

**Third International Workshop and Steering Meeting  
Twann, Switzerland  
25 August – 1 September 1998**

WORLD OVERVIEW  
OF CONSERVATION APPROACHES  
AND TECHNOLOGIES (WOCAT)

***Workshop &  
Steering Meeting  
Proceedings***

Progress, Preparation of Outputs,  
Revision of Methodology, Plan of Action,  
Institutional Reorganisation

World Association of Soil and Water Conservation (WASWC)  
Centre for Development and Environment (CDE)  
Institute of Geography, University of Bern  
Bern, Switzerland

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**Layout**

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*Workshop &  
Steering Meeting  
Proceedings*



## List of Collaborating and Funding Institutions<sup>1</sup>

<b>ADB</b>	Asian Development Bank, Manila, Philippines
<b>ASOCON</b>	Asia Soil Conservation Network, Jakarta, Indonesia
<b>CDCS</b>	Centre for Development Co-operation Services, Vrije Universiteit Amsterdam, The Netherlands
<b>CDE</b>	Centre for Development and Environment, University of Bern, Switzerland
<b>CIAT</b>	Centro Internacional de Agricultura Tropical, Cali, Colombia
<b>DANIDA</b>	Danish International Development Aid
<b>DARC</b>	Department of Agriculture & Resource Conservation, Pretoria, South Africa
<b>DLD</b>	Department of Land Development, Ministry of Agriculture and Cooperatives, Bangkok, Thailand
<b>FAO</b>	Food and Agriculture Organisation of the United Nations, Rome, Italy
<b>FSWCC</b>	Fujian Soil and Water Conservation Centre, Fuzhou, China
<b>GTZ</b>	Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn, Germany
<b>IBSRAM</b>	International Board for Soil Research and Management, Bangkok, Thailand
<b>ICARDA</b>	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
<b>ICIMOD</b>	International Centre for Integrated Mountain Development, Kathmandu, Nepal
<b>ICRISAT</b>	International Crops Research Institute for the Semi-Arid Tropics, Niamey, Niger
<b>IDRC</b>	International Development Research Centre, Ottawa, Canada
<b>INSAH</b>	Institut du Sahel, Bamako, Mali
<b>IRE</b>	Institute of Resources and Environment, University of British Columbia, Vancouver, Canada
<b>ISCW</b>	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
<b>ISRIC</b>	International Soil Reference and Information Centre, Wageningen, The Netherlands
<b>OSS</b>	Observatoire du Sahara et du Sahel, Paris, France
<b>PASOLAC</b>	Programa de Agricultura Sostenible en Laderas de América Central, Managua, Nicaragua
<b>RELMA</b>	Regional Land Management Unit (former RSCU), SIDA, Nairobi, Kenya
<b>SDC</b>	Swiss Agency for Development and Cooperation, Bern, Switzerland
<b>UNEP</b>	United Nations Environment Programme, Nairobi, Kenya
<b>WASWC</b>	World Association of Soil and Water Conservation, Ankeny, USA

WOCAT Management Board: CDE, FAO, ISRIC, OSS, DLD

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<sup>1</sup> up to September 1998

## List of Abbreviations

<b>CCD</b>	Convention to Combat Desertification
<b>DB</b>	Database
<b>DBMS</b>	Database Management System
<b>D-CAT</b>	Database of WOCAT
<b>DSS</b>	Decision Support System
<b>GLASOD</b>	Global Assessment of Soil Degradation (UNEP /ISRIC)
<b>ha</b>	Hectare (10.000 m <sup>2</sup> )
<b>HKH</b>	Hindukush/Himalaya
<b>MB</b>	WOCAT Management Board
<b>MoU</b>	Memorandum of Understanding
<b>NARES</b>	National Agricultural Research and Extension System(s)
<b>NGO</b>	Non-Governmental Organisation
<b>NRM</b>	Natural Resource Management
<b>PR</b>	Public Relations
<b>QA</b>	Questionnaire on Approaches
<b>QM</b>	Questionnaire on the WOCAT map
<b>QT</b>	Questionnaire on Technologies
<b>RMD</b>	Resource Management Domain(s)
<b>SM</b>	Steering Meeting
<b>SWC</b>	Soil and Water Conservation
<b>TF</b>	Task force
<b>ToR</b>	Terms of Reference
<b>WB</b>	World Bank
<b>woCat</b>	WOCAT's cat (cartoon and personal guide)
<b>WS</b>	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 Workshop and Steering Meeting, held in Twann, Switzerland in August / September 1998. 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. Please give us your comments in order to improve the programme and the results presented in this document.

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

## Introduction

The third international Annual WOCAT workshop and Steering Meeting which was held in Twann, Switzerland, was attended by 27 participants from 15 countries and 5 continents, 10 of them attending for the first time (see participants list). Therefore the meeting started with a general introduction to the WOCAT programme and an overview of the events since the last meeting in Murten (see box, page 3).

The participants were then asked to introduce themselves and to put their expectations of the workshop on paper. These were grouped in broad categories that corresponded largely to the workshop topics. Most frequent were expectations with regard to WOCAT outputs and their practical use.

### *Expectations of participants*

#### METHOD: Database/Questionnaires

Approval for final printing of questionnaires

- Inputs to the further development of the database
- Guidance on further database developments

#### PRODUCTS & USE

- Work towards analytical synthesis of data
- Analysis of outputs in terms of quality and costs
- Identify areas of anticipated outputs
- Outputs (user-friendly and practical)
- Presentation of outputs to users
- How to finalise outputs
- Finalisation of Questionnaires (T,A, M)
- Outputs (Information)
- Practical uses of database and map
- Outputs relating to production (fertility)
- Confirmation of: 1) Clear purpose 2) Useful output 3) Reasonable time span

#### GUIDELINES

- Work towards: WOCAT guide kit for project design
- Plan for WOCAT case study
- More definite – methodologies - outputs
- Systematic analysis of technologies for decision support
- Outputs: - who is doing what – planning – funding

#### LINKS

- Links to parallel activities of others
- Africa: Links between WOCAT and ongoing activities e.g. Indigenous SWC projects (CDCS, Amsterdam)
- Better communication = better planning

#### NAT./REG. INITIATIVES

- Regional and national programme strategies
- National vs. regional strategy for West Africa
- Development of concrete (regional) initiatives
- South Africa's initiative SADC-Region – Guidelines
- Strengthening the linkages between us and the relevant external organisations
- Decisions on decentralisation and division of labour

#### REVIEW

- Consequences of review, for WOCAT for map in particular
- Serious discussion and decision on consequences of the review

#### FUNDING

- Agree funding strategy
- "Marketing" strategy

#### LEARN & APPLY

- Obtaining more information for further practical use in southern China areas
- Learn from other WS experiences (Philippines)
- Learning from experience of other countries

### **Aim of the workshop**

Since 1996, WOCAT has organized Annual Workshops and Steering Committee Meetings to:

- a. bring together the main collaborating and funding institutions and the core collaborators,
- b. assess the progress,
- c. further develop the program
- d. plan for the future.

As agreed during the last workshop in Murten in 1997, a Steering Meeting would be held on Friday and Saturday in the first week (28-29/8/98) of the annual workshop.

As the WOCAT programme developed since the Annual Workshop and Steering Meeting in Murten, the following discussion topics were identified:

1. Review of the External Evaluation
2. Further Development of Methodology: Database Management System, outputs.
3. Development of different guidelines for national, regional and global WOCAT programs
4. Progress and development of activities at the global, regional and (sub)national level
5. Development of funding strategies: for national, regional and global program
6. Planning of next phase of WOCAT

<b>WOCAT Milestones 1992-98</b>		
<b>1992</b>	Bern	<b>Proposal for funding to SDC:</b> WOCAT funded by SDC: from 1.9.92 - 31.8.95
1 October	Sydney; Australia	<b>ISCO Conference:</b> 24 SWC specialists from 16 countries 1st international meeting to define overall goals
<b>1993</b>		
October 11-15	Riederalp Switzerland, CDE	<b>International Workshop:</b> 19 specialists from 13 countries Definition of WOCAT objectives, methodology; splitting up into three Qs: QT, QA, QM, to be developed by 3 task forces.
<b>1994</b>		
January 13-14	Thika, Kenya RSCU	<b>Task force meeting: Approaches</b> 1st draft of report on approaches (guidelines)
March 13-15	Wageningen ISRIC	<b>Task force meeting: Technologies</b> 1st draft of questionnaire on Technologies
June	Bern at CDE	<b>Finalizing 1st drafts of QT/QA</b>
August	Bern at CDE	<b>Task force map.</b> 1st draft of QM
August	Bern CDE	<b>CDE coordination.</b> Drafts of QT, QA, QM compiled
August-November	Kenya, Ethiopia, Niger, S.A.	<b>Testing of QT, QA by WOCAT task force members</b> Feedback from testing in Africa, suggestions for improvements
October 20-21	Wageningen, ISRIC	<b>Meeting on database and expert system,</b> ISRIC, CDE, SOCOX. First version of D-CAT (database of WOCAT) and development of X-CAT (expert system of WOCAT)
December 12-15	Bern, CDE	<b>Workshop for Core Group Members</b> Final draft of Qs, change of methodology: towards regional workshops.
<b>1995</b>		
March 13-14	Rome, FAO	<b>Meeting on map with ISRIC and CDE</b> Further development of objectives and outputs of the map
May	Bern, CDE	<b>Finalizing QT, QA and QM /</b> Printing of 1st version of QT, QA and QM
June 26- July 1	Machakos, Kenya collaboration RSCU - CDE	<b>1st Regional Workshop (East Africa):</b> 27 SWC specialists from 7 countries and 10 facilitators: 30 Technologies and 19 Approaches and regional map; sponsored by RSCU, CDE, FAO, GTZ
August	CDE-UNEP	<b>Proposal for funding of Regional Workshop.</b> UNEP approval for funding of Southern African workshop
November 6-11	Ouagadougou Burkina Faso, OSS/GTZ	<b>2nd Regional Workshop (Western Africa):</b> 30 participants from 4 countries: Launching of WOCAT and testing of methodology in Western Africa: sponsored by OSS/GTZ, FAO and SDC
December 11-15	Magoebaskloof, South Africa	<b>3rd Regional workshop (Southern Africa)</b> 28 SWC specialists from 8 countries, 4 facilitators, collection of 22 Technologies and 17 Approaches and regional map
<b>1996</b>		
January	Bern, CDE	<b>Proposal for funding to SDC.</b> 2nd phase of WOCAT funding approved by SDC: from 1.9.95 - 31.8.98
Febr.- May	Bern, CDE	<b>Meetings:</b> Evaluation of results, drafting of outputs, revision of method
May 6-14	Sigriswil	<b>International workshop and Steering Committee (SC) meeting</b> with main collaborating institutions and donors: Development of the programme, finalizing outputs of WOCAT, <b>Formation of a WOCAT Consortium and Steering Committee</b>
June	Tunis, Tunisia; OSS	<b>4th Regional workshop (Northern Africa):</b> Including Tunisia, Algeria, Morocco and Mauritania. Organized by OSS.
August 26-30	Bonn	<b>ISCO Conference:</b> Presentation of WOCAT Africa to date (paper), Poster presentations in Dare to Share Fair, meetings to and feed-back from SWC specialists worldwide
Sept. 15-21	Thailand (DLD)	<b>National WOCAT Workshop:</b> Launching Asian data collection with national funding: 21 Technologies and 14 Approaches

