i>Uganda</i>
<i>Contour Barrier Hedgerows</i>		<i>South East Asia</i>
<i>Stone Wall Bench Terrace</i>	<i>Traditional Implementation of Stone Wall Bench Terrace</i>	<i>Syria</i>

## 5.3 Taskforce on the Use of WOCAT

### Working Group Members

Malcolm Douglas (Chair), Romeo Labios (Rapporteur), Somporn Patinavin, Richard Thomas, Francois Lompo, Aidubek Asanaliev, Felipe Zapata, Aigul Zhanserikova, Miodrag Zlatic, Radisav Pavlovic, Kamron Saifuk

### The WOCAT tools and process have the potential to be used as:

- An M&E tool for appraising individual technologies and approaches, by those promoting and/or using them, and in particular as a tool for quantifying their costs and benefits;
- An extension tool for the documentation, identification and transfer of technologies/ approaches from one locality to another;
- A research tool for identifying knowledge gaps and key topics requiring research investigation;

- A research review tool for evaluating the results of research trials, and assessing the bio-physical and socio-economic suitability of research derived technologies/approaches;
- An educational data resource for students, teachers and lecturers;
- An educational data resource for developing environmental education programmes; and
- An educational tool for use by students when collecting and analysing data for case studies, dissertations and theses.

#### **Ensuring increased use of WOCAT for extension, research and educational purposes requires:**

- The existence of a comprehensive database;
- As a start this requires updating and completion of all existing QT's and QA's in the current database (specifically filling in the currently missing data sets);
- And the completion and entry of many more quality QT's and QA's;
- Linking national and regional WOCAT activities with on-going and pipeline government, donor and NGO supported projects and programmes (at the regional, national and/or local levels) with a common interest in soil and water conservation and natural resource management - aim being to promote the use of WOCAT tools and process within such projects and to tap their financial and technical support for undertaking WOCAT activities of mutual interest/benefit;
- Tapping the skills and knowledge of local WOCATeers (existing and potential) and assisting them with obtaining any technical and financial support required; and
- Broadening the current general perception of WOCAT as an extractive questionnaire filling process generating data for the global database, to promoting its use as a field appraisal tool which research and extension workers can use to determine the environmental impact and socio-economic costs and benefits of individual technologies and approaches.

#### **The terms of reference (TOR)**

The TOR for the proposed task force on the use of WOCAT data, tools and process should include the following:

- The identification of existing and potential primary and secondary WOCAT users (eg. Policy makers, planners, research workers, extensionists, technicians, land users, students, academics etc) - and determination of their specific needs;
- Determining the respective roles of the Bern secretariat and regional/national coordinators with regard to promoting the wider use of WOCAT and providing backstopping support to existing and potential users;
- Reviewing the objectives, content, methods and target beneficiaries of all recent WOCAT training activities;
- Identifying additional training needs and alternative training approaches - particularly for promoting the use of the QT's and QA's as field appraisal tools;
- Determining the type of guideline manuals, training materials and illustrative case studies required to promote the greater use of WOCAT tools and process;
- Overseeing the development of alternative field based training exercises where the primary emphasis is on the use of the QT's and QA's as field appraisal tools; and
- Determining the key languages into which the QT's and QA's and QM's should be translated and identifying those with lead responsibility for ensuring the quality of the translations from the English language originals.

#### **Resource requirements**

- Fulfilment of the above TOR is beyond what could be expected from a group of WOCATeers working on voluntary basis in their spare time - what is required is the identification of at least one person able to work full time on the task for a minimum of two months, who then reports his/her findings for review and endorsement by a task force panel of experts;
- This requires the identification of a source of funding to cover the costs involved in enabling either a member of the WOCAT management team/secretariat or a consultant to work full time on the key tasks outlined above;
- The members of the task force panel of experts to be drawn from the list of discussion group participants with other names to be suggested by the WOCAT management team.

**Expected outputs and timing**

First draft report to be completed and circulated to the task force panel of experts within 6 months (by end of April 2003) - providing funds are available. This report to include:

- A review of existing and potential WOCAT users and the possible uses to which the WOCAT database, tools and process could be put;
- A set of recommendations on what should be done to better meet the needs of potential users;
- A set of recommendations, including a revised generic training module, for broadening current training activities so as to promote the use of WOCAT QT's and QA's as field appraisal tools; and
- Detailed TOR for the preparation of the guideline manuals, training materials and illustrative case studies required to promote the greater use of WOCAT tools and process.

The report to be used as the basis for the development and organisation of at least one field based WOCAT training exercise in the period May - October 2003. The aim being to field test alternative training approaches, and to prepare and refine the necessary supporting guideline manuals, training materials and illustrative case studies. The results to be presented to the 8th WOCAT workshop and steering committee.



# TOPIC 6 PLANNING NEXT YEAR

## 6.1 Vision for WOCAT

### 6.1.1 WOCAT in three years

#### Global

- More emphasis on training on cost-benefits aspects
- Demonstrated impact of WOCAT use in policy, research, field level
- Global map available
- Proven usefulness of WOCAT at global level (e.g. international organizations)
- WOCAT further spreading in Africa and Asia, initiated activities in Europe, South America

- |   |                 |
|---|-----------------|
| • | High priority   |
| ○ | Medium priority |

#### Regional/National

- Existing Q's updated and quality-checked
- Have at least 100 quality-checked QT's and QA's and 5 country maps
- WOCAT used in evaluating, planning, and implementing projects (e.g. via national action plans for UNCCD)
- Proven usefulness of WOCAT at field level
- WOCAT used in education and extension
- Functional national secretariats
- WOCAT tools and approaches institutionalized within SWC related agencies, programmes and projects in member countries

### 6.1.2 WOCAT in ten years

#### Global

- Database containing a representative set of technologies and approaches for most agro-ecological zones
- Active and expanding WOCAT network including current institutions plus representatives from other continents
- Atlas of technologies available worldwide

#### Regional/National

- Overview and handbooks from every currently involved member nation
- WOCAT used in extension, project evaluation and monitoring and education as a regular activity by GOs and NGOs
- National and global maps available
- WOCAT more linked with eco-regional initiatives on land degradation / Natural Resources Management

## 6.2 Proposed Global Activities 2003

### 6.2.1 Specific Objectives of SDC contributions

WOCAT's goal is to provide tools that allow Soil and Water Conservation (SWC) specialists to share their valuable knowledge in soil and water management, that assist them in their search for appropriate SWC technologies and approaches, and that support them in making decisions in the field and at the planning level. → *Continuation on page 52*

## Major global activities

Objectives / expected results	Activities for the 3 years period 2002 - 2004	<b>PLANNING 2003:</b> <b>Major global activities (planned up to WWSM China Oct 2003)</b>
<b>1. WOCAT Network</b>  <i><b>Objective:</b> to further support and develop the WOCAT network: coordination, awareness rising and promotion</i>  <b>Result: enhanced and consolidated network</b>	a) <b>Maintain collaboration</b> between existing partners b) Add new partners and consortium members c) <b>Conduct 3 international workshops and steering meetings</b> (according to established procedure and guidelines) d) <b>Participate in international conferences</b> to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO) e) <b>Integrate WOCAT in development process</b> at the national (ongoing government, NGO and bilateral aid projects) and global level (UNCCD, UNCBD(?), UNFCCC(?)) f) <b>Continue and enhance the WOCAT e-mail list and newsletter</b>	<ul style="list-style-type: none"> <li>• <b>Maintain collaboration:</b> ongoing activity (a)</li> <li>• <b>New partners:</b> Latin America?, depending on requests (see 2) (b)</li> <li>• 8<sup>th</sup> international workshop and steering meeting china: October 03 (c)</li> <li>• <b>Promotion of WOCAT:</b> (d)               <ul style="list-style-type: none"> <li>- LADA workshop and follow-up, Rome (Nov. 2002): MG + countries</li> <li>- IECA (Int. Erosion Control Association), USA (Feb. 2003): ?</li> <li>- WCAC (World Conserv. Agricult. Congress), Brazil (Sept./Oct. 2003): ?</li> <li>- World water forum, Japan (march 2003): ?</li> <li>- IYW (Int. Year of the Water) contributions WOCAT: MG</li> </ul> </li> <li>• <b>Integrate WOCAT in development process:</b> taskforce and ongoing activity at national and international level (e.g. WOCAT to become a tool for the FAO-UNEP-GEF project on land degradation and rehabilitation (LADA), WOCAT part of the IFAD-GM – GEF programme in Latin America and Caribbean?</li> <li>• WOCAT-L (discussion forum through e-mail)→ feedback!</li> <li>• Newsletters: WOCAT newsletter (2-3), contributions to WASWC newsletter (4)</li> </ul>
<b>2. Training</b>  <i><b>Objective:</b> to provide back stopping and training support for national and regional initiatives.</i>  <b>Result: National and regional collaborators trained to run WOCAT programme in their countries and regions</b>	a) Further develop procedures to <b>enhance data quality</b> b) <b>Support further collection</b> of data-sets in 5-10 countries where WOCAT has been initiated and additional 5 new countries (depending on requests and steering meetings)	<ul style="list-style-type: none"> <li>• <b>New initiatives:</b> training with core support: (a, b)               <ul style="list-style-type: none"> <li>- China: when? Nov?</li> <li>- Himalaya: Feb/Mar 03 / Nov 03</li> <li>- North Africa: ?</li> <li>- West Africa: Mar 03</li> <li>- Yugoslavia: ?</li> </ul> </li> <li>• Participation in <b>follow-up workshops</b> (b, a)               <ul style="list-style-type: none"> <li>- Ethiopia: when? (a, b)</li> <li>- Central Asia (training for national trainers): April/May 03</li> <li>- India?</li> </ul> </li> </ul>

<p><b>3. Methodology / Tools</b></p> <p><i>Objective: to further develop the methodology, mainly the tools for knowledge exchange and decision support</i></p> <p><b>Result: Additional tools for exchange of knowledge and decision support developed</b></p>	<p>a) Improve Internet access to data and tools</p> <p>b) Improve database management system to enhance decision support</p> <p>c) Produce support materials, such as standards for national “overview books”, guidelines for the use of WOCAT data in the development process</p>	<ul style="list-style-type: none"> <li>• Further <b>website improvement / modifications</b>: ongoing (a)</li> <li>• Improve <b>database functioning</b>: ongoing (b)</li> <li>• <b>Task force</b> on “Overview Books”: layout and content(c)</li> <li>• <b>Task force</b> on “Using WOCAT”: improved and tested guidelines (c)</li> <li>• <b>Task force</b> on “WOCAT in research/education” : compilation of presentation materials (e.g. in Powerpoint) (c)</li> </ul>
<p><b>4. Data quality</b></p> <p><i>Objective: to enhance data quality and additional data collection</i></p> <p><b>Result: Good quality data from at least 15 countries made available and used for the production of outputs</b></p>	<p>a) Further develop procedures to <b>enhance data quality</b></p> <p>b) <b>Support further collection</b> of data-sets in 5-10 countries where WOCAT has been initiated and additional 5 new countries (depending on requests and Steering meetings)</p>	<ul style="list-style-type: none"> <li>• <b>Task force</b> on “Quality Assurance”: (a) <ul style="list-style-type: none"> <li>- Output: Guidelines</li> <li>- Establish review panels at national and global level</li> </ul> </li> <li>• <b>Set of quality assured Ts / As</b>: Data ready by end of March 2003 and next WWSM Nov 03</li> </ul>
<p><b>5. Outputs</b></p> <p><i>Objective: to support the production of outputs</i></p> <p><b>Result: Outputs produced: 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</b></p>	<p>a) <b>Produce CD-ROM</b> in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests</p> <p>b) <b>Compile a first overview of global experiences of SWC Technologies and Approaches</b> from selected countries that have been active in the compilation of the data</p> <p>c) <b>Publish in journals and conference proceedings</b> the SWC classification system, the methodological tools for database management system, decision support (guidelines for “Using WOCAT”) and for mapping</p>	<ul style="list-style-type: none"> <li>• Task force “<b>Digital Products</b>” (c) <ul style="list-style-type: none"> <li>- CR-ROM vers. 3 (well functioning; tested in different environments, quality assured Ts / As): next WWSM 2003</li> <li>- website with updated methods, guidelines, T's / A's / maps</li> </ul> </li> <li>• UNEP-WOCAT <b>Overview Book</b>: further case studies from other countries to be included in final draft (Sept 2003)</li> <li>• <b>National book</b> from Kenya finalized</li> <li>• Draft of <b>world map</b> on the internet</li> </ul>

Since its initiation in 1992, WOCAT has established a global network of SWC specialists. Since 1996, WOCAT is organized as an international consortium, coordinated by a management group and supported by a secretariat. The objectives and activities of the overall WOCAT programme are developed within the WOCAT consortium and are subject to the annual Steering Meetings.

The main objective of this NRE-CDE programme contribution is to enhance the WOCAT programme, its activities and the quality of its outputs by using the acquired competence of CDE and the partners of the WOCAT network.

The specific objectives of the NRE-CDE programme contribution for the 3 years period 2002 to 2004 are as follows:

- 1) To further support and develop the WOCAT network: coordination, awareness rising and promotion
- 2) To provide backstopping and training support for national and regional initiatives
- 3) To further develop the methodology, mainly the tools for knowledge exchange and decision support
- 4) To enhance data quality and additional data collection
- 5) To support the production of outputs (at national, regional and global level)

### Major Events 2003

Event	Date	Venue	Relevance
Annual Conference of International Erosion Control Association (IECA)	24 – 28 Feb. 2003	U.S.A.	high
Regional Workshop (NCCR Students Education)	March 2003	Bishkek or Almaty Dushanbe	high
International Workshop	Spring 2003	Central Asia	medium
International Congress of Freshwater	June 2003	Tajikistan	high
World Conservation Agriculture Congress (WCAC)	11- 15 August 2003	Brazil	very high
International Symposium on 25 years of Assessment of Soil Erosion	22 –26 Sept. 2003	Ghent, Belgium	high
Vetiver Conference	Oct. 5-9 2003	Guanzhou Province, China	medium

### Plan for quality assured QA /QT – Datasets

Country	ready for CD-ROM 31.1.03 (total)		Ready for WWSM 30.9.03 (additional)		Remarks
	QT	QA	QT	QA	
Philippines	10	3	1	1	
P.R. China	15	15	10	5	
INSAH			30	10	
Tajikistan			6	2	
Yugoslavia			3	3	
Ethiopia	2	2	10	5	
Kazakhstan	1	1	2	1	
Kyrgyzstan	2	2	2	2	
North Africa			4	4	
Tanzania	4	4	10	3	plus 6 QMs
ICIMOD	0	0	4	4	(not sure)
South Africa	10	10	10	10	
Kenya	14	6	7	3	
Thailand	1	1	12	12	
ACT	2	1	2	1	(Zimbabwe, Zambia, etc.)
WASWC	3?	3?	-	-	already in CD v2, but 1 QT, 1 QA have been updated for the overview book
<b>TOTAL</b>	<b>64</b>	<b>48</b>	<b>113</b>	<b>66</b>	Quality assurance and commitment by national / regional institutions

Total of quality assured datasets by 30.9.03: **177 QTs and 114 QAs**

## 6.3 Proposed National and Regional Activities

### 6.3.1 Regional Workplans

Regional Workplans for the next year were presented. They are attached in the Annex 1.

