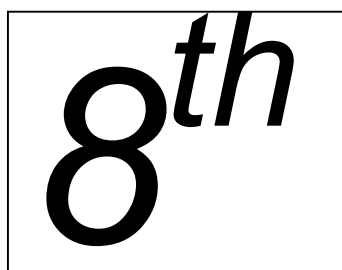




World Overview of Conservation Approaches and Technologies



***International Workshop
and Steering Meeting***

Kathmandu, Nepal

28 October - 2 November 2003

PROCEEDINGS

Progress, Methods, Outputs,
Plan of Action,
Organisation

Co-sponsored by:



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Editors

Centre for Development and Environment (CDE)

Mats Gurtner, Gudrun Schwilch

with support from Hanspeter Liniger, Godert van Lynden, Hilde Helleman

Address

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

<http://www.WOCAT.net>

Layout

Mats Gurtner



WORLD OVERVIEW
OF CONSERVATION APPROACHES
AND TECHNOLOGIES (WOCAT)



*WORKSHOP &
STEERING MEETING
PROCEEDINGS*

WOCAT Management Group:

Centre for Development and Environment (CDE, Switzerland)

World Soil Information (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)

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

Tajik Soil Science Research Institute (TSSRI, Tajikistan)

International Centre for Integrated Mountain Development (ICIMOD, Nepal)

LIST OF COLLABORATING AND FUNDING INSTITUTIONS

ACT	African Conservation Tillage Network, Harare, Zimbabwe
ADB	Asian Development Bank, Manila, Philippines
ASC-UPLB	Agricultural Systems Cluster, University of the Philippines, Los Baños, Philippines
ASOCON	Asia Soil Conservation Network, Jakarta, Indonesia
BSWM	Bureau of Soils and Water Management, Department of Agriculture, Quezon City, Philippines
CAMP	Central Asia Mountain Programme, Bishkek, Kyrgyzstan
CDE	Centre for Development and Environment, University of Bern, Switzerland
CHTDB	Chittagong Hill Tracts Development Board, Khagradari, Bangladesh
CIS	Centre for International Cooperation, Vrije Universiteit Amsterdam, The Netherlands
DANIDA	Danish International Development Assistance, Copenhagen, Denmark
DEC	Department for Erosion Control, Faculty of Forestry, Belgrade University, Yugoslavia
FAO	Food and Agriculture Organisation of the United Nations, Rome, Italy
“Friends of WOCAT”	Individuals without institutional backing
FSWCC	Fujian Soil and Water Conservation Centre, Fuzhou, China
GTZ-CCD	Deutsche Gesellschaft für Technische Zusammenarbeit – UN Convention to Combat Desertification, Eschborn, Germany
IAEA	International Atomic Energy Agency, Joint FAO / IAEA Division, Vienna, Austria
IFAD-GM	International Fund for Agricultural Development - Global Mechanism, Rome, Italy
ICARDA	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
ICIMOD	International Centre for Integrated Mountain Development, Kathmandu, Nepal
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics, Niamey, Niger
InGeo	Institute of Geography, Ministry of Science, Almaty, Kazakhstan
INSAH	Institut du Sahel, Bamako, Mali
ISCW / ARC	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
ISRIC	ISRIC World Soil Information, Wageningen, The Netherlands
IWMI	International Water Management Institute, Pretoria, South Africa
KAU	Kyrgyz Agrarian University, Bishkek, Kyrgyzstan
KVL	The Royal Veterinary and Agricultural University, Denmark
LDD	Land Development Department, Ministry of Agriculture and Cooperatives, Bangkok, Thailand
MAFS-SCLUPU	Ministry of Agriculture and Food Security, Soil Conservation and Land Use Planning Unit, Dar es Salaam, Tanzania
MoA, Ethiopia	Ministry of Agriculture, Addis Abeba, Ethiopia
NDA	National Department of Agriculture, Pretoria, South Africa
NCCR N-S	National Centre of Competence in Research North – South (CDE, Central Asia, Ethiopia, Kenya)
OSS	Observatoire du Sahara et du Sahel, Tunis, Tunisia
PASOLAC	Programa de Agricultura Sostenible en Laderas de América Central, Managua, Nicaragua
RELMA	Regional Land Management Unit (former RSCU), Sida, Nairobi, Kenya
SDC	Swiss Agency for Development and Cooperation, Bern, Switzerland
SWCB	Ministry of Agriculture, Soil & Water Conservation Branch, Nairobi, Kenya
SWCMC	Soil and Water Conservation Monitoring Center, MWR, Beijing, P.R. China
Syngenta	Environmental Safety Assessments and Contracts, Jealott's Hill International Research Centre, Berkshire, UK; Syngenta Foundation, Basel, Switzerland
TSSRI	Tajik Soil Science Research Institute, Dushanbe, Tajikistan
UCL	Université catholique de Louvain, Agricultural Engineering Unit, Soil and Water Conservation, Louvain-la-Neuve, Belgium
UNEP	United Nations Environment Programme, Nairobi
WASWC	World Association of Soil and Water Conservation, Beijing, P.R. China
WDCU	Watershed Development Coordination Unit, New Dehli, India

WOCAT Management Group: CDE, FAO, ISRIC; RELMA, SWCMC, BSWM, INSAH, TSSRI, ICIMOD

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	Hindu Kush - 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 Resource 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
WOCATeer	WOCAT collaborator
WOCAT-L	WOCAT mailing list
WWSM	WOCAT (annual) Workshop and Steering Meeting
WS	Workshop

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FOREWORD

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions in order to present the results of the eighth annual WOCAT Workshop and Steering Meeting, held in Kathmandu, Nepal, in October/November 2003. 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 (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.

During the previous annual workshop in Rome, Italy, in November 2002, China was selected to host the 8th annual workshop. Unfortunately they had to cancel their offer as a result of the SARS problem. The venue was therefore changed to the International Centre for Integrated Mountain Development (ICIMOD) in Kathmandu, Nepal which has offered to host the meeting for years.

The workshop took place at the Summit Hotel in Kathmandu during 6 days from Tuesday to Sunday, whereof one day was spent in the field. There was no extra steering meeting this year, since no donor representatives attended. Decisions were taken during the workshop, but mainly on the last day (planning next year).

23 participants from 13 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.

Unfortunately the East African delegation (5 people from Kenya and Tanzania), sponsored by RELMA, were not allowed to continue their travel from Bombay to Delhi and had to return home because of a visa problem for India.

Aim of the meeting

The aim of the annual WOCAT Workshop and Steering Meeting is to present and discuss major developments during the previous 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 are identified and the budgetary consequences considered. Collaborators are invited to contribute to the further development and promotion of these WOCAT activities.

Major emphasis of WWSM8

- Strengthening collaboration within the geographical regions;
- Quality assurance: peer review system, global panel, national panel?;
- Outputs: overview books and world map, etc.;
- Making decisions, follow-up activities and responsibilities.

Topics

The main discussion topics identified for the workshop were:

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

Review of last year and regional group meetings.

TOPIC 2: Use of WOCAT:

An issue of high importance to WOCAT: where and how is WOCAT used / could be used?

TOPIC 3: Quality assurance:

How to ensure proper data quality?

TOPIC 4: Digital products and CD-ROM:

Progress and problems with digital products; new CD ROM v. 3 to be presented and discussed.

TOPIC 5: Mapping at national and regional level (QM), World Map:

Progress with the mapping exercise is still slow in spite of interest shown by WOCAT collaborators and from outside. Also the World Map launched last year (see WWSM7 Proceedings p. 39) has yielded disappointingly few results. How to proceed?

TOPIC 6: Organisational and funding issues: operation of MG and task forces:

WOCAT organisational structure was established since the first WWSM in Sigriswil, 1996. There is a clear need for some reconsideration of the existing structure, in particular with respect to the operation of the task forces and the Management Group.

TOPIC 7: Planning next year(s):

Wrap up and planning ahead (regional groups).

WORKSHOP PROGRAMME

Date/time	Activity/Topic	Responsibilities
Monday 27/10	Arrival of participants; registration (local holiday: Tihar festival)	
18:00	Welcome drink	ICIMOD
Tuesday 28/10		
08:30 – 08:45	Opening, welcome	G. Campell, H.P. Liniger
08:45 – 09:45	Introduction, participants' expectations, approval of agenda, administrative information	H.P. Liniger, S. Bhuchar
	TOPIC 1: Progress reports	Chair: G. v. Lynden Rapporteur: M. Gurtner
09:45 – 10:15	Activities at the global level (Secretariat/Management Group)	H.P. Liniger
10:15 – 10:45	Coffee break	
10:45 – 11:40	Task Forces (10 min. each) <ul style="list-style-type: none"> Quality assurance Digital products Overview books Use of WOCAT WOCAT mapping (e-mail group only) 	R. White G. Schwilch M. Gurtner R. Labios G. v. Lynden
11:40 – 12:30	Presentation of regional and national progress reports and workplans (10 min. each!) <i>Africa:</i> (RELMA, Kenya, Tanzania), Ethiopia, South Africa	Regional / national coordinators / representatives
12:30 – 14:00	Lunch break	
14:00 – 15:30	<i>South Asia:</i> ICIMOD, Nepal, (Bangladesh), India, <i>East and South-East Asia:</i> Philippines, Thailand/WASWC, China, FAO <i>South-East Asia</i> <i>Central Asia:</i> CAMP, Tajikistan, Kyrgyz Republic, (Kazakhstan)	Regional / national coordinators / representatives
15:30 – 16:00	Coffee break	
16:00 – 16:30	<i>Europe:</i> SOWAP, Serbia & Montenegro, Switzerland	Regional / national coordinators / representatives
16:30 – 18:00	Regional group meetings (3 groups: Africa, South and South-East Asia, Central Asia and Europe): <ul style="list-style-type: none"> Discussion on problems and solutions within the countries Discussion on how to make country and regional programmes more effective Preparation of common presentation to plenary and 1-2 poster: major achievements, problems, solutions, plans (which are of interest for the other regions) Preparation of open questions where an answer is expected from the plenary 	Moderators: H.P. Liniger G. Schwilch M. Gurtner
19:00	Dinner	
Wednesday 29/10		
08:30 – 09:30	Continuation of regional group meetings	
09:30 – 10:00	Regional group presentations and plenary discussions with the aim to give inputs and support	Topic chair and rapporteur
10:00 – 10:30	Coffee break	
10:30 – 11:30	Continuation of regional group presentations and discussions	
	TOPIC 2: Use of WOCAT	Chair: J. Rondal Rapporteur: R. Labios
	TOPIC 3: Quality assurance	Chair: J. Rondal Rapporteur: R. White
11:30 – 12:00	Input to quality assurance (document from M. Douglas)	H.P. Liniger
12:00 – 13:30	Introduction to group work Lunch break	

13:30 – 16:00	Working in 2 groups (with introductory input and moderator) a) Use of WOCAT: where and how is or could WOCAT be(ing) used? b) Quality assurance: how to ensure proper data quality? WOCAT label? The group works should come up with concrete workplans for taskforces	Inputs / moderator: a) G. v. Lynden b) H.P. Liniger
16:00 – 16:30	<i>Coffee break</i>	
16:30 – 18:00	Continuation of group work	
19:00	<i>Dinner</i>	
20:30	Meeting of case study authors of global overview book	
Thursday 30/10		
<i>whole day</i>	<i>field trip</i>	
Friday 31/10		
08:30 – 09:15	Use of WOCAT: Presentation of topic and group work results. Plenary discussion and decisions.	Topic chair and rapporteur
09:15 – 10:00	Quality assurance: Presentation of topic and group work results. Plenary discussion and decisions.	Topic chair and rapporteur
10:00 – 10:30	<i>Coffee break</i>	
	TOPIC 4: Digital products and CD-ROM v.3	Chair: S. Sombatpanit Rapporteur.: G. Schwilch
	TOPIC 5: Mapping at national and regional level (QM); World Map	Rapporteur: D. Danano
10:30 – 10:45	Introduction to group work	Inputs / moderator:
10:45 – 12:30	Working in 5 parallel groups (with introductory input and moderator) Topic 4: a) CD-ROM v.3 and website: testing and feedback b) Databases: suggestions for improvements c) On-line training courses: needs and options Topic 5: d) QM: experiences, the way ahead e) Worldmap: Why so few results? How to proceed?	a) M. Gurtner b) R. v.d. Merwe c) G. Schwilch d) G. v. Lynden e) H.P. Liniger
12:30 – 14:00	<i>Lunch break</i>	
14:00 – 15:00	Combining groups a) + b) + c) (= Topic 4) and groups d) and e) (= Topic 5): discussion of workplan for taskforces	
15:00 – 16:00	Digital products, CD-ROM, on-line training: Presentation of topic 4 and group work results. Plenary discussion and decisions.	Topic chair and rapporteur
16:00 – 17.15	<i>Visit to ICIMOD incl. coffee break</i>	
17:30 – 18:30	QM and World map: Presentation of topic 5 and group work results. Plenary discussion and decisions.	Topic chair and rapporteur
19:00	<i>Dinner</i>	
Saturday 01/11		
	TOPIC 6: WOCAT organisational and funding issues	Chair: D. Danano Rapporteur: S. Bhuchar
08:30 – 08:45	Introduction to topic 5 and to group work	H.P. Liniger, G. v. Lynden
08:45 – 10:30	Working in 3 groups: a) Management Group: tasks, funds, operation b) Task forces. tasks, funds, operation c) Operation of network: MoU for collaborators, regional coordination, WOCAT membership?, Annual Workshops (aim, frequency, participants, locations)	
10:30 – 11:00	<i>Coffee break</i>	
11:00 – 11:45	Presentations of group work results Topic 5	Topic chair and rapporteur
11:45 – 12:30	Plenary discussion and decisions	
12:30 – 14:00	<i>Lunch break</i>	
<i>afternoon</i>	<i>free</i>	

Sunday 02/11		
	TOPIC 7: Planning next year(s)	Chair: H.P. Liniger Rapport.: H. Hellemann
08:30 – 10:15	Regional group meetings: <ul style="list-style-type: none"> - working on received inputs from plenary - concrete steps to achieve suggested results from the workshop topics (e.g. for quality assurance, outputs, use of WOCAT, etc.) - finalizing workplans and regional coordination 	
10:15 – 10:45	<i>Coffee break</i>	
10:45 – 11:00	Short presentation of workplans (regional summaries)	
11:00 – 12:00	“Market place”: National workplans and group posters can be viewed and discussed	
12:00 – 12:30	Review of WOCAT visions	G. v. Lynden
12:30 – 14:00	<i>Lunch break</i>	
14:00 – 15:00	Prioritisation of global activities for next year <ul style="list-style-type: none"> o assuming current funding, a “to do list”: by whom, what outputs to be expected and when! o assuming more funding becoming available, what could be done and against what budget? o assignment and responsibilities of Task Forces: commitment! o major events 	H.P. Liniger
15:00 – 15:30	Election of Management Group members, assignment of Secretariat, next WWSM 2004	
15:30 – 16:00	<i>Coffee break</i>	
16:00 – 17:00	Feedback from participants (against expectations), AOB	
17:00	<i>Closing</i>	



View from the Summit Hotel where the workshop took place on Kathmandu and the Himalayan peaks (Photo by Hanspeter Liniger)

TOPIC 1 PROGRESS REPORTS

Rapporteur: Mats Gurtner

Each year, progress at all levels is reported and compared with the workplans prepared during the previous workshop. The reports below cover the period from November 2002 (WWSM Rome) to October 2003.

1.1 Activities at the global level

1.1.1 Review 2003

Major achievements in 2003:

- Development and quality checking of overview books;
- Further database and website development, preparation of CD-ROM version 3;
- Participation, presentations and papers in international workshops and conferences (DFID-ICIMOD workshop Nepal, IAEA Vienna, LADA Rome, Dom Vody / University of Dushanbe), OECD meeting on erosion in Rome, FAO - ICIMOD meeting in Kathmandu, Water Forum Dushanbe;
- International Workshop and Steering Meeting in Nepal (ICIMOD);
- IYM Conference on "Natural and Socio-economic Effects of Erosion Control in Mountainous Regions", Belgrade, Yugoslavia, December 2002;
- Publications: Proceedings of the IYM Conference Belgrade, Paper in *Bioengineering for Erosion Control and Slope Stabilization in Asian-Pacific* (early 2004), Paper in *Renewable Natural Resources Management for Mountain Communities* (DFID-ICIMOD, end 2003).

1.1.2 Funding

a) SDC

Continuation of the first 3 years phase of a long-term programme: WOCAT together with MRD (International Journal: Mountain Research and Development) and SLM (programme on: Sustainable Land Management) 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 of SDC and CDE. Start: 1.1.02 to 31.12.04

Approved WOCAT programme:

- Long term mandate(!);
- WOCAT is highly appreciated by SDC, a review is likely to happen at the beginning of next year (last year of the first phase);
- CDE is seen by SDC as centre of competence to coordinate WOCAT;
- Objectives: see table below;
- Even though the annual budget increased from CHF 300'000 to 400'000 there has been an increase of overheads (as a contribution to CDE) thus the available funds for activities apart for the fixed personnel costs are little.

b) DANIDA

- Reduction from CHF100'000 to 80'000 for the 3rd year (due to overall budget cut of DANIDA);
- 3rd year contribution received and almost used (core contribution has been exhausted, the earmarked country contribution has some money left for an input into the international DANIDA workshop in Indore, Nov. 03);
- Negotiations with Poul Richard Jensen for an extension of WOCAT support, however due to government change and reduction of funding an extension or continuation did not look promising at the time of the WWSM, which would have meant a loss of about US\$ 80'000 per year. This was very much regretted by the DANIDA responsables. During the international DANIDA workshop in Indore a follow-up was discussed and a new proposal initiated.

Review of global activities 2003

Objectives / expected results	Activities for the 3 years period 2002 - 2004	REVIEW 2003 Major achievements November 2002 – October 2003
<p>1. WOCAT Network</p> <p><i>Objective: to further support and develop the WOCAT network: coordination, awareness rising and promotion</i></p> <p>Result: enhanced and consolidated network</p>	<p>a) maintain collaboration between existing partners</p> <p>b) add new partners and consortium members</p> <p>c) conduct 3 International Workshops and Steering Meetings (according to established procedure and guidelines)</p> <p>d) participate in international conferences to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO)</p> <p>e) integrate WOCAT in development process at the national (ongoing government, NGO and bilateral aid projects) and global level (UNCCD, UNCBD(?), UNFCCC(?))</p> <p>f) continue and enhance the WOCAT e-mail list and newsletter</p>	<ul style="list-style-type: none"> • collaboration maintained and enhanced (a) • new partners: ICIMOD countries, IAEA (WOCAT as an accepted tool and method to document SWC within the IAEA-research projects), Syngenta SOWAP (b) • Participation and presentations in (inter)national meetings, workshops and Conferences: <ul style="list-style-type: none"> • Annual International Workshop and Steering Meeting (WWSM) at ICIMOD, Kathmandu, Nepal, 28.10 - 2.11.03 with 22 participants from 13 different countries. (c) • LADA workshop Rome: 5-8. November 2002 (d) • DFID/NRSP workshop Kathmandu February 2003 (d) • IAEA meeting in Vienna (5.03). • OECD expert meeting on soil erosion in Rome, FAO, March 03 (d) • FAO - ICIMOD meeting in Kathmandu September 2003 (d) • Water Forum Dushanbe (August – September 2003) • Posters and oral presentation at the DOM VODY (House of Water) event September 2003 (d) • WOCAT integrated in development process: considerable progress in Ethiopia, Philippines, China, partly in all other collaborating institutions (e) • WOCAT mailing list operational, 2 WOCAT newsletters and in 4 WASWC newsletters (f) • Several presentations: LADA workshop at FAO after the Workshop and Steering Meeting in Rome (11.02). IAEA meeting in Vienna (5.03). For both projects WOCAT was accepted as a standard methodology. ICIMOD: introduction of WOCAT, presentation at DFID workshop in Nepal (2/3.03)
<p>2. Training</p> <p><i>Objective: to provide back stopping and training support for national and regional initiatives.</i></p> <p>Result: National and regional collaborators trained to run WOCAT programme in their countries and regions</p>	<p>a) conduct additional 2 international “Training for National Trainers / Facilitators” workshops</p> <p>b) provide support and expertise for additional national and regional initiation and training workshops (e.g. Central Asia, India, Eritrea, ...), upon request from national / regional institutions</p>	<ul style="list-style-type: none"> • Training National specialists from the ICIMOD countries February 03 • 2 training courses for students from Central Asia (Kyrgyzstan and Tajikistan) in March 03 and September 03 in collaboration with the Swiss research programme of NCCR North - South. • Backstopping and support provided to national / regional training (without participation of global core group members): Niger (March 03), Ethiopia (June 03), China

<p>3. Methodology / Tools</p> <p><i>Objective: to further develop the methodology, mainly the tools for knowledge exchange and decision support</i></p> <p>Result: Additional tools for exchange of knowledge and decision support developed</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"> • Website: regularly updated. Approach database made available on-line and technology database updated. (a) • Database management system improved esp. updating French and Spanish version, removing bugs and easier installation (b) • Improved drafts of summary sheets for overview books. (c)
<p>4. Data quality</p> <p><i>Objective: to enhance data quality and additional data collection</i></p> <p>Result: Good quality data from at least 15 countries made available and used for the production of outputs</p>	<p>a) further develop procedures to enhance data quality</p> <p>b) support further collection 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"> • selection of 25 Technologies and 20 Approaches for further data improvement and for development of quality assurance procedures (for overview book) (a) • Mandate to consultant for the assessment of the quality and improvement of the procedure about the quality assurance (a) • Central Asia through the support of CAMP project (a,b)
<p>5. Outputs</p> <p><i>Objective: to support the production of outputs</i></p> <p>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</p>	<p>a) produce CD-ROM in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests</p> <p>b) compile a first overview of global experiences of SWC Technologies and Approaches from selected countries that have been active in the compilation of the data</p> <p>c) publish in journals and conference proceedings 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"> • CD-ROM vs.3, first draft, Website and database improved (a) • WOCAT overview book Kenya (draft available) • Global WOCAT overview book: 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), • Proceedings of 7th International WOCAT Workshop and Steering Meeting in Rome printed and distributed • Database improved • Publications: (c) <ul style="list-style-type: none"> • Paper in <i>Renewable Natural Resources Management for Mountain Communities</i>, (DFID-ICIMOD, end 2003) and paper for the book of Mountain Research Initiative submitted and accepted but not published yet • Paper in the Proceedings of the IYM Conference on <i>Natural and Socio-economic Effects of Erosion Control in Mountainous Regions</i>, Belgrade (2003) • Paper in <i>Bioengineering for Erosion Control and Soil Stabilization in Asian – Pacific</i> (WASWC, early 2004)

c) Other donors

- EU proposal with Syngenta on SOWAP approved. WOCAT is a key partner, represented by ISRIC, and thus receives some contribution for WOCAT global activities (but funds are basically earmarked for the support of SOWAP). Budget for WOCAT: €208'000 for 3 years.
- Funding proposal prepared to Syngenta Foundation and discussed in October 03. Even though WOCAT has been evaluated as a very attractive programme, there are little remaining uncommitted funds available from Syngenta Foundation to support WOCAT substantially. On 23.10.03, CDE received an approval of CHF 50'000 per year for a period of 3 years as support for WOCAT. WOCAT has to prepare a list of activities and outputs and a budget for the next 3 years.
- Approval of a UNEP contribution of US\$10'000 and proposal submitted for an extra US\$30'000 for the production of the global overview book.

The constraints that WOCAT face\$ are:

- Too little time/money allocation for WOCAT core activities, secretariat (incl. coordination, backstopping, development of methodology, outputs, workshops) ;
- Too little support for taskforces (i.e. quality assurance and production of output\$, use of WOCAT).

Additional donors need to be engaged!

Action by whom? (see taskforces)

1.1.3 Publicity

- Internet appearance by WOCAT;
- Active participation in LADA technical workshop, Rome, 5-7 November 2002;
- Paper in *Renewable Natural Resources Management for Mountain Communities*, (DFID-ICIMOD, end 2003);
- Paper in the Proceedings of the IYM Conference on *Natural and Socio-economic Effects of Erosion Control in Mountainous Regions*, Belgrade (2003);
- Paper in *Bioengineering for Erosion Control and Soil Stabilization in Asian – Pacific* (WASWC, early 2004);
- Poster and oral presentation for DOM VODY House of the Water, Tajikistan;
- Presentation made at the IAEA research coordination meeting in Vienna (5.03): “*Assess the effectiveness of soil conservation techniques for sustainable watershed management and crop production using fallout radionuclides*” ;
- WOCAT newsletters and contributions to WASWC newsletters.

1.1.4 WOCAT in education / research

WOCAT in education / training:

not planned, but involvement during the last year:

- Lectures and field training in Central Asia (Kyrgyzstan and Tajikistan), synergies used with NCCR North – South.

WOCAT in research:

- WOCAT study in Switzerland finalized: 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 research collaboration with SOWAP in England, Belgium and Hungary;
- Coordinated research projects (CRP) of IAEA on fallout radio-nuclides (FRN): WOCAT method used as a standard to document SWC technologies, which are used in their research.

1.1.5 WOCAT Secretariat

Main activities

- React to requests for brochures, CD-ROMs (CD-ROM v.3, CD-ROM Video);
- email correspondence;
- Production of WOCAT Workshop and Steering Meeting proceedings;
- E-mails: Main persons involved in maintaining and enhancing the contacts and reacting to requests are: Fränzi Jöhr, Gudrun Schwilch, Godert van Lynden, Mats Gurtner and Hanspeter Liniger; yet more core support is needed (e.g. to avoid delayed replies to requests). The solution proposed by the Secretariat is to involve the growing pool of well informed WOCATeers, the sharing of information should go on amongst the different WOCATeers without necessarily involving the secretariat. There is also need to decentralize the support from the secretariat and to involve more and more the regional and national institutions.

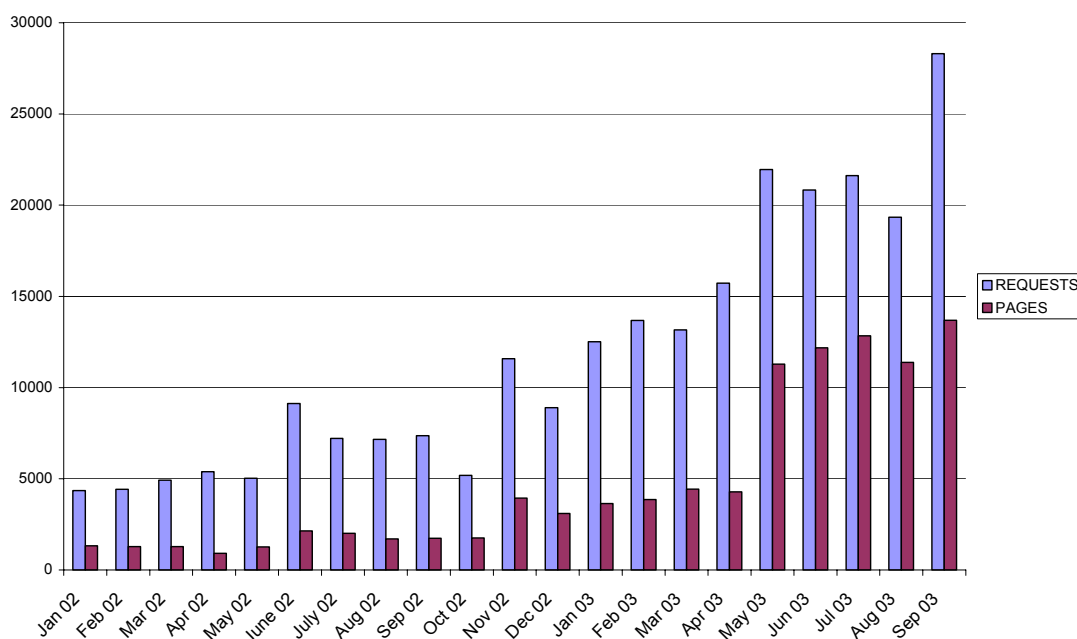
1.1.6 WOCAT website statistics

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

Website statistics (Oct. 02 to Sep. 2003)

- Total requests: 192'523 (528 / day) (each file on a web page is counted separately, i.e. if there are 10 graphic files on a page, this counts as eleven requests!);
- Total pages: 86'317;

Web statistic for WOCAT website



- Distinct hosts: 7'513 (number of different computers);
- The hits show that there have been high increases in June 02, Nov. 02, May 03 and Sep 03. The reasons for this could not be elaborated in detail, but June 02 could be the effect of the ISCO conference in May and Nov. 02 was right after the last WWSM in Rome;
- Domain or organisation analysis not (yet) possible (unresolved IP-numbers), i.e. we don't know *who* visited our website;

- Top search words (in decreasing order):

- Worldmap
- Soil
- WOCAT
- Map
- Access
- Conservation
- India
- Water
- Degradation
- World

These top search words show a considerable interest in the map (worldmap and map in general). India is ranking quite high as well, which is also reflected by the high number of downloads of the India pilot study (see below);

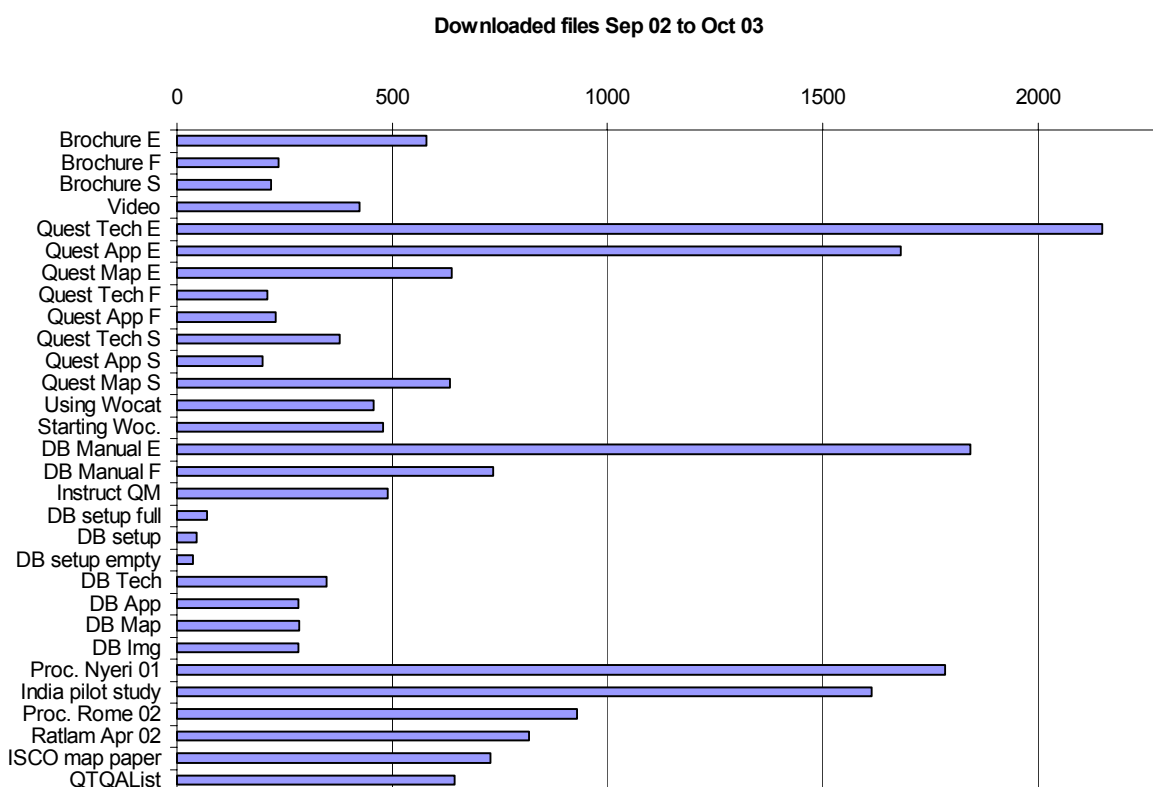
- Most requested pages:

- Home (index.asp)
- Worldmap
- Database
- Collaborating and funding institutions
- Introduction to WOCAT (first page of brochure)
- Latest newsletter

- Least requested pages:

- Newsletter archive
- Definition of SWC measures

- The most frequently downloaded files were the questionnaires (in English), the database manual, the proceedings of former annual workshops and the India pilot study.



This statistic needs to be interpreted with some care. The number of requests do not reflect the number of visitors because each graphic file on a web page counts as one request. On the other hand, certain visits are not counted, if the user has visited this page before and it is still in his cache and not rechecked. Or the Internet Service Provider's (ISP) cache has saved it, because somebody else from the same ISP has looked at that page recently. The proportion of requests retrieved from the cache can make up to 50%, so half of the user's requests are not counted. Further reading on www.analog.cx/docs/webworks.html.

1.2 Progress reports of taskforces

1.2.1 Quality assurance

Task Force members: Roger White (Chair), Miodrag Zlatic, Samran Sombatpanit, Rod Gallacher

Report by Roger White

During the preparation of the global overview book, the CDE staff and Will Critchley gained in-depth experience with quality assurance procedures. Comments were provided to the authors and their feedback was included to improve the documentation and evaluation of the SWC technologies and approaches. Through an assignment given to Malcolm Douglas more in-depth experience and knowledge could be generated. However, other TF members provided little assistance. Furthermore the task force has the following comments:

- The quality problems are not caused by mistakes in the questionnaire, therefore changing the questionnaire will not be necessary, except for some additional or improved explanations on the E-pages. Foremost, the questionnaires need to be filled completely by the author(s);
- There should be a time limit of 3 months in which the task force has to produce a report, otherwise this will always be left until the latest moment;
- Audience for output: the QA's and QT's are designed for subject matter specialists. Sanjeev Bhuchar turned one of the questionnaires into a narrative (success story); this should be done more often as it is accessible for a wider audience. (Remark by the editors: this is the idea of the overview book and the summary sheets.);
- WOCAT activities should be fully incorporated in annual planning of projects and not be seen as "add-ons". Therefore, WOCAT should not be seen first as a data collection exercise but as a process of documentation and self-evaluation of SWC knowledge and secondly as a way to disseminate the knowledge and use it in a new context. Experience so far has shown that the value of self-evaluation has been underestimated and thus needs to be emphasised. The documentation and self-evaluation is first and foremost for the own benefit, not to serve others;
- Global versus regional quality responsibilities: the global responsibilities lay in the quality of methodology development and the regional responsibilities in the quality of the application / implementation of those methodologies. This means that the quality assurance is a regional responsibility! The global level can assist by providing feedback.

1.2.2 Digital products

Taskforce members: G. Schwilch (Chair), W. Prante, R. van der Merwe, B. Tereke, Z. Niu, K. Lyoba, G. van Lynden

Report by Gudrun Schwilch

WOCAT CD-ROM v. 3

- New draft version for testing is available and was distributed to the workshop participants;
- The contents of the CD-ROM as well as the layout and the functioning of the menu are the same as the WOCAT website;
- Will be printed early 2004 (as soon as possible);
- Delay due to various reasons, but mainly because the material was not ready (presentations, manuals, translations, etc.);
- Participants are asked to give their feedback during this workshop and before the end of year.

New features:

- Approaches on-line database newly implemented;
- New image database using the free software "MyAlbum". The data from the previous version (based on MS Access) was transferred to the new system. The WOCAT album is mainly used as an image viewer, whereas the metadata (description, author, date, etc.) on the images is handled within the technologies and approaches databases.

Improved features:

- The set-up files to install the WOCAT database suites (containing the Technologies, Approaches and Map databases as well as the WOCAT album) were further improved and tested. There are various set-up versions available (one containing all the image files, another without images and an empty version for data entry) to be chosen from depending on the available computer space and the aim;
- The Technologies on-line database was improved and updated;
- Improvement of the French and Spanish versions of the Technologies and Approaches databases;
- The database manual was updated according to the new database versions and is currently being translated to French and Spanish;
- The WOCAT website was updated regularly.

Surveys:

- An inquiry was sent through WOCAT-L in February 03 to find out if we can migrate the databases to Access2000/2002 or if many users are still using Access97. There were only 6 replies and thereof 3 wishing to remain with Access97;
- A user survey on WOCAT digital products was distributed among subscribers of WOCAT-L in August 03. Feedback was not high: out of > 400 subscribers, 15 persons reacted. But scores were generally very positive;
- The new draft of WOCAT CD version 3 was sent out to the task force members for testing, but unfortunately feedback was rare (only two persons). The CD-ROM has therefore not been sufficiently tested yet and all readers are asked to provide feedback to WOCAT before the end of 2003!

1.2.3 Overview Books

TF members: K. Mutunga (Chair), D. Danano, G. Kimaru, S. Sanginov, F. Lompo, M. Gurtner, E. Chuma
Report by Mats Gurtner (Kithinji Mutunga, chair of the task force, was not present)

Task Force activities 2002/2003

None of the planned taskforce activities was carried out. There was neither an e-mail discussion on different tasks nor any preparation of guidelines on overview books production process, structure and content of overview books. Communication between taskforce members was non-existent. Nevertheless there was some news to be reported on the stage of different national initiatives and the global overview book.

Kenya Overview Book: "Soil and water conservation in Kenya as documented through WOCAT"

Finalization of the Kenya Overview book, now published in the RELMA series as "Working Paper No. 19, 2003". The document needs substantial enhancement before it can be up-graded to a Technical Report status within the RELMA series. (see Kenya report page 16)

South Africa Info Book

At present an Info-book is being put together, using data from the 4-page summaries and appropriate figures. The book should be finalised by end of 2003. A draft example of 2 case studies (1 technology and 1 approach) is presented in the Annex I, page 76.

Ethiopia Overview Book

Draft of national overview book was planned but not achieved because the completion of the questionnaire was conducted only in 3 out of 14 regions of Ethiopia so far. Collection of more data is required from the remaining regions.

Central Asia Overview Book

No information about present status.