<b>1997</b>		
March	Bonn (GtZ)	<b>Meeting: GtZ – FAO – CDE:</b> Discussion of progress and issues to be addressed during Next SC meeting
- May	Bern, CDE	<b>Revision of questionnaires</b> on Technologies and Approaches
May	Bern, CDE	Production of <b>WOCAT brochure</b>
May-Aug	FAO and CDE	Development of <b>new database</b> and <b>data analysis</b> system
May	CDE and ISRIC	Presentation of WOCAT in <b>Desertification Atlas</b> of UNEP
June	Paris OSS and CDE	Entry of <b>N-Africa and W-Africa data</b> into old DB: 26 Technologies, 16 Approaches
July	GtZ, CDE	New initiative: <b>Latin and Central America:</b> Translation into Spanish, Contacting institutions, starting process
July	ADB, CDE	New initiative: <b>China:</b> Preparing translation into Chinese, proposal for WS in Nov'97
Aug-Sept	Murten, CDE	International <b>Workshop</b> and <b>2<sup>nd</sup> Steering Committee</b> meeting
October	Rome, OSS	WOCAT multimedia presentation at the CCD conference
November 17-21	Fuzhou, ADB	National <b>Initiation and training workshop in Fuzhou, Fujian Province:</b> 26 participants of six Red Soil Provinces in China
December	Rome, FAO	Management Board Meeting
<b>1998</b>		
February	Bern, CDE	WOCAT <b>Database Training</b> for 3 delegates from the Fujian SWC Centre, China
February	Bern, CDE, ISRIC, FAO	Development work on <b>Database Management System</b> for QT, QA, QM and integration of QT / QM
March	Bern, CDE	New initiatives of <b>ICRISAT Niger and PASOLAC Nicaragua:</b> First discussions
March 31–April 1	Bogota, GTZ	WOCAT Workshop Colombia with 12 experts of GTZ, CIAT and University of Colombia
April	Paris, OSS and Colombia, GTZ	Translation of latest versions of questionnaires into French and Spanish
April	Bern, CDE	Final Revision of questionnaires on Technologies, Approaches an Map
April-June	Rome, FAO and CDE	Preparation of WOCAT <b>CD-ROM</b> version 1.0 which illustrates the WOCAT methodology and shows preliminary data sets and results
April-May	Bern, CDE	<b>WOCAT Review:</b> external evaluation of the WOCAT programme for SDC
May-Aug	Cali, CIAT	WOCAT studies in <b>Colombia</b> by two students of CDE Bern
June-Aug	Niamey, ICRISAT	WOCAT studies in <b>Niger</b> by two students of CDE Bern
July	Rome, FAO	Distribution of WOCAT <b>CD-ROM</b> to all WOCAT collaborators and contributing specialists
August 17-21	Manila, DANIDA	New initiative: National WOCAT Workshop in the <b>Philippines</b>
August 25–September 1	Twann, CDE	<b>International Workshop and Steering Meeting</b>

## TOPIC 1: Comments on the WOCAT External Review

### Introduction

#### *Rationale*

During the Annual Workshop and Steering Committee meeting in Murten, 26 August – 2 September 1997, it was decided to have an external review of the WOCAT program in 1998. The main two reasons being:

- SDC's second phase of funding comes to an end in August 1998 and SDC is ready to make a decision regarding further commitments;
- WOCAT partners generally agree the need for getting a competent and objective opinion on the program as a means to convince more donors.

#### *Timing and methodology*

The final report of the review was to be ready by 31 May 1998. The methodology chosen by the review team should be as participatory as possible, to take into account the different interests and views of the diverse program partners.

#### *Composition of the review team*

The team leader was Dr. M. Stocking, from University of East Anglia, Norwich, United Kingdom. The second member was Dr. A. Pozzi, Private Consultant, Zürich, Switzerland.

#### *Terms of Reference*

The review analysed the WOCAT programme and made recommendations for its future development. The recommendations were addressed first to SDC for decision making regarding further commitments and secondly to the WOCAT Management Board in its efforts to find additional donors. The following specific topics listed under the TOR cover relevance, objectives, approach, efficiency and funding of the program:

1. Relevance of the program to development priorities and needs (context analysis)
2. Clarity and feasibility of the objectives and outputs
3. Adequacy of the WOCAT methodology (compared with other methods) to achieve the objectives
4. Adequacy and efficiency of institutional set-up
5. Adequacy and efficiency of the management
6. Cost-efficiency, effectiveness and funding strategy
7. SDC's role as co-funding agency of WOCAT
8. Further programme development

### Discussion

Prior to the discussion Michael Stocking introduced the review report. He suggested that spontaneous adoption of WOCAT methodology would be the test of acceptability.

R. Gallacher thanked the reviewers on behalf of WOCAT, for their comprehensive and balanced report, which was reflected by the 5 persons who commented mainly in support of the final version.

The fourteen recommendations of the review are listed below with the remarks made during the discussion in *italics*. More detailed comments were received in writing from partner institutions before the workshop.

List of Recommendations by WOCAT External Review and WOCAT Consortium Response  
made during the Annual Workshop and Steering Meeting in Twann, August 1998

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The review team recommends that:

**(1)** The developmental relevance of WOCAT needs to be explicitly defined, and processes introduced by which that relevance is justified.

**(2)** Future development of WOCAT must address the use of the outputs for developmental purposes.

*Endorsed by WOCAT Consortium:*

- *Requests forwarded to WOCAT and the use of its outputs shall be monitored (see also recommendation (4) below).*
- *The usefulness to the beneficiaries for their daily work shall be reviewed about one year after making the database available to them.*

**(3)** The highest priority must be given to producing a draft output of the results of all Workshops and data-gathering exercises within, say, three months.

*Endorsed:*

- *The following outputs were prepared between the review (April-May 1998) and the Twann Meeting (August 1998), namely: (a) final drafts of the three revised questionnaires forming a framework for evaluation (learning exercise) (b) a first version of a CD ROM containing all (preliminary) data*
- *Additional outputs will be prepared within the next year according to the annual planning.*
- *Quicker turnaround is now possible with the database in place and the various marketing and collection tools available in 1998*
- *There are items to be addressed such as ownership of data and better feedback*

**(4)** WOCAT should not exaggerate its claims to reach and benefit such a variety of target groups. Management should monitor carefully the number of institutions and professionals involved, as well as any uptake of outputs and cases of spontaneous adoption.

*Endorsed:*

- *There will still remain a variety of target groups, addressed by different outputs*
- *At the heart are professionals improving professionals, the secondary beneficiaries are those benefiting indirectly from that better professional knowledge*
- *Spontaneous adoption of the WOCAT methodology occurred in China, Philippines, Thailand, Niger and South Africa. Regional nodes will monitor the uptake of outputs and clearly identify the users.*

**(5)** The WOCAT methodology to create a database of technologies should continue largely in its present form. New means of gathering the information should be explored, which would include field-level participatory surveys of land users so that not only would the involved professionals learn the farmers' perspective but also the costs and benefits of SWC will more accurately be represented.

*Endorsed:*

- *WOCAT will develop guidelines and new procedures for data collection within the next 12 months. This should stimulate the contact between professionals (SWC specialists, decision makers) and land users.*

**(6)** The methodology of creating a database of Approaches (QA) needs reappraisal. The type of thinking and analysis required is beyond the experience of most participants, and cannot be developed within the one-off confines of a single Workshop.

*Endorsed:*

- *During and after the review the QA has been thoroughly revised, and many questions about the setting have been removed (repetitions to QT).*
- *Difficulties in responding to questions also reflects gaps in (important) knowledge, but by exposing such gaps, the questionnaire(s) may act as a stimulus for improvement*
- *The recent Philippines workshop (Aug. 98) had used the questionnaires from the CD-ROM without apparent difficulties*

**(7)** The methodology for deriving the mapping output of WOCAT should be reappraised.

*The following points were discussed prior to endorsement:*

- *Reappraisal of the methodology would considerably slow the process of producing requested outputs.*
- *Reappraisal of cost and benefits of the map production is needed and benefits need to be demonstrated, but reappraisal of the methodology should not hinder the production of outputs.*
- *Maps are very powerful and thus the production has to be done very carefully.*
- *The map is a major justification for WOCAT, by showing the positive side of human impact and by providing an overview.*
- *Carrying out the mapping exercise should be made easily possible for regional institutions and proper training should be provided*
- *The mapping database and the links to QT still need further technical development*
- *The mapping methodology is scale independent and can be applied at regional (e.g. 1:5 M) and national (e.g. 1:1 M or larger) scale. Therefore the users can define what is the best scale for them*

*Endorsed:*

- *The map methodology QM will be further developed and the usefulness of the outputs will be demonstrated at the national and regional scales within the current planning phase.*

**(8)** WOCAT should seek to decentralise some of its coordinating functions to regional centres.

*Endorsed:*

- *While WOCAT started implementing this strategy several years ago it will have to strengthen the support to regional and national initiatives, and provide guidelines to them which will assist them in finding financial support for their activities.*
- *The progress of this decentralisation will be monitored and criteria for the support by the core WOCAT programme will be established.*
- *The WOCAT Consortium underlines that sufficient resources will have to be made available to regional centres in order to accelerate the process of decentralisation.*

**(9)** In setting a high standard of collaboration and reporting, WOCAT management is urged to continue its good support, while also seeking a more decentralised sharing of some responsibilities.

*Endorsed:*

- *WOCAT Management Board (representatives from six institutions) attempts to continue its support and clarify the responsibilities. Guidelines will be developed within the current phase aiming at regulating responsibilities and procedures.*

**(10)** Future workshops and information collection exercises must include financial provision for the draft compilation of the country/regional database and its evaluation by participants shortly after the collection exercise.

*Discussed:*

- *the WOCAT Consortium highly agrees to this recommendation, although it has not always been possible to ensure sufficient funding for these activities. Future proposals should include funding for required technical assistance from core group*

*Endorsed:*

- *The WOCAT Members will do their best to rise the awareness that sufficient resources are needed for the production of outputs and to ask regional and national initiatives for continued support.*

**(11)** SDC should implement WOCAT in projects having SWC components currently being coordinated by other sections of SDC.

**(12)** SDC is urged to support regional centres wishing to carry out WOCAT activities as regional coordinators.

**(13)** SDC is urged to continue its support for the central coordinating functions of WOCAT, including the maintenance of the database and support for the development of outputs, while WOCAT Management Board also seeks diversified funding for future developments and upscaling.

*Discussed:*

- *Recommendation 11-13 are highly supported.. WOCAT, with the support of SDC, should develop a multi-donor funding strategy*

**(14)** WOCAT activities now need to turn from an almost total emphasis on database development and information collection, to the practical use and demonstration of the utility of outputs.

*Endorsed:*

- *In the current planning phase strong emphasis will be given for improving the WOCAT outputs and their utility*
- *Database development and information collection is still an ongoing activity*

## TOPIC 2: Further Development of Methodology and Outputs

### 1. Presentation of final version of questionnaires

Latest copies of English versions of all three questionnaires were presented. French and Spanish translations are being prepared by OSS and GTZ.

The changes since the version distributed in Murten include:

- QT was approved by Chinese and Latin American contributors, QA needed a clearer structure and some clarifications
- Limiting the area definition to the actual area covered (no 'overall area')
- Questions about the environmental and socio-economic setting of the area were partly moved from QA to QT. There is nothing in QA about the setting anymore, since it was very confusing to which area the information should be related and frustrating due to duplications for most of the contributors.
- Better mutual reference between QT and QA
- Duplication of questions in QT and QA removed
- Emphasizes complementary role of QA to QT
- Including SWC classification system into QT and QM
- Extended summaries in QT and QA
- QM: priority ranking removed
- Geo-reference in QT
- Reference to corresponding QT(s) in QM
- Changed order for "Productivity" item in QM (more emphasis on trends and their causes)
- Improvement of instructions in QM

Discussion:

- Number of questionnaires to be printed? (*no decision made!*)
- New focus on output may lead to eventual changes of questions?
- Further changes to questionnaires will have severe implications on time, costs and credibility of program; they would not only mean changing the English paper questionnaire but also entail changes in the data entry module of the database, the preselection and reporting module and possibly the data itself - of all 3 language versions.
- Frequent difficulties with map usage reported, often due to scale (large units)
- Map units and scale: should be flexible for individual countries: use smaller units if needed. For consistency reasons, 1:5M SOTER physiographic units are still strongly recommended at regional/global level, but these can be subdivided into smaller units (e.g. SOTER units, including soil criteria) if needed.
- Translations: it is always difficult to make a proper translation with unambiguous meanings (these also depend on the regional context)

Next steps:

- Last checking on errors, printing English document
- Proofreading of French and Spanish versions, printing documents

### 2. CD-ROM and Database Management System

The CD-ROM version 1.0 illustrates the WOCAT methodology and contains initial data sets and results. 500 Copies were printed and sent by FAO to all collaborating and contributing experts.