#### East Africa (RELMA)

- It was noted that WOCAT activities date back to 1994 with pre-test questionnaires and 1995 regional workshop (Ethiopia, Sudan, Kenya, Uganda, Tanzania, Zambia). At the moment only Ethiopia/ Kenya are active, however, Uganda documented 6 QTs in 2000 with PFI/WOCAT book. RELMA is moving in to Zambia, Malawi and Zimbabwe is represented in this 7<sup>th</sup> WWSM
- RELMA to develop a regional WOCAT initiative proposal with input from regional countries and WOCAT Berne, taking WOCAT as a tool for data collection, evaluation and analysis
- RELMA to conduct a regional TOT (Training of Trainers) workshop
- Countries in the Region to link national WOCAT activities to existing bilateral programmes
- Individual countries to promote WOCAT in education institutions as Universities
- Countries to link with ACT through national ACTs representatives, to document at least 2 QTs and 1 QA on conservation agriculture
- To have an annual Eastern Africa regional WOCAT review/planning meeting, prior to the WWSM, to harmonise regional plans/ activities

#### Himalaya (HIMCAT)

- Countries involved: Pakistan, India, Nepal, Bhutan, China, Bangladesh and Myanmar
- National level associates: Indian national programme and China national programme
- Regional level associates: CAMP/ DRYCAT
- Proposal for DRYCAT in 3 three years:
  - Pakistan – NWFP: Chitral/Gilgit
  - India – Kashmir/Ladakh
  - China – TAR: Lhasa

#### Work plan for 2003

- March: 2-day meeting in Kathmandu “back to back” with Soil Erosion/Natural Resource Management Symposium (late February)– each country to prepare 1 QT and to have incorporated WOCAT in training, and develop way forward for 2003
- November: 2-day meeting in Kunming to review progress on QTs and plan for 2004

Funding: from PARDYP

Facilitation: WOCAT Berne for the March/November meeting

#### ASOCON

Countries involved: 7 (Indonesia, Malaysia, Thailand, Philippines, Vietnam, China and Papua New Guinea)

- ASOCON has been in existence for 10 years but activities have been constrained by budget
- The aim is to reactivate ASOCON through LADA activities
- WOCAT entry point is possible through LADA in promotion of conservation agriculture, using WOCAT methodology to provide a framework for monitoring, evaluation and promotion

#### ICARDA region

Institutions involved: ICARDA, FAO, CAMP, INSAH

- This is a vast area with a language problem
- Regional networks exist in SWC/Water Harvesting and are the ones to be utilised, without forming new networks, but to integrate WOCAT in the existing networks
- The aim will be enhance communication and exchange experience, and try to utilise Qs and WOCAT products to influence policy/ decision makers to use WOCAT as tool for monitoring/ evaluation

### 6.3.2 National Workplans for 2003

All participating countries prepared and presented their annual plans, as attached in the Annex 1.

#### The task given to the countries:

- For all country presentation, you should prepare two tables:
  - Table A – List of activities that can be done with the available money
  - Table B – List of other activities that need to be done and require additional funding
- Try to link with in-country funded projects/programmes (either locally funded or with foreign funding) with common interest in SWC and try to sensitise these funding agencies or donors to (co-)finance the WOCAT activities
- Try to identify how to link WOCAT with national action plans on resource conservation or UNCCD
- Prepare list of Ts and As that need to be included in the new version of CD-ROM

## 6.4 Budget 2002/2003<sup>3</sup>

Budget 10/02-10/03	Annual Budget	Reallocation 02-03	
<b>SDC</b>			
	CHF	CHF	USD
<b>Subtotal personnel (incl. overheads/contribution to CDE)</b>	<b>234000</b>	<b>234000</b>	<b>156'000</b>
<b>Travel expenses</b>	<b>14000</b>	<b>14000</b>	<b>9'333</b>
<b>Materials</b>			
Computers, peripherals and software	6000	6000	4'000
Production of books	20000	20000	13'333
Production of CD-ROM vers. 3 and 4	10000	10000	6'667
Printing reports / posters	15000	15000	10'000
Postage, etc,	2000	2000	1'333
<b>Subtotal materials</b>	<b>53000</b>	<b>53000</b>	<b>35'333</b>
<b>Mandates</b>			
International Workshop and Steering Meetings	30000	30000	20'000
Training National Trainers workshop (International)	16000		0
Quality control: assignments	13000	29000	19'333
Mandate for support and coordination (ISRIC)	30000	30000	20'000
Seedmoney and support to national and regional initiatives	10000	10000	6'667
<b>Subtotal mandates</b>	<b>99000</b>	<b>99000</b>	<b>66'000</b>
<b>Total SCD Funding</b>	<b>400000</b>	<b>400000</b>	<b>266'667</b>
<b>DANIDA: Tanzania, India</b>			
		CHF	USD
Core support: Contribution to ISRIC, travel, quality control		40000	26'667
Country related activities: India, Tanzania, Eritrea		40000	26'667
<b>Total DANIDA funding:</b>		<b>80000</b>	<b>53'333</b>

<sup>3</sup> \*Note: Budget is still subject to negotiations with SDC!

Financial Contributions to WOCAT between 9/92 and 9/02 (in US \$)								
	9/00-8/01			9/92-8/01	9/01-8/02			9/92-8/02
	Cash	Kind	Total	Total	Cash	Kind	Total	Total
ADB/China National level						15'000	15'000	30'000
ADB/FSWCC - China	7'000	4'500	11'500	50'500	10'000	5'000	15'000	65'500
ASOCON			0	62'000			0	62'000
CAMP Central Asia	30000?		0	0	???	???	10'000	10'000
CDCS		10'000	10'000	60'000		10'000	10'000	70'000
CDE		10'000	10'000	70'000			0	70'000
DANIDA	60'000		60'000	120'000	53'300		53'300	173'300
DED (Niger)	? ?		0	6'000			0	6'000
ESAPP Ethiopia	8'235		8'235	8'235	15'000		15'000	23'235
FAO	4'000	20'000	24'000	844'000	10'000	55'000	65'000	909'000
GTZ/OSS	2150 ?		0	243'000	???		0	243'000
HIMA - Iringa Tanzania	???	???	0	0	???	???	0	0
IBSRAM	? ?		0	5'500			0	5'500
ICARDA	? ?		0	25'000		10'000	10'000	35'000
ICIMOD	? ?	4'000	4'000	9'500		5'000	5'000	14'500
ICRISAT (Niger)	? ?		0	21'000		10'000	10'000	31'000
IDRC	0	0	0	85'000			0	85'000
INSAH		300	0	6'000		4'000	4'000	10'000
ISRIC		20'000	20'000	180'000		20'000	20'000	200'000
MoA: Ethiopia: WFP			0	0	???	4'200	4'200	4'200
MoA: SWC Kenya		10'000	10'000	10'000		2'500	2'500	12'500
MoA: SWC Tanzania			0	0	???	???	0	0
NDA/ISCW (ARC)/SA	17'000	8'000	25'000	139'000	10'000	2'000	12'000	151'000
OSWU	? ?		0	4'000			0	4'000
PASOLAC/GTZ/LA		3'000	3'000	74'000		???	0	74'000
Philippines (UPLB/BSWM)	1'500	1'000	2'500	38'500	???	10'000	10'000	48'500
RSCU/RELMA	31'000	10'000	41'000	128'500	40'000	10'000	50'000	178'500
SDC	175'000		0 175'000	1'308'000	260'000		0 260'000	1'568'000
Syngenta			0	0	???	???	15'000	15'000
Thailand (LDD)		5'000	5'000	49'500		2'000	2'000	51'500
UNCCD-GTZ Central Asia	10'000		10'000	10'000	???	???	0	10'000
UNEP	? ?		0	90'000	10'000		10'000	100'000
Unversity Belgrade	500		500	1'400	700	500	1'200	2'600
WASWC						4'500	4'500	9'000
WDCU India			0	0	???	???	20'000	20'000
<b>Total</b>	<b>314'235</b>	<b>105'500</b>	<b>419'735</b>	<b>3'648'635</b>	<b>409'000</b>	<b>169'700</b>	<b>623'700</b>	<b>4'272'335</b>

<sup>1</sup> computers

→ ca. 42% of total contributions by SDC

## 6.5 Taskforces

### Overview of taskforces 2003

The meeting decided that the following task forces should be established or continued:

Taskforce	Members
Quality assurance	Roger White (Chair), Miodrag Zlatic, Samran Sombatpanit, Rod Gallacher
Digital products	Gudrun Schwilch (Chair), Wolfgang Prante, Rinda van der Merwe, Berhanu Fantaw Tereke, Zhiming Niu, Kimamba Lyoba, Godert van Lynden
Overview books	Kithinji Mutunga (Chair), Daniel Danano, Gahiru Kimaru, Sanginboy Sanginov, François Lompo, Mats Gurtner, Edward Chuma
Use of WOCAT (incl. WOCAT in research / education)	Malcom Douglas (Chair), Romeo Labios, Somporn Patinavin, Richard Thomas, François Lompo, Aidubek Asanaliev, Felipe Zapata, Aigul Zhanserikova, Miodrag Zlatic, Radisav Pavlovic, Kamron Saifuk

### Principles (modified from WWSM Wageningen 2000)

- At least one physical meeting per year (if possible), e.g. combined with major meetings/ conferences
- Regional clustering?
- 3 reports per year to WOCAT-L (Dec; April; Sept)
- MG members to follow-up TFs
- Estimated time input: minimum 2 weeks/ per year/ task force
- Maximum of 5 members per TF with sufficient time/commitment

## 6.6 Evaluation of the Workshop

### 6.6.1 Expectations of Participants

All participants were asked to rate how their expectations of the workshop as given at the beginning of the meeting were met: Ranking from 1 = not fulfilled at all, 5 = completely fulfilled. Those that have no rating are from participants who left before the evaluation. (See table below)

### 6.6.2 Feedback session

Some participants argued that the workshop could have been shorter, like 4-5 days. Some issues were repeated; this time could have been used for other things, e.g. technical training. However, it was pointed out that this participants were asked to address their needs and that the aim was not a training workshop. But experience from other years showed that one week was not enough if including a steering meeting. The problem this year was that not very few additional people attended the SM. The SM should be skipped if (almost) no newcomers are joining and/or held only within a small group.

Much time was needed to present national activities. The suggestion to compile it into a document based on reports from the countries which should be sent in advance, is nice, but probably not realistic, since nobody is following such requests. What you can't have through emails are e.g. brainstorming, exchange of information through informal discussions or hands-on training on CD-ROM, etc.



Name of Participant	Expectations	Rank
<b>Godert van Lynden</b> ISRIC	Feedback on WOCAT and concrete action plans	<b>3</b>
<b>Mike Lane</b> Syngenta	1) To develop relations between WOCAT and Syngenta; 2) To clarify the role of WOCAT in my mind so that I can sell it to Syngenta in Europe	
<b>Ceris Jones</b> Syngenta	To better understand how and what WOCAT can contribute to soil conservation in initiatives in Europe	
<b>Somporn Patinavin</b> LDD	1) To learn about WOCAT database management, 2) comparing, sharing information	<b>4</b> <b>4</b>
<b>Kamron Saifuk</b> LDD	1) To show and exchange experiences of technologies 2) more collaborative and strengthening activities WOCAT - LDD	<b>4</b> <b>4</b>
<b>Aibdubek Asanaliev</b> Agrarian Academy of Kyrgistan	WOCAT should have directly contacts to local community for implementation of SWC technologies and to Agricultural University, Rural Advisory Service; where many SWC practices are and students can participate in technology implementation	
<b>Zulfira Zikrina</b> CAREC	1) Contacts with organizations and WOCAT people; 2) organization of workshop & seminars; 3) financial support; 4) tools for dissemination of information among users	
<b>Aigul Zhanseirikova</b> CAMP	1) Possibility of WOCAT activity in CA (to find tools / mechanisms for implementation at local sites); 2) to find new contacts, partners; 3) experience exchange	
<b>Berhanu Fentaw Tareke</b> MoA	1) More clarification on the tools/QM/QA/QT; Task Forces; 2) Formulate future work plan	<b>3</b> <b>4</b>
<b>Daniel Danano Dale</b> MoA	1) Meet other WOCAT partners to learn from their experiences on data collection 2) Reports of what has so far been achieved in WOCAT outputs: Global Summary, National Summary, Maps, New Technologies, Approaches	<b>4</b> <b>5</b>
<b>Miodrag Zlatic</b> Faculty of Forestry	1) Promoting better funding strategy as the fundamental for running and promoting WOCAT (for organizational setup); 2) Promoting WOCAT also in educational programme	<b>4</b> <b>4</b>
<b>Radisav Pavlovic</b> FAO-SNEA	« Usefulness » of WOCAT in practical terms (e.g. successful examples of technology replication transfer from one region to another part of the world)	
<b>François Lompo</b> Directeur Adj. Chargé d. Progr.; INERA	How countries with more experience in WOCAT can help in launching WOCAT in Sahelian countries? (of 9 countries only Niger is represented in WOCAT database)	<b>4</b>
<b>Edward Chuma</b> Zimbabwe	Identify and initiate complementary activities with ACT (the African Conservation Tillage Network)	<b>4</b>
<b>Sanginboy Sanginov</b> SSRI	Exchange experience in SWC technologies and collaboration with other institutions in this field	<b>4</b>
<b>Romeo Labios</b> FSSRI, UP Los Baños	1) WOCAT application in the field level (Experiences from others) 2) WOCAT in Education 3) WOCAT's use as instrument for donor support	<b>4</b> <b>4</b> <b>4</b>
<b>Rinda van der Merwe</b> ISCW / ARC	Info-Pack: National Overview Folders of SWC Technologies and Approaches	<b>3</b>
<b>Francis Turkelboom</b> ICARDA	1) Get more involved in WOCAT 2) Explore opportunity for WOCAT network for dry areas	
<b>Malcolm Douglas</b> Private Consultant	To learn what's going on and how to make links to countries where he works	<b>3</b>
<b>Roger White</b> ICIMOD	Clear understanding (for me) how to set up and operationalise HIMCAT	<b>5</b>
<b>Bai Zhanguo</b> c/o ISRIC	Strengthening WOCAT in China: improvement of the existing document, collection of much more nation-wide information on SWC Technologies (fill in Qs)	<b>4</b>
<b>Xuezhen Yang</b> Fujian Soil Conservation Off.	To set up Chinese WOCAT cooperation network and begin to work	<b>4</b>
<b>Zhiming Niu</b> SWCMC	1) To set up WOCAT network in China and to make linkages with WOCAT officially 2) to learn much more about GIS application in SWC	<b>5</b>
<b>Jianqin Cai</b> SWCMC	To initiate WOCAT nationally within China including personnel training, data outputs and extension	<b>5</b>
<b>Kimamba Lyoba</b> MAFS - SCLUPU	regional/national WOCAT initiatives should be known in-depth by strong donor's (represented in this workshop) to support data collection and application	<b>4</b>
<b>Gathiru Kimaru</b> RELMA	How to make country and regional programmes in Africa more effective?	<b>3</b>
<b>Felipe Zapata</b> Joint FAO/IAEA Div. (AGE)	Collaborative partnership with WOCAT for regional / national activities (link to IAEA: new programme on Soil Conservation)	
<b>Joe Rondal</b> BSWM	1) How to use WOCAT data for sustainable agricultural development 2) Guideline Task Force	<b>3</b> <b>3</b>
<b>Samran Sombatpanit</b> WASWC	Should make our products well usable, so people want to have them!	<b>3</b>
<b>Gudrun Schwilch</b> CDE	To have strong Task Forces for next year	<b>3</b>
<b>Wolfgang Prante</b> FAO	Data Quality Assurance	<b>3</b>
<b>Mats Gurtner</b> CDE	1) Discuss ideas / suggestions to improve the planned WOCAT Overview Book 2) Find ways to solve our data quality problem	<b>3</b> <b>3</b>
<b>Hanspeter Liniger</b> CDE	What is needed to get 100 good quality Technologies and Approaches for the WOCAT database?	<b>5</b>
<b>Kithinji Mutunga</b> SWCB	1) Commitment in budget for National / Regional Initiatives by WOCAT Bern 2) Overview book format	<b>2</b> <b>2</b>

WOCAT has started 10 years ago and there is still methodology development going on. Now the emphasis should more be on the use of WOCAT. The people/countries should report on how they have used WOCAT (on the monitoring sheet). Quality assessment should be integrated into the use of WOCAT. This should be the major focus for next year.



Figure 8: WOCATers from all parts of the world in a plenary session

## 6.7 Management Group Meeting

### Management Group Meeting of WOCAT, Grottaferrata, Rome, 2 November 2002

*Present: Hanspeter Liniger, Gathiru Kimaru, François Lompo, Joe Rondal, Samran Sombatpanit, Godert van Lynden, Rod Gallacher (rapporteur)*

Bern takes care of organizational matters including workshops and management issues such as contacts and contracts, for example with Syngenta.

Management Group has to enhance inputs and inspire collaborators, help with project proposals, linkages including research and funding policy.

#### Issues

Issues indicated for MG attention were:

- Technical (motivational)
- Organizational (arranging MoUs etc.)

- Implementing the global vision
- Funding

How? In the past, email has been the main method for communication. Continue this practice, but include “MG” in the subject line to facilitate filtering.

Responsibilities should be increasingly delegated to Task Forces. MG members will participate in Task Forces as appropriate, taking every opportunity to nudge the TF and ensure the elements for coming year’s organization and ongoing actions are in place.

### **Organization**

Management Group: template MoUs to circulate

- a) to collaborators for information, posting a version on the website, the CD ROM and WOCAT-L;
- b) to all collaborating institutes, as it is always better to be prepared for changes in designated persons and responsibilities. Details would be negotiated if responses were favourable. Money should not be mentioned; the MoA would take over that role;
- c) to other programmes at regional or global level, again for information.