Global Overview Book¹

At WWSM 7 it was agreed to improve the quality of the case study summaries and to include more case studies (20 in total) in order to produce a real global overview. Publishing was therefore postponed from December '02 to September '03. Now, this deadline was changed again mainly due to three reasons:

- Process of revising, up-dating and completing the information of the existing case studies in order to achieve a high data quality standard took longer than anticipated (which proved difficult through e-mail correspondence with contributing specialists);
- Time constraints at WOCAT secretariat in Bern (which is in charge of the overview book together with Will Critchley);
- New case studies need to be included to achieve a well-balanced selection covering a broad spectrum of case studies which are selected according to the following criteria:

Criteria for the selection of case studies for the global overview book:

- Quality / completeness of data
- Geographical spread
- Partner sensitivity
- Range of Technologies: - Measures (A, V, S, M)
 - Land Use
 - Degradation types
 - Agro-ecological zones
- Range of Approaches
- Variety of old / new data sets

Selection of case studies

According to these criteria...:

- ...23 case studies have definitively been selected for the overview book, and
- ...15 additional case studies have been identified to include missing SWC experiences

Due to unsuccessful search of potential collaborating authors / institutions

- ...3 case studies had to be cancelled from the list that was presented at WWSM7

Selected case studies for global overview book			
<i>(23 technologies, in italics: additional cases to first selection presented at WWSM7)</i>			
QT	Name of Technology	Country	Corresponding Approach
BRK 10	Composting and Application in Planting Pits	Burkina Faso	Agro-ecological Programme of a Women Association
CHN 21	Orchard Interplanted with Bahia Grass	China	Government Extension??
COL 01	Silvo-agricultural System	Colombia	Integrated Rural Community Development
COS 02	Agroforestry with Coffee ("café arbolado")	Costa Rica	Agroforestry Extension
ETH xy	Area Closure	Ethiopia	Local Level Participatory Planning Approach (LLPPA)
IND 03	Doh (sunken riverbed structure)	India	Comprehensive Watershed Development
IND 4	Forest Catchment Treatment	India	Joint Forest Management
KEN 05	Fanya juu	Kenya	Catchment Approach
KEN 16	Grevillea Agroforestry System	Kenya	Individual Farmer Initiative
<i>KEN 30</i>	<i>Conservation agriculture through deep ripping</i>	<i>Kenya</i>	<i>Self Help Group Approach</i>
<i>MOR 01</i>	<i>No-tillage (or: minimum tillage?)</i>	<i>Morocco</i>	<i>Knowledge Dev. for No-tillage and Sustainable Farming</i>
NIC 01	Organic Manure from Earthworm Culture	Nicaragua	Participatory Community Approach
NIC 04	Stem Cutting Check Dams	Nicaragua	Farmer to Farmer
NIG 01	Stone Lines & Tassa	Niger	Participatory Approach for Collective Land Rehabilitation
PER 01	Rehabilit. of Stone Level Bench Terrace System	Peru	Community Action for Rehab. of Trad. Terrace System
PHI 03	Natural Vegetative Strips NVS	Philippines	LANDCARE
PHI 07	Multi-storey cropping	Philippines	<i>no approach documented</i>
RSA 03	Traditional Stone Terrace Walls	South Africa	Indigenous /traditional system
RSA 04	Vetiver grass Soil Conservation system	South Africa	Self teaching
<i>SWI 01</i>	<i>Vineyards with permanent green cover</i>	<i>Switzerland</i>	<i>Name?</i>
SYR 01	Stone Wall Bench Terrace (traditional)	Syria	Traditional Implementation of Stone Wall Bench Terrace
THA 25	Small Level Bench Terrace	Thailand	Farmers Initiative
UGA 04	Improved Trash Lines	Uganda	Promoting Farmer Innovation

¹ in collaboration with UNEP; in WWSM7 proceedings also called UNEP book

Potential additional case studies (15 technologies, in <i>italics</i> : additional cases to first selection presented at WWSM7)			
QT	Name of Technology	Country	Remarks
???	Rice Paddies on Irrigation Terrace	China/Phils?	<i>missing: Rice Paddies</i>
BOL xy	<i>Integrated Watershed Management</i>	<i>Bolivia</i>	<i>few examples from South America documented, being entered into the DB</i>
CHN 45	<i>Loess Plateau Level Bench Terrace</i>	<i>China</i>	<i>major erosion area; major achievement with high input and impact; check with Cai</i>
CHN 48	<i>Shelterbelt</i>	<i>China</i>	<i>missing: wind breaks check with Cai</i>
NIG xy	<i>Wind break</i>	<i>Niger</i>	<i>missing: wind breaks</i>
ETH xy	<i>Grazing land management</i>	<i>Ethiopia</i>	<i>missing: technology on grazing land! check with Daniel Danano</i>
NEP 01	<i>Improved Terraces</i>	<i>Nepal</i>	<i>check with Sanjeev</i>
PAR xy	<i>Conservation Agriculture</i>	<i>Paraguay</i>	<i>missing: large scale conservation agriculture not yet documented</i>
KYR xy	<i>Bio drainage</i>	<i>Kyrgyzstan</i>	<i>missing: measure against salinity presented on posters (in Russian) to be documented in standard WOCAT format</i>
TAJ xy	<i>Orchard and wheat</i>	<i>Tajikistan</i>	<i>presented on posters (in Russian) to be documented in standard WOCAT format</i>
TAJ xy	<i>Grazing land / forest plantation</i>	<i>Tajikistan</i>	<i>See above</i>
RSA 11	<i>Run-off Control on Cultivated Land</i>	<i>South Africa</i>	<i>missing: large-scale drainage system! drafted by M. Douglas, check with Rinda</i>
RSA 42	<i>Restoration of Degraded Rangeland</i>	<i>South Africa</i>	<i>missing: technology on grazing land! drafted by M. Douglas, check with Rinda</i>
RSA 47	<i>Strip Mine Rehabilitation by Plant Translocation</i>	<i>South Africa</i>	<i>missing: rehabilitation of mining sites! drafted by M. Douglas, check with Rinda</i>

Dropped case studies (3 Technologies, listed as potential additional cases studies at WWSM7)			
QT	Name of Technology	Region	Remarks
	Contour Barrier Hedgerows	South East Asia	No data available
	Minimum Tillage, small scale	Southern Africa	No data available
	Minimum Tillage, large scale	Europe	No data available

Fund allocations needed for the printing are ongoing and depend on the current negotiations with UNEP, Syngenta Foundation and additional potential donors. Details will be available by the end of 2003. At the moment the overview book is planned to be published in June 2004, just in time for promotion at the ISCO conference (early July 2004). The following table shows the workplan agreed at the editors meeting in August 2003 in Bern.

Workplan	
Steps	Deadline
a) case studies finalized	<10.10.03
b) prototype (summary layout) finalized	5.9.03
c) analysis 1st draft	31.1.04
d) editing case studies	24.10.03
e) feedback to Analysis	24.10.03
f) Analysis 2nd Draft	28.2.04
g) conclusion / intro / preface	22.3.04
h) layout	
i) technical drawings	
k) photo selection finalized	
l) final layout	30.4.04
m) final proof-reading	15.5.04
n) ready for print	31.5.04

Presentation and discussion of Overview Book during WWSM 8

During WWSM8 a first draft version was presented. An example of a case study (including Technology and Approach) is presented in Annex 1, pages 68 - 75.

The information of some cases studies was completed with various authors in additional late night sessions.

Workshop participants asked if the overview book will be translated into other languages. There are no translations planned, but it could be discussed with UNEP/FAO. Some mentioned that translations should not only be made to French and Spanish, but also to Chinese, Russian and Arabic. A good quality product in

English will raise the demand for translations and donors might be interested to fund this specific activity since it provides a clear and attractive output (of which the preparations costs are already covered).

There was the general feeling that this overview book will be a very important output for WOCAT.

Deadline for potential additional case studies to be included in the overview book is 31 December 2003!

1.2.4 Use of WOCAT

Taskforce members: M. Douglas (Chair), R. Labios, S. Patinavin, R. Thomas, F. Lompo, A. Asanaliev, F. Zapata, A. Zhanserikova, M. Zlatic, R. Pavlovic, K. Saifuk

Report by Romy Labios

The task force was not able to perform properly after the successful start in Rome, where detailed ToRs were elaborated. There was too little networking afterwards and the group was too large.

Review of the Rome Report

- *WOCAT as an M&E tool for appraising technologies and approaches and for quantifying their cost and benefits ...*

Countries involved in WOCAT activities used the three questionnaires in appraising their Ts, As and Ms. The main use is the self-evaluation of existing experience, the identification of knowledge and knowledge gaps, the assessment of strengths and weaknesses, and the use of WOCAT to monitor changes and performance of SWC. The value of all these applications has originally been underestimated and should be emphasized as a major value of WOCAT. However, there are too few cases in the global database where costs and benefits are well documented and some Ts and As lack information on costs and benefits altogether, as also mentioned in the paper of Malcolm Douglas.

- *WOCAT as an extension tool for the documentation, identification and transfer of technologies/ approaches from one locality to another;*

A case of natural vegetative strips (NVS) technology in the Philippines and maybe other Ts and As in other countries involved in WOCAT.

- *WOCAT in research – as a tool for identifying knowledge gaps and key topics requiring research investigation;*

Examples by Syngenta in the SOWAP project and CDE in NCCR/CAMP project.

- *WOCAT in research – as a review tool in evaluating results of research trials, and assessing the bio-physical and socio-economic suitability of research derived technologies approaches;*

We still have to get cases and experiences from member countries if they have done this.

WOCAT in education

- *An educational data resource for students, teachers, lecturers;*

For those members involved in the academia like UPLB, CDE, etc. it served as reference materials in teaching and training.

- *An educational tool for students when collecting and analysing data for case studies, dissertation and theses;*

A case of Swiss students of University of Bern doing their theses in Central Asia.

Resource requirements

Malcolm Douglas prepared an assessment or review on QTs, and QAs in the global data base and submitted a report on this (please refer to the paper of Malcolm Douglas)

1.2.5 WOCAT mapping

E-mail group members: José Rondal (Chair), Hanspeter Liniger, Godert van Lynden, Dirk Pretorius, Kamron Saifuk, Francis Turkelboom, Michael Lane

Report by Godert van Lynden

Little progress could be reported on QM and Worldmap. Godert van Lynden sent an email to the mapping group, but response was almost nil. There would be more discussions on WOCAT mapping under Topic 4. The worldmap was in fact the original idea of WOCAT, but was only revived after a request from the national Geographic Magazine last year. Feedback since then has been disappointing in spite of promises made by various participants of WWSM7.

1.3 Activities at the national / regional level

1.3.1 RELMA

No information received so far.

1.3.2 Kenya

Report by Kithinji Mutunga (through email)

1. SWC in Kenya: Overview

Finalization of the Kenya Overview book

Now published in the RELMA series as "Working Paper No. 19, 2003". The current title is: "*Soil and water conservation in Kenya as documented through WOCAT*". Some copies WERE issued to the East African team that was to attend WWSM8. Some more copies (about 80) were handed over to Kithinji Mutunga for distribution. The document needs substantial enhancement before it can be up-graded to Technical Report status within the RELMA series. This could be done next year if found necessary, subject to availability of funds. So far Kithinji Mutunga, Donald Thomas and Joseph Mburu have made a major effort.

2. Other documentation

Conservation tillage (QT+QA):

- Small-scale farmer efforts in Kalalu/Laikipia;
- Large scale farmer efforts in Kisima/Timau, Meru.

Updating (QT+QA)

- QT KEN 16: individual land user initiative for Grevillea agroforestry, Kiwanja catchment, Embu;
- QA KEN 8: individual land user initiative for Grevillea agroforestry, Kiwanja catchment, Embu.

3. Global Overview book on SWC

- Updating 4 page summaries and peer review of QT KEN 5: Fanya juu;
- Updating 4 page summary and peer review of QA KEN 2: Catchment approach.

4. Comments on the questionnaires

Some detailed comments on the questionnaires and the databases were sent to the WOCAT secretariat.

5. Use of WOCAT in education

Mr. David Mburu of Jomo Kenyatta University of Agriculture and Technology has been using WOCAT materials in a regional course organized annually by the African Institute for Capacity Building (AICAD) based at the University. The course brings together 30 participants drawn from Kenya, Uganda and Tanzania. The participants are from different disciplines. A few videos are also issued to the participants at the end of the course. The next course will be in February 2004. The materials are also used in the undergraduate course in

agriculture. WOCAT materials have also been issued to a lecturer at the Nairobi University (Soil Science Department).

6. WOCAT activities in Central Province Kenya

In Central Kenya, and Nyeri District in particular, WOCAT has been used in various activities as follows:

- CARITAS is a Catholic NGO that provides social, development, and relief services for the poor worldwide. In Nyeri CARITAS was inducted to WOCAT questionnaire, database and outputs. This was done using the WOCAT materials collected during the workshop in Rome 2002. The methodology was really appreciated especially when we issued the WOCAT video. Already they have copied the video to have enough to give to their field staff for their training. In the drier areas of Nyeri, Laikipia and Nyandarua districts CARITAS deals mainly with land resource management and poverty alleviation. They also deal with relief food distribution during famine in the three districts.
- CARITAS will be using the QA questionnaire to evaluate their approach, and to use it as a base for their planning for the next six years starting from 2004. The WOCAT team will keep in close touch with CARITAS.
- WOCAT videos have been distributed to other field officers within the Ministry of Agriculture and to another NGO called SACDEP that promotes sustainable agriculture. The videos are mainly for training and education.
- With the help of land users and extension staff in the drier areas of Kieni, the District Soil Conservation Officer has collected information using QT for some popular technologies used by livestock farmers. Currently the officer is working on the sketches for illustrations in the questionnaire.

7. Future outlook/plans for 2004

For the coming year the main efforts will be focused on:

- Distribution of available WOCAT materials;
- Encouraging more integration of WOCAT methodology in various land management projects and programmes;
- Documenting more QTs and QAs;
- Promoting wider use of WOCAT in education.

Some progress has already been made in respect of these action points as shown in the report above.

1.3.3 Tanzania

Report by Kimamba Lyoba (through email)

- Training of data collectors and users on data quality and utilization: 28 persons (3 women and 25 men) trained;
- Field documentation of existing Ts, As, and Maps using WOCAT tools: 5QTs, 5QAs and 5QMs collected;
- Data forwarded to Bern before was only partially updated due to unavailability of required information;
- Participation in the 2003 WOCAT annual workshop failed due to missing visa for airport transfer in India;
- Training of national trainers on database management was not conducted.

1.3.4 Ethiopia

Report by Daniel Danano

- Documentation of case studies for 19 QTs, 12 QAs and 14 QMs;
- A training was conducted at Wollaita Soddo to train 8 field staff participating in the completing of the questionnaires from the Southern Region;
- Draft overview book produced: this was not achieved because the completion of the questionnaire was conducted only in 3 out of 14 regions of Ethiopia. Collection of more data is required from the remaining regions. It was an unrealistic plan;

- Participation of 4 SWC specialists in a regional workshop was not achieved because the regional coordination was unable to make the coordination as anticipated;
- Encoding and analysis completed for 19 OTs, 12 QAs and 14 maps;
- Backstopping provided for 16 weredas in 3 regions;
- 2 EthiOCAT Review Meetings conducted for checking the quality and standards of the information collected;
- Students from 2 universities used WOCAT tools for their research;
- 3 NGOs showed interest in WOCAT;
- WOCAT is a strong tool especially in the cost-benefit analysis: Conservation has an impact on the ground and we could convince government and donors of that.

1.3.5 South Africa

Report by Rinda van der Merwe

Progress made

- After the Annual Workshop and Steering Meeting in Italy, 2002, our priority was to work through all questionnaires already in the database and decide which should be included in the new WOCAT CD-ROM;
- The images database was updated and new images included. All this data was sent to Bern.
- No progress was made with the map questionnaire of South Africa;
- At present we are busy putting an Info-book together, using data from the 4-page summaries and appropriate figures;
- South Africa is also planning a one day seminar in a couple of months time, where we want to inform all stakeholders of the progress of WOCAT in South Africa up till now, and also incorporating WOCAT in our LandCare initiative;
- WOCAT will also be available on our AGIS – web page (<http://www.arc.agric.za>) in the near future;
- A link to WOCAT is available on the Agricultural Research Council site (<http://www.arc.agric.za>).

Reasons for delay

No extra funding was available for the project and therefore no progress was made with some activities.

Expenses (November 2002 – October 2003)

Manpower	11425 US\$
Direct cost	315 US\$
Travel costs	3660 US\$
Total	15400 US\$

Workplan for 2003/2004

Money is available for two activities, namely to get WOCAT on AGIS and to integrate WOCAT with the LandCare programme. The Information book will be finalised by the end of 2003 and the Promotion Workshop will also be funded with the available budget.

1.3.6 INSAH / West Africa

Report by François Lompo (through email)

In March 2003 there was an orientation workshop on WOCAT organized by François Lompo in Niamey. As a result, four countries planned to fill in WOCAT questionnaires: Burkina Faso, Mali, Niger and Senegal. Unfortunately, no funds were found to achieve this aim.

The main problem in West Africa are the missing funds. A minimum of funds would be required to run WOCAT. The region West Africa feels a bit let aside by WOCAT and assumes that this is because there are no research projects related to CDE / WOCAT within this region, as it is the case in East Africa.

There is a need for increased collaboration with WOCAT core to see how the region could again become more active. There are many experiences made with SWC technologies and approaches, which could be shared with others.

The WOCAT secretariat adds the following comment: WOCAT needs to stress that the activities in the countries and regions are not run by the WOCAT core group. There is need for the regional and national initiatives to identify funding sources and to attract donors and to integrate WOCAT into existing programmes and activities. The WOCAT core group is keen to see good progress made in Western Africa and thus François Lompo (and INSAH as a regional organization) has been elected into the Management Group.

1.3.7 PARDYP-ICIMOD

Report by Sanjeev Bhuchar

Background

The International Centre for Integrated Mountain Development's (ICIMOD) People and Resource Dynamics Project (PARDYP), funded by Swiss Agency for Development and Cooperation (SDC) and International Development Research Centre (IDRC), is a regional interdisciplinary and research for development project in the field of mountain watershed management. It is being implemented with institutions in China, India, Nepal and Pakistan for developing and sharing information on watershed related issues from a mountain farming system perspective. Testing and developing soil and water conservation, with active involvement of various stakeholders, particularly the land users, assume prime importance for the project. Therefore, application of WOCAT tools for its own assessment of the activities and to link with this important global network for dissemination of the project's, collaborating institutions/departments' and traditional findings is considered to be an important initiative by PARDYP.

It must be mentioned here that for ICIMOD, promotion and application of WOCAT in the Hindu Kush-Himalayan (HKH) region has been a recent initiative, mainly on account of the support and interest shown by the participants during the first introduction workshops in March 03 and Project's Regional Coordinator – Mr Roger White. Through this initiative, it is envisaged that in the long term ICIMOD will be able to facilitate in building a good data base for the HKH on various SWC measures, which hopefully will be of direct applied value for the land users and SWC specialists in the region. Adopting WOCAT is also looked at by PARDYP as one way to link with other relevant programs supported by SDC.

The way ahead in 2003

PARDYP's interest in WOCAT application, and its commitment to this initiative on a regional basis, is evident from the following events and activities carried out during the current year:

Capacity building of identified WOCAT regional partners

- Organising WOCAT training for representatives from Bangladesh, Bhutan, India, Pakistan and Nepal with WOCAT trainers in March 2003;
- Continued discussion on future strategies with these participants and a few new ones through emails and by personal contacts, e.g. with the Eco Science Centre in Nepal;
- Another WOCAT training is being organized for some old and a few new groups from across the HKH countries from 3-8 Nov. 2003. This time it will be more "on the ground" training. This will also serve as an opportunity for ICIMOD to develop some joint programs on WOCAT for the coming year;

International initiative

- Co-sponsoring of the WOCAT's 8th Annual International Workshop and Steering Meeting from 28 Oct – 2 Nov 2003 at the Summit Hotel, Nepal.

Other highlights

- Documentation of one example from PARDYP (Nepal) on improved hill terraces completed and submitted to WOCAT (main specialist: Mr Madhav Dhakal; PARDYP Nepal);
- Another one on agroforestry from Sikkim (India) has been initiated by Ms E. Kerkhoff of Natural Resource Management Division of ICIMOD;
- Mr S. Khisa from the Chittagong Hill Tracts Development Board in Bangladesh has been able to obtain funding for carrying out WOCAT related activities;

- Based on the database generated through WOCAT tools, the PARDYP team was able to write a success story for SDC meeting in Bhutan in October 2003;
- Contribution of up to 30% of time for WOCAT by key staff in PARDYP ICIMOD.

Work Plan for 2004 and onwards

This is still pending as we will like to develop it in consultation with our regional partners, who will be attending the training programme in Nov. 2003.

However, it is already indicated that we would, in all likeliness, organize a workshop in March 2004 in which we hope to invite and sponsor participants from Central Asia, HKH, and South India (Danida project).

1.3.8 India

Report by Roland Benson

- WOCAT activities in India are carried out within DANIDA's watershed programmes (DANWADEP);
- Comprehensive Watershed Development Programme (CWDP), Madhya Pradesh: 3 QTs + 1 QA completed and included in WOCAT database;
- WOCAT orientation workshop held in Tirunelveli, Tamil Nadu for 15 participants in Dec. 2002;
- WOCAT training workshop held in Tirunelveli, Tamil Nadu for 15 participants in Jan. 2003;
- CWDP Tirunelveli, Tamil Nadu: 2 QTs filled in and being finalised in discussion with WOCAT;
- 50 copies of the training workshop proceedings (Oct. 2002, Ratlam) distributed in March 2003;
- 60 copies of the filled in technologies and approaches from Madhya Pradesh distributed in August 2003;
- WOCAT QT and QA questionnaires have facilitated in documenting some of the successful technologies demonstrated in the DANWADEP projects in a comprehensive and technical manner for dissemination in CWDP, Madhya Pradesh. In CWDP, Tirunelveli the QT questionnaire has been used to document, analyse and compare two alternate technologies (shelter belt and agro-forestry) implemented in the project;
- Problems: The guiding notes and explanations provided with the questionnaires require further clarity, especially in context of composite technologies where two or more structures combine to function as the effective conservation measure;
- DANIDA is phasing out its activities in India in 2004;
- It is planned to hold an orientation workshop in Karnataka at the end of November and to test 2 technologies and 1 approach. Data collection will be carried out in the 2-3 following months. Finalizing workshop with the help of WOCAT core and with invited people from the state level (government has large watershed projects);
- A similar proposal exists for Orissa state

1.3.9 Philippines

Report by Romeo Labios

Introduction

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 resources management was given emphasis in national and international meetings and conferences;
- Poster/paper presentation at the Conservation Farming Movement, Inc (CFM) Annual Scientific Meeting, Nov. 14-15, 2002, Cagayan de Oro City, Philippines;
- Poster/paper presentation at the First Philippine Corn Annual Symposium and Planning Workshop, Jan. 15-17, 2003, Calamba City, Philippines;
- Poster presentation, 25th National Academy of Science and Technology, June 9-10, 2003, Manila, Philippines;
- Third International Conference on Vetiver (ICV-3), October 6-9, 2003, Guangzhou, China;

- Training of Agrarian Reform Beneficiaries (ARBs) on Conservation Farming, August 20 to 22 and September 2-4, 2003;
- Thanks to WOCAT Joe Rondal became one of the most popular promoters of the natural vegetative strips (NVS) technology (see also set-up of demonstration farms below);
- WOCAT used as instruction material on natural resource management for undergraduate and graduate students.

Documentation

- Revised 2 QTs and 1 QA for the World Overview Book;
- Updated QT on Vetiver Grass System.

Technology Selection and Screening

- Training of Agrarian Reform Beneficiaries (ARBs) on Conservation Farming, August 20-22 and September 2-4, 2003;
- Set-up six technology demonstration farms anchored on the use of natural vegetative strips (NVS) and residue management;
- Monitoring of 3-year old NVS on a farmer-managed techno-demo farm;
- Set-up long-term research on Conservation Tillage for Corn (as a consequence of having met José Benites, FAO at the WWSM7 in Rome 2002).

WOCAT Materials

- Publication of flyers using the WOCAT database;
- Published an article in the Philippine Environmental Science Journal entitled SWC Technology Adoption;
- WOCAT as reference materials in course – curriculum in Farming Systems and Natural Resources Management.

Mapping

- PHILCAT finished the mapping (QM) for Luzon Island using the Physiographic Map of the Philippines published by ISRIC. About 40 physiographic units were involved. With the completion of mapping activities for Mindanao and Luzon islands, only the Visayas Island group remains to be documented and mapped;

PHILCAT Workplan for 2004

See workplan page 111

1.3.10 Thailand

Report by Samran Sombatpanit

ThaiCAT / LDD

The Thai team that presented the work plan for the year 2003 has found a major obstacle since there was a change in the administration of the Land Development Department (LDD) in Nov 2002, and the THAICAT team was not successful in proposing the draft MoU to their superior for consideration. However, the Thai team, comprising Mr Kamron and Mr Somporn, is determined to operate as proposed once the MoU has been signed. (Refer to the proposal of the Thai team presented at WWSM7 in Rome, Italy last Oct/Nov 2002.)

1.3.11 WASWC

Report by Samran Sombatpanit

Activities of WASWC in relation with WOCAT in the past 12 months (Nov 2002-Oct 2003)

- Supported conferences in Belgrade, Yugoslavia and Sofia, Bulgaria where WOCAT was presented prior to the launch of the WOCAT SEE (Southeast and East Europe);
- Supported a WOCATeer to travel to China to attend the 3rd International Conference on Vetiver where WOCAT's work was presented to a number of participants;
- Coordinated with the Thai team from the Land Development Department to sign agreement with WOCAT.

Publications

- Published WOCAT HIGHLIGHTS in the *WASWC Newsletter* every 3 months;
- Having finished publishing a book on *Ground and Water Bioengineering for Erosion Control and Slope Stabilization in Asia-Pacific* where one chapter on WOCAT is included (published early 2004);
- Working on a book on *Monitoring and Evaluation of Soil Conservation and Watershed Development Projects* where one paper on WOCAT will be included (published late 2004);
- Working on an issue of Special Publication of the WASWC, to publish the accomplishments of WOCAT from 1992-2004 to inform our members (published early 2005).

Vision

- What we envision: WOCAT program to be used widely in the future;
- We expect that there will be great synergy created from the cooperation between WOCAT and WASWC.

1.3.12 FAO / RAP (Regional Office for Asia and the Pacific)

Report by Yuji Niino, FAO Regional Office for Asia and the Pacific

Activities of FAO related to WOCAT activities:

1. Agro-ecological Zoning (AEZ) / Land Resource Information System (LRIS)

GIS based planning and decision support system which may be used for disaster prevention and management as well as selection and recommendation of appropriate soil and water conservation methods linking with WOCAT database.

2. Land Degradation Assessment in Drylands (LADA) Project

Goals are to develop and widespread application of a methodology to assess and quantify the nature, extent, severity, impact and root causes of land degradation in drylands and remedial solutions. The assessment integrates biophysical factors and socio-economic driving forces.

3. Towards the Development and Applications of a Multi-purpose Environmental and Natural Resources Information Base for Food Security and Sustainable Development (ASIACOVER)

To develop a regional map, digital database and socio-economic statistics based on existing land cover information to facilitate regional cooperation for food security and sustainable and environmentally sound agriculture in South-East Asia. The various land cover classifications used in the region will be following FAO's classification standards. Areas and countries for which no recent and reliable land cover information exists will be identified and a strategy will be developed to fill these gaps in partnership with other interested organizations and institutions. The capacities to maintain and update such maps and data bases for integrated use of geo-physical and socio-economic information and decision support tools for improved analysis, planning and decision making for food security and sustainable agriculture and identify needs to improve such capacities where required are assessed in the participating countries.

4. Asia Soil Conservation Network for Humid Tropics (ASOCON)

Pre-existing network for soil and water conservation network in the Southeast Asia and it could be functioned for implementation and promotion of WOCAT in the region, although activities have been limited for last 3 years due to shortage of financial as well as program development.

5. Other soil and water conservation programs

Other soil and water conservation programs involve: Conservation Agriculture, Problem Soils Management, Promotion of Biodiversity and Carbon sequestration, Integrated Soil Nutrient Management Systems, etc.

1.3.13 China

Report by Feng Xu

Getting started WOCAT in China (at national level), 2002-2003

The past year (Oct.2002-Oct.2003) was the beginning for activities at national level. In September 2002, the China Ministry of Water Resources (MWR) approved SWCMC (Soil and Water Conservation Monitoring Center, Ministry of Water Resources) to join WOCAT as national coordinating agency in China. After then, SWCMC started the activities as it committed (Rome proceedings p.73). Due to the SARS problem, some activities were delayed or cancelled. Additionally, delays were also caused by the leave of Dr. Niu to ADB/GEF.

1. Implementation of committed activities

Memorandum of Understanding between the SWCMC Beijing and WOCAT was signed during the WOCAT Workshop and Steering Meeting in Rome 02 and it was used as the basic document for the further activities.

- *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;*

In 2003, SWCMC organized 2 major training programs for soil erosion in southern China (training of vegetation restoration technologies for constructing areas in Fujian province, and training of landslide erosion control in Jiangxi province), which introduced the method of getting valid help by WOCAT database. The trainee numbers of these programs exceeded 100.

- *Linkages of future China-WOCAT (initially defined as COCAT) with the national website are expected to be established after WOCAT is initiated in China;*

SWCMC has planned the website in early 2003. Unfortunately, the SARS impacts delayed the network infrastructure updating in the Ministry of Water Resources. The updating was not able to start yet. However, SWCMC has prepared essential basis for the website, and will establish the linkage at the end of 2003.

- *Linkages of existing WOCAT network in Fujian with future national network are proposed to be conducted;*

The preliminary linkage was established. The training of WOCAT in Fujian province was a successful case. Based on the good relationship between national and regional (Fujian province) agencies, the future linkage and cooperation will be optimistic.

- *Get permanent fixed funding to support WOCAT from the Ministry of Water Resources (MWR) and searching for other potential funds from other resources.*

SWCMC has applied for such funding from MWR and other resources. Also for the reason of SARS, international cooperation was affected. But MWR has expressed the will to support SWCMC's activities for WOCAT. We will try to attain this goal in the next year.

- *Organizing the 8th annual WOCAT workshop and Steering Meeting (WWSM);*

Preparations were made and approval for financial support was granted but due to the SARS attack in 2002, the organization of the WWSM was stopped and postponed to 2004. SWCMC is applying for approval and financial support from MWR for the 9th annual workshop and steering meeting in 2004.

2. Expenses for WOCAT

Expenses for WOCAT in the last year were made for the support of training programs. Those expenses include materials, digital outputs, and experts travel fares. The total expenses amounted to RMB (basic Chinese currency unit) 100,000 (equivalent to US dollar 12,107).

3. Plan for next year

We plan to enhance the impact in our country rapidly. Beside the application and preparation for the 9th WWSM, the effort will be mainly based on training programs.

Organize a WOCAT training program for Chinese trainers:

We plan to select 10 future trainers from main regions suffering serious erosion threat. These future trainers will take the responsibilities for planning and organizing regional WOCAT training program in 2004. And they also will be the taskforce for WOCAT in national training program (below) in 2004. We hope a half month training program for trainers will be held in Switzerland (CDE) or in Beijing, and hope to get support from CDE.

Organize national training program including WOCAT training for Chinese trainees:

At least 1 national training program for Chinese trainees will be implemented in 2004. And WOCAT training will be key courses for the training program(s). The trainees presumably will be around 200.

1.3.14 CAMP

Report by Aida Gareyeva

CAMP is the Central Asian Mountain Programme, with the mission of sustainable development of mountain regions in Central Asia.

CAMP - WOCAT tasks:

- To present WOCAT in Central Asia (CA);
- To find partners for WOCAT from local organisations as focal points of WOCAT;
- To support WOCAT's focal points in CA in the beginning, as the governments cannot support such programmes;
- To find ways for dissemination of WOCAT experience to the farmers.

What was done:

- CAMP translated QT and QA to Russian and updated them;
- CAMP organized 2 WOCAT workshops (in Bishkek 2000 and Dushanbe 2001);
- CAMP built 3 working groups in Tajikistan, Kyrgyzstan and Kazakhstan, and involved 3 local organisations (Agronomy University (Kg), Soil Institute (Tj), Geographical Institute (Kz));
- CAMP started a project with collection 40 technologies and approaches in 3 countries, using short questionnaire forms in 2003 (selection of questions from QT and QA);
- CAMP developed a design for presentations of this technologies for A-0 posters.

Plans:

- An exhibition (40 A0 posters) will be opened from 12 –15th November in 3 countries;
- During this exhibition CAMP will organize 2 trainings:
 - with RAS (Helvetas) - rural advisory service specialists
 - with students
- After the November exhibition a moving exhibition will be organized with working groups for each mountain alliance village (19 villages in CA), December 2003;
- 4 technologies will be documented comprehensively and filled in WOCAT questionnaires (3 from Tajikistan, 1 from Kyrgyzstan);
- All posters will be translated into English;
- Next year CAMP will work with on-farm researchers in Kyrgyzstan on the basis of WOCAT's database and CAMP collections of technologies;
- In Tajikistan this project work will be done through PAMS (NCCR), (including implementation activities of technologies described and evaluated by WOCAT).

1.3.15 Tajikistan

- We introduced WOCAT and some selected SWC technologies and approaches from Tajikistan in the Dushanbe International Forum of Freshwater;
- The Soil Institute and Agrarian University has coordinated the of WOCAT activities;
- Presentation and training: One day for students of Agrarian University and one day for scientists and extension workers of Soil Institute (jointly with WOCAT coordinator from CDE);
- Posters of technologies prepared for DOM VODI exhibition. Moving exhibition with 40 posters from Central Asia to Mountain Alliance Villages in Central Asia;
- Introduced WOCAT in DOM VODI.

Tajikistan plans:

- Document 3 QT and 1 QA to WOCAT (with support from CAMP);
- Try to find donors for documenting additional QTs and QAs (possible funding through NCCR PAMS, FAO, ICARDA, ?).

1.3.16 Kyrgyzstan

Report by Aibdubek Asanaliev

- 22 technologies/approaches (short version only) documented;
- Agreement with CAMP and definition of mandate;
- Moving exhibition with 40 posters from Central Asia to Mountain Alliance Villages in Central Asia.

Kyrgyzstan plans:

- To document 1 QT and 1 QA to WOCAT;
- To involve students (6) for data collection;
- To try to find donors for documenting QT and QA with WOCAT's help.

1.3.17 Kazakhstan

Report by Aigul Zhanserikova

- Reorganization of WOCAT activities in Kazakhstan;
- Assessment of current situation of land and water use in the field (agricultural land): list of most important current problems in the field of land use in Kazakhstan and identification of possible solution;
- Fundraising for WOCAT activity: Co-financing from foundation Milieukontakt, Oost-Europa (The Netherlands);
- Within WOCAT CAMP activity in Central Asia: Preparation of posters on technologies for DOM VODI (House of Water) / Moving exhibition;
- Preparation of PAMS proposal: Financing approved from PAMS;
- Conducting of seminar for popularisation of Soil and Water Conservation technologies and approaches: trained 20 participants of seminar (local farmers, institutions members).

1.3.18 Serbia – Montenegro

Report by Miodrag Zlatic

Review of planned activities

Continued search for donors for national programme

- National level: 3 contacts - 1 agreement with Ministry for Natural Resources and Environment (MNRE): funding of 1700 US\$;
- Contacted Ministry for Agriculture and Water Management: without answer;
- Contacted Federal Ministry for Science and Technology: stopped working;
- Contact with Heinrich Böll foundation: without answer;
- Contact with UNU (draft is in programme phase).

WOCAT promotion:

- Meeting with deputy minister of MNRE;
- Meeting with Heinrich Böll foundation;
- Promotion at IYM Conference in Belgrade in December 02 and promotion at WASWC meeting for Balkans in Sofia in July 03;
- Workshop was held in July 03 in Belgrade; possible one more workshop in Nis in November 03;
- Meetings with Water Management Enterprises "Erosion" in Nis and Valjevo were not realized (lack of funds).

Working on Questionnaires in South/East Serbia

- 5 Ts were realised from which 3 were filled in South Serbia and Montenegro;
- 4 communities were questioned in Southeast Serbia (QM): Vladičin Han (366 km²), Surdulica (627 km²), Vranje (860 km²) and Leskovac (1 024 km²) which in total is 2877 km²;
- We are still preparing maps;
- Brochure was not realized because of funding and shortage of data.

Examples on promotion of WOCAT

- WOCAT promotion at IYM Conference in Belgrade in December 2002

Key note speeches: Martin Haigh: «*Soil and Water Conservation in Mountainous Region: the Work of WASWC*»; Karl Herweg, Hanspeter Liniger: «*Soil Erosion Control – an Integral Part of Sustainable Land Management*»; Miodrag Zlatić: «*Economic and Social Aspects of Cooperative Venture of Mountainous Region of Porečje Vučje*»

During the conference a meeting of Mission and Vision of WASWC was held, emphasizing WOCAT being a good regional programme/project for future. It was proposed to discuss more about regional cooperation in the Balkans at the WASWC meeting for Balkans in Sofia, giving to WOCAT more attention. The product of the conference is a book with the proceedings. WOCAT figured prominently in the recommendations of the conference.

- WOCAT promotion at WASWC meeting for Balkans in Sofia (July 2003)

WOCAT was very dynamically presented at the meeting, with involvement of all participants. It was a continuation from the IYM Conference in Belgrade. Regarding Balkan countries it can be concluded that WOCAT is an ongoing programme in Serbia and Montenegro and that it is accepted to be regional programme/project by representatives of present countries.

Examples on conservation measures

- Vegetables intercropping (onion between paprika) / conservation tillage; location: Veternica watershed; village: Golemo Selo (South Serbia);
- Oblacinska sour cherry on level bench terraces supported by steep risers which are made of earth protected with grass banks; location: steep slopes of Igriste area in Veternica watershed (South Serbia); cooperation with state enterprise and private farmers;
- Terrace is also used as the way for tractors;
- Sour cherry on terraces made by private farmer on steep slope (in front) and blackberries (in foothill); location: Veternica watershed; village: Nakrivenik;
- Traditional Mediterranean terraces with the risers made of dry laid masonry; width of the terraces depends from the relief conditions amounting from several meters to several tens meters; location: village Sobajici (Montenegro);
- Revitalised old vineyard;
- Sorts of grape: Kratosija, Krsta, Zilavka;
- Crop rotation (wheat/cereals - maize - grasses/meadows) and contour tillage done by local farmers on their land; location: village Rusanj (hilly Belgrade surrounding - Serbia);
- Crop rotation: maize - high density seeding of cereals - plough land; location: village Rusanj (hilly Belgrade surrounding - Serbia).

Investigated districts

23 Jablanicki district:

- 23/1 Community Leskovac (1024 km²)

24 Pcinjski districts :

- 24/1 Community Vladicin Han (366 km²)
- 24/2 Community Surdulica (628 km²)
- 24/3 Community Vranje (860 km²)

1.3.19 SOWAP

Report by Godert van Lynden / Mike Lane

Project Objectives

The project "Soil and surface water protection using conservation tillage in Northern and Central Europe" (SOWAP) aims to overcome the constraints to adoption and implementation of soil and water conservation strategies by demonstrating practical and realistic land-use solutions. Specifically, the project aims to demonstrate:

- The viability and effectiveness of 'conservation oriented' arable land management systems in protecting soil resources and improving catchment water quality and promoting biodiversity;
- The environmental, ecological, economic and social benefits of 'conservation oriented' land use practices;
- The environmental impacts associated with "conventional" arable land use practices, where intensive soil management can lead to degradation of soil resources, water pollution, reduced biodiversity and less carbon sequestration;
- How an environmentally sound land use policy can be implemented, as recommended by the EU 6th Environment Action Programme and the EC Communication on Soil Protection;
- How a unique database can be disseminated successfully at the local, regional, national and EU level via workshops, multi-media, field visits, publications and the Internet.

Project Partners

SOWAP is a unique collaborative project, involving a wide range of institutional and professional backgrounds:

- Academia (KU Leuven, Cranfield, ISRIC; Hungarian Ac. of Science; Harper Adams Univ.);
- Non-governmental Organisations (RSPB, National Trust, FWAG, Ponds Conservation Trust, Allerton Trust);
- Industry (Syngenta, Vaderstadt);
- And most importantly: farmers.

What and where?

SOWAP is installing pilot sites in three countries initially: UK, Belgium and Hungary, Based on the principles of 'minimum-tillage' to promote better soil management. Investigated aspects are:

- Agronomic;
- Environmental;
- Economic;
- Social

Dissemination of results will take place through WOCAT, farmer networks and the SOWAP website <http://www.SOWAP.org>

Funding

- Primarily EU-Life/Environment and Syngenta;
- Secondary funding from each of the partners;
- Total: € 3M. for three years;
- WOCAT share: € 208.000

Who will use the outputs?

- Farmers: by demonstrating practical options, we can influence their decision making;
- EU and Government: by generating comprehensive data, we hope to influence future policies;
- Academia and NGOs: to develop understanding and stimulate new research.

WOCATs envisaged role in SOWAP

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

- Document different conservation tillage practices in N. and C. Europe mechanised farming systems, using the WOCAT methodology;
- Entering and managing data in the WOCAT database;
- Explore the strengths and weaknesses of these practices to assess their practicality for ordinary farmers and other land users;
- Assess the impact of conservation tillage practices on land and water resources;
- Assure data quality;

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

- Workshops;
- Reports and other publications;
- CD ROMs (1998; 2000; 2004) and Internet (through WWW.WOCAT.NET);

- Posters and presentations during international meetings;
- Audiovisual materials.

WOCATs expectations of SOWAP

1. To expand the global WOCAT database with European case studies (new agro-ecological and socio-economic environment);
2. To evaluate the effectiveness of selected SWC measures (minimum tillage in particular) in England, Belgium and Hungary;
3. To include European countries / institutions / companies / NGO's in the WOCAT Network;
4. Detailed documentation of SWC case studies in NW Europe (technologies & approaches);
5. Evaluation of selected SWC measures in England, Belgium and Hungary.