The CD-ROM was appreciated by most of the participants of the workshop.

Problems / improvements for next version:

- Needs a lot of disk space and memory
- People who are not experienced with computers struggle with the installation (and de-installation) of the software
- Database system and data are in a very preliminary stage.
- On-line help?

Database management system:

- First draft of short manual: see proposal for WOCAT Guidelines
- Screenshots of parts of the Access database: see page 11-13
- All data was transferred from the previous Word version to Access.
- Data gaps increased due to the numerous revisions of the questionnaires, amendments by the contributors is essential.

Envisaged next steps as discussed in group work:

- Data import feature: Has become necessary because of the efforts to decentralize data collection and the subsequent need to re-unite data in the central master database (CDE/FAO). This process will be facilitated by separating programs and data. It has been agreed that users would be given an empty database in case they wish to collect and record their data independently of the master database.
- On-line help: There seems to be a general need to have further help available by pressing the F1 (help) button when running the databases. It can be distinguished between a functional help feature (what to do next / what is the next step in running the software) and assistance in correctly filling in the data fields. The latter is already available in the form of the left (E) pages of the paper version. Its incorporation is merely a technical problem.
- QA pre-selection criteria: It was felt that the participants cannot be expected within a one hour discussion to come up with recommendations. It was therefore given as a kind of homework to elaborate proposals for further enhancements / improvements. The database development team would be pleased to receive proposals any time by e-mail.
- Additional reports and analysis: see QA pre-selection criteria
- Short summary (former 2-page summary): see QA pre-selection criteria
- Internet: It would be impossible to turn the present database applications into Internet applications. It seems however feasible to generate a number of representative summary reports and convert them into web documents (htm) that could be selected / accessed by a simple search mechanism. This should serve as an "appetizer" which would encourage people to download the full database application via FTP.
- Development of different language versions: As regards additional French and Spanish language versions it appears more practical to hold English, French and Spanish questionnaires in a single global database and enhance the search mechanism rather than splitting up the master database into three parts. The refined search mechanism would have to guarantee that a keyword would be found in its English, French and Spanish equivalent. These equivalents have already been recorded in the WOCAT glossary. Any further language versions (Chinese, Arabic, etc.) would have to be developed as a separate exercise. Data collected in these languages need to be translated into English for incorporation into the global database.

### Workplan for the above activities

Activity	Completion by	Who <sup>2</sup>
Debugging / enhancement of present versions	October 98	WP/GS
Import feature	Mid September 98	WP
On-line help	October 98	WP/GS
Internet	November 98	WP
Multilanguage versions	March 99	WP (S) /GS F)
QA preselection criteria	Depending on feedback	WP
Short summary	Depending on feedback	GS
Reports / analysis	Depending on feedback	GS
Whole questionnaire printing	November 98	GS
QM/QT/ArcView integration	August 99	GvL, WP, GS
CD-ROM version 2	August 99	WP, GS, etc.

<sup>2</sup>

WP= Wolfgang Prante, GS= Gudrun Schwilch, GvL= Godert van Lynden. S= Spanish, F= French

### WOCAT Technologies - Search by Criteria

#### General

Key word(s)  and   
 or  or   
 Name of technology   
 Description of techn.

#### Tips:

Don't be too restrictive by selecting many criteria !

Click on the frame to remove a set of criteria.

**Start Search**  
 Clear Criteria  
 Close

#### Geographic

Continent  Region  Country

#### Problems / Means

Measures  or   
 Main means   
 Category  or   
 Soil deg. addressed  or

- Agronomic measures
- Vegetative measures
- Structural measures
- Management measures

#### Natural

Climatic regime  or   
 Avg. annual rainfall 750-1000  or   
 Elevation  or   
 Slope  or   
 Avg. soil depth  or   
 Soil fertility  or   
 Soil texture  or   
 Land forms  or

#### Human / land use

Land use type  or   
 Market orient.(Crops)  or   
 Market orient.(Grazing)  or   
 Market orient.(Forest)  or   
 Land ownership  or   
 Land use rights  or   
 Area per household  or   
 Costs <  US\$/ha <  US\$/ha  
 Initial Recurrent

### Selected Technologies

ID	Technology Name	Country	Keywords
eth1	Trashlines. Complementary stone/soil bund	Ethiopia	Contour, down
eth3	Area Closure	Ethiopia	grazing/cropp
ken1	Grass Strips: Ribbon like strips of grass pla	Kenya	Grass plantec
LES3	Relay Intercropping	Lesotho	Intercropping,
LES5	Donga Rehabilitation	Lesotho	Gully, donga,
MOZ1	Intercropping with Short Fallow	Mozambique	Intercropping,
MAL1	Systematic Interplanting of Faidherbia Albic	Malawi	tree planting,
nam2	Contours on Lands with Waterways	Namibia	Planning cont
nig2	'Tassa'	Niger	tassa   poche
nig5	Tassa	Niger	tassa   trou ci
RSA2	Controlled Traffic Reduced Tillage	South Africa	Multipurpose
tha11	Contour bund	Thailand	Mechanical s
<b>tha17</b>	<b>Integrated Conservation System</b>	<b>Thailand</b>	<b>Integration be</b>
tha1	Vegetative control and integrated crop rota	Thailand	Vegetative co
tha8	Cropping system	Thailand	Cropping of

Summary (2 pages)  
 Entire questionnaire

Display  
 Print

View Summary

Close

[Integrated Conservation System](#)

Integration between the hillside ditches and cropping system

## WOCAT Approaches - Search by Criteria

### General

Key word(s)  and   
or  or   
Name of approach   
Description of approach

Start Search

Clear Criteria

Close

### Geographic

Continent  Region  Country

### Approach Features

Target groups  Land users or   
Land user involvement  or   
Finance  National non-go or   
Minimum contribut. (%)   
Training   
Extension  or   
Labour  or

Access - [fSelectedApprQA : Form]

File View Insert Format Records Tools Window Help

## Approaches

Approach name	Country	
Front Bank, Back Ditch of 1 China		Land users
Project Extension	Cameroon	Land users

- Summary (2 pages)
- Entire questionnaire

- Display
- Print

OK

Cancel

3-day, Farm visit, Planning, Training

### 3. Report of expert system task force

The task force of the expert system never met and therefore has nothing to report on. It was regretted that the leader of the expert system task force could not be present.

### 4. Outputs

The Workshop discussed the various WOCAT outputs, first through group work and then in plenary. The following was agreed:

#### 1. Internet

Publicity excerpts and a number of technical data from WOCAT are available on the Internet and they are being updated regularly. Users may visit the site at:

HYPERLINK <http://www.giub.unibe.ch/cde/projects/wocat.htm>

The latest item to be entered was the WOCAT External Evaluation Report by Michael Stocking and Andrea Pozzi.

#### 2. CD-ROM

WOCAT databases have been obtained from various WOCAT workshops in Africa and Asia through the completion of the questionnaires: QT, QA and QM. These were incorporated into a CD-ROM in FAO Land and Water Digital Media Series No. 3, five hundred copies of which have been produced for distribution. Data are to be updated and improved and will be used, along with new data, for producing a second edition.

#### 3. Handbooks of SWC Technologies and Approaches

The handbooks were originally planned to be tools for project design, training and extension. So far no handbook has been compiled. It was agreed that handbooks should be produced for the East African region as an urgent, pilot exercise. A funding proposal was drawn up to produce handbooks 'T' and 'A' by a target of September 1999 – given that funding is secured in time. Rather than being called 'Handbook of Technologies/ Approaches', these publications would be entitled 'Overview of Approaches' and 'Overview of Technologies'. The format of the handbooks would broadly follow the outline discussed and presented in the WOCAT meeting at Sigriswil in 1996 (see Sigriswil minutes: pp 16-26)

#### 4. Map

Maps are undoubtedly important outputs that are targeted at user groups, including policy/decision makers, scientists and students as well as the general public, in order to visualise *what* is happening *where*. Maps are easier to discuss than tables and long narratives and they are not very expensive to produce. The meeting agreed that WOCAT should continue this effort while trying to strengthen decentralisation and enable regional/national institutions to handle map preparation themselves. This will decrease dependency on ISRIC, which until now has been producing the maps.

#### 5. Decision Support System (DSS)

This output succeeds the so-called "Expert System" which was in the WOCAT list of outputs from the beginning until the Murten Workshop. Three persons were assigned to be responsible for developing the DSS since September 1997, but no result has appeared to date. As this is an important and useful product especially for decision makers, planners and extension workers, its development is a priority.

#### 6. Hypertext

In association with the DSS, the hypertext which was developed by the University of British Columbia in 1995-6 has been good for publicising WOCAT's usefulness to potential or new participants. The examples of selected SWC technologies in different biophysical and socio-economic milieu quickly draws the attention of those who are involved in conservation of soil and water resources.

### *7. Brochure*

The colourful brochure of WOCAT should be improved by putting new photos and new examples of summary sheets of QT and QA to bring it up to date. A brochure is a suitable medium for publicity purpose as it can stand-alone. It can be readily produced in large quantities and widely distributed.

### *8. Video*

Nowadays videos are relatively cheap to produce and can be screened almost everywhere. Video players are also cheap, and widely available. Using videotape is an alternative to the CD-ROM where computers are not readily available. Most regional/national institutions have been successful in using videotape for promoting new innovations. South Africa has recently produced a good *LandCare* video which is being widely used.

### *9. Colour Slides*

Colour slides are useful wherever there is electricity. They are cheap to produce and projectors are inexpensive. They are therefore usable as a complement to other forms of media.

### *10. Guidelines*

The guidelines discussed under topic 3 can also be considered a WOCAT output. See topic 3 for further description of content and purpose.

### *11. Executive summaries*

When various outputs have been produced at a regional level there remains a role of a brief, informative and attractive 'executive summary'. Such a summary will be useful for (especially) decision makers, planners, and high officials who do not have enough time to go through full documents. The summaries will also act as 'appetisers' to attract people to the WOCAT 'main course'.

## TOPIC 3: Development of WOCAT Guidelines for Regional Initiatives

### Introduction

As suggested in the Murten Workshop a need exists for “*a document, which contains more specific ‘how to go about it’ methodological details, as well as rules and the responsibilities of the various stakeholders. Hence there is a requirement for a booklet containing WOCAT Guidelines to help potential (and current) collaborators to understand the specific WOCAT methodology and procedures*”.

The following draft guidelines were prepared prior to the workshop by Will Critchley and Godert van Lynden, with additions from Wolfgang Prante and Gudrun Schwilch. They aim to facilitate the organisation and implementation of a regional WOCAT exercise and are based on the assumption that an institution with a regional mandate takes the initiative and responsibility for a WOCAT activity covering several countries at the time. The guidelines provide some basic procedures for the implementation of a regional WOCAT programme. Activities at the national level should follow the same guidelines, if they are a 'stand alone' sub-regional exercise. If on the other hand these national activities are a supplementary follow-up to a regional exercise, then they naturally can tailor the procedures to suit their own specific purposes which would need to be approved by WOCAT, if WOCAT accreditation is to be given<sup>3</sup>. However, output from national activities need not necessarily comply with WOCAT (global) standards, as outputs will only partly be included in the global database (about five examples of As and Ts per country).

NB: *National activities that are implemented at 1:5M scale are considered as regional if no other regional activity is already taking place covering the same area.*

### Draft Guidelines

- **Introduction to WOCAT** [as in QT/QA/QM]
- **Responsibilities and obligations at global, regional and national level and mode of interaction/ exchange** (see also Murten proceedings: p. 19/20):
  1. At global level, the core WOCAT group (MB) is responsible for organisational assistance and technical guidance during all phases of the project and for maintaining a standard “WOCAT quality” of the produced outputs.
  2. At the regional level the main responsibility of the activity will be with the regional institution. This will include the regional co-ordination, awareness raising and familiarisation of WOCAT among the national partners, acquisition of proper funding, organisation of regional workshops, administrative and logistic support, data correlation and quality control, production of final outputs.
  3. National institutions are responsible for the selection of appropriate participants, identification of relevant T's and A's and for making available working time, equipment, manpower and data and ensuring proper results of the fieldwork.