### **Linkages**

Linkages are to be defined with collaborating institutes and organizations. Linkages would be geographic and opportunistic in nature. It must be made clear to collaborators that linkages are designed to integrate with existing activities rather than running a new parallel activity. Emphasize that the exercise is for information enhancement, documentation and evaluation.

### **Tasks and goals**

A need was seen to get summaries of WOCAT aims and achievements into scientific journals, with emphasis on the integration aspects of WOCAT.

Workshops and training should be continued with country emphasis.

Management Group will be in charge of implementing the global vision and keeping activities on track to achieve stated goals. This is very important in advance of meetings.

It was suggested that MG members look again at the Steering Meeting recommendations about 6 months after the meeting, to ensure that all understand the issues, tasks and goals. Timing for the E-mail evaluation exchange on this subject is the end of March in each year.

The situation where a donor dictates the WOCAT work programme should be avoided. MG should decide how funds are allocated.

### **Membership**

Samran and Rod relinquished their positions on MG. Substitutes were discussed and will be approached during the SM. Hanspeter thanked them for their support and service to WOCAT over several years.



# TOPIC 7 STEERING MEETING

## 7.1 Introduction

*Hanspeter Liniger (CDE) chaired the meeting and Gudrun Schwilch (CDE) was rapporteur*

### Welcome note

*by Parviz Koohafkan, FAO*

The knowledge/experience gained by WOCAT needs to be put in practice. Land degradation and soil and land management are very important issues. WOCAT collects local knowledge and can contribute to CCD and all other conventions. LADA meeting is taking place directly after the WOCAT meeting, as a global undertaking. A dynamic interactive assessment of land degradation is needed. WOCAT is in fact a more constructive view of land degradation assessment. Different aspects of land degradation and land management are needed.

### Participants

Short presentation of participants. The following additional participants joined the Steering Meeting:

- Parviz Koohafkan, FAO
- Adrian Sommer, SDC
- Laurence von Schulthess, SDC
- Ana Saez, FAO
- Freddy Nachtergaele, FAO
- Partly participation by other FAO staff

## 7.2 Reports on Topics 1 – 6

*See also full topic reports*

### 7.2.1 Topic 1: Review of Activities

#### Summary by Godert van Lynden

- Global level: WOCAT is accepted as a long-term programme for SDC at CHF 400000/year. DANIDA funding is continued but reduced by 20% to 80000 CHF/year.
- National activities: considerable progress and new initiatives after WWSM 2001 in Nyeri. Activity plans of last were year partly implemented, sometimes hindered by lack of finance or too ambitious expectations.
  - Kenya: data collection underway, advanced draft of overview book. Some funding and time constraints.
  - China: progress with data collection (incl. map) in Fujian. WOCAT proposal at national level approved, MOU signed during WWSM.
  - Thailand: data collection ongoing, map for SE province in advanced stage. MOU with LDD to be signed.
  - Philippines: data collection ongoing, map for Mindanao implemented, strong institutionalisation
  - South Africa: WOCAT been on hold for some time, taking up again. Considerable number of QT and QA in data base but quality assurance necessary. QM partly for entire country (land use, degradation) but conservation only complete for Gauteng.
  - Ethiopia: WOCAT institutionalized under MoA. Data collection underway, national workshops organized.
  - India: collaboration with DANWADEP programme, first introductory workshop in April 02, data collection started, training workshop held in October 02.

- Tanzania: WOCAT institutionalized under MoA. Data collection underway, national workshops organized.
- Yugoslavia: Sensibilisation in ministries and departments, conferences.
- C. Asian countries: activities starting (TJ, KZ, KY), some data collection, collaboration with CAMP.
- INSAH / West Africa: activities mainly in Niger (data collection and workshops), other countries to follow through INSAH.
- Besides success of WOCAT in terms of uptake by national and regional institutions, there is an urgent need to be defined in terms of actual use of WOCAT data in the field and above. Good quality data is essential (and still a problem).
- Long term vision of institutional and personal commitment needed.
- There is more spontaneous uptake rather than WOCAT being pushed.
- Great variety of different projects and institutions seeing the use and having the need in working with WOCAT
- Various actual or potential links, both topically and geographically.
- Task Forces: good progress with some (Digital products; SWC categorization; QM, Guidelines), less or none with other due to lack of interest or time (e.g. coffee table book). Communication within TFs to be improved.
- New initiatives/collaboration: Syngenta (Conservation Agriculture in Europe); FAO/IAEA (use of radionuclides); FAO-SNEA (Northern Africa); ICARDA (CWANA); ICIMOD (HKH): all promising potential and/or concrete steps underway for collaboration.
- Links to research (EUCAT), ICARDA (DRYCAT), ICIMOD
- Ecoregional approach and focus on water ("DRYCAT")
- WOCAT monitoring sheets (see annex) are the standard format to report activities.

## Discussion

The discussion raised the request to include Latin American countries. This is foreseen, but more based on requests from those countries. WOCAT has since 1998 shifted from a centralized programme to a decentralized network. WOCAT core activities focus on backstopping, methodology development and promotion / awareness creation. WOCAT is not a separate project, but is part of on-going programmes in the countries, e.g. as part of the Ministry of Agriculture in Ethiopia.

SDC is still a major contributor of the in cash funds, but there is a lot of in-kind and ad-hoc contributions from many institutions, incl. FAO. Since WOCAT should be part of the institution work, this in-kind contributions are often not considered. Other donors contribute directly through in-country projects (e.g. ADB in China).

## 7.2.2 Topic 2: Quality Assurance

### Summary by Gathiru Kimaru

Importance of quality assurance:

- The usefulness of the various WOCAT products depends heavily on the quality of the data. This has been discussed in several meetings including this one.
- Quality assurance is first and foremost a national level responsibility. Each national secretariat should work as a team in data collection and quality control. Other experts and land users should also help in reviewing the data. Finally, all of the QT and QA summary documents will require technical and English language editing.
- Above this there is also need for peer review at the regional and global levels to maintain the overall quality of the data in the global WOCAT database

To improve the process of the data collection on technologies and approaches, a number of changes have already been made to the QT and QA questionnaires.

Problems observed in filling in the questionnaires and suggested improvements:

- The questionnaires are sometimes worked on by individuals without fully consulting other experts, especially the land users. The initial information gathering should be from several sources, such as research institutions, extension programs and projects, farmers' organizations and individual farmers.

Where needed, further fieldwork (including PRAs) will ensure improved data quality and involvement of other experts and land users.

- Many of the later sections of the questionnaires are given less attention, in particular the section on costs, supporting sketches and concluding statements. Photos and diagrams are needed to help fully describe the technologies and the approaches. The photos should show the situation before and after, or with and without, the technology or approach. People should be included in the photos.

#### **Discussion:**

PRA is a good tool to assess perception of land users towards the technologies / approaches. E.g. Ethiopia is considering using PRA while documenting the technologies / approaches. There is shift from pure data collection to giving more weight to the documentation process itself.

It is possible to incorporate WOCAT into ongoing bilateral programmes, e.g. GEF as funding source for 3 UN-conventions, but only at a national level. There are no funds for data collection at global level. There is already a strong link with UNCCD in certain countries (e.g. Central Asia). National initiatives need to approach e.g. GEF themselves.

### **7.2.3 Topic 3: Digital Products**

*Presentation of WOCAT website, CD-ROM and databases by Gudrun Schwilch*

#### **Discussion:**

Sometimes a search in the database shows that there is no technology / approach which meets the selected criteria. But the search by criteria form should help in giving a fast overview on what kind of data is available (e.g. technologies from which countries and which climatic regimes). Moreover, no conflicting criteria should be entered (e.g. arid climate and rainfall >1000 mm). Next update of the database on the Internet will be by February 03.

### **7.2.4 Topic 4: Mapping**

*Summary by Joe Rondal*

WOCAT has launched a global initiative with the aim to put up a *world map* of successful technologies being practiced worldwide. The Information will come from WOCAT countries (21 countries actively involved in WOCAT) and regional groups (10 regional groups: ICIMOD, ICARDA, RELMA, ACT, INSAH, FAO-NORTH AFRICA, FAO-IAEA, ASOCON, CAMP, SYNGENTA FOUNDATION). The output will be initially in the Internet early next year. Over the long term (10 years), a world atlas of soil and water conservation technologies is envisioned

*National mapping* constitutes the geographical component of WOCAT providing an overview of land use, productivity trend, degradation occurring and SWC activities in a country, region or worldwide and is based on any geo-referenced base map. Considerable progress has been achieved in Thailand, South Africa, Philippines and Ethiopia during the past year.

The world map came up recently, but is actually an old WOCAT issue. In-between there was more effort put on national mapping, as presented here in the case of the Philippines.

#### **Discussion:**

There are either physiographic or administrative units used as the base map. Using SOTER maps provides a valuable GIS-tool, since SOTER info is then available through the WOCAT map viewer.

The WOCAT map should be linked with LADA.

How to link it to socio-economic indicators? IFAD is working on that and could help in finding collaborators in their partner countries.

## 7.2.5 Topic 5: Overview Books / Using WOCAT

### **Summary** by *Malcolm Douglas*

Currently there are drafts of 3 overview books: Kenya, South Africa and global (UNEP), but others are planned (e.g. Central Asia draft). The outline of the overview books should be the same for all WOCAT products. Experiences on compiling those books should be shared among the countries and guidelines developed.

The use of WOCAT should be emphasized. WOCAT is a tool for the transfer of technologies/approaches and a tool for appraising individual technologies by those promoting and or using them. Potential users of WOCAT and their needs should be clearly identified.

### **Discussion:**

WOCAT has digital and printed products, with some emphasis on the latter for people without access to computers. The WOCAT brochure should be updated to better raise awareness about the use of WOCAT. These products could help to attract donors for country activities.

## 7.2.6 Topic 6: The Road Ahead (Future of WOCAT)

*Presentation of the prioritised results from a brainstorm session by Romy Labios*

### **Discussion:**

It is important to integrate institutional aspects to ensure sustainability of WOCAT. This is the organisational platform to implement these things.

Activities had to be prioritised according the vision of the institutions and the available funds (e.g. Latin America 2nd priority). Maybe diversifying WOCAT product, e.g. rapid easy assessment for soil conservation, deduct principles from databases for SWC. This is the task for the overview book task force.

## 7.3 Global Workplan

### 7.3.1 Workplan

*The workplan for global activities 2003 was presented by Hanspeter Liniger.*

*See 6.2.2 "Major Global Activities"*

### **Discussion**

The interest on the "use of WOCAT" shown in the vision is missing in the global programme. There are concrete steps needed, otherwise it remains no more than a good idea. CDE has to prove the usefulness of WOCAT towards SDC. There is a taskforce on this and on quality assurance. Some think it should only be at national level, but monitoring of the use of WOCAT should be at all levels. Use of WOCAT should be a major part of WOCAT, more than just task forces.

As documentation and evaluation is the first step of "Using WOCAT" all ongoing initiatives are already "using WOCAT". It does not matter if a country has already a lot of data collected or is a newcomer. National plans should be adapted to stress the aspect of documentation and evaluation being more than simple data collection.

Maybe a new external evaluation is needed after the one in 1998, but that would require an additional budget. All countries could take advantage of such an evaluation. Maybe even more donors would be a result of such an exercise.



## 7.3.2 Budget

*Presented by Hanspeter Liniger*

*See 6.5 “Budget 2002/2003”*

- Last year 419'735 US\$
- This year 623'700 US\$
- Relative contribution of SDC 42% of total. Core funding is still a limiting factor in view of the expanding activities.
- Many small contributions: keep us going, but how much can people really commit themselves to do a job for WOCAT?

## 7.4 National and Regional Workplans

### 7.4.1 National Workplans

The national workplans were presented by the national coordinators, as in Annex 1.

All activities are now embedded in ongoing programmes, research institutions, etc. These workplans will be reviewed during the next WWSM.

### 7.4.2 Regional Workplans

The regional workplans were presented by the regional coordinators, as in Annex 1. These workplans will be reviewed during the next WWSM.

## 7.5 Taskforce Activity Plans

*See chapters 2.4, 3.3, 4.3 and 5.3; Comments only*

### 7.5.1 Quality Assurance

*Presented by Miodrag Zlatić*

*See 2.4.2. “Taskforce Quality Assurance”*

It is not the TF checking the data, they just develop guidelines how to do it. Difficult to work through email only.

### 7.5.2 Digital Products

*Presented by Gudrun Schwilch*

*See 3.3.2 “Taskforce Digital Products”*

### 7.5.3 Overview Books

*Presented by Edward Chuma*

*See 5.2 “Taskforce on Overview Books”*

There is a complaint that there is no Asian participant in this TF. Very ambitious programme. Is it realistic to achieve? Link to Management Group should be Kimaru or Lompo, who are in the Management Group, not Mats Gurtner.

## 7.5.4 Using WOCAT

*Presented by Malcolm Douglas*

*See 5.3 "Taskforce on the Use of WOCAT"*

Realistic plan, shows that this needs time, commitment, funds. "Using WOCAT" is an old issue and the review 98 showed that WOCAT should not be too ambitious (e.g. not claiming land users as their primary target group). The work on using WOCAT carried out till now has to be reviewed first. Nobody could commit himself to do it (time!).

The taskforces are the structure/organ to carry out WOCAT development work!

## 7.6 Organizational Issues

### 7.6.1 TOR of Management Group

#### **Technical responsibility**

- Coordinating development and functioning of tools and other technical products / outputs

#### **Organizational responsibility**

- MoU's
- Linkage to regional / national initiatives (geographically and ad hoc)
- Organization of Annual Workshops and Steering Meetings
- Respond to requests, comments, suggestions

#### **Global coordination responsibility:**

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

#### **Acquisition and coordination of funding:**

- Initiation of core funding proposals
- Support for national / regional funding proposals
- Responsibility and signatory for funding agreements (at global level) and budget allocations

#### **Operation:**

- Through e-mail
- Physical meetings: during Annual Workshops and other events (e.g. major conferences) where a majority of the MG members is present

## 7.6.2 Election of Management Group Members

### So far:

- Samran Sombatpanit, WASWC
- Joe Rondal, BSWM Philippines
- François Lompo, INSAH
- Gathiru Kimaru, RELMA
- Rod Gallacher, FAO
- Godert van Lynden, ISRIC
- Hanspeter Liniger (global coordination), CDE

### Stepping down:

- Samran Sombatpanit, WASWC: Since LDD is now officially represented in WOCAT, Samran feels he can leave the Management Group, but he will remain active in WOCAT.
- Rod Gallacher, FAO: Rod likes to thank for the support. He was part of WOCAT since the beginning at the Riederalp workshop. A management group member should be attached to an institution, but he will be retiring soon.

The steering meeting participants gave a warm thanks to both.

### New:

It was suggested to replace Rod with another person from FAO and Samran with a representative from China. The meeting agreed by acclamation and the following persons were appointed

- SWCMC / PRC: Zhiming Niu
  - FAO: Freddy Nachtergaele\*
- (\* Decision taken by FAO 1 week after Steering Meeting)

## 7.6.3 Assignment of Secretariat

Secretariat and global coordination: CDE

The Meeting agreed unanimously to let the Secretariat of WOCAT remain at CDE, Geography Institute, University of Bern, Bern, Switzerland.

ToR for secretariat:

- Acts on requests of the MG
- Responds to correspondence and requests (and distribute to MG when needed)
- Distribution of materials, tools.
- Hosts the global database
- Assists in organization of global workshops and steering meetings

## 7.6.4 Next WOCAT Workshop & Steering Meeting 2003

### Offers for hosting:

- ICIMOD (offer since several years)
- SWCMC China (offer since several years)
- North Africa (FAO)
- Tajikistan
- New offers: South Africa 2005, Philippines

### Rules for venue:

- Every second year in Europe and other years in active region
- Change: every third year in Europe?
- Alternatives to meet in Europe: MG with donors?

SDC only comes when the meeting is in Europe. But it is no problem to have it 2 years in the regions and only one every 3 years in Europe. An additional meeting with the Management Group and the donors would substitute the steering meeting.