1.3.20 Switzerland

Report by Hanspeter Liniger

Through an MSc study at CDE by Nicole Güdel the WOCAT methodology was used to document and evaluate the impact, advantages and disadvantages of green cover for vineyard. The geography student used the WOCAT methodology in order to document and compare 3 different vineyard technologies:

- (a) tilling and leaving soil bare between the rows of the grapes which are up and down the slope,
- (b) having a green cover (again between the rows which are up and down the slope) and
- (c) having terraces.

This is done in 3 regions of Switzerland (Wädenswil at the Lake of Zurich, Twann at the lake of Bienne and in Salgesch in the Valais). The WOCAT Technology and Approach questionnaires were translated into German and farmers were interviewed. This method of comprehensively assessing the different aspect was appreciated by the farmers. The interviews of the farmers were complemented with interviews with experts and the consultation of the literature. Major issues are water competition and water stress, input (machinery, chemicals). Some specific measurements were made concerning soil organic matter and soil moisture and plant water stress. Final results are available and the student is defending her thesis in December. She is presenting one of the Technologies in the global overview (Green cover between the rows up and down the slope). (See WOCAT newsletter 7)

1.3.21 FAO-SNEA / North Africa

Report by Radisav Pavlovic (through email)

The NAFCAT developments were as follows:

Morocco

Two case studies have been prepared for insertion into the database. We might need some instructions in this regard, should they not already been available on the Internet. We have a team there who might do much more, and I make the due arrangements as soon as I get to Morocco, early next year.

Tunisia

Also here we have completed two case studies, ready for inclusion in the database. The lady who was busy with the matter went early this year abroad for training, initially for three months, and then extended till the end of the year.

Algeria

We introduced the WOCAT programme to some people there, and identified those would be starting the first work. I expect to finalize the arrangements during my next mission to that country, equally early next year.

1.3.22 IAEA

Report by Hanspeter Liniger (from WOCAT newsletter 7)

The First Research Co-ordination Meeting of the Co-ordinated Research Project "Assess the effectiveness of Soil Conservation techniques for sustainable watershed management and crop production using fallout radionuclides" was held from 19-23 May 2003 in Vienna.

Through the initiation of Felipe Zapata, an agreement was signed between the International Atomic Energy Agency (IAEA) in Vienna and WOCAT (CDE) such that WOCAT takes an active role in the above mentioned Coordinated Research Project (CRP). Hanspeter Liniger was invited to present the WOCAT activities at the first CRP meeting and to identify together with the 20 participants from 17 countries how WOCAT can be incorporated into the CRP. Over 15 projects presented their results in using fallout radionuclides (FRN) to assess the effectiveness of soil conservation, which according to the WOCAT experiences is a very much needed issue to be addressed by research since for many SWC Technologies the impact on erosion is not known.

WOCAT was assessed by the participants and the decision was made that the WOCAT method should be used by all collaborating projects in order to document, evaluate, monitor and disseminate the SWC technologies tested by the projects. This would allow the IAEA projects to present their SWC technologies and approaches in a standard way and share them within the WOCAT network. In fact, through the initiative of Felipe Zapata several presentations already used the WOCAT categorization system for the SWC Technologies. It was discussed that the additional information concerning the use and results of the FRNs could be added in a separate database that could be linked to the WOCAT database.

Opportunities for additional research collaboration were discussed within the frame of WOCAT and the NCCR programme on Research Partnerships for Mitigating Syndromes of Global Change (<http://www.nccr-north-south.unibe.ch/>) for Kenya, Ethiopia and Central Asia (see newsletter n° 7, report about the NCCR regional training course in Kyrgyzstan). The aim of this technical collaboration would be to apply the methods of FRN in these countries through the NCCR project in order to assess state and dynamics of degradation and effectiveness of conservation. Through the collaboration training would be provided as well as facilities for the analysis and interpretation of soil samples to assess erosion and sedimentation rates. Under the signed research agreement between IAEA and WOCAT, WOCAT will be again invited to participate in the next meeting planned for fall 2004. This collaboration opens a nice opportunity to include most recent research results and information about the effectiveness of SWC into the WOCAT database and at the same time to provide a useful tool for research and sharing of knowledge. For more information about IAEA and its activities related to WOCAT contact Felipe Zapata: F.Zapata@iaea.org

1.3.23 ICARDA (DRYCAT)

No information received so far

1.4 New initiatives

1.4.1 Bangladesh

Through the first training workshop at ICIMOD in March 03 Mr. Sudibya Kanti Khisa of the Chittagong Hill Tracts Development Board, Khagradari, Bangladesh was involved and he took the initiative to secure funding for a first training and introduction course for WOCAT in Bangladesh. The event is planned for mid March 2004 with participation from already experienced and trained facilitators from the ICIMOD countries and with backstopping from CDE.

1.5 Issues from the national / regional progress reports

- Additional Ts and As: most of the participating countries need to assess the quality and improve the datasets such that they can be added to the global datasets and presented online in the internet and on the CD-ROM version 3;
- Map progress: Philippines, Ethiopia, Serbia-Montenegro;
- Additional workshops and training: India, Ethiopia, Philippines, Serbia-Montenegro, Kyrgyzstan and Tajikistan, Tanzania;
- Good progress: Ethiopia, China, Philippines, India, Central Asia;

- Translations are major difficulty: they can be adding to the quality problem, and create misconceptions. Except for the three official WOCAT languages (F, E, S), which are supported by the WOCAT core group, translations into other languages should be done through the national and regional programmes. There is need for proper attention and sufficient care and funding concerning the language versions. It could spoil the reputation and the usefulness of WOCAT;
- WASWC is a major promotor of WOCAT;
- Emphasis on regional strengthening, however expectations of national initiatives towards the region need to be fulfilled;
- Use of WOCAT:
 - On farm experiments: Philippines, Kenya
 - In training / education: Philippines
 - Monitoring: Ethiopia
- Outputs:
 - Directly related to WOCAT, modified and remotely related to WOCAT: whatever is produced and making use of (parts of) WOCAT, please put also the WOCAT logo (after confirmation with the WOCAT secretariat) on the product, make WOCAT known even if we were not funding it.
 - If the WOCAT methodology has been used to produce new formats / outputs, the results should be made available to the WOCAT network: e.g. 1 page summary (South Africa) and posters (CA)
- MoU's are very important for some countries and help in the promotion and acceptance of WOCAT: e.g. China. Therefore, a special effort need to be made by WOCAT secretariat to make official MoU's with the collaborating partners. This should be a major activity for the WOCAT secretariat for 2004.



Romy Labios presenting strategies to address funding problems and to involve other countries in WOCAT activities in South-East Asia (Photo by Hanspeter Liniger)

1.6 Regional Group Meetings

- Discussion on problems and solutions within the countries;
- Discussion on how to make country and regional programmes more effective;
- Preparation of common presentation to plenary and 1-2 posters: major achievements, problems, solutions, plans (that are of interest for the other regions);
- Preparation of open questions where an answer is expected from the plenary.

1.6.1 South- East Asian Group

Jianqin Cai, Lies Kerkhoff, Jose Rondal, Romeo Labios, Yuji Niino, Samran Sombatpanit, Gudrun Schwilch

Issues (problems & solutions)	Strategies
Slow / non adoption of WOCAT in the national program(s)	Integrate WOCAT in the regular / national programs
Close minded in receiving / searching for innovations (e.g. Thailand)	Convince top management
Institutional commitment	How other countries will learn from the Philippines
Efficient networking within the region	Identify focal person / institution (FAO, ASOCON, ICRAF, ...?)
	Organize regional trainings on WOCAT
Involvement of other countries to WOCAT activities	Piggy back / ride on to international meetings / conventions on NRM
Funding	Develop program proposals – focus at farm level on the use conservation technologies
Potential funding institutions / agencies	ICRAF, FAO, UNEP, ADB, CDE / SDC

1.6.2 Central Asian Group

Roland Benson, Xu Feng, Aida Gareyeva, Abdybek Asanaliev, PB Shah, Sanjeev Bhuchar, Hanspeter Liniger

List of problems / weaknesses mentioned:

- Inadequate commitment by participating institutions;
- Adoption of WOCAT into country programmes is still weak;
- WOCAT tools not included in new project formulation;
- Inadequate technical support and training;
- No proper follow-up after training;
- Availability of material in local language ;
- Translation and language problems;
- Questionnaires are too long / too broad / time consuming;
- Sensitive questions related to wealth, income etc.;
- No documentation by farmers on costs / inputs / benefits;
- Few specialists familiar with WOCAT tool;
- Farmers reluctant to share information (Tajikistan);
- Lack of dissemination of WOCAT among farmers / users;
- Financial problems;
- Lack of cooperation with Government;
- Convince governmental institutions to use WOCAT tools;
- Lack of synergy between departments and implementing agencies;
- Responsibility for data quality assurance;
- Technical problems in opening QM;
- Limited inter project / regional / organisation sharing about WOCAT;
- Lack of information / knowledge about WOCAT;
- Difficult to cover different national contexts with a standardized approach;
- Not yet clearly visible how to use WOCAT for monitoring & evaluation and decision making.

List of strong points mentioned:

- Strong advocacy in dissemination SWC through WOCAT;
- Networking within and through WOCAT;
- Strong network at international level;
- Develop a country / region / world database;
- Participatory approach followed by WOCAT;
- WOCAT used as a tool within national networks (needs approval at national level (esp. China));
- Formal MoU at national level (China);
- More people interested in sharing knowledge at national / provincial level;
- Promotes interaction with farmers;
- Through documentation strong and weak points are seen;
- Document and disseminate farmers / users experiences;
- Through workshops able to communicate experiences;
- Involves multiple stakeholders;
- Serves as a good monitoring & evaluation tool;
- Governmental policy / decision makers showing an interest in WOCAT (India);
- Positive atmosphere for replication.

Solutions:

- National / regional programmes should use WOCAT to focus on country specific problems;
- Frequent exposure / exchange of ideas, expertise at national / regional levels;
- Strong networking at national / regional / global level;
- Technical support needs to be strengthened;
- Training programmes for skills development at the national level;
- Need to follow up on training ;
- Need for communication / networking among countries;
- More cooperation with different international agencies / organisations/ programmes at various levels;
- Need to convince other departments on use of WOCAT / training at national level;
- Highlight achievements of WOCAT at global level with donors;
- Fundraising at all levels;
- Develop joint proposals and present to interested donors (on a national / regional level);
- ICIMOD could take lead in the HKH region on quality assurance (with a possible involvement also in Central and South Asia);
- To organise more training for farmers using WOCAT tool;
- Improve / adjust QA's and QT's to local situations;
- Stronger emphasis on implementation strategies;
- Promote WOCAT through other media, like exhibitions, etc.

1.6.3 African – European Group

Rinda van der Merwe, Daniel Danano, Godert van Lynden, Miodrag Zlatić

Major achievements:

- New case studies documented and used for analysis and evaluation;
- Workshops, conferences, trainings (helped in quality control);
- Websites (e.g. S-Africa) / links / overview books;
- Networking (e.g. Serbia-Montenegro).

Problems:

- Funds;
- Awareness;
- Regional cooperation.

Solutions:

- Publicity through various media: newspapers / magazines / journals, TV, workshops, products;
- Strengthening regional cooperation through meetings and support of the WOCAT secretariat;
- Proposals for funding.

But how???

TOPIC 2 USE OF WOCAT

Rapporteur: Romeo Labios

2.1 Group work on the use of WOCAT

The group work on the “Use of WOCAT” looked at how and where WOCAT is being used or could be used, and came up with a concrete workplan for the taskforce.

2.1.1 Review on the use of WOCAT

Godert van Lynden (Moderator), Romeo Labios (Rapporteur), Gudrun Schwilch, Samran Sombatpanit, Daniel Danano, P.B Shah, Lies Kerkhoff, Aida Gareyeva, Murod Ergashev, Miodrag Zlatic

The criteria that can be applied when assessing the success of WOCAT are different for the levels of application:

At the global level

- Direct target groups for WOCAT at the global level are the national and regional institutions, hence requests from these is a yardstick for success;
- Various international and local institutions are using it as a tool, so they see it as useful;
- WOCAT has apparently found its niche in the regular Natural Resources programs of many international and national institutions;
- The recorded Website hits and requests for information through Email are also a certain indicator of success, though they need to be interpreted with care.

At the Regional/National level

- Application at field level: it is assumed that the regional and national institutions interested in (and applying) WOCAT are using this methodology to improve their work at the field level: if this has no positive impact why would they want to use it?
- In spite of a request through WOCAT-L for examples of direct impact of WOCAT at the field level, such direct examples are not yet abundantly supplied;
- It will also be difficult to make a direct link between success stories at the field level and the impact of WOCAT.

In Education and Research

- WOCAT is being used by various educational / scientific institutions for training as well as a research tool: AIT, CDE, KLV, UPLB, NCCR, Ethiopia, Serbia & Montenegro.

Review of the use of WOCAT based on the specific suggestions elaborated at WWSM7, Rome, 2002 (WWSM7 proceedings p. 46-48)

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. **Examples: Philippines, Nepal, Ethiopia;**
- An extension tool for the documentation, identification and transfer of technologies/approaches from one locality to another. **Examples: Philippines (production of posters based on WOCAT data and promotion of Natural Vegetative Strips (NVS)), Central Asia (production of posters for exhibitions and rural extensions), Ethiopia;**
- A research tool for identifying knowledge gaps and key topics requiring research investigation; **Examples: NCCR (Central Asia), Ethiopia;**
- 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. **Examples: Philippines;**
- As educational data resource or for awareness raising: **Examples: CDE, NCCR, Serbia & Montenegro, Ethiopia, AIT, UPLB;**
- As a tool to influence policy/decision makers. **Examples: Philippines, Ethiopia, China.**

2.1.2 Suggestions Raised

- Organize a workshop for multi-level stakeholders at the regional level to discuss and present feedback on the use of WOCAT at the various levels;
- Identify focal institutions to serve as a regional secretariat for easy dissemination and retrieval of information;
- Look for more international linkages, e.g. UNCCD, OECD, etc.

Most suggestions in the Rome Proceedings with respect to ensuring increased use of WOCAT for extension, research and educational purpose have been partly addressed and/or are ongoing. A few issues remain and are taken up by the new task force, as summarized in the ToR below.

2.1.3 Terms of reference (TOR) for the taskforce

Role of taskforce	Target date	Working time	Responsibility TF lead: G. van Lynden
Review and reassessment of target groups using the previous WWSM proceedings	End of Nov 2003	3 days	
Reviewing / reassessing the objectives, content, methods and target participants of recent WOCAT training activities	End of Dec 2003	17 days	
Development of strategies in promoting use WOCAT particularly as field appraisal and evaluation tool	End of March 2004	14 days	ICIMOD, DANIDA-India, Y. Niino, J. Rondal, R. Labios
Provide strategies on feedback mechanisms	End of May 2004	14 days	ICIMOD, Berhanu Fantaw, Xu Feng,

2.2 Problems and solutions towards implementing / using WOCAT (survey): 8 key questions

From the country presentations and the regional group work reports 8 key questions for the implementation and use of WOCAT at the regional and national level have been identified which need to be addressed. In the following, for each of the key questions the problems and proposed solutions are listed:

1. Are you and your collaborating institutions convinced that WOCAT is useful?

Problems	Solutions
<ul style="list-style-type: none"> - Funding source not convinced (RSA) - Tajikistan no problem, for Central Asia it is difficult to convince governmental institutions (CA) - Not fully, less exposure (ICIMOD) - Some collaborating institutions may be somewhat convinced, but they have not put much effort in implementing it (WASWC) 	<ul style="list-style-type: none"> - Orientation workshop for project staff (India) - Participation in Regional Meeting proposed in March 2004 at ICIMOD in Nepal (India) - Produce outputs for ground level use (RSA) - Exhibitions in Tajikistan, Kyrgyzstan, Kazakhstan (CA) - On farm research in Tajikistan and Kyrgyzstan (CA) - Training workshops in Kyrgyzstan and Tajikistan (CA) - Organize a national workshop / training if funding is available (Philippines, BWSM) - Dissemination of results, products. More training courses – regional + national (ICIMOD) - Show examples of successes (WASWC)

2. Is there sufficient awareness within countries / regions / relevant institutions?

Problems	Solutions
<ul style="list-style-type: none"> - Awareness within the country needs to be improved (India) - Inadequate promotion work (Ethiopia) - There is not enough awareness among ministries (SMN) 	<ul style="list-style-type: none"> - WOCAT workshop at the state level (Karnataka) with the Government (India) - Networking with other WOCAT partners within the country (India) - Enhance promotion among potential collaborating institutions (Ethiopia)

<ul style="list-style-type: none"> - WOCAT not being incorporated in ongoing programmes makes it difficult (RSA) - Not enough awareness (CA) - Lack of funding to conduct information drive (Phil, BWSM) - Not very much (Phil, UPLB) - No (ICIMOD) - There is some awareness of WOCAT in the region (WASWC) 	<ul style="list-style-type: none"> - Continuing meetings with ministries (SMN) - Cooperation with RAS (Rural Agricultural Service), trainings, exhibitions (CA) - More funding (Philippines, BWSM) - New version of CD-ROM should be available as soon as possible (Philippines, BWSM) - Workshops / training within the national & regional level should be organized; prepared proposal but difficult to find donors (Phil, UPLB) - Dissemination of results, products. More training courses – regional + national (ICIMOD) - Show examples of successes (WASWC)
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3. Is WOCAT incorporated in ongoing programmes / institutions?

Problems	Solutions
<ul style="list-style-type: none"> - Yet to gain acceptance as an M&E tool (India) - Lack of awareness about the tool (India) - OK at ISCW, but not at Department of Agriculture (RSA) - CAMP and NCCR (PAMS) only for 2003 (CA) - Funding is never enough (Philippines, BWSM) - Partly in R&D and education (Phil, UPLB) - No (ICIMOD) 	<ul style="list-style-type: none"> - Integrate WOCAT in the project M&E framework (India) - Trying to incorporate WOCAT with UNU project (draft preparation) (SMN) - Outputs will help to convince Department of Agriculture to incorporate in LandCare programme (RSA) - ICARDA in Tajikistan, NCCR (PAMS), CAMP (CA) - More funding to intensify WOCAT activities at the national level (Philippines, BWSM) - Need to get support from CDE and other member countries on the use of WOCAT in education (Phil, UPLB) - Discussion with partner institutions during training / workshops / visits (ICIMOD)

4. Who takes responsibility (for taking initiatives, running WOCAT, promoting, searching for funding, etc.)? Is this responsibility clear?

Problems	Solutions
<ul style="list-style-type: none"> - Who takes initiative and responsibility (India) - Leaders to promote WOCAT are lacking (India) - CAMP was responsible, but for the future it is not clear (CA) - Lack of adequate funding (Philippines, BWSM) - Searching funds is a problem so we are using our existing time / funds (Phil, UPLB) - Only in ICIMOD and Bangladesh, not clear in Pakistan, India and Nepal partners (ICIMOD) 	<ul style="list-style-type: none"> - DANIDA (Watershed Coordination Unit) takes initiative and contacts other agencies / Government for promoting WOCAT (India) - Request Government to fund WOCAT ICARDA in Tajikistan, national institutions in Tajikistan, Kyrgyzstan, Kazakhstan will take responsibility (MoU's) (CA) - Approach donors (Philippines, BWSM) - Running / promoting is done by national and regional institutions (Phil, UPLB) - Depends on the lead institutes (ICIMOD)

5. Is there sufficient funding / time allocation?

Problems	Solutions
<ul style="list-style-type: none"> - Adequate funds are not available (India) - Need exists for more funding (Ethiopia) - Funding is a problem because only small amounts available (seed money: 2700 US\$, Ministry for NP: 1700 US\$) (SMN) - No permanent financial support (China) - Funding for 2003 –2004 not sure (RSA) - CAMP supported with funding in 2003, but for 2004 the situation is not clear (CA) - Funding is a problem, time is on voluntary basis and part of institutional mandate (Phil, UPLB) - No (ICIMOD) - There is some funding or time allocation, but may be not enough (WASWC) 	<ul style="list-style-type: none"> - Request government and donors to fund WOCAT (India) - Project proposal for fund request to donors (Ethiopia) - Continuing contacts with local and foreign donors (SMN) - Not yet, just to try our effort (China) - New project proposal will be submitted (RSA) - National institutes will try to find funding, but they need support from MG, TF to develop proposals (CA) - Contact potential donors (Philippines, BWSM) - There should be a program proposal funded by international donors (Phil, UPLB) - Need to develop joint regional proposals (ICIMOD) - Provide more funding if available (WASWC)

6. Is there good collaboration between the different stakeholders at national, regional and global level and are there joint efforts?

Problems	Solutions
<ul style="list-style-type: none"> - Active collaboration is not materializing at different levels among various stakeholders (India) - Regional collaboration has been weak (Ethiopia) - Not very good at the global level (China) - CA is a beginner in WOCAT (CA) - Regionally there is very little collaboration, nationally there is collaboration (Philippines, BWSM) - Not very strong but we are trying (Phil, UPLB) - Not at global level (ICIMOD) - Not so good collaboration (WASWC) 	<ul style="list-style-type: none"> - Promote specific events (training, meetings, etc) at various levels (India) - Communicate and provide feedback via e-mail regularly among stakeholders (India) - Strengthen regional collaboration through proper communication and dialogue (Ethiopia) - More joint meetings at global level (China) - CA will be more involved in WOCAT (CA) - Contact regional organisations for possible linkages (Philippines, BWSM) - Active awareness and probation of MoU (Phil, UPLB) - Joint proposals might help (ICIMOD) - Show more examples of successes (WASWC)

7. Are the responsibilities at the global level and the national and regional level clear?

Problems	Solutions
<ul style="list-style-type: none"> - Further clarity is required. Roles and responsibilities are at present vague and unclear (India) - They are not clear at the government / ministry level (SMN) - Not clear (CA) - Regional collaboration does not exist (Philippines, BWSM) - Not at national level (ICIMOD) 	<ul style="list-style-type: none"> - Clarity should be achieved in meetings / workshops at various levels (national/regional/global) (India) - More meetings with ministries (SMN) - WOCAT promotion through media (SMN) - A willing regional institution should be approached to coordinate and fund WOCAT regional / national initiatives (Philippines, BWSM) - At national level more efforts are needed (ICIMOD)

8. Is networking (emails, workshops, TF) satisfying?

Problems	Solutions
<ul style="list-style-type: none"> - Needs to be improved (India) - Communication problems: language (China) - There are difficulties in national institutes with computers, emails: they are not enough available (CA) - Members do not always respond to email (Philippines, BWSM) - No (ICIMOD) - Face to face meetings are essential (WASWC) 	<ul style="list-style-type: none"> - Promote specific events (training, meetings, etc) at various levels and communicate and provide feedback via e-mail regularly among stakeholders (India) - Training programs (China) - Fund raising (CA) - Commitment is important (Philippines, BWSM) - People are required to be followed-up (ICIMOD) - Some funding allocated (WASWC)

Summary statistics

Issue	is a problem	is no problem
Convinced that WOCAT is useful?	2	11
Sufficient awareness?	6	7
Is WOCAT incorporated in ongoing programmes / institutions?	5	8
Who takes initiative / responsibility?	8	7
Sufficient funding / time allocation?	12	3
Is there good collaboration – are there joint efforts?	11	4
Responsibilities at global and reg. / nat. level clear?	9	4
Is networking (emails, workshops, TF) satisfying?	7	9

The summary shows that WOCAT is generally seen as useful and that there is generally good collaboration. However, the awareness on the use, the incorporation into existing programmes, responsibilities and networking needs to be improved. A major problem is seen in the insufficient funding and insufficient responsibilities to identify funds.

TOPIC 3 QUALITY ASSURANCE

Rapporteur: Romeo Labios

3.1 Improving WOCAT Data Quality - Some Observations and Suggestions

Report by Malcolm Douglas

Introduction

WOCAT has an international standardised methodology, involving a set of three comprehensive questionnaires, for the documentation and evaluation of individual SWC technologies and approaches, including their area coverage. It has also created, and maintains, a global database system for the storage, retrieval and dissemination of the documented information. Currently the database contains 117 QTs from 15 countries and 69 QAs from 12 countries.

Recent WOCAT workshops have expressed concern over data quality control when completing individual QT and QA questionnaires. For instance feedback from the second Indian WOCAT Workshop in 2002 noted that *"the QTs are of little if any use, lacking vital details, classifying the technologies wrongly, and being inconsistent in the technology"*. A recent detailed review of a selection of the QTs and QAs in the database, undertaken for the WOCAT secretariat, has confirmed that they contain major inconsistencies, contradictions and gaps in data. It is a major cause for concern that after 11 years of the WOCAT programme the database still contains very few accurately documented technologies and approaches. The problem of poor quality control has been further highlighted by the difficulty in finding enough summary descriptions, within the global database, of sufficient quality for direct inclusion in the WOCAT/UNEP overview book.

Lack of Rigorous National and Global WOCAT Quality Control Systems

One of the key reasons for the poor quality of the data is that most of the countries and institutions participating in the WOCAT programme have failed to put in place any quality control systems for checking their accuracy and completeness. Completed QTs and QAs are typically sent direct to the secretariat in Bern without being reviewed in-country. The WOCAT secretariat has also not been in a position to undertake any rigorous quality control due to insufficient manpower (none of the staff are full time) and insufficient first hand knowledge of many of the technologies and approaches documented to date.

There is a critical need for the participating countries and institutions to take primary responsibility for ensuring quality control for all the QTs and QAs that their SWC specialists document and evaluate. There should be no more unscreened QTs and QAs sent to the WOCAT secretariat. Instead each country should identify a small group of national experts, with a broad knowledge and practical experience of the various technologies and approaches used for SWC purposes, and to arrange for them to take on responsibility for reviewing all the QTs and QAs completed by SWC specialists within their country. This review should take place prior to the QTs and QAs being entered into a national WOCAT database, and in particular before they are forwarded to the WOCAT secretariat. Following the review of an individual QT or QA the members of the expert group should liaise with the original author to: (i) clarify any apparent inconsistencies in the data; (ii) eliminate any misunderstandings with regard to particular sections in the questionnaire; (iii) correct any errors in the data recorded; and (iv) determine how best to fill in any data gaps.

Because of the time involved (it can take at least 1 day to properly review a completed QT or QA) it may be necessary to provide the members of the national WOCAT expert group with a small honorarium to compensate for the time devoted to WOCAT quality control. The necessary funds for this should be first and foremost sourced in-country, as very limited core funding is available to the WOCAT secretariat. The ideal situation is where such honorariums can be funded from the annual government budget allocation for SWC activities. However in many cases it will be necessary to seek funding for WOCAT activities as a component of a government and/or donor funded SWC related project.

There is also a need for a global quality assurance expert panel to assist the WOCAT secretariat in undertaking the final review of those QTs and QAs considered suitable for entry into the global database. The panel should comprise individual international experts with in-depth field knowledge of SWC in particular countries and regions of the world. Their task would be to assist the WOCAT secretariat in: (i) identifying any further remaining inconsistencies, inaccuracies and information gaps; (ii) clarifying issues that, while they may

be self evident at the national level, would not be familiar to the global database users from other countries or regions; and (iii) with language editing. Because of the time and commitment that is required such tasks cannot be expected to be undertaken on a purely voluntary basis hence there will be a need for the WOCAT secretariat to be able to make honorarium payments to compensate for the time involved. Funds for this will need to come from the core WOCAT operating costs.

SWC Specialists are Not Used to Critically Questioning What They Do

A key reason for the poor quality of many of the completed QTs and QAs is that very few SWC specialists are used to critically questioning, either the technologies they recommend, or the approaches they use to promote these technologies. Many of the authors come from cultural backgrounds in which there is no tradition of critically asking 'why' something is the way it is. Furthermore it is often institutionally difficult for individual SWC specialists to question the local relevance of nationally determined technical standards, or to challenge the 'expert' wisdom of senior officials.

Those SWC specialists that have been asked to fill in a WOCAT QT and QA, commonly see the task as a data collection exercise in which they are merely providing information for use by someone else. The assumption is that the technology or approach being documented has already been validated by others as 'successful' and it is not for them to prove otherwise. SWC specialists do not yet see using the WOCAT tools as a way in which they can evaluate, for themselves, the advantages and disadvantages of their own SWC technologies and approaches. Hence filling in a lengthy QT or QA is typically regarded as a chore, one that takes up a lot of time, rather than something that has direct benefit to their own work. The consequence is poorly filled in questionnaires with inconsistencies, contradictions and gaps in the data provided, as there is no personal incentive for the author to do the job well. Whereas the first parts of the questionnaires may be filled in reasonably comprehensively, often with additional comments provided, the latter parts are completed less thoroughly, with a tendency to just tick boxes and provide no additional comments. This is possibly one explanation as to why the important sections on costs and adoption are invariably weak and lacking in much needed data.

There is a need to play down the role of WOCAT as a global programme for sharing data. Instead more emphasis should be placed on encouraging SWC specialists to use the WOCAT tools to critically question and evaluate their own perceptions, technical knowledge and field experiences with specific SWC technologies and approaches (self evaluation). This has implications for how to conduct future WOCAT training. The focus should be less on teaching about 'correctly' filling in the questionnaires, and more on providing SWC specialists with the skills to evaluate the conservation and cost effectiveness of particular technologies or approaches, in which documenting the available data, using the WOCAT questionnaires, is an intrinsic part of the evaluation process. In such training the questionnaires would be introduced as tools to be used for collecting, recording and analysing data in a systematic and standardised manner. Through using the WOCAT tools, to get what the authors would regard as a valued end product for themselves, it should be possible to improve the quality of the data submitted to the WOCAT global database.

Some General Reasons for Poorly Filled In Qs

From a review of a sample of completed QTs and QAs it would appear that there are a number of common reasons why many of the completed Qs have inconsistencies, contradictions and gaps in their data. In particular it was noted that many authors:

- are unused to the need, and methods, for reviewing critically, in a systematic manner, their knowledge and experience of SWC technologies and approaches;
- have filled in the questionnaires on their own, without consulting and reviewing their findings with other experts;
- have undertaken the work as a desk top exercise with limited, if any, field verification and discussion with the land users;
- have made limited use of secondary data sources (e.g. project documents and technical manuals) for documenting and checking the technical specifications, costs and benefits, of particular technologies and approaches;
- have failed to recognise, and challenge, their technical preconceptions and biases, hence assumptions about the problems being addressed may be wrong, and likewise they may be wrong as to their assessment of the effectiveness of the technology or approach being documented;
- are guilty of automatically assuming that once a technology and/or approach has been implemented, the land degradation problems will have been controlled, however this may be >wishful= thinking and all too often no hard data is supplied to back up such a belief;

- have a poor understanding as to how land degradation processes actually operate, under specific local conditions, this may lead them to mis-diagnose the nature of the problem and therefore make incorrect assessments as to the on-site and off-site impact;
- tend to write generalised descriptions that could fit several similar technologies rather than provide a detailed description specific to the technology being documented;
- describe the characteristics of a technology in terms of what it does (reduce erosion) but fail to give adequate details of its technical specifications leaving it unclear as to how it performs this function;
- commonly fail to differentiate between the characteristics of the wider area in which the technology users are operating, and the conditions specific to the sites where the technology is adopted;
- while happy to tick the square boxes, or give a ranking in the circular ones, rarely fill in the comments section - thus no explanation or justification is provided that would enable the database user to have a better understanding, and more confidence in, the tick or ranking;
- rarely provide a detailed breakdown of the costs, and with many key cost elements missing, give a false impression by underestimating the actual costs;
- due to a lack of hard data, are reduced to guesstimates of primary production and yield increases, which means that little confidence can be attached to their economic analysis and estimates of financial benefits.

Specific Comments on the QTs

The report by Malcolm lists also a multitude of specific comments on questions or sections of QT and QA. These are presented under Annex 2, page 80

3.2 Group Work on Quality Control

During the presentations of the taskforces and the previous group work several issues for group work on quality assurance were highlighted:

- Why quality control? For whom?
- What recommendations → different types?
- Is there need for training on quality assurance?
- Do the WOCAT methodologies / tools need to be further improved to get better quality data?
- Which are problems caused by translation?
- What should be done at the global and regional / national level?
- Who takes responsibility?
- Which are follow-up needs?
- Need for taskforces (global, reg/nat): What? How? When? Where? Funding /time availability?

3.2.1 Group work report

Roger White, Hanspeter Liniger, Joe Rondal, Yuji Niino, Jianquin Cai, Xu Feng, Abdybek Asanaliev, Roland Benson, Sanjeev Bhuchar, Rinda van der Merwe

The discussions addressed **minimum data requirements** (shortened questionnaire). Most thought this is a good and practical idea. Dr. Asanaliev from Kyrgyzstan explained how they have developed a 21 page mini WOCAT questionnaire that covers the issues they consider to be most important. Hanspeter reminded the group that the shaded questions on the QT were considered to be mandatory. All shaded Qs are used to produce the 4 page summary and are needed for first evaluation. According to all the persons and institutions involved in the development of the questionnaires these were the issues of very high priority and thus should be provided. However the full information from the Qs would be needed in order to be able to implement a technology or approach.

Is **quantitative data** really necessary? Is it available? Do we have the confidence to put numbers in the answers to many of the questions (e.g. what is the locally acceptable level of soil erosion)? How do we present the information? With gaps?

All present felt there was a **need for flexibility** to adapt to local situations. But in general we all felt that we should stick to the questionnaire and accept gaps.

There was also a need to provide **feedback to farmers** who were spending a lot of time to complete questions. They should see results.

The question of '**for whom**' came up throughout the discussions: in summary we are the customers for the WOCAT questionnaires and we should be allowed to modify them to suit our needs, as we collect the data for our use. From the point of view of exchange and sharing of data, there is need to use as much as possible a common method and the same database structure. Therefore, any major changes made should be reported to the WOCAT secretariat in order to keep track of changes or to improve the methodology.

An only secondary use (from our perspective) is for global mapping. Of course it helps us if WOCAT is promoted with good examples and WOCAT has a good reputation.

Training is also needed on how to analyse the data and fill in the information. An "idiots guide" to economics would be useful for the section on figures. Also refresher training and trouble shooting (with WOCAT core group and MG members), which could be added on to the annual steering meeting, and going through the questionnaires for clarity (with Gudrun and Mats).

ICIMOD would host a regional meeting in Kathmandu in March, with one resource person from the MG. ICIMOD would cover travel costs for one person from China, one from Southern India and one from Central Asia, as well as its current WOCAT mountain group. We would hope to see how a **regional group** might develop. Maybe the SE Asia group could approach ICRAF (which expressed interest in Nairobi) or maybe IIRR to help as a regional centre?

It emerged that some **recognition of WOCAT outputs as peer reviewed paper equivalents** and thus academically acceptable and for CVs would really help all participants. Researchers need papers. Can this be formalized? It would be a big step forward. What is the process to get this approved as peer reviewed: Is it sufficient to have the ISDN-ISSN number on the CD ROM? How to do it on the Internet? Or are printed versions needed?

Follow-up actions: ICIMOD to follow-up through R. White

The region could play a role in sharing **review of QTs** etc. Please note that it is "review" rather than "quality assurance". But how can local institutions without funds get peer reviewed QTs? It has to be between WOCATeers.

The urgency to document knowledge before it is lost was also highlighted.

Translation is an issue - both quality and cost. For quality a local glossary should be developed. Translators with subject matter experience are rare and often expensive. Local examples on the explanation pages should also be added to the QTs etc. for local use.

Follow-up action: Malcolm Douglas's paper was reviewed in detail. A mini task force with people who had used QTs should be set up, being aware that **revision** (of Qs) on wording, explanations etc. are not the same as revisions that mean a change in the data and database. This mini task force consists of Rinda van der Merwe, Samran Sombatpanit, Gudrun Schwilch, Romy Labios. They will meet before the end of the workshop. Note that in Rome it was decided to have no further revisions...!

Roger will lead a **taskforce on regional issues** and will present it to the first Asia regional meeting in February, incorporate further comments and then circulate to all. Let us hope RELMA will take the lead for Eastern Africa.

All task force members should meet for two days before the next steering meeting (WWSM) to agree upon and refine their work.

TOPIC 4 DIGITAL PRODUCTS AND CD-ROM v.3

Rapporteur: Gudrun Schwilch, Lies Kerkhoff

Group work on:

- a) CD-ROM v.3 and website: testing and feedback (Mats Gurtner);
- b) Databases: feedback, suggestions for improvements, bugs, problems (Rinda van der Merwe);
- c) On-line training courses: needs and options (Gudrun Schwilch).

Aim of the group work: to come up with concrete plans / ToRs for the task force

4.1 CD-ROM v.3 and website

Samran Sombatpanit and Roger White checked the CD-ROM and they found it more or less okay, except for a few minor adjustments, which will be corrected by Gudrun Schwilch after the WWSM. They stated that it had become really user-friendly and that it is the most powerful tool for WOCAT so far.

For the website it was wished that more articles/publications and books should be mentioned, which can easily be done if people send them to the WOCAT secretariat. WOCAT in Education should be updated, as it would be a useful part. The Tips&Tricks page was mentioned to be very helpful as well and could be complemented by a FAQ (Frequently Asked Questions) page.

Follow-up for taskforce?

The CD-ROM is okay after inclusion of above-mentioned minor points, and needs no further task force. However, more people still need to test the CD-ROM and explore possible problems in using the CD such that the user-friendliness and the performance can be assured.

4.2 Databases

Rinda van der Merwe, Miodrag Zlatic, Romy Labios, Abdybek Asanaliev, Murod Ergashev and Sanjeev Bhuchar have tested the databases. They didn't find problems except that for the map database, the software MapObjectsLT needs to be installed (which can be requested from the WOCAT secretariat). This is often unclear and should be mentioned clearly in the database manual, and through a clear error message in the database. The new image database (the WOCAT album, which is based on the MyAlbum software) was not known yet and introduced later during the workshop on Saturday evening.

Follow-up for taskforce?

No taskforce but a test group is needed to provide feedback to the developers of the digital products.

Database test group: *Rinda van der Merwe, Samran Sombatpanit, Joe Rondal and Godert van Lynden*

4.3 On-line training courses / e-learning

Group members: Xu Feng, Cai Jianqing, Gudrun Schwilch and Lies Kerkhoff

Gudrun presented the ideas developed so far on on-line training for WOCAT:

Where does the idea come from?

- Request for Internet based graduate course on Soil Erosion Management by Hans Schreier, University of British Columbia, Canada, 2001;
- Similar requests by subsequent email-discussion on WOCAT in education;

- Learning about MyNetWorks.org which have the professional knowledge and are searching for subjects (<http://www.mynetworks.org>);
- Upcoming ideas about using e-tools for the WOCAT network to facilitate/enhance learning and exchange about Soil and Water Conservation.

First ideas for WOCAT, where e-learning tools could be used:

- „How to start WOCAT?“ as small on-line course:
Introduction, what does WOCAT offer, getting to know other initiatives, learn about how to start a new initiative, discuss general questions (inter-active, personalized);
- „Workshop“ for WOCAT facilitators:
Single modules on certain topics, to be used as further training;
- „Chat of the month“:
Presentation from a WOCAT activity and discussion at a predefined time;
- Graduate course for students:
accredited course for Universities about Soil and Water Conservation.

Possible advantages:

- Facilitates exchange through the Internet;
- Is more interactive than a mailing list;
- Fast access, as the websites are small;
- Away from a pure database to a community / network (personalized);
- Builds on a media-didactic design, i.e. stimulates learning instead of only providing information;
- Computer offers unique opportunities for visualisation and simulation, and the chance of a cooperation of learners at different places with different backgrounds.

Possible disadvantages:

- Excludes those without access to the Internet;
- Needs basic knowledge about Internet (incl. chats, discussion groups, etc);
- Chats have to be conducted according time zones.

