WOCAT

World Overview of Conservation Approaches and Technologies

15th

Bishkek and Naryn, Kyrgyzstan
21 - 27 June 2011

PROCEEDINGS

Progress, Methods, Outputs,
Plan of Action,
Organisation

Co-sponsored by:

WOCAT

WORLD OVERVIEW OF CONSERVATION APPROACHES AND TECHNOLOGIES (WOCAT)

15th

SHARE FAIR AND INTERNATIONAL WORKSHOP & STEERING MEETING PROCEEDINGS

LIST OF COLLABORATING AND FUNDING INSTITUTIONS

ACT	African Conservation Tillage Network, Harare, Zimbabwe
ADB	Asian Development Bank, Manila, Philippines
AJZ	AJZ: Association des Jeunes de Zammour, Médenine, Tunisia
ARC-ISCW	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
ASC-UPLB	Agricultural Systems Cluster, University of the Philippines, Los Baños, Philippines
BSWM	Bureau of Soils and Water Management, Department of Agriculture, Quezon City, Philippines
CAMP Alatoo	Central Asia Mountain Programme, Bishkek, Kyrgyzstan
CAS and MWR	Institute of Soil and Water Conservation, Yangling, China
CDE	Centre for Development and Environment, University of Bern, Switzerland
CGIAR	Consultative Group on International Agricultural Research, Washington, USA
CHTDB	Chittagong Hill Tracts Development Board, Bangladesh
CIS	Centre for International Cooperation, Vrije Universiteit Amsterdam, The Netherlands
CRDA	Commissariat Régional au Développement Agricole, Médenine, Tunisia
DESIRE	EU-project for Mitigating desertification and remediating degraded land
DEC	Dept. for Erosion Control, Faculty of Forestry, Belgrade University, Serbia & Montenegro
DERAD	Diagnostic Environnemental et Recherches Appliquées pour le Développement, Antananarivo, Madagascar
DoA	Department of Agriculture, Pretoria, South Africa
FAO	Food and Agriculture Organisation of the United Nations, Rome, Italy
FAO-LADA	Land Degradation Assessment in Drylands, Rome, Italy
FSWCC	Fujian Soil and Water Conservation Centre, Fuzhou, China
GEF	Global Environmental Facility
GEF OP12	GEF Operational Programme 12 Gansu Project Management Office, Lanzhou City, China
GI	Institute of Geoecology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
GO	Government Organisation
GREAD	Group of Research, Studies and Actions for Development, Niamey, Niger
GIZ	Gesellschaft für Internationale Zusammenarbeit,
IC-Pakistan	Intercooperation-Pakistan, Hayatabad – Peshawar, Pakistan
ICARDA	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
ICIMOD	International Centre for Integrated Mountain Development, Kathmandu, Nepal
ICRAF	International Center for Research in Agroforestry, Nairobi, Kenya
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics, Niamey, Niger
InGeo	Institute of Geography, Ministry of Science, Almaty, Kazakhstan
INP	Institut National de Pédologie, Dakar, Senegal
IRA	Institut des Régions Arides, Médenine, Tunisia
IRRI	International Rice Research Institute, Manila, Philippines
ISRIC	World Soil Information, Wageningen, The Netherlands
IWMI	International Water Management Institute, Pretoria, South Africa
KAU	Kyrgyz Agrarian University, Bishkek, Kyrgyzstan
KU	Kathmandu University, Kathmandu, Nepal
MADRPM	Ministère de l'Agriculture du Développement Rural et des Pêches Maritime, Morocco
MoA-Ethiopia	Ministry of Agriculture, Addis Abeba, Ethiopia
MSEC-CACILM	Multicountry Secretariat, Central Asian Countries Initiative for Land Management, Bishkek, Kyrgyzstan
NCCR N-S	National Centre of Competence in Research North-South, Switzerland
SDC	Swiss Agency for Development and Cooperation, Bern, Switzerland
SSMP	Sustainable Soil Management Programme, Kathmandu, Nepal
SWCMC	Soil and Water Conservation Monitoring Center, MWR, Beijing, P.R. China
SWALIM	FAO Somalia Water and Land Information Management, Nairobi, Kenya

TerrAfrica	TerrAfrica – Regional Sustainable Land Management
TSSRI	Tajik Soil Science Research Institute, Dushanbe, Tajikistan
	Tajik Academy of Agricultural Sciences, Dushanbe, Tajikistan
UNCCD	United Nations Convention to Combat Desertification, Bonn, Germany
UNEP	United Nations Environment Programme, Nairobi, Kenya
UNGN	UNESCO-GN Chair, Faculty of Human Sciences, University of Mohammed V, Rabat, Morocco
UNU-INWEH	United Nations University, Institute for Water, Environment and Health, Hamilton, Canada
WASWC	World Association of Soil and Water Conservation, Beijing, P.R. China
WDCU	Watershed Development Coordination Unit, New Delhi, India
WORLP	Western Orissa Rural Livelihood Project

Please note that this is not an exhaustive list.

LIST OF ABBREVIATIONS

BANCAT	Bangladesh Conservation Approaches and Technologies
CA	Central Asia
CC	Climate Change
CCD	Convention to Combat Desertification
CF	Contour Farming
CHTRDPII	Second Chittagong Hill Tracts Development Project
DB	Database
DBMS	Database Management System
DS	Decision Support
DSS/ DST	Decision Support System/ Decision Support Tool
HIMCAT	Himalayan Conservation Approaches and Technologies
HKI	Helen Keller International
INGO	International Non-Governmental Organisation
ISCO	International Soil Conservation Organization
KM	Knowledge Management
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
LD	Land degradation
LU(S)	Land Use (System)
MG	WOCAT Management Group
MoU	Memorandum of Understanding
NAP	National Action Plan
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
QA	Questionnaire on Approaches
QM	Questionnaire on the WOCAT Map
QT	Questionnaire on Technologies
SLM	Sustainable Land Management
SM	Steering Meeting
SWC	Soil and Water Conservation
TF	Task force
ToR	Terms of Reference
WG	Working Group
WM	Watershed Management
WMsc	Watershed Management Sub-component of CHTRDPII
WOCATeer	WOCAT collaborator
WOCAT-L	WOCAT mailing list
WS	Workshop
WWSM	WOCAT (annual) Workshop and Steering Meeting

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FOREWORD & INTRODUCTION

WOCAT (World Overview of Conservation Approaches and Technologies) http://www.wocat.net is an established global network of sustainable land management (SLM) specialists, contributing to SLM by sharing and evaluating knowledge. WOCAT's goal is to provide tools and methods for knowledge management and decision support.

Since its initiation in 1992, WOCAT developed standardized methods and tools and a harmonised knowledge management system, which are tested and applied in many countries all over the world. Through the growing WOCAT network and database many SLM experiences were already shared and guidelines for best SLM practices are continuously being developed.

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

During the previous annual workshop in Morocco in 2009, Kyrgyzstan was selected to host the 15th annual WOCAT Workshop and Steering Meeting (15th WWSM). The 15th WWSM took place from 21 to 27 June, 2011 in Bishkek and Naryn, and was split into two parts. From 21 to 22 June a 2 day WOCAT Share Fair dedicated to the topic of "SLM knowledge management and decision support for global and local needs" was held in Bishkek at the Hotel Ak Keme. The objectives were to i) share experiences on SLM knowledge management and decision support, ii) show how SLM can improve food security by addressing challenges related to climate change, water availability and land degradation, iii) formulate declarations to streamline WOCAT and related tools into global, regional and national SLM programmes, and iv) promote a Central Asia SLM knowledge management initiative. The Share Fair was attended by almost 100 participants from 25 countries. Kyrgyzstan and the regional countries (Tajikistan and Uzbekistan) were strongly represented by almost 50 participants. It was an ideal platform to enhance the collaboration between regional as well as international projects/programmes and to bring together various regional and international organizations and institutions.

The WOCAT Share Fair was followed by the 5 days WOCAT Workshop and Steering Meeting (WWSM) at University of Central Asia (UCA) in Naryn, from June 24 to June 27, 2011. The outcomes of the Share Fair were further developed during the WWSM, progress evaluated and directions for the future of the WOCAT network, especially on how to institutionalize WOCAT and how to secure funding, discussed. The WWSM was attended by 55 participants from 23 countries with 14 participants from the region.

The meeting was organized by the WOCAT Secretariat and the Regional Coordination Office, JACS Central Asia NCCR North-South, Bishkek, Kyrgyzstan, and co-organised by the University of Central Asia (UCA), CAMP Alatoo Public Foundation, GIZ CCD-Project for Central Asia / CACILM, ISRIC, FAO, CDE and SDC.

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions in order to present the results of the 15th WWSM, held in Bishkek and Naryn, Kyrgyzstan. This document is not addressed to a broad public and therefore has not been prepared for such a purpose. It is a working document for the further development of WOCAT. Thus some of the issues are presented as reported by the rapporteurs.

The proceedings include:

1. Summary of the WOCAT Share Fair
2. Summary of the WWSM
   a. Parallel topic discussion on a) climate change and disaster risk reduction and b) pasture and grazing land management
   b. National / regional and global progress reports and activity plans
   c. Updates on different WOCAT tools
   d. Summary of major discussion points on institutionalizing WOCAT and securing funding
   e. Summary of Steering Meeting
3. Annex

A CD-ROM is attached to these proceedings with all major power point presentations and photographs. The reference to the presentation file is indicated in brackets behind the speaker's name.

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

EXTENDED SUMMARY

WOCAT Share Fair

Day 1: SLM facing global and local needs

His Excellency Torogul Bekov, Minister of Agriculture, Kyrgyz Republic delivered the opening remarks, stating the importance of managing natural resources in the face of increasing population, exposure to natural hazards and climate change - particularly in mountain areas - and promoting environmentally-friendly agricultural production. The opening remarks were followed by short opening statement of the co-organisers CAMP, Aida Gareeva, UCA, Nasreen Dhanani, CACILM, Reinhard Bodemeyer and NCCR North South, Mira Arynova. After the opening Hanspeter Liniger, Coordinator WOCAT, highlighted needs and WOCAT achievements in SLM knowledge management and decision support. He was calling for partnership with WOCAT which aims at up-scaling KM and DS in SLM to better manage investments, use experiences for further investments and provide a platform for reporting & impact assessment of SLM/LD. Possible solutions are to streamline WOCAT in all SLM programmes of the different agencies/institutions, use the synergies and joint efforts rather than creating parallel systems. For this sufficient resources in countries should be earmarked as well as for the development and global coordination of KM.

In the morning and early afternoon keynote presentations highlighting challenges, opportunities and synergies of SLM related to different topics were delivered. A presentation on SLM and climate change adaptation was given by the PPCR project in Tajikistan showing first results from the Pilot Programme. This presentation was followed by an input on SLM and flood/disaster mitigation and prevention by the SDC project in Tajikistan presenting SDC's Disaster Risk Reduction approach on how to manage risks and disasters. After that five presentations addressed SLM and water (watershed management, water use efficiency) starting with the regional experience of SLM and water scarcity at ICARDA, followed by a Helvetas project in Kyrgyzstan on enabling farmers to efficiently manage water at field level, and a regional perspective of IWMI on water productivity improvement at plot level. The session on SLM and water was further enriched with a contribution from ISRIC on green water credits and concluded with a presentation on land degradation and SLM assessment using LADA/WOCAT tools across the Kagera river basin. Furthermore a contribution on SLM mapping was made by South Africa on implementation and decision support illustrating the process towards informed decision making based on experience in facilitating and developing NRM strategies for Provinces in South Africa. Additionally two contributions followed on SLM and pastoralism supporting local knowledge through the Herders' Manual and providing a recap of the International Pastoralism Symposium held the week before. The session was concluded by a presentation on SLM and new developments / innovations CAMP Alatoo project activities in Kyrgyzstan with focus on energy efficiency on rural house construction.

In the late afternoon a poster market on national and regional achievements of WOCAT partners took place with special booths of the co-hosts showing their work related to SLM. The displayed posters showed rangeland monitoring and management in Mongolia, pastoralism in Central Asia, Water / DRR in Afghanistan, experiences of GEF project in China, best practices from Senegal and mapping / decision support in South Africa. The poster market was very interactive and the participants were able to discuss each other's experiences.