Since ICIMOD-Nepal and China offers stand for years, the Steering Meeting selected between the two. Advantages and disadvantages between the two are compared:

	China	ICIMOD - Nepal
Venue	where?	Kathmandu
WOCATivities	Active programme in Fujian Province and new initiative at national level (Member of MG)	Concrete plans to start activities from Feb 03 onwards
Programme environment	Big national SWC activities covering 1/5 of the world population ?!	Regional institution (8 HKH - countries) New environment with high agro-ecological range: with Highland –Lowland interactions
Logistics	depending on location (more expensive) Support by host? Financial, ... Good facilities to host??? Secure Already visited by a number of WOCATeers during ISCO 02	Nepal easy to reach and cheap Support by host? Financial, ... Good facilities to host!!!, Good training facilities Security:??? Interdisciplinary programmes

**Voting:** China selected, probably Shaanxi Province

**Dates:** Since the budget year for core activities from 2002 onwards is from January to December (and not September to August as before), the WWSM should be more towards the end of the year.

Proposed is the 1<sup>st</sup> or 2<sup>nd</sup> week in November; 6 days, Monday till Saturday, including field day between.



Figure 9: Zhangguo Bai and Xuezhen Yang, WOCATeers from China

## 7.7 AOB

Malcolm Douglas: being one without institution wishes to be acknowledged as e.g. “friends of WOCAT”. He suggests to create a new category to have it in an official way.

## 7.8 SDC Report of WOCAT Steering Meeting

The following was a report by the SDC representatives sent to the WOCAT Secretariat after the Steering Meeting. The report is presented without changes or comments by editors:

### **Report on SDC participation in the WOCAT (World Overview of Conservation Approaches and Technologies) Steering Committee Meeting from 4 November 2002 at FAO in Rome.**

#### **Participants from SDC:**

Adrian Sommer, Laurence von Schulthess

#### **Background**

WOCAT is a global network of institutions (government, research and education, private) working in the field of soil and water management, organized as a consortium. Established 1992 WOCAT is working on documentation and exchange of relevant experiences and on development of operational instruments (decision-making and planning). These days, 21 countries, among them important partners like South Africa and particularly China, are actively involved. CDE is responsible for the organisation and coordination of the network. SDC supports WOCAT within the framework of collaboration with CDE from 2002 to 2004 with CHF 400,000 annually.

#### **Steering Committee**

After a one-week technical workshop a Steering Committee meeting was held on 4 November 2002 for discussion and approval of next years activity plan. For the Steering Meeting Agenda see Workshop Program. The list of participants is attached in Annex 3.

#### **Some impressions**

- The financial dependence from SDC seems still to be relatively high.
- The wide range of active countries and institutions taking part is remarkable, whereas CDE's strong leadership position is still accepted by the partners.
- On the other hand there seem to be more and more regional and national initiatives (ownership)
- In doing so an important region is largely missing (Latin America)
- The interest in the subject is obvious
- It looks as WOCAT emphasises more on problems of soil degradation while issues of water take second priority.
- Experiences and instruments do exist but their implementation and practical use are not yet sufficiently developed.

#### **Recommendations**

- There should be a greater focus on water issues; contacts with institutions like Global Water Partnership should be strengthened (toolkit as an interesting instrument!); the International Year of Water will give the opportunity.
- Latin America should be more incorporated into the process; ASOCAM (Agricultura Sostenible Campesina de Montaña) could give a possible getting in.
- The possibilities to promote the intensified and specified use of experiences and instruments and to supervise it with an adequate simple monitoring has to be checked
- The limits and potential of marketing WOCAT products should be verified (financial sustainability)

- A vision “WOCAT 2010” has to be created (roles of SDC, CDE, thematic, institutional and financial sustainability of the network, role of regional leading institutions, etc.).
- The program WOCAT with its experiences and instruments should be made more popular within SDC (Natural Environment Network!).
- A positioning of SDC and CDE has to be carried out together with participating institutions early 2004 with regard to the new phase starting 2005.

# ANNEX 1: ACTIVITY PLANS

## National Workplans (in alphabetic order)

### WORKPLANS for Central Asia

WORKPLAN for Kazakh WOCAT group 2003									
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required	Commitment by	
Trainings for users, WOCAT education	Collaboration with institutes, specialists, students and users of SWC technologies.	15	6	3	Reference material, hand book, Office equipment		2000 USD	Zhansericova Zikrina, Iorgansky	March-September 2003
QT, QA	Documentation of SWC technology for WOCAT database Filling in QT and QA and translation to English	5	2	3	Office equipment		1500 USD	Zikrina, Urazayeva students	January-November 2003
2-3 seminar	Participation at the international and local seminar	15	12	3	Presentational materials, brochures		5000 USD	WOCAT group	February-October 2003

Prepared by: Zikrina Zulfira

Total: 8500 USD

WORKPLAN for: Kyrgyzstan 2002-2003						
Expected outputs	Activities				Funding	
					Available	Required
	Collection of data and field work					1000
	Training of local staff					1000

Total: 2000

WORKPLAN for: Tajikistan 2002-2003										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution		Materials / equipment		Available	Required		Commitment by	
Training local staff for Data collection	WOCAT techn. and appr.	3	6	Tajik Agrarian Academy		100	1400	S.Sanginov	Nov.2002 Nov.2003	
Map	Developing soil erosion Map	5	6	Tajik Soil Science Research Institute	Gis	1000	3000	S.Sanginov R.Mamadkulov	Nov.2002 Nov.2003	
Taj QA	Translation of questionnaires	3	6	Tajik Soil Science Research Institute	Computer	100	600	S.Sanginov R.Mamadkulov	Nov.2002 Nov.2003	
Testing QA	Field testing	2	1	SSRI		200	1000	R.Kabilov	Nov.2002 Nov.2003	
WOCAT lecture to students	Lecture at TAU	2	3	TAU	Xerox Computer	200		R.Boboev	Nov.2002 Nov.2003	
WOCAT promotion	Newsletter	2	5	SSRI	Computer	100	600	S.Sanginov	Nov.2002 Nov.2003	
	Participation in International Conferences			SSRI	Computer		2000	S.Sanginov		
Regional Workshop for TNT							9000			
Documentation of technologies	Documentation	3	6	SSRI	Computer, GIS	200	2000	Ergashev	Nov.2002 Nov.2003	
Publication of SWC books	Tajikistan SWC Handbook	1	6	Tajik Soil Science Research Institute	Xerox Computer	100	600	U.Akramov	Nov.2002 Nov.2003	

Prepared by:

Total: 2000 11200

What will be done by **CAMP** and WOCAT in the future:CAMP planned budget for WOCAT activity in Central Asia for next 2<sup>nd</sup> phase (2003-2006)

- Improvement of translation of QTs and QAs into Russian
- 1 Regional WSh for the participants from 3 countries (TJ, KZ, KG) to train students in filling of QTs and QAs
- Data collection support and presentation of summary sheets and posters for extension service
- 1 International WSh in CA to improve all knowledge about WOCAT data base, QTs, QAs, to discuss mechanisms of implementation of WOCAT activity in CA
- to coordinate WOCAT activities in 3 CA countries
- To look for Institutions who interested to work with WOCAT in local level with users, has common interests with CAMP or WOCAT activities
- To look for other international or regional organizations with common interests to collaboration in CA in field of SWC (e.g. ICARDA)



WORKPLAN for FJCAT,China										
Expected outputs	Activities	Input				Funding USD		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Qm	Collector 5-8 counties data	3	5	SWCO	PC&GIS	3000	3000	Nie,Chen	Yang&Wang	Sep.30 2003
Qt	Improve 5 new 2	2	3	SWCO	PC	1200	1200	Nie,Chen	Yang&Wang	Dec.31,2002 Sep.30, 2003
Qa	Improve 5 New 2	2	3	SWCO	PC	1200	1200	Nie,Chen	Yang&wang	Dec.31,2002 Sep.30, 2003
Lecture & training	2-3	2		SWCO	Projector	3000	2000	Nie&Yang	Yang&Wang	Nov.30 2003
Translation QM into Chinese		2	4	SWCO		1600	1600	Nie,Chen	Yang&Wang	Sep.30 2003

Prepared by Yang

Total: 19,000

**Activities to be conducted at the regional level (Fujian Province)**

- With the assistance of Dr. Bai Zhanguo, to complete 5 QT/QA, quality control
- Translate QM into Chinese and cover 5 to 8 QMs
- Conduct other activities in term of the overall arrangements of national coordinating agency, i.e. SWCMC

Reported by Yang Xuezhen, Director of FJSWCO

**Activities to be conducted at the national level**

- Memorandum of Understanding for WOCAT development in China nationally is planned to be signed during this Conference;
- Training on how to get WOCAT started is expected to be organized early next year, in detail covering personnel trained, data management, and outputs produced, etc;
- Linkages of future China-WOCAT (initially defined as COCAT ) with this national website are expected to be exercised after WOCAT is initiated in China;
- Linkages of existing WOCAT network in China, Fujian Network with future national network are proposed to be conducted;
- Get permanent fixed funding to support WOCAT from MWR and searching for other potential funds from other resources.

Prepared by: Cai Jianqin, Deputy Director, SWCMC and Niu Zhiming, Project Officer, SWCMC

Work Plan for EthiOCAT -2003									
Expected outputs	Activities	Input			Materials / equipment	Funding		Responsible person(s)	Timetable
		Person x months / Institution				Available	Required	Commitment	
Updating of the former 8 Ts and 2 As and undertaking of case studies for 25 QTs, 12 Qas, 38 QMs	Data collection QTs, QMs, QAs	17 wereda experts 8 regional and 2 national facilitators	17 x 0.5 months 8 x 0.4 months 2 x 4 months	WOA; RBOA; MOA	Questionnaires, topo-maps, base maps, surveying equipment, finance	4,800	12,000	MOA ESAPP Other sources	November 2002 – June 2003
46 Wereda experts to be trained	Training of field staff on data collection	2 National facilitators and 8 Regional facilitators	40 SWC specialists for 7 days 2 national and 4 regional facilitators	WOA; RBOA; MOA	Questionnaires, topo-maps, base maps, surveying equipment, finance	1,600	3,000	MOA ESAPP other sources	January 2002 – February 2003
Technical support provided to 23 weredas in 4 Regions	Backstopping and technical support	2 National and 6 regional facilitators	40 days for national facilitators and 50 days each for regional facilitators	WOA; RBOA; MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	800	1500	MOA ESAPP Other sources	November 2003- June 2003
17 QTs 10 QAs 30 QMs edited and entered into the database	Editing of data collected	4 Regional and 1 national facilitator	20 days each for regional facilitators and 30 days for national facilitators	RBOA  MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	-	-		February 2003 – August 2003
Encoding and analysis completed for 17 QTs, 10 Qas, 30 QMs	Data encoding and analysis	Regional and national data base managers	4 regional and 1 national facilitators	RBOA  MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	800	1,500	Other sources	November 2003- August 2003
1 national EthiOCAT activities achievements report prepared	Report writing	8 regional and 2 national facilitators	20 days each	RBOA  MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	-	-	-	July 2003 – September 2003
1 National workshop for promoting EthiOCAT conducted	Conducting national workshop	2 national facilitators	7 days	MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	-	10,000	RELMA	November 2002- January 2003

1 EthiOCAT steering meeting for reviewing achievements conducted	National meeting for assessing preliminary results	National facilitators	5 days	MOA	Completed QTs, QAs and QMs	8000	-	-	March 2003
1 a zero draft Overview book ready	Compiling and presenting of results (National Overview Book)	8 regional and 2 national facilitators		RBOA MOA	Questionnaires, topomaps, base maps, surveying equipment, finance	-	-	-	September 2003
16 regional experts trained in data management	Training in data management and analysis		6 days	WOCAT / EthiOCAT	Questionnaires, topomaps, base maps, surveying equipment, finance	-	3,000	MOA Other sources	March / April 2003
4 SWC specialists	Participating in Regional workshop	Regional and national EthiOCAT facilitators		MOA and RBOA	-	-	4,500	RELMA	June 2003
2 EthiOCAT facilitators	Attending WWSM	National EthiOCAT facilitators		MOA	-	-	5,500	RELMA/WOCAT	
Total						16,000 \$	41,000 \$		

### Ethiocat Vision

EthiOCAT as the vision of making available information and tools needed by extension workers, researchers, policy makers, higher learning institutions and the public at large for planning, implementing, monitoring and evaluation of soil and water conservation / land management projects/ programs, research undertakings, education and decision making processes through its database establishments, overview books, maps. It has the major mission of strengthening national and regional conservation planning and decision-making in Ethiopia.

### India: Action plans and suggestions (no workplan available):

#### CWDP-MP / DANWADEP - level

- Finalisation of filled-in questionnaires (3 QT, 1 QA): within 1 month
- Document additional T's and A's (including indigenous T's)
- Report on pilot phase
- Test QM in the project area (with assistance from WOCAT by email)
- Feedback to land users
- Technology development based on documentation in phase II (internalisation of learning from documentation)
- WOCAT activities are part of the on-going project
- DANWADEP / WDCU is ready to promote the application of WOCAT

#### Gov. of Madhya Pradesh / Gov. of India

- Follow-up to be discussed in executive committee meeting (Oct./Nov. 02)
- GoMP / GoI may consider a state level / national workshop on WOCAT for an assessment of WOCAT application

WORKPLAN for: Kenya										
Expected outputs	Activities	Input				Funding U\$		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Updated overview book	• Overview book for Kenya updated	3	1			4,500		DBT, KM, JKM	RELMA	Nov./ Dec 02
1,000 cc updated overview book	• Type setting, printing					5,000		RELMA	RELMA	Feb./ April 03
10 persons	• TOT	4					3,500	KENCAT	WOCAT	Jan. 03
10 demonstrations	• promotion in education	4					2,100	KENCAT	WOCAT	Jan – Jun 03
10 Qs	• updating QA+QT	10					3,000	KENCAT	WOCAT	Feb June
5 Institutions	• collaboration/ partnership	10						KENCAT		Apr – Sept. 03
KEN/SWC maps for 3 districts	• QM test in Kirinyaga, Embu, Mbeere	10	2				4,000	RELMA		June 03
2 persons	• 8 <sup>th</sup> WWSM						4,000	KENCAT	WOCAT	Sept 03

Prepared by: Kithinji M + G. Kimaru.....\*

available = 9,500; request = 16,600

WORKPLAN for: PHILCAT (Nov 2002-Oct 2003)										
Expected outputs	Activities	Input				Funding (US\$)		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Complete QM map for the Philippines	• Data collection, entry and integration. Data analysis	4	2	BSWM	Computer, e-mail	1,000.00	5,000.00	J. Rondal	J. Rondal	12 months
3 QTs 1 QA	• Data collection and entry	3	1	BSWM/ FSSRI	Computer, e-mail	-	1,000.00	J. Rondal, R. Labios	J. Rondal R. Labios	12 months
Technology selection and screening	• Technology identification for various target groups	5	3	BSWM/ FSSRI	Computer, e-mail	-	2,000.00	J. Rondal, R. Labios	J. Rondal, R. Labios	8 months
WOCAT Materials	• Presentation of WOCAT materials to CFM conference	1	1	FSSRI	WOCAT power point materials, Computer	300.00	-	R. Labios	R. Labios	1 month
	• Production of SWC extension materials	3	3	FSSRI		200.00	1,000.00	R. Labios	R. Labios	6 months
	• Include a link to WOCAT website on BSWM website							J. Rondal	J. Rondal	
Prepared by: Jose Rondal and Romeo Labios						Total:	1,500.00	9,000.00		

Prepared by: Jose Rondal and Romeo Labios

<b>WORKPLAN for: South Africa - 2003</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x month / Institution			Materials / equipment	Available	Required		Commitment by	
WOCAT-South Africa on internet (AGIS)	<ul style="list-style-type: none"> <li>Resolve issue of integration of WOCAT database into Informix-based AGIS</li> </ul>	2	1	NDA / ISCW		\$ 5 000		ISCW / NDA	DP	February 2003
A printed document / output	<ul style="list-style-type: none"> <li>Print and bind 4 page summaries</li> </ul>	2	1	ISCW		\$ 2 000		ISCW / NDA	RVDM	March 2003
WOCAT integrated with LandCare programme	<ul style="list-style-type: none"> <li>Establish as Reporting method</li> <li>Stimulate new LandCare project proposals</li> </ul>	1	1	NDA		\$ 2 000		NDA	DP	March 2003
Promotion Workshop	<ul style="list-style-type: none"> <li>Organisation of Workshop</li> <li>Make products available</li> <li>Report on Workshop</li> </ul>	3	2	ISCW	CD ROM's Pamphlets Posters	\$ 5 000		ISCW / NDA	RVDM	April 2003
More and Complete Questionnaires	<ul style="list-style-type: none"> <li>Updating of current datasets</li> <li>Continue data collection</li> </ul>	2	Variable	ISCW			\$ 20 000	ISCW	RVDM	2002 – 2003
Final Map	<ul style="list-style-type: none"> <li>Update datasets</li> <li>Data collection</li> <li>Application of Map</li> </ul>	4	2	ISCW / NDA / Bern University			\$ 10 000	NDA / ISCW	DP	August 2003

Prepared by: Rinda van der Merwe

Total Required: \$ 30 000

**WORKPLAN FOR: TANZANIA October 2002-September 2003**

Application of WOCAT Tools in assessment and promoting appropriate existing SWC Techn. and Appr. in Lake Victoria Basin, Pangani and Luiche River Basins.