The group raised the following issues:

1. There are advantages to try it out in Asia, as such courses are considered very important in China and there are possibilities to try it out in a language other than English. Computer access is not a problem in cities in China and India. There are all kinds of new IT technologies being tried out in Asia, including portable public Internet access in India (seen on Discovery TV channel).
2. The MENRIS programme of ICIMOD has experience with distance learning and IKM has experience in using many kinds of media to disseminate scientific information, they might also know whom to contact for funding of such things.
3. “Main need is for a working on-line community.”
How active is WOCAT at the moment to enhance a working on-line community with true interactions between its users? There is for example no experience whether any authors of Technologies/ Approaches are asked about their data entries (e.g. further details) or whether they are given any feedback by users of the databases. How realistic is it that WOCAT can provide a working on-line community? If the community would interact more effectively, this may boost the feedback for authors and provide new insights in this. Chatting and emailing can be done from centres as well as regionally.
4. How useful is e-learning to replace existing WOCAT training courses and save costs on those? Nothing can replace Hanspeter Liniger as a source for inspiration and motivation. This is one of the most important elements that make the trainings successful.
5. Demand for distance learning is there, especially from people who can't access other courses. However, potential users of distance learning courses in Asia are young people who know about computers and English and who are interested and/or experienced in SWC or agriculture.
6. Funding:
 - can be found for distance learning less dependent on course subject
 - is needed for course development as well as maintenance
 - basic set-up through MyNetWorks.org is already 20.000 US dollar, which does not include WOCAT working time or costs of running the course

How to proceed?

We should focus on a course for topic matter specialists and not university students. It would also be useful for training of WOCAT trainers, because it would save money on travel and it would also be useful when WOCAT people leave their positions and their successors need to gain their knowledge.

We should try to see if we could develop a realistic funding proposal. There are people around with more experience on developing distance learning projects and we should take their advice.

A **task force** on online-learning should elaborate various proposals based on the following options:

- “Chat of the month”;
- Starter (introduction to WOCAT);
- Training module for WOCATeers;
- University graduate courses.

Task force members: *Romy Labios, Lies Kerkhoff, Roland Benson (and partly Gudrun Schwilch)*

4.4 Plenary discussion:

Two main issues were discussed:

- Feedback in general and difficulties obtaining it;
- About possibilities for online learning.

Feedback in general

The usefulness of e-learning features was questioned, since WOCAT does not even get substantial feedback through its mailing list WOCAT-L. A suggestion was to send reminders to provide feedback every three months. The basic problem is that people are very committed and very busy. It is easier to describe a problem in a meeting than in writing through email.

People might be reluctant to provide negative feedback and to report when they have problems. Everyone should understand that Wolfgang Prante and Gudrun Schwilch are ready to solve problems and would really appreciate to hear who uses the products and what problems the users have.

There were several comments on why people do not provide feedback to emails. It is a time consuming activity and the benefit is not always assured. Bug solving and trouble-shooting may be difficult through email.

Follow-up action: There was no solution found for the feedback issue except to encourage people again and again to provide feedback as a contribution to the improvement and the use of WOCAT.

E-learning

To develop E-products for dissemination of technologies would fit within the mandate of an institution like ICIMOD and skills would also be available. Even if the E-products are developed, the issue remains whether WOCAT can manage to provide/ organise the time input required while the product is being used.

This all depends on which products are developed. There was a discussion on how we could make E-learning products work. The example discussed first was the “chat of the month”. This might be tried out through an existing chat-box, which is not especially developed for WOCAT. But chatting on complex issues takes much more time than talking, which might take the momentum out of the discussion and makes it less spontaneous, which is why people quit. It can also be expensive if Internet access is through a normal telephone line. Alternatives are a mailing lists or video conferencing which is more like a real meeting.

E-learning or E-meeting products could be more useful than mailing lists to get feedback on issues, if a certain time / date is allocated to WOCAT work. E-learning should be given a try, because we should keep up with new developments.

At the end of the discussion the benefits of e-learning were still unclear, especially because there are so many more urgent WOCAT activities left to be done first.

Follow-up action: The idea is that Romy, Lies and Roland will explore experiences of other e-learning product users and find out about benefits and disadvantages. If there is potential, they will try to develop proposals for funding. They will look among a broad range of donors, that don't necessarily have to be interested in SWC.



Late night session with the team from Central Asia (Photo by Hanspeter Liniger)



Group work on the use of WOCAT (Photo by Hanspeter Liniger)

TOPIC 5 MAPPING AT NATIONAL AND REGIONAL LEVEL (QM); WORLD MAP

Rapporteur: Daniel Danano (and Hanspeter Liniger, Gudrun Schwilch, Godert van Lynden)

Feedback and progress for both the World map and (sub) national or regional mapping had been below expectations. A clear exception being the Philippines, which has used the ASSOD (physiographic) base map for mapping of SWC in about 2/3 of the country (Luzon and Mindanao) and has plans to finish the remaining third within the next year. Some progress was also mentioned in Ethiopia and Serbia/Montenegro.

Regarding regional maps, what has been achieved so far is not satisfactory. No regional maps have been prepared or there is no effort being made along this. The Email group established during the Rome 2002 meeting was unable to discharge its responsibilities in this connection. There was not much response to the Emails sent out.

The World Map initiative, which was launched after a request by the National Geographic Magazine a year ago, had been announced through the WOCAT mailing list, as well as during the previous WWSM, where the participants showed considerable interest. Yet promised or spontaneous contributions remained low (in spite of reminders) and the meeting was invited to make suggestions for enhancement.

5.1 Group work

Yuji Niino, Joe Rondal, Roland Benson, Daniel Danano, P.B. Shah, Aida Gareyeva, Hanspeter Liniger, Godert van Lynden

Hanspeter Linigers comments to topic 5

- Many people do not know how to properly use maps;
- Maps are political and send messages, they should therefore contain the right messages;
- Is the difference between the QM and the global map clear?

What is the target group:

- a) for the **global map**? broad interested public (e.g. National Geographic Magazine, Internet requests), politicians, decision makers, development agencies. It should help to raise global awareness on the importance of SWC and highlight the achievements made so far in SWC.
- b) for the **national / regional map (QM)**? National planning, basis for donors (to identify intervention areas, to document and monitor progress), and for research to identify knowledge gaps.

The group agreed that the **global map**:

- a) is a top priority and needs a deadline for a coverage.
- b) should be pushed and supported by the national, regional and global level. But how?
- c) would raise the awareness / popularity for WOCAT and for SWC. And also for the work of the WOCAT collaborators?

We should provide an example for a filled in country contribution. Which country? Or should we put on-line all the submitted country contributions?

The group work was also used for a general presentation of QM since many group members were not very familiar with it.

5.2 Next steps

- Use WASWC to invite contributions to the world map: next newsletter to have 1 page introducing the global map and inviting members to contribute (Samran Sombatpanit);
- An announcement on the World Map through the Mountain Forum was seen as an option too (Godert van Lynden);
- New promises for contributions were made by all participants;
- QM: What is the role of QM and what are follow-up activities? This should be addressed in Topic 7: national regional planning;
- Various participants announced plans for applying QM at varying scales (e.g. ICIMOD for their PARDYP sites in Nepal, India, Pakistan).

5.3 Plenary discussion

World map:

- Nature conservationists show flowers / animals which will be eradicated, with the aim that this appeals to people. WOCAT should use the world map (including attractive photographs and short descriptions of technologies and approaches) for the same purpose: attract peoples attention to soil and water conservation.
- The map currently displayed on the WOCAT Website is only an example of what the map could look like, and it is not reflecting the actual situation (this caused misunderstanding), nor the final layout / legend. It only shows one or two activities from the countries as examples and not really the achievements of that country. The case of Ethiopia was raised where only one activity out of many other important technologies is shown on the map. In fact it should even be an encouragement for people to send their contribution, in order to make the map more accurate.
- It was pointed out that the requested contributions could be made relatively easily and rapidly by someone (or preferably a group of experts) with an overall knowledge of the SWC situation in the country, e.g. in a half-day meeting
- It was finally agreed that each country will give the feed back as soon as possible so that the necessary corrections may be made.
- Information from other countries is needed too, not only from WOCAT countries
- There will be a UN Mapping Committee Meeting in Bern (8 March 2004). ICIMOD will participate. WOCAT should consider presenting the WOCAT mapping activities.

Mapping at regional / national level (QM)

- In the view of some collaborators mapping is very time consuming;
- To get the base map for QM in digital format can create difficulties (e.g. SOTER);
- Mapping sometimes requires permission from the government to produce maps (e.g. Nepal);
- P.B. Shah suggested to have a mapping subcommittee at WOCAT global / core level. They should incorporate any raw maps (on land use, soil degradation, conservation etc.) into the WOCAT maps. This suggestion was rejected, as the selection of the most important SWC measures needs to be taken at national level, not at global level.

TOPIC 6 WOCAT ORGANISATIONAL AND FUNDING ISSUES

Rapporteur: Sanjeev Bhuchar

6.1 Management Group

6.1.1 Operation of the WOCAT Management Group

Discussion paper from Godert van Lynden

As far back as the 5th WWSM in Wageningen (2000) the operation of the Management Group was critically reviewed:

Problems listed

- Communication between MG and national/regional nodes is not enough streamlined;
- MG members do not have a specific responsibility relating to regional reporting / contact / encouragement; they do not sufficiently encourage TF's to work;
- MG members do not contribute equally; some members are in MG 'ex officio', delegated by their institutions;
- MG will have problems to handle all requests in the future, due to limited working time and unrealistic commitment;
- There is sub-optimal communication, partly due to lack of possibilities for physical meetings.

Possible solutions to address these problems

- Enlarging the number of MG members was discussed but not seen as a feasible solution;
- Assigning specific responsibilities to MG members was considered necessary; this would have to be done by the MG in an internal process;
- MG members are expected to be the leading motivators in WOCAT, with a high commitment; particularly in regions where a WOCAT programme is initiated;
- MoUs will have to be developed between WOCAT and national/regional institutions that should take a leading role. Within the MG, Godert van Lynden is working on standard MoUs that can be adapted to specific conditions and requirements.

These solutions have either not (or only partially) been applied or have not worked. In current practice Hanspeter Liniger and Godert van Lynden are the persons from the MG most involved in the coordination / management of WOCAT on a daily basis, with a great amount of assistance from Gudrun Schwilch, involving frequent exchange of ideas, proposals and decisions. This is partly explained by the fact that all have a significant part of their (paid) working time (around 40%) assigned to WOCAT. Yet there is less interaction with the other MG members than desired and the many tasks for WOCAT could be distributed among more people. It appears that the commitment of the (other) MG members is not reflected in their time spent on MG issues. This is not a satisfactory situation and there are different options to solve this:

1. There is an acting management team with Hanspeter as coordinator, Godert and Gudrun as "members" or with other title (we have been functioning this way so far), and the other MG members remain active as "Board Members". Responsibility for major decisions will be shared among the entire MG, but we do expect an active reaction in those cases. Problem: where to draw the line and who feels involved and responsible?
2. All correspondence concerning WOCAT management (and thus the MG) is circulated and comments from who ever reacts will be compiled and support decisions. No reaction (let's say within two weeks) will be taken as agreement.
3. All MG members need to be consulted and all decisions be taken jointly. Problem: time and not very practical (always need feedback from seven people).

Mails sent by Hanspeter and Godert, e.g. about the SARS problem related to the workshop venue, or about this very issue sparked disappointingly little response, by just one or two MG members. During the WWSM7 in Rome responsibilities for different task forces were assigned to individual MG members and this has not had the desired effect (see discussion paper on task forces). The same applies for the allocation of regional responsibilities – though this was not sufficiently reflected in the proceedings.

It appears that either expectations of the role of the MG members should be down tuned (resulting in a more centralised management!) or that commitment of MG members and their institutions should be higher and fixed in a MoU, which clearly allocates a certain amount of working time of the MG member to WOCAT MG work. The institutions might be expected to fund this time out of their own sources, if they attach real value to being represented in the WOCAT MG.

Additional physical meetings might also improve the effectiveness of the MG but only if Email contact is already functioning. A modest budget should be set aside for this.

6.1.2 Group work and plenary discussion

Sanjeev Bhuchar (Rapporteur), Joe Rondal, P.B. Shah, Yuji Niino, Cai Jianqin, Feng Xu, Hanspeter Liniger

Group discussion on tasks, funds and operation of the WOCAT Management Group.

Effectiveness of communication – restructuring of Management Group

An important issue is the current effectiveness of communication. Complaints are that there is a very low response to emails sent to the WOCAT management group members. To increase the effectiveness of communication between the members restructuring of the Management Group is suggested. A proposal of restructured Management Group is presented in chapter 7.6.

At regional level, heads (instead of the collaborating individuals) of institutions may be appointed as members of the enlarged MG, as this raises the importance of WOCAT. These heads of institutions can in their turn appoint representatives of their institution who will actually perform the main tasks. These representatives should be constant (not every year a different representative). Discussions showed that not the heads of organisations but those actually involved in WOCAT should be nominated in the MG

The role of this enlarged MG will be to identify regional and national issues that need to be addressed and communicate these to the Core MG., who will identify the issues that need to be taken up by them and, when needed, will support in addressing the issues at nat./reg. level. The Core MG is responsible for finding core funding.

Plenary discussion

The regional representation in the enlarged Management Group may change over time according to performance.

MoUs need to be established for the Management Group member institutions. But MoUs alone do not guarantee active contributions, it needs the commitment of the institution and of persons. It was suggested that the MG work (as well as the TF-work) may need an extra MoU, as it does not give direct profit to the country / institution. But WOCAT would lose one of its strengths (as mention in the review by Michael Stocking) of being successful because of personal commitment and not because of official MoUs. It is not expected that people work on a voluntary basis, but with the support of their own institution or own funds. But a MoU may even help to find other funds. The establishment of further MoUs should be pursued.

In the case of the Philippines, the WOCAT activities are part of the regular activities of the involved institutions. Four years ago they invited all agencies within the government related to SWC to join the national WOCAT committee. The budget is meagre and there are no additional funds.

The idea of finding one single donor to fund both the global and the national level activities and to overcome the problem of many donors financing various levels of the network, does not seem to be realistic.

The MoU of China (SWCMC) serves as an example for others. Many countries express their wish to sign a MoU with WOCAT.

6.1.3 ToR for the WOCAT Management Group (MG)

A: core MG
B: enlarged MG

1. **Technical** responsibility

- Coordinating development and functioning of tools and other technical products / outputs (A/B)

2. **Organizational** responsibility

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

3. **Global coordination** responsibility

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

4. **Funding** responsibility (acquisition and coordination):

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

Operation:

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

ToR for secretariat:

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

6.2 Task forces

6.2.1 Operation of WOCAT task forces

Discussion paper from Godert van Lynden

The Proceedings of the WWSM7 (Rome) quite appropriately state (p. 66): “The task forces are the structure/organ to carry out WOCAT development work!”. And as far back as the WWSM5 in Wageningen (2000) the following problems were listed:

- TFs do not have sufficient time to adequately organise their work during a WWSM;
- There is a lack of formalised task/ responsibility assignment and time allocation;
- Email communication can be too easily ignored or is buried under other messages;

- TFs have too many members and not enough commitment (possibilities);

Possible solutions to address these problems:

- TF chairs should be responsible for the work, and use the other TF members for specific tasks and as a source of feedback;
- Objectives and activity plans of TFs should be formally submitted by TF chair for WS proceedings;
- Some TF should be organised rather nationally/regionally to enable better collaboration.

However, in the WWSM6 (Nyeri) Proceedings (2001) it is stated that: "Overall the task forces have not been as efficient as expected. Why?"

The same workshop provided a number of new recommendations:

- 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.

Nevertheless the same conclusions as in Nyeri and Rome needs to be drawn: the task forces are not effective and in fact very little has come out of them. Participants during the annual workshops are always quite eager to raise their hand when asked who wants to participate in a Task Force, but – with some good exceptions – this is seldom followed by a true commitment in the time between the two annual workshops. There may be several reasons for this:

- Other priorities take over once back home again;
- The Task Force work is unpaid and thus gets no time allocated;
- Unclear ToR for the TF's;
- Unclear distributions of responsibilities among TF members?
- Insufficient coordination by task force leaders or support/follow-up from the MG;
- Too complex issues to handle by Email?

Although one or more TF member(s) will have to take the technical lead in the task concerned, which may represent a significant time involvement, the minimum one can expect from the other TF members is to react to drafts or ideas sent around by Email or otherwise. This has noticeably not been the case for the task force on Digital Products (Emails requesting feedback on the new Setup suite of the WOCAT databases, and an Email on Digital Products User Survey) and for the Map Email list (Email inquiring on the state of affairs with QM and on World Map) – a few exceptions notwithstanding!

Last year an attempt was made to prepare clear ToR for the task forces with time and budget allocations. Task force on the Use of WOCAT presented a clear and concise TOR, which resulted in a request from the Secretariat to Malcolm Douglas to prepare - against payment - a report on this issue, with considerable overlaps with the Quality Assurance issue. However, involvement of other TF members was again minimal, but the idea of task forces is to jointly work on a topic rather than asking one consultant to do so (though this may indeed be useful for a kick-off leading to an active discussion per Email by other TF members).

A suitable budget allocation for each TF, enabling members to get together halfway through the year in order to discuss progress and problems, and to pay for small jobs to be done or consultants, appears useful. The Secretariat / MG needs to determine before each TF is making its ToR, what funds could be allocated to each TF.

6.2.2 Group work

Roger White, Aida Gareyeva, Rinda van der Merwe, Samran Sombatpanit, Godert van Lynden

Group discussion on tasks, funds and operation of WOCAT task forces.

The group elaborated the following ideas to solve the problem with task forces:

- Tack on TF meeting(s) to WWSM (2 days before and after);
- Restrict invitations to WWSM based on deliverables;

- Regional institutions could take up responsibility for one or more tasks. This does not exclude institutions in other regions to address the same task, provided there is some overall coordination;
- Proposal for a regional TF meeting (ICIMOD), with ICIMOD funds. Additional interested participants invited from abroad – intermediate contact and feedback on the task(s) addressed by Email;
- Partial use of funds for regional / national activities for contribution to TF.

Other ideas on Task forces:

- Establish a TF on fundraising:
 - To acquire core funding
 - To assist national / regional initiatives with funding proposals and establishing contacts

The heads of institutions should nominate representatives, but nomination should be consistent (people should not change too often).

6.3 Operation of the Network

Miodrag Zlatić (Rapporteur), Daniel Danano, Romy Labios, Roland Benson, Murod Ergashev, Gudrun Schwilch, Lies Kerkhoff

There are three network levels:

- National level
- Regional level
- Global level

The WOCAT network at national level

Philippines: WOCAT was established by several organizations (11 agencies/institutions and 2 professional societies); funding is coming from various institutions; seed money from WOCAT/CDE was used for people who filled QTs; basic management has been done by PHILCAT.

Ethiopia: WOCAT is part of the National Programme for Agriculture and the network is established by the Ministry of Agriculture; funding is from ACDC and small local budgets for workshops; contributors for QTs are not paid; a WOCAT meeting for representatives of 7 regions is organised once a year.

Tajikistan: WOCAT network is organized between institutes (Agrarian and Agroforestry institutes); financial support from CAMP to fill QTs.

Serbia and Montenegro: WOCAT network is currently been established; coordination has been done by Dept. for Erosion Control and contributors are two water management enterprises; seed money from WOCAT/CDE has already been used and small financial support from the Ministry for Nature Protection has been agreed.

The WOCAT network at regional level

ICIMOD: Regional WOCAT network with Nepal, Bhutan, Northern India, Bangladesh (network with national institutions whereas ICIMOD gets funds for regional cooperation and the organization of the network).

East African Region: RELMA as regional institution, but WOCAT network is currently not very active.

Other possible regional institutions: ICARDA, FAO-SNEA, ...

General remark: the regional level has to be strengthened

The WOCAT network at global level

Members of the group agreed that MoUs are very important for all levels (from global to national), but the country representatives have to take the initiative to establish a MoU with WOCAT.

WOCAT membership

The group discussed possible official membership for individuals and institutions. But then WOCAT would first need to be registered as an organisation/institution. In general, the group would welcome the establishment of official WOCAT membership, but no further steps were initiated.

WOCAT annual workshop

The importance of the annual workshops is emphasized to complement the e-mail communication.

It is recommended to use the field day to visit places where QTs were filled.

WOCAT in principle funds one participant per country depending on activities/performance.

An additional regional workshop half a year after the annual workshop would enhance the communication and the annual achievements.



The WOCAT collaborators from China, Philippines, FAO – RAP and ICIMOD (Photo by Hanspeter Liniger)

TOPIC 7 PLANNING NEXT YEAR(S)

Rapporteur: Hilde Helleman

7.1 WOCAT vision

WOCAT in three years

- High priority
 - Medium priority
- Already achieved: ✓✓✓, ✓✓, ✓
New items in *italics*

Global

- ✓✓ WOCAT proven useful at global level (e.g. accepted by international organizations);
- More emphasis in training on cost-benefit aspects and on *impacts (on natural, human environment)*;
- ✓ Demonstrated impact of WOCAT use in policy, research, field level;
- Global map available (*start: Nov. 03*);
- ✓ WOCAT further spreading in Africa and Asia, new initiated activities in Europe, South America.

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, extension *and research*;
- ✓ Functional *regional and* national secretariats;
- ✓ WOCAT tools and approaches institutionalised within SWC related agencies, programmes and projects in "member" countries?

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;
- *Comprehensive compilation of technologies / approaches available worldwide (Atlas?).*

Regional/National

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

7.2 Proposed Global Activities 2004

As the main donors for the global WOCAT programme / core activities are SDC and DANIDA, the objectives of their support have been identified and stated in the respective funding proposals as follows:

The main objective of this 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 SDC-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, in particular 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 global activities:

In the following table the objectives and the specific activities (as listed in the project document) are listed and in a 3rd column the planned activities for the 3rd year of the current phase of the WOCAT contribution are described.

Objectives / Expected results *	Activities	Planning 2004: Major global activities/achievements planned for Nov. 2003 – Oct. 2004
<p>1. WOCAT Network</p> <p><i>Objective: to further support and develop the WOCAT network: coordination, awareness rising and promotion</i></p> <p>Result: enhanced and consolidated network</p>	<ul style="list-style-type: none"> • maintain collaboration between existing partners • add new partners and consortium members • conduct 3 International Workshops and Steering Meetings (according to established procedure and guidelines) • participate in international conferences to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO) • integrate WOCAT in development process at the national (ongoing government, NGO and bilateral aid projects) and global level (UNCCD, UNCBD(?), UNFCCC(?)) • continue and enhance the WOCAT e-mail list and newsletter 	<ul style="list-style-type: none"> • Reorganization of WOCAT network: MG, Taskforces, ... (e.g. MoU, ...) • Promotion of WOCAT: <ul style="list-style-type: none"> - Paper in “<i>Renewable Natural Resources Management for Mountain Communities</i>” (Eds. M. Stocking et al) - Presentation of WOCAT in a Mountain Research Initiative book by H. Hurni, HP. Liniger and U. Wiesmann - Paper in a WASWC book on monitoring (Eds. S. Sombatpanit et. al.) - FAO watershed proceedings • Presentations: <ul style="list-style-type: none"> - ISCO July 2004: 6 presentations: SOWAP, knowledge gap, WOCAT map, Ethiopia, Philippines and Serbia/Montenegro - LADA: Dakar 5 –7 December 04 - International Conference on sloping lands: Chiang Mai 5 - 8.9.04 - World Agro-forestry conference, Florida 26.6. - 2.7.04 - International Weed Science Congress, Durban, June 2004?, Special session on conservation technologies • WOCAT-L (discussion forum through e-mail)→ feedback! • Regional WOCAT meeting: ICIMOD, Central Asia, India, China and representatives from other regions and WOCAT secretariat; ICIMOD; Nepal, March 2004 • Newsletters: WOCAT Newsletter (2-3 /year), contributions to WASWC Newsletter (4 / year) • 9th International Workshop and Steering Meeting in China, tentatively 8 – 14 Nov. 2004 • Vision / positioning of WOCAT towards global (UN) issues (conventions, Kyoto protocol, etc.): 2-day international workshop with major donors and partners • Taskforces on regional structure and funding, quality assurance, QM / world map, use of WOCAT, digital products, e-learning • Established process for peer reviewed WOCAT datasets on internet and CD-ROM. • Fund raising
<p>2. Training</p> <p><i>Objective: to provide back stopping and training support for national and regional initiatives.</i></p> <p>Result: National and regional collaborators trained to run WOCAT programme in their countries and regions</p>	<ul style="list-style-type: none"> • conduct additional 2 international “Training for National Trainers / Facilitators” workshops • provide support and expertise for additional national and regional initiation and training workshops (e.g. Central Asia, India, Eritrea, ...), upon request from national / regional institutions 	<ul style="list-style-type: none"> • Training with core support: <ul style="list-style-type: none"> - Central Asia Research (NCCR IP2 Tajikistan): 3 countries April 04 - China: (March / April 04) - Bangladesh (March 04) - India (April 04) - North Africa: ??? - LADA Argentina: ??? • Participation in follow-up Workshops: (depending on TF activities and regional/national demand)

<p>3. Methodology / Tools</p> <p><i>Objective: to further develop the methodology, mainly the tools for knowledge exchange and decision support</i></p> <p>Result: Additional tools for exchange of knowledge and decision support developed</p>	<ul style="list-style-type: none"> • improve Internet access to data and tools • improve database management system to enhance decision support • produce support materials, such as standards for national “overview books”, guidelines for the use of WOCAT data in the development process 	<ul style="list-style-type: none"> • Improve database functioning • Further website improvement / modifications • Develop methodology and layout presentation of “Overview Books” • Task force on “Using WOCAT” → output: report and revised guidelines • Develop tools for “WOCAT in research/education” → output: presentations and documents. • Guide to economic assessment: cost-benefits • E-learning (TF output)
<p>4. Data quality</p> <p><i>Objective: to enhance data quality and additional data collection</i></p> <p>Result: Good quality data from at least 15 countries made available and used for the production of outputs</p>	<ul style="list-style-type: none"> • further develop procedures to enhance data quality • support further collection 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"> • Task force on “Quality Assurance” / now called “self-evaluation and asking for contributions” <ul style="list-style-type: none"> - Output: Guidelines - Establish review panels at national and global level • Set of quality assured Ts / As: Data ready for CD-ROM v3 by 31.12.03 and next WWSM • Peer reviewed datasets ? (WOCAT label?)
<p>5. Outputs</p> <p><i>Objective: to support the production of outputs</i></p> <p>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</p>	<ul style="list-style-type: none"> • produce CD-ROM in the FAO digital media series and distribute it to collaborating institutions, individuals and according to requests • compile a first overview of global experiences of SWC Technologies and Approaches from selected countries that have been active in the compilation of the data • publish in journals and conference proceedings the SWC classification system, the methodological tools for database management system, decision support (guidelines for “Using WOCAT”) and for mapping 	<ul style="list-style-type: none"> • Test group “Digital Products” <ul style="list-style-type: none"> - CR-ROM v3 (well functioning; quality assured Ts / As) - website with updated T's / A's / maps • WOCAT Overview Book (June 04) • Contributions to national overview books from Kenya (?) ..., South Africa (?), ... • Central Asia Posters and electronic versions, maybe book? • Draft of world map on the internet

* **Objectives / Expected results as stated in the funding proposal** of the programme contribution from SDC 2002 to 2004. Additional funding through Syngenta Foundation, DANIDA and UNEP has been identified in order to complement the SDC funding and to support the objectives and activities listed. The UNEP proposal is a specific support for the production of the global overview. Syngenta Foundation and DANIDA support will be formulated by the end of 2003 and will support some of the activities as listed in the SDC proposal but will provide more resources and enable more outputs of the global WOCAT programme. The main emphasis of the DANIDA support will be on objective 2 and 4, especially for those countries where DANIDA has major activities in Watershed Development Programmes. Syngenta Foundation will mainly support objective 3 and 5.

Plan for quality assured QA /QT – Datasets

Country	ready for CD-ROM 31.1.03 (total)		Ready for WWSM 30.9.03 (additional)		Ready for WWSM 11.04 (additional)		Remarks
	QT	QA	QT	QA	QT	QA	
Philippines	10 ✓	3 ✓	1	1	2	2	QM Visayas
P.R. China	15 ✓	15 ✓	10	10	-	-	
INSAH			30	10			
Tajikistan			6	2	5	2	
Serbia & MN			3	3	2-3	2-3	2 districts for QM
Ethiopia	2 ✓ 4	2 ✓	10	5	8	5	5 regions for QM
Kazakhstan	1 ✓	1 ✓	2	1			
Kyrgyzstan	2	2	2	2	2	1	
North Africa			4	4			
Tanzania	4 ✓	4 ✓	10	3	17 ?	17 ?	plus QMs
ICIMOD			4	4	4	4	Nepal and Bangladesh
South Africa	10 ✓	10 ✓	10	10	5	5	Depending on funds, 2 more provinces for QM
Kenya	14 ✓	6 ✓	7	3	?	?	
Thailand	1	1	12	12	?	?	
ACT	2	1	2	1			Zimbabwe, Zambia, etc
WASWC	3?	3?	-	-			Contribution to global map from WASWC countries
TOTAL	64	48	113	66	45	38	

Available in CD-ROM v. 3:

- Total Technologies: 124
- Total Approaches: 74



Paddy rice terraces after harvesting, near Kathmandu, Nepal (Photo by Hanspeter Liniger)

7.3 Funding

7.3.1 Budget

WOCAT Phase 4 Jan. 02 – Dec. 04						
	Description	Budget Jan. 02 – Jun 03	Expenditures Jan. 02-June 03	Used	Budget 2004	
		CHF	CHF	in %	CHF	US\$
1	Salaries and overheads (CDE)	441.000	543.800	123	377.000	290.000
2	Travel Costs	30.500	27.057	89	26.000	20.000
21	Travels	30.500	27.057	89		
3	Materials	79.500	24.380	31	63.000	48.462
31	Computers, peripheral, software	9.000	17.696	197	1.000	769
32	Production of books	30.000	0	0	35.000	26923
33	Production of CD--Rom	15.000	0	0	10.000	7692
34	Printing reports / posters	22.500	2.792	12	10.000	7692
35	Postage etc	3.000	3.892	130	7.000	1538
4	Subcontractors	148.500	146.909	99	74.000	56.923
41	International Workshops, Steering Meetings	45.000	57.953	129	36.000	27.692
42	Training National Trainers Workshop	24.000	16.794	70		
43	Quality Control	19.500	0	0	20.000	15.385
44	Mandate for support (ISRIC)	45.000	43.002	96	0	0
45	Seedmoney, support national initiatives	15.000	11.052	74	8.000	6.154
46	<i>Other mandates not CDE</i>	0	18.108		10.000	7.692
47	<i>National Workshops</i>	0	0			
48	<i>Additional contributions</i>	0	0			
	Total	699.500	742.146	106	540.000	415.385

Available funds Jan 02 – Jun 03	
Donors	Income in CHF
SDC	600,000
DANIDA	67,000
UNEP	13,000
Syngenta	19,500
Total	699,500

Proposed Funds 2004		
Donors	Proposed income CHF	Budgeted income CHF
SDC	400'000	400'000
DANIDA	80,000	40,000
UNEP	40,000	20,000
Syngenta	50,000	25,000
SOWAP	30,000	15,000
Total	600,000	500,000

Comments to Expenditures 1.1.2002-30.6.03 and Budget 2004

The annual expenditures show that compared to the SDC budget over expenditures have been made for the salaries and overheads for CDE. However, due to additional contributions by DANIDA, and UNEP and due to savings on the materials the budget for the period of 1.1.2002 to 30 June 2003 was only overspent by 6%. Not included in the tables below are about 270'000 CHF in cash and in kind contributions within major partner institutions (not covering local expenditures for documentation and data collection). SDC's contribution to WOCAT is about 62% (see contributions below).

The budget allocation for 2004 adjusted the amount used for CDE such that the capacity of the secretariat and the coordination for WOCAT could be maintained. This shows that the originally allocated staff budget from SDC was increased by around 50 %. The overall budget for 2004 is assumed to be CHF 500'000. There is some uncertainty about the contributions other than SDC. Contracts with DANIDA and Syngenta Foundation are being prepared and have a good chance to be accepted. The proposal to UNEP as well as the contribution from SOWAP to the core activities is still under negotiations. Those contributions are therefore included in the budget with 50 %. The budget will be finalized and adjusted according to

commitments and approved funding by the end of January 2004. Major efforts will go into the production of the global overview book, quality assurance and support for task forces and for regional / national initiatives. The budgeted expenditures are slightly higher than the budgeted income due to a proposed workshop on the WOCAT vision and the distribution of the overview book, as recently discussed with SDC.

7.3.2 Contributions

Financial Contributions to WOCAT between 9/92 and 9/03 (in US \$)								
	9/01-8/02			9/92-8/02	9/02-9/03			9/92-9/03
	Cash	In-kind	Total	Total	Cash	In-kind	Total	Total
SDC	260'000	0	260'000	1'568'000	300'000		300'000	1'868'000
FAO	10'000	55'000	65'000	909'000	240	10'000	10'240	919'240
IDRC			0	85'000			0	85'000
RSCU/RELMA	40'000	10'000	50'000	178'500	???	???	0	178'500
UNEP	10'000		10'000	100'000			0	100'000
GTZ/OSS	???		0	243'000			0	243'000
CDCS		10'000	10'000	70'000			0	70'000
ISRIC		20'000	20'000	200'000		20'000	20'000	220'000
CDE			0	70'000			0	70'000
Thailand (LDD)		2'000	2'000	51'500			0	51'500
PASOLAC/GTZ/LA			0	74'000			0	74'000
ADB/FSWCC - China	10'000	5'000	15'000	65'500			0	65'500
ASOCON			0	62'000			0	62'000
NDA/ISCW (ARC)/SA	10'000	2'000	12'000	151'000	15'400	5'000	20'400	171'400
ICRISAT (Niger)		10'000	10'000	31'000			0	31'000
DED (Niger)			0	6'000			0	6'000
ICARDA		10'000	10'000	35'000		???	0	35'000
INSAH		4'000	4'000	10'000			0	10'000
ICIMOD		5'000	5'000	14'500	???	???	0	14'500
OSWU			0	4'000			0	4'000
IBSRAM			0	5'500			0	5'500
Philippines (UPLB/BSWM)		10'000	10'000	48'500	1'000	3'000	4'000	52'500
DANIDA	53'300		53'300	173'300	58'000		58'000	231'300
University Belgrade	700	500	1'200	2'600	???		0	2'600
MoA: SWC Kenya		2'500	2'500	12'500			0	12'500
HIMA - Iringa Tanzania	???	???	0	0			0	0
ESAPP Ethiopia	15'000		15'000	23'235			0	23'235
CAMP Central Asia	???	???	10'000	10'000	13'000	1'500	14'500	24'500
UNCCD-GTZ for Central Asia	???	???	0	10'000			0	10'000
MoA: SWC Tanzania	???	???	0	0			0	0
MoA: Ethiopia: WFP	???	computers 4'200	4'200	4'200	12'000	2'000	14'000	18'200
WDCU India	???	???	20'000	20'000	10'000		10'000	30'000
Syngenta	???	???	15'000	15'000			0	15'000
ADB/China National level		15'000	15'000	30'000		12'100	12'100	42'100
WASWC		4'500	4'500	9'000	1'000	1'000	2'000	11'000
Kazakhstan				0	950		950	950
Tajikistan				0	2'000	500	2'500	2'500
MAFS Tanzania					7'890		7'890	7'890
SOWAP								
Total	409'000	169'700	623'700	4'272'335	421'480	55'100	468'690	4'760'525

7.4 Regional Activity Plans

Regional group meetings (same groups as first day)

- Shortly present to group members your plans
- Identify common issues / joint activities

Issues for the regional discussions

- Contribution to global map
- Advancement with QM
- Peer reviewed quality Ts/As, additional Ts/As
- Addressing the “8 issues to advance” (see 2.2 Problems and solutions towards implementing / using WOCAT (survey: 8 questions, page 34)
- Organisation of WOCAT MG
- Task forces (which, what, who)
 - Use of WOCAT
 - Fundraising
 - Regional structures
 - QM / world map
 - E-learning
 - Quality assurance
 - Digital products: test group

7.4.1 Europe / Africa

Godert van Lynden, Miodrag Zlatic, Daniel Danano, Rinda van der Merwe

Global map

- Ethiopia: map needs to be improved. Improved information will be provided. Legend must include combinations of measures. Four more examples will be provided by end of January;
- South Africa: will review existing data for S. Africa and complement or correct where needed before end of the year;
- Serbia & Montenegro: 2-3 examples by end of January (2004);
- SOWAP: will advertise global map among SOWAP partners for providing info.

QM

- Ethiopia: 3 regions finished (entered into the database, data will be provided before end of this year), 2 regions to be added before WWSM9, at 1:1 M (> 70% of the country);
- Serbia & Montenegro: 4 polygons (communities) covered as test case, covering >2000 km²; needs to be checked. Data (matrix tables) in Word format, will be entered in QM database. Feedback meeting for the 4 communities before end of the year. Before WWSM9: 1 district (about 6 –10 communities) completed, possibly 2nd started;
- South Africa: No further progress to what is already in the WOCAT database; NDA is no longer implementing QM; further progress depends on funds; proposal to Department of Agriculture is being prepared. Much will depend on appreciation of the info book;
- SOWAP: no plans as yet.

Peer reviewed and new Ts & As

- Ethiopia: 10 QTs and 5 QA new peer reviewed case studies to be provided before next WWSM;
- Serbia & Montenegro: 3 existing Ts will be peer reviewed (for overview book) before end of 2003 (feedback meeting); 2-3 QTs and QAs new peer reviewed case studies before next WWSM;
- South Africa: - depending on funding - peer reviewing of at least 10 existing QTs and QAs (each), 5 new QTs and QAs (each) peer reviewed;
- SOWAP: training in Jan.: 3-6 Ts and As for 3 countries by next WWSM. Peer review system to be established.

8 issues to advance

- See 2.2 Problems and solutions towards implementing / using WOCAT (survey): 8 issues, page 34

Task Forces

- Regional structures: regional distribution of tasks (covering different or same tasks);
- Prioritisation of tasks :
 1. Fundraising task force: should act as Advisory Board, members not necessarily from WWSM participants, but persons with good donor contacts and fundraising experience;
 2. Quality assurance: responsibility first at national, then regional and global level (where applicable). Task force should act as peer review committee at different levels, to make sure provided data are "quality assured". No (further) need for TF on quality assurance methodology or strategy;
 3. Use of WOCAT: see group report;
 4. Digital Products: testing, feedback and reviewing of changes to the methodology (NB: this should in fact be done by all!); role in further development of digital products (support to Gudrun Schwilch and Wolfgang Prante);
 5. QM and World Map: no need for global task force, Email group to be maintained or enhanced;
 6. E-learning: needs additional staff time and resources, that are already lacking.

7.4.2 Central Asia, China and Hindu-Kush Himalaya

Aida Gareyeva, Roger White, P.B. Shah, Xu Feng, Sudibya Kanti Khisa, Murod Ergashev, Sanjeev Bhuchar

Workplan

Expected Outputs	Activities	Central Asia	China	HKH
Awareness raising	Exhibitions Meetings Training Dissemination (Overview Book) Briefing note Global map	relevant no relevant relevant no relevant	no relevant relevant relevant no relevant?	no relevant relevant relevant relevant relevant
Strengthening of regional activities and network	Formal/informal collaboration MoU with WOCAT Joint Proposals for funding (initiation) Take active part in TFs	relevant relevant relevant relevant	relevant relevant relevant relevant	relevant relevant (ICIMOD) relevant * relevant
Data Generation	QT/QA/QM documentation Updating On-farm research	relevant (6/2/-) no relevant	no relevant no	relevant (4/4/4) relevant no

*except Bangladesh for national initiative

Fund Status	Central Asia	China	HKH
available		8.260 US\$??
required	10.000 US\$	75.000 US\$??