Responsibilities should be fixed in a MoU between WOCAT, the regional institution and preferably a donor organisation.

- **Objective of the data collection** at the regional level is an overview of the most important SWC activities, not comprehensiveness, which could be the objective of a national activity.

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<sup>3</sup> Detailed procedures for national WOCAT activities are described in the Proceedings of the CLASP workshop in Hanoi, June 1997.

## ➤ **Procedures for conducting a regional WOCAT programme (3 phases)**

### **I Preliminary activities:**

- Identify expectations of regional institution and of participating countries
- A standard proposal (see Annex I: standard proposal format) will serve as the basis for regional initiatives. This may need to be modified to a greater or lesser extent to suit regional specificities. The standard proposal contains budget items to be considered but no (indicative) figures.
- The national partner institutions of the regional organisation should be familiar with WOCAT and have to prepare for participation in the programme (e.g. identification of existing data and of all relevant T's and A's, available staff, facilities and resources, etc.)
- Drafting of a detailed workplan (see Annex I), with time schedule (e.g. when can outputs be expected!)
- Selection criteria for participants (see Annex II): what background, what level, how many per country
- Base map for QM: where available 1:5M SOTER physiographic map (for national activities other maps and a larger scale possible)

### **II Implementation**

- The initial training workshop will (desirably) have a duration of one week. The optimum number of participants is 2-3 per country with a total maximum of about 25. The WOCAT core group will provide resource persons for technical support. A one day field exercise is an essential part of the Workshop [Programme example: see box].

#### **Initial workshop: motivation, training**

- Introduction to WOCAT
- Training in data entry / quality control
- Selection of Ts and As to describe (see criteria in Annex III).
- Field visit and testing QT,QA and QM (filling Questionnaires in groups)
- Training in data analysis / reports
- Specification of activities for subsequent data collection phase

*Modified after 1997 Fujian workshop programme*

- Additional training will be given to regional WOCAT co-ordination staff in data management and analysis (preferably directly after the workshop).
- The workshop is followed by in-country data collection (field work), with technical assistance from WOCAT core group and regional institution. Field visits indispensable! Duration (depending on region) ± 6 months? Data are entered into the WOCAT database preferably directly by the national institutions while the regional organisation takes care of the compilation and correlation of these various national data. Annex IV provides guidance in the use of the data entry and analysis system.
- After the fieldwork a report-back (follow-up) meeting is held: presentation (by countries) and quick analysis (by regional WOCAT co-ordination, e.g. draft maps and 2p summaries) of first results. Data correlation and other troubleshooting. Participants: WOCATeers and others (govt. officials, donor(s), etc.)

### **III Finalisation**

- Data checking, quality control and groundtruthing.
- Preparation of outputs at regional level: maps, QT handbooks, QA reports. Should conform to WOCAT standards, see Annex V. Assistance from WOCAT core group.
- Evaluation of results, criteria see Annex VI. Assistance from central WOCAT (MB).
- How to use the WOCAT products in practice, e.g. for project design/implementation or evaluation? See Annex VII.

## ANNEX I: WOCAT Funding Proposal for a Regional Initiative

### Standard Format

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1. Background
  - summary of WOCAT so far [*see existing texts*]
  - place/role of regional initiatives (part of the 'grand scheme' but also self-standing)
2. Justification
  - for WOCAT as a whole [*use modified existing rhetoric*]
  - for the regional initiative (regional context)
3. Goal and Objectives
  - for WOCAT as a whole [*use modified existing rhetoric*]
  - specific regional goals/ objectives (including improved networking)
4. Activities and Methods
  - refer to preceding procedures/guidelines
  - stress the need for consistency
5. Outputs
  - discrete regional outputs
  - contribution to global WOCAT outputs
  - potential for national outputs under follow-up national exercises
6. Inputs
  - mainly personnel and associated expenses: including regional persons and central WOCAT resource persons
  - other items (workshops, training) costed under budget
7. Benefits
  - of WOCAT as a whole
  - to the region(al organisation) and national partners
  - be specific! (see evaluation caveats)
8. Assumptions and Risks
  - usual shopping list here (especially those pertaining to comprehensive cover and quality of data)
9. Responsibilities and Obligations
  - responsibility to follow guidelines
  - obligations towards national partners and central WOCAT
10. Workplan
  - realistic (?2 years to production of all regional outputs) [*see Model for Implementation (of a National Inventory) in CLASP Proceedings*]
11. Budget
  - orientation of regional personnel/ awareness raising
  - facilitation by central WOCAT resource personnel
  - training/field work/workshop/ follow-up groundtruthing
  - database requirements
  - production of outputs

## ANNEX II: Criteria for Selection of WOCAT participants

### Who selects?

- To be discussed

### General criteria

- Knowledge of SWC
- Time and equipment available
- Familiar with computerised data handling (pref. under Windows 95)
- Institutional backing
- Good motivation

### For the initial training/workshop and for the field work [separate?]

#### ➤ For QT and QA

- Sufficient background and experience to have an overview of existing technologies/approaches at national (cq sub-national) level
- Adequate field experience and able/willing to make additional field visits
- Familiar with, and knowing about, various details of SWC technologies/approaches (technical, financial, socio-economic)

#### ➤ For QM

- Sufficient background and experience to have a spatial overview of existing technologies/approaches at national (cq sub-national) level
- Familiar with basic cartographic procedures, preferably also with GIS
- Ability to generalise and summarise SWC activities at field level to small mapping scale (e.g. 1:5M)
- Good interaction with QT/QA contributors

### For the closing workshop /report-back meeting

- Participants in initial training and fieldwork
- Senior staff from national institutions *[only latter part of workshop?]*

## ANNEX III: Criteria for Selection of Technologies and Approaches

The following is taken from QT

Main **natural (bio-physical) criteria** for determining the boundaries of a technology. A SWC Technology should cover:

- only one of the following land use types: cropland (separate annual, perennial, tree/shrub crops), grazing land (extensive, intensive grazing), forest/woodland, and mixed or other land.
- only one or a clearly defined combination of the following measures: agronomic, vegetative, structural, management.
- one or a combination of two adjacent climatic zones: humid, sub-humid, semi-arid, arid.
- one or a combination of two adjacent slope categories: flat, gentle, moderate, rolling, hilly, steep, very steep.
- one or a combination of two soil texture classes: sand, loam, clay.
- one or a combination of two soil depth categories: shallow, medium, deep.

Main **human (socio-economic) criteria** for determining the boundaries of a technology. A SWC Technology should cover:

- a defined level of mechanization: hand tools, animal-drawn implements, motorized.
- a defined production system: self supply (subsistence), mixed, or market-oriented (commercial).
- a defined level of inputs (costs) that are required
- a defined system of land ownership / land use rights.

## ANNEX IV: Guidelines for the Use of the Interactive Database Management System

### The WOCAT Databases: Background

WOCAT has developed three comprehensive questionnaires, forming a framework for the evaluation of soil and water conservation and a methodology for data collection at the same time. Data are entered in an interactive database management and analysis system. WOCAT outputs consist of books and reports on appropriate SWC technologies and approaches, maps of SWC activities, databases, a decision support system, and world-wide accessible information in paper or digital format and through the internet.

The WOCAT database management system consists of three main databases: technologies, approaches and map database. Additionally, the addresses of all collaborators and contributors are stored in a fourth database. All of them were created in MS-Access 97, but runtime versions are provided for users without access to that software. This manual is restricted to the databases on technologies and approaches.

### The structure

The databases have three main parts:

The data management part consists of all the data entry masks and a not yet implemented data import feature. The entry masks are a user-friendly tool to enter and change the answers given in the questionnaire. Their layout conforms as much as possible to the paper version of the questionnaires. Nevertheless it is still recommended to either write the answers first in the paper questionnaire or at least have the paper version at hand while entering the answers directly into the computer. The explanation pages are missing from the computer version. The data entry masks also serve as a tool to look at the complete questionnaire.

The data retrieval part allows selection of one technology / approach and to view or print a predefined 2-page summary of it, or to search for technologies / approaches which meet certain criteria selected by the user.

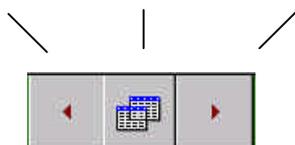
The data analysis part provides predefined summary reports over a selected continent or region. A chart shows the statistical distribution of answers given to a selected question.

### How to ....

#### ... enter a new questionnaire?

1. Select the Data Management button on the main menu
2. Enter password 'bern', press Enter or click the OK button
3. Select 'Create Master Record'
4. At the record selector (bottom of page) select  to go to a new record
5. Select a country name by clicking on the arrow right of the country field or by entering the name of the country by yourself. The software automatically fills the text of the field with a country from the list that matches the characters you enter as you type in the field.
6. After pressing Enter, the first letters of the questionnaire ID and the continent and region fields are filled automatically. Then, add a hitherto unused number between 1 and 99 to the ID code.
7. Start entering your name, first name, etc. You can go from the beginning through all the fields in right order by pressing Enter after having completed a field.
8. Reaching the end of the form (the field with the date of completion of the questionnaire), select the right arrow button on top right of the form to get to the next page or select a chapter of the questionnaire with the menu button and list.

Previous page      menu      next page



9. Go on filling in your answers
10. To go back to the main menu, select the menu button (see point 8.) and below the content list click on the Main Menu button.
11. Remark: You don't have to save any data, it's always saved directly after entering.

**... edit an existing questionnaire**

1. Select the Data Management button on the main menu
2. Enter the password 'bern', press Enter or click the OK button
3. Select 'Create Master Record'
4. At the record selector (bottom of page) select the right arrow to flip through all the records. They are stored alphabetically according to the country code. Stop at the desired questionnaire.
5. Go to other parts of the questionnaire with the described buttons in point 8. above and enter or change data directly in the field. Caution: any data you change is saved immediately (automatically) and the old data is overwritten, and is not accessible any more!

**... view a 2-page summary**

1. Select the Data Retrieval button on the main menu
2. Select a questionnaire by clicking the down arrow in the first field and by selecting an item from the list
3. Click on the button "Summary report (2 pages)"
4. Select Display or Print
5. Press OK
6. Zoom in or out and view the next page by PageDown or clicking on the arrow on the page selector (bottom of screen)
7. Go back by clicking on the Close button on the top toolbar.

**... search for a technology / approach**

1. Select the Data Retrieval button on the main menu
2. Click on the Search by Criteria button
3. Start filling fields with the criteria you want to search for, e.g. select a continent and a rainfall range to limit your search to those two criteria. Don't be too restrictive by selecting a lot of criteria.
4. Click on the Start Search button
5. View the list of technologies / approaches resulting of the query and select the one you would like to have a closer look at
6. Click the View Summary button to display the 2-page summary of the selected technology / approach
7. Go back by clicking on the Close button on the top toolbar.

**... view data analysis results**

1. Select the Data Analysis button on the main menu
2. Select a subject of analysis
3. Select rank 1 (only those that were ranked as number 1 are considered), 2 (only those that were ranked as number 2 are considered) or 3 (only those that were ranked as number 3 are considered) or any combination, to be included in the analysis
4. Select a continent or a region (not both!)
5. Click on the OK button
6. The result shows a statistical overview of the number of responses according to given categories for the selected subject
7. Go back by clicking on the Close button on the top toolbar.