Day 2: A joint way forward, challenges and opportunities for SLM knowledge management and decision support

The 2nd day started with input presentations of different speakers on joint efforts towards SLM knowledge management and decision support showing benefits of spreading SLM at regional and national level. From Central Asia we had speakers from a World Bank project in Tajikistan, from the CACILM Multicountry Secretariat in Kyrgyzstan, the FAO representative in Kyrgyzstan, the UCA and the Rural Agriculture Service in Kyrgyzstan. From outside the region we had speakers from the Ministry of Environment and Nature Protection in Senegal, the Beijing Forestry University in China, the SLMI(O) in Afghanistan and SDC. Each of them was highlighting their experiences related to SLM knowledge management and decision support.

In the afternoon a WOCAT carousel, a special type of group work on streamlining SLM KM&DS on all levels was conducted. Discussed topics were i) the role of knowledge management (KM) and decision support (DS), ii) joint efforts in SLM, iii) some general reflection on using WOCAT and iv) key messages delivered by input speakers in the morning session. The group work was presented in plenary combined with a panel discussion with the WOCAT Management group and some key persons. Some concluding points were that KM and DS has to build on existing and innovative knowledge. Furthermore, the WOCAT

KM has been appreciated and it has been concluded that DS is needed but at an initial stage and needs to be further developed. It was agreed that a common SLM KM/DS system, e.g. reporting to UNCCD, WB, GEF, Project donors is needed and that not only the end product counts but also the process (capacity building) is important.

The 2nd day WOCAT Share Fair was closed by Hanspeter Liniger with an outlook that a long-term commitment is needed on all levels building on existing institutions and partners. The role and importance of regional and national hubs and the global coordination was highlighted.

15th WWSM

The 15th WWSM followed the 2 day WOCAT Share Fair in Bishkek. The outcomes of the Share Fair were further developed, progress evaluated and directions for the future of the WOCAT network, especially on how to institutionalize WOCAT and how to secure funding, discussed.

Parallel session: topic discussion

A session was held on **Climate change and disaster risk reduction (DRR).** After a general introduction on climate change & DRR a specific presentation was held on the first draft of the WOCAT climate change module. This module was tested in Tajikistan in the Pilot Programme for Climate Resilience (PPCR). First results and experiences were shared. After that a group work followed in which participants had to discuss the relevance of CC issues in the framework of the WOCAT documentation. Discussed were the scope of CC assessment in the WOCAT tool & methods, the scale (time & spatial) of the assessment and first reactions from countries about the WOCAT CC module draft.

Parallel to it a session was held on **Pasture / grazing land management**. The aim of this topic discussion session was to define key issues / challenges in pasture / grazing land management and its sustainable management. According to the experiences of partners key findings and solutions were defined. Keeping these in mind it had to be decided if WOCAT needs, beside what is already available in the basic QT and QA, a module on pasture/ grazing land to fulfill partners needs and demand.

WOCAT progress (global / national level)

Review global progress

The Global Management, CDE, FAO and ISRIC presented their global progress. Extensive presentations were delivered. Key achievements can be summarized as follows:

- TerrAfrica Publication 'Sustainable Land Management in Practice – Guidelines and Best Practices for Sub-Saharan Africa' was published.
- Chapter 5.1 on halting land degradation for food security has been compiled for the FAO 'State of the World Land and Water Resources' (SOLAW)
- The on-line database on SLM technologies was completed and uploaded on the WOCAT website for testing by its partners.
- A simple Map Viewer was realized which allows analyzing the mapping data (QM) by viewing some predefined maps.
- The watershed management module (QWM) was finalised and tested in Tunisia.
- A draft WOCAT climate change module was developed and tested in Tajikistan.
- WOCAT thoroughly participated in the discussion on the perspectives on KM for UNCCD by attending the KM side event at CST2/ CRIC9 (February 2011 in Bonn), commenting the draft questionnaire compiled for an online survey on the Knowledge Needs Assessment, partake in the interviews and on-line survey on the assessment of KM needs (March, April 2011)
- WOCAT trainings were held in Senegal, Tajikistan, Mongolia, etc..
- WOCAT review 2011 (2008-2011) was done.

National progress / Poster market

This year the national progress was presented the first time in the form of a poster market. Each country initiative presented their challenges related to SLM, KM and DS, their achievements since Oct 2009, in SLM knowledge documentation and WOCAT tool development and training/ networking, and their outlook to the future.

Updates on different WOCAT tools

During the 15th WWSM an online Technology / Approach data entry and an online map viewer demonstration was given. Furthermore, an input presentation on the use of WOCAT tools in Kagera basin was delivered and the latest updates of the WOCAT watershed module were shared.

For WOCAT newcomers a short input presentation on WOCAT was given which was attended by six countries: Cambodia, Malawi, Senegal, South Africa, Tajikistan and Vietnam.

Task forces

Compared to the 14th WWSM where taskforce activities were central, the 15th WWSM in Kyrgyzstan did not focus on task forces and touched them only marginally. A short update was given on the progress of the following task forces: 1) Impact monitoring, 2) Decision support, 3) Watershed / climate change module, 4) Mapping, and 5) Digital products.

Institutionalizing WOCAT and securing funding

In the 15th WWSM a strong emphasis was put on the discussion on how to institutionalize WOCAT and secure funding for the future. On the last day an intense group work was held on a) national / regional level and b) global level.

At national / regional level the groups came up with suggestions which would help to strengthen national / regional initatives such as i) MoU between WOCAT and national institutions, ii) support in proposal writing by global WOCAT, and iii) technical support and backstopping service from WOCAT Secretariat.

The global level drafted future scenarios for a new institutional set-up of WOCAT. The following two options prevailed in the discussion i) a consortium of different interested institutions, and ii) creating an International NGO.

Steering Meeting

A **SWOT survey** of existing WOCAT knowledge management and decision support system was done. A short overview of the results for Strengths / Weakness / Opportunities / Threats was delivered.

A big challenge for the WOCAT network is to **institutionalize WOCAT** on different levels and to **secure funding**. Currently WOCAT is initiating a new global partnership to upscale knowledge management and decision support in SLM and is seeking new partners to (1) develop further its potential to manage land-based project investments to meet the challenges of climate-change mitigation and adaptation, biodiversity conservation, water management and disaster-risk reduction; (2) meet country and project obligations to have KM and DS systems in place to draw upon experiences of SLM for future investments; and (3) provide a better platform for reporting, tracking and managing SLM technologies and approaches.

The **GEF-LADA-WOCAT project** "Land Degradation Assessment and Monitoring for Sustainable Land Management Decision Support and Scaling up of Best Practices, LADA-WOCAT" was presented and opportunities for funding for WOCAT partners highlighted.

Tentative global activity plan for 2011+

Basic enabling activities at global level

(Outputs ($\rightarrow$ deadlines):

- Concept note and responses from major partners ($\rightarrow$June-July)
- External evaluation, consultation with Management Team ($\rightarrow$ Mid Aug)
- Proposal for new institutional set up and funding strategy ($\rightarrow$ Sept)
- Draft fund raising proposal for enlarged WOCAT programme ($\rightarrow$ Aug)
- Concept on how to streamline WOCAT into main donor agencies ($\rightarrow$ Aug)
- New institutional set-up ($\rightarrow$ deadline?)
- MoUs with partners (MG, Secretariat with partners ?)

Organizational and administrative issues

Next WWSM

Currently WOCAT is initiating a new global partnership to upscale knowledge management and decision support in SLM and is seeking new partners. As the new WOCAT partnership and the new Institutional set-up of WOCAT is not clear yet discussions about the next WWSM are at present not clear either.

However, regardless of the new Institutional set-up of WOCAT countries made suggestions to host the next WWSM. Suggestions came from South Africa and Malawi to hold a regional workshop in Southern Africa showing a regional context with a special emphasis on mapping. Furthermore, ISRIC in Wageningen, the Netherlands, Afghanistan, SLMIO and Mongolia came up with offers. Southern Africa got the highest votes. A cycle of 18 months was suggested, so that the next WWSM would be end 2012.

WORKSHOP PROGRAMME

<u>Part 1</u>: WOCAT Share Fair, Bishkek

Date/time	Activity / topic
Tuesday 21/6	**WOCAT SHARE FAIR (DAY 1): SLM FACING GLOBAL AND LOCAL NEEDS**
08:30 – 09:00	Registration
	Moderators: Sally Bunning, FAO / Godert Van Lynden, ISRIC
09:00 – 09:30	**Opening statements** Minister of Agriculture and co-organisers
09:30 – 10:15	**Needs and WOCAT achievements in SLM knowledge management and decision support** (WOCAT Management – Hanspeter Liniger)
10:15 – 10:45	*Coffee break*

10:45 – 13:00	**Keynote presentations regarding challenges, opportunities and synergies of SLM**
	 1) SLM and climate change adaptation – first results from the Pilot Programme for Climate Resilience (PPCR) in Tajikistan, Bettina Wolfgramm, PPCR Tajikistan
	 2) SLM and flood/disaster mitigation and prevention Manzura Nazaramonova, SDC Tajikistan
	 3) SLM and water (watershed management, water use efficiency)
	      a) SLM and water scarcity, Jozef Turok, ICARDA
	      b) Enabling farmers to efficiently manage water at field level, Lydia Pluess, Project Manager of SEP Project, Helvetas Kyrgyzstan
	      c) Improving Water Productivity at Plot Level in Ferghana Valley Water Productivity, Oyture Anarbekov, IWMI Central Asia Subregional Office, Uzbekistan
	      d) Green water credits, Godert Van Lynden, ISRIC

13:00 – 14:00	*Lunch break*
14:00 – 15:30	**Keynote presentations** (cont.): 3) SLM and water (watershed management, water use efficiency) cont. e) Land degradation and SLM assessment using LADA/WOCAT tools across the Kagera river basin, Sally Bunning and Monica Petri, FAO, and Lehman Lindeque, FAO consultant. 4) SLM Mapping: Implementation and informed decision making, Lehman Lindeque, Department of Agriculture, Forestry and Fisheries, South Africa 5) SLM and pastoralism (local assessment, mapping and priority setting) Inam Ur-Rahim and Henri Rueff, NCCR North South 6) SLM and new developments / innovations: Thermal insulation of houses and energy efficient stoves in Kyrgyzstan – challenges and possibilities, Janyl Kojomuratova and Ruslan Isaev, CAMP-Alatoo
15:30 – 17:00, *incl. coffee break*	**Poster market on some project, national and regional achievements**
Evening	*Welcome drinks / dinner*

Wednesday 22/6	WOCAT Share Fair (day 2): A joint way forward, challenges and opportunities for SLM knowledge management and decision support
09:00 – 10:30	**Input presentations on joint efforts towards SLM knowledge management and decision support showing benefits of spreading SLM** • at regional level • at national level Input speakers with key messages 1. SLM oriented projects in Tajikistan: experience and lessons learnt from WOCAT methodology application, German Kust, Environmental Consultant Member, World Bank, Natural Resource Management Task Team (Tajikistan) 2. Regional knowledge-management under CACILM, CACILM Multi-country Secretariat/GIZ/CACILM Multi-country Capacity Building Project, Jamal Annaklycheva (CACILM Msec Bishkek) and Vitaliy Gromov 3. Land and water resources management in Central Asia (FAO) Giovanni Munoz, presented by Sally Bunning and Matraim Jusupov 4. Institutionalizing Learning for Sustainable Land Management: Proposal to establish an SLM theme within University of Central Asia's Mountain Societies Research Centre, Chad Dear, Senior Research Scientist, Mountain Societies Research Centre, University of Central Asia 5. SLM knowledge management and decision support in Senegal, Déthié Soumare Ndiaye, Ministry of Environment and Nature Protection, Senegal 6. Land Degradation Combating and Sustainable Land Management in China and Introduction of China-GEF Partnership on Combating LD in Dryland Ecosystem, Prof. Zhang Kebin, ADB/GEF project consultant and LADA China Team, College of Soil & Water Conservation, Beijing Forestry University, China 7. Sustainable Land Management Institute Organization (SLMIO) - Building foundations for SLM in Afghanistan, Helaluddin Musadiq 8. Getting SLM knowledge to the people - opportunities and limitations in Kyrgyzstan, Joomart Jumabekov / Elisabeth Katz, Rural Agriculture Service, Helvetas 9. SDC's current engagement & challenges in SLM & Desertification in the light of WOCAT, Yves Guinand, Programme Manager and Focal Point UNCCD, SDC Switzerland
10:30 – 11:00	*Coffee break*
11:00 – 12:30	**Input presentations on joint efforts towards SLM knowledge management and decision support showing benefits of spreading SLM** cont.
12:30 – 13:30	*Lunch break*
13:30 – 15:00	**Group work: WOCAT action carousel** Streamlining SLM KM&DS on all levels
15:00 – 15:30	*Coffee break*
15:30 – 17:00	**Presentation of group work "WOCAT action carousel"** **and synthesis / plenary / panel discussion with WOCAT Management Group and key persons**
17:00 – 17:15	**Closing**