**TABLE A ACTIVITIES NEEDED FUNDING.**

Expected Outputs	Activities	Inputs				Funding		Responsible Institutions	Timetable
		Persons x months/Institution			Materials / equipment	Available from MAFS	Required from WOCAT, RELMA and others	Commitment by	
Good quality data available and used.	(i) Training of data collectors and users on data quality and utilization.	25	5 days	MAFS/USERS	Training materials, computer, CD Rom	NIL	US \$ 16,000	WOCAT / RELMA / MAFS	Dec. 2002 - March 2003
Available National trainers on WOCAT data base management	(ii) Training of national trainers on data base management.	4	3 months	MAFS	Training materials, computer, CD Rom	NIL	US \$ 24,000	WOCAT / RELMA / OTHERS	Oct. 2002 to Sept. 2003
Capacity building of institutions.	(iii) Participation on the 2003 WOCAT annual meeting and at least 2 other international related activities workshops.	4	5 days	MAFS/USERS	Fare, Per Diems and Training materials	NIL	US \$ 40,000	WOCAT / RELMA / OTHERS	Oct. 2002 to Sept. 2003
Total amount required:							US \$ 80,000		

**TABLE B ACTIVITIES THAT HAVE FUNDS FROM THE MINISTRY OF AGRICULTURE AND FROM RELMA.**

10 QTs, 3QAs and 6QMs available by Sept. 2003.	(i) Carry out field documentation of existing Ts, maps and As using WOCAT tools	14	Days (variable)	MAFS, District Councils, NGOs, Projects	Questionnaire sheets, base maps and stationery	US \$ 6,690	US \$ 10,000	RELMA/MAFS	Oct. 2002 to Sept. 2003
SWC QTs, QAs and QMs available and used.	(ii) Update the data forwarded to Bern i.e 4QTs and 4QAs, and Compile and analyse new data collected and enter into data base.	6	Days (variable)	MAFS and District Councils	Stationery, computer, CD-ROMS	US \$ 1,200	NIL	MAFS	Oct. 2002 to Sept. 2003

Prepared by Lyoba (MAFS - Ministry of Agriculture and Food Security)

Activities planned from November 2002 to October 2003 (Tanzania)

1. Training: a) Data collectors and users on data quality and utilizations; b) National trainers on data management.
2. Documentation of technologies, approaches and its spatial distributions on the 13 selected pilot districts.
3. Update, compile and analyse data collected.
4. Information exchange: Participation on 2003 WOCAT annual meeting and at least 2 other international related activities workshops

<b>WORKPLAN for: Land Development Department (LDD) Nov 02 – Oct 03</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / Equipment	Available	Required			
QT and QA of 12 representative locations	To complete QT and QA of 12 locations	3	6	LDD	Computer QT ,QA Questionnaire	5,100	2,000	S. Kamron P. Somporn		Mar-Aug. 2003
QM of Thailand	Assessment of QM for the whole country ( derived from soil erosion map and cross-checking by field observation and QT, QA information)	4	3	LDD	Computer CD-ROM v.3	3,000	2,500	S. Kamron P. Somporn		Jan-Aug. 2003
Modified map for Word Map Production	Compilation of QM for an appropriate units	2	1	LDD	GIS WOCAT-web	1,400	-	S. Kamron P. Somporn		Oct. 2003
SWC technologies, approaches database (search from THAICAT under <a href="http://www.vladd.go.th">www.vladd.go.th</a> )	Improve database and networking to WOCAT	2	2	LDD	Computer Internet Materials	2,800	1,000	S. Kamron P. Somporn		Jan.- Dec. 2003
THAICAT office and Staffs	Provide space and staffs to handle WOCAT activities	3	12	LDD	Office materials	3,000	800	S. Kamron		Jan.- Dec. 2003
WOCAT demonstration sites	To promote WOCAT technologies and approaches for the selected sites	14	12	LDD	Computer QT, QA, QM	4,000	1,000	S. Kamron P. Somporn 12 personnel from regional offices		Jan.- Dec. 2003
Total						19,300	7,300			



<b>WORKPLAN for: Land Development Department (LDD) Nov 02 – Oct 03</b>										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		No. Par	Duration (day)	Institution	Materials / Equipment	Available	Required			
WOCAT guiding persons for SWC and technology transfer	<u>Training</u> - LDD personnel to understand how to use WOCAT as a tools for SWC and implementation	24	3	LDD	Computer QT ,QA Questionnaire	2,000	2,600	S. Kamron P. Somporn		Jan-Mar 2003
24 Volunteer Soil Doctors that can adopt and transfer WOCAT in practical and viable approaches	- Volunteer Soil doctors (Volunteer farmers)l to understand and adopt WOCAT for SWC practices on their farms	24	3	LDD	Computer QT ,QA Questionnaire	2,000	2,600	S. Kamron P. Somporn		Jan-Mar 2003
Total						4,000	5,200			
<b>Grand Total</b>						<b>23,300</b>	<b>12,500</b>			

**THAICAT Vision:**

- to be ones among the other sites that represent the good achievement and demonstrate the sustainable land management by adoption of the WOCAT disciplines and supports
- to assess the QM for the whole country (biophysical units // administrative boundaries)
- to provide the spatial data derived from QM to be fitted in the Global Scale (World Map)
- to select 12 land development villages as the representative sites for describing the QT, and QA formats
- to improve the database linkage to WOCAT network
- to contribute LDD technologies, approaches, and achievement in combating land degradation in Thailand
- to coordinate GO's and NGO's in exchanging technologies, ITK, and approaches
- to provide space /room for THAICAT Office and also staffs to handle and collaborate WOCAT activities
- to promote WOCAT technologies, approaches by adoption and integration to LDD routine mandates and approaches for the implementing scales, such village, tambon, micro-catchment, and sub-basin, etc.

**Training:** - LDD personnel to understand, how to use and facilitate WOCAT for SWC technologies, implementing at the on-farm level

- Volunteer Soil Doctors (Volunteer farmers) whom work with LDD at Tambon (sub-district) and villages for land development programmes

WORKPLAN for Yugoslavia: Sept. 2002 – Sept. 2003										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Further actions	<ul style="list-style-type: none"> <li>Continue of finding donors for national/ regional WOCAT program.</li> <li>Contacts with foreign org. (Unep, embasies, foundat</li> </ul>	3	3	BU-FFDE			\$ 1000  \$ 1000	M. Zlatic  N. Dragovic	BU-FFDE CEKOR	Oct. 2002 Dec. 2003.
WOCAT promotion	<ul style="list-style-type: none"> <li>Meeting with ministries, enterpr.</li> <li>Meeting with foreign org.</li> <li>Promotion at IYM</li> <li>Training worksh. in Belgrade and Valjevo</li> </ul>	20	0,02	BU-FFDE			\$ 1000 \$ 1000 \$ 1000 \$ 20000	M.Zlatic, S.Kostadinov	BU-FFDE CE-KOR	Nov. 02  Nov. 02 Dec.02 Jan./Mar.03
Further action Qm	<ul style="list-style-type: none"> <li>Working on Qm in South/East Serbia</li> </ul>	6	3	BU-FFDE, NGO CEKOR			\$ 10,000	M.Zlatic, S. Kostadi-nov, N. Dragovic	BU-FFDE CEKOR	May – Jun 03
Qa, Qt  Brochure	<ul style="list-style-type: none"> <li>Starting Qa and Qt in South and West Serbia</li> <li>Brochure of undertaken programme for one year</li> </ul>	6 4	3 1	BU-FFDE, NGO CEKOR,			\$ 10,000  \$ 1,000	M.Zlatic, S. Kostadinov, M. Zlatic, N. Rankovic N.Dragovic	BU-FFDE NGO CE-KOR	Jun – Aug. 03 Sept. 03

Total: \$ 46 000

Prepared by: ...Miodrag Zlatic.....

Legend: BU-FFDE: Belgrade University-Faculty of Forestry, Department for Erosion Control  
CEKOR: Centre for Ecology and Sustainable Development

## Regional Workplans / New Initiatives

WORKPLAN for: HIMCAT (ICIMOD)										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
• 11 sensitised staff from 5 countries	• 2 day meeting (KTM) WOCAT + 3 field days (with DFID soil erosion network) PKR	2 2	10 days 10 days	WOCAT ICIMOD		Airfares + Local expenses	Sal.+DSA	HPL, GVL RW	RW	Feb./March 2003
• 1 QT, 1QA per participant	• Data collection	11	10 days	HIMCAT partners		Yes		RW	RW	Oct. 2003
• 9 (?) trained staff; activity plan for following years	• 1 week training workshop (Kunming)	2 2	10 days 10 days	WOCAT ICIMOD		Airfare Yes	Sal.+DSA	HPL, GVL RW	RW	Nov. 2003

Prepared by: Roger White

Total: US\$

**NB:** Associate with National programmes in India and China, CAMP and DRYCAT

WORKPLAN for Institut du Sahel – CILSS / INSAH										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Regional training workshop	<ul style="list-style-type: none"> <li>Presentation of WOCAT</li> <li>Use of digital products</li> </ul>		3 days	INSAH / WOCAT secretary	Training Materials	10800000	6000000 (ca. 9000 Euro)	F. Lompo; Ch. Biolders		March 2003 for 3 days in Guinea Bissau
Data collection	<ul style="list-style-type: none"> <li>Filling / up-dating the questionnaires in six countries: Burkina Faso; Mali; Niger; Senegal; Cap Vert; Gambia</li> </ul>			INSAH / NARS	Questionnaires	-	6000000	NRM Pole focal point in the NARS		year long
WOCAT promotion	<ul style="list-style-type: none"> <li></li> </ul>			INSAH / NARS	WOCAT products	-	-	INSAH / NARS		year long

Prepared by: F. Lompo

Total:22800000

**Comments on the Workplan for CILSS / INSAH**

1. The priority is given to the Regional Training Workshop. This workshop is proposed to be held two or three days during the Annual Regional Committee of the Natural Resource Management Pole. It will be an opportunity to fit WOCAT activities in the process of activity planning in the regional programme of the pole. Regarding funds, it is necessary to find funds for the participation of external persons as Charles Biolders, a resource person from Niger (Mr. Laouali) and somebody from the WOCAT secretariat.
2. Data collection is planned for the following five countries: Burkina Faso, Mali, Senegal, Gambia, Cap Vert. For Niger, activities will concern quality assurance and up-dating. For these activities core funds are needed.

Contacts have to be undertaken with OSS, AIEA and the World Bank for funding WOCAT activities in the CILSS region

WORKPLAN for: WASWC Nov 02 – Oct 03										
Expected outputs	Activities	Input				Funding		Responsible person		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required			
Publicity of WOCAT in media	<ul style="list-style-type: none"> <li>Publishing 'WOCAT Highlights' in every issue of WASWC newsletter</li> </ul>	1	1	WASWC	Computer Internet	-	-	S. Sombatpanit		

Prepared by: Samran Sombatpanit

## IAEA

Future collaboration plans

- Provision of information on SWC technologies and approaches
- First RCM, May 19-23 2003, Vienna
- Training workshop on WOCAT

Utilization of standardised protocols for evaluating (description and analysis) SWC technologies

## ICARDA

by Richard Thomas

Requirement for training of ICARDA staff in WOCAT questionnaires.

Where ICARDA will consider using the WOCAT approach.

- In the gap analysis exercise that conforms part of a new regional program on rainfed agriculture in the WANA region (West Asia and North Africa) facilitated through the Global Mechanism of the UNCCD.
- ICARDA's own benchmark sites particularly in Syria, where there are efforts on the rehabilitation of degraded lands.
- As part of ICARDA's capacity building and training efforts in sustainable land management in CWANA (Central, West Asia and North Africa) particularly where land users, extension workers, researchers and policy makers are involved (i.e., as part of an awareness raising exercise).
- As part of the INRM approach that is being mainstreamed into the CGIAR centers and incorporated into the emerging challenge programs. This could also include collaboration with LADA-WOCAT.

As a general feature ICARDA will consider WOCAT as a methodology/tool for soil and water conservation and seek to incorporate it into its efforts on developing decision making tools and guidelines for land users and policy makers.

## North Africa Work Plan for 2003

- Two national studies on traditional soil and water conservation practice are being launched in North Africa (Morocco and Tunisia; similar studies might be conducted for the remaining three countries: Libya, Algeria and Mauritania; this depends on the results from the previous two studies, as these are the most advanced). The emphasis is on the link of these measures with the desertification NAPs (National Action Plan), as these have recently been approved in the first two countries;
- On of the TORs is the completion of 2 QTs and 2 QAs, although we would not mind to have the old ones reviewed with the view of assuring their data quality;
- The difficulties faced in completing the Qs would be used to assess the needs for training needed at national level;
- We intend to provide a number of quality-checked QTs and QAs, although we cannot make any specific promises regarding the numbers of the Q's;
- Sensitization will be pursued with the aim of promoting the usefulness of WOCAT in soil and conservation planning and implementation. For this we would need the assistance of the Secretariat, more specifically by fielding an experienced French-speaking WOCATEER (such as somebody called Charles);

SNEA (which stands for *Sub-regional Office for the North Africa*) would actively participate in the TF on demonstrating of the use of WOCAT (primarily as a “pusher”); of course, as rightly stressed upon by Hanspeter Liniger, this work will be impossible without an active participation of ALL WOCATEers.

## RELMA

Currently **RELMA** covers six countries in Eastern Africa: Eritrea, Ethiopia, Kenya, Uganda, Tanzania, Zambia. These countries own RELMA: They generate the annual workplan, but the funding is from SIDA.

Now RELMA has been restructured into a “field office” for the Natural Resources Department of SIDA. This means that the country activities will no longer be supported by RELMA as before. Much of the workplan will be suggested from Stockholm, and will have to be “regional” in scope. A new Regional Advisory Committee is being put together to help reshape the future RELMA workplan.

RELMA will also have a wider geographical coverage (Sub-Saharan countries with SIDA supported bilateral programmes). RELMA will continue to support WOCAT as a regional programme

## Syngenta and WOCAT (EUCAT)

- **NEMCAP** (Northern European Mechanised Conservation Agriculture Project)  
NEMCAP aims to assess the viability of a more “conservation-oriented” agriculture, where fewer tillage practices replace the numerous cultivations carried out under more “conventional” arable farming systems. The NEMCAP partners are Syngenta, the National Soil Research Institute (NSRI) of Cranfield University, the University of Leuven, WOCAT (World Overview of Conservation Approaches and Technologies), and Vaderstad (minimum tillage machinery manufacturer). One criterion for the success of such a project is the potential for independent assessment of the environmental and economic benefits of the approaches suggested, and a suitable manner for transmitting this information. This is the role of WOCAT.
- Proposal of **SOWAP** (Soil and Surface Water Protection Using Conservation Tillage in Northern and Central Europe) submitted to EU, with possible involvement of WOCAT

# **ANNEX 2: MONITORING SHEETS**

## **MONITORING OF WOCAT PERFORMANCE AND IMPACT**

National Monitoring Sheets

page 88

Regional / Global Monitoring Sheets

page 108

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: October 2001-october 2002  
Institution: CAMP CA REC

Country: **Kazakhstan**  
Contact person: Zikrina Zulfira

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	2	mod					
Institutions, including NGO's	5	mod	2	few			
Decision makers	1	few	1	few			

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Meeting	10	March, April 2002	Kazakhstan
Workshop	12	July, September 2002	Kazakhstan
presentation	2	October 2002	

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	20 .... %
Information and training	20 .... %
Data collection	40 .... %
Analysis, output production	20 .... %
Other	..... %
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	1		
Number of Approaches (As)	1		
Area (km <sup>2</sup> ) for which maps are prepared	1830 km <sup>2</sup>		

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	Case study of one farm		
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports			
Presentation materials (PR)	Presentation materials for annual WOCAT meeting		
Maps	A map of the area where the technology was applied		
Others (for example, guidelines)			

#### Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)



**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	5	During field trips and meeting with users
2. Requests made for WOCAT data and use of products (CD-ROM, books)	5	Understandable, preferably printed materials
3. Requests made for training on WOCAT methodologies and performed training activities	2	
4. Persons/institutions using the WOCAT guidelines	2	The Kazakh research institute of land cultivation, The Kazakh research institute of mechanization
5. Persons/institutions using the WOCAT questionnaires for documenting SWC	3	The Kazakh research institute of land cultivation, The Kazakh research institute of mechanization
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.		Are being planned

**6. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

The information was updated and systematized .....