## ANNEX V: Standards for WOCAT Outputs

See also Sigriswil (p. 16-28) and Murten proceedings (Topic 4 p. 16-17)

Specific:

For QA

For QT

For QM

*(To be developed)*

## ANNEX VI: Criteria for Evaluation of Results

*(To be developed)*

## ANNEX VII: Guidelines for the Use of WOCAT Products

*(To be developed)*

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#### **TOPIC 4: Progress and development of global, regional and national programmes, and institutional reports**

The following table gives a brief overview of the activities carried out between 9/97 and 8/98 by region, country or at institutional level. It is based on written submissions as well as verbal presentations.

region/ country/ institution	Activities 9/1997 – 9/1998
Eastern Africa	<ul style="list-style-type: none"> <li>no further data collection: awaiting final versions of QA/QT/QM</li> <li>meeting between D. Thomas and H.P. Liniger (CDE) to prepare further action and project proposal to RELMA</li> <li>meeting with RELMA October 1998 who seem to be supportive of further WOCAT activities</li> <li>there is an outstanding need to reconcile incompatible differences between Kenya and Tanzania on map</li> <li>after revision/ update of existing completed questionnaire a proposal for production of outputs will be prepared</li> </ul>
South Africa	<ul style="list-style-type: none"> <li>project proposal to initiate SA-WOCAT has been submitted by ISCW to DARC, which has agreed in principle. D. Pretorius (DARC) will co-ordinate WOCAT activities, with H. Smith (ISCW) as the project leader</li> <li>SOTER project has been approved as well, SOTER map can be used as basis for QM</li> <li>a WOCAT exercise is planned for the first half of 1999</li> </ul>
Northern Africa	<p>Morocco</p> <ul style="list-style-type: none"> <li>presentation of WOCAT in the Ministry of Agriculture</li> <li>designation of WOCAT focal point</li> <li>project proposal submitted; if there will be an agreement between OSS and the MA, WOCAT would be part of the “Desertification information system” in the framework of the National Action Program to combat desertification</li> </ul>
Western Africa	<ul style="list-style-type: none"> <li>French translations of QA and QT have been prepared through OSS</li> <li>OSS: further plans dependent on requests and cooperation with sub-regional partners</li> <li>there is now a pilot database (quality +/-) for Mali, Niger, Burkina Faso and Senegal</li> <li>a draft map (based on GLASOD units) has been prepared for Niger</li> </ul> <p>INSAH/CILSS</p> <ul style="list-style-type: none"> <li>INSAH has the mandate to co-ordinate NRM research activities in the CILSS region; in the framework of the subregional Action Program for the CCD, this has been widened to the coastal West African countries</li> <li>a one-day presentation and discussion between OSS and INSAH staff regarding WOCAT and a possible subregional WOCAT program is scheduled for November</li> </ul> <p>NIGER/ICRISAT</p> <ul style="list-style-type: none"> <li>interest to initiate and co-ordinate a sub-regional WOCAT program, presentation and discussion of NIGER/ICRISAT</li> <li>Niger activities now being coordinated by ICRISAT</li> <li>a SWC consultation committee comprising ICRISAT, INRAN, GAP, DED and the University of Niamey has been created</li> <li>test of 1997 version of QA/QT started in 3 projects</li> <li>about 20 NGOs informed about WOCAT</li> <li>project proposal for a post-doc for WOCAT at ICRISAT has been submitted</li> </ul>
Latin America	<ul style="list-style-type: none"> <li>WOCAT initiative launched by 30 regional rural development projects started in 1997</li> <li>GTZ supported a test of QA/QT (97 interim version) in 2 projects</li> <li>then an evaluation workshop was held to review outputs in April '98 compared WOCAT results with the PASOLAC guide (<i>NB: PASOLAC = regional network incl. Nicaragua, Honduras, El Salvador</i>).</li> <li>On QT WOCAT was better, but QA was considered inadequate for requirements. Nevertheless it was decided not to use the WOCAT methodology but to develop an alternative Q, because costs and time investment for data collection and management were considered to be disproportionate compared to the projects needs.</li> </ul>

Thailand	<ul style="list-style-type: none"> <li>• database for QT and QA expanded to 28 Ts and 18 As</li> <li>• these will be updated where necessary</li> <li>• co-operated in finalising QT and QA questionnaires</li> <li>• co-operated in the external WOCAT review (visit by M. Stocking in April)</li> </ul>
China	<ul style="list-style-type: none"> <li>• A WOCAT training workshop was held for 26 participants in Fujian Province in Nov. 97 with ADB funds. This was followed by field testing of the questionnaires.</li> <li>• 3 Chinese delegates received further training in Bern (Feb/Mar 98)</li> <li>• Language/ translation remains a problem which must be solved before an expanded Chinese programme takes off</li> <li>• The current CD-ROM is little use to the Chinese (language problem again)</li> <li>• Funding will be a key issue if China is to be covered. Could WOCAT be combined/ incorporated with routine work to reduce costs?</li> </ul>
Philippines	<ul style="list-style-type: none"> <li>• WOCAT workshop (17-21 Aug 98) for 39 participants from Dept of Environment &amp; Natural Resources, Dept of Agric., Nat. Irrigation Admin., etc. with Malcolm Douglas and Trevor Dibb as co-ordinators</li> </ul>
ICARDA	<ul style="list-style-type: none"> <li>• financial constraints have delayed start-up of activities eg planned training w/shop for Syria/ Jordan/ Lebanon</li> <li>• WOCAT needed as there are 'conservation blanks' in knowledge</li> <li>• 'sensibilisation' (awareness) and confirmed interest of ICARDA management</li> <li>• have begun to translate Qs into Arabic</li> </ul>
ICIMOD	<ul style="list-style-type: none"> <li>• confirmed continued interest in WOCAT for HKH countries</li> <li>• further discussion in Sept/98 during mission of Will Critchley<sup>4</sup></li> </ul>
IBSRAM	<ul style="list-style-type: none"> <li>• prototype of DSS further developed by Dr. M. Rais</li> <li>• analysis of data from Vietnam, Indonesia and Thailand completed</li> <li>• Thai team successfully applied prototype in NE Thailand</li> <li>• time and money limited further applications</li> <li>• IBSRAM has developed plan for knowledge centre for sustainable land management: linkage to data bases such as WOCAT will be essential</li> </ul>
ISRIC	<ul style="list-style-type: none"> <li>• Thailand/ Nov '97: assisted with follow-up '96 workshop</li> <li>• China/ Nov '97: participated in Fujian workshop</li> <li>• WOCAT meetings Rome Dec/'97; Bern/ Feb '98</li> <li>• Co-edited Murten proceedings; revised QM; helped prepare CD-ROM materials; co-drafted WOCAT guidelines; reviewed WOCAT paper for AMA publication; assisted in update WOCAT website</li> </ul>
CDCS	<ul style="list-style-type: none"> <li>• revised QA/QT</li> <li>• used QA/QT in Kenya, Tanzania and Uganda under 'Promoting Farmer Innovation' programme</li> <li>• co-drafted WOCAT guidelines</li> </ul>
FAO	<ul style="list-style-type: none"> <li>• hosted MB meeting in Rome in Dec '97</li> <li>• meeting in Bern with G. Schwilch and G.van Lynden for programming questionnaires</li> <li>• completed pre-selection mechanisms for QT and QA databases</li> <li>• assembly of CD-ROM plus printing/ mailing</li> <li>• continued discussion on incentives in SWC (potential for use of QA/QT)</li> <li>• training in Katsina State, Nigeria using modified WOCAT QT</li> <li>• CCD discussions on using best practices to be downloaded from WOCAT database</li> <li>• discussions in FAO on using WOCAT as a vehicle in technical cooperation between developing countries</li> <li>• ASOCON and WOCAT: ongoing discussions</li> <li>• drafted funding strategy proposal</li> </ul>

<sup>4</sup> PS: outcome of Will Critchley's mission to ICIMOD after workshop was preparation of draft MOU stating ICIMOD's interest in acting as a regional node for WOCAT activities. Green light now for preparation of a funding proposal, to be done collaboratively.

## **TOPIC 5: Development of funding strategies**

### **FUNDING STRATEGY for WOCAT**

This paper (drafted by R. Gallacher and M. Zoebisch) is based on the assumption that the various recommendations from the Stocking/Pozzi External Review 1998 on development goals will be adopted, especially: "Development relevance of WOCAT needs to be explicitly defined and justified". The basis for a funding strategy can then be laid down.

This strategy would be:

- linked to the use of outputs for development purposes;
- joined to a full description of the current outputs;
- associated with ongoing financial support to draft regional or country database structures for initial evaluation and feedback by participating institutes and individuals.

As implied in the Review, it would be highly desirable that SDC, FAO, GTZ and other collaborators begin using WOCAT methodologies in their entire range of projects, to set an example to other donors and institutes.

The funding strategy will necessarily differ in content between the global, sub-continental (regional), national and district target areas. In most cases the various levels of strategy will aim to support a service which is not available from other usual sources. The implication is that this service is non-profit with little or no possibility to repay any loans in the short term. This service is of documentation and information sharing where the eventual target group are not in a position to pay for these services (technicians and subject matter specialists in developing countries). We emphasize that this is a network **of technicians for technicians**.

The two-way sharing of diverse outputs including data could eventually be done over the Internet, with various transitional measures before that becomes a full reality. Linkages to academic, research, development agencies and financing institutions are foreseen in order to facilitate the exchanges. These current WOCAT activities would normally be the subject in other organizations of consultancies and contracts, which in the WOCAT case would tend to distance the organizers, facilitators and participants as well as substantially adding to costs. So it appears that the chosen path, despite other disadvantages, has merit.

A streamlining of procedures is required for action plans so that funding "transparency" can be assured. All unnecessary information collection, processing and sharing must be minimized and all activities which are "nice but not essential" should be gradually eliminated.

#### **WHO benefits from a Funding Strategy?**

Stakeholders such as subject matter specialists, educators, politicians, budget and planning officers and decision makers dealing with land use and management issues, will be vitally concerned. The funding strategy should cater for concerned and involved institutes and dependant land management groups where "self help" is to become the credo, with various types of donors, cash and kind, national or international, as partners in the process. These self-help groups could be at municipal level with NGO technical support; bilateral programmes; technical cooperation between developing countries, etc.

Certain donors could be looking for serious programmes in development where their input is acknowledged.

#### **WHY formulate a funding strategy?**

To generate a feeling of involvement in the process by all parties; synergy of combined efforts; sustainability especially in maintenance aspects; budget savings once the methodologies are accepted and the funding strategies become workable; accountability issues can be addressed; recognition that empowerment and information sharing are logical ways forward in the development process.

This formulation process will force the organizers to plan that WOCAT becomes more demand-led and responsive to user needs. A funding strategy will assist in identifying and dealing with risks such as: insufficient income; product obsolescence; legislation and copyright effects; information supplier apathy; loss of management team; other active competitors; software development problems (to mention a few!).

A strategy should help in identifying specific needs for funds: core administration (salaries and “people business” as major cost); data input and maintenance; training for data collection, database management; information distribution; networking; incentives; miscellaneous.

### **WHERE to apply the funding strategy?**

Success stories are documented wherever they are discovered and processed locally for eventual internal and external reference. Provincial, national or sub-continental databases are organized as the needs dictate and material is screened for global sharing. That will mean the funds will be required at various levels and for several types of outputs and activities and the strategies can be targeted accordingly.

### **WHAT Strategy?**

A strategy can be considered as a systematic list of actions which are time-based with certain rules attached in order to narrow the various options. A funding strategy in this case would deal with the varied needs such as data collection, database management, reports of various kinds, publications such as a series based on the Reij/Scoones/Toulmin book “Sustaining the Soil: Indigenous SWC in Africa”; more glossy brochures; companion text to the CD-ROM with images.

Sponsors would be identified for each type of output or activity over short, medium or long term.

The funding strategy has to take account of the various existing donors covering district, national, sub-continental and global activities. A prerequisite is that certain institutions and donors accept the need for medium to long term funding support and commitment to the strategy, in view of the long lead time needed to adapt procedures.

### **HOW to apply the funding strategy?**

It is feasible that future development bank loans could include use of WOCAT methodology for collection and processing of information on existing success cases. We will have to convince those financing organizations of the usefulness of WOCAT (Global Environment Facility, World Bank, IFAD international organizations concerned with sustainable use of natural resources, etc.) in order to obtain grant funds from these sources.

This will be supplemented with self-help schemes, synergy arrangements, cross-funding and special events support. We should look for opportunities to link WOCAT initiatives onto comprehensive activities and successes such as Landcare, Farmer Field Schools etc.

We note that there are many potential donors who are just waiting to be convinced that a cause is worthwhile and deserves support. This phenomenon is mainly confined to North America but it could spread. Subscription possibilities and encouragement for support of certain activities should already be planned with the help of WASWC and other appropriate bodies.