Addressing the 8 issues to advance as in chapter 2.2.:

Problem	Solution	Central Asia	China	HKH
Issue 1: Convinced of usefulness? → Convincing Gov.	See awareness, expected outputs in Workplan	relevant	no	relevant
Issue 2: Sufficient awareness? → Linked to Issue 1	See awareness expected outputs in Workplan	relevant	no	relevant
Issue 3: Incorporation in programmes? → limited	Better dissemination strategy (global+reg.) Briefs Notes Global team backstopping / initiative	Relevant relevant relevant	Relevant relevant relevant	Relevant relevant relevant
Issue 4: Initiative / responsibility? → no	MoU and identification of focal person	relevant	no	relevant (except Bangladesh)
Issue 5: Sufficient funding / time allocation? → no	Joint proposal (funds) Core fund allocation	relevant relevant	relevant relevant	relevant relevant

Addressing the 8 issues to advance as in chapter 2.2. (continuation):

Issue 6: Collaboration / joint efforts? → no	Joint meetings. eg. with WASWC and national / reg. initiatives Link with extension services	relevant	relevant	relevant
Issue 7: Clear responsibilities (global, reg./nat. level) → no (more relevant at national level)	Funding MoU MoU at regional	relevant relevant relevant	relevant no no	relevant relevant no
Issue 8: networking satisfying? → no	Logistic support (computer and email bills) Language/terminology problem needs to be solved	Relevant relevant	No relevant	No no

Discussion on task forces

Which	Need?	What	Who to lead (suggestions)
Use of WOCAT	Yes	Monitoring	HP and Gudrun (CDE)
Fund raising	yes	Global Regional	? (MG) ICIMOD
Regional structure	yes	classified on the basis of each sub-region	C.Asia? maybe ICIMOD China HKH - ICIMOD
QM / Worldmap	no	--	--
e-learning	yes	WOCAT trainers graduate students	CDE and University experts and ICIMOD
Quality assurance	yes	Documentation Meetings	CDE, ICIMOD and WASWC
Digital Products	no	--	--

7.4.3 South-East Asia

Romeo Labios (Chair), Samran Sombatpanit, Joe Rondal, Yuji Niino, Jianqin Cai

Find common plan for the region

Issues	Solutions/Activities	Time Table
Coordination: Organization/institution to serve as regional coordinating office / secretariat	FAO Regional Office, Bangkok to serve initially	Nov '03 onward
Networking within the region	Prepare TCP project proposal for FAO support - China – c/o Cai/Xu - Phils – c/o Joe/Romy - Thai – c/o Samran - Indonesia???? Approach CG centers - IRRI,IWMI,ICRISAT c/o Yuji - IIRR –c/o Joe - ICRAF – c/o Romy ASOCON?	End of Dec '03 End of Dec '03
Promotion	- Workshop on AEZ, LADA in Bangkok, Thailand - Intl. Conference on Sloping Lands, Chiang Mai - World Agroforestry Conf., Orlando, Florida - Tropical sandy soils symposium, Khon Kaen, Thailand	10-14 Nov 2003 5-8 Sept 2004 27 Jun – 2 Jul 04 19-21 Oct 2004

Contribution to Global Map

- China c/o Cai and Xu (2-3 Ts);
- Thailand – ok;
- Philippines – ok ;
- Indonesia – to ask contribution c/o Samran.

Advancement with QM

- Philippines to work on the Visayas island;
- Thailand to refer back to Rome plan;
- China - no plan yet.

Peer reviewed quality Ts and As

- initially c/o by existing member national institutions;
- modest incentive (honorarium) to be provided to member of the review committee, funds to come from core fund of WOCAT???

Task forces - should we have them?

- Use of WOCAT Yes
- Fund Raising Doubtful
- Regional Structures Yes
- QM / Worldmap Yes (being in the task force)
- E-learning Yes
- Quality assurance / peer review Yes
- Digital products, test group Yes (being in the task force)

7.5 Taskforce Activity Plans

Taskforce: <i>members</i>	ToR Activities	Deadline
Use of WOCAT <i>Godert (lead), ICIMOD, DANIDA- India, Yuji, Joe, Romy, Xu Feng (+ members last year? – to be contacted)</i>	<ul style="list-style-type: none"> • Review and reassessment of target groups using the previous WWSM proceedings • Reviewing / reassessing the objectives, content, methods and target participants of recent WOCAT training activities • Development of strategies in promoting use WOCAT particularly as field appraisal and evaluation tool • Provide strategies on feedback mechanisms 	Nov 03 Dec 03 March 04 May 04
Fund raising global: <i>Hanspeter, Francis?</i>	<ul style="list-style-type: none"> • Identify Taskforce members (as nobody committed him/herself to this TF to join Hanspeter, additional members need to be recruited from core collaborators who have not participated in the WWSM 03) • Identify partners and donors, send findings to core collaborators • Compile existing proposals and make them available to core collaborators • Submit proposals to DANIDA, UNEP, Syngenta Foundation 	Jan 04 Mar 04 Mar 04 Dec 03
Fund raising regional: <i>Roger, Aida</i>	<ul style="list-style-type: none"> • prepare a report on possible funding strategies appropriate for regional groups. RW to prepare – with help from Sanjeev and Aida (by email). • Discuss at March Regional meeting • Finalise document, submit to MG for dissemination/feedback. • TF meeting before WWSM9, present findings at meeting 	end Feb 04 March 04 end Mar 04 Nov 04
Regional structures: <i>Roger</i>	<ul style="list-style-type: none"> • Prepare a report on possible options for regional structures by Roger • Discuss at March Regional meeting • Finalise document, submit to MG for dissemination/feedback. • TF meeting before WWSM9, present findings at meeting 	end Feb 04 March 04 end Mar 04 Nov 04
QM / worldmap: <i>Hanspeter, Godert, Samran</i>	Global map: <ul style="list-style-type: none"> • Announcement in WASWC newsletter • Announcement in Mountain Forum • Get results from WOCATeers • (Further) develop prototype QM: <ul style="list-style-type: none"> • Promote examples e.g. Philippines: e.g. conferences, on Website (on-line map viewer) • List countries to be supported by TF • Link to research in CA 	Dec 03 Dec 03 Dec 03 Feb 04 Feb

E-learning: <i>Lies (lead), Romy, Roland, (Gudrun)</i>	<ul style="list-style-type: none"> • explore experiences from other institutions (ICIMOD, ICRISAT, IRRI, ...) • review documents from those experiences, meet experienced people, etc • draft working paper for e-WOCAT (for various options, e.g. chat, intro to WOCAT, training modules, e-conferences, graduate courses, etc.) • make concrete funding proposals to approach donors • contact potential donors and submit proposals • May have first feedback from donors for WWSM 9 	31. Dec. 03 28. Feb. 04 31. May 04 31. Aug. 04 31. Oct. 04 Nov 04
Quality assurance global: <i>Hanspeter</i>	<ul style="list-style-type: none"> • Identify members of TF (M. Douglas, W. Critchley,) • Explore possibilities to get "peer review" status • Propose set-up for the process: review panel, ... 	Jan 04 Mar 04 May 04
Quality assurance regional: <i>Sanjeev, Yuji</i>	<ul style="list-style-type: none"> • Develop a strategy with regional partners on quality assurance (draft report) • Circulation of report among the regional members and feedback • Final report • Demonstration of few examples on quality assurance • Formulation of working groups for WWSM9 	end April 04 15 May 04 end May 04 Ongoing 15 Oct 04
Digital products: <i>Developers: WP, GS</i> <i>Test group: Rinda, Joe, Samran, Yuji, Godert, Madhav</i>	<ul style="list-style-type: none"> • Developers continuously improve the digital products. • Test group will be approached from time to time to test features. <p><i>Possible additional test group members: R.P. Gupta (new), Berhanu Fentaw Tereke and Kimamba Lyoba (both last years task force members)</i></p>	On-going

7.6 Organizational Issues

7.6.1 Election of MG Members

So far:

- BSWM (Philippines): Joe Rondal
- CDE: Hanspeter Liniger (global coordination)
- FAO: Freddy Nachtergale
- INSAH (West Africa): François Lompo
- ISRIC: Godert van Lynden
- RELMA (East Africa) : Gathiru Kimaru
- SWCMC (PR China): Zhiming Niu

Stepping down:

- SWCMC: Zhiming Niu

Proposal:

MG Core:

- CDE: Hanspeter Liniger (global coordination; secretariat)
- ISRIC: Godert van Lynden
- FAO: Freddy Nachtergaele (more time / input required then during last year– **to be confirmed**)

MG Enlarged:

- BSWM: Joe Rondal (so far)
- Central Asia: Institute of Soils, Sanginboy Sanginov (new, confirmed)
- China: Feng Xu (new, replacement of Niu)
- ICARDA: Francis Turkelboom (new, **to be confirmed**)
- ICIMOD: Sanjeev Bhuchar (new)
- INSAH: François Lompo (so far)
- RELMA: Gathiru Kimaru (so far)
- S. Asia: R. Benson (new, **to be confirmed**)

Secretariat and global coordination: CDE

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

7.6.2 Next International Annual Workshop and Steering Meeting

Offers for hosting:

1. SWCMC China (offer since several years);
2. Tajikistan, Kyrgyzstan;
3. Serbia - Montenegro

Rules for venue:

- Every third year in Europe (decision WWSM7);
- Alternatives to meet in Europe: MG with donors?

	China	Tajikistan
Venue	to be identified	Dushanbe
WOCATivities	<ul style="list-style-type: none"> • Active programme in Fujian Province and new initiative at national level • Member of MG 	<ul style="list-style-type: none"> • First collection of Ts in reduced format • Link to research • Possible new member of MG
Programme environment	<ul style="list-style-type: none"> • Big national SWC activities covering 1/5 of the world population • Great WOCAT country with a lot of degradation and conservation • LADA pilot country 	<ul style="list-style-type: none"> • Institute of Soils, well recognized internationally, coordinating ICARDA activities, IAEA link, link to research (NCCR) • Great WOCAT country with a lot of degradation and conservation • CAMP
Logistics	<ul style="list-style-type: none"> • China: depending on location of venue • Good facilities to host? • Support by host? Financial, logistics, ... • Interdisciplinary programmes • Already visited by a number of WOCATeers during ISCO 02 	<ul style="list-style-type: none"> • Not too easy to reach • Local logistics need good arrangements • Support by host? Financial, (CAMP?)... • Good facilities; good training facilities • Interdisciplinary programmes

Decisions made:

When: tentative 8-14 Nov. 04 (information through newsletter, make a survey among previous WOCATeers to confirm best suitable period)

Where: China

7.7 Feedback from participants

Feedback from participants against expectations		
Name of Participant	Expectations	Rating
Aibdybek Asanaliev KAU, Kyrgyzstan		
Roland Benson KWDP, India	<ul style="list-style-type: none"> Explore possible collaboration with WOCAT partners To learn more about WOCAT tools 	
Sanjeev Bhuchar ICIMOD, Nepal	<ul style="list-style-type: none"> Clarity about quality assurance process at regional level 	3
Jianqin Cai SWCMC, P.R. China		
Daniel Danano Dale MoA, Ethiopia	<ul style="list-style-type: none"> Talking about regional cooperation where it is not effective We often talk of "quality assurance", how will this be achieved and by whom 	3 4
Murod Ergashev Soil Science Institute, Taj.	<ul style="list-style-type: none"> see more application of WOAT at field level from other countries 	5
Xu Feng SWCMC, P.R. China	<ul style="list-style-type: none"> How to adjust the structure of QTs and Qas for future use. 	2
Aida Gareyeva CAMP, Kyrgyzstan	<ul style="list-style-type: none"> Exchange of experience To discuss the way of dissemination of technologies to the farmers 	5 3
Mats Gurtner CDE, Switzerland	<ul style="list-style-type: none"> Complete case studies (overview book) with participants Get all inputs/contributions for the proceedings from participants 	5 4-5
Hilde Helleman ICIMOD, Nepal	<ul style="list-style-type: none"> Receive everybody's inputs in time Have all the expectations come through 	4
Romeo Labios FSSRI, UP Los Baños	<ul style="list-style-type: none"> See more application of WOCAT at field level from other countries See more application of WOCAT in education and R&D 	4 3
Hanspeter Liniger CDE, Switzerland	<ul style="list-style-type: none"> Progress for global map Overview Ts/As in good quality, including photo's Streamlining production of the book for ISCO 2004 	3 4
Yuji Niino FAO, Thailand	<ul style="list-style-type: none"> Institutional functions for data collection, technical implementation, extension Linkage with other possible programmes / projects 	4 4
Joe Rondal BSWM, Philippines	<ul style="list-style-type: none"> WOCAT overview book firmed up Stronger regional WOCAT groups 	4 3
Gudrun Schwilch CDE, Switzerland	<ul style="list-style-type: none"> Strengthen the region so that every country will profit Find an effective solution for the quality assurance procedure 	3 2
P.B. Shah ICIMOD, Nepal	<ul style="list-style-type: none"> Success stories Documentation by country / region 	2-3 3
Samran Sombatpanit WASWC, Thailand	<ul style="list-style-type: none"> See reports of WOCAT achievements from certain regions, e.g. Kenya Get good stuff to make available to WASWC members 	2-3 3
Rinda van der Merwe ISCW / ARC, South Africa	<ul style="list-style-type: none"> Ways to solve quality control problem 	4
Godert van Lynden ISRIC, Netherlands	<ul style="list-style-type: none"> Better operational structure (TF, MG) Better feedback mechanisms Quality data (mechanism) Good atmosphere, fun and nice views 	3 2-3 2-3 5
Roger White ICIMOD, Nepal	<ul style="list-style-type: none"> HIMCAT further developed and mainstreamed Broader understanding of WOCAT in ICIMOD 	2-3 4
Miodrag Zlatic Faculty of Forestry, Serbia	<ul style="list-style-type: none"> Strong output on quality control of data collection (significance of feedback meetings) 	3-4
Lies Kerkhoff ICIMOD, Nepal	<ul style="list-style-type: none"> Knowledge on how agro-forestry systems can be documented in WOCAT 	



A small present to Sanjeev Bhuchar who has perfectly organised this years WWSM (Photo by Mats Gurtner)

ANNEX 1: NATIONAL AND GLOBAL EXAMPLES OF STANDARDIZED SUMMARY FORMATS FOR WOCAT CASE STUDIES

page

WOCAT Overview Book

SWC Technology: “Natural Vegetative Strips”	68
SWC Approach: “Claveria Landcare Association”	72

South Africa Info Book

SWC Technology: “Traditional Stone Terrace Walls”	76
SWC Approach: “Inter Departmental Approach”	77

Central Asia SWC Technology Poster

Improvement of Water Potential in Soil.....	78
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A two-year NVS established on a 35% slope (Photo by Agustin Mercado)

Natural Vegetative Strips

Within individual farm plots, strips of land, 30 – 50 cm wide and 5-10 m apart, are marked out on the contour and left unploughed, to form permanent cross slope vegetation barriers of naturally regenerated grasses and herbs.

Grass strips are a widespread technology all over the world. The difference in this situation is that the grass is not planted deliberately – hence the name 'natural vegetative strips'.

Description: Natural vegetative strips (NVS) are narrow live barriers vegetated with naturally occurring grasses and herbs. Farmers like the technique because it requires only minimal labour for establishment and maintenance while effectively controlling soil erosion and preventing wash of fertilizers applied to the crop. After laying out the contour lines with A-frames or the 'cow's back method' (if the back of a cow is level while walking across the slope, it is following the contour), the 50 cm strips on both sides of the contour are simply left unploughed. Pegs placed along the contour serve as an initial guide in ploughing. Ploughing along the contour itself helps to further reduce soil erosion. The unploughed strips become vegetated through natural regeneration of grasses and herbs. Water running down the slope during heavy rains infiltrates into the soil when it reaches the vegetative strips. Eroded soil collects behind the strips and natural terraces form over time. Land preparation and crop management become easier. NVS is a low-cost technique because no planting material is required and only minimal labour is necessary for establishment and maintenance. The vegetation on the established NVS needs to be cut to a height of 5-10 cm: once before planting a crop and 1-2 times during the cropping period. The cut material can be incorporated during land preparation or applied to the cropping area as mulch.

The technology had been practiced by a few farmers for several years before the entry of the International Centre for Research in Agroforestry (ICRAF) in 1993. Farmers then became organized and the technology gained wide acceptance.

Some farmers plant fruit and timber trees, bananas or pineapples on or above the NVS. This may be when establishing the contour lines, or after they have been established. The trees and other cash perennials provide an additional source of income, but they may eventually shade the adjacent annual crops.



Location: Misamis Oriental and Bukidnon, Philippines

Technology area: 110 km²

Conservation type: vegetative

Land use type: annual cropping

Climatic regime: humid

Database reference code: PHI03

Related Approach: Landcare PHI04

Author: Jose Rondal, Quezon City, Philippines & Agustin Mercado, Jr, Claveria, Mis. Oriental

Date: 28.10.1999



*Pruning NVS during maintenance. The cut material is spread before being ploughed under to enhance soil organic matter.
(Photos by Augustin Mercado, Jr., ICRAF, Misamis Oriental, Philippines)*

CLASSIFICATION AND PURPOSE OF SWC TECHNOLOGY

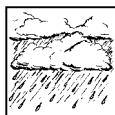
Problem description: Loss of top soil through erosion by closely-spaced rills and gullies and rapid soil fertility decline resulting in the need for more inputs to maintain crop yield.

Land use:



annual crops:
maize, vegetables

Climate:



humid

Degradation:

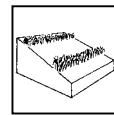


water erosion:
topsoil, gully



chemical degr.:
fertility decline

SWC Measures:



vegetative m.:
grass, aligned

Technical function / impact:

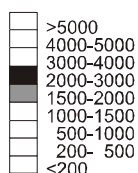
main: - control of dispersed runoff (impede/retard)
- reduction of slope angle
- reduction of slope length

secondary: - increase of infiltration
- increase in soil fertility
- improvement of ground cover

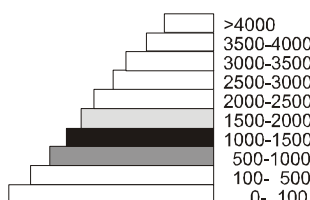
ENVIRONMENT

Natural environment

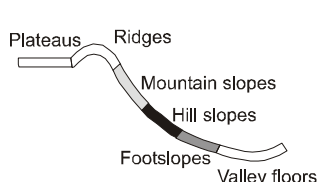
Average annual rainfall (mm):



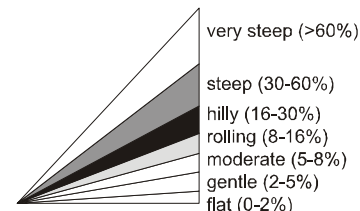
Elevation (m):



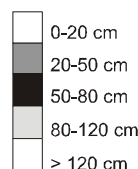
Landforms:



Average slope:



Average soil depth:



Growing season: 240 days, from May to December

Soil fertility: mostly low, strongly acid and with high P fixing capacity

Soil texture: mostly medium (loam) , some fine (clay)

Surface stoniness: mostly no stones, partly stony

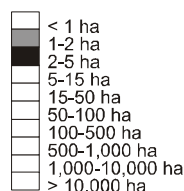
Topsoil organic matter: mostly low (<1%), partly medium (1-3%), Rapid organic matter mineralization due to high temperature

Soil drainage: generally good except in depressions

Soil erodibility: mostly moderate (on valley floors), partly high (on hill slopes)

Human environment

Size of land per household



Land use rights: leased (by individuals)

Land ownership: mainly individual – titled, partly individual - not titled

Market orientation: mixed (subsistence and commercial)

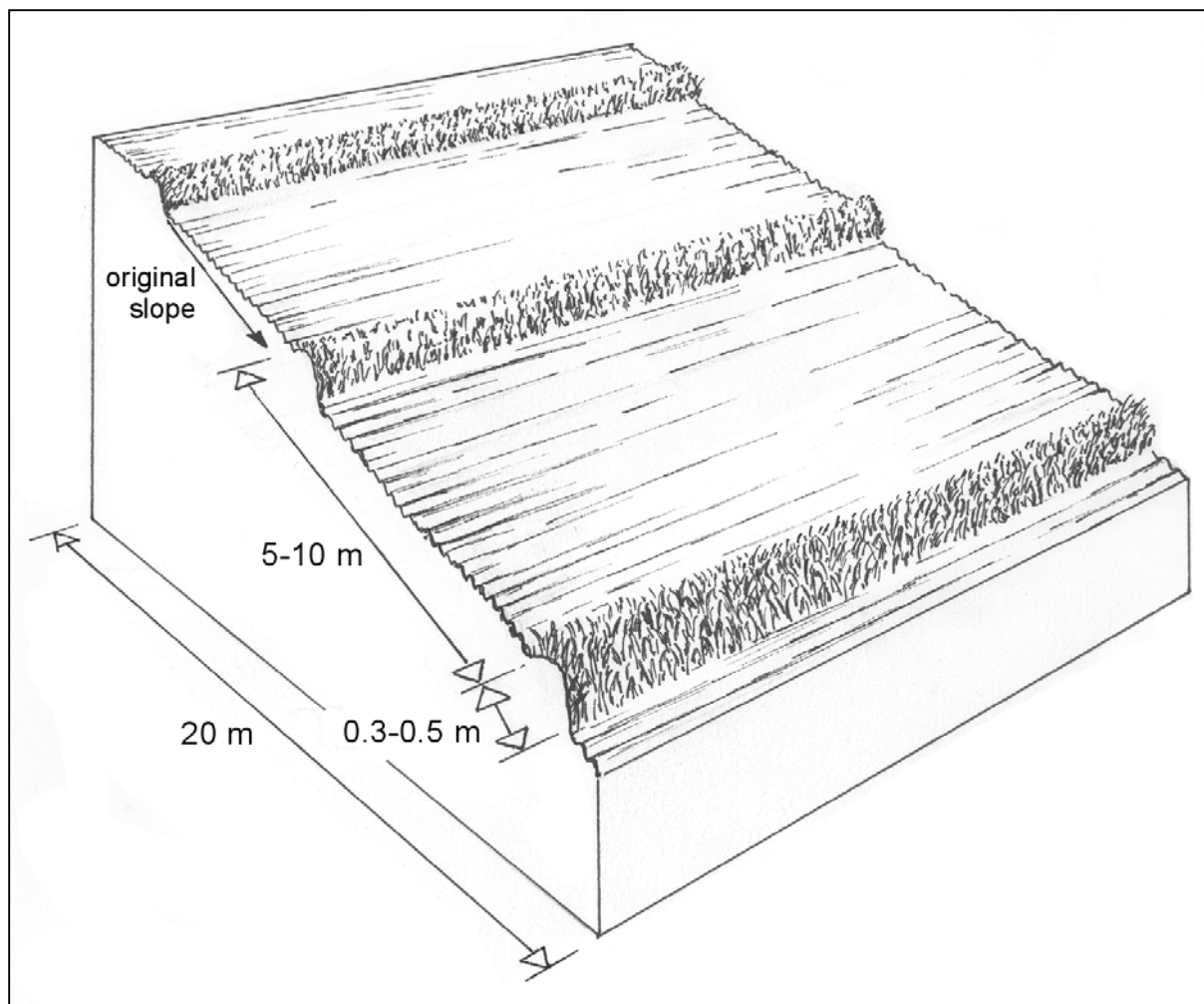
Level of technical knowledge required:

field staff / extension worker: moderate

land user: moderate

Importance of off-farm income: 10 - 50% of all income

Comment: Carpentry, trade, business, labour for neighbouring farms with intensive agricultural activities (e.g. vegetable production)



Technical drawing of NVS: Strips of land, 30-50 cm wide and 5-10 m apart, are marked out along the contour and left unploughed to form permanent cross slope vegetative barriers of naturally regenerated grasses and herbs. The area between the strips is ploughed and slowly develops into terraces. (Drawn by M. Gurtner)

IMPLEMENTATION STEPS AND INPUTS

Establishment activities

1. Layout of contours with the use of an A-frame during the dry season before land preparation, placing pegs (stakes) along the contours.
2. Initial ploughing along the contours.

Duration of establishment phase: 1 year.

Establishment inputs

Inputs	Costs / ha (US\$)	% borne by land user
Labour (5 person days)	15	100
Equipment		
Animal traction (32 hours)	40	100
Tools (2): Plough and harrow	25	100
Stakes (pegs)	4	100
TOTAL	84	100

Maintenance / recurrent activities

1. Slashing by manual labour using machete (2 times per cropping season; two croppings per year)
2. Spreading the cut materials evenly in the alleys as mulch.

Maintenance / recurrent inputs

Inputs	Costs / ha (US\$)	% borne by land user
Labour (12 person days)	36	100
TOTAL	36	100

Costs: Costs of establishing contours and maintenance by slashing are calculated by linear distance of NVS. This example is from a typical field with an 18% slope: at an NVS spacing of 5 meters, the approximate total linear distance for one hectare is 2000 meters. In this example, the farmer has paid for everything him/ herself (see section on acceptance/ adoption).

ANALYSIS / ASSESSMENT

Acceptance / Adoption: 50% of the land users (2000 families) who implemented the technology did so without incentives. The other 50 % received free seeds, breeding animals (e.g. heifers) or just simply technical assistance (e.g. laying out of contours). All are marginal farmers (landowners) who applied it because of its sustainability and environmental protection. They formed LANCARE associations that benefited their members in various ways. Non-landowners have not implemented the technology due to insecurity of tenure. There is a strong trend towards spontaneous adoption especially where LANDCARE associations are organized.

Economic analysis

<i>Benefits compared with costs</i>	<i>Short-term:</i>	<i>long-term:</i>
<i>For establishment:</i>	Positive	very positive
<i>For maintenance:</i>	Positive	very positive

Impacts of the technology

Production and socio-economic benefits

- +++ fodder production / quality increase (biomass as fertilizer)
- ++ wood production increase
- ++ farm income increase
- + crop yield increase

Socio-cultural benefits

- +++ improved knowledge SWC/erosion
- ++ community institution strengthening
- ++ national institution strengthening (government line agencies and educational institutions)

Ecological benefits

- +++ soil cover improvement
- +++ soil loss reduction
- +++ soil structure improvement
- + increase in soil moisture
- + increase in soil fertility
- + biodiversity enhancement

Other benefits

None

Off-site benefits

- ++ reduced river pollution
- + reduced downstream flooding
- + increased stream flow in dry season

and disadvantages

- pest sanctuary
- crop area loss, before NVS can evolve to cash – perennials or fodder grasses
- increased input constraints
- hindered farm operations

and disadvantages

None

and disadvantages

None

and disadvantages

- weed infestation due to seed dispersion and grass roots spreading from the NVS to nearby areas (especially if grass is *Imperata cylindrica*)

and disadvantages

None

CONCLUDING STATEMENTS

Strength / advantages

- 1) Easy to establish and maintain
- 2) Little competition for space, sunlight, moisture and nutrient. Improvement of soil fertility.
- 3) Low labour requirement
- 4) Effective in reducing soil erosion (by 90%)

Weaknesses / disadvantages

- 1) Effect on yield and income is not readily felt, since reduced erosion is not easily translated into increased income or yield
- 2) Reduction of productive area by c. 10 %
- 3) Creation of a fertility gradient within the alley (soil is lost from the top of the alley and accumulates above the NVS where fertility then concentrates)
- 4) High initial establishment cost felt by land users especially if there is a tree crop component of the system
- 5) Long maturity of some perennial components of the cropping system

How to sustain/improve?

Strengthen farmers associations. Intensify information and education campaign (IEC)
Regular trimming of vegetative strips and use these as mulch.
Use only naturally growing grass species
Adopt other supportive technologies like mulching, zero tillage/minimum tillage, etc.

How to overcome?

Farmers must have other sources of income (e.g. livestock). Education about what long-term sustainability means.

Optimum fertilization to offset production loss. This can be compensated by the nutrient conserved and will result in the reduction of fertilizers after some years.

Heavier application of fertilizer on the upper part of alley

Land users ask for subsidy/assistance from government, e.g. establishment of nurseries, free seedlings and fertilizers

Proper mix of annual and perennial crops



Farmer sharing the technology to his fellow farmers. (Photo by Agustin Mercado, Jr.)

Claveria Land Care Association (CLCA)

Participatory method which inexpensively diffuses soil and water conservation technologies among upland farmers who are interested in learning and sharing knowledge about new technologies to generate income and conserve natural resources.

Description: Farmers are organized at the grassroots level into associations called Landcare. With a minimal annual fee of US\$ 0.25, any interested SWC practitioner can join. Landcare serves as the vehicle for the dissemination of SWC technologies and for farmers training, it has three components: grassroot farmers organizations; technical facilitators (International Council for Research in Agroforestry ICRAF), line agencies (ministries), academia and the Local Government Units (LGUs). The Landcare associations are structured as Municipal, Village (Barangay level or affiliate People's organization), and Village Sub-Groups (Sitio / Purok level). This creates competent groups as vehicles for effective dissemination of SWC technologies from the municipal level down to the smallest village of 10-15 households. To give the associations a legal status so that they can transact business and enter into contracts, they are registered with the Securities and Exchange Commission (SEC). They conduct monthly meetings to promote exchange of knowledge, ideas, and experiences thus promoting transfer of SWC technologies. These could be farmer-to-farmer, technician-to-farmer (vice-versa), farmer-to-politician (vice-versa), technician-to-politician (vice-versa), among technicians, among politicians. The LGUs (municipal and Barangay) allocate 20% of their development funds for LANDCARE related activities such as meetings, trainings and visits, nursery establishment (materials and seeds). LGUs also enact local laws to encourage adoption of SWC technologies such as giving tax incentives, and members are given priority for other government programs and availing financial assistance from financial institutions. The technical facilitators backstop technological demands of different LANDCARE groups at various levels. They also facilitate an environment of creativity and dynamism among LANDCARE groups and members. A link is created between LANDCARE groups and the service providers. In case members want to get production loans, they can be recommended to lending institutions by LANDCARE, which acts as a guarantor.

The association enhances shared labour, camaraderie and encouraged group decisions on matters relating to SWC. Aside from prioritisation in the breeding animal distribution program by the Dept. of Agriculture, the association also takes care of nursery establishment and seeding. From an original one (1) association with 25 marginal farmers as members in 1996, this has increased to 45 chapters (groups) with over 4,000 farmer-members in 1999 covering 18 villages. Each village has one chapter. The strengthening of established associations is in process and the formation of new chapters in outlying villages is still on-going.



Location: Misamis Oriental and Bukidnon, Philippines

Approach area: 140 km²

Technology involved: Natural Vegetative Strips (NVS)

Land use type: annual cropping

Climatic regime: humid

Author: Agustin Mercado, Jr.,
Claveria, Misamis Oriental, Philippines

Date: 4.9.2003

CONSTRAINTS AND OBJECTIVES

Problem description

- organizational and institutional problems
- financial problems
- low food and nutritional security
- low adoption of SWC technologies

Objectives

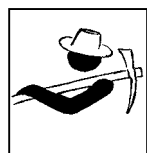
- to organize farmers who have common concerns, problems, needs and aspirations;
- to establish farmers association as conduit for financial and other support for SWC technologies;
- to strengthen working linkages between the farmers and the LGU, NGO's and service providers;
- to promote sharing of new technologies, information, ideas and experiences among LANDCARE groups and members;
- to facilitate collective efforts in activities which cannot be done at household level (e.g. communal nursery, workgroups).

Constraints addressed by the approach

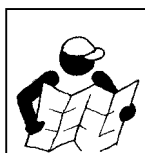
Major constraints	Specification	Treatment
Legal	insecurity of land tenure, since the land is classified as forest land and belongs to the government	speed up the land reclassification and land registration program of the Department of Environment and Natural Resources (DENR)
Financial	insufficient capital	members of LANDCARE are recommended to lending institutions for the granting of production loans
Minor constraints		
Technical	insufficient knowledge of farmers on land and animal husbandry	farmers training and cross visits to nearby farmers

PARTICIPATION AND DECISION MAKING

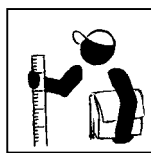
Target groups



Land user



Planner



SWC specialist

Approach costs

were met by the following donors:

international NGOs	20 %
community / local	80 %
	100%

Decisions making

Choice of the technology: made by land users supported by SWC specialist. Spontaneous adoption with technical assistance from local SWC specialists financed by the donors.

Method of implementing the technology: made by land users supported by SWC specialists through the farmers association (LANDCARE).

Approach designed by national specialists, international specialists and land users. ICRAF facilitated the organization of farmers. Specialists established the linkage between LANDCARE and LGU/NGOs.

Community involvement

Phase	Type of involvement	Activities
Initiation	interactive	public meetings, rapid/participatory rural appraisal, workshops/seminars
Planning	interactive	public meetings, rapid/participatory rural appraisal, workshops/seminars
Implementation	self-mobilization	Responsibility of major and minor steps, casual labour
Monitoring/evaluation	interactive	Measurements/observations, public meetings, interviews/questionnaires
Research	interactive	on-farm research

Differences in participation between men and women: Men attend public meetings and do the major decisions in field activities. Women do home-related activities

Organogram of the project/programme

PO: Peoples Organization

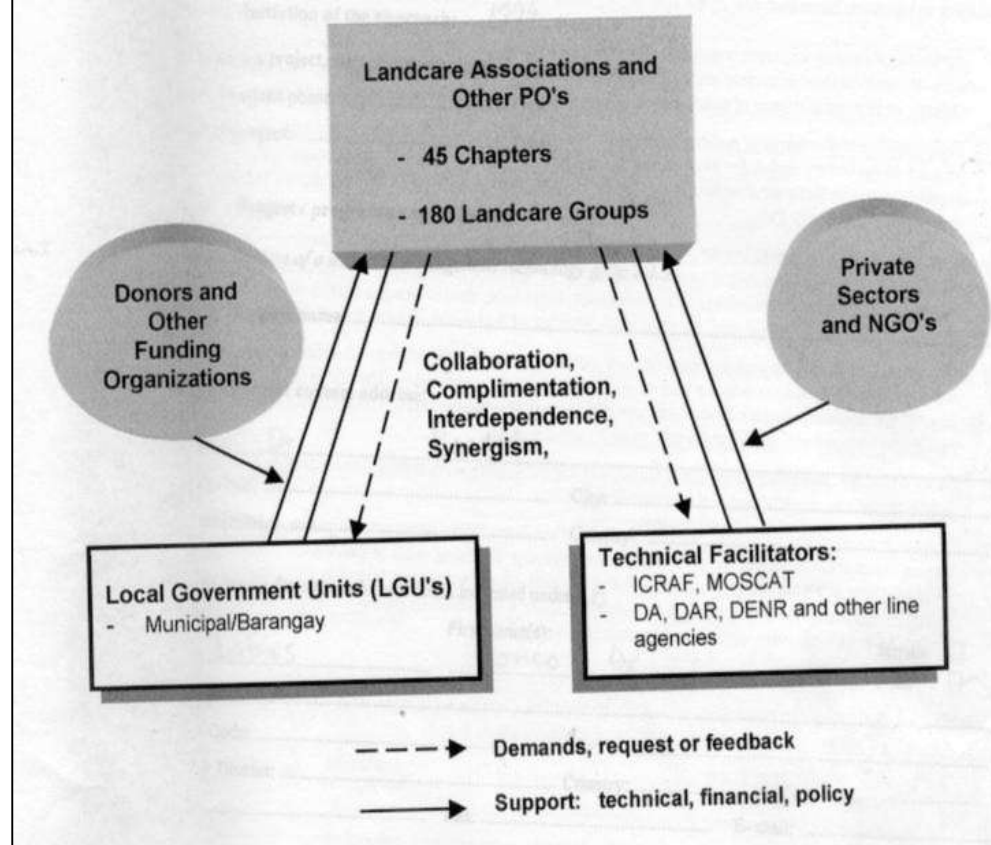
ICRAF: International Centre for Research in Agroforestry

MOSCAT: Misamis Oriental State College of Agriculture and Technology.

DA: Department of Agriculture

DAR: Department of Agrarian Reform

DENR: Department of Environment and Natural Resources



EXTENSION AND PROMOTION

Training: Training of land users, extension workers/trainers, SWC specialists on nursery establishment and seeding, soil sampling and soil fertility assessments, contouring (layout of contours for the natural vegetative strips), pest and disease control in the farm or on-the-job trainings or through farm visits and demonstration areas. Effectiveness of training is good, in the case of SWC specialists even excellent.

Extension: Key elements of the extension are trainings and visit, formation of LANDCARE groups and technical backstopping to LANDCARE groups. The extension service of the government is now carried out through the LGUs. Its continuation is quite adequate, but most of the staff have poor motivation and lacking in direction. Planning is still a top-down approach from national/regional level. Activities and projects are target driven, set by the national/regional office. The effectiveness of the extension on farm management is good.

Research: On-farm research on sociology and technology was a great part of the approach. Additionally, ICRAF has been conducting research in the area on SWC for more than ten years. This includes understanding the biophysical and socio-economic factors that influence adoption or non-adoption of SWC technologies. The effectiveness of the applied research is great. Research results are fed to the LANDCARE groups to meet their needs as well as to get feedback for the technology. Farmers appreciate, evaluate and accept or reject the technology.

Land use rights: Ownership rights helped the approach implementation. Land tenure is still an important factor in adoption of SWC technology. Providing simple technology in establishment and maintenance enhance adoption. Landcare groups exist where tenants are members. They adopt SWC technology

INCENTIVES

Labour: There was no payment for the labour involved in SEC activities under the approach. Voluntary labour by land users included land preparation, nursery establishment, laying out contour and maintenance of contour strips.

Inputs: Coffee and perennial tree seed were partly provided through the approach.

Credit: There was no credit provided for SWC activities under the approach.

Support to local institutions: Local institutions are very supportive to LANDCARE and to SWC activities in general. The local government enact laws or ordinances to support SWC implementation. Among the incentives are endorsement to lending institutions for the availing of production loans, tax credit and in some cases, the provision of seeds, fertilizer and breeding animals.

Long-term impact of incentives: The giving of incentives has to be reviewed and evaluated. Although it hastens the adoption of SWC technologies, in some cases, interest is not sustained once incentives is discontinued. Preferential assistance should be given to those who voluntarily adopt the technology.

MONITORING AND EVALUATION

Monitored aspects

aspects:

- bio-physical
- No. of land users involved

method and indicators:

- regular observations of improvement in crop yield
- regular measurements of numbers

Changes as result of monitoring and evaluation: There have been no significant changes in the approach due to monitoring and evaluation. M & E is mainly monitoring the growth in membership of farmers association (Landcare).

IMPACTS OF SWC APPROACH

Improved soil and water management: The approach greatly helped land users in the implementation of soil and water management technologies. Farmers adopt natural vegetative strips (NVS). Large farms (> 3 ha) generally evolved into commercial production of tree crops (coffee) and trees (timber). Small farms generally remain at subsistence level, hence grain crops with grass strips.

Adoption of the approach by other projects / land users: Many other NGOs, LGUs and line agencies adopted/adapted LANDCARE approach in their respective areas. The approach has been proven effective and it is now being looked upon as a model for the implementation of SWC and other related activities particularly in Mindanao.

Approach continuation: Land users can continue the approach without support. Landcare is a triangulation of grass-root organizations (farmers), local government units (LGU's), and technical facilitators. The financial resource required for this approach are imbedded in the regular budget of municipal or barangay. The LGU's (politicians) consider Landcare groups as political machinery and voting blocks. If they are to stay in politics, they have to sustain Landcare. The fate of local politicians is how much they support Landcare particularly in agricultural community where 80-90% voting population is living from farming community. The Landcare groups now leaned to demand technical backstopping, financial support and policy support from line agencies and LGU's. Landcare enable strong and active participation of people.

CONCLUDING STATEMENTS

Strength / advantages

- 1) Promotes rapid adoption of SWC technologies. Provides easy and fast access / implementation of SWC Technology
- 2) Encourages farmers to avail the services, policy and financial support from LGU and service providers.
- 3) Provides a vehicle for participatory research and technical interventions and ensures newly developed technologies are relevant
- 4) Makes extension activities cost effective
- 5) Ensures sustainability
- 6) Promotes social integration and addresses other social issues beyond household capacity to solve (burial, wedding, etc.)
- 7) Makes farm work easier

Weaknesses / disadvantages

- 1) Over-emphasis of political patronage by some LGUs. People of different orientation/background are sceptical to introduced ideas.
- 2) Some farmers join LANDCARE expecting free items or grant
- 3) Lack of leadership and organization skills of Landcare some leaders, unable to guide groups into cohesive, dynamic organization. It takes time to get consensus and to make them work together.
- 4) Over-reliance on ICRAF for technical innovation
- 5) Participation entails time to be away from farm work
- 6) Individual problems cannot be addressed, except for members who are more frank and open

How to sustain/improve?