Part 2: WOCAT Workshop and Steering Meeting (WWSM); Naryn

Date/time	Activity / topic		Responsibilities
Thursday 23/6	**TRANSFER TO NARYN AND FIELD DAY**		
	Transfer from Bishkek to Naryn (Travel time: 6 hours) Field visit on the way to Naryn. Information on pasture management and elaboration on herder manual. Evening arrival in Naryn		*Inam Ur-Rahim and NCCR team*
Friday 24/6	**OPENING / TOPIC DISCUSSIONS**		*Chair: Godert Van Lynden* *Rapp.: Julie Zähringer*
8:30 – 09:30	**Welcome and introduction** - participants, expectations, approval of agenda - WOCAT External Evaluation		*Hanspeter Liniger* *Anna Tengberg*
09:30 – 10:00	**SWOT SURVEY OF EXISTING WOCAT KNOWLEDGE MANAGEMENT AND DECISION SUPPORT SYSTEM**		*Rima Mekdaschi Studer, Isabelle Providoli*
10:00 – 10:30	*Coffee Break*		
10:30 – 11:30	**Summary of Share Fair** Open plenum discussion / reflection on Share Fair General feedback/ impressions of WWSM participants		*Hanspeter Liniger, Michael Stocking, Markus Giger*
11:30 – 12:00	**PARALLEL SESSION: TOPIC DISCUSSION** **INTRODUCTION TO PARALLEL SESSION**		
12:00 – 13:00	1) CLIMATE CHANGE (CC) & DISASTER RISK REDUCTION (DRR) MODULES – Introduction to CC & DRR – Presentation Tajikistan experience and WOCAT CC module – Group work on CC module – Outlook on mitigation	2) PASTURE / GRAZING LAND MANAGEMENT – Key issues / challenges in pasture/ grazing land management and its sustainable management – Experiences of partners – Key findings / solutions – Pasture / grazing land and WOCAT (need for new module?)	*Markus Giger, Julie Zähringer, Isabelle Providoli* *Bernd Steimann, Inam Ur-Rahim, Henri Rueff, Rima Mekdaschi Studer*
13.00 – 14.00	*Lunch*		
14.00 – 17:00	1) CLIMATE CHANGE (CC) & DRR / MODULES (cont.)	2) PASTURE / GRAZING LAND MANAGEMENT (cont.)	
17:00 – 18:00	Sharing of results from parallel sessions		
After dinner	Meeting of WOCAT Management Group, WOCAT reviewer & consultant and WOCAT donors		

Saturday 25/6	**FIELD DAY AND TESTING OF TOOLS**	
08:00 – 18:00	Field day in surrounding area of Naryn: Jergetal and Ming Bulak: – CAMP Alatoo approach "Sustainable pasture management" – Socio-economic disparities in villages / pasture management committees – New cattle breeds: artificial insemination of the cattle breeds	*CAMP team and Bernd Steimann*
Sunday 26/6	**WOCAT PROGRESS (GLOBAL / NATIONAL LEVEL)**	*Chair: Sally Bunning* *Rapp.: Rima Mekdaschi Studer*
08:30 – 09:30	**Wrap-up of field day**, share lessons learned.	*Hanspeter Liniger*
09:30 – 10:30	**Review global progress and vision (plenary presentation)**	*Hanspeter Liniger, Rima Mekdaschi Studer*
10:30 – 11:00	*Coffee break*	
11:00 – 13:00	**National progress / Poster market** standardised poster format)	*Rima Mekdaschi Studer, Isabelle Providoli* *National and regional representatives*
13:00 – 14.00	*Lunch*	
14:00 – 15:00	WOCAT External Evaluation: Discussion with countries	*Anna Tengberg*
15:00 – 15:30	Online QT / QA demonstration Online map viewer Input presentation: use of WOCAT tools in Kagera basin	*Julie Zähringer* *Godert Van Lynden* *Lehman Lindeque*
15:30 – 16:00	*Coffee break*	
16:00 – 18:00	A. Watershed module: latest update B. WOCAT for new comers C. Sight-seeing Naryn	*Rima Mekdaschi Studer* *Isabelle Providoli* *Salamat*

Monday 27/6	**INSTITUTIONALIZING WOCAT AND SECURING FUNDING**	*Chair: Markus Giger* *Rapp.: Isabelle Providoli*
08:30 – 12:00	**Group work on** Institutionalizing WOCAT and securing funding a) at global level b) national and regional	*Hanspeter Liniger*
12:00 – 13:00	**Reporting back to plenum**	
13:00 – 14:00	*Lunch*	
	STEERING MEETING / CLOSING	
14:00 – 17:30, incl. coffee break	• Report back from SWOT • Institutionalizing and securing funding • GEF-LADA-WOCAT project • Tentative global activity plan for 2011+ Expenditure 2008-10, budget 2011 • National and regional activities for 2011/ 2012 • Organizational and administrative issues • Next WWSM • Feedback from participants and evaluation • AOB **Closing**	*Hanspeter Liniger* *Godert Van Lynden* *Sally Bunning* *Yves Guinand*
19:00	Cultural contribution and farewell Dinner	
Tuesday 28/6	**DEPARTURE**	
	Departure of participants in the morning by bus from Naryn to Bishkek (Travel time: 6 hours).	

WOCAT SHARE FAIR

WOCAT Share Fair (day 1): SLM facing global and local needs

Moderators: Sally Bunning, FAO / Godert Van Lynden, ISRIC

Opening statements

Minister of Agriculture: Torogul Bekov

His Excellency Torogul Bekov, Minister of Agriculture, Kyrgyz Republic welcomed all the participants and delivered the opening remarks, stating the importance of managing natural resources in the face of increasing population, exposure to natural hazards and climate change - particularly in mountain areas - and promoting environmentally-friendly agricultural production.

His Excellency stated that the objectives of WOCAT to up-scale SLM is becoming more and more important in the face of increasing population growth, need for more, diversified and good quality food throughout the year. This imposes a huge pressure on fertile land. In Kyrgyzstan 94% of land is covered by mountains and only 10% of land is arable land (most of it under irrigation), which is little for a demographically active land like Kyrgyzstan.

Furthermore, high level of wind and water erosion in mountainous areas, irrigation system erosion, man made disasters and CC exasperate the problems

A statement on SLM and fertility preservation of Kyrgyz soils that was prepared by several Ministries and institutions (Ministry of Agriculture, Agency of Agrarian Policy, Ministry of Natural Resources, Commission to control agricultural land) will be soon signed by the Prime Minister.

According to the Minister Organic Farming will become very important to manage land resources, notably soil fertility, in a sustainable manner. In his eyes fertile land is the main asset of his country, not industry and not oil that will finish at one point.

His Excellency would very much like to see that knowledge is transformed into action.

Opening statements of co-organisers

- *CAMP, Aida Gareeva*: CAMP Alatoo is now a public foundation. CAMP started in the year 2000 and is active in Tajikistan, Uzbekistan and Kyrgyzstan. Its objective is to ensure sustainable land and water resource management. CAMP started using the WOCAT methods and tools very early on. CAMP has initiated a light version of the technology questionnaire and documented about 150 different technologies which were stored in a 'local' knowledge base. This was a very useful exercise for the further development of CAMP and later CAMP Alatoo. During this meeting CAMP Alatoo will present the energy saving practices that they propagate, introduce their sustainable pasture management project and accompany the group during the field trips.

- *UCA, Nasreen Dhanani*: The preceding symposium and international conference on pastureland was a very successful event. Such events in the area are important to raise awareness and show the importance of SLM. SLM is a core area of the University of Central Asia (UCA). UCA is planning three campuses in the region: Khorov in Tajikistan, Takari in Kazakhstan and Naryn in Kyrgyzstan, which the participants of WWSM15 will visit later this week. Ms Dhanani in turn stressed the fact that knowledge and science should be translated to the very practical level and the herders' manual prepared by the Mountain Society Research Centre, which his affiliated to UCA, is such an example.

- *CACILM, Reinhard Bodemeyer*: Mr Bodemeyer welcomed everybody to where combating land degradation is taking place. CACILM is a regional initiative with different multi- and bi-lateral donors of which GIZ is one. The objective of CACILM is to find the right approach to combat desertification and applying SLM. CACILM is regional in the sense that it operates in 5 Central Asian countries. Already a lot is happening on the national level. On one hand CACILM is active in implementation of SLM and on the other hand offers a platform for sharing of lessons learned, supports building communities of action and promotes knowledge management for better decision making. CACILM chose WOCAT as the tool for knowledge management to document, evaluate and disseminate information. Now it is time to move on how to capitalize on the lessons learnt.

- *NCCR North South, Mira Arynova*: the Regional Office of NCCR North South is pleased to host the WOCAT workshop and hope for a successful and fruitful meeting event.

Needs and WOCAT achievements in SLM knowledge management and decision support

WOCAT Management – Hanspeter Liniger, Coordinator WOCAT (0_WOCAT intro_Liniger.ppt)

The introduction highlighted that the focus should shift from bad news on degradation/desertification to good news on SLM, its importance, where it works, how to spread it etc. SLM should be in such a way to maintain or improve ecosystem services for human well-being, as negotiated by all stakeholders. Global issues related to ecosystem services & human wellbeing are poverty reduction, productivity, climate change, desertification, biodiversity and disaster risk reduction, water/wind: off-site/downstream.

Knowledge management (KM) is currently in fashion, however KM on SLM practices is scattered, not easily available, and in different formats. There is no information about the area covered by SLM, the knowledge is not used which leads to repeating mistakes and reinventing the wheel. KM contributes to decision making by building on existing wealth of knowledge (indigenous, innovative, project, research), understanding local adaptations and innovations and providing options for spreading SLM.

WOCAT's vision is that land and livelihoods can be improved through sharing and enhancing knowledge about sustainable land management and through informed evidence based decision support for up scaling of best practices.

WOCAT is a global network of specialists working in the field of Sustainable Land Management (SLM). It has a framework for Knowledge Management and Decision Support (DS) for SLM which has been jointly developed with over 50 organizations since 1992. The funding partners are SDC, FAO, EU, GEF, WB, country projects, etc..

WOCAT's mission is to support innovation and decision-making processes in Sustainable Land Management by: i) building up and coordinating a global network of SLM specialists, ii) developing standardized but flexible tools and methods for knowledge management and decision support, iii) managing a global knowledge base on SLM, synthesizing and presenting the information through different media and iv) enhancing capacity of involved actors trough training, education & research.

Goal 1: global WOCAT network

The WOCAT network comprises over 60 institutions worldwide. It operates in decentralized manner through regional/national initiatives. The network welcomes new participants/institutions and organisations who have SLM knowledge management on their agenda.

Goal 2: Standardised methods and tools

WOCAT has developed a framework for documentation, evaluation and dissemination of SLM knowledge. The standardised tools are developed jointly with partner institutions and countries. They address documentation and evaluation of SLM technologies and approaches, and mapping of land degradation and conservation. The WOCAT framework is available in different languages and has a modular structure. The core elements of the WOCAT framework are questionnaires for evaluating SLM based on expert knowledge. The modular structure meets the needs of different user groups and keeps the framework flexible and open for supplementary topics/ themes and global issues.