National and local administrations are often already engaged in activities parallel to WOCAT data gathering. We have to identify these efforts and suggest adoption of the standardized data collection format. The same applies to a lesser extent among international organizations.

We have to identify opportunities for cost-sharing where mutual goals can be attained with international and locally-based organizations. Find out who is the “competition” and can we join them?

A discussion group on the lines of the Mountain Forum would be a useful way to introduce the various options and issues on a continuing basis, to help link activities and outputs to new funding sources.

### **How EVALUATED?**

Global accountability can be reinforced from a compilation of local, national and sub-continental data on trends and targets. The WOCAT Map database and linkages with Technologies database will be an important tool to bring awareness of the threats and opportunities, thanks to the possibilities to produce various analyses and products.

Mechanisms will need to be put in place so that information is quickly available to respond to questions related to problems of technology, sociology, economics or (the lack of) appropriate policy.

### **Remark:**

Soil and water conservation projects as such are generally not attractive to donors, so PR is needed to show links, opportunities to tie in with existing donor projects and to show that WOCAT uses SWC in the sense of sustainable soil and water management.

### **Next Steps**

The Funding Strategy Task Force members agreed to exchange views and propositions by e-mail over the next few months to arrive at a consensus and to orient future discussion on proposals and plans as well as implementation steps timing and costs.

Ongoing strategic planning is necessary so WOCAT can establish: corporate objectives; growth criteria; procedure for search for growth opportunities and monitoring; strategic development including dynamics of change; acquisitions and disposals; development of existing operations.

After the Strategic Planning exercise has taken place, in order to confine the funding strategy, certain definitions and "rules" have to be laid down.

For instance, in stating objectives, the justification that WOCAT is non-profit, a service to developing and developed countries unavailable elsewhere, humanitarian and concerned with poverty alleviation, are noted; WOCAT has strong links to research and extension; has a corporate governance with accountability to stakeholders, a time scale for outputs.

Then we define and re-prioritize the various outputs and activities, indicating their geographical or institutional locations and where co-funding has already been agreed or that possibility should be investigated and when WOCAT will be acting independently. If charges are to be levied for access to certain data, indicate who pays and at what rates, and who is excluded from fees.

### *Discussion*

The funding issues were laid out through a plenary brainstorming to which it was agreed that strategies will follow certain Principles and Approaches as well as using certain Tools which would permit to carry out specific Tasks. A preliminary listing follows:

#### Principles

- Decentralised activities and funding (as subsidiarity, compared to "franchising")
- Programme approach to pursue in-country
- long-term perspective of activity, linked to the previous point;
- Relevance and output-orientation of projects
- Cost effectiveness
- Donor requirements and their standards for implementing
- Donor strategy to explore so WOCAT can conform or both compromise
- Accountability to donors & users
- Sharing information on funding
- Transparency
- MB: Clearing functions (setting Standards)
- MB support Service (preparing Budgets)
- Participation in annual SM (include in Budget)

## Approach

- Demand-driven user survey on topics such as extent of degradation, success or otherwise of treatments
- Strategic partnerships
- Lobbying to ensure better donor awareness
- Make use of relevant ongoing activities and initiatives such as desertification convention, soil fertility initiative, integrated plant nutrient systems, integrated soil management, ASOCON, Land Care
- Prioritize activities
- Aim at self-sufficiency
- Project cycle one-page ideas
- Prototypes
- Guidelines
- Memoranda of Understanding, for various institutes

## Tools

- Info-Databases (on Donors, proposals)
- Standard TOR's, MoU's prototypes
- Promo materials: fragments of releases, photos for self-assembly

## Tasks

- Develop Guidelines (W. Critchley, G. v.Lynden) final draft 31.12.98
- Develop MoU, TOR, (R. Gallacher, M. Zöbisch, H. Hurni) Draft: 31.12.98; see ASOCON Joint Memorandum of Understanding, ICIMOD MoU
- Prototypes
- National prototype project proposal (C. Biolders, H. Hurni) Draft: 31.12.98

## TOPIC 6: Planning of next phase (1998-2001)

With regard to the future of WOCAT, the exercise of the Murten workshop was repeated to gauge the vision of the participants for the medium (3 years) and long (10 years) term, as reflected in the table below. Furthermore, detailed workplans for the global, the regional and the national level were drafted by the various collaborating institutions. These are attached in a separate appendix.

### VISION for WOCAT: medium and long term

The following table is the result of a brainstorming session, using a similar table from the Murten workshop as a basis. The result has not been discussed or finalised, it is presented as food for thought (or “guiding principles”) for the MB of WOCAT to further develop:

Global	Regional
WOCAT in 3 years	WOCAT in 3 years
<ul style="list-style-type: none"> <li>• DB handling and management system refined to be more user friendly</li> <li>• Database and analytical tools available on the Internet</li> <li>• Regional nodes identified and incorporated into WOCAT</li> <li>• Pools of facilitators established at all regional nodes (i.e. through training, etc.)</li> <li>• Agreement on “marketing” (funding) strategy (for global &amp; regional level)</li> <li>• PR and marketing tools produced and made available to regional nodes</li> <li>• “Guidelines” for procedures finalized and implemented</li> <li>• (Prototype) handbooks available for at least two regions.</li> </ul>	<p><i>Outputs</i></p> <ul style="list-style-type: none"> <li>• Handbooks (for some regions) completed</li> <li>• Evaluation of all methods done</li> <li>• WOCAT used in some planning projects</li> <li>• Interactive maps</li> </ul> <p><i>Use</i></p> <ul style="list-style-type: none"> <li>• NARES begin to use WOCAT</li> <li>• First case studies successful</li> </ul> <p><i>Organisation and coverage</i></p> <ul style="list-style-type: none"> <li>• More strength in regional nodes, minimum core /NARES as responsible partners</li> <li>• Add Sahel, W. Africa; S. Africa, India, S. America</li> </ul> <p><i>Sources of information</i></p> <ul style="list-style-type: none"> <li>• Add indigenous knowledge of farmers, NGOs</li> </ul>
WOCAT in 10 years	WOCAT in 10 years
<ul style="list-style-type: none"> <li>• Africa and Asia coverage completed and outputs published (including handbooks); rest in progress</li> <li>• Hyperlink Databases developed</li> <li>• Automatic extraction of data from other DBs</li> <li>• Global phase two update</li> <li>• Impact of WOCAT T/A analyses/DSS visible</li> <li>• Large number bilateral / multilateral development programmes using WOCAT outputs integrated in practical SWC and management by NARES, NGOs, planners</li> <li>• Expert system developed</li> <li>• Global awareness</li> <li>• Decentralised coordination</li> <li>• WOCAT linked to national research priorities and development needs in new countries.</li> </ul>	<ul style="list-style-type: none"> <li>• Technically self-supporting regional WOCAT countries operational in all major regions</li> <li>• All historical data integrated</li> <li>• Approach and Technology handbooks available for many regions</li> <li>• Standard practice to use WOCAT methods as guidelines for planning SWC activities</li> <li>• Integrated information available both for policy management and for field work</li> <li>• WOCAT results widely used in project design</li> <li>• In more than 5 countries staff fully trained to use WOCAT</li> <li>• WOCAT as routine activity in NARES</li> <li>• WOCAT on-line through internet to all agencies and automatically in workplan of all involved in natural resource management</li> </ul>

**WOCAT global 3<sup>rd</sup> phase**

For the proposed third phase of WOCAT core funding by SDC, starting in September 1998, the following activities were listed with an indication of who would be chiefly responsible and a rough estimation of funding allocation.

<b>What?</b>		<b>Who?</b>	<b>Funds</b>
1. Global coordination:	<ul style="list-style-type: none"> <li>- MB</li> <li>- Annual WS and SM</li> <li>- Between reg./nat. initiatives</li> <li>- Funding: strategy development &amp; coordination</li> <li>- Enhance reg./nat. initiatives</li> </ul>	MB MB MB reg./nat. TF	20 %
2. Technical assistance: (to reg./nat. initiatives)	<ul style="list-style-type: none"> <li>- Questionnaire, data collection</li> <li>- Data quality and exchange</li> <li>- DB support</li> <li>- Production of outputs</li> </ul>		20%
3. Capacity building:	<ul style="list-style-type: none"> <li>- Training</li> <li>- Materials (hard-, software)</li> </ul>		20%
4. Database development:	<ul style="list-style-type: none"> <li>- Building-up of global db</li> <li>- Further development of dbms</li> <li>- "case studies": collection, complementation, analysis (support to existing datasets/- collection transfer of non-WOCAT datasets into WOCAT</li> </ul>	FAO, CDE	20%
5. Outputs:	<ul style="list-style-type: none"> <li>- Manual, procedures, guidelines for reg./nat. global WOCAT</li> <li>- Prototypes (case studies)</li> <li>- Reports/books (global): Analysis/synthesis – Handbooks</li> <li>- Demonstrate application of prototype (usefulness)</li> <li>- Guidelines for evaluation</li> </ul>	TF TF TF TF TF	20%

<b>WOCAT 3<sup>rd</sup> Steering Meeting, Twann, 28-29 August 1998</b>
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### Agenda

1.	Approval of agenda and election of chairperson	M. Stocking	10.00 - 10.10
2.	Annual report of activities (Management Board) (9.1997 – 8.1998)	S. Sombatpanit	10.10 – 10.25
3.	Financial overview of expenditures 9.1997 – 8.1998	HP. Liniger	10.25 – 10.35
4.	Responses of the external review	R. Gallacher	10.35 – 10.50
5.	Presentation of CD-ROM	W. Prante / G. Schwilch	10.50 – 11.30
6.	Annual Work Plan: Proposals, discussion and approval (global, regional, national, individual): global coordination, database, outputs (WS Topics 2, 3, 4, 6)	HP. Liniger D. Thomas (2) G.v.Lynden, W.Critchley (3) A.Trux, S. Sombatpanit (4)	11.30 – 12.30 14.00 - 15.00
7.	Revising WOCAT's long-term strategy and vision (1997 Murten Meeting minutes Annex 13)	W. Critchley	15.00 – 16.00
	<i>COFFEE BREAK</i>		16.00- 16.30
8.	Funding need and strategies: Budget 9.1998 – 8.1999 (Topic 5)	H. Hurni	16.30 – 17.30
9.	Review of organisational set-up: Management Board (MB), Regional Nodes, National Centres, Active Membership	Chair	17.30 – 18.00
10.	Elections(MB), responsibilities (Active Membership)	Chair	18.00 – 18.15
11.	Next WS and Steering Meeting (when/where)	HP. Liniger	18.15 – 18.30
12.	Any other business	Chair	

The items discussed during the Steering Meeting correspond to the six topics in the earlier sections of these proceedings and reference is therefore made to these sections. Agenda points 3, 9, 10 and 11 however were not addressed before and will be treated here

### Ad 3: Financial overview of expenditures 9/1997 – 8/1998

All participants were asked to provide a statement on their (estimated) expenditures for WOCAT in the last year. The resulting table not only shows an increase over the last year in total expenditures, but also a growing shift from cash contributions (roughly three-quarters average between 1992 and 1997) to in-kind contributions, which now constitute about half of all contributions during the past year.