Encourage meetings and cross-visits of Landcare groups at each level to share knowledge, ideas and experience. Encourage Landcare members to participate in information and education campaign (IEC).

Promote strong leadership among LANDCARE groups to be collective. Encourage LANDCARE groups to be very open in requesting assistance.

Encourage active participation by different LANDCARE groups and to express their needs.

Encourage farmer-to-farmer transfer of technology. LGUs to share the cost of technology transfer. LANDCARE groups are strengthened. Develop their leadership skills.

Encourage regular meeting and conduct activities to enhance social integration. Encourage to help one another as a community.

Encourage workgroups

How to overcome?

Encourage a more transparent government at LGU particularly at Barangay level.

Project objectives and strategies should be explicitly explained to farmers.

LANDCARE group leaders are to be trained in leadership skills and group facilitation and participation.

Encourage farmers to conduct farmer level orientation

Meetings and discussions should be done during evenings or holidays

Encourage everybody to share their problems and concerns

Contact person: Agustin Mercado, Jr., ICRAF, MOSCAT Campus, Claveria, Misamis Oriental, Philippines

Further reading: Dennis P. Garrity and Agustin Mercado, Jr. The LANDCARE Approach: A Two-Pronged Method to Rapidly Disseminate Agroforestry Practices in Upland Watersheds. Undated. ICRAF, Claveria Research Site, MOSCAT Campus, Claveria, Misamis Oriental, Philippines.

Traditional Stone Terrace Walls

Traditional stone terrace walls built on sloping fields for cultivation

GENERAL INFORMATION

Description: Stone terrace walls are built when clearing new land of stone to bring it into cultivation. These walls are added to each year from further loose stone which is uncovered. The dimension of the walls and the spacing between depends on various factors including the amount of stone in the field. The walls may be up to 1.25 metres high, about 1.5 m maximum base widths and from 20 to 50 metres in length. Spacing is from 3 – 10 metres apart and depends on the slope of the land: stone terracing is generally confined to slopes between 12° and 26°. Between 7° and 12° contour grass strips are generally used: below 7° land is not terraced. Design varies. Some terrace walls are very neatly built; others are merely piles of stone across the slope. The purpose, apart from clearing the land, is to guard against erosion and help keep soil fertility in place, on sloping cropland in a sub-humid area – where rainfall is around 1,000 mm per annum. Maize is the most common crop, but various other annuals and perennials are also grown.

SWC-Categories: Structural measures

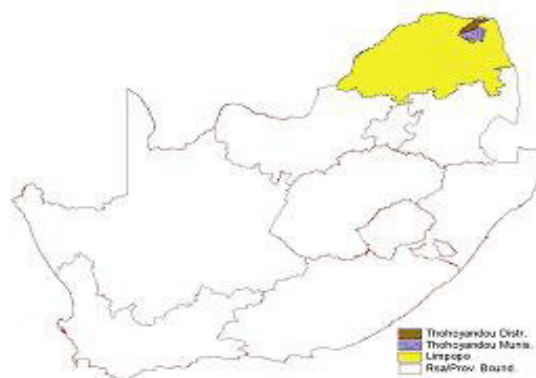
Land use type: Annual cropping and Tree/shrub cropping

Land ownership: Individual, not titled

Location: Thohoyandou district

Area covered: 8 km²

Map:



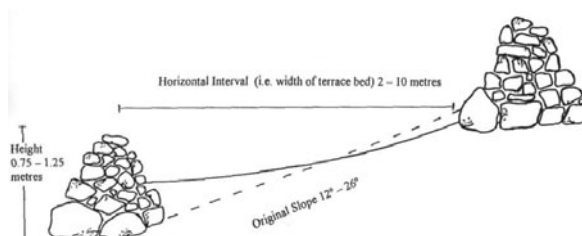
Author: Critchley William, Vrije Universiteit, Amsterdam, The Netherlands

Illustration:



Stone terrace walls

Figure 3 Stone Terraces (Mizsheto): Ranges in Dimensions



Stone terraces: ranges in dimensions

Inter Departmental Approach

Eradication of invasive alien plants to enhance water sustainability by increasing run-off into dams and rivers

GENERAL INFORMATION

Description: Programme started in October 1995, employing previously disadvantaged unemployed people to clear invading trees in catchments and along rivers. This has been going on for approximately 4 years. The leading department is the Department of Water Affairs and Forestry but they have been in partnerships with a number of other departments e.g. Land Affairs, Agriculture, South African National Parks, Welfare etc. Labour intensive methods are used to clear trees and apply herbicides to prevent regrowth. Where in sensitive areas, rehabilitation techniques are employed e.g. sowing grass seeds and re-establishing indigenous plants. There are also some wetland rehabilitation projects across the country where engineering techniques are used to rehabilitate wetlands.

The Inter-departmental approach is unique in the country, but very important as objectives span all departments. The work is done on farmland, community land, private company land and governmental land. New laws will force landowners to clear large stands of alien trees in future and this programme offers landowners a way of clearing their land before the law is enforced. The approach is to use labour intensive clearing techniques to provide jobs and also tackle an ecological problem. In so doing, the programme tackles socio-economic issues and environmental issues. The major objective is to create sustainable water supplies in a drought prone country; hence "Working for Water" (providing work to unemployed and increasing water availability).

Target groups:

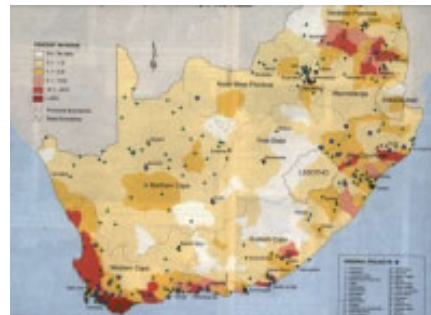
Politicians/Decision makers
Planners
SWC specialists/Extension workers
Land Users
Teachers/School children/Students

Location: Whole of South Africa

Area defined by:

Watershed/catchment unit
Socio-economic/cultural unit
Ecological unit
Administrative unit

Map:



Author: Jacqui Coetzee, Working for Water Program, P/Bag X6001, Potchefstroom, 2520

Illustration:



Community involvement



Eradication of alien plants by community members

Soil and Water Conservation Technologies in the Central Asia

Planting poplar trees on saline and waterlogged soil

Kyrgyzstan

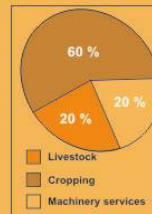
Besh-Terek village, Moscow rayon

Mambetov Baikazak A., village entrepreneur

general background:

The household owns 12 ha of land: 3 ha of irrigated, 1 ha of non-irrigated and 1 ha of cultivated hayfield. There are 2 dairy cows, a horse, 10 sheep and 30 heads of poultry. The property also includes: 1 tractor MTZ-80, a plow, a drill and a cart. The main income of the family comes from: cropping 60%; livestock 20%; offer of machinery services 20%.

Besh-Terek village is located to north-west of Chui valley at 130 km from Bishkek and 500 m above sea level. The climate is extremely continental with hot summer and cold winter. The average temperature in June is +24°C and in January 4°C. The average annual rain amount is 380-430 mm. The soil types of the presented arable land include: meadow and saz soils with the water table of 0.5-1.0 down to 1.5 m with occasional alkali and saline soils.



problems:

Secondary salinity and waterlogging of soils. Reduction of farmers' income.

During irrigations ground water comes out salinizing soil and waterlogging the area. The drainage system is silted, weedy and covered with reed being totally out of order. Costs for materials and drain cleaning are very high.

Soil is becoming a salt-marsh, the area is highly waterlogged disabling to grow various crops. The crop yield has decreased down to 50%, production costs have been doubled, with the same costs the farmer harvests 1,500-1,700 kg of grain per ha, whereas with the same costs he used to receive 30,000-35,000 kg per ha.



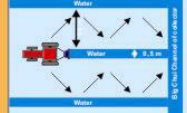
solution:

Solution: The farmer has planted poplar trees which are resistant to salinity; he takes care of the trees using row-spacing to grow fodder crops.

Description of Soil and Water Conservation (SWC) Technology: Planting poplar trees on saline and waterlogged soil.

Using the trenching machine KZU-05 mounted on the tractor MTZ-80 the farmer Mambetov B. made trenches of 0.5 m depth along the entire length of the sides and middle of waterlogged fields with the distance of 50 m between trenches. Along the trenches the surplus of ground and irrigation water was taken aside to lower areas. In autumn after soil being dried at ploughing depth he plowed the field at 30-35 cm deep.

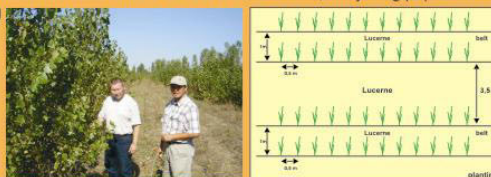
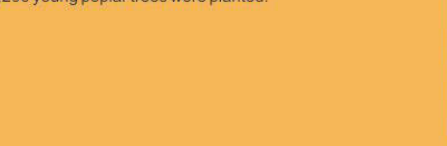
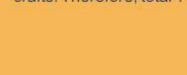
Early in spring as soon as the soil dried he made harrowing with 70 cm of row spacing. Then poplar crafts were planted at 10-15 cm between them being covered with 10 cm of top soil and 1-2 buds on the surface. As far as germination started and soil dried moderate irrigations were done.



Next year the poplar seedlings were replanted into permanent plant-belts with 3-5 m width, inter-plant spacing in the row of 1 m and 0.5-10 m between plants. The distance between poplar tree belts was 10-15 m. Currently spacings between poplar belts are used to grow Lucerne.

7,500-8,000 young poplar trees are required for planting 2 poplar belts around 5 ha of area. To grow this number of poplar trees 0.25-0.26 ha was required.

Trees were also planted in belts of 1 m with the distance between the belts of 5 m. On the area of 1 ha 3,200 young poplar trees were replanted which required 0.10 ha to grow them using 215-240 seedlings.



results:



Application of the technology: There is a positive experience to plant poplar trees on saline and waterlogged spaces with a high water table in Panfilov, Sokuluk and Jaiyl rayons. The technology has been developed by the Forestry Department under the Kyrgyz Agrarian University based on the previously existing technologies and for the first time the technology has been applied in the condition of secondary salinity and water logging.

Opportunity for extension: To prevent the impact of ground water poplar trees can be planted where water table is high or where ground water comes out to the surface. The water table has been decreased down to 1 m, on waterlogged areas the surplus of ground and irrigation water was taken to lower places, rehabilitation of natural vegetation started on drained areas. It made possible to diversify varieties of agricultural crops.

Having improved the soil quality the farmer has started cultivating the most of his landshare which previously was waterlogged. Now he can build fodder crops, maintain more livestock therefore get higher incomes.

In 5-6 years the farmer can use the planted poplar trees as building timber.



Soil and Water Conservation Technologies in the Central Asia

Soil densification of the dried bottom of Aral sea

Kazakhstan, Kyzylorda oblast, Kozhobahy village
"Oasis", Sallmov B.I..

general background:

Kazakhstan, Kyzylorda oblast, Kazalin rayon, dried bottom of Aral sea, Kaskakulan
500 ha of pasture, 150 sheep, 20 camel, 15 horses.

Income structure of the household: wool 10%, meat 80%, shubat 10%.
Climate is arid with very little rain of 150 mm a year.
Soil: sand, crust alkali soil

100%
livestock
products

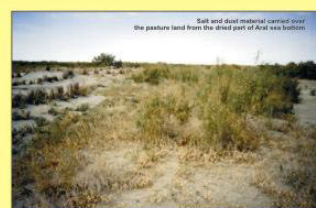


problems:

Deterioration of socio-economic situation in Aral region. Salt-dust material from the dried bottom of Aral sea is carried over agricultural land by wind.

Extensive development of irrigated agriculture in the delta of Syrdaria river resulted in the decrease of Aral sea level and 35 million ha of bottom land being exposed. The dried bottom is the source of salt-dust material near the adjoining agricultural land. Degradation processes of environment are developing: extension of saline land, lost of biodiversity of the river delta ecosystems, active deflation and accumulation processes, low water table.

It has resulted in the deterioration of socio-demographic situation in Aral region: increase of children and maternal mortality, infectious, cancer and cardio-vascular diseases, there is a very high level of migration (40%).

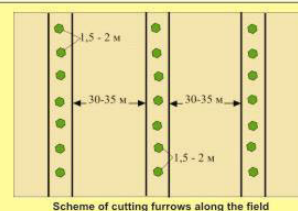


solution:

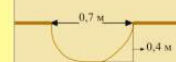
Densification of Aral sea bottom.

Description of the technology of soil densification of dried Aral sea bottom

The dried part of the sea bottom includes about 50% of saline soil or 1.5 million ha. There is no tree and bush vegetation due to a very high salinity (more than 5% of soil weight). In order to establish favorable conditions for seeding and seed germination in June and September they cut sand accumulating furrows transversely to dominating winds. The depth is 40 cm made with trenching machines PKL-70 or KZU-03. Furrows are cut in each 30-35 meters. Young haloxylons or tamarisks are planted along the center of furrows in March. By that time furrows are already two third covered with fresh sand. Young seedlings are planted in rows with 1.5-2 m between them. Autumn drilling of haloxylon seeds is acceptable.



Scheme of cutting furrows along the field



cross section of the furrow

extension of areas under wood plantations will provide densification of active soils and consequently it will result in reducing salt, dust and sand being carried over which are rich in harmful chemicals and that, in its turn, will provide the improvement of the sanitary and epidemiological situation in the region. Moreover, when reaching its maturity stage the vegetation can be used as fire wood at 14.4 USD/ha. The simplified technology provides 21 USD/ha.

results:

The planted vegetation forms forest and pasture lands. The technology has been applied for the first time. The planted vegetation will provide semination process which enables to accelerate overgrowing of the dried bottom, to extent the area under forest, to prevent salt and dust material being carried over the neighboring territories.

Mass application of the technology can provide stabilization of ecological situation in Aral region.

Provision of the local population with fire wood.

Strong point of the technology. Prevention of salt and dust carry out, stabilization and improvement of ecological and sanitary-epidemiological situation, reduction of migration of the local population.

Weak points of the technology. Effectiveness depends on weather conditions, aridity and remoteness of the targeted region, difficulties in life conditions.

Recommendations

The described technology is applicable for other regions of dried lands.



ANNEX 2: QUALITY ASSURANCE – SPECIFIC COMMENTS ON QTs AND QAs

by Malcolm Douglas

Specific Comments on the QTs

QT Section 1.2 Brief Identification of SWC Technology

More thought needs to be given to the common name of the technology to ensure that it can be distinguished from similar ones. For instance multi-storey cropping, terraces and conservation tillage are generic names that cover a range of related technologies. The following are examples of how such generic names might be made more specific: (i) Coconut based multi-storey cropping system; (ii) Level bench terraces for the Loess Plateau Region of China; and (iii) Conservation tillage, using animal draft power, for smallholder dryland cereal/legume cropping systems.

Most authors have difficulty in describing the technology in just 5 key words (section 1.2.3). The tendency is to describe the technology using much the same words as in the definition (section 2.1.1). Suggest that ET 1 gives some examples of what are meant by key words.

QT 1.3 Area Information

Many authors will give a precise area figure, as well as ticking one of the boxes for *If precise area is not known, indicate approximately*. In some cases the area in which the technology has been applied will be restricted to the area of the author's particular research or extension project, even though it is actually very widely applied within the country. So this section often gives a false impression of the areal extent of the technology. This is where members of the national WOCAT quality assurance expert group should be able to assist the author by advising whether the technology described is just limited to a small geographic area or is applied over a much wider area.

QT 1.3.2 Indicate in the map below the area units where the SWC Technology is applied

The units used vary according to the author and can be confusing. Sometimes the area units will be given as km² where what is depicted are administrative units (provinces, counties districts etc). Reference in the QT to SOTER polygons may be confusing to the author, who is unlikely to be familiar with the SOTER Digital Database and/or lack access to maps showing the location of the SOTER polygons for his/her area of interest.

If WOCAT wants to encourage greater use of SOTER polygons for ease of entry into a digital database, with individual area units given unique map codes (eg. 2692-FJ for a unit in Fujian Province in China), then greater effort must be given to making the software and digital maps available, and training people in their use.

QT 1.4 Land Degradation

Section 1.4.1 should ideally be completed on the basis of field observations and interviews with land users, to get a more accurate assessment of the occurrence of the different land degradation types. When undertaken as a purely desk top exercise the tendency is to tick the boxes that match the author's preconceptions of the problem, which may or may not be correct. The various erosion boxes are invariably ticked but other land degradation types may be overlooked. Filling in the specify/remarks column would provide useful additional information to back up the assessment, but is rarely done.

Several QTs had gaps in the data in the table in section 1.4.2. Some key columns being left blank, such as *type of degradation*. Note is this a failure on the part of the author, or who ever entered the data in the database?

With regard to section 1.4.3 only some authors provide comments explaining where the figure for tolerable levels of soil erosion come from. The figure of 10 tonnes/ha/yr is regularly presented suggesting it is used by SWC specialists as a common standard, rather than based on any specific local assessment of soil type and erosion hazard.

This section should be cross checked with section 3.1.1 to see how it compares with the soil loss figure for the with SWC situation. In one QT the tolerable soil loss rate was given as 10 t/ha/yr, while the rate for with SWC was given as 58 t/ha/yr, suggesting that the technology being described was not actually very effective at controlling erosion.

QT 2.1.1 Definition of Technology

The one sentence definition of the technology is the most important part of the QT as it is this which will determine whether anyone searching the database will read any further. This section is often very poorly written. At times the problem is one of poor English, which can be resolved through good language editing. However it is more often because the description is very general and fails to define the key characteristics of the technology, ie. what makes it different to other SWC technologies.

QT 2.1.2 Summary of technology with its main characteristics

Likewise the summary of the technology is commonly written in very general terms providing few details of the key technical specifications. In several QTs all that is provided is a description of the characteristics of a technology in terms of what it does but with no technical details. For instance one QT had the following description: *Engineering measures: contouring terraces so as to conserve the water & soil and increase fruit yield*. The description failed to indicate whether the terraces: (i) are level, backward or forward sloping; (ii) on the contour or on a gradient across the slope; (iii) continuous or intermittent; or (iv) have any other construction features such as an earthbank on the top of the riser and/or a ditch at the back of the terrace. The description also failed to provide any details of the dimensions of a typical terrace (height, width etc) or the cost of construction and maintenance.

Failure to provide a good summary description seriously reduces the overall quality and usefulness of the QT. The latest version of the QT sets out clearly what is needed namely *description, purpose, establishment/maintenance and environment*. However few authors have followed this sequence or provided adequate details. Whereas the information may exist elsewhere in the full QT, this section is where anyone searching the database would expect to find a clear description of the technology. Without this they are unlikely to consider it any further.

It is also important to include the status of the technology (ie. experimental, project/programme promoted or indigenous) as one of the first points in the description. In several QTs it was sometimes unclear as to whether what was being documented was a research trial or a validated technology that was already part of a SWC extension programme.

QT 2.1.3 Photo

More thought needs to be given to the photos that are included in the QT. They need to be clear as to what they show, and match with the description given in section 2.1.2, nor contradict the technical drawing in section 2.4.1. For instance if the description and technical drawing refer to level bench terraces the photo should not actually depict outward sloping terraces.

Photos should have well defined captions and/or be annotated to ensure they show the key points of the technology being described. Where appropriate photos should be included depicting the before and after, or with and without, situation. It can also be good to include people in the photos for human interest and to stress the role of the land user. The caption should also credit the photographer, or source of the photo if scanned from an existing publication.

QT 2.2 Purpose and classification

Completing the various subsections under this heading requires that the author has a good basic understanding of land degradation processes. From the way this part of the QT was often completed, it would suggest that many SWC specialists don't understand the processes and/or have difficulty understanding how a specific technology can, or cannot, combat land degradation. This poor understanding of land degradation processes, by SWC specialists, is cause for concern as it can lead to wrong assessments with regard to: (i) the types of land degradation mainly addressed by the technology (section 2.2.2.4); and (ii) how the technology combats land degradation (section 2.2.2.5).

One QT suggested that a windbreak would prevent water erosion by controlling both dispersed and concentrated runoff. However widely spaced trees cannot by themselves control surface runoff as their trunks are too far apart to have any cross slope barrier effect. Likewise a prerequisite for wind erosion to occur is that the topsoil must be dry, so strong winds during the cropping season, while they may damage the crop, are unlikely to lead to wind erosion as the topsoil will usually be moist at that time. Overcoming this problem will require better training of SWC specialists. A key task for resource persons in future WOCAT training should be to check the technical understanding of the participants, and address any misunderstandings or gaps in their knowledge of land degradation processes.

On occasion there was some confusion as to whether the technology consisted of agronomic, vegetative, structural and/or management measures (section 2.2.2.2). Likewise in scoring the circles for 2.2.2.3 and 2.2.2.5 some potential key answers may be overlooked or given an inconsistent score. Again future WOCAT training should focus on clarifying these.

The general land use types (section 2.2.2.1), while adequate for most smallholder cropping systems in sub-Saharan Africa don't allow for the differentiation of key differences in some of the cropland components of Asian

farming systems, notably paddy rice and orchards. Likewise there is no scope for differentiating between rainfed and irrigated annual cropping, or dryland versus wetland farming.

QT 2.3 Status

Some authors appear unclear about how to describe the current status of the technology (section 2.3.1). This is particularly the case with technologies that may have originally been introduced by a project, but have since become standard practice. Does this count as a *programme/project implemented/promoted* or a *traditional/indigenous/existing/local* technology?

A case in point is the extensive use of level bench terracing in the Loess Plateau Region of China. This form of terracing was introduced to the area in the early 1950s as part of the communist party's mass mobilisation campaigns. Large areas of the Loess Plateau have been terraced and terracing continues to be promoted in the area through government and donor funded projects. Hence when deciding to tick a box in section 2.3.2 which does the author use? None of the 5 existing options really fits this situation, so is there a need for a new box on the lines of a *validated technology/tried and tested over many (more than 20) years*? Whereas the author could tick the *other (specify)* option, and write something along those lines, in reality very few authors, when completing a QT, ever tick the other boxes, always trying to fit the technology to one of the given options. During WOCAT training potential WOCATeers should be encouraged to use the other option when the technology does not fit any of the given ones, and to specify why it does not fit.

There is potential for contradictions in this section, where under 2.3.1 a technology may be described as traditional, but shown in 2.3.5 to be designed by national or international specialists.

QT 2.4.1 Technical drawing

The technical drawings are of variable quality, and at times confuse rather than clarify the description, particularly when they show something, either different to the photo (section 2.1.3), or which fails to match the description (section 2.1.2). For instance in one QT the photo and a sketch in section 2.1.3 suggested that only part of the hillside is excavated to create the terraces, with the intervening strips left unchanged from the original hill slope, while the technical drawing in 2.4.1 suggested the whole hillside is carved into bench terraces.

Common errors are to leave out the dimensions of the structural measures (height, width, spacing, gradient etc), or to show for a vegetative measure an over simplified layout, such as when the drawing of a wind break shows only 1 line of trees when it consists of several. The drawing should also be kept simple and schematic rather than be an elaborate artists impression. The latter, while they may look good, can be a distraction making it harder to get the required information from the drawing.

QT 2.4.2 Specifications of agronomic measures

Some authors will complete this section even though the technology is a structural or vegetative measure. In such cases the authors tend to use this section to describe the agronomic practices followed in the cropped portion of the field lying between the structures or vegetative strips, even though this has nothing to do with the technology itself. On other occasions this section may be left blank even when an agronomic measure is a critical component of the overall SWC package, for instance failing to note that the planting of fruit trees on orchard terraces on degraded hillsides requires the digging of large planting holes and filling them with organic manure.

QT 2.4.3 Specifications of vegetative measures

Errors can creep in when the author misreads or misunderstands particular sections, columns and/or boxes. The technical specifications in the table (section 2.4.3.1) need checking to see if they are in the correct column and are accurate. For instance one QT gave a vertical interval of 10 metres between strips on flat land. Was this an error on the part of the author, or did whoever enter the data in the WOCAT database put it in the wrong column (ie. it should have been spacing between strips not the VI)?

Not all authors specify which plant species are used in the vegetative measure, and some even give answers that do not fit the question.

QT 2.4.4 Specifications of structural measures

Again errors can creep in when the author misreads or misunderstands particular sections, columns and/or boxes. The technical specifications in the table (section 2.4.4.1) need careful checking to see if they are in the correct column and are accurate. In many cases key data on one or more aspects of the technical dimensions is missing. This table is also another area where errors can slip in when the data is entered into the database.

Some authors may be unfamiliar with the term bund and when describing a terrace with a raised bank on the lip will describe this as a bund rather than as part of the terrace. Also from the answers about slope and gradients either some authors are unclear as to what is wanted or they don't properly check the answers they give. For instance in one QT when describing a level bench terrace the slope between the structures was given as 10%,

rather than 0%, and the lateral gradient as 80! Likewise many authors will put in a figure for the water harvesting ratio even when the technology has nothing to do with water harvesting.

Where structural and vegetative measures are combined there is a need to cross check the answers in sections 2.4.3.1 and 2.4.4.1 to see they match. Often they don't.

QT 2.4.5 Specification of management measures

Some QTs will include details of SWC management measures that are carried out in another part of the landscape rather than being a specific component of the technology being described. In such a situation they should be documented separately using a different QT.

QT 2.5 Natural Environment

This section is relatively straight forward to complete. However errors can creep in and this is where the knowledge of the national expert group is essential for checking the data and raising any possible errors with the author.

Currently this part of the QT does not adequately capture the seasonality of such key climatic features as rainfall. Likewise strong winds when the soils are dry and exposed will be more of a concern, for wind erosion control, than strong winds during the rainy season. The agro-climatic zone (section 2.5.2) also needs further differentiation according to whether the climate is tropical, sub-tropical or temperate.

QT 2.6 Human environment and land use

Again the first part of this section is relatively straight forward to complete. However errors can creep in and this is also where the knowledge of the national expert group is essential for checking the data and raising any possible errors with the author.

The table in 2.6.4 is clearly laid out in the QT enabling a clear separation of the land ownership and land use rights for the general situation, and that specific to the area where the technology is applied. However the summary layout, in the database version, can be confusing when the data is retrieved.

When completing sections 2.6.13 (cropland), 2.6.14 (grazing land), 2.6.15 (forest/woodland) and 2.6.16 (other) many authors present the situation for the wider area in which the land users operate rather than the specific plots of land in which the technology is applied. For instance in one QT describing, a technology for hillside orchards, information was given about the lowland annual cropping systems, livestock practices, woodlands and wilderness areas, even though these had nothing to do with the technology. It is therefore important during WOCAT training to stress that it is not necessary to fill in every part of the QT, only those parts that are specific to the technology being described.

Reviewing this section also revealed the potential for misunderstandings when translating the English originals into another language. It is not easy to translate technical terms from one language to another, particularly if the translation is done by someone with limited SWC technical knowledge. For instance it was noted that several of the Chinese QTs recorded the type of cultivation as shifting even though this is extremely uncommon in China. The explanation could be that the term shifting was translated as the character for crop rotation. It is therefore essential that when the QT is translated into another language, another SWC expert checks the translation with the English original, to identify any possible mistranslations.

QT 2.7 Costs

Although this is one of the key sections for anyone wanting to see if the technology is worth trying elsewhere, it is a part of the QT where there are usually significant gaps in the data provided. This would suggest that many SWC specialists have no idea of what it actually costs to adopt the SWC technologies they recommend. If true this is a cause for concern and an indictment of many past SWC efforts.

It should be possible to get the required data for many project promoted technologies from a review of the relevant project planning documents and technical manuals. Information on the land users own indigenous practices will be less readily available, but should be obtainable through sensitive interviewing of representative practitioners.

Where costs are given it is often unclear as to how up to date they are, which makes it difficult to compare different technologies to determine which might be the most cost effective at the present time. There is thus a need to record the date to which the costs apply, and provide an estimate of what the establishment and recurrent costs would be at the present time (the date the QT was completed). Also for some site specific technologies (eg. check dams, small water impounding dams) it would be more appropriate to record the typical unit cost, rather than the cost per ha.

In section 2.7.3 on subsidies there is no line for recording subsidies provided from local government (district, county, municipality, village etc) as opposed to national government sources. It would appear that some authors, in countries where local government plays a key role in SWC activities, have recorded this against the

community/local line giving a false impression as to the extent to which the community itself has contributed to the costs.

QT 2.8 Supportive technologies

This section is usually left blank which may, or may not, be correct. This is where the knowledge, of the members of the national expert panel, about the technology should be used to check and advise the author on whether anything should be recorded here.

QT 3.1 Benefits, advantages and disadvantages

The main problem with this section is that the author usually just ticks a box but rarely gives any figures or comments that would explain and justify the selection of negligible, little, medium or high. Are these purely guesstimates or is there real data to back it up? The lack of any backing statements limits the confidence of database users in the data. Some benefits that might be expected, given the type of technology being documented, are not ticked and may therefore have been overlooked. This is where a good review by the national expert group should pick up on such concerns, and by liaising with the author determine whether they were left out by mistake, or there really are no such benefits from applying the technology.

Occasionally figures for yield increases may be given, but it is unclear whether this can be attributed solely to the technology, or whether it may in part be due to the simultaneous introduction of fertiliser, new varieties and improved crop husbandry practices. For instance, as suggested by one QT, can terracing alone result in a 100-1000% yield increase?

In some QTs the figures given for soil loss with or without SWC need cross checking with the authors. For instance, as suggested by one QT, can you really lose 200-260 t/ha/yr on slopes of less than 2% with sandy soils? Such figures have may well have come from runoff plots at a research station in an adjacent hilly site and have been applied without any critical review to the area where the technology is practised.

QT 3.2 Economic analysis

This is the part of the QT that inspires the least confidence in the answers. This stems from the fact that regrettably there is a generally a lack of hard data with which to undertake the economic analysis. This is an incredible indictment of past SWC efforts in that it shows that SWC technologies have been promoted on the basis of their ecological rather than economic benefits. Improving the quality of this part of the QT requires the development of set of cost-benefit analysis WOCAT worksheets/tools to guide the collection and analysis of the data required to accurately complete section 3.2. These should be included in the database as a technical annex so that interested database users can see how the author arrived at the figures presented in the main body of the QT.

Note the report of the 7th WOCAT international workshop and steering meeting reported that Roger White was to provide advice to WOCAT on this. Has this been done?

QT 3.3 Adaptation

From the answers given to this section would appear that many authors did not understand what was meant by the term adaptation. Where non English language versions of the QT are used it will be necessary to check whether the term was correctly translated. This is also an area that may require clearer guidelines during future WOCAT training.

QT 3.4 Acceptance or adoption

This is a section where there were frequently contradictions with earlier parts of the QT (notably section 2.7.3) concerning whether or not incentives were used to get the technology adopted. Authors need to cross check their answers in the different sections to ensure such contradictions do not occur. There may also be cultural differences between countries as to what constitutes an incentive, for instance paying land users for their labour may be regarded as normal practice in some countries and therefore not considered an incentive.

Some authors appear to have misunderstood what is meant by spontaneous adoption (section 3.4.2). This can lead to misleading, confusing and incorrect answers. There is a need to check whether part of the confusion is related to the way the terms have been translated. Even in areas where it has been indicated elsewhere in the QT that all costs have been borne by a government or donor funded project it will still be noted by some authors that a percentage of land users have adopted the technology spontaneously (section 3.4.2.1).

QT 3.5 Concluding statements

The main problems with this section arise where the author introduces a strength or weakness about the technology that has not previously been mentioned or actually contradicts an earlier section. There is thus a need for better cross referencing and checking between this section and what has previously been reported.

QT Additional information (annex T3)

It is very rare to find a QT in the database where the author has made use of annex T3 to provide additional information, which for lack of space could not be covered properly elsewhere in the QT. More use should be made of annex T3, particularly where the dimensions (width, height, spacing etc) of a technology may vary according to such things as slope and soil type. There is not room to cover this fully in the description (section 2.1.2) or under the specifications sections (2.4.3.1 and 2.4.4.1) whereas a table showing the different dimensions could be included here with a cross reference provided under the corresponding sections.

Specific Comments on the QAs

From a review of a number of QAs it would appear that there is still considerable confusion as to what constitutes an approach and what is a technology. This needs to be addressed as a matter of concern in future WOCAT training.

QA 1.2.1 Name of SWC Approach

All too often the author will use exactly the same name as used for the corresponding QT.

QA 1.2.2 Key words to describe SWC approach

There are many examples of QAs where the key words listed are identical to those used to describe the technology, and as such are do not describe the approach. Need for examples of key words to be given on page EA 2.

QA 1.2.4 Associated Technologies

Why does WOCAT recommend that the QA should be restricted to 1 QT? Many area based SWC projects would have a common approach but might involve several technologies related to different parts of the landscape and/or different land use types.

QA 1.3.4 Provide a photograph/slide showing an impression of the approach

Whereas it is relatively easy to find one or more photos that will show a technology it can be much more difficult to find ones that illustrate an approach. More thought needs to be given to photo selection and providing clear captions, particularly where the photo needs supporting explanations.

QA 2.1.1.1 Definition of the SWC Approach

Many QAs repeat the definition of the technology rather than coming up with one specific to the approach.

QA 2.1.1.2 Provide a summary of the approach with its main characteristics

Again many QAs repeat the equivalent paragraph from the QT and provide no information on the approach itself.

The QA clearly sets out the need for information on *objectives, methods, stages of implementation, role of participants and other important information*. Few authors have followed this sequence.

QA 2.1.2.3 Provide an organogramme that points out important actors within the approach

While some authors include an organogramme others have included a technical drawing of the technology. Although a clear example is given on page EA 7 some authors appear not to be familiar with the term. Need to check how this was translated into the non English language versions of the QA.

QA 2.1.3 Problems/constraints

This section can be confused, with authors mixing up problems related to the promotion of the technology and the environmental/land degradation problem(s) the approach is seeking to address. One way to perhaps overcome this would be to split 2.1.3.1 into 2 parts. Part 1 specifically asking about the main land degradation problems. Part 2 asking about other problems (eg. poverty alleviation, low agricultural production, lack of technical knowledge, lack of cash to invest in SWC etc).

Under 2.1.3.2 would suggest reversing the order by putting the direct causes first and indirect second, as is the case on EA8. The authors should also be encouraged to write something in the comments section to justify/explain their selection and ranking of the different causes.

The comments on the constraints and treatments (section 2.1.3.3) can be very superficial providing little in the way of useful information.

QA 2.1.4 Objectives and targets

In many QAs what are listed as objectives (section 2.1.4.1) are primarily project activities rather than objectives.

Likewise what are listed as targets (section 2.1.4.2) are more like general objectives than specific targets. A target would be something like: (i) reduce soil loss by 50%; (ii) terrace 5,000 ha of hillside; and/or (iii) have the new technology adopted by 60% of the farmers in a specific area.

Frequently no benefits are listed (section 2.1.4.2). The benefits that might be expected as a result of a project approach could be something like: (i) average farm household income raised from x US\$ to y US\$/year; (ii) average crop yields increased from x kg to y kg/ha; (iii) employment provided for ... number of people; and/or (iv) less downstream damage to croplands, settlements, roads, reservoirs due to reduced sedimentation and flooding.

To complete this part of the QA properly more guidance may be needed as it is a common mistake in project planning to mix up objectives, activities and targets, and development planners often have difficulty in determining the expected SWC benefits.

QA 2.1.5 Decision making

Need to cross reference this section with other sections in the QA, to ensure there are no contradictions between the answers, in particular with regard to: (i) who chose the technology (section 2.1.5.1); (ii) decided on its method of implementation (section 2.1.5.2); (iii) designed the approach (section 2.1.7.1); (iv) the type of involvement of local communities (section 2.2.3.1); and (v) how land users were involved (section 2.2.3.2).

QA 2.1.6 Framework of SWC Approach

On occasion there may be a misunderstanding (or mistranslation) of the term *traditional rules*. The answers given to sections 2.1.6.1 and 2.1.6.2 in some QAs referred to government legislation rather than the traditional community/cultural rules of the land users.

QA 2.1.7 Operations of the SWC Approach

See comment under 2.1.5.

QA 2.1.7.3 Which were implementing agencies & 2.1.7.4 Which were national counterpart agencies

Neither of these sections makes provision for the role of local government agencies as implementing or counterpart agencies. In many countries there are distinct roles and responsibilities for central government SWC related agencies compared to those of the counterpart agencies operating at the regional, provincial, or other levels of local government (eg. district, county, municipality, township, village etc) with regard to technical supervision, planning, funding, implementation and monitoring. Because of this it would appear that some authors are ticking the community/local box when what they are describing is actually local government.

QA 2.1.7.7 Was own personnel employed or was existing in-line staff engaged?

From some of the answers given in the QAs would appear that some authors may not understand what the listed terms mean, even though EA14 makes it clear what is meant. Does this mean the authors don't read the examples page or that the terms have been mistranslated?

QA 2.2 Participation

See comment under 2.1.5, particularly for section 2.2.3.

While peoples participation in SWC may be increasingly advocated as the way forward for SWC efforts, the reality is that it has yet to be institutionalised within most SWC departments. This means that many SWC specialists have a limited understanding of the principles and practice involved. Hence the answers given for land user involvement may often be wishful thinking on the part of the authors, rather than reality, and are sometimes contradictory. For instance in one QA the self mobilisation box was ticked for initiation even though the answers to section 2.1.5 on decision making indicated a top down approach with decisions being made by the SWC specialists and local government officials.

Need for comments/explanations of the reasons for scoring/ranking particular activities (section 2.2.3.2). For instance if R/PRA was used what form did it take? What measurements/observations were undertaken by the land users for M&E? What on-farm and on-station research was undertaken (particularly if there is no reference elsewhere in the QA to research being part of the approach).

QA 2.3 Financing

This section often lacks hard data, particularly with regard to the budget (section 2.3.2). Where project related data is available it is not always clear whether the budget covers just the SWC activities or other project activities.

There is no provision in table 2.3.11 for contributions from local as opposed to national government and it would appear from some QAs that the local government contribution has been recorded against the community/local line. Also this table only covers monetary contributions to costs as there are only columns for *as loan* or *as grant*. There is no provision in the table for an in-kind contributions column. The community contribution, broken down in 2.3.1.2, would usually be mostly in-kind.

QA 2.4 Indirect subsidies

Need to provide more details in the comments sections as these are often very brief giving only a superficial description/explanation of what is involved in any training, extension or research activities.

Some QAs appear to have been completed as a theoretical desk top activity. Questions on training, extension and research would be easier to complete if related to a specific government or donor funded project. The answers given might also be different if this approach was taken.

QA 2.5 Direct subsidies

Some contradictions can arise between this section and earlier ones, particularly concerning whether labour was voluntary or paid for.

Hard data may be lacking when done as a theoretical desk top exercise, so where possible the answers should be based on a specific government or donor funded project.

QA 3.1 Methods used for monitoring and evaluation

There is currently nowhere to record on the QA information on who carried out the monitoring (project staff, government monitoring department, land users etc). Perhaps need for an additional question in the QA on this.

It is common to find that no information is given on the indicators and procedures used for monitoring (sections 3.1.1.1 and 3.1.1.2).

QA 3.2 Impact analysis

Need to provide more details in the comments sections as these are often very brief giving only a superficial description/explanation of: (i) whether, and how, the approach led to changes in land management; (ii) implementation progress; (iii) changes in attitudes and customs; (iv) effectiveness of training/extension/research activities; (v) how the policy, land tenure and legislative environment affected the approach; (vi) how the local economy benefited from the approach; and (vii) the off-site effects.

From the answers to section 3.2.3.1 would appear that there some authors may have misunderstood what is meant by attitudes and customs (or have been mistranslated). Could be clarified by expanding/rewriting the comments section.

QA 3.2.6 Incentives

Need to ensure that this section matches the other sections where reference is made to the use of incentives. In some QAs it does not!