Goal 3: global knowledge base

WOCAT manages global on-line databases for storage, searching and exchange of SLM practices containing: 310 SLM technologies and 170 approaches from 50 countries, and degradation and SLM maps from 20 countries. Synthesized experiences are available as books as e.g. on the global level the WOCAT overview book where the land is greener (2007), and on regional / national level the SLM in Practice (2011) and national overview books from Ethiopia, China, Nepal, Bangladesh, Mongolia, Senegal, Tunisia, etc..

WOCAT also provides information for decision support for selecting appropriate SLM practices. Please refer to the DESIRE project as an example.

Goal 4: training, education and research

Over 500 SLM specialists from 40 countries are trained in using WOCAT tools and running national initiatives (training of trainers). WOCAT links development and research, evaluating SLM and filling knowledge gaps by applied research.

A partnership with WOCAT aims at up scaling KM and DS in SLM to better manage investments, use experiences for further investments and provide a platform for reporting & impact assessment of SLM/LD. Possible solutions are to streamline WOCAT in all SLM programmes of the different agencies/institutions, use the synergies and joint efforts rather than creating parallel systems. For this sufficient resources in countries should be earmarked as well as for the development and global coordination of KM. Hence WOCAT should develop to Worldwide Orientation towards Development On the Ground (WODOG).

Keynote presentations regarding challenges, opportunities and synergies of SLM

1) SLM and climate change adaptation – first results from the Pilot Programme for Climate Resilience (PPCR) in Tajikistan

Bettina Wolfgramm, PPCR Tajikistan (1_SLM_CC_PPCR_Wolfgramm.pdf)

As introduction reflections on SLM in times of climate change were made. SLM tries to reduce negative effects of climate change so that land use systems become more climate resilient. Building up resilience is a very important process. What are the buffer capacities of the land use system, of the farming system, of the watershed and of the ecosystem? And what are the adaptation capacities: traditional and modern knowledge, self-organisation, networks and information exchange? What are the power relations and gender inequalities?

The goal of the Pilot Programme for Climate Resilience (PPCR) in Tajikistan, Phase 1, Component A5 Agriculture is to identify best SLM practices to improve rural livelihoods and resilience to climate change and make policy recommendations for their up-scaling. An inventory of SLM best practices (WOCAT+ QC), a land legal and policy assessment, and a participatory analysis was done. The project team consists of the Centre for Development and Environment (CDE) of the University of Bern, CAMP Kuhiston, Prof. Zvi Lerman (the Hebrew University), Helvetas (Swiss Association for International Cooperation), and University of Central Asia (UCA). The time frame of the project is 1st of March 2011 with a draft Report in July 2011 and the final report in September 2011.

The output of the project is 77 SLM documentations: 50 technologies and 27 approaches in English and Russian language and 20 Climate Change Questionnaires. 13 organisations are involved in the process: Tajik Soil Institute, CAMP Kuhiston, Pamir Biology Institute, Ministry of Agriculture, World Bank, CARITAS Switzerland, Welthungerhilfe, GIZ, UNDP, Youth Ecological Centre, ACTED, CESVI, MSDSP.

Preliminary results are already available. Observed climate change impacts are e.g. increased number of heavy rainfall events, decreased number with precipitation during winter and spring, droughts. Some adaptation measures are establishment of contour ditches which increases the resilience through reduced surface water runoff and gully development or planting high diversity of fruit tree species which increases the resilience through reduced risk of production failure through diversification. Some identified technology groups are livestock systems, irrigation management, infrastructure for water management etc.. Related climate change impacts which are addressed by these technology groups are vegetation degradation, water shortage, untimely water availability, etc.. The tolerance of SLM technologies to climate extremes has been assessed.

Likewise approach groups were identified such as SLM planning, joint management, knowledge transfer etc.. For the participatory analysis different stakeholder workshops on land use practices and policies were conducted.

Challenges in the process were the level of assessment: single plots and technologies, coping strategies at the farm level, land use systems and watersheds, and the up-scaling of Technologies and Approaches.

Opportunities / multiple benefits / win-win situations were: Adaptation and mitigation go generally hand-in-hand, Integrated water management and risk reduction - diversification - biodiversity conservation.

Draft recommendations are:

- **HOW:** Adapting to climate change is a process and involves participatory planning, monitoring of resilience of (existing) SLM technologies, and participatory technology development
- **WHAT:** A combination of investment intensive and low cost measures, as well as traditional and modern technologies
- **WHO:** initiative local person(s) & government institutions supported by "service providers"
- **HOW LONG:** Long-term adaptation measures (often change of land use type) and emergency measures (timely climate and market information, agronomic measures, water pumps)
- **WHY:** Informed decision making and knowledge management

Synergies with other programmes and WOCAT were mentioned and a general feedback to WOCAT can be seen in the power point presentation.

2) SLM and flood/disaster mitigation and prevention (Tajikistan)

Manzura Nazaramonova, SDC Tajikistan (2_SLM_flood-disaster_Manzura.pdf)

Tajikistan is a disaster prone country. Sustainable development was hampered by a number of devastating events. The potential for large-scale disasters is present in the region and small to mid-scale disasters are omnipresent, especially in rural areas.

SDC has a Disaster Risk Reduction approach to manage risks and disasters. The programme follows an integrated approach on disaster cycle, multi-stakeholder approach, multi-risk approach, sustainable use, risk-oriented focus, policy dialogue and mitigation measures.

The SDC Regional DRR Programme is present in Central Asia (CA) since 2003. The overall goal of the DRR Strategy for CA is to ensure safe life and sustainable livelihood. Lines of intervention are awareness raising, capacity building, particular risk reduction and DRR policy development.

Some examples of the DRR Programme are i) the CAMP project having workshops in villages and awareness raising and planning activities, ii) the Remote Geohazard Capacity project on GLOF's and Flash Floods, iii) Natural Risk Management on disaster risk plan development, better soil stability etc. and CoES IMAC building up and Info and Management Centre, GIS and information on hazard and disaster (spatial data / maps).

Problems and lessons learned are that the government recognises the importance of DRR. However, the respective government institutions still lack funding for improving their capacity to analyze and manage the risks and the collaboration between CoES, Hydrometerological and Geological Departments is still weak. Furthermore the focus should be on the local level to reconnect the Civil Society and local Government. Prevention on national level is difficult, mitigation and preparedness on local level is not enough. Prevention of disasters should be done by reducing the underlying risk factors.

SDC developed a new cooperation strategy 2012 – 2015 including a Water Basin Approach addressing up- and downstream by combining SDC DRR and Irrigation Programmes. Details can be seen in the power presentation in the annex. Furthermore SDC has an Integrated Watershed Management Initiative/Approach scaling up grassroots level DRR/IWSM projects, strengthen civil society, tighten its inter-linkages to the local authorities, consolidate and spread the achievements. SDC wants to contribute to a coordinated DRR/IWM sector in Tajikistan to ensure the coherence of approaches, to ensure evidence-based decision making. Possible synergies in the knowledge management sectors by using WOCAT to access lessons learnt from farmers which later on get prepared for policy makers.

3) SLM and water (watershed management, water use efficiency)

a) Sustainable Land Management and Water Scarcity in Central Asia (ICARDA)

Jozef Turok, Kirsten Kienzler, Ram C. Sharma, Kristina Toderich* and Feras Ziadat, International Center for Agricultural Research in the Dry Areas (ICARDA), *International Center for Biosaline Agriculture (ICBA), CGIAR Programme Facilitation Unit, Tashkent, Uzbekistan, (3a_SLM_water_ICARDA_Turok.pdf)

The Regional Programme for Sustainable Agricultural Development in Central Asia and the Caucasus, supported by the Consultative Group for International Agricultural Research, assists the countries in achieving sustainable increases in the productivity of crop and livestock systems through development, adoption and transfer of production technologies, natural resource management and conservation strategies, by strengthening agricultural research and fostering cooperation among the countries and international agricultural research centers. Eleven centers currently participate in the Programme, among them ICARDA as the lead center, ICBA, and IWMI, the International Water Management Institute. The Programme works in close collaboration with national partners - research organizations, governments, policy makers, farmers' associations, universities and other stakeholders.

Central Asia is characterized by land degradation processes on a large scale, associated with soil salinity, low soil fertility and soil erosion. These processes are further exacerbated by demonstrated above-average influences of climate change in the Region. Competition for water resources between different sectors and user groups has dramatically increased since the 1990s. Moreover, use of water per unit area of agricultural production is very high, owing to old and inefficient irrigation infrastructures, among other factors.

Tackling the challenge of water in Central Asia requires that water productivity in agriculture is increased, besides rational distribution of water among countries and efficient management of water resources in general. The research contributions to increasing water productivity in agriculture are threefold:

- Promoting water-use efficient techniques (efficient irrigation systems, water harvesting, etc.)
- Developing more efficient crop varieties

- Selecting proper soil and crop management practices, including efficient on-farm water management

This presentation introduces the concept and research approaches to Sustainable Land Management (SLM), and gives selected examples from collaborative research on developing crop varieties and selecting soil and crop management practices. Promoting water-use efficient techniques is addressed in a separate presentation by IWMI, in this volume.

New improved germplasm for major food and feed crops has been introduced from the international centers and rigorously evaluated under agro-ecological conditions in the Region. This resulted in the release of 42 improved cultivars, tolerant to biotic and biotic stresses, in different crops. In particular, high yielding, high quality, yellow rust resistant and heat tolerant facultative and winter wheat lines have been tested in Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Azerbaijan and Kazakhstan. The 'Dustlik' wheat variety, released in Uzbekistan in 2005 and tolerant to medium salinity is now popular among farmers. Seed production systems have been promoted to ensure that good quality seed become available to the farmers. At the same time, germplasm conservation activities in the Region have made significant progress as new gene banks were established in most of the countries.

Pearl millet and sorghum are more water-use efficient than many local crops, highly tolerant to salt and drought and do not require preparatory soil leaching. Their evaluation in the local crop-livestock farming production systems resulted in a number of varieties recommended for the conditions in Central Asia. Pearl millet and sorghum also offer an economically interesting alternative for reclamation of unused marginal drylands.

Research on soil and crop management has resulted in the development of more efficient technologies. Several SLM practices were examined in 12 benchmark sites located in various agro-ecological zones of the Region. Laser leveling, for instance, resulted in 25-35% water saving (50-60 mm per irrigation). Raised-bed seeding has a demonstrated impact on water-use efficiency. In the experimental sites, yield increases were in the range between 7-22% because of enhanced germination rates while irrigation savings were 15-20%. Other tested practices included mulching, residue retention and various on-farm irrigation techniques. Crop-livestock integration and range management contributed towards improving livestock productivity and reducing the pressure on grazing lands. As a result of collaborative research, zero-till and other conservation agriculture practices are being increasingly adopted by Central Asian farmers. Capacity building, including participation of more than 11 thousand farmers in farmers' field days, farmers' fairs, traveling workshops, farmers' schools and demonstration activities has been another major component of the Regional Programme during the past years.

The research questions are highly inter-related and the development of solutions requires an approach that integrates crops, livestock, natural resource management research and the necessary policies to support improvements. In fact, taking a more integrated approach in public research is at the core of current reform in the Consultative Group for International Agricultural Research. The existing CGIAR partnership in Central Asia and the Caucasus will continue promoting the uptake of collaborative research knowledge and innovation into better policies and development of practices for the benefit of the farmers in the Region.

Keynote presentations delivered by Oyture Anarbekov and Manzura Nazaramonova (Photos: HP. Liniger)

b) Enabling farmers to efficiently manage water at field level (Helvetas)
  Lydia Pluess, Project Manager of SEP Project, Helvetas Kyrgyzstan (3b_SLM_water_SEP project_Pluess.pdf)

Helvetas has designed the On-Farm Water Management Project SEP (the name is deduced from the Kyrgyz words for "Efficient Use of Water" – **S**uunu **E**ffectivduu **P**aidalanuu) in 2008, based on extensive studies of the water sector in Kyrgyzstan. Helvetas identified a knowledge gap at field level. Currently farmers are aware of inefficient water management and would like to improve it, but there is lack of knowledge and information at farm level and at the level of the Water User Associations (WUA) with regard to efficient water use technologies.