.....

**7. Use of WOCAT in training / education:**

Use of WOCAT illustrative materials for dissemination of SWC ideas in Kazakhstan .....

.....

**8. Benefits of WOCAT:**

Creation of the Kazakh task force group for collection SWC technologies and sharing world SWC experience in Kazakhstan. Kazakh users and specialists on SWC got a chance to enlarge their scope and consequently to improve their skills in SWC activity.....

.....

**9. Problems with WOCAT:**

The status of the Kazakh WOCAT group is not determined yet. It makes difficulties to establish good relationship with necessary organization in Kazakhstan. ....

.....

**10. Others:**

.....

.....

Date: 26 October 2002 ..... Filled by: Zikrina Zulfira.....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002 ..... Country: **Tajikistan**  
 Institution: Soil Science Institute ..... Contact person: S. Sanginov

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.:</i> numbers of persons / institutions <i>Intens.:</i> average intensity of contacts: - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	60						
Institutions, including NGO's	5						
Decision makers	2						

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
1. Initial WOCAT Training workshop on terracing and mulching	30	2002	Tajikistan
2. Map Questionnaire workshop in Soil Institute	40	May 2002	Tajikistan

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	10 .... %
Information and training	20 .... %
Data collection	20 .... %
Analysis, output production	40 .... %
Other	10 .... %
<b>Total</b>	<b>100 %</b>

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	2	3	
Number of Approaches (As)	2	3	
Area (km <sup>2</sup> ) for which maps are prepared			

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	WOCAT activity in Faizabad	20	2002
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	Introduction of WOCAT	10	
Presentation materials (PR)			
Maps	Soil erosion map		
Others (for example, guidelines)			

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
	ICARDA project	Central Asia

**B. Impact indicators**

	No.	Details, remarks, ...
7. Users that have shown interest in WOCAT (Brochure distributed)	57	During workshops
8. Requests made for WOCAT data and use of products (CD-ROM, books)	3	From Agrarian University
9. Requests made for training on WOCAT methodologies and performed training activities	15	
10. Persons/institutions using the WOCAT guidelines	3	3 Institutes from Tajikistan
11. Persons/institutions using the WOCAT questionnaires for documenting SWC	5	Soil Science Res .Institute
12. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.		

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

.....

.....

**8. Use of WOCAT in training / education:**

Tajik Agrarian University will use it for education.....

.....

**9. Benefits of WOCAT:**

Improve the agriculture for sustaining.....

.....

**10. Problems with WOCAT:**

We need Tajik version of the WOCAT materials.....

.....

**11. Others:**

Thanks a lot for organisers of WOCAT .....

.....

Date: 10/09/02

Filled by: SANGINOV S.R

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002 ..... Country: **Fujian, CHINA**  
 Institution: ..... Contact person: Yang Xuezhen

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	5	F	2	F	4	F	
Institutions, including NGO's	1	F			2	F	
Decision makers	2	f					

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Mini workshop	15	4,06,02	6
Meeting&traaining	7	10,05,02	1

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	10 .... %
Information and training	20 .... %
Data collection	20 .... %
Analysis, output production	30 .... %
Other	20 .... %
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)		5	
Number of Approaches (As)		5	
Area (km <sup>2</sup> ) for which maps are prepared	4000		

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries		1	
Reports, analysis of specific aspect, e.g. incentive		1	
Meeting / workshop reports		1	
Presentation materials (PR)		45	
Maps		2	
Others (for example, guidelines)		3000	

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)

**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)		
2. Requests made for WOCAT data and use of products (CD-ROM, books)		
3. Requests made for training on WOCAT methodologies and performed training activities	45	Student in the Fujian Agriculture & Forestry University
4. Persons/institutions using the WOCAT guidelines		
5. Persons/institutions using the WOCAT questionnaires for documenting SWC		
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.		

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

.....

.....

**8. Use of WOCAT in training / education:**

.....

.....

**9. Benefits of WOCAT:**

.....

.....

**10. Problems with WOCAT:**

.....

.....

**11. Others:**

.....

.....

Date: 30,10,2002 ..... Filled by: Yang Xuezheng.....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002..... Country: **Ethiopia**

Institution: Ministry of Agriculture..... Contact person: Daniel Danano

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		Global	
	No.	Intens.	No.	Intens.	No.	Intens.
Scientists/professionals	12	Moderate	-	-	8	Moderate
Institutions, including NGO's	5	Moderate	-	-	2	Few
Decision makers	2	moderate	-	-	-	-

*No.:* numbers of persons / institutions  
*Intens.:* average intensity of contacts:  
 - few (1-5 contacts/year)  
 - moderate (5-20)  
 - many (>20)

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
WOCAT facilitators training held in Rome	2	Jan.2002	Ethiopia
Follow up of Rome facilitators training for regional facilitators in Ethiopia held in Addis Abeba	10	Jun.2002	Ethiopia
ISCO conference held Beijing	1	May 2002	Ethiopia
Training for SWC specialists participating in data collection in Oromia Region	18	Aug.2002	Ethiopia

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	20.... %
Information and training	30.... %
Data collection	45.... %
Analysis, output production	-..... %
Other	5..... %
<b>Total</b>	<b>100 %</b>

#### 4. Development of database:

	new filled	updated	Remarks
Number of Technologies (Ts)	4	-	Very soon before the end of the year there will be more Ts (13), which are being filled
Number of Approaches (As)	2	-	Very soon before the end of the year there will be more of As (8), which are being filled
Area (km <sup>2</sup> ) for which maps are prepared	4,250	-	

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	Area enclosures Grazing/grassland management Local Level Participatory Approaches		July 2002
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	. Training for Regional facilitators held in Addis . Training for SWC specialists of Oromia region at Nazareth		June 2002 Aug. 2002
Presentation materials (PR)			
Maps	Maps prepared for 3 Ts completed in Konso Wereda of SNNP and 1 T from Gidole Wereda		September 2002
Others (for ex. guidelines)	-		

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
February 2002	MoU for undertaking the establishment of soil and water conservation data and information	SWCD of MOA and ESAPP

**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	50	WOCAT brochures were distributed to different users in Ethiopia starting from the higher level policy makers (Minister) down to the field SWC specialists
2. Requests made for WOCAT data and use of products (CD-ROM, books)	15	CD-ROMs requests are being made from various users but these are not available
3. Requests made for training on WOCAT methodologies and performed training activities	Many	Requests are coming from NGOs working in SWC
4. Persons/institutions using the WOCAT guidelines	5	WFP, Researchers, NGOs,
5. Persons/institutions using the WOCAT questionnaires for documenting SWC		
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	-	

7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:

.....

8. Use of WOCAT in training / education:

.....

9. Benefits of WOCAT:

.....

10. Problems with WOCAT:

.....

11. Others:

.....

Date: 29/10/2002 .....

Filled by: Daniel Danano.....



Figure 10: Field level training on data collection for SWC specialists participating in data collection in Oromia, Ethiopia (Photo by Daniel Danano)

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2001 - 2002 ..... Country: **Kenya**  
 Institution: SWCB/MoA ..... Contact person: Kithinji M

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	8	moderate	1	few	1	few	
Institutions, including NGO's			1	few			
Decision makers							

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
TOT workshop	2	Jan 02	

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	..... 5%
Information and training	..... 5%
Data collection	80%
Analysis, output production	..... 5%
Other	..... 5%
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)		7	
Number of Approaches (As)		5	
Area (km <sup>2</sup> ) for which maps are prepared			

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	Farmers' Initiatives in Land Husbandry: Promising technologies for the drier areas of east Africa	3,000	Nov 01
Reports, analysis of specific aspect, e.g. incentive	QT/QA update meeting QT/QA feedback/ quality check	10 10	17/7/02 8/8/02
Meeting / workshop reports			
Presentation materials (PR)			
Maps			
Others (for example, guidelines)			

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
29/6/02	Support to WOCAT activities in Kenya	RELMA/ SWCB/MoA



**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)		
2. Requests made for WOCAT data and use of products (CD-ROM, books)		
3. Requests made for training on WOCAT methodologies and performed training activities		
4. Persons/institutions using the WOCAT guidelines		
5. Persons/institutions using the WOCAT questionnaires for documenting SWC		
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.		

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

.....

.....

**8. Use of WOCAT in training / education:**

JKUAT, Nairobi, used WOCAT materials for exposure to students.....

.....

**9. Benefits of WOCAT:**

.....

.....

**10. Problems with WOCAT:**

Information technology materials/ tools are mandatory .....

.....

**11. Others:**

.....

.....

Date: 24/10/02

Filled by: Kithinji M

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2001-2002 ..... Country: **Philippines**  
 Institution: PHILCAT ..... Contact person: Jose D. Rondal/Romeo V. Labios

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	100	mod	30	mod	20	Few	
Institutions, including NGO's	20	mod	20	mod	-	-	
Decision makers	6	mod	10	mod	--	-	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of participants.:	Dates:	Countries involved:
17 <sup>th</sup> WCSS, Bangkok, Thailand	>900	Aug 22 '02	>100
8 <sup>th</sup> Asian Regional Maize Workshop, Bangkok, Thailand	150	Aug 05-08 '02	Mexico, USA, India, China, Philippines, Thailand, Indonesia, Vietnam, Nepal, Bangladesh, Malaysia, Pakistan
Nat. Irrigation Adm-Japan International Cooperation. Agency, Quezon City, Phils	75	June 25 '02	Philippines
ISCO Conference, Beijing, China	>600	May 26-31 '02	>60
WOCAT meeting, Fujian, China	10	June 1-4 '02	Switzerland, Netherlands, Philippines, Thailand, China, Ethiopia
Workshop for WOCAT Facilitators, Rome, Italy	20	Jan 21-25 '02	Thailand, China, Phils., Yugoslavia, Kenya, Ethiopia, S. Africa, Burkina Faso, Niger, Tanzania, Italy, Netherlands, Switzerland
Int'l Symposium on Sustaining Food Security and Managing Natural Resources in SE Asia - Thailand	170	Jan 8-11 '02	USA, Germany, Philippines, Thailand, Vietnam, Indonesia, Nepal, etc.
Conservation Farming Movement Annual Conference, Laguna, Philippines	100	Nov 14-15 '01	Indonesia, Philippines

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	15..... %
Information and training	10..... %
Data collection	50..... %
Analysis, output production	20..... %
Other	5..... %
<b>Total</b>	<b>100 %</b>

#### 4. Development of database:

	new filled	updated	Remarks
Number of Technologies (Ts)	2	3	
Number of Approaches (As)	1	-	
Area (km <sup>2</sup> ) for which maps are prepared	80,000		Mindanao Island

#### 5. Production of outputs

	titles, details, ...	No. (copies)	Date
Overviews and case study summaries	Natural vegetative strip, Multi-storey cropping	Draft	Aug. 2002
Reports, analysis of specific aspect, e.g. incentive	Use of WOCAT data	Draft	Aug. 2002
Meeting / workshop reports			
Presentation materials (PR)	WOCAT Posters and Power point	2 poster 3 power point	Jan 8-11 '02 Nov 14-15 '01
Maps			
Others (for example, guidelines)	Pamphlets on Conservation Tillage Technology	100	June 2002

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)

**B. Impact indicators**

	No.	Details, remarks, ...
<b>1. Users that have shown interest in WOCAT (Brochure distributed)</b>	20	Government line agencies, State Colleges and Universities(SCUs)
<b>2. Requests made for WOCAT data and use of products (CD-ROM, books)</b>	40	Government line agencies, international organization, State Colleges and Universities
<b>3. Requests made for training on WOCAT methodologies and performed training activities</b>	4	UPLB researchers and other (SCUs) , DOA staff
<b>4. Persons/institutions using the WOCAT guidelines</b>	2	BSWM ,BAR, UPLB in screening out technologies for soil conservation projects and farmer-clients
<b>5. Persons/institutions using the WOCAT questionnaires for documenting SWC</b>	2	Leyte State University; Department of Agriculture, Region 7, Cebu City; FSSRI and Institute of Agroforestry, UP Los Banos
<b>6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.</b>	12	Members of the interagency committee (PHILCAT)

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

NVS is being pushed more as technology-option for traditional and low income farmers .....

**8. Use of WOCAT in training / education:**

As instruction materials in the undergraduate and graduate levels as well as for non-degree training ..

**9. Benefits of WOCAT:**

Technology screening and selection, project monitoring, documentation of technologies and approaches.....

**10. Problems with WOCAT:**

Insufficient funds for training and operating expenses for documentation;

Potential users of QT/QA are turned off by the long questionnaire. ....

**11. Others:**

WOCAT should target the production of field materials (eg. Handbooks, pamphlets).....

Date: Oct. 23, 2002..... Filled by: JOSE D. RONDAL/ROMEO V. LABIOS .....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2001/2002

Institution: ARC - ISCW

Country: South Africa

Contact person: Rinda van der Merwe

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.:</i> numbers of persons / institutions <i>Intens.:</i> average intensity of contacts: - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	23	mod					
Institutions, including NGO's	4	few					
Decision makers	2	mod					

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
None			

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	10 .... %
Information and training	20 .... %
Data collection	60 .... %
Analysis, output production	10 .... %
Other	0 ..... %
Total	100 %

#### 4. Development of database:

	new filled	updated	Remarks
Number of Technologies (Ts)	24	38	Also updated figures
Number of Approaches (As)	24	32	Also updated figures
Area (km <sup>2</sup> ) for which maps are prepared			

#### 5. Production of outputs

	Titles, details, ...	No. (copies)	date
Overviews and case study summaries	None		
Reports, analysis of specific aspect, e.g. incentive	None		
Meeting / workshop reports	Report on Training Workshop	2	Jan 2002
Presentation materials (PR)	None		
Maps	None		
Others (for example, guidelines)	None		

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
	None	

**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	30	World Summit on Sustainable Development Visitors to Institute
2. Requests made for WOCAT data and use of products (CD-ROM, books)	5	
3. Requests made for training on WOCAT methodologies and performed training activities	0	
4. Persons/institutions using the WOCAT guidelines	2	
5. Persons/institutions using the WOCAT questionnaires for documenting SWC	2	
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	?	None that know of

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

None .....

.....

**8. Use of WOCAT in training / education:**

None

**9. Benefits of WOCAT:**

.....

**10. Problems with WOCAT:**

Inputting of figures into database; not enough space in database. When entering "South Africa" into database error messages come up. ....

.....

**11. Others:**

.....

Date: 21 October 2002..... Filled by: Rinda van der Merwe.....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: October 2002 to September 2002

Country: **Tanzania**

Institution: Ministry of Agriculture and Food Security<sup>4</sup> Contact person: Paulo S.M. Tarimo

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	60	many	5	few	4	few	
Institutions, including NGO's	57	many	1	few	2	few	
Decision makers	3	few	-	-	-	-	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
ToT Workshop	54	November 2001 & July 2002	Tanzania
-----	-----	-----	-----

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	50%
Information and training	20%
Data collection	??%
Analysis, output production	0%
Other	??%
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	n.a.	n.a.	Pending output from 13 districts where data collection is in progress.
Number of Approaches (As)	n.a.	n.a.	
Area (km <sup>2</sup> ) for which maps are prepared	5 districts	n.a.	

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	Land Management Technological Conflicts: a case of Chome Division, Same District, Tanzania	1	2002 (Ongoing study)
Reports, analysis of specific aspect, e.g. incentive	nil		
Meeting / workshop reports	ToT workshop reports	120	Npvenber 2001 & July 2002
Presentation materials (PR)	nil		
Maps	(1) Lake Victoria Basin Land Cover/Use Map (2) Handeni District Land Use Map	1 1	2001 200/2003
Others (for example, guidelines)	nil		

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
-----	nil	-----
-----	-----	-----

<sup>4</sup> Ministry of Agriculture and Food Security, in short, MAFS

**B. Impact indicators**

	No.	Details, remarks, ...
<b>1. Users that have shown interest in WOCAT (Brochure distributed)</b>	60	<ul style="list-style-type: none"> <li>- 4 national research and training institutions (Directorate of Research and Dev. - MAFS, National Soil Service Mlingano, Sokoine University of Agriculture and Tumbi Agric. Research Institute)</li> <li>- National Land Use Planning Commission</li> <li>- Iringa District Council Extension Office</li> <li>- 54 all participants of the two local ToT workshops</li> </ul>
<b>2. Requests made for WOCAT data and use of products (CD-ROM, books)</b>	60	All in (1) above
<b>3. Requests made for training on WOCAT methodologies and performed training activities</b>	27	Most of them are participants of the previous local ToT workshops and/or WOCAT collaborators in field/from projects/district councils
<b>4. Persons/institutions using the WOCAT guidelines</b>		a) Ministry of Agriculture and Food Security b) HIMA Project in Iringa district
<b>5. Persons/institutions using the WOCAT questionnaires for documenting SWC</b>		MAFS and collaborating districts/institutions
<b>6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.</b>		MAFS

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT: NIL**

.....