QA 3.3 Concluding statements

Need to ensure that these are in line with the answers given to the previous sections. For instance if the approach involved heavy use of financial incentives, is it credible to tick the yes box when answering the question *Can the land users continue the approach activities without support* question (section 3.3.1.1)? If they can, then the author will need to explain why the incentives/ subsidies were needed for the approach, and how once the project support ends the land users would be able to meet future establishment and maintenance costs. Currently the comments section says *if no or uncertain, specify and comment*, in most cases it would be equally important to justify a yes answer, as many SWC projects fail to have a long term impact because the post project support needs have been overlooked or underestimated.

QA Additional information (annex T3)

It is very rare to find a QA in the database where the author has made use of annex T3 to provide additional information, which for lack of space could not be covered properly elsewhere in the QA.

ANNEX 3: WOCAT USER SURVEY

To obtain an idea of how much WOCAT products are being used and for what purpose, a user survey was conducted among subscribers of the WOCAT mailing list. Two questions were asked, one regarding the use (and impact) of WOCAT at the field level, the other consisting of a brief questionnaire concerning the use of digital products. Feedback was not high: out of 434 subscribers, 15 persons (3,75%) reacted, almost all solely to the digital products questionnaire (see below). Scores were generally very positive.

A) WOCAT at the field level

Ten years since the start of the WOCAT project (now programme) progress is quite satisfactory in terms of methodology development and network expansion (focus of roughly the first 5 years), adoption of the methodology by SWC (and other) institutions, data collection and international recognition (focus of the second half of the decade). Though these achievements all suggest a considerable success of WOCAT, we are still looking for more evidence on the **impact of WOCAT at the field level**. We realise that first of all it is a long-term process for such impacts to become visible and secondly that it may be difficult to attribute individual success stories to WOCAT alone. But we also believe that there must be examples of successful application of (parts of) the WOCAT methodology at the field level and we would like to hear (more) about these.

Although WOCAT is monitoring progress through its standard Monitoring Sheets that are filled in by national/regional collaborators each year for the Annual Workshop and Steering Meeting, with this request **we especially ask anyone to send us examples where WOCAT has made a difference for individual (or groups of) land users**. No long texts needed, just some brief but clear description of where and how WOCAT contributed.

B) User survey WOCAT digital products

Secondly, we are interested in the **use of WOCAT digital products** like the WOCAT CD ROM, the Website, the on-line databases etc. which are important outputs of WOCAT. We very much like to get some feedback on the usefulness of these products and therefore highly appreciate your collaboration in answering the few questions in **attached WORD form**. If you have difficulties using this, just fill in the form below and return it us (please. check whether just ticking or ranking is required as reply).

WOCAT Digital Products User Survey

What digital medium are you using most to get information on WOCAT:

	<i>total</i>
Internet (WOCAT Website)	9
CD ROM	6
The WOCAT mailing list (WOCAT-L) or individual Emails	8
	9

How often do you access this medium:

	<i>total</i>
Infrequently (e.g. once a year or less)	1
Sometimes (several times per year)	4
Frequently (once a month)	6
Intensively (more than once a month)	3
	5

What information are you accessing/using (please rank in order of importance, 1 = most important)

	<i>Avg.</i>	<i>Count</i>
General info (e.g. Introduction, Brochure, etc.)	2,9	7
The databases (for browsing the information)	2,7	11
The questionnaires (for entering /editing data)	3,0	9
Manuals or Guidelines	2,6	11
Publications, reports	2,0	10
The Newsletter (either through the Website or through the mailing list)	2,9	13
Other:		

How are you using this information:

	<i>total</i>
As reference material	10
To apply in practice and improve your work	10
As teaching material	6
To list SWC done in specific area/under certain conditions / in specific areas	4
Other, namely:	0

How would you rate the overall user-friendliness of the WOCAT digital products on a scale of 1 (bad) to 5 (good)?

Avg.
4,3

What should be improved and how?

How would you rate the overall usefulness of the information on a scale of 1 (bad) to 5 (good)?

Avg.
4,3

What should be improved and how?

What type of work are you involved in: (several answers possible, please rank in order of importance; 1 = most important)

	<i>Avg.</i>	<i>Count</i>
Agriculture/Forestry extension	2,5	7
Project implementation	1,3	8
Agriculture/Forestry planning (pls. specify what level: field/ project/ district/ national, etc.):	2,8	5
Research (specify)	1,1	9
Education (pls. specify what level):	2,0	4
Other (pls. specify):		

ANNEX 4: MONITORING SHEETS AND ACTIVITY PLANS

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CDE

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Switzerland
Institution: CDE

Year: 2003
Contact person: HP. Liniger, G. Schwilch

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
see separate table		

2. Expenses for WOCAT

Expenses in cash: 300'000 US \$

Expenses in kind: US \$

Performance indicators

3. 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	25	moderate					
Institutions, including NGO's	25	moderate	5	few	5	moderate	
Decision makers							

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Training workshop Kathmandu, Nepal	25	24.3.-4.4.	3?
Initiation and training workshops Central Asia: Kyrgyzstan and Tajikistan: NCCR North-South students SWC specialists	30	20.-27.3, 11.-26.9	3
IAEA research coordination meeting Vienna, Austria	20	19.-23.5	17
Presentation to Syngenta in Basel	20	Nov 02	International meeting

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

Promotional purposes	10%
Information and training	20%
Data collection	10%
Analysis, output production	25%
Other	35%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)			
Number of Approaches (As)			
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries	draft of UNEP-WOCAT overview book	1	
Reports, analysis of specific aspect, e.g. incentive	3 papers submitted: Hurni, H., Liniger, H.P. and U. Wiesmann: Research partnerships for mitigating syndromes in mountain areas. In: Huber, U.M., Reasoner, M.A., Bugmann, H. (Eds.): Global Change and Mountain Regions: A State of Knowledge Overview. Kluwer Academic Publishers, Dordrecht, in press. Liniger H.P., van Lynden G. (forthcoming): Building up and sharing knowledge for better decision making on soil and water conservation in a changing mountain environment – the WOCAT experience. In: Stocking M. et al (eds.): Renewable Natural Resources Management for Mountain Communities. Herweg K., Liniger H.P. 2003: Soil Erosion Control - an integral part of sustainable land management. In: Natural and socio-economic effects of erosion control in mountainous regions. Proceedings of the IYM conference, Belgrade 2003		2003
Meeting / workshop reports	Proceedings WWSM 7 Rome 02	75	31.1.03
Presentation materials (PR)	Powerpoint presentations compiled and put on Internet, CD-ROM	0	31.8.03
Maps			
Others, e.g. guidelines	DB manual updates		

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

Date	Content	Partners (MoU between whom?)
April 03	IAEA	CDE and IAEA
ongoing	ISRIC - CDE collaboration	ISRIC and CDE

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	200	
Requests made for WOCAT data and products (CD-ROM, books)	200	
Requests made for training on WOCAT methodologies	2	Nepal and Central Asia
Number of trained participants	40	Nepal and Central Asia
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		(see national reports)
Persons/institutions using the WOCAT questionnaires for documenting SWC		(see national reports) + Institute of Geography, Bern
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		(see national reports)
Use of WOCAT in training / education (No. of courses given)	1	Different departments of the University of Dushanbe

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:**

Use of WOCAT tools for diverse purposes (education, training, research, implementation). Commitment of partners.

12. Problems with WOCAT:

Insufficient task force performance and responses to Management Group issues. Funding constraints / time allocation for core activities.

13. Others:

FAO

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: -
Institution: FAO

Year: 2003
Contact person: Freddy Nachtergaele, AGLL

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
QA on-line	Programming of on-line version of QA	QA operational on-line
Update of QT on-line	Programming of update mechanism of on-line QT database from MS-aAccess database	QT on-line database up-to-date
Mock-up of revised WOCAT CD-ROM	Compilation of new and updated material for the revised version. Modification of web interface for use on CD-ROM	Mock-up version produced and presented at annual meeting in Nepal
WOCAT Workshop	Training Workshop Argentina	Discussed and planned
Information dissemination		Achieved (article, info, CDROMs, MiscDoc)

2. Expenses for WOCAT

Expenses in cash: 240 US \$

Expenses in kind: 10.000 US \$

Performance indicators

3. 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		few		few	2	few	
Institutions, including NGO's		few		few	2	few	
Decision makers		few		few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
-			

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

Promotional purposes	5%
Information and training	5%
Data collection	
Analysis, output production	90%
Other	
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)			not really applicable because FAO does not produce data
Number of Approaches (As)			not really applicable because FAO does not produce data
Area (km ²) for which maps are prepared and scale of these maps			-

7. 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, e.g. guidelines	Reprint of LWDMS # 16 (WOCAT video) CD-ROM	2	Nov 03

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	20	approximate figure
Requests made for WOCAT data and products (CD-ROM, books)	200	approximate figure counting both CD-ROMs
Requests made for training on WOCAT methodologies		n.a.
Number of trained participants		n.a.
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		not known by FAO
Persons/institutions using the WOCAT questionnaires for documenting SWC		not known by FAO
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		not known by FAO
Use of WOCAT in training / education (No. of courses given)		n.a.

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

n.a.

11. Benefits of WOCAT:

n.a.

12. Problems with WOCAT:

n.a.

13. Others:

Date: 14 November 2003

Filled by: Wolfgang Prante / Freddy Nachtergaele

TANZANIA

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Tanzania Year: 2003
 Institution: Ministry of Agriculture & Food Security Contact person: P.S.TARIMO

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Good quality data available and used	Training of data collectors and users on data quality and utilization	28 persons (3 women and 25 men) trained
Available National trainers on WOCAT data base	Training of national trainers on data base management	Training not conducted
Capacity building of Institution	Participation in the 2003 WOCAT annual meeting and at least 2 other International related activities	2 persons participated in the 2003 WOCAT annual meeting.
10 QTs, 3QAs, and 6QMs available by September 2003	Carry out field documentation of existing Ts, As, and Maps using WOCAT tools.	5QTs, 5QAs and 5QMs collected
SWC QTs, QAs and QMs available and used	Update the data forwarded to Bern i.e 4QTs and 4QAs and compile new data collected and enter into data base	Data forwarded to Bern partially updated due to unavailability of required information.

3. Expenses for WOCAT

Expenses in cash: US \$ 7,890 (MAFS)

Expenses in kind: US \$ (... extension personnel from District Councils)

Performance indicators

3. 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	30	many	-	-	-	-	
Institutions, including NGO's	2	few	-	-	-	-	
Decision makers	1	few	-	-	-	-	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
1 WOCAT Training workshop (Arusha)	28	04 – 07/02/2003	Tanzania (25 District)

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

Promotional purposes	5%
Information and training	20
Data collection	15%
Analysis, output production	5%
Other	55%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	5	4	The work is partially worked
Number of Approaches (As)	5	4	The work is partially worked
Area (Km2) for which maps are prepared and scale of these maps	-	-	All maps from the field are in hard copy (non digital, needs more time to work on it...eg. digitizing).

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries	Land management technology profiles for selected areas in Tanzania (co-sponsored by MAFS and RELMA)	Report in final touches	2000
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports			
Presentation materials (PR)			
Maps			
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)		
Requests made for WOCAT data and products (CD-ROM, books)		
Requests made for training on WOCAT methodologies	90	District SMS in SWC and related extension disciplines.
Number of trained participants	28	All were district subject matter specialist in soil and water conservation .
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	6	SUA, ARI Tumbi, ARI Seliani, ARI Mlingano, OFTI, MAFS,
Persons/institutions using the WOCAT questionnaires for documenting SWC	1	Ministry of Agriculture and Food Security
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	0	
Use of WOCAT in training / education (No. of courses given)	1	Arusha training workshop

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

None

11. Benefits of WOCAT:**12. Problems with WOCAT:**

- Time consuming in filling in questionnaire
- WOCAT database software (CDs) not accessible to some PCs due to difference in version

13. Others:

- Potential users' perception (against the reality) ... "WOCAT is a project...there must be some funds allocated for technology documentation...!"
- Reporting progress/work output as per schedule/action plan. More time needed...
- Financing: there should be reliable funding sources to support both field as well as office work (materials, software, communication, transport, etc).

Date: 20 October 2003

Filled by: K. H. LYOBA

WORKPLAN for: Tanzania

Planned activities

During the next year focus will be on two areas of unaccomplished previous undertakings, which are: -

1. Making follow up on questionnaire filling and description of technologies and approaches. To be involved are the following techniques/technologies: -
 - Contour bunds
 - Hedge rows
 - Rainwater harvesting
 - Contouring
 - Bench terracing
 - Ridging/tie-ridging
 - Stabilization of contour bunds by fodder grass
 - Pit farming
 - Use of bamboo in gully control
 - Double digging
 - Vetiver hedges
 - Infiltration ditches
 - Ripping
 - Sub-soiling
 - Manure soak-pit
 - Agroforestry
 - Beekeeping in forest reserves/gazetted forests
2. Mapping of technologies and approaches.

Funding Sources

WOCAT/RELMA will be asked to support the Ministry of Agriculture and Food Security to carry out implementation.

ETHIOPIA

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Ethiopia
Institution: Ministry of Agriculture

Year: 2003
Contact person: Daniel Danano

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Updating of the former 8 Ts and 2 As; undertaking of case studies for 25 Ts, 12 As and 38 Ms	Completing of questionnaires on technologies, approaches and maps	Case studies undertaken and completing of questionnaires for 19 technologies 12 approaches and 14 maps undertaken
46 Wereda experts trained	Training of field staff on data collection	A training was conducted at Wollaita Soddo to train 8 field staff participating in the completing of the questionnaires from the Southern Region.
Draft overview book produced	Compiling and presenting of national results on (National overview Book).	This is not achieved because the completing of the questionnaire is conducted only in 3 out of 14 regions of Ethiopia. Collection of more data required from the remaining regions. It was unrealistic plan.
4 SWC specialists gained knowledge in participating in regional workshop	Participating in regional workshop	All planned activities were not achieved because the regional coordination was unable to make the coordination as anticipated.
1 national EthiOCAT activities achievements report prepared	Report writing	The report on EthiOCAT activities achievements completed
Encoding and analysis completed for 17 QTs, 10 QAs and 30 QMs	Data encoding and analysis	Encoding and analysis completed for 19 OTs, 12 QAs and 14 maps
Technical support provided for 23 weredas in 4 regions	Backstopping and technical guidance	Backstopping provided for 16 weredas in 3 regions
1 EthiOCAT Review meeting conducted	National meeting for assessing preliminary results	2 EthiOCAT Review Meetings conducted for checking the quality and standards of the information collected

4. Expenses for WOCAT

Expenses in cash: 12000 US \$

Expenses in kind: 2000 US \$

Performance indicators

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

	national		regional		global	
	No.	Intens.	No.	Intens.	No.	Intens.
Scientists/professionals	10	few	0	few	0	few
Institutions, including NGO's	3	few	0	few	0	few
Decision makers	2	few	0	few	0	few

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

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Training for field staff participating in the completing of questionnaires in the Southern Peoples region	8	June 2003	
Review workshop for Oromiya region	18	Oct 2003	
Review workshop for Tigray and Southern regions	9	Oct 2003	

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

Promotional purposes	5%
Information and training	15%
Data collection	60%
Analysis, output production	20%
Other	0%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	19		
Number of Approaches (As)	12		
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries	Environmental and economic impacts of SWC measures in Boreda, Southern Ethiopia: the case of soil bunds as the major measure		
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	2		
Presentation materials (PR)			
Maps	14		
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	23	Staff from various organizations, students from from Agricultural colleges and Alemaya University of Agriculture and researchers from the Ethiopian Research Organization
Requests made for WOCAT data and products (CD-ROM, books)	6	Organizations (Government and Non-government) working in soil conservation and land development
Requests made for training on WOCAT methodologies		
Number of trained participants		
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		WOCAT tools used for evaluating the impact of SWC programme in Ethiopia Assisted by the World Food Programme Students from Alemaya Agricultural University, Department of Geography Addis Ababa University and Mekele University for conducting research used WOCAT tools.
Persons/institutions using the WOCAT questionnaires for documenting SWC		
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		
Use of WOCAT in training / education (No. of courses given)		

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

There is an expression from most of the field staff who have participated in the completing of the questionnaires that the size of the questionnaire could be reduced by condensing the questions which are seemingly redundant. Points are taken and is being studied to check whether what is commented is valid and then give the feed back to WOCAT coordination.

11. Benefits of WOCAT:

Projects and programmes being evaluated and formulated using WOCAT tools

12. Problems with WOCAT:**13. Others:**

Date: 24 Oct 2003

Filled by: Daniel Danano

WORKPLAN for: Ethiopia										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
8 QTs and 5 QAs documented	• Completing of 8 QTs and 5 QAs and 8 QMs in Amhara and Diredawa regions	16	1	WAO MOA RBOA	Questionnaires, office facilities and field equipment required for the survey	500	1500	Daniel and regional coordinators	ESAPP	Sept. 2004
A national workshop conducted	• Conducting a national workshop for promoting WOCAT / collaborating institutions /	2	1	MOA	Venue with facilities	1500	3000	Daniel	ESAPP and other sources	Feb. 2004
16 wereda technical staff trained	• Training field technical staff participating in the completion of the questionnaires	16	-	WAO MOA RBOA	training material and manuals	1200	2400	Daniel and Berhanu		March 2004
10 QTs and 5 QAs reviewed and entered in to the data base	• A review work for assuring quality	6	1	MOA RBOA	Office facilities	500	2700	Daniel	MOA	Sept. 2004
Workshop proceedings	• workshop report preparation	2	1	MOA	Office facilities	700	400	Daniel and regional rep.	Other source	May. 2004
Strengthened regional coordination / cooperation	• Communicate with RELMA and countries in the East African countries	1	-	MOA	-	-	-	Berhanu		June 2004
QM for 5 regions completed; map prepared; technical backstopping provided	• Complete QMs for 4 regions, encode and map: • Provide technical back-stopping	1	2	MOA	Computer and accessories	1500	3000	Berhanu		August 2004

SOUTH AFRICA

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: South Africa
Institution: ARC-ISCW

Year: 2002/2003
Contact person: Rinda van der Merwe

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
WOCAT on internet AGIS	Resolve issue of integration of WOCAT database into AGIS	Not yet finalised - project leader of AGIS resigned and caused a delay
Printed document	Compile Info book	Will be finished by end Nov. for use in RSA Workshop
Integrated with LandCare Programme	Establish as reporting method Stimulate new LandCare project proposals	Not yet
Promotion Workshop	Organisation of Workshop Make products available Report on Workshop	Planned for 28 November
More/complete questionnaires	Updating and continuous data collection	Some updating has been done - need more funds to continue
Final Map	Update datasets, data collection & application of map	None - Need more funds to continue

5. Expenses for WOCAT

Expenses in cash: 15'400 US \$

Expenses in kind: 5'000 US \$

Performance indicators

3. 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	moderate		few		few	
Institutions, including NGO's	3	few		few		few	
Decision makers	2	few		few		few	

4. WOCAT meetings / workshops / presentations:

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

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

Promotional purposes	70%
Information and training	20%
Data collection	5%
Analysis, output production	5%
Other	0%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	0	10	Not enough funding
Number of Approaches (As)	0	10	Not enough funding
Area (km ²) for which maps are prepared and scale of these maps	0	0	No maps - not enough funding

7. 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 7 th Annual Workshop and Steering Meeting	5	Feb 03
Presentation materials (PR)	Info-book (not finalised)		Nov 03
Maps	None		
Others, e.g. guidelines	None		

8. 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	

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	10	Visitors to Institute
Requests made for WOCAT data and products (CD-ROM, books)	5	
Requests made for training on WOCAT methodologies	0	
Number of trained participants	0	
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	2	
Persons/institutions using the WOCAT questionnaires for documenting SWC	2	
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	5	
Use of WOCAT in training / education (No. of courses given)	0	

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

None

11. Benefits of WOCAT:**12. Problems with WOCAT:****13. Others:**

None

Date: 2003- 09-18

Filled by: Rinda van der Merwe

WORKPLAN for: South Africa - 2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person	x months	/ Institution	Materials / equipment	Available	Required		Commitment by	
WOCAT-South Africa on internet (AGIS)	<ul style="list-style-type: none"> Resolve issue of integration of WOCAT database into Informix-based AGIS 	2	1	NDA / ISCW		\$ 5 000		ISCW / NDA	DP	March 2004
A printed document / output	<ul style="list-style-type: none"> Compile and bind 	2	1	ISCW		\$ 2 000		ISCW / NDA	RVDM	Feb 2004
Global Map	<ul style="list-style-type: none"> Review existing data, complement and correct 	1	1	ISCW		0	0	ISCW	RVDM	Des 2003
WOCAT hopefully integrated with LandCare programme	<ul style="list-style-type: none"> Establish as reporting method Stimulate new LandCare project proposals 	1	1	NDA		\$ 2 000		NDA	DP	March 2004
Promotion Workshop	<ul style="list-style-type: none"> Organisation of Workshop Make products available Report on Workshop 	2	1	ISCW	CD ROM's Pamphlets Posters	\$ 5 000		ISCW / NDA	RVDM	Feb 2004
More and Complete Questionnaires	<ul style="list-style-type: none"> Updating of current datasets Continue data collection (5 sets) 	3	Variable	ISCW			\$ 20 000	ISCW	RVDM	2003 – 2004
Final Map	<ul style="list-style-type: none"> Update datasets Data collection Application of Map 	4	5	ISCW / NDA / Bern University			\$ 15 000	NDA / ISCW	??	October 2004

Prepared by: Rinda van der Merwe

Total Required: \$ 35 000

ICIMOD, Nepal

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Nepal
Institution: ICIMOD

Year: 2003
Contact person: Roger White, Sanjeev Bhuchar

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Capacity building in the HKH on application of WOCAT	Trainings for the regional partners with WOCAT experts	Two trainings organized in March and Nov, 2003
SWC database in the HKH	Documentation of 2 cases	One completed on improved hill terraces in Nepal.
Strengthening global initiative-network	Cosponsoring of international initiatives	Co sponsored 8 annual workshop and steering meeting

6. Expenses for WOCAT

Expenses in cash: US \$

Expenses in kind: US \$

Performance indicators

3. 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	8	moderate	7	few	2	moderate	
Institutions, including NGO's	6	few	5	few		few	
Decision makers		few		few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Training	30	March, Nov. 03	Bangladesh, Bhutan, India, Nepal, Pakistan
Workshop 2003 Annual Workshop	24	October	Pl. refer to WOCAT list

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

Promotional purposes	40%
Information and training	30%
Data collection	10%
Analysis, output production	20%
Other	0%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	1		Recent initiative
Number of Approaches (As)	1		
Area (km ²) for which maps are prepared and scale of these maps	0	0	QM could not open

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries	Improved Hill Terraces in Nepal		
Reports, analysis of specific aspect, e.g. incentive	None		
Meeting / workshop reports	Three	3	March, Oct., Nov. 2003
Presentation materials (PR)	Success Story	1	Oct 03
Maps	None		
Others, e.g. guidelines	None		

8. 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	

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	4	Visitors to Institute
Requests made for WOCAT data and products (CD-ROM, books)	3	NGO's and Line Departments
Requests made for training on WOCAT methodologies	0	
Number of trained participants	30	From across the Himalayan region
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	2	
Persons/institutions using the WOCAT questionnaires for documenting SWC	2	
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	3	
Use of WOCAT in training / education (No. of courses given)	0	

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

None

11. Benefits of WOCAT:

Helps evaluation of one's activities. It will help in building a long term data base for the Hindu Kush Himalaya

12. Problems with WOCAT:

A few regional insititutions-departments have lack of funding to go forward.

13. Others:

None

Date: 2003- 10-12

Filled by: Sanjeev Bhuchar

WORKPLAN for: ICIMOD										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Promotion of WOCAT in the HKH region	<ul style="list-style-type: none"> Regional Workshop Training Workshop 	2	1	ICIMOD-PARDYP				ICIMOD	PARDYP	Feb. 2004 Oct 2004
Generation of database in the HKH	<ul style="list-style-type: none"> Documentation of QA/QT/QM Global mapping 	3	1	ICIMOD				ICIMOD	NRM Div PARDYP	March 2004
Strengthening of WOCAT in the HKH	<ul style="list-style-type: none"> Submission of joint proposal from the HKH 	2		ICIMOD and partners				ICIMOD	ICIMOD	Date to be decided during Nov 2003
Dissemination of WOCAT results	<ul style="list-style-type: none"> Writing success stories Presentation during other workshops Posters 	2	1	ICIMOD				ICIMOD	ICIMOD	By October 2004

INDIA

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: India
Institution: WDCU

Year: 2003
Contact person: Palle C. Andersen

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
CWDP, MP - 3 QTs + 1 QA	3 QTs + 1 QA	Completed and included in WOCAT database
CWDP, Tirunelveli - 2 QTs	2 QTs	Questionnaires filled up and is being finalised in discussion with WOCAT.

2. Expenses for WOCAT

Expenses in cash: 10000 US \$

Expenses in kind: US \$

Performance indicators

3. 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	few	15	moderate	3	few	
Institutions, including NGO's	1	few	6	moderate		few	
Decision makers	1	few	3	few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
2 nd WOCAT Workshop at CWDP, MP, Ratlam	40	7 - 11 Oct. 2002	India / WOCAT Representatives
WOCAT Orientation Workshop at CWDP, Tirunelveli	15	Dec. 2002	India
WOCAT Training Workshop at CWDP, Tirunelveli	15	Jan. 2003	India

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

Promotional purposes	5%
Information and training	25%
Data collection	40%
Analysis, output production	30 %
Other	
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	5		3 included in database + 2 being finalised
Number of Approaches (As)	1		1 included in database
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries	QTs - Dugout Ponds / Sunken Structure / Silvi-pasture + QA - Participatory Approach	50	Mar. 2003
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	WOCAT Workshop Ratlam Proceedings of the 2 nd WOCAT Workshop, Ratlam	50	Mar. 2003
Presentation materials (PR)	QTs - Dugout Ponds / Sunken Structure / Silvi-pasture + QA - Participatory Approach	60	Aug. 2003
Maps			
Others, e.g. guidelines			

8. 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

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	1	CWDP, Tirunelveli
Requests made for WOCAT data and products (CD-ROM, books)	1	CWDP, Tirunelveli
Requests made for training on WOCAT methodologies	1	CWDP, Tirunelveli
Number of trained participants	10	CWDP, Tirunelveli project staff
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	2	CWDP, MP + CWDP, Tirunelveli
Persons/institutions using the WOCAT questionnaires for documenting SWC	2	CWDP, MP + CWDP, Tirunelveli
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		
Use of WOCAT in training / education (No. of courses given)	2	

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

NIL

11. Benefits of WOCAT:

WOCAT QT and QA questionnaires have facilitated in documenting some of the successful technologies demonstrated in the DANWADEP projects in a comprehensive and technical manner for dissemination in CWDP, MP. In CWDP, Tirunelveli the QT questionnaire has been used to document, analyse and compare two alternate technologies (shelter belt and agro-forestry) implemented in the project.

12. Problems with WOCAT:

The guiding notes and explanations provided with the questionnaires require further clarity, especially in context of composite technologies where two or more structures combine to function as the effective conservation measure.

13. Others:

Date: 20 October 2003

Filled by: Rahul Sen, WDCU

WORKPLAN for: India 2003-04										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
2 QTs + 1 QA	<ul style="list-style-type: none"> • Orientation workshop • Collection of data • QT/ QA finalisation workshop 	10	1	KWDP / WDCU	WOCAT CR ROM / Questionnaires / Stationary			DA, KWDP + DA WDCU	PC, WDCU	Dec 2003 - Mar. 2004
2 QTs + 1 QA	<ul style="list-style-type: none"> • Orientation workshop • Collection of data • QT / QA finalisation workshop 	5	2	CWDP, Orissa / WDCU	WOCAT CR ROM / Questionnaires / Stationary			DA, CWDP, Orissa + DA WDCU	PC, WDCU	Dec. 3002 - Mar. 2004

Prepared by: Rahul Sen (DA, WDCU)

Total: 5000 US \$

WORKPLAN for: Bangladesh										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person	x months	/ Institution	Materials / equipment	Available	Required		Commitment by	
Awareness	<ul style="list-style-type: none"> Meeting with concerned departments, briefing note for policy makers 	6	2 days	CHTDB SRDI BFRI DAE	Existing facilities will be utilized	USD 3000		Sudibya Kanti Khisa	Mr. Wadud Bhuyan, Chairman	
Awareness	<ul style="list-style-type: none"> Training 	30	7 days	CHTDB SRDI BFRI DAE	Existing facilities will be utilized			Sudibya Kanti Khisa		March 04 (to be finalized with Mr. R. White)
Strengthening	<ul style="list-style-type: none"> Formal / informal collaborations 			CHTDB SRDI BFRI DAE	Existing facilities will be utilized			Sudibya Kanti Khisa	CHTDB	March 04 0- June 04
Data generation	<ul style="list-style-type: none"> Local map Field work QM/QA/QT Digital mapping 	6	4 months	CHTDB SRDI BFRI DAE	Digital camera	USD 6000		Sudibya Kanti Khisa	CHTDB SRDI BFRI	Feb 04 – Nov 04
Quality assurance	<ul style="list-style-type: none"> Technical assessment 					USD 1000		Sudibya Kanti Khisa	CHTDB SRDI BFRI	August 04 – Dec 04

Prepared by: Sudibya Kanti Khisa

Total: \$ 10,000

CHTDB = Chittagong Hilltracks Development Board
 SRDI = Soil Resources Development Institute
 BFRI = Bangladesh Forest Research Institute
 DAE = Department of Agriculture Extension

PHILIPPINES

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Philippines
Institution: PHILCAT

Year: Oct. 02 to Sept. 03
Contact person: Jose Rondal & Romeo Labios

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Complete QM Map for the Philippines	Data collection, entry and integration. Data analysis	Complete for Mindanao (2002) and Luzon (2003)
3 QTs, 1 QA	Data collection and entry	Updated QT for Vetiver. Because of the lack of funds for travel, there were no new documentation
Technology selection and screening	- Technology identification for various target groups	- Training of Agrarian Reform Beneficiaries (ARB) on Conservation Farming - Set-up six (6) technology demonstration farms anchored on the use of two technologies: natural vegetative strips (NVS) and residue management - Set up long term research on Conservation Tillage for corn
WOCAT Materials	- Presentation of WOCAT Materials for CFM Conference - Production of SWC extension materials - Link WOCAT website to BSWM website - Use of WOCAT materials in education	- Poster/Paper Presentation, Conservation Farming Movement, Inc. Annual Scientific Meeting, Nov. 14-15, 2002 - Poster Presentation, 25th National Academy of Science and Technology Scientific Conference, June 9 to 10, 03 - Third International Conference on Vetiver and Exhibition (ICV-3), Oct. 6 to 9, 03, Guangzhou, Guangdong, P. R. China - Publication of SWC flyers using the WOCAT database - Published an article in the Philippine Environmental Science Journal on SWC Technology Adoption. - Started preparing Soil Erodibility Map of the Philippines which will be linked to WOCAT data afterwards - Under trial run - As reference materials in course curriculum in Farming Systems and Natural Resource Management

2. Expenses for WOCAT

Expenses in cash: 1000 US \$

Expenses in kind: 3000 US \$

Performance indicators

3. 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	20	moderate	40	many	4	few	
Institutions, including NGO's	10	moderate	7	moderate	6	moderate	
Decision makers	12	moderate	18	moderate	2	few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Farmers Training	50	Aug. 2003	Philippines
Conservation Farming Movement, Inc. Annual Scientific Meeting, Paper Presentation on Conservation Tillage	189	Nov. 14-15, 2002	Philippines, ICRAF, SEA
25th Annual Scientific Meeting of the National Academy of Science and Technology	250	June 9-10, 2003	Philippines, USA, Australia

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

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

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	0	2	For the overview book
Number of Approaches (As)	0	1	For the overview book
Area (km ²) for which maps are prepared and scale of these maps	100		Luzon Island is complete

7. 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)	Production of soil conservation flyers WOCAT as a Tool for Effective Planning, Monitoring and Evaluation of Soil and Water Conservation Practices (Poster and Paper Presentation)	500	Oct. 2003 Nov. 14-15, 02 and June 9-10, 03
Maps			
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	0	All the brochures available were distributed in 2002
Requests made for WOCAT data and products (CD-ROM, books)	10	Requesting parties were told to wait for the new version
Requests made for training on WOCAT methodologies	2	Regional SWC officers
Number of trained participants	5	Regional SWC officers
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		
Persons/institutions using the WOCAT questionnaires for documenting SWC	3	ICRAF, FARMI of Leyte State University, University of Mindanao and UPLB
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	3	Regional SWC officers, UPLB
Use of WOCAT in training / education (No. of courses given)	2	UPLB and Leyte State University

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT: Appropriate spacings of NVS under different slope classes was determined. Wider choice of technologies was made possible.

11. Benefits of WOCAT: A rich source of information for the planning of SWC projects for different physical and socio-economic environment.

12. Problems with WOCAT: The documentation procedure is quite tedious and field data are not always available. Data base needs to be translated in a handy and easier to manage format to be useful in the field.

13. Others: Budget is the most serious limitation in the implementation of WOCAT activities.

WORKPLAN for: Philippines 2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Completion of QM for the Philippines	• Data gathering and filling of information for the Visayas	5	3	BSWM	Computers, maps	1000	3000	J Rondal	J Rondal	Jan to June 2004
Quantitative data on soil loss	• Monitoring of established techno-demo farm	1	2	BSWM	Computer	0	1000	J Rondal	J Rondal	Jan to March 2004
Techno Demo Farms (NVS)	• Establishment of demo farms in 2 sites	4	5	BSWM	Seeds, fertilizers	0	2000	J Rondal	J Rondal	June to Sept. 2004
2 QAs, 2 QTs	• Documentation	6	4	BSWM/UPLB	Computer	600	2000	J Rondal/ R Labios	J Rondal/ R Labios	Jan- Sept 2004
WOCAT PR Materials	• Presentation of WOCAT materials to scientific conferences	1	2	UPLB	Computer, Presentation materials	100	0	R. Labios	R. Labios	Nov. 03 to May 04
Educational Materials	• WOCAT use as instruction materials	1	12	UPLB	Computer	100	0	R. Labios	R. Labios	Nov. 03 to Oct. 04

Prepared by: Jose D. Rodal & Romeo V. Labios

Total: US \$ 1800 US \$ 8000

WASWC

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: WASWC
Institution: WASWC

Year: 2003
Contact person: Samran Sombatpanit

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Publishing WOCAT Highlights in WASWC newsletter	To publish in every issue of the newsletter	Have published in every issue as planned

2. Expenses for WOCAT

Expenses in cash: 1000 US \$

Expenses in kind: 1000 US \$

Performance indicators

3. 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		few		few		many	
Institutions, including NGO's		few		few		many	
Decision makers		few		few		moderate	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Partial support to the conference of Prof Zlatić in Belgrade, Yugoslavia, a WASWC-coorganized event, where WOCAT was presented. It was a part of the YEAR OF THE MOUNTAINS 2002 events.	35	11-13-Dec-02	10
Full support of a WASWC conference in Sofia, Bulgaria where a full WOCAT session was launched, presented by Prof Zlatić and his team.	40	1-2-Jul-03	10
Coorganize the 3 rd Int'l Conference on Vetiver in Guangzhou, China, where Dr. Joe Rondal and I will participate and extend the knowledge on WOCAT to participants. WASWC pays Dr. Rondal's travel costs.	300	6-9-Oct-03	30

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

Promotional purposes 50
Information and training 50
Data collection
Analysis, output production
Other

Total 100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	2		Plastic Mulch Technique, to be filled
Number of Approaches (As)	2		Vetiver System, to be filled
Area (km ²) for which maps are prepared and scale of these maps			

7. 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, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)		
Requests made for WOCAT data and products (CD-ROM, books)		
Requests made for training on WOCAT methodologies		
Number of trained participants		
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		
Persons/institutions using the WOCAT questionnaires for documenting SWC		
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		
Use of WOCAT in training / education (No. of courses given)		

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:****12. Problems with WOCAT:****13. Others:**

Date: September 27, 2003

Filled by: Samran Sombatpanit

WORKPLAN for: WASWC										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person	x months	/ Institution	Materials / equipment	Availabl e	Required		Commit- ment by	
Publicity	<ul style="list-style-type: none"> Publishing of WOCAT Highlights in every issue of WASWC Newsletter 	1	1	WASWC	Computer	1,000	-	S. Sombatpanit		Nov 2003 – Oct 2004
World Map	<ul style="list-style-type: none"> Contribution of data from various members of WASWC living in many countries 	1++	1	WASWC	Computer	2,000	-	S. Sombatpanit et al.		Nov 2003 – Oct 2004
Int'l Meetings	<ul style="list-style-type: none"> Presentation of WOCAT at int'l meetings cooperated by WASWC (in varying contents) 	4	0.25	WASWC	Computer	2,000	-	S. Sombatpanit et al.		Nov 2003 – Oct 2004

Prepared by: Samran Sombatpanit

Total \$5,000, Required: 0

P.R. China

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: China
Institution: SWCMC, MWR

Year: 2003
Contact person: Xu Feng

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Introduce WOCAT information source	Training program on vegetative restoration in Fujian province	Over 70 trainees understand the method of accessing WOCAT information source
Introduce WOCAT information source	Training program on landslide erosion control in Jiangxi province	Over 30 trainees received WOCAT information source
Introduce WOCAT information source	Training course on WOCAT at the state bureau of forestry	The WOCAT information source introduced in details

2. Expenses for WOCAT

Expenses in cash: US \$
Expenses in kind: 12107 US \$

Performance indicators

3. 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		moderate		few		few	
Institutions, including NGO's		moderate		few		few	
Decision makers		moderate		few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:

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

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

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)			
Number of Approaches (As)			
Area (km ²) for which maps are prepared and scale of these maps			

7. 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, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)		Most trainees in our training program shown interest
Requests made for WOCAT data and products (CD-ROM, books)		
Requests made for training on WOCAT methodologies		
Number of trained participants		More than 100
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		
Persons/institutions using the WOCAT questionnaires for documenting SWC		
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		Prof. Xia Jun, Prof. Liu Baoyuan, and Dr. Bai Zhanguo
Use of WOCAT in training / education (No. of courses given)		In Jiangxi and Fujian provinces, for erosion control technologies training

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:**

Preliminary started the cooperation with WOCAT in the national level, and trainees in southern China received relevant information on WOCAT.