The objective of the project is therefore to enable farmers in pilot areas to take informed decisions on adaptation and adoption of improved techniques on efficient water use to increase water and crop productivity in view of adaptation to climate change effects. With this project Helvetas contributes to more sustainable natural resources management, better food security and income and ultimately to poverty alleviation in rural areas in Kyrgyzstan.

SEP uses a demand-driven intervention approach, and supports project proposals of agricultural advisory services, Water User Associations and private businesses which aim at building capacities of farmers in efficient water use. SEP supports the implementation of the projects with small grants and with training and coaching provided by a network of specialists around the Centre of Training, Consultancy and Innovation (ZOKI).

SEP supports a wide range of action research related to irrigated and rainfed agriculture. Advanced furrow irrigation techniques, the use of water measurement instruments, drip irrigation, rainwater harvesting techniques and conflict prevention are some of the topics which SEP partners promote. Trainings are usually part of a broader service package which the partners offer to farmers, either linked to water delivery services or to income generation in agricultural production.

After two years of intensive field trainings, farmers start to change their irrigation practices, namely to irrigate crops according to actual water needs, to control and measure the water volume and to apply advanced irrigation techniques. Farmers realized that they can reach higher and more stable yields and at the same time save water and costs for irrigation. The changes can be observed also at the level of WUAs. The trainings lead to a more cautious use of water, reduced conflicts and increased payment rate for water services. Farmers and WUAs in project areas are therefore discussing to switch from fixed rates for water delivery services to a volume-based system.

For such a systemic change several conditions must be fulfilled: The existence of suitable measurement structures (hydroposts), the ability of WUAs to allocate water to farmers in a timely, fair and efficient way, the capability of farmers to manage and control water distribution to the fields and to irrigate crops efficiently.

A project cannot and should not address such a systemic change on its own. Collaboration and streamlining of activities with government institutions and with other initiatives in the water sector is crucial. Knowledge platforms like WOCAT support this collaboration as they offer opportunities to share experiences and allow the various stakeholders to elaborate commonly shared strategies.

c) Improving Water Productivity at Plot Level in Ferghana Valley Water Productivity (IWMI)
  Oyture Anarbekov, Senior Research Officer, IWMI-Subregional Office for Central Asia, Uzbekistan (3c_SLM_water_IWMI_Anarbekov.pdf)

Presentation starts with introduction to topic water resources management. In particular, document shows importance of water resources for Aral Sea Basin. There is given background on Aral Sea Basin and the change of its boarder. The next slide shows main indicators of water and land resources use in Central Asia, it focuses on irrigated land area, total water withdrawal including for irrigation. First part of presentation concludes what are the main challenges of the region with regard to on-farm water management.

Second part of the presentation starts with what are the main key messages we can conclude based on above statements and how "Water Productivity Improvement" (WPI-PL) project helps to address it. There is given map of demonstration fields of WPI project in FV where tested different technologies directed towards improvement of on-farm water management. In the next slide, there is given clear goals and objectives of WPI-PL project including innovation cycle and partnership for innovation promoted by the project. Afterwards, presenter focuses on interventions promoted by the project and what has been achieved/findings so far by project interventions.

Third part of the presentation focuses on challenges and opportunities that exist for WPI-PL project, possible synergies with other programmes/projects that need to be exploited. And final slide stops with conclusion and outlook for the future of WPI work in partnership with different organizations, projects and programmes.

d) Green water credits (ISRIC)
Godert Van Lynden, ISRIC (3d_SLM_water_ISRIC_Van Lynden.pdf)

Blue water resources exploitation faces scarcity in view of the competing demands by urban, hydro-electric power generation and irrigation, and are nearing the limit of ecologic sustainable withdrawal of ground and surface water (for definition of blue water see annex). Future demands will be much higher and water allocation to satisfy all these demands from the current exploitation of ground and surface waters cannot be met. We need to change the way we think about water and agriculture. Instead of a narrow focus on utilization of river and ground water alone, we need to include in the overall water resources management the *green water* component, which is the water that enters into the soil and which is available for plant growth. The *green water* component comprises at an average 2/3 of total rainfall. The overall *green* and *blue water* flows are given in Figure 1 for Kenya, where a Green Water Credits (GWC) project is running since 2007.

The challenge ahead is to improve at a large scale the use and management of rainwater in upstream rainfed land uses (agriculture, forestry and rangeland), which is called *green water* management. For example, current land management practices by farmers show the wasting of rain water by (i) high rates of surface runoff enhancing flash floods and erosion, and (ii) large losses by evaporation of water directly from bare soil. Upstream land users can improve rain water management while increasing the available blue water resources in terms of quantity and quality for the water users downstream. However, the downstream benefits of these farmers' water management services are at present largely unrecognised and unrewarded.

The knowledge and the tools to improve upstream management of arable, range and forest land are available (e.g. www.wocat.net) but they need to be implemented. To do so, investments need to be made by farmers. The Upper Tana catchment proof-of-concept in Kenya (GWC-Phase I) demonstrates the benefits of current and innovative water management practices. For exploratory investigation purposes only three soil and water conservation practices were considered – vegetative contour strips, tied ridges and mulching. The "with and without" scenario analysis of these practices indicated in a quantitative way large potential benefits in the form of reduced erosion, recharged ground water, reduced soil evaporation and increased yield.
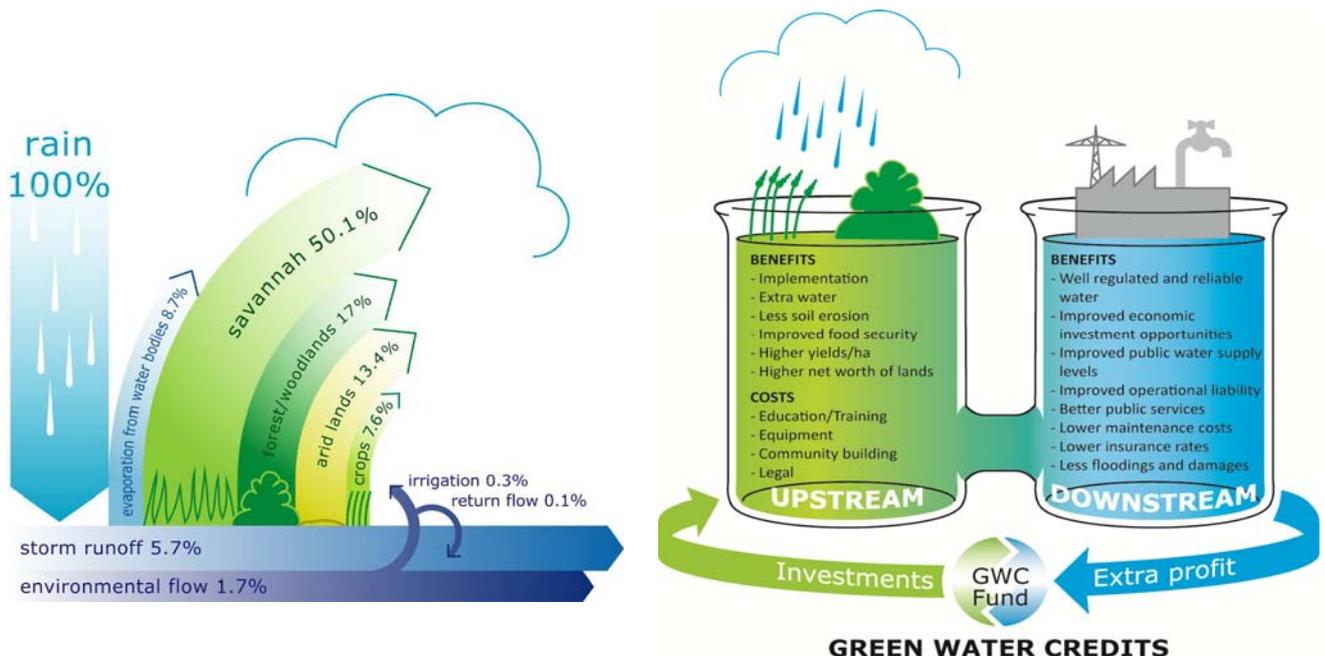

Figure 1: Overall green and blue water flows in Kenya

Figure 2: Upstream and downstream Costs and Benefits of improved water and soil management

Figure 2 summarizes the upstream on-site and downstream off-site benefits of these practices. Detailed quantified information is given in reports GWC 3 to 6, and a summary is presented in GWC Synthesis Report number 7 "The spark has jumped the gap" (ISRIC 2008), www.greenwatercredits.net.

Green water management will also absorb green house gases, in particular carbon dioxide, because more green water means higher transpiration, thus more biomass. This may lead to both above-ground and below-ground carbon dioxide sequestration. For example: (i) carbon dioxide captured in trees is a recognized mechanism when trees are not cut or used for fuel wood, and (ii) improved soil management may result in higher soil organic matter content, which could lead to a stable carbon pool in the soil. Above ground carbon sequestration falls under the Kyoto Protocol on Global Climate Change (e.g. current REDD programme). Carbon sequestration in the soil is recently being recognized and being made operational under the voluntary carbon market, using methodologies for activity-based Sustainable Agricultural Management of cropland, grassland and forest management (see www.v-c-s.org).

As of 2008, a Phase 1 "Proof Of Concept" GWC project is running in Morocco as well, where the Sebou basin in the North of the country is the study area. A new project is also being formulated for Algeria and a proposal has been submitted for China.

The GWC is a financial facility to support farmers, to make: initial investments (short term) and maintenance investments (long term) in appropriate green water management. GWC is a field application of WOCAT. WOCAT is key to the project, providing examples of successful green water management practices and a method to assess (e.g. mapping), monitor and evaluate these.

e) Land degradation and sustainable land management assessment using LADA/WOCAT tools across the Kagera river basin (FAO)
Sally Bunning and Monica Petri, FAO, Lehman Lindeque, FAO consultant
(3e_SLM_water_Kagera_Bunning et al.pdf)

The Transboundary Agro-ecosystem Management Project for the Kagera River Basin (Kagera TAMP), funded by GEF and implemented by FAO, has the goal to adopt an integrated ecosystems approach for the management of land resources across the basin, shared by Rwanda, Burundi, Uganda and Tanzania. The project will generate local, national and global benefits including: restoration of degraded lands, carbon sequestration and climate change adaptation, agro-biodiversity conservation and sustainable use and improved agricultural production, contributing to protection of international waters and food security and improved rural livelihoods.

An assessment of land degradation (LD) and SLM measures (hot and bright spots) is ongoing to be used for selecting intervention areas, enhance project strategy, and define best practices. The WOCAT-LADA-DESIRE questionnaire for mapping (QM) was used through participatory workshops with multidisciplinary team of experts to evaluate and map what types of land degradation are occurring, where and why and what is done about it in terms of SLM. Following a QT/QA training workshop with 12 SLM experts, WOCAT questionnaires are being used in the 21 target districts to assess SLM Technologies (QT) – specifying the measure, its extent impacts - and SLM Approaches (QA) –specifying who and how the technology was implemented. This aims to describe 40-50 best practices by end September.

The QM phase started with the baseline data shared with NBI-NELSAP and two workshops were conducted in Burundi and Rwanda with 21 participants to produce Land use systems (LUS) spatial databases and maps using land use (prepared using land cover, livestock intensity, and protected areas), crop types, livestock species, elevation, slope, rainfall, temperature, soil, population density and poverty. The LUS baseline with an administrative overlay was used during three participatory expert workshops (QM) in Rwanda, Uganda, and Burundi with 16 to 31 experts per country. The driving forces–pressures–state–impacts–responses framework (DPSIR) was used to describe the general and detailed LD-SLM situation in all defined map units. Up to 80 demonstrative maps per country were produced including: trend in land use change; LD indicators such as extent, degree, rate, severity, principal types; extent and effectiveness of existing SLM; LD and SLM impacts and most important direct and indirect causes by LD types; conservation practices and objectives of measures; and best practices. Data and maps are under validation.