**8. Use of WOCAT in training / education: NIL**

.....

.....

**9. Benefits of WOCAT:**

It has provided an opportunity for a new thinking towards the ways we solve land management related problems from grassroots to national levels.

**10. Problems with WOCAT:**

Inadequate guidelines on the use and applications of the QM programme.

**11. Others:**

More financial and material is needed in order to cause data collectors to dedicate more time in WOCAT related activities vi-a-vis SWC field data collection/documentation.

Date: 09 October 2002.....Filled by: Paulo S.M. Tarimo

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002

Institution: WASWC

Country: **Thailand** and neighbouring countries

Contact person: Samran Sombatpanit

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	8	few	5	few	5	few	
Institutions, including NGO's	4	few	3	few	4	few	
Decision makers	2	few	2	few	2	few	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Natural Resource Mgmt and SWC in Thailand, Chiang Mai, Thailand	400	Nov 20-23, 2002	1 + around 5 Expatriate participants
Food Security Int'l Symposium, Chiang Mai, Thailand	250	Jan 8-10, 2002	25 countries in Asia, Europe and Americas
1 <sup>st</sup> WOCAT Workshop for National Trainers, Rome, Italy	16	Jan 21-25, 2002	10 countries in Asia, Africa and Europe
12 <sup>th</sup> ISCO Conference, Beijing, China	600	May 26-31, 2002	60 countries from all continents
17 <sup>th</sup> IUSS World Soil Congress, Bangkok, Thailand	2000	Aug 14-21, 2002	100 countries from all continents

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	25..... %
Information and training	15..... %
Data collection	20..... %
Analysis, output production	20..... %
Other, such as WO-Map workshop	20..... %
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	2	1	-
Number of Approaches (As)	2	1	-
Area (km <sup>2</sup> ) for which maps are prepared	1) 60000 2) 5000		1) SE Thailand 2) Chantaburi Province

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	-	-	-
Reports, analysis of spec. aspect, e.g. incentive	-	-	-
Meeting / workshop reports	Report on the Symposium 62 of the IUSS (WOCAT) will be prepared.	-	-
Presentation materials (PR)	Posters to present at all meetings in (2) except in Rome.	4	2001-2
Maps	WOCAT Map of SE Thailand WOCAT Map of Chantaburi Province	2	Oct 2002
Others (for example, guidelines)	Ms of a WOCAT paper for the Bioengineering book Articles for all issues of WASWC newsletter	1 4	2002 2001-2

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
2001- early 2002	Preparation of MoU for cooperation in implementing WOCAT program	LDD, Bangkok and CDE, Bern

### B. Impact indicators



	No.	Details, remarks, ...
<b>1. Users that have shown interest in WOCAT (Brochure distributed)</b>	40	Participants at the WOCAT Map workshops in SE Thailand and Chantaburi Province
<b>2. Requests made for WOCAT data and use of products (CD-ROM, books)</b>	30	Participants to 17 <sup>th</sup> IUSS World Soil Congress requested CD-Roms and
<b>3. Requests made for training on WOCAT methodologies and performed training activities</b>	-	-
<b>4. Persons/institutions using the WOCAT guidelines</b>	-	-
<b>5. Persons/institutions using the WOCAT questionnaires for documenting SWC</b>	2	Prof Wu Bo Zhi of the Yunnan Agricultural University, Kunming, and Dr Xia Hanping of the South China Institute of Botany, Guangzhou, China.
<b>6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.</b>	-	-

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

- .....  
 - .....

**8. Use of WOCAT in training / education:**

- .....  
 - .....

**9. Benefits of WOCAT:**

- .....  
 - .....

**10. Problems with WOCAT:**

- .....  
 - .....

**11. Others:**

WOCAT has been done in Thailand during past 12 months in a rather limited extent. But upon the entrance of LDD to the joint WOCAT program it is expected the work will proceed smoothly by LDD staff. More impact monitoring would be done later. On the other hand, some works on WOCAT Map would be done in Thailand and other neighbouring countries.

Date: October 26, 2002.....Filled by: Samran Sombatpanit.....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002

Institution: Faculty of Forestry

Country: Yugoslavia

Contact person: Miodrag Zlatić

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		No.: numbers of persons / institutions Intens.: average intensity of contacts: - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	15	moder.	7	moder.			
Institutions, including NGO's	5	moder.	1	few	1	few	
Decision makers	6	Modér.	3	few	2	few	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Meeting/training with basic WOCAT stuff	8	April 9	Yugoslavia
Meeting with Water Management Enterprise-Valjevo	6	July 18	Yu
Presentation to two ministr. and person from Agric.F.	10	Sept. 30	Yu

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	80.... %
Information and training	15.... %
Data collection	5..... %
Analysis, output production	..... %
Other	..... %
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	1		
Number of Approaches (As)	1		
Area (km <sup>2</sup> ) for which maps are prepared			

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries			
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports			
Presentation materials (PR)			
Maps			
Others (for example, guidelines)	Not completed material		April

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
Sept. 30	Oral Agreement with Federal Secr. of Labour, Health – Environment Dept.	Dusan Jovic – Senior Advisor

**B. Impact indicators**

	No.	Details, remarks, ...
<b>1. Users that have shown interest in WOCAT (Brochure distributed)</b>	4	Ministry for Ecology; Federal Secr. of Labour, Health – Envir. Dept.; Agricultural faculty; Water Management Enterprise
<b>2. Requests made for WOCAT data and use of products (CD-ROM, books)</b>	7	2 persons from Bulgaria, 2 from Macedonia, 1 from Bosnia and Herzegovina, 1 from Russia, 1 from Monte Negro
<b>3. Requests made for training on WOCAT methodologies and performed training activities</b>	2	Request from Water Management Enterprise and Federal Secretariat for LH-Envir. Dept.
<b>4. Persons/institutions using the WOCAT guidelines</b>	2	Faculty of Forestry and Agric. Faculty
<b>5. Persons/institutions using the WOCAT questionnaires for documenting SWC</b>	2	Faculty of Forestry, Agric. Faculty
<b>6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.</b>		Starting level

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

WOCAT is at the starting level .....

**8. Use of WOCAT in training / education:**

It was used to train WOCAT stuff, then to introduce Government organizations and in education (part of lecture programme)

**9. Benefits of WOCAT:**

At this starting level, WOCAT gathered people/experts from different fields and also from government which is really difficulty for normal “problems” at the present.situation in the country. ....

**10. Problems with WOCAT:**

Funding for running programme is minimal up to now.....

**11. Others:**

.....

Date: October 24<sup>th</sup> 2002..... Filled by: Miodrag Zlatić .....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT

Year: 2002

Institution: INSAH

Country: SAHEL region

Contact person: François Lompo

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	10	few	--	--	--	--	
Institutions, including NGO's	--	--	5	few	1	few	
Decision makers	--	--	10	few	--	--	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
NRM Commetee	20	3-2002	9
Sahel NARS DG Annual Meeting	10	8-2002	9
World Bank Project	2	10-2002	2

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	70 .... %
Information and training	30 .... %
Data collection	..... %
Analysis, output production	..... %
Other	..... %
Total	100 %

#### 4. Development of database:

	new filled	updated	remarks
Number of Technologies (Ts)	--	--	
Number of Approaches (As)	--	--	
Area (km <sup>2</sup> ) for which maps are prepared	--	--	

#### 5. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	--		
Reports, analysis of specific aspect, e.g. incentive	--		
Meeting / workshop reports			
Presentation materials (PR)			
Maps			
Others (for example, guidelines)			

#### 6. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
--	--	
--	--	

**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)		
2. Requests made for WOCAT data and use of products (CD-ROM, books)		
3. Requests made for training on WOCAT methodologies and performed training activities	9	these persons are the NRM Pole focal points in the 9 countries. They are in charge of the launching WOCAT in these countries
4. Persons/institutions using the WOCAT guidelines		
5. Persons/institutions using the WOCAT questionnaires for documenting SWC		
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.		

**7. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**

-- .....

**8. Use of WOCAT in training / education:**

WOCAT tools have been used for training of 5 persons from different agroecological zones in Burkina Faso .....

**9. Benefits of WOCAT:**

-- .....

**10. Problems with WOCAT:**

WOCAT is not fully active in sahelian zone .....

**11. Others:**

It is necessary to organize a regional training workshop for sahelian countries. Funds have to be mobilized for this purpose .....

Date: 29.10.2002 ..... Filled by: François Lompo .....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT global level

Year: 2002..... Country: Switzerland.....  
 Institution: CDE..... Contact person: Hanspeter Liniger / Gudrun Schwilch.....

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals	17	mod.	9	mod.	18	mod.	
Institutions, including NGO's	13	mod.	7	mod.	15	mod.	
Decision makers	2	few	0	-	0	-	

(Numbers according to list of collaborating/funding institutions)

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Rome, Training for Trainers	36	Jan	8
ISCO Beijing: 3 WOCAT presentations/papers	200	May	ca. 50
Fujian (post-ISCO)	10	June	7
IUSS Bangkok: WOCAT participation/presentations	2000	Aug.	ca. 100
India (Ratlam)	35	Oct	1
WWSM, Rome	36	Oct/Nov	21
LADA Workshops, Rome	60	Jan/Nov	20

#### 3. Percentage time spent for the following purpose over the last year:

Coordination	35 .... %
Promotional purposes	10 .... %
Information and training	15 .... %
Data collection	5 ..... %
Analysis, output production	15 .... %
Other	20 .... %
Total	100 %

#### 4. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries	draft of UNEP-WOCAT Overview Book	1	Nov.
Reports, analysis of specific aspect	3 ISCO papers (general, SWC categories, map) MRD articles (case studies, analyses) Newspapers (Tagesanzeiger, SAEFL, NZZ/Helvetas)	600 50'000	May Feb June
Meeting / workshop reports	Proceedings WWSM 6 Nyeri 01	80	
Presentation materials (PR)	5 Posters DOM GOR Kyrgyzstan 5 Poster ISCO	1 1	April May
Maps	National Geographic (little information about WOCAT)	?	Sept.
Others (e.g., guidelines)	Instructions QM database	Internet	Feb

#### 5. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
Feb	Seed money contract with Kazakhstan	Central Asia Regional Environmental Centre
ongoing	ISRIC – CDE collaboration	ISRIC and CDE

**B. Impact indicators**

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	300	During conferences and workshops see list above
2. Requests made for WOCAT data and use of products (CD-ROM, books)	200	Mostly during conferences and workshops
3. Requests made for training on WOCAT methodologies and performed training activities		Training for Trainers India
4. Persons/institutions using the WOCAT guidelines		(see national reports)
5. Persons/institutions using the WOCAT questionnaires for documenting SWC		(see national reports) + Institute of Geography, Berne
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	??	

**6. Use of WOCAT in training / education:**

Courses and lectures at the University of Berne.....

**7. Benefits of WOCAT:**

.....

**8. Problems with WOCAT:**

.....

**9. Internet:** See <http://www.fao.org/landandwater/agll/WOCAT/WOCATlog.htm>

	No.	Remarks
Count of visitors of the WOCAT home page	80'665	221 / day (1.1.02 – 31.12.02)
Users viewing brochure and/or video	2'794	Brochure: 1'933 E, 197 F, 173 S Video. 491
Users downloading questionnaires, guidelines, etc.	7'522	2688 MapQuest E (!) TechQuest 479 E, 130 F, 173 S TechExpl 161 E, 61 F, 60 S AppQuest 233 E, 73 F, 62 S AppExpl 116 E, 56 F, 64 S 310 Guideline Using WOCAT, 252 Start W. DBManual: 1386 E, 793 F, 425 InstructQM
Users accessing the databases (without on-line databases)	919	203 QT, 97 QT runtime 130 QA, 56 QA runtime 167 QM, 53 QM runtime 198 ImageDB, 63 runtime
Users downloading WOCAT reports	> 4'000	2259 Proceedings Nyeri 01 853 SWC categorization system 535 Proceedings WS India April 02, etc.

**10. Others:**

.....

Date: 22/01/2003 ..... Filled by: Hanspeter Liniger / Gudrun Schwilch.....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT global level

Year: 2002..... Country: Italy.....  
 Institution: FAO..... Contact person: Wolfgang Prante .....

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global		<i>No.: numbers of persons / institutions</i> <i>Intens.: average intensity of contacts:</i> - few (1-5 contacts/year) - moderate (5-20) - many (>20)
	No.	Intens.	No.	Intens.	No.	Intens.	
Scientists/professionals					>20	few	
Institutions, including NGO's					<10	few	
Decision makers					<5	few	

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
7th Annual International WOCAT Workshop and Steering Meeting	36	28/10-4/11	> 20 different countries
.....			
.....			

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	10 ... %
Information and training	5 ... %
Data collection	..... %
Analysis, output production	80 ... %
Other	5 ... %
Total	100 %

#### 4. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries			
Reports, analysis of specific aspect			
Meeting / workshop reports			
Presentation materials (PR)			
Maps			
Others (for example, guidelines)	New WOCAT website structure and layout	n.a.	1-6/9

#### 5. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
	Reimbursement of part of the expenses of the January 2002 'Workshop for WOCAT Facilitators'	FAO and CDE
.....		

### B. Impact indicators

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	> 100	Impact not measurable by FAO as a mere distributor of material



2. Requests made for WOCAT data and use of products (CD-ROM, books)	> 100	
3. Requests made for training on WOCAT methodologies and performed training activities	1	FAO Tunis
4. Persons/institutions using the WOCAT guidelines	not known	
5. Persons/institutions using the WOCAT questionnaires for documenting SWC	not known	
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	moderate	

**6. Use of WOCAT in training / education:**

.....  
 .....

**7. Benefits of WOCAT:**

Provision of a proven methodology .....  
 .....

**8. Problems with WOCAT:**

General lack of data quality.....  
 .....

**9. Internet:**

	No.	Remarks
Count of visitors of the WOCAT home page		to be filled in by CDE as host of WOCAT internet site
Users viewing brochure and/or video		
Users downloading questionnaires, guidelines, etc.		
Users accessing the databases		
Users downloading WOCAT reports		

**10. Others:**

.....  
 .....

Date: 22/1/2003 ..... Filled by: Wolfgang Prante .....

## MONITORING OF WOCAT PERFORMANCE AND IMPACT global level

Year: 2002

Country: Netherlands

Institution: ISRIC

Contact person: Godert van Lynden

### A. Performance indicators

#### 1. Number of person / institutions contacted and measure of intensity of contacts:

	national		regional		global	
	No.	Intens.	No.	Intens.	No.	Intens.
Scientists/professionals	10	mod	10	mod.	10	mod.
Institutions, including NGO's	10	mod	10	mod.	3	mod.
Decision makers	3?	few	?		3	mod.

*No.: numbers of persons / institutions*  
*Intens.: average intensity of contacts:*  
 - few (1-5 contacts/year)  
 - moderate (5-20)  
 - many (>20)

#### 2. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Rome, Training for Trainers	20	Jan.	8?
India (Ratlam)	35	April	1
Fujian (post-ISCO)	10	June	7
WWSM, Rome	40	Oct/Nov	21

#### 3. Percentage time spent for the following purpose over the last year:

Promotional purposes	35%
Information and training	25 %
Data collection	- %
Analysis, output production	10? %
Other (coordination, methodology, etc.)	30 %
Total	100 %

#### 4. Production of outputs

	titles, details, ...	No. (copies)	date
Overviews and case study summaries			
Reports, analysis of specific aspect			
Meeting / workshop reports	Proceedings WWSM	p.m.	Nov/Dec
Presentation materials (PR)	ISCO	p.m.	May
Maps	(assisting in) Philippine map output	p.m.	Oct.
Others (for example, guidelines)			

#### 5. Progress of official agreements / memorandum of understandings (MoU) entered into (for either funding or other kinds of collaboration):

Date	Content	Partners (MoU between whom?)
Sept.	SOWAP proposal to EU/Life-Env.	Syngenta, Leuven, Cranfield
Oct.	draft agreement	IAEA

### B. Impact indicators

	No.	Details, remarks, ...
1. Users that have shown interest in WOCAT (Brochure distributed)	10	many through WOCAT-L or WOCAT-Email, few (numbers indicated) specifically through ISRIC

2. Requests made for WOCAT data and use of products (CD-ROM, books)	10	
3. Requests made for training on WOCAT methodologies and performed training activities	2	
4. Persons/institutions using the WOCAT guidelines	?	none specifically through ISRIC
5. Persons/institutions using the WOCAT questionnaires for documenting SWC	?	
6. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	?	