	Financial contributions in US\$ to WOCAT (till 8/98)						92 - 8/98
	1992 – 8/97			8/97 – 8/98			
	Cash	Kind	Total	Cash	Kind	Total	
SDC	100%	-	\$603.000	100%	-	\$150.000	\$753.000
FAO	62%	38%	\$450.000	19%	81%	\$185.000	\$635.000
IDRC	100%	-	\$85.000	-	-		\$85.000
RSCU	43%	57%	\$70.000	100%	-	\$5.000	\$75.000
UNEP	89%	11%	\$90.000	-	-		\$90.000
GTZ/OSS	80%	20%	\$166.000	54%	46%	\$39.000	\$205.000
CDCS	-	100%	\$30.000	-	100%	\$5.000	\$35.000
ISRIC	-	100%	\$85.000	-	100%	\$35.000	\$120.000
CDE	-	100%	\$20.000	-	100%	\$20.000	\$40.000
Thailand	91%	9%	\$35.000	29%	71%	\$3.500	\$38.500
GTZ/ LA	-	100%	\$25.000	56%	44%	\$34.000	\$59.000
ADB/China	-	100%	\$5.000	88%	13%	\$24.000	\$29.000
ASOCON	-	100%	\$15.000	56%	44%	\$32.000	\$47.000
ISCW (ARC)	-	-	-	-	100%	\$6.000	\$6.000
ICRISAT	-	-	-	50%	50%	\$5.000	\$5.000
Philippines	-	-	-	67%	33%	\$30.000	\$30.000
Total US\$	74%	26%	\$1.679.000	51%	49%	\$573.500	\$2.252.500

### Ad 9 / 10 Review of organisational set-up: Management Board (MB), Regional Nodes, National Centres, Active Membership, responsibilities

The current structure was approved and the MB re-elected. The role of the task forces was discussed and proposals were elaborated (see topic 6, and Annex III: task forces)

### Ad 11 Next WS and Steering Meeting (when/where)

It was agreed that the next Annual Workshop and Steering Meeting will take place in Thailand from 6—11 September 1999. Main objectives of that workshop would be:

- Activity report /Program for next year
- Approval of draft outputs, decision where to apply
- Monitoring system
- Funding / Acquisition
- Progress: Regional and national initiatives; decentralization
- Progress Task Forces

<b>APPENDIX I:</b>
<b>Schedule for International WOCAT Workshop and Steering Meeting 25.8. - 1.9.98, Twann, Switzerland</b>

	WOCAT WORKSHOP	Responsibilities
<b>Tuesday, 25/08/98</b>		
9:00 – 10:00	Introduction, review of WOCAT highlights, expectations of workshop, approval of agenda, administrative information	H.P. Liniger
10:00 - 10.30	<i>Coffee break</i>	
	<b>TOPIC 1: Review of external evaluation.</b> <i>Will be discussed on Thursday</i>	
	<b>TOPIC 2: Further development of methodology and outputs</b>	Chair: J. Mburu Rapporteur: W. Prante / G. Schwilch
10:30 – 11:00	Presentation of final version of questionnaires	G. v. Lynden / HP. Liniger
11:00 – 11:30	CD-ROM and Database Management System	W. Prante / G. Schwilch
11:30 – 12:00	Report of expert system task force	R. Knapp / D.B. Thomas
12:00 – 12:30	Discussion	
12:30 - 14:00	<i>Lunch break</i>	
14:00 – 14:30	Brainstorming on future outputs	
14:30 – 15:30	Group work on topic 2 (outputs)	
	<b>TOPIC 3: Development of guidelines</b>	Chair: D. Cahill Rapporteur: W. Critchley / G. v. Lynden
15:30 – 16:00	Presentation of proposal	W. Critchley /
16:00 – 16:30	Discussion	G. v. Lynden
16:30 - 17:00	<i>Coffee break</i>	
	<b>TOPIC 4: Progress and development of global, regional and national programs</b>	Chair: NN Rapporteur: A. Trux / S. Sombatpanit
17:00 – 18:00	Africa: East (RELMA), South (ISCW), West & North (OSS, ICRISAT)	J. Mburu / D. Pretorius / A. Trux, Ch. Biolders, I. Ousseini
18:30	<i>Apéro</i>	
19:00	<i>Dinner</i>	
Evening	Social evening	
<b>Wednesday, 26/08/98</b>	<b>TOPIC 4: Progress and development of global, regional and national programs</b>	Chair: Rapporteur: W. Critchley / G. v. Lynden
08:30 – 09:15	Asia: Thailand (DLD), China (FSWCC), Philippines	S. Sombatpanit, A. Trux (?)
09:15 – 09:45	South- and Central America (GTZ, CIAT)	
09:45 – 10:30	New initiatives: ICARDA, ICIMOD, IBSRAM, PASOLAC	M. Zoebisch, F. Penning d. V.
10:30 - 11:00	<i>Coffee break</i>	
11:00 – 12:30	Group work on 1) CD-ROM 2) Outputs 3) Guidelines	A. Trux/S. Sombatpanit
12:00 - 14:00	<i>Lunch break</i>	
14:00 – 14:30	Continuation of group work	R. Gallacher/M. Zöbisch
14:30 – 15:30	Report and discussion group work 1-3	
16:00 - 16:30	<i>Coffee break</i>	

	<b>TOPIC 5: Development of funding strategies</b>	Chair: H. Hurni Rapporteur: R. Gallacher M. Zöbisch
15:30 - 16:00 16.00 - 16.30 16.30 - 18.30  19:00 - 20.00 20.00 evening	Introduction and proposal <i>Coffee break</i> Group work on topics 4, 5 and 6 (geographical regions) and group: CD-ROM / DB <i>Visit to wine cellar</i> <i>Dinner</i> Slide presentations by participants	R. Gallacher M. Zöbisch
<b>Thursday, 27/08/98</b>	<b>TOPIC 1: Review of external evaluation</b>	Chair: S. Sombatpanit Rapporteur: HP. Liniger
08:30 - 09:00 09:00 - 10:30 10:00 - 10:30	Presentation of review Comments by collaborating institutions and implications <i>Coffee break</i>	M. Stocking
	<b>GROUP WORK AND RESULTS</b>	Chair: J. Dumanski Rapporteur: groups
10:30 - 12:30 12:30 - 14:00 14:00 - 15:00  15:00 - 16:30 16:30 - 17:00 17:00 - 18:30 18:45 evening	Group work on topics 4, 5 and 6 (geographical regions) <b>Lunch break</b> Presentation and discussion of group work on topics 4, 5 and 6 (outputs) Planning of next phase 3 years, 1 year <i>Coffee break</i> Preparation of steering meeting <i>Dinner</i> Walk to the gorge, arrival of additional SM participants	HP. Liniger
<b>Friday, 28/08/98</b>	<b>WOCAT STEERING MEETING (SM)</b>	Chair: M. Stocking Rapporteurs: Responsibles for Topic 1- 6
09:30 - 10:00 10:00 - 11:00 11:00 - 11:30 11:30 - 12:30 12:30 - 14:00 14:00 - 15:30 15:30 - 16:30 16:30 - 16:40 16:40 - 17:15 18:00 19:40 evening	<i>Welcome coffee, administrative issues</i> Introduction, approval of agenda of SM Annual report by Management Board: Activities and finances Presentation of topics 1, 2 and 3 <i>Lunch</i> Discussion and decisions on topics 1, 2 and 3 Presentation of topics 4, 5 and 6 <i>Short coffee break</i> Discussion on topics 4, 5 and 6 <i>Dinner</i> <i>Roundtrip on the lake of Biel</i> Social evening	
<b>Saturday, 29/08/98</b>		
08:30 - 10:00 10:00 - 10:30 10:30 - 11:00 11:00 - 12:00 12:00 - 12:30 12:30 - 14:00 14:00 - 18:00 18:30 evening	Continuation of discussion and decisions on topics 4, 5 and 6 <i>Coffee break</i> Annual work plan Management issues Any other business and closing of steering meeting <i>Lunch</i> Visit of the city of Biel/Bienne or Neuchâtel <i>Dinner</i> Social evening	
<b>Sunday, 30/08/98</b>	Sightseeing, individual/group trips	

<b>Monday, 31/08/98</b> 8:30 - 12:30  <i>12:30 - 14:00</i> 14:00 - 18:30 18:30 – 22:00	<b>GROUP WORK: methodologies/outputs and guidelines</b>  Group work and taskforces: 1) outputs 2) methodology (data collection, database) 3) updating of collected data 4) guidelines  <i>Lunch</i> Continuation of group work and taskforces <i>Dinner on an Alp in the Jura</i>	Chair: D. Pretorius Rapporteur: groups
<b>Tuesday, 1/09/98</b>		
08:30 - 10:30 10:30 - 11:00 11:00 - 12:30 12:30 - 14:00	Presentation of group work <i>Coffee break</i> Finalizing of group work and proceedings and closing of workshop <i>Lunch</i>	

## APPENDIX II: WORKPLAN for: Production of Draft Outputs for Eastern Africa

- (1) Overview of SWC Technologies for EA
- (2) Overview of SWC Approaches for EA
- (3) Maps of dominant SWC in EA
- (4)

Expected outputs	Activities	Inputs				Funding US\$ <sup>5</sup>		Responsible person		Timetable
		Person x months (institution)			Materials/ equipment	Available	Required		Commitment by <sup>6</sup>	
Proposal for funding	- Prepare funding proposal							J.Mburu/ HP. Liniger		09/98
Data preparation	- Revision and update - Training on map production	Workshop / (individual meetings)					20'000 10,000	D. Thomas/H.P. Liniger G.v. Lynden/		11/98-02/99
First Draft	- Analysis of data and preparation of first draft - Assessment of first draft	Workshop					40,000 20,000	D. Thomas / H.P. Liniger /G.v.Lynden/ W. Critchley		04/99
Final draft	- Preparation of final draft - Editing and proof reading - Layout and preparation - Map drafts						35,000 5,000 5,000	D. Thomas/ G.v. Lynden/ W. Critchley / H.P. Liniger		08/99
Contingencies Total							15,000 150,000			

<sup>5</sup> Possibilities: RELMA, FAO for one resource person (D. Thomas) and a core contribution from global WOCAT and ???

<sup>6</sup> There is need to establish the commitment and the role of RELMA: D.B. Thomas, J. Mburu and H.P. Liniger (who will stay in Kenya from September 1997 to February 1998) will establish how to proceed

**APPENDIX II: WORKPLAN for: ASIA WOCA(c)Tivities**

Expected outputs	Activities	Inputs				Funding US\$ *1000		Responsible person		Timetable
		Person x months (institution)		Materials/ Equipment	Available	Required		Commitment by		
1. Identified donors 2. Identified regional node options	Meeting of WOCAT Asia participants China, Thailand, Philippines with WOCAT committee reps.				Fares + DSA	20	8	Gallacher Reps Liniger +		Jan 99
Selected regional nodes	1. Meet with Chinese authorities Re formal China node	1	0.5	Bern	Fares + DSA		8	Hurni		By July 1999
	2. Canvas selected Asian regional institutes	1	0.5	FAO		4		Gallacher or Dent		
		1	0.5	ASOCON Member		2		Samran		
1. Endorsement of activities New WOCAT participators 2. AOB	ASOCON Meeting	FAO 7 Member countries  4 observer countries Bern		ASOCON Member countries	Fares + DSA	34		Gallacher  Sutadi (Indonesia)  Bern		By Dec 1999

\* to be proposed in FAO Budget

**APPENDIX II: WORKPLAN for : IBSRAM**

Expected outputs	Activities	Inputs				Funding		Responsible person		Timetable
		Person	x months (institution)		Materials/ equipment	Available	Required		Commitment by	
1. Feedback from S.E. Asian endusers on value of WOCAT data base	1.1 Inform team leaders of +/- 15 Asian and Pacific countries		0.05	IBSRAM	50 Brochures printed methodology CD	yes	0	F.Penning de Vries	Now	Start < 15/9/98
	1.2 Review by network co-ordinators of computer version with DLD	5	0.1	IBSRAM DLD			0	F.Penning de Vries	Now	1/99
	1.3 Review by team (leaders) of computer version with DLD	15	0.05	NARES			0	F.Penning de Vries	Now	< 1/99
	1.4 Formulate feedback and participate annual meeting	1	0.1	IBSRAM DLD			2 k	F.Penning de Vries	Now	1/99
2. Feedback from several regional nodes on value of WOCAT-Data base	2.1 Invite other target groups in Thailand	1	0.25	DLD				Samran		< 1/1/99
	2.2 Invite other regional nodes to encourage them to perform similar case studies	1	0.10	DLD + IBSRAM				Samran, F.Penning de Vries		< 1/1/99
	2.3 Hold workshop for case studies (3 days)	2 + 10 participants + resource person	0.25	DLD + IBSRAM			35 k	F.Penning de Vries Samran		<15/6/99
	2.4 Formulate feedback (user needs survey)	10	0.1	DLD + IBSRAM				F.Penning de Vries Samran		< 1/7/99