The main improvement of the WOCAT-LADA-DESIRE QM methodology included the preparation of a transboundary/basin wide homogenization, the application of LADA WOCAT method in very short time (usable results produced within 7 months), and the production of a set of QM maps enabling non GIS users to easily make use of the database. The use of QT/QA assessments will add to the knowledge base and inform on SLM demonstration, training and scaling up with partners in the target catchments and districts and for scaling up across the basin. Final result will include a rapid but robust understanding of LD/SLM (effectiveness/adoption/adaptation/ cost/benefit) including: territorial assessment of LD

impacts and causes; identified SLM technologies and approaches for promotion and community action; the assessment and monitoring of SLM interventions to address LD, productivity decline, food insecurity and to enhance ecosystem services and generate global environmental benefits.

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4) SLM Mapping: Implementation and informed decision making
Lehman Lindeque, LADA/WOCAT South Africa (4_SLM Mapping_Lindeque.pdf)

The objective of the presentation was to report on and illustrate processes contributing to informed decision making based on the mapping of Land Degradation (LD) and Sustainable Land Management (SLM) in South Africa. The presentation focused on four topics which explain the logic of informed decision making. First, data collection and consensus mapping, secondly, understanding the LD problem, thirdly, analysing the current response to LD, and finally, the design of suitable future SLM responses to address specific LD problems.

Consensus mapping and the importance of data calibration and harmonization was explained by describing the methodology, followed by the Participatory Expert Assessment (PEA) Workshops in South Africa as part of the Land Degradation Assessment in Drylands (LADA) Project's National Assessment of LD and SLM. The flow of events, the potential use of WOCAT/LADA QM variables as well as WOCAT QT and QA were used to explain the process towards informed decision making and designing suitable and sustainable SLM options to address LD. To describe the LD problem it is important to understand the flow of events: the drivers of LD influence the direct pressures; the direct pressures cause specific degradation types which lead to negative impacts on Ecosystem Services. All of this explains the current state of LD in the region.

Analysing the current responses to LD has two parts: firstly, the current response needs to be described using QM variables like conservation groups and measures. Secondly, the effectiveness of those responses need to be evaluated looking for example at variables like 'Effective implementation and maintenance', 'Effectiveness trend' and 'Reasons for changes in effectiveness trends'. These current responses will also have an impact on Ecosystem Services, and together will explain the current state of SLM in the region. In addition to the variables from the QM and the expert recommendations by contributing specialist during the PEA Workshops, other useful data sources also exist which can provide useful additional information to contribute towards informed decision making. The information derived from the QM Matrix, expert recommendations and additional data sources all help to determine if a specific area is a priority for intervention. Although the QM Mapping data will provide the backbone for deciding on priority areas, land users and other key stakeholders still have to give inputs and eventually reach consensus on the identification of priority areas for intervention as illustrated in Figure 3.
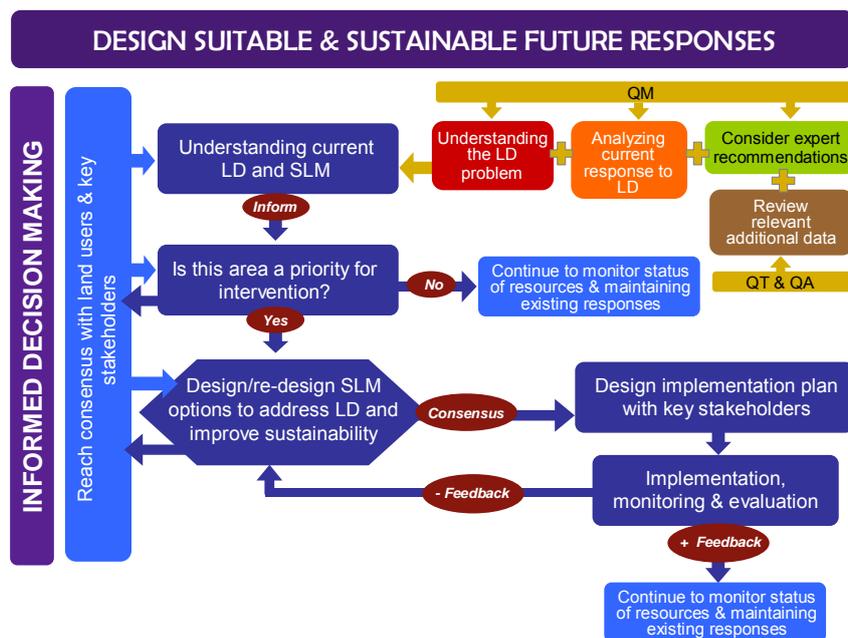
Figure 3: Flow diagram illustrating the design of suitable and sustainable future responses based on information from regional mapping of LD and SLM

A better understanding of LD and the current response to LD will inform, together with stakeholder inputs, the design of SLM options to address LD and improve sustainability. Once consensus is reached, an implementation plan or NRM Strategy is developed, again with inputs from key stakeholders. Implementation, monitoring and evaluation are the next steps, as feedback on the progress made towards the sustainable management of natural agricultural resources is important. Monitoring and evaluation results need to be fed back into the decision making process and in some cases it might be necessary to re-visit 'priority areas' and also the re-design of responses in order to ensure continuous improvement and achievements of goals and objectives.

In conclusion, the WOCAT/LADA QM methodology and data provide a solid base for informed decision making at both national and sub-regional levels. The importance of understanding the LD problem, the current response and some important cause-effect relationships are vital in designing suitable sustainable future responses towards SLM. Finally, the importances of consensus for ownership, feedback and monitoring for the continuous improvement of informed decision making have been emphasised.

5) SLM and pastoralism (local assessment, mapping and priority setting) (NCCR North South)

Presentation by Inam Ur-Rahim (5a_SLM_pastoralism_herder manual_Inam.pdf)
SLM and Pastoralism: supporting local knowledge through the Herders' Manual

There was a need for transferring knowledge through a herder's manual from skillful to unskillful herders who joined the livestock sector after de-collectivization. Existing tools have proved to be inefficient (McLeod 1997). The Pasture Law enables management at the village level. The manual is a pilot decision tool with potential for global knowledge management applications. There was a need for a simple manual, elaborated with local knowledge.

The novelty stands in that the manual combines traditional and scientific knowledge using participatory approaches to increases ownership and acceptability. It simplifies the classical monitoring tool to make it understandable for the herders. It adjusts the scale of assessment to make it applicable by the herders. It tailors monitoring to the institutional framework to make it relevant to the management system.

The manual is composed of sections on: (refer to Annex 1B for more details)

- the 100 most desired fodder plants
- the 20 most unwanted plants
- determining the available grazing biomass
- monitoring pasture quality and productivity

- improving pastures
- estimation of livestock weight
- feeding
- breeding
- housing
- health management and disease control

Presentation by Henri Rueff (5b_SLM_pastoralism_symposium_Henri.pdf)

Recap.of the International Symposium, Pastoralism in Central Asia: Status, Challenges and Opportunities in Mountain Areas Bishkek / Kyrgyzstan, 13-18 June 2011

Henri Rueff presented the outcomes of the Pastoralism Symposium held in Bishkek the week before the WOCAT ShareFair.

It was decided to have this Symposium because of the importance of the livestock sector in the region, the Pasture Law bringing a new management setting, the launching of a Herder's Manual developed for Kyrgyzstan, the launching of the Mountain Societies Research Center at the University of Central Asia and the launching of its background paper on Pastoralism in Central Asian Mountains, and to facilitate the development of a vision, policy and action plan(s) for pastoralism in Central Asia.

Issues discussed addressed pasture rehabilitation, improved infrastructure, payment for ecosystem services, social services, market access, pastoral economy and value chain, alternative income sources, policy dialogue, breeding and veterinary support, new functional pasture institutions, and exchanges of know-how.

It was decided to create an information platform / network to share knowledge and experiences, to have publications from the Symposium, to elaborate a "Pastoralism Pamphlet", to have tighter cooperation with WOCAT, WISP & others, to develop new long-term project proposals that address herders'needs.

6) **SLM and new developments / innovations: Thermal insulation of houses and energy efficient stoves in Kyrgyzstan – challenges and possibilities (CAMP-Alatoo)**
   Ruslan Isaev and Janyl Kojomuratova, CAMP Alatoo, Kyrgyzstan (6_SLM new developments_CAMP_Ruslan.pdf)

Since 2001 CAMP Alatoo is working on development, approbation and dissemination of different energy efficient technologies which can be applicable in rural areas of Kyrgyzstan by local population. One of the most successful initiatives has become thermal insulation of houses, energy effective stoves, construction of energy efficient buildings.

Living conditions in the poorly heated rural houses are difficult. At the same time rural population hasn't access to information about energy saving technologies. In addition the earnings of rural population forbid to invest in improving of energy efficiency of their houses. For raising the awareness of local population CAMP Alatoo conducts information campaigns, holds exhibitions of different energy efficient and renewable energy technologies, L4S on energy efficiency. In order to securing of local population with services of qualified masters we train local craftsmen to insulate the houses, construct energy efficient

stoves, provide consultancy etc. To secure the financial sustainability of energy efficient measures dissemination CAMP Alatoo provides local population with low-interest microcredits or attracts additional funding through other microfinancial institutions.

The activities of CAMP Alatoo in the energy efficiency field is aimed at reduction of CO_2 emissions, improving of peoples life conditions in rural areas, and also there is influence on decreasing of deforestation in the area of villages which involve in our projects. Thus we are striving for meeting the requirements of ecological, social, institutional and economical sustainability.

CAMP Alatoo is providing trainings on construction of energy efficient stoves and thermal insulation of houses. During trainings conduction we set up of groups of masters for cooperation in marketing and quality management.

The technologies of thermal insulation of houses proposed by CAMP Alatoo are based on usage of low-priced and available local organic materials. These technologies do not require complex and special skills. We use different methods of insulation with using of clay, straw, wool, sawdust, cane reed etc.
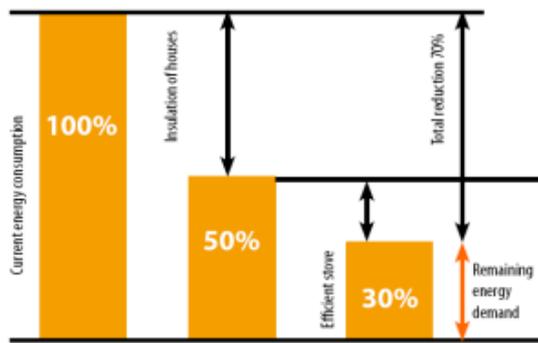
One of the essential effects of implemented energy efficient measures is the possibility of reduction of greenhouse gas emissions. According to the calculations made by specialists of CAMP Alatoo the potential of greenhouse gas emissions reductions approximately accounts for 33,5 – 46,9 kg equivalent CO_2/m² annually. When implementing energy efficient measures in 100 houses one could obtain the reduction of CO_2 emissions by 234 – 328,3 tons.

In consideration with potential of greenhouse gas emissions reductions CAMP Alatoo together with its Swiss partners CDE and MyClimate developed corresponding methodology and submitted it to the CDM Board of UNFCCC. In the event that the methodology approved there is a possibility of attraction of additional funding to invest in implementation of energy efficient measure in rural areas of Kyrgyzstan.

As theme of energy efficiency become very popular among villagers in mountain regions CAMP Alatoo cooperates with different partners like BMU, GTZ, REPIC, Government of Principality of Liechtenstein, UNDP, CDE, CEEBA, AGOCA, BIOM, WECF, CAMP Kuhiston, KNIIPSS, KAWS, Kompanion, MyClimate, Habitat for Humanity Kyrgyzstan, UNISON to dissaminate the expirience in ovecountry.

Poster market on some project, national and regional achievements

An introduction to the poster session was given in the plenary hall. Several thematic posters were introduced by presenters on the screen of the plenary hall. Presenters were allowed to promote their poster shortly and explained more details during the poster market.