12. Problems with WOCAT:**13. Others:**

Date: 31-Oct-2003

Filled by: Xu Feng

WORKPLAN for: P.R. China 2004										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Sponsor the 9 th WWSM of WOCAT	<ul style="list-style-type: none"> Apply for support (and presumably prepare) for the 9th WWSM of WOCAT 	15	03	SWCMC, MWR			40000		Cai Jianqin	Oct.2003 to Nov.2004
Introduce WOCAT to trainees in national level	<ul style="list-style-type: none"> WOCAT course for training program 	4	2	SWCMC, MWR		8260			Cai Jianqin	Available time in 2004
WOCAT Learning	<ul style="list-style-type: none"> WOCAT training program 	10	1	SWCMC, MWR and CDE			35000		Cai Jianqin	Available time in 2004

Prepared by: XU Feng

Total: US \$ 8260 US \$ 75000

Tajikistan

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Tajikistan Year: 2003
 Institution: Soil Institute / Central Asia Mountain Partnership (CAMP)
 Contact person: Sanginboy Sanginov / Aida Gareyeva, Ulan Kasymov

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Introduce WOCAT in Water Forum		We introduced WOCAT and available technologies and approaches in the Dushanbe International Forum of Fresh Water.
Involvement in WOCAT		Soil Institute and Agrarian University involved for WOCAT activities
Organising workshop in the field of on-farm soil and water management for sustainable agriculture		Presentation and training: One day for students of Agrarian University and one day for scientists and extension workers in Soil Institute
Prepare 16 posters of technologies for DOM VODI		Prepared for exhibition. Moving exhibition with 40 posters from Central Asia to Mountain Alliance Villages in Central Asia
Introduce WOCAT in DOM VODI		INTRODUCED

2. Expenses for WOCAT

Expenses in cash: 6'000 US \$

Expenses in kind: 500 US \$

Performance indicators

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

	national		regional		global	
	No.	Intens.	No.	Intens.	No.	Intens.
Scientists/professionals	60	few		few		few
Institutions, including NGO's	5	few		few		few
Decision makers	4	few		few		few

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

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Dushanbe FORUM of Fresh water	200	30.08-1/09	53 countries
On farm soil and water management	200	15-16.09	Tajikistan

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

Promotional purposes 50%
 Information and training 25%
 Data collection 65%
 Analysis, output production 15%
 Other

Total 100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)			
Number of Approaches (As)			
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries			
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	On-farm soil and water management and local governance	34	15-16/09
Presentation materials (PR)			
Maps			
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	150	
Requests made for WOCAT data and products (CD-ROM, books)	56	
Requests made for training on WOCAT methodologies	45	
Number of trained participants	15	
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	2	
Persons/institutions using the WOCAT questionnaires for documenting SWC	5	
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	5	
Use of WOCAT in training / education (No. of courses given)	3	

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:****12. Problems with WOCAT:****13. Others:**

Date: 5/09/03

Filled by: Sanginboy Sanginov / Aida Gareyeva

WORKPLAN for: Tajikistan 2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months / Institution			Materials / equipment	Available	Required		Commitment by	
Awareness	• Exhibition	1	1	Soil Institute, CAMP	Posters, exhibition	1000 USD		CAMP, Ergashev, Sanginov	S.ins.	18.11.03 – 28.11.03
Awareness	• Moving exhibition to alliance villages	1	1	Soil Institute, CAMP	Petrol	300 USD		CAMP, Ergashev, Sanginov	S.ins.	28.11.03 – 5.12.03
DB	• To fill 3 Ts in QT	2	1,5	Soil Institute	Stationeries and translation	1200 USD		Ergashev, Sanginov	S.ins.	28.11.03 – 29.02.04
Awareness	• To describe 3 Ts to the overview book	1	0,4	Soil Institute	Translation	90 USD		CAMP, Sanginov	S.ins.	15.12.03
	• On farm researches	5	2	Soil Institute			5000 USD	CAMP, NCCR, Sanginov	S.ins.	March 04 – Nov. 04
DB	• To fill 2 QT and QA	2	2	Soil Institute	Translation			Sanginov, NCCR	S.ins.	03.04 – 07.04
	•									

Prepared by: Ergashev Murod

Total \$ 2590 Required: \$ 5000

KYRGYZ REPUBLIC

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Kyrgyz Republic Year: 2003
 Institution: Agrarian University / Central Asian Mountain Partnership (CAMP)
 Contact person: Abdybek Asanaliev / Aida Garayeva

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
20 technologies	Collection of data and analysis, the creation of posters	22 technologies/approaches (short version only)
Establishment of WOCAT focal point	Meetings	Agreement with CAMP and definition of mandate
Public exhibition in DOM GOR Nov. 03	40 Posters on SWC from Central Asia	Moving exhibition to Mountain Alliance Villages in Central Asia

2. Expenses for WOCAT

Expenses in cash: 7000 US \$ (funded by CAMP)

Expenses in kind: 700 \$

Performance indicators

3. 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	few		few		few	
Institutions, including NGO's		few		few		few	
Decision makers	1	few		few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Meeting and soil and water conservation	1	15.09-17.09. 2003	Kyrgyzstan, Tajikistan

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

Promotional purposes	10%
Information and training	
Data collection	60%
Analysis, output production	30%
Other	
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	20		Only in short form, not in database yet
Number of Approaches (As)	2		Only in short form, not in database yet
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries			
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	Meetings with Rural Advisory Service specialists and management group		March, June, Oct. 03
Presentation materials (PR)	40 Posters	3 sets	Nov. 03
Maps			
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)		
Requests made for WOCAT data and products (CD-ROM, books)		
Requests made for training on WOCAT methodologies		
Number of trained participants		
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	1	Using it in training section in Kyrgyz Agrarian University
Persons/institutions using the WOCAT questionnaires for documenting SWC	1	Kyrgyz Agrarian University
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.	1	Kyrgyz Agrarian University
Use of WOCAT in training / education (No. of courses given)	1	Kyrgyz Agrarian University

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:****12. Problems with WOCAT:****13. Others:**

Date: 15.09.2003

Filled by: A. Asanaliev

WORKPLAN for: Kyrgyzstan 2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months / Institution			Materials / equipment	Available	Required		Commitment by	
Awareness	• Exhibition	1	1	Soil researchers, Agrarian University, CAMP	Posters, exhibition	1000 USD		CAMP, Asanaliev		12.11.03 – 24.11.03
Awareness	• Moving exhibition to alliance villages	1	1	Agrarian University, CAMP	Transport costs	500 USD		CAMP, Asanaliev		24.11.03 – 5.12.03
Awareness	• Training for RAS (Agr. Services, Helvetas)	1	3 days	Agrarian University, CAMP	Salaries	40 USD		CAMP, Asanaliev, Topchubaev RAS (Helvetas)		18.11.03
Awareness	• Training for students	1	3 days	Agrarian University, CAMP				CAMP, Asanaliev		16.11.03
DB	• To fill 1 T for overview book and 1 QT	1	1,5	Agrarian University	Translation salaries	800 USD		CAMP, Asanaliev		25.12.03 – 28.02.04
	• On farm researches	1	3	Agrarian University			3000 USD	CAMP, Asanaliev		03.04 – 09.04
DB	• To fill 1 QT and QA	1	1,5	Agrarian University	Translation and transport costs		500 USD	CAMP, Asanaliev		03.04 – 06.04

Prepared by: Asanaliev Abdubek and Aida Gareyeva

Total \$ 2340 Required: \$ 3500

KAZAKHSTAN

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Kazakhstan Year: 2003
Institution: Central Asian Mountain Partnership Contact person: Aigul Zhanserikova

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Start of WOCAT activity in Kazakhstan	Re-election of WOCAT working group in Kazakhstan	Reorganization of WOCAT activities in Kazakhstan
Definition of real situation in field of land and water using in Kazakhstan	Starting creations of database of Soil and Water Conservation (SWC) technologies and approaches used in the Republic of Kazakhstan (in national level).	List of most important current problems in the field of land use in Kazakhstan and ways of solution of them.
Support of activity of WOCAT team in Kazakhstan	Fundraising for WOCAT activity	Co-financing from foundation Milieukontakt Oost-Europa (The Netherlands)
Popularization of Kazakhstan technologies	Preparation of materials for 12 posters in Bishkek	Joint to WOCAT activity in Central Asia
Popularization of Kazakhstan technologies	Preparation of 5 technologies for Innovation Competition in field of water management (Dom Vody, Dushanbe, Tajikistan)	Joint to WOCAT activity in Central Asia
Financing of WOCAT activity	Preparation of PAMS proposal	Financing approved from PAMS
Popularization of Soil and Water Conservation technologies and approaches	Conducting of seminar	Trained 20 participants of seminar (local farmers, institutions members)

2. Expenses for WOCAT

Expenses in cash: \$950 (\$500 - credit from PAMS/NCCR, \$450 co-financing from foundation Milieukontakt Oost-Europa (The Netherlands))

Expenses in kind: - US \$

Performance indicators

3. 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	23	moderate	5	few			
Institutions, including NGO's	7	moderate	4	few			
Decision makers	5	moderate	2	few			

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
1. Mission of Hanspeter Liniger in Almaty: Building of Kazakh national WOCAT team, collaboration with neighbouring countries, visit of institutions, identification of technologies and approaches.	6	24.03.2003	Kazakhstan, Kyrgyzstan, Tajikistan
2. Seminar for farmers of Almaty Oblast (filling questionnaire concerning farm problems, acquainting with WOCAT database)	20	09.05.2003	Kazakhstan

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

Promotional purposes	20
Information and training	40
Data collection	30
Analysis, output production	10
Other	
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	1		
Number of Approaches (As)			
Area (km ²) for which maps are prepared and scale of these maps			

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries			
Reports, analysis of specific aspect, e.g. incentive	Distribution of WOCAT booklets	20	09.05.03
Meeting / workshop reports	Minutes from Seminar	6	09.05.03
Presentation materials (PR)	<ul style="list-style-type: none"> 40 Posters for exhibition of Central Asian SWC Innovations for Dom Vody (Tajikistan) Distributed WOCAT booklets 	1 5 20	6.08.03 31.08.03
Maps			
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)
12.06.03	Agreement about co-financing of PAMS project	Mileukontakt Oost-Europa foundation (The Netherlands)

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	28	Brochures were distributed within farmers and scientists
Requests made for WOCAT data and products (CD-ROM, books)	20	Seminar participants received materials about WOCAT activity
Requests made for training on WOCAT methodologies	1	There was a seminar conducted in Almaty oblast.
Number of trained participants	20	Participants of seminar
Persons/institutions using WOCAT guidelines: <ul style="list-style-type: none"> - Getting started with WOCAT - Using WOCAT - Database manual 	10	Most of them were scientists and farmers
Persons/institutions using the WOCAT questionnaires for documenting SWC	14	Institutions: 6, Persons: 8
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		
Use of WOCAT in training / education (No. of courses given)		

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

Not yet.

11. Benefits of WOCAT:

Local farmers have used WOCAT database and technologies and had training on technologies of mineral soil treatment and cotton watering.

12. Problems with WOCAT:**13. Others:**

Date: 10 September, 2003

Filled by: Aigul Zhanserikova, CAMP Program Representative in Kazakhstan

WORKPLAN for: Kazakhstan 2003-2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Definition of real situation in field of land and water use in Kazakhstan	Creations of a database on SWC technologies and approaches	5	8	WOCAT team, Inst. of Geography, Inst. of meadows and pastures, Inst. of agriculture, Inst. of water economy	Writing goods, films, diskettes, cartridge for printer	562	562	Skorintseva Irina, Budnikova Taisiya	WOCAT team KZ	
Definition of level of SWC that is used by farmers in Kazakhstan	Filling of questionnaires by standard format on suggested on SWC technologies and approaches	5	10	As above	As above	549	549	Skorintseva, Nuryngereyev Kanysh	WOCAT team KZ	
Systematization of works with farmers	Development of database of farmers in Kazakhstan	5	8	As above	As above	562	562	Skorintseva Irina	WOCAT team KZ	
Definition of problems in the field of land use in Kazakhstan	Development of special questionnaires for the farmers for definition of problems of land use in Kazakhstan	5	2	As above	As above	554	554	Skorintseva Irina	WOCAT team KZ	
Popularization of Conservation Agriculture	Documentation of Minimum Tillage (Conservation Agriculture)	5	12	As above	As above	569	569	Alimaev Ilya	WOCAT team KZ	
Demonstration for opportunities of SWC technologies	Documentation and evaluation of SWC technologies	5	12	WOCAT team, Inst. of Geography, Inst. of meadows and pastures, Inst. of agriculture.	Digital camera	694	694	Skorintseva Irina	WOCAT team KZ	
Demonstration for opportunities of SWC technologies	Selection of demonstration fields for experiments. Preparation and conducting of experiments with farmers	1	5	WOCAT team		1350	1350	Alimaev I., Skorintseva Irina	WOCAT team KZ	
Popularization of SWC technologies and approaches	Conducting of 3 seminars and popularization of SWC technologies and approaches.	5	3	WOCAT team		3300	3300	Skorintseva I. Alimaev Ilya,	WOCAT team KZ	
Demonstration for opportunities of SWC technologies	Conducting of action on planting of saxaul nursery and pasture-protecting windbreak strips	8	1	WOCAT team		450	450	Nuryngereyev Kanysh	WOCAT team KZ	
Study of SWC technologies	Trip to Shuechinsk to the Institute of forestry.	2	1	WOCAT team		600	600	Skorintseva I.	as above	
Study of SWC technologies	Trip to Taraz to Institute of water management.	2	1	WOCAT team		600	600	Budnikova Taisiya	WOCAT team KZ	
Join the World Association of Soil and Water Conservation technologies and approaches	Delivery of technologies and approaches that are used in Kazakhstan to the World Association of Soil and Water Conservation technologies and approaches (10 Qs)	4	2	WOCAT team		570	570	Skorintseva Irina, Kanysh Nuryngereyev	WOCAT team KZ	
	Preparation of report	3	1	WOCAT team		550	550	Skorintseva I.	as above	

Prepared by: Kanysh Nuryngereyev

Total: US \$ 10910

SOWAP (N. & C. Europe)

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: N. & C. Europe (UK, Hungary, Belgium) Year: 2003

Institution: ISRIC

Contact person: Godert van Lynden

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Project proposal being approved	Submit proposal	Approved (June 2003)

2. Expenses for WOCAT

Expenses in cash: US \$

Expenses in kind: US \$

Performance indicators

3. 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	25	few	5	few		moderate	
Institutions, including NGO's	10	moderate		few	1	moderate	
Decision makers	3	few		few		few	

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
SOWAP launch meeting; Silsoe	25	May 2003	UK, Belgium, Hungary
SOWAP project meeting Budapest	20	September 2003	UK, Belgium, Hungary

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

Promotional purposes	5
Information and training	
Data collection	
Analysis, output production	
Other	95
Total	100 %

6. Development of database:

	new filled	Updated	remarks
Number of Technologies (Ts)			
Number of Approaches (As)			
Area (km ²) for which maps are prepared and scale of these maps			

7. 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, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)
June 2003	Project proposal / contract	ISRIC/EU and SOWAP partners

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
a. Users that have shown interest in WOCAT (Brochure distributed)	25	
b. Requests made for WOCAT data and products (CD-ROM, books)	10	
c. Requests made for training on WOCAT methodologies		Implicit to project
d. Number of trained participants	N/A	
e. Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual	N/A	
f. Persons/institutions using the WOCAT questionnaires for documenting SWC	N/A	
g. Persons/institutions using WOCAT advice / services as a tool for programme design, implementation, etc.	N/A	
h. Use of WOCAT in training / education (No. of courses given)	N/A	

10. Modifications made or innovations carried out to approaches or technologies as a result of using WOCAT:**11. Benefits of WOCAT:****12. Problems with WOCAT:****13. Others:**

Date: 29/10/03

Filled by: Godert van Lynden

WORKPLAN for: SOWAP 2004										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months/ Institution			Materials / equipment	Available	Required		Commitment by	
Trained staff of SOWAP partners in UK, B, HU	<ul style="list-style-type: none"> Training in WOCAT methodology: data collection and analysis 	2	0,5	ISRIC CDE		yes		GVL		Jan./Feb. 2004
Case studies documented on minimum tillage for pilot areas	<ul style="list-style-type: none"> Data collection 	6-10	4-6	SOWAP partner institutions in B.,UK, Hu.		yes		national coordinators, GVL		Summer 2004?
Analysis of documented data	<ul style="list-style-type: none"> Evaluation 	6-10	1-2	SOWAP partners institutions, ISRIC, CDE		yes		GVL, nat. coordinators		Autumn 2004
Dissemination of first results	<ul style="list-style-type: none"> through Website, workshops, presentations 	1-2	ongoing	ISRIC, CDE and SOWAP partners		yes		GVL		End 2004

Prepared by: G. van Lynden

Total: US \$ 100.000

SERBIA – MONTENEGRO

MONITORING OF WOCAT PERFORMANCE AND IMPACT

Country: Serbia and Montenegro
Institution: Faculty of Forestry

Year: 2003
Contact person: Miodrag Zlatić

General Report

1. Review of planned activities

Achievements compared to the expected outputs and planned activities of last year's workplan. Give reasons for delay or non-achievements, if applicable.

Expected Output	Planned Activities	Achievements
Further actions	- Continue of finding donors for national programme - Contacts with foreign org.	- National level: 3 contacts - 1 agreement with Ministry for Natural Resources and Environment - Contact with Heinrich Bell foundation without answer
WOCAT promotion	- Meeting with ministries, enterpr. - Meeting with foreign org - Promotion at IYM - Training workshop in Belgrade and Valjevo	- Meeting with deputy minister of MNRE; meeting in Water Management Enterprise "Erosion" in Nis; - Meeting with Heinrich Bell foundation - Promotion at IYM Conference in Belgrade in December and promotion at WASWC meeting for Balkans in Sofia in July. - Workshop was held in July in Belgrade; possible one more workshop in Nis in October.
Further action: Qm	Working on QM in South/East Serbia	- 4 communities were questioned in Southeast Serbia (Qm); we are still preparing maps
Starting Qa, Qt; Brochure	- Qa and Qt in South and West Serbia; - Brochure	5 Ts (3 filled) and 3 technologies in Central Serbia, South Serbia and Montenegro

2. Expenses for WOCAT

Expenses in cash: 2700 US \$ (Seed money from WOCAT)

Expenses in kind: US \$

Performance indicators

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

	national		regional		global	
	No.	Intens.	No.	Intens.	No.	Intens.
Scientists/professionals	25	many	12	moderate	8	moderate
Institutions, including NGO's	5	moderate	5	moderate	1	few
Decision makers	2	few	1	few		few

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

4. WOCAT meetings / workshops / presentations:

Meeting, workshop, presentation:	No. of particip.:	Dates:	Countries involved:
Presentation of WOCAT at IYM Conference in Belgrade	70	Dec. 12th	Serbia
Workshop in Belgrade	4	25.07	Serbia
Presentation of WOCAT at WASWC Conference for Balkans (in Sofia)	20	July 1st	Serbia

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

Promotional purposes	25%
Information and training	15%
Data collection	40%
Analysis, output production	15%
Other	5%
Total	100 %

6. Development of database:

	Newly filled	Updated	Remarks
Number of Technologies (Ts)	3	1	In total we have 5 TS (three are filled)
Number of Approaches (As)	3		
Area (km ²) for which maps are prepared and scale of these maps	500		We are still preparing maps

7. Production of outputs

	Titles, details, ...	No. (copies)	Date
Overviews and case study summaries			
Reports, analysis of specific aspect, e.g. incentive			
Meeting / workshop reports	WOCAT report (from WASWC Meeting for Balkans) is in publishing	1	July 1st
Presentation materials (PR)	Power point presentation	1	September 2003
Maps	preparing map of the part of South Morava watershed		Sept. 2003
Others, e.g. guidelines			

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

Date	Content	Partners (MoU between whom?)
Aug. 11 th , '03	Ministry for Natural Resources and Environment agree to finance national WOCAT programme with 100000din in next period (1600 USD)	MNRE and Faculty of Forestry/Dept for Erosion Control

Impact indicators**9. Use of WOCAT**

	No.	Details, remarks, ...
Users that have shown interest in WOCAT (Brochure distributed)	15	Interest appeared after IYM and WASWC Conferences
Requests made for WOCAT data and products (CD-ROM, books)		
Requests made for training on WOCAT methodologies	10	Participants of WASWC Meeting in Sofia were interested in a regional WOCAT workshop
Number of trained participants		
Persons/institutions using WOCAT guidelines: - Getting started with WOCAT - Using WOCAT - Database manual		
Persons/institutions using the WOCAT questionnaires for documenting SWC		
Persons/institutions using WOCAT advice/services as a tool for programme design, implementation, etc.		
Use of WOCAT in training / education (No. of courses given)	4	1 training for 4 persons for running WOCAT; lecture for the students of fourth year of studying; lecture for the students at the beginning of studying (first year); deep presentation/lecture at the WASWC meeting in Sofia which influenced participants very much.

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

We hope to see results in this point of view next year, when people learn from WOCAT

11. Benefits of WOCAT:

(1) Gathering stakeholders in SLM; (2) Positive influence on changing farmers opinion: to think not only about one solution, and to choose between several best.

12. Problems with WOCAT:

Long questionnaire shocked people, especially private farmers because they thought that they loose too much of time. In WOCAT mapping appears that trained people are going into more details and use detailed units (smaller watersheds).

13. Others:

This year we run the programme with seed money, hoping that our meetings with donors will help.

Date: Sept. 15th, '03

Filled by: Miodrag Zlatić

WORKPLAN for: Serbia – Montenegro 2004										
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"> • Finding nationl donors • Contacts with foreign org. 	2	4	BU-FFDE			1000	M. Zlatic and Nada Dragovic	BU-FFDE and CEKOR	Nov. 5th - Feb. 28th
WOCAT promotion	<ul style="list-style-type: none"> • Meeting with enterpr in V. Han; • Meeting with foreign org.; • Promot. at ISCO; • Training in Belg./Nis/Valjevo 	20	0,2	BU-FFDE			15000	M. Zlatic, S. Kostadinovand N. Dragovic	BU-FFDE and CEKOR	Dec. 1 st - March 31st
Further action: Qm	<ul style="list-style-type: none"> • Working on QM in Central and South Serbia and in submediterranean part of Montenegro 	7	3	BU-FFDE and CEKOR			10000	M. Zlatic, S. Kostadinov and N. Dragovic	BU-FFDE and CEKOR	April 1 st - Jun 31st
Further action: Qa and Qt	<ul style="list-style-type: none"> • Running QA and QT in Central and South Serbia and Montenegro 	4	3	BU-FFDE and CEKOR			10000	M. Zlatic, S. Kostadinovand R. Kadovic	BU-FFDE and CEKOR	Jun 1 st - Jul 31st
Quality Control	<ul style="list-style-type: none"> • Feedback meeting 	10	1	BU-FFDE and CEKOR			2000	M. Zlatic, S. Kostadinov and N. Dragovic	BU-FFDE and CEKOR	Jul 10 th - Jul 15th
Brochure	<ul style="list-style-type: none"> • Brochure of undertaken programme for previous period 	5	1	BU-FFDE and CEKOR			1000	M. Zlatic, N. Dragovic amnd N. Rankovic	BU-FFDE and CEKOR	Sept. 1 st - Sept. 30th

Prepared by: Miodrag Zlatic

Total: US \$ US \$ 39000

Legend: BU-FFDE -Belgrade Univ. - Faculty of Forestry/Dept. for Erosion Control; CEKOR: Centre for Ecology and Sustainable Development

ANNEX 6: LIST OF PARTICIPANTS

WOCAT 8th International Annual Workshop and Steering Meeting						
Kathmandu, 28 October - 2 November 2003						
Name	Institution	Address	Country	Email-Address	Telephone	Telefax
Samran Sombatpanit	WASWC	67/141 Amonphant 9, Soi Sena 1, Bangkok 10230	Thailand	sombatpanit@yahoo.com	+66 25703641	+66 25703641
Abdybek Asalaniev	Kyrgyz Agrarian University	68 Mederov Str., Bishkek, 720005	Kyrgyz Republic	aida@camp.elcat.kg	+996 312 680928, 68 05 20	+996 312 680928
Miodrag Zlatic	Faculty of Forestry	Kneza Visaslava 1, 11030 Belgrade	Serbia & Montenegro	mizlatic@yubc.net	+381 11 553 122	+381 11 545 485
Murod Ergashev	Soil Science Institute	734025, Dushanbe, Rudaki av.21 A	Tajikistan	soil@tajik.net	+992-372-271979	+992-372-213207
Hanspeter Liniger	CDE	Steigerhubelstrasse 3, Bern	Switzerland	liniger@giub.unibe.ch	+41 31 6318845	+41 31 6318800
Gudrun Schwilch	CDE	Steigerhubelstrasse 3, 3008 Bern	Switzerland	gudrun.schwilch@cde.unibe.ch	+41 31 631 88 45	+41 31 631 85 44
Mats Gurtner	CDE	Steigerhubelstrasse 3, Bern	Switzerland	mgurtner@giub.unibe.ch	+41 31 6318845	+41 31 6318800
Aida Gareyeva	CAMP	338, Frunze st.720011, Bishkek	Kyrgyz Republic	aida@camp.elcat.kg	+996(312) 680928, 680520	+996(312)680928
Rinda van der Merwe	ARC-ISCW	600 Belvedere Street, Arcadia, Pretoria	South Africa	rinda@iscw.agric.za	+27 12 3102500 / 64	+27 12 323 1157
Roland Benson	Danida Adviser, KWDP	Sangmesh Building, VivekNagar (East), Bijapur, 586104	India	danidakwp@rediffmail.com	0	+91-8352-277068
Yuji Niino	FAO Reg. Office for Asia and the Pacific	39 Phra Atit Road, Bangkok 10200	Thailand	Yuji.Niino@fao.org	+66-2-697-4213	+66-2-697-4445
Jose Rondal	BSWM	Elliptical Road, Diliman, Quezon City	Philippines	jrondal@info.com.ph	+63 2 923 0459	+63 2 920 4318
Romeo Labios	University of the Philippines Los Baños	Agricultural Systems Cluster, College Of Agriculture, UP Los Baños; College; Laguna, 4031	Philippines	romylabios@yahoo.com	+63 49 536 3229/4455	+63 49 536 5282/ 4455
Godert van Lynden	ISRIC	PO Box 353 Wageningen	The Netherlands	godert.vanlynden@wur.nl	+31 317 471735	+31 317 471700
Daniel Danano	Ministry of Agriculture	Addis Ababa	Ethiopia	minagr@telecom.net.et	+251 1 154913/75	+251-1- 528298

Jianqin Cai	SWMC, 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
Xu Feng	SWCMC, Ministry of Water Resources	No. 2, Lane II, Baiguang Rd., Xuanwu Dist. Beijing 100053	P.R. China	xufeng@mwr.gov.cn	+86 10 6320 3726	+86 10 6320 3690
Roger White	ICIMOD/PARDYP	G.P.O. Box 3226 Kathmandu	Nepal	rwhite@icimod.org.np	+977 1 5525313	+977 1 5524509
Sanjeev Bhuchar	ICIMOD	G.P.O. Box 3226 Kathmandu	Nepal	sbhuchar@icimod.org.np	+977 1 5525313	+977 1 5524509
P.B. Shah	ICIMOD/PARDYP	G.P.O. Box 3226 Kathmandu	Nepal	pshah@icimod.org.np	+977 1 5525313	+977 1 5524509
Hilde Helleman	ICIMOD	G.P.O. Box 3226 Kathmandu	Nepal	hhelleman@icimod.org.np	+977 1 5525313	+977 1 5524509
Lies Kerkhoff	ICIMOD	G.P.O. Box 3226 Kathmandu	Nepal	ekerkhoff@icimod.org.np	+977 1 5525313	+977 1 5524509
Sudibya Kanti Khisa	Chittagong Hill Tracts Development Board / CHTDB	Khagradari - 4400, Bangladesh	Bangladesh	khisask@bttb.net.bd, khisask@hotmail.com	+88 0371 - 61649	+88 0371 61615
Samma Shakya	ICIMOD	G.P.O. Box 3226 Kathmandu	Nepal		+977 1 5525313	+977 1 5524509
Giri Bahadur Shreshta	ICIMOD	G.P.O. Box 3226 Kathmandu	Nepal		+977 1 5525313	+977 1 5524509



Last row (from left to right): Giri Bahadur Shreshta (Nep), Romeo Labios (Phi), Feng Xu (Chn), Roland Benson (Ind), Samran Sombatpanit (Tha), Daniel Danano (Eth), Roger White (UK), Mats Gurtner (Swi), Miodrag Zlatić (Yug), Godert van Lynden (NL), Aibubek Asanaliev (Kyr), Yuji Niino (Jap), Hanspeter Liniger (Swi), Hilde Helleman (NL), Sanjeev Bhuchar (Ind)

First row: Lies Kerkhoff (NL), PB Shah (Nep), Murod Ergashev (Taj), Joe Rondal (Phi), Rinda van der Merwe (RSA), Aida Gareyeva (Kyr), Gudrun Schwilch (Swi), Jianqin Cai (Chn)

ANNEX 7: FIELD TRIP REPORT



On Thursday 30-10 a field trip was made to the ICIMOD test and demonstration site at Godawari, just south of Kathmandu. Originally a PARDYP field site about one hour outside the valley had been envisaged but this had been reconsidered in view of the deteriorated security situation.

The Godawari site covers an area of 25 ha, varying from gentle slopes with wetland conditions to steep sloping mountain forest. The site shows a range of rural development options, from soil and water conservation measures through various energy generation techniques to Angora rabbit and Nuba goat keeping. The main purpose is to test and demonstrate various technologies for, and approaches to, sustainable mountain development, which are of interest to the people and partner institutions of ICIMOD in the Hindu Kush-Himalayan (HKH) Region.

Objectives of the Godawari site

The main purpose is to test and demonstrate various technologies for and approaches to sustainable mountain development which are of interest to the people and partner institutions of ICIMOD in the Hindu Kush-Himalayan region. The specific objectives of Godawari T&D Farm are:

- to test and modify technologies and methodologies for sustainable land use appropriate for (parts of) the Hindu Kush-Himalayan region;
- to demonstrate viable options for the rehabilitation of degraded lands and sustainable mountain agriculture; and
- to provide training facilities to improve the skills in and technical know-how on new and proven technologies and approaches for sustainable land use in the HKH.



Stations on the trip through the Godawari test site (Photos by Hanspeter Liniger and Samran Somanpanit)

ANNEX 8: WOCAT MILESTONES

WOCAT Milestones 1992-2003		
2003		
October 28 – November 2	Kathmandu, Nepal	8th Annual International WOCAT workshop and Steering Meeting, attended by 23 participants from 13 countries
September 11-26	Tajikistan and Kyrgyzstan	Presentation of WOCAT as research tool and setting up research collaboration with NCCR North-South: impact of land use on natural resources. Workshop and field work on SWC Ts and As in Central Asia.
August 19-21	CDE Bern, Switzerland	Task force meeting “global overview book”
May, 19-23	Vienna, Austria	IAEA research coordination meeting: “Assess the effectiveness of soil conservation techniques for sustainable watershed management and crop production using fallout radionuclides”. Inclusion of WOCAT in the international research projects of IAEA.
March 22-25	Almaty, Kazakhstan	WOCAT initiation workshop in collaboration with CAMP (Central Asia Partnership Programme) and national institutions.
March 20-21 and 26-27	Bishkek, Kyrgyzstan	WOCAT training of 20 Central Asian students in collaboration with NCCR North-South (Swiss National Centre of Competence in Research)
February 24 – March 4	Kathmandu, Nepal	Presentation of WOCAT in Symposium and Research Workshop on Renewable Natural Resources Management for Mountain Communities Kathmandu and Pokhara/Landruk and WOCAT Workshop in Kathmandu
2002		
October November 5-8	Rome, Italy	Presentation of WOCAT methodology at the LADA workshop at FAO: acceptance of WOCAT as a tool for the documentation and assessment of Land degradation (and conservation)
October 28 – November 4	Rome, Italy	7 th 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 th ISCO Conference in Beijing, China.
April 9 – 11	Ratlam, India	Introductory WOCAT workshop, organized by the Comprehensive Watershed Development Project (CWDP) with the support of DANIDA in Ratlam district, Madhya Pradesh State, India with 35 participants from 3 districts.
January 23 – 25	FAO, Rome	Presentation of WOCAT at the steering meeting of the LADA project (Land Degradation Assessment in Dryland Areas)
January 21 – 25	FAO, Rome	Workshop for WOCAT Facilitators with 15 delegates from 10 countries. In-depth treatment of the WOCAT methodology for those responsible for the co-ordination and implementation of regional / national data collection.
2001		
September 28 - 29	Nyeri, Kenya	Presentation and Meeting with RELMA regional Advisory Committee members from 6 Eastern African countries: Eritrea, Ethiopia, Kenya, Tanzania, Uganda, Zambia
September 24 - 28	Nyeri, Kenya	6 th Annual International WOCAT workshop and Steering Meeting attended by 30 participants from 15 countries
September 21	Nairobi, RELMA; ICRAF	Presentation of WOCAT and its use to national and international institutions
September	FAO, CDE	Finalizing of WOCAT video and printing & publishing it in the FAO Land and Water Digital Series No 16: on a CD-ROM in 3 languages: E, F, S
June 11-14	Iringa, Tanzania	National WOCAT Training Workshop in Iringa, Tanzania, initiated through the HIMA project and the Ministry of Agriculture, sponsored by DANIDA.

May 21-24	Dushanbe, Tajikistan	Regional WOCAT Training Workshop for four Central Asian countries (Tajikistan, Kyrgyzstan, Khazhakstan, Uzbekistan) on Technologies and Approaches, organized by CAMP and UNCCD/GtZ.
April 23-27	Nazret, Ethiopia	National WOCAT Training Workshop in Nazret, Ethiopia with 39 representatives from 9 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.
2000		
December 11 – 22	Bonn, UNCCD	Participation of WOCAT in the UNCCD Conference of the Parties (COP4) in Bonn (side event and stand with posters and CD-ROM)
November	Pretoria, South Africa	WOCAT as an important part in the ITC/ISRIC refresher course
October 23-28	Buenos Aires, Argentina	ISCO conference: various WOCAT presentations and WOCAT/ISRIC/FAO corner in the poster hall
September 26 – 29	Bishkek, Kyrgyzstan	WOCAT information and training workshop in Bishkek, Kyrgyzstan for five countries in Central Asia (organized by CAMP and NCCD)
September 4 – 11	Wageningen, ISRIC	5th International Annual Workshop and Steering Meeting
September	Rome, FAO	WOCAT on internet (CD-ROM on internet)
September	Rome, FAO	Printing of CD- ROM Version 2
June 12 - 20	Pretoria, South Africa	Workshop WOCAT South Africa: testing the map methodology, quality control QT/QA, outputs Approaches/Technologies.
June 9	Bern, CDE	Printing WOCAT brochure 2000 (English, French, Spanish)
April 10 – 12	Rome, FAO	WOCAT meeting: organisational set-up, funding strategy, planning.
1999		
September 6 – 10	Bangkok, Rayong Thailand, IBSRAM, DLD, WASWC	4th International Annual Workshop and Steering Meeting
June 6-13	Aleppo, Syria	Regional WOCAT training workshop for ICARDA countries
May 3 – 7	Nairobi, Kenya	Workshop for collection of Technologies and Approaches of Kenya
May 3 – 7	Niamey ICRISAT	WOCAT training workshop for finalizing the datasets for Niger and initiating the process for CILSS - INSAH countries
April 19 – 24	Bern, CDE	WOCAT meeting: Database management System esp. QM, different language versions, new brochure, Guidelines etc.
March 15-19	Stanger, South Africa	WOCAT workshop South Africa: Training of 34 participants from 9 Provinces WOCAT to be used as a national tool to gather and exchange SWC experience
March 9-10	Managua, PASOLAC	Introduction to WOCAT at National Seminar on SWC in Nicaragua
January 18 – 21	Nanyuki, Kenya	Taskforce Meeting for WOCAT Kenya and East Africa: setting –up of program to collect 14 SWC Technologies and 10 Approaches from Kenya.
1998		
December	Bern, CDE	Finalizing revision and printing of revised version of QT and QA
September – October	Bern, CDE	Proposal for funding to SDC: 3 rd phase of WOCAT funding approved by SDC: from 1.9.98 - 31.8.01
August 25– September 1	Twann, CDE	International Workshop and Steering Meeting
August 17-21	Manila, DANIDA	New initiative: National WOCAT Workshop in the Philippines
July	Rome, FAO	Distribution of WOCAT CD-ROM to all WOCAT collaborators and contributing specialists
June-Aug	Niamey, ICRISAT	WOCAT studies in Niger by two students of CDE Bern
May-Aug	Cali, CIAT	WOCAT studies in Colombia by two students of CDE Bern
April-May	Bern, CDE	WOCAT Review: external evaluation of the WOCAT programme for SDC
April-June	Rome, FAO and CDE	Preparation of WOCAT CD-ROM version 1.0 which illustrates the WOCAT methodology and shows preliminary data sets and results
April	Bern, CDE	Final Revision of questionnaires on Technologies, Approaches an Map

April	Paris, OSS and Colombia, GTZ	Translation of latest versions of questionnaires into French and Spanish
March 31–April 1	Bogota, GTZ	WOCAT Workshop Colombia with 12 experts of GTZ, CIAT and University of Colombia
March	Bern, CDE	New initiatives of ICRISAT Niger and PASOLAC Nicaragua: First discussions
February	Bern, CDE, ISRIC, FAO	Development work on Database Management System for QT, QA, QM and integration of QT / QM
February	Bern, CDE	WOCAT Database Training for 3 delegates from the Fujian SWC Centre, China
1997		
December	Rome, FAO	Management Board Meeting
November 17-21	Fuzhou, ADB	National Initiation and training workshop in Fuzhou, Fujian Province: 26 participants of six Red Soil Provinces in China
October	Rome, OSS	WOCAT multimedia presentation at the CCD conference
Aug 26-Sept 2	Murten, CDE	International Workshop and 2 nd Steering Committee meeting
July	ADB, CDE	New initiative: China: Preparing translation into Chinese, proposal for WS in Nov '97
July	GTZ, CDE	New initiative: Latin and Central America: Translation into Spanish, Contacting institutions, starting process
June	Paris OSS and CDE	Entry of N-Africa and W-Africa data into old DB: 26 Technologies, 16 Approaches
May	CDE and ISRIC	Presentation of WOCAT in Desertification Atlas of UNEP
May-Aug	FAO and CDE	Development of new database and data analysis system
May	Bern, CDE	Production of WOCAT brochure
May	Bern, CDE	Revision of questionnaires on Technologies and Approaches
March	Bonn (GTZ)	Meeting: GTZ – FAO – CDE: Discussion of progress and issues to be addressed during Next SC meeting
1996		
Sept. 15-21	Thailand (DLD)	National WOCAT Workshop: Launching Asian data collection with national funding: 21 Technologies and 14 Approaches
August 26-30	Bonn	ISCO Conference: Presentation of WOCAT Africa to date (paper), Poster presentations in Dare to Share Fair, meetings to and feed-back from SWC specialists worldwide
June	Tunis, Tunisia; OSS	4th Regional workshop (Northern Africa): Including Tunisia, Algeria, Morocco and Mauritania. Organized by OSS.
May 6-14	Sigriswil	International workshop and Steering Committee 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 nd phase of WOCAT funding approved by SDC: from 1.9.95 - 31.8.98
1995		
December 11-15	Magoebaskloof, South Africa	3rd Regional workshop (Southern Africa) 28 SWC specialists from 8 countries, 4 facilitators, collection of 22 Technologies and 17 Approaches and regional map
November 6-11	Ouagadougou Burkina Faso, OSS/GTZ	2nd Regional Workshop (Western Africa): 30 participants from 4 countries: Launching of WOCAT and testing of methodology in Western Africa: sponsored by OSS/GTZ, FAO and SDC
August	CDE-UNEP	Proposal for funding of Regional Workshop. UNEP approval for funding of Southern African workshop
June 26-July 1	Machakos, Kenya collaboration RSCU - CDE	1st Regional Workshop (East Africa): 27 SWC specialists from 7 countries and 10 facilitators: 30 Technologies and 19 Approaches and regional map; sponsored by RSCU, CDE, FAO, GTZ
May	Bern, CDE	Finalizing QT, QA and QM / Printing of 1st version of QT, QA and QM
March 13-14	Rome, FAO	Meeting on map with ISRIC and CDE Further development of objectives and outputs of the map
1994		

December 12-15	Bern, CDE	Workshop for Core Group Members Final draft of Qs, change of methodology: towards regional workshops.
October 20-21	Wageningen, ISRIC	Meeting on database and expert system, ISRIC, CDE, SOCOX. First version of D-CAT (database of WOCAT) and development of X-CAT (expert system)
August-November	Kenya, Ethiopia, Niger, S.A.	Testing of QT, QA by WOCAT task force members Feedback from testing in Africa, suggestions for improvements
August	Bern CDE	CDE coordination. Drafts of QT, QA, QM compiled
August	Bern at CDE	Task force map. 1st draft of QM
June	Bern at CDE	Finalizing 1st drafts of QT/QA
March 13-15	Wageningen ISRIC	Task force meeting: Technologies 1st draft of questionnaire on Technologies
January 13-14	Thika, Kenya RSCU	Task force meeting: Approaches 1st draft of report on approaches (guidelines)
1993		
October 11-15	Riederalp Switzerland, CDE	International Workshop: 19 specialists from 13 countries Definition of WOCAT objectives, methodology; splitting up into three Qs: QT, QA, QM, to be developed by 3 task forces.
1992		
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



The famous Stupa of Boudhanat