**APPENDIX II: WORKPLAN for : ICARDA-Region 9/98 – 8/99**

(Pending approval by ICARDA management)

Expected outputs	Activities	Inputs			Funding		Responsible person		Timetable
		Person x months (institution)		Materials/ equipment	Available	Required		Commitment by	
• Arab. Version of WOCAT Q ready	• Translate & revise Arabic version QA/QT/QM		4	ICARDA		Yes		M.Zoebisch	4/99
• Facilitator pool established	• Organize training workshop for facilitators		1	ICARDA	Transport, training facilities	Yes, for local costs	For resource person	M.Zoebisch	4/99
• Pilot data base established	• Data collection • Build-up data base A/T • Draft map • Revise data base + map		3	ICARDA	Transport and computer facilities	yes	Consulting & Feedback by resource persons and WOCAT core group	M.Zoebisch	9/99
			1	ICARDA					
			1	ICARDA					
			1	ICARDA					

**APPENDIX II: WORKPLAN for : NIGER - August 99**

Expected outputs	Activities	Inputs			Funding		Responsible person		Timetable	
		Person x months (institution)		Materials/ equipment	Available	Required		Commitment by		
Updated data on Niger (QT/QA)	Assemble and update existing data	1	0,15	Univ. N		yes	I. Ousseini	C.Bielders	11/98	
		1	0,10	ICRISAT						
Review of existing data on QM	Assemble existing data	1	0,15	Univ. Niamey		yes	I. Ousseini	I. Ousseini	11/98	
National WOCAT committee	Workshop	1	Univ.	0,5		yes	I. Ousseini	C.Bielders	12/98	
		1	ICRISAT	0,5						
		2	INRAN/DED	0,10						
WOCAT data for Niger QT/QA/QM	Workshop	1	0,5	Univ.			20,000	I. Ousseini	C.Bielders	4/99
		1	0,5	ICRISAT						
		2	0,5	INRAN, ..						
Partial compilation of database	Data entry	1	2	ICRISAT			Post-doc	C.Bielders	8/99	

## APPENDIX II: WORKPLAN for: INSAH Institut du Sahel

(Draft work plan further planning depends on INSAH Management division and WS outcome)

Expected outputs	Activities	Inputs			Funding CFAx1.000.000		Responsible person		Timetable	
		Person	x months (institution)	Materials/ equipment	Available	Required		Commitment by		
Formal Institutional link between INSAH and WOCAT	Presentation of WOCAT to INSAH Management Board (CTG)	0,03	INSAH	Conference materials	2		G. Traore	7/98	14/10/98	
	One day detailed presentation of WOCAT to INSAH staff	0,1	INSAH	+ mission			A. Trux G. Traore		11/98	
	Niger national workshop extended to INSAH and relevant W-Africa countries	0,25	OSS				8,5	G. Traore		4/99
	Participation to 99 WOCAT workshop and steering com. Meeting	0,5	INSAH OSS	Travelling costs INSAH + OSS + country representative			2	G. Traore A. Trux		9/99

**APPENDIX II: WORKPLAN for : Southern Africa**

Expected outputs	Activities	Inputs			Funding		Responsible person		Timetable	
		Person x months (institution)		Materials/ Equipment	Available	Required		Commitment by		
WOCAT DB with +/- 15 Qs Paper rep. (map)	Initiate Wocat in SA Identify role players Other initiatives Initial WS - Invite SADC - Training - Identify +/- 15 QA & QT - follow up - quality control - integrate Q's into DB	Student + WM (WOCAT) 5	6 3 1 0,5	ISCW CDE Dept. of Agric.	Bags + stationary from CDE	\$ 50,000		ISCW (ARC) Dept. of Agric.  HP. Liniger	H. J. C. Smith D.J. Pretorius  	98/99  WS March 99
- Update DB - (map)	Continue WOCAT co- ordination - Continuity - Link Qs to conservation projects		2 1	ISCW Dept. of Agric.		Yes		ISCW Dept. of Agric.	H. J. C. Smith D.J. Pretorius	98 -> 2000
- Distribute CD - Paper Reports (map)	Link with SADC - Products from Magoebaskloof WS	Student	1 1	Dept. of Agric. CDE		yes		Dept. of Agric.	D.J. Pretorius	98 -> 2000
- Updated DB - More paper Reports (M)	Regional WS	?	?	?	?	?		SADC	?	2000



**APPENDIX II: WORKPLAN for : Thailand**

Expected outputs	Activities	Inputs				Funding		Responsible person		Timetable
		Person x months (institution)		Materials/ equipment	Available	Required		Commitment by		
Technology Approaches	A workshop to improve data for QT, QA and enter into database in CD-ROM	4 and former participants	1	DLD	-	6,000	4,000	Samran Vasuthep Sakda		12/98 WS 1-6/99 Entry + analysis
Map	Finding data for remaining polygons and update - old data	4	0,25	DLD & ISRIC	-	2,000	2,000 ISRIC	Samran Wanarat Pityakon G. v. Lynden		9-11/98 Data gathering 1/99 constructing map
Rough idea of possibility to operate WOCAT in other SE Asian countries		1	0,5	DLD	-	1000	1,000	Samran		No date identified



## APPENDIX II: Requested assistance from the Management Board

The workplans presented above to a larger or lesser extent require inputs from the Management Board and WOCAT core group in terms of technical and organisational assistance. This planned support is presented in the table below.

	Oct 98	Nov 98	Dec 98	Jan 99	Feb 99	Mar 99	April 99	May 99	June 99	July 99	Aug 99
Central America						Training Ws Nicaragua					
China								Chinese version CD ROM programming			Chinese version CD-ROM production
Thailand	Exploring to operate WOCAT Laos Oct-Sept Advice: E-mail		WS Data- updating → advice E-mail	Map construction → advice E-mail					Entry-Analysis QT, QA ready → advice from Core group Preparation of Annual WS+SM		
E-Africa	Negotiations with RELMA Sept/Oct 98 RP	Preparation of funding proposal Sept 98 → assistance		Revision update data RP			Analysis and data preparation outputs → RP (WC)				Prepare final draft of outputs → advice
S-Africa					Training WS 4-5 RP						
W-Africa							WOCAT WS Niger 1-2 RP				
ICARDA							Resource Person for Training WS 3-4 RP (from 4/99 onwards)			Backup by WOCAT Center Team with data analysis & map production → assistance	

- RP= Resource person

## APPENDIX III: TASKFORCES

### Preparation of Awareness **VIDEO** for WOCAT

1. This will be a 20-25 minutes "general introductory video" which will be low cost.
2. The target audience will be donors and regional and national decision makers.
3. The production will use as much as possible already shot material. Additional footage may be also required. All material should be in digital, Hi8, S-VHS or Betacam format for quality production.
4. The production overview:
  - Prepare framework (script) based probably on the sequence in the hypertext/brochure
  - Editing to be done in a central place
5. First edit to be ready by September 1999
6. HP. Liniger to act as coordinator. Other members of team to include: J. Mburu, R. Gallacher, M. Zöbisch and D. Pretorius
7. The funding required to be worked out after idea finalized and final modalities of production agreed on.

### WOCATALOGUE

- *A purrrrfect* monitoring system

#### Objective

- provide data to funders on demand + uptake of WOCAT
- provide a management tool to show progress and identify priorities

#### Primary criterion

Must be easy to assemble data, preferably using present information sources

#### Elements of monitoring system already

- Milestone events list
- SM + Workshop reports
- financial contributions table \*
- address list

\*changes and/or analysis needed

#### Recommendation

2 broad areas of monitoring

- MONITOR ACTIVITY
- MONITOR DEMAND

#### 1) Monitoring activity

A few key indicators on an annual basis for Annual Steering Meeting.

- cumulative number in DB
- Techniques
- Approaches
- Area of mapping

Number of workshops, participants, countries

Standard Presentation:

Timing: A.S.A.P. Historical data assembled by next meeting (January 1999)

## 2) Monitoring Demand

Again, key indicators

### A. Spontaneous adoption (own initiated data collection)

- list demand activities.

### B. Financial data

- revise present table

- capture co-funding properly

by estimation: e.g. 160 technologies x 2 days x US\$ 100 = participant time value

### C. Survey of potential user institutions at national / regional level. Aim: 200

- sent brochure

- letter + tear-off reply slip to simple questions:

1. Q1. Is WOCAT relevant to your mandated activities? YES/NO. (if yes, go to 2)
2. Q2. What current and future planned activities could WOCAT assist? (list)
3. Q3. What resources would be needed to implement WOCAT activities? (provide indicative list).

## Taskforces 98/99

TF on:	Respons. person	other persons	Major activities till 8/99	When?	Funding?
DBMS/CD ROM Software Dev.	W. Prante	G. Schwilch C. Biolders G.v.Lynden	see detailed workplan		provided by FAO, CDE, ISRIC, ICRISAT (in kind)
Image Database	G. Schwilch	everybody	collect slides and digital images	always on-going	provided by CDE (in kind)
Guidelines	G.v.Lynden W. Critchley	D. Cahill H. Hurni J. Jensen	Refine guidelines, complete annexes, test in reg. workshop	Dec. 98 (1 <sup>st</sup> draft) spring 99	especially guidelines on evaluation need considerable input in time (funding)
DSS	C. Biolders	M. Stocking W. Prante G. Schwilch D. Thomas	Need of DSS to be described Dev. of DSS initiated	Feb 99 Aug. 99	In kind conditional upon funding of Postdoc
Funding Strategy	R. Gallacher	M. Zöbisch C. Biolders H. Hurni J. Jensen	<ul style="list-style-type: none"> <li>collect donor profiles</li> <li>advanced text Nov. 98</li> <li>MoU WOCAT/donor draft</li> <li>draft funding proformas for MB/SDC discussion</li> </ul>	Oct. 98 Nov. 98 “ “	In kind plus co-funding with other parallel activities; Hurni travel (CDE funds) contacting donors
Monitoring	M. Stocking	HP. Liniger G. v. Lynden	<ul style="list-style-type: none"> <li>finalise monitoring system</li> <li>collect historical activities</li> <li>present activities</li> <li>collect demand info</li> <li>monitoring report</li> <li>all above have time/staff implications</li> </ul>	Jan 99  Aug. 99	In kind by TF members
Overview – outputs for E. Africa	DB. Thomas	HP. Liniger G.v. Lynden J. Mburu W. Critchley (+ RELMA)	<ul style="list-style-type: none"> <li>develop funding proposal</li> <li>review update data</li> <li>revise maps</li> <li>draft synthesis</li> <li>workshop to asset draft</li> <li>finalisation draft</li> </ul>	Oct. 98 Nov. 98 Nov 98 Jan-March98 Apr/May 99 July/Aug 99	preliminary estimate \$ 160,000
Video	HP. Liniger	J. Mburu M. Zöbisch D.Pretorius. R. Gallacher	<ul style="list-style-type: none"> <li>prepare script</li> <li>agree production modality</li> <li>selection of existing footage / shooting new footage</li> <li>editing / 1<sup>st</sup> draft</li> </ul>	Oct/Nov 98 Nov 98 Jan 98 (Kenya) March 99 (S-Africa) April 99 (ICARDA) June 99	Funding from Core WOCAT (SDC)
Brochure	S. Sombatpanit	D. Cahill., HP. Liniger, W. Prante, G. Schwilch Xie Fuguang	final draft publication	Feb. 99 May 99	Printing at CDE in Switzerland or Bangkok?

TASKFORCE: How to circulate information and inform WOCAT about the progress?

- 1<sup>st</sup> drafts to be circulated among TF-members. Final drafts to be sent to MB, Collaborating Institutions and Additional Core Group → Feedback to TF responsible. If no final draft by 28/2/99 → report prepared by TF responsible and distributed to MB before 28/2/99. Also report before 31/8/99

**APPENDIX IV: WOCAT Workshop Participants: Twann; 25/08/98 to 01/09/98**

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<b>van Lynden</b> Godert	ISRIC International Soil Reference and Information Centre	P.O. Box 353	6700	AJ Wageningen Netherlands	0031-317 471735 0031-317 471711	0031-317 471700 vanlynden@isric.nl
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