The following posters were presented (pdf versions on CD):

1) Sustainable Land Management: Mitigating disaster risks and improving livelihoods
   Khalid Azami, Sylvaine Rieg, Helvetas Swiss Intercooperation, Afghanistan

2) China:
   a) PRC-GEF Partnership on Land Degradation in Dryland Ecosystems: Management and Policy Support to Combat Land Degradation I and II

   b) Introduction of China-GEF Partnership on Combating LD in Dryland Ecosystem
   Zhang Kebin: ADB/GEF consultant / Beijing Forestry University, China

3) Rangeland monitoring and management in Mongolia
   Dr. M. Bayasgalan (Environmental Information Center), Dr. A.S. Khaulenbek (Institute of Geoecology of MAS), R. Bolor (Coping with Desertification Project of SDC)

4) Best practices in Senegal
   Déthié Soumare Ndiaye (Ecological Monitoring Centre), Ndéne Lo, Ndeye Sokhna Fall, Samba Sow, Ibrahima Deme (National Institute of Soil Pedology)

5) Understanding land degradation and the current response to degradation to inform decision making on sustainable land management, South Africa
   G.H.L. Lindeque (Department of Agriculture, Forestry and Fisheries), L. Lotter (Agricultural Research Council)

Presentation of posters by Khalid Mohammad Azami, Sow Samba and Zhang Kebin (Photos: HP. Liniger)

Participants at poster market (Photos: J. Zähringer)

The hosts and co-hosts displayed their work related to SLM in booths:
-   CAMP
-   GiZ / CACILM, (poster pdf versions on CD)
-   UCA
-   NCCR North-South

Global WOCAT posters (pdf versions on CD):
1) WOCAT 1: Knowledge Management & Decision Support for Sustainable Land Management
2) WOCAT 2: Decision support & Mapping Land Degradation and Conservation Tools
3) WOCAT 3: Integrative Watershed Management – a tool to assess SLM technologies and approaches working as a system
4) WOCAT 4: Where the land is greener
5) WOCAT 5: SLM in Practice

WOCAT Share Fair (day 2): A joint way forward, challenges and opportunities for SLM knowledge management and decision support

Moderator: Markus Giger, CDE

Input presentations on joint efforts towards SLM knowledge management and decision support showing benefits of spreading SLM

- at regional level
- at national level

Input speakers with key messages

1) SLM oriented projects in Tajikistan: experience and lessons learnt from WOCAT methodology application
German Kust, Environmental Consultant Member, World Bank, Natural Resource Management Task Team, (Tajikistan) (1_Tajikistan_World Bank_Kust.pdf)

World Bank Natural Resource Management Task team is interested in WOCAT methodology application in Tajikistan, because we consider WOCAT developing methodology useful to design new SLM oriented projects, to find ways to apply and disseminate good SLM technologies on global, regional and local levels. Successful experience from WB projects in Tajikistan to earmark capacities within SLM projects is in the areas of: eligibility criteria and participatory environmental analyses for selecting and assessing SLM investments; participatory planning and environmental trainings at initial stages with further M&E plans. To further streamline SLM in related projects several groups of indicators are necessary to apply for sustainability purposes: Eligibility indicators, M&E indicators, Outcomes/outputs indicators.

Challenges to use WOCAT as a possible facility to streamline SLM: (i) Difficulties in the practical application of technologies/approaches for different decision makers: appropriate SLM choices across the highly variable agro-climatic and other geographic conditions; (ii) Difficulties to document/describe integrated technologies and/or big projects: appropriate choices across different scales of application, (iii) Necessity for the components on risk assessment and M&E requirements for proposed activities, (iv) Necessity of the DBase for ideas/methods/messages in addition to technologies and approaches: appropriate choice across efficiency and effectiveness for specific conditions and redundancy of information on technology in some cases (e.g. for beekeeping, terracing slopes, canal rehabilitation, etc),

To increase the value of WOCAT for big multipurpose projects (such as WB or governmental projects) it will be necessary to supplement the TAM (techs-Approaches-Mapping) DBase with an "Ideas/methods" component. To attract more institutes and specialists to the documenting of the current data base it is necessary to make the form more flexible, providing the opportunity to less detailed documenting of the technology/idea/approach.

The possible ways of the WOCAT development also might be: (a) Simplification of the data base for local users, (b) Structuring of the data base for target groups and purposes, (c) Providing possibility to describe/document integrated/complicated technologies and SLM/SWM practices, (d) Using separate tools to describe/document big multipurpose SLM/SWM oriented projects, (e) Providing possibility to discuss and edit/develop/improve entries to other partners and specialists including possibility of working with off line drafts, (f) Providing possibility in some cases with separate tools to analyze and describe/document negative and successfulness SLM attempts, (g) Cooperation with educational/knowledge/excellence centers on the elaboration and preparation of SLM educational modules for target groups and purposes, (h) Further development of the approaches to identification appropriate technologies/ideas in a country/site/community specific context and tools for decision support, (i) Overcoming of language barriers, (j) Access for those not connected to internet.

2) Regional knowledge-management under CACILM
Presentation by CACILM Multi-country Secretariat/GIZ/CACILM Multi-country Capacity Building Project
Jamal Annaklycheva (CACILM Msec Bishkek) and Vitaliy Gromov (CACILM MCB, Bishkek) (2_CACILM_Jamal.pdf)

Central Asian Countries Initiative for Land Management (CACILM) is a partnership of five Central Asian countries and the donor community[1] dedicated to combating land degradation and improving rural livelihood. CACILM was launched in 2006 and became operational in 2007 in all five countries. CACILM is being implemented in a multi-country framework based on national programming frameworks, as well as through the national activities spanning in all five countries. CACILM is implemented in phases: the first phase was realized during the period of 2007-2010; it is envisaged that the second phase of the programme will commence in 2012 and will be carried out till 2015. In 2011, an interim phase focuses on the consolidation of generated experience of the first phase and the mobilization of resources for the future phase of the programme.

Twelve national projects and four multi-country components/projects (Research, Knowledge Management, Information System, Multi-country Capacity Building Project) became operational during CACILM 1st phase. Presently, one of the national projects and two multi-country components (Research, Information System) are completed and the rest are in the final phase of capitalization of their diverse experience. During CACILM 1st phase the focus was given to the initiation of national and multi-country activities, setting up the national and multi-country structures and the monitoring and evaluation of programme activities. In 2011, CACILM undergoes a transition phase of reorienting its objectives towards a service provider. Future CACILM phase puts a value added to the regional knowledge management system. There is a shared understanding of knowledge management as a process which will enable people to share and transfer knowledge between the countries and apply them.

The organization of the Regional Knowledge Management system stems from the number of facts: (i) the Central Asian countries demonstrated different progress in development and application of technologies and approaches and therefore there is a need and an opportunity to transfer the knowledge over the countries, (ii) the CACILM community[2] which represents the immediate circle of CACILM partners requires the knowledge in various aspects and, hence, will be under priority focus during CACILM future phase, (iii) there is still a need for better advocacy and lobbying of CACILM mission, and (iv) establishment of cooperation and exchange of information with other regional or global SLM knowledge management networks.

In order to create the effective Regional Knowledge Management (RKM) system the understanding of its multi-task function has been reached, namely "supply-orientation" and "demand-orientation" tasks. The "supply-orientation" task of the Regional Knowledge Management system is to create a "basket" of knowledge generated during CACILM 1st phase and disseminate them, whereas "demand-orientation" will focus on identification of requests and needs of the users and the creation of mechanism of effective and timely response. Both types of activities should run in parallel and complement each other.

In 2011, the CACILM team composed of the staff of the Multi-country Secretariat and the staff of the Multi-country Capacity Building project[3] joined their efforts to fulfill the 1st task of RKM to consolidated existing SLM knowledge in the region. In the process of studying available and generally accepted tools for documenting best practices KM component and MCB project jointly decided to choose an internationally recognized tool WOCAT. Its main advantages are the open accessibility of the documented practices in online database, the comparability of best practices, the possibility of a bilingual documentation (English and Russian), long-term storage of information and opportunities to make a standardized printed form from online versions.

Ten resources persons (2 in each country) were trained in the process of documentation during the regional workshop in Dushanbe in April 2011 followed by the series of the national workshops in each country to present and discuss the best practices. As a result, totally 66 practices were presented and 29 were selected for documentation. It is planned to finalized documentation by the end of 2011. A dissemination strategy for CACILM Regional Knowledge Management system will be elaborated to identify target groups, means and ways of dissemination.

CACILM programme is on the half-way of its experience with WOCAT tools and procedures. Still, given the value also to the process and not only to the "end product", we can draw some conclusions at this stage:

a) WOCAT proved its well-known status and therefore was attractive for participants in the national workshops to share their information; however, nobody was ready to contribute financially;
b) WOCAT Questionnaire format does not allow all relevant technologies and approaches to be documented properly;
c) WOCAT applies eligibility criteria for SLM which are too loose;
d) Capacity of WOCAT resource persons should be regularly maintained and increased.

Considering the above statements we clearly see that WOCAT is one of the tools and platforms which are recommended to use to establish CACILM Regional Knowledge Management system. Presently, the programme is facing a challenge of developing other knowledge management tools.

As CACILM is a multi-country and multi-donor programme the challenges for the establishment of the Regional Knowledge Management system remain as follows:

a) Keywords are "interest" and "motivation" of all partners in creating and maintaining of Knowledge Management system;
b) What is required is a clear agreement on coordination and sharing information between all partners (MoU);
c) Impact Assessment is required on how KM is translated into national and regional activities;
d) To foster culture of exploiting existing knowledge by decision-makers;
e) Give more importance to development of human resources at programme level!

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[1] ADB, Canada, Germany, GEF, Global Mechanism, ICARDA, IFAD, Switzerland, UNDP, UNEP (2006)

[2] Staff and partners of CACILM national projects, CACILM National Secretariats in five countries, CACILM Multi-country Secretariat, members of the National Coordination Councils in five countries, the UNCCD National Focal Points, members of the CACILM Steering Committee.

[3] According to the project document, MCB project is an integral part of CACILM programme and its outcome (Outcome 4: Collection and dissemination of BPs at the regional and national levels) is developed to complement CACILM Knowledge Management component

Input presentations delivered by Jamal Annaklycheva, Déthié Soumare and Yves Guinand
(Photos: HP. Liniger)

3) Land and water resources management in Central Asia (FAO)
Giovanni Munoz, presented by Sally Bunning and Matraim Jusupov (3_FAO Central Asia.pdf)

The Land and Water Division of the FAO Subregional Office in Ankara, (SEC) is providing capacity development in natural resources management in the region including i) training on reform of the irrigation sector: Irrigation Management Transfer as an option to improve irrigated agriculture performance, ii) training on the development of national drought preparedness plans, iii) workshop on introduction of service oriented management for medium and large irrigation schemes, and iv) training on tools and methodologies to improve water productivity.

A regional project is under preparation titled "Mutually acceptable mechanism on integrated use of water resources in Central Asia through applying a Scenario Approach".

At the national level:

Tajikistan: Support to the ongoing reform of the Ministry of Land Reclamation and Water Resources. This includes support on the implementation of Integrated Water Resources Management, the creation of river basin authorities, and the design of a plan for irrigation management transfer to farmers' organizations.

Turkey: Support to the government for the "climate proofing" of agricultural policy, including improvements to the National Drought Action Plan.

Kyrgyzstan: On-going project demonstrating the benefits of objective assessment and systematic development of modernization plans for irrigation schemes and improving water productivity at the farmers' plot level by optimizing water use through the use of Farmers' Field Schools.

Uzbekistan: Ongoing project to identify priority areas for investment on water saving technologies in a small transboundary basin (the upper basin is in Kyrgyzstan).

Through the above mentioned FAO irrigation projects implementation about 14 000 vulnerable rural households with population of 80'000 people will be constantly provided by irrigation water in 2011, and they will be able to optimally use water due to improved water resources management.

The support will be provided to farmers for implementation of modern agricultural methods and more diversified activities to gain profit.