**6. Use of WOCAT in training / education:**

N/A

**7. Benefits of WOCAT:**

Fits in overall ISRIC field of interest and focus

**8. Problems with WOCAT:**

Problems with database, esp. QM: (in)compatibility between Access2000 and –97 version. Insufficient (quantitatively) programming/database support. Insufficient insight in budget allocation.

**9. Internet:**

	No.	Remarks
Count of visitors of the WOCAT home page		N/A, this is general WOCAT
Users viewing brochure and/or video		
Users downloading questionnaires, guidelines, etc.		
Users accessing the databases		
Users downloading WOCAT reports		

**10. Others:**

Date: 22-1-02

Filled by: Godert van Lynden

# ANNEX 3: FIELD TRIP REPORT

by Michael Lane

## Field Visit to Abruzzo Region in Italy

The workshop field visit was to the Abruzzo region of Italy, which is most famous for its wine (e.g. Montepulciano) and pasta production. The region is on the other side of the Apennine Mountains from Rome, on the Adriatic coast. This meant a beautiful drive over the mountains, which was light relief for all those who had been working hard in the workshop itself. The host for the visit was Prof. Michele Pisante of the faculty of agronomy at Teramo University. The faculty is a new institution with the remit to teach and research in the areas of food production and food quality. Prof. Pisante very ably introduced the department and the agriculture of the local region before the actual field visit began.

The topography of the region is generally very sloping, with fine textured soils. As a result soils are prone to erosion, in certain areas of the region. The major crops grown are vines, olives and Durham wheat (used for pasta production). Over the last few years there has been a change to the method of vine cultivation. Historically vines were cultivated in the form of a canopy, which helped protect the soil underneath from the potentially damaging effects of heavy rainfall. However, although this produced good grape yields, the quality of the resultant wine was not adequate to compete in a global market. The vine cultivation is therefore moving to "wall" vine growing, in order to improve wine quality. This approach leaves the inter row spaces open to the effects of any rainstorms. The faculty is currently engaged, with Syngenta, in investigating the use of cover crops for soil conservation within vineyards that use the new method of propagation.

The workshop visited the site that will be used to perform the investigations into cover crop management, and the layout of the work was explained. Prof. Pisante was also able to answer a wide range of questions about the agronomy of the Abruzzo region and Italy in general.

The visiting party subsequently visited a superb local restaurant, where they feasted on the labours of the local farmers, including a tasting a variety of local wines. Prof. Pisante was able to regale the group with how each wine was produced adding to the value of the experience. There was subsequently the chance to purchase the wine from a local viticulturist.

The group would like to thank Prof. Pisante and the faculty for their hospitality, as I am sure a good time was had by all.



Figure 11:  
Vines and  
Olives in  
Abruzzo  
Region, Italy

## ANNEX 4: LIST OF PARTICIPANTS

Name	Institution	Address	Country	Email-Address	Telephone	Fax
1 Aibdubek Asanaliev	Agrarian University of Kyrgyzstan	68, Mederova st., 720005, Bishkek,	Kyrgyz Republic	aida@camp.elcat.kg	+996 (312) 540435, 547894	0
2 Jianqin Cai	Soil and Water Conservation Monitoring Center, Ministry of Water Resources	No. 2, Lane II, Baiguang Rd., Xuanwu Dist. Beijing 100053	P.R. China	caijq@mwr.gov.cn	+86 10 6320 3726	+86 10 6320 3690
3 Daniel Danano Dale	Ministry of Agriculture	P.O.Box 62758; Addis Ababa	Ethiopia	ethiocat@telecom.net.et	+251 1 154913/750	
4 Malcolm Douglas	Private consultant	Easingwold Road; Y061 1HN; Huby; York	United Kingdom	mgdouglas@gn.apc.org	+44 1347/810815	+44 1347/810815
5 Berhanu Fentaw Tareke	Ministry of Agriculture	P.O.Box 23497 code 1000, Addis Ababa	Ethiopia	ethiocat@telecom.net.et	+251 1 154913/750	
6 Mats Gurtner	Centre for Development and Environment	Steigerhubelstrasse 3; Bern	Switzerland	mgurtner@giub.unibe.ch	+41 31 631 88 45	+41 31 631 85 44
7 Gathiru Kimaru	RELMA	P.O. Box 63403; Nairobi	Kenya	g.kimaru@cgiar.org	+254 2 52 44 18	+254 2 52 40 01
8 Romeo Labios	FSSRI, UP Los Baños	College, Laguna, 4031	Philippines	rvl@lgn.csi.com.ph; romylabios@yahoo.com	+63(49)536 4455/3229	+63(49)536 4455/5282
9 Michael Lane	Syngenta	Jealott's Hill International Research Centre, Bracknell, Berkshire, RG42 6EY	United Kingdom	mike.lane@syngenta.com	+44 134 441 364 3	+44 134 441 367 7
10 Hanspeter Liniger	Centre for Development and Environment	Steigerhubelstrasse 3; Bern	Switzerland	liniger@giub.unibe.ch	+41 31 631 88 45	+41 31 631 85 44
11 François Lompo	Coordinateur Pole GRNISP	04 BP 8645 Ouagadougou 04	Burkina Faso	frlombo@fasonet.bf	+226 31 92 02/20 58 80	+226 34 02 71/31 92 06
12 Kimamba Lyoba	Ministry of Agriculture and Food Security, Soil Conservation and Land Use Planning Unit.	P.O.Box 9071 Dar es Salaam	Tanzania	kimambalyoba@yahoo.co.uk	+255 022 2860450	+255 022 2860450/286571 0
13 Kithinji Mutunga	Soil and Water Conservation Branch	P.O Box 30028; Nairobi	Kenya	pc@nalep.co.ke	+254 2 2721691/4	+254 2 2714867
14 Zhiming Niu	Soil and Water Conservation Monitoring Center, Ministry of Water Resources	No. 2, Lane II, Baiguang Rd., Xuanwu Dist. Beijing 100053	P.R. China	niuzhm@mwr.gov.cn	+86 10 6320 3547	+86 10 6320 3690
15 Wolfgang Prante	FAO	Via delle Terme di Caracalla, 00100 Rome	Italy	wolfgang.prante@fao.org	+3906 57055085	+3906 57056275
16 Dirk Pretorius	National Department of Agriculture, Directorate Land Use and Soil Management	Private Bag X120; Pretoria 0001	S. Africa	dirkp@nda.agric.za	+27 12 319 7545	+27 12 329 5938
17 Joe Rondal	Bureau of Soils and Water Management	Visayas, Avenue, Diliman, Quezon City	Philippines	jrondal@info.com.ph	+632 923 0459	+632 970 43 18
18 Sanginboy Sanginov	Soil Science Research Institute	734025, Dushanbe, Rudaki av.21 A	Tajikistan	soil@tajik.net	8 992 372 2719798	992 372 21 32 07
19 Gudrun Schwilch	Centre for Development and	Steigerhubelstrasse 3; Bern	Switzerland	gudrun@giub.unibe.ch	+41 31 631 88 45	+41 31 631 85 44

20	Richard Thomas	Environment Director Natural Resource Management P.O. Box 5466, Aleppo Program NRMP; ICARDA	Syria	R.Thomas@cgiar.org	+963 21 2213433	+963 21 213490; 5744622
21	Francis Turkelboom	ICARDA P.O. Box 5466, Aleppo	Syria	F.Turkelboom@cgiar.org	+963 21 221.34.33	+963 21 221.34.90
22	Rinda van der Merwe	ARC - Institute for Soil, Climate and Water 600 Belvedere Street, Arcadia, Pretoria	S. Africa	rinda@iscw.agric.za	+27 12 3102564	+27 12 3231157
23	Godert van Lynden	ISRIC P.O. Box 353; 6700 AJ Wageningen	The Netherlands	vanlynden@isric.nl	+31 317 471 735	+31 317 471 700
24	Roger White	ICIMOD GPO 3226 Kathmandu	Nepal	rwhite@icimod.org.np	+977 1 525313	+977 1 524509
25	Xuezhen Yang	Fujian Soil Conservation Office No. 229 Dongshui Rd., Fuzhou, Fujian 350001	P.R. China	fjstb@public.fz.fj.cn	+86 591 7514057/7514322	+86 591 7514325
26	Felipe Zapata	Joint FAO/IAEA Division (AGE) ; International Atomic Energy Agency; c/o ISRIC Wagrammerstr. 5; P.O. Box 100 A- 1400, Vienna	Austria	F.Zapata@iaea.org	+ 43 1 2600 21693	+ 43 1 26007
27	Zhanguo Bai	P.O. Box 353; 6700 AJ Wageningen	Netherlands	baizhanguo9910@hotmail.com	0	0
28	Aigul Zhanserikova	Central Asian Mountain Partnership (CAMP) 480043 Almaty, 40, Orbita-1 KZ	Kazakhstan	camp@itte.kz	+7 3272 292619, 206534, 296646	+7 3272 292619
29	Zulfira Zikrina	Kazakhstan CA REC Almaty microdistrict 6, 46, 59 , 480036 Almaty	Kazakhstan	om@zik.samal.kz	+7 286789	+7 286789
30	Miodrag Zlatic	Faculty of Forestry Kneza Visislava 1; 11030 Belgrade	Yugoslavia	mizlatic@EUnet.yu	+381 11 553 122	+381 11 545 485
31	Samran Sombatpanit	WASWC 67/141 Amonphant 9, Soi Sena 1, Bangkok 10230	Thailand	sombatpanit@yahoo.com	+66 25703854/257036 41	+66 25703641
32	Kamron Saifuk	LDD Phaholyothin road, Chatuchak, Bangkok 10900	Thailand	kamron@LDD.GO.TH; k_saifuk@hotmail.com	+66 2579 22 19	+66 2579 19 36
33	Somporn Patinavin	LDD Phaholyothin road, Chatuchak, Bangkok 10900	Thailand	psomporn@ldd.go.th; sompornbirm@hotmail.com	+66 2579 01 11 (ext. 1244)	0
34	Ceris Jones	Syngenta Jealott's Hill, Bracknell, Berks RG42 6EY	United Kingdom	ceris.jones@syngenta.com	+44 1344 41890	+44 1344 413737
35	Radisav Pavlovic	FAO-SNEA 3 bis Abdel Malek Ibn, Marouane, P.O. Box 300; Tunis	Tunesia	radisav.pavlovic@fao.org	+216 71 847 553	+216 71 791 859
36	Jose Benites	FAO - AGLL Via delle Terme di Caracalla, 00100 Rome	Italy	Jose.Benites@fao.ORG	+39 (06) 570 54825	+39 (06) 5705 6275
37	Rod Gallacher	FAO - AGLL Via delle Terme di Caracalla, 00100 Rome	Italy	Rodney.Gallacher@fao.org	+ 39 06 5705 3085	+39 (06) 5705 6275
38	Freddy Nachtergaele	FAO - AGLL Via delle Terme di Caracalla, 00100 Rome	Italy	Freddy.Nachtergaele@fao.org	+ 39 06 5705 5888	+39 (06) 5705 6275
39	Christina Vella Tomlin	FAO - AGLL Via delle Terme di Caracalla, 00100 Rome	Italy	VellaTomlin, Christina (AGLL)	0	0
40	Edward Chuma	Afr. Cons. Tillage Network, Inst. of Env. Studies, Univ. of Zimbabwe P.O.box MP 167, Mount Pleasant ; Harare	Zimbabwe	chuma@africaonline.co.zw	+263 4 339 101; mob.: 091 235047	+263 4 333 407/335 249





**Last row** (from left to right): Daniel Danano (Eth), Jianqin Cai (Chn), Godert van Lynden (NL), Samran Sombatpanit (Tha), Zhiming Niu (Chn), Miodrag Zlatic (Yug), Dirk Pretorius (RSA), Kithinji Mutunga (Ken), Malcolm Douglas (UK), Zhanguo Bai (Chn), Mike Lane (UK), Joe Rondal (Phi), Felipe Zapata (A), Aibdubek Asanaliev (Kyr), Somporn Patinavin (Tha), Roger White (UK), Mats Gurtner (Swi);

**Middle row:** Xuezheng Yang (Chn), Romeo Labios (Phi), Aigul Zhanerikova (Kaz), Gudrun Schwilch (Swi), Zulfira Zikrina (Kaz), Berhanu Fentaw (Eth), Rinda van der Merwe (RSA), Kamron Saifuk (Tha), Sanginboy Sanginov (Taj), Wolfgang Prante (Ita);

**First row:** Edward Chuma (Zim), François Lompo (Brk), Kimamba Lyoba (Tan), Hotel Receptionist, Francis Turkelboom (Syr), Hanspeter Liniger (Swi)

**Missing:** Gathiru Kimaru (Ken), Richard Thomas (Syr), Ceris Jones (UK), Radisav Pavlovic (Tun), Jose Benites (Ita), Rod Gallacher (Ita), Freddy Nachtergaele (Ita), Christina Vella Tomlin (Ita)

# ANNEX 5: WOCAT MILESTONES

<b>WOCAT Milestones 1992-02</b>		
<b>2002</b>		
October 28 – November 4	Rome, Italy	7 <sup>th</sup> Annual International WOCAT workshop and Steering Meeting
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 12 <sup>th</sup> 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	6 <sup>th</sup> Annual International WOCAT workshop and Steering Meeting attended by 30 participants from 15 countries
September 21	Nairobi, RELMA; ICRAF	Presentation of WOCAT and its use to national and international institutions
September	FAO, CDE	Finalizing of WOCAT video and printing & publishing it in the FAO Land and Water Digital Series No 16: on a CD-ROM in 3 languages: E, F, S
June 11-14	Iringa, Tanzania	National WOCAT Training Workshop in Iringa, Tanzania, initiated through the HIMA project and the Ministry of Agriculture, sponsored by DANIDA.
May 21-24	Dushanbe, Tajikistan	Regional WOCAT Training Workshop for four Central Asian countries (Tajikistan, Kyrgyzstan, Kazakhstan, Uzbekistan) on Technologies and Approaches, organized by CAMP and UNCCD/GtZ.
April 23-27	Nazret, Ethiopia	National WOCAT Training Workshop in Nazret, Ethiopia with 39 representatives from 9 different 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: 3 <sup>rd</sup> phase of WOCAT funding approved by SDC: from 1.9.98 - 31.8.01
August 25– September 1	Twann, CDE	International Workshop and Steering Meeting
August 17-21	Manila, DANIDA	New initiative: National WOCAT Workshop in the Philippines
July	Rome, FAO	Distribution of WOCAT CD-ROM to all WOCAT collaborators and contributing specialists
June-Aug	Niamey, ICRISAT	WOCAT studies in Niger by two students of CDE Bern
May-Aug	Cali, CIAT	WOCAT studies in Colombia by two students of CDE Bern
April-May	Bern, CDE	WOCAT Review: external evaluation of the WOCAT programme for SDC
April-June	Rome, FAO and CDE	Preparation of WOCAT CD-ROM version 1.0 which illustrates the WOCAT methodology and shows preliminary data sets and results
April	Bern, CDE	Final Revision of questionnaires on Technologies, Approaches an Map
April	Paris, OSS and Colombia, GTZ	Translation of latest versions of questionnaires into French and Spanish
March 31– April 1	Bogota, GTZ	WOCAT Workshop Colombia with 12 experts of GTZ, CIAT and University of Colombia
March	Bern, CDE	New initiatives of ICRISAT Niger and PASOLAC Nicaragua: First discussions
February	Bern, CDE, ISRIC, FAO	Development work on Database Management System for QT, QA, QM and integration of QT / QM
February	Bern, CDE	WOCAT Database Training for 3 delegates from the Fujian SWC Centre, China
<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 2 <sup>nd</sup> 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 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: 2 <sup>nd</sup> 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>		
1 October	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