4) Institutionalizing Learning for Sustainable Land Management: Proposal to establish an SLM theme within University of Central Asia's Mountain Societies Research Centre
Chad Dear, Senior Research Scientist, Mountain Societies Research Centre, University of Central Asia (4_UCA_Chad.pdf)

University of Central Asia's Mountain Societies Research Centre (MSRC) aims to support and enhance the resilience and quality of life of mountain societies through sound research on the sustainable development and management of their physical, social, economic, and cultural assets. Improved understanding of the effectiveness of various sustainable land management techniques and approaches as climate change adaption and mitigation measures and the dissemination and adoption of such understanding is consistent with MSRC's aims. MSRC is therefore exploring options to establish a unit within MSRC that will serve as a hub for promoting the generation, dissemination, and application of knowledge regarding sustainable land management in mountainous Central Asia. The proposed objectives of the SLM Unit are as follows:

Objectives

1. **Monitoring:** Provide technical support to actors who are monitoring vulnerability to climate change, the resilience of sustainable land management technologies and approaches as well as their potential for climate change mitigation using the WOCAT and other tools.

2. **Applied research:** Identify and enhanced options for climate change adaptation for smallholder farmers through a programme of research with clear applied outputs and that is carried out by collaborative teams including local and international researchers.

3. **Knowledge platform:** Identify, collect, organize and make publically available SLM monitoring data, research outputs, and other electronic learning resources relevant to SLM in Central Asia.

4. **Trainings:** Develop and implement short-cycle trainings for government extension workers and NGO staff aimed at better informing them about SLM technologies, approaches and enabling legal environments. Trainings will be administered through UCA's School of Professional and Continuing Education (SPCE).

5. **University teaching:** Inform UCA's future undergraduate and graduate-level university curriculum using SLM documentations, learning resources, and research that is specific to Tajikistan.

MSRC will continue to work with partners to refine the concept, identify appropriate funding sources, and if a good fit is found, develop a full proposal to establish the unit.

5) SLM knowledge management and decision support in Senegal, Ministry of Environment and Nature Protection, Senegal
Déthié Soumare Ndiaye (5_MoE Senegel_Dethie Soumare.pdf)

Located in the Atlantic Sahel region of Sub Saharan Africa, Senegal is has an extent of 196,722 km² (192,000 km² of land and 4,722 km² of water) and a population of 9,952,000 habitants. Decades of diminishing rainfall and growing population have put increasing pressure on natural resources, making soil less fertile and affecting crop and livestock production. The loss of soil productivity emerges as the most symptomatic *consequence* of soil degradation. Investments in the agricultural sector are still concentrated in the areas where irrigated crops predominate, whereas poverty is more emphasized in rainfed agriculture areas, the wider part of the country. SLM practices are then essential to restore/maintain soil productivity and to improve rural population livelihoods (more than 2/3 of the total population). But promoting SLM countrywide in a context of financial resources scarcity and with a wide diversity of actors involved is challenging. Information on existing knowledge should be made available (capture, document, share, update), but also tailored to support decision making at various level and for various actors. A knowledge management system is therefore very useful to collect, organize, analyze and share information on SLM practices on a permanent basis.

In Senegal, many measures aiming at addressing LD and promoting SLM have been taken during past decades:

- the reorganization of the institutional framework;
- the upgrading and fine-tuning of rules and regulations, strengthened by the signature and ratification of several international agreements; and
- the development of several strategies & programmes (NAP/Environment, NAP/CCD, NAPA, SNDD, PRSP, PNIA, LADA, GDT, etc.)

A key step in this process is the project of establishment of a national framework for investment in SLM (CNIS-GDT), an operational and multi-sectoral framework including all stakeholders and aiming to align interventions, mobilize and streamline resources and help decision making.

Despite all these efforts, many constraints remain: no clear definition of respective missions of main SLM actors, scarce financial resources, lack of synergies (sectoral approaches) between SLM actors, lack of synergies between Conventions, lack of robust and tested tools, lack of a common methodological framework and the absence of a common knowledge management system for data collection, management and sharing.

The WOCAT tools gave an important contribution in this regard, helping realize an integrated assessment of land degradation/sustainable land management and an analysis of the way institutions and policies influence how people use the land resources. They have been also used to identify and document existing knowledge on SLM (technologies as well as approaches. All these information were organized in and share through the WOCAT database.

Though it's demonstrated that a national framework is a key step for spreading SLM, it's important to keep in mind the necessity to find the best strategy to make such a framework run on a permanent basis and help improve rural population's livelihoods as well as national agricultural sector performances.

6) Land Degradation Combating and Sustainable Land Management in China and Introduction of China-GEF Partnership on Combating LD in Dryland Ecosystem
Prof. Zhang Kebin, ADB/GEF project consultant and LADA China Team, College of Soil & Water Conservation, Beijing Forestry University, China (6_Beijing Forestry University_GEF_Zhang Kebin. pdf)

China is one of the countries suffering from severe land degradation. Most of its arid and semi-arid areas are distributed in the Northwest part of China, covering a land area of 3.45 million square meters and accounting for 35.9% of the total land area of China. Erosion area has reached 3.56 million square meters, covering 37% of China's total land area. Total sandy desertification area in China has as well reached 1.74 million square meters, accounting for 18% China's total land area. More than 400 million peoples have been affected and annual direct economic loss caused by desertification is about $77 billion. And serious desertification threatened the country's ecological environment, economic development, social harmony, and sustainable development.

Since 2000, many effective measures have been adopt by China in Land Degradation Combating and Sustainable Land Management, such as in laws & regulations system, policy mechanism, scientific planning for NAP, integrated and practical measures LDC, desertification combating investment mechanism, desertification monitoring system, implementations of UNCCD in China enhanced and good relationship established between China and the Secretariat of UNCCD and other UN bodies. Great achievements have been achieved in past years.

China-GEF Partnership on Land Degradation in Dryland Ecosystems is the first of it's type in combating land degradation, aiming at seeking for new approaches to address land degradation and to provide a model and experience in using Integrated Ecosystem Management (IEM) to combat land degradation for other regions in China and other developing countries by creating a cross-sector, cross-industry and cross-region sustainable natural resource management framework to integrate funds from government at central and local levels and international organizations and optimize allocation of resource and funds so as to establish a renovated management system and an improved operational mechanism. ADB was selected as the executive agency of the GEF project.
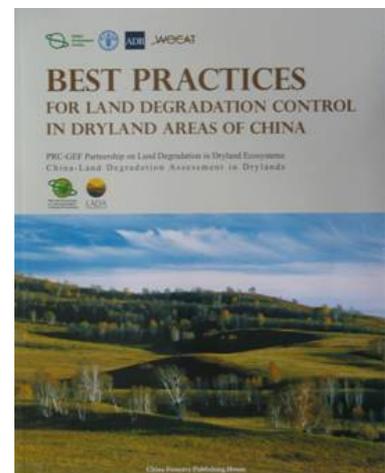
China has been one of the six pilot countries since 2002 for FAO-LADA project. LADA National, LADA Local (six pilot sites), Training activities (domestic and international) and Capacity building are the key activities in implementations of the project in China.

WOCAT has been China since late 1990s and the big achievements are the publication of Vol. I of Best Practices in LDC in China (in WOCAT format) in 2008 and Vol. II of Best Practices in LDC with 18 cases will be ready in 2012 by end of GEF/ADB Project.

7) Sustainable Land Management Institute Organization (SLMIO) - Building foundations for SLM in Afghanistan
Mr. Helaluddin Musadiq (7_SLMIO Afghanistan_Helaluddin M.pdf)

Sustainable Land Management Institute Organization (SLMIO) is a non-governmental organization based in Bamyan (Afghanistan). SLMIO is a collaborative initiative. Its founding members are Bamyan Government, Bamyan University, Department of Agriculture, Irrigation and Livestock (DAIL, Bamyan), Aga Khan Foundation (AKF), Catholic Relief Services (CRS), International Centre for Integrated Mountain Development (ICIMOD), United Nations Environment Programme (UNEP), HELVETAS Swiss Intercooperation, Swiss Agency for Development and Cooperation (SDC), Jesuit Refugee Service (JRS), Solidarités International and Group for the Environment, Renewable Energy and Solidarity (GERES).

SLMIO's vision: Afghanistan's landscapes become greener and socio-economic and ecological benefits of rural population are maximized in an equitable and sustainable manner.

SLMIO Mission: To enhance Afghan professional capacities, share knowledge and support decision-making processes in sustainable land management, particularly in connection with integrated water resources and watershed management.

SLMIO Outcomes

Outcome 1: Knowledge and skills of natural resource management professionals, students and land users on SLM has been enhanced. SLMIO will develop and offer practical training and academic courses on SLM.

Outcome 2: Rural community institutions have managed their land and water resources by applying participatory and integrated SLM practices. SLMIO will offer consultancy services to interested institutions on SLM and undertake technology development.

WOCAT training (Bamyan; 2010)

Outcome 3: Sustainable and locally relevant land and water management techniques and tools relevant for Afghanistan are documented and shared. SLMIO will train NRM/SLM practitioners on WOCAT tools, facilitate documentation of SLM case examples from Afghanistan and establish an active Afghanistan Conservation Approaches and Technologies (AFCAT) network with links to WOCAT and HIMCAT.

Benefits of AFCAT:

1) Sharing lessons learned and best practices on SLM.

2) Build capacities of Afghan professionals on SLM.

3) Use of SLM knowledge in designing national strategies.

4) Enabling synergies between SLM approaches and methodologies applied by various development organizations.

5) Enhancing knowledge on mitigation and adaptation to climate change.

6) One voice on SLM at national and international fora.

7) Decision support for implementation of SLM practices leading to improved livelihoods and environment.

SLMIO donors: Swiss Agency for Development and Cooperation and SLMIO members.
Web-site (under construction): www.slmi.org.af

8) Getting SLM knowledge to the people - opportunities and limitations in Kyrgyzstan
Joomart Jumabekov / Elisabeth Katz, Rural Agriculture Service, Helvetas *(8_Rural Agriculture Service_Katz.pdf)*

The SLM knowledge and decision support system in the Kyrgyz Republic

The figure shows the SLM knowledge and decision support system in the KR with its main players. The arrows show where the system is strong or less strong. The most remarkable points are the following:

- Knowledge dissemination for common agricultural topics is fairly strong, but focusing on rather conventional topics and practices.

- Land management knowledge generation takes place, but at a much less intensive scale than e.g. in Tajikistan, although the level of land

management problems is high in the Kyrgyz Republic, while dissemination to users is weak.
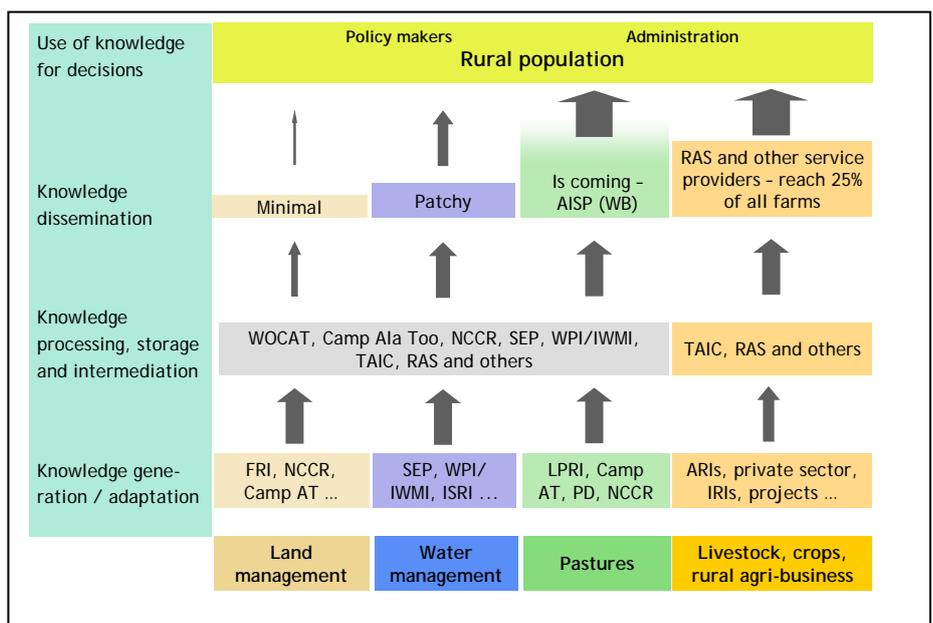
- At the knowledge processing level, better coordination and collaboration between the different players would enhance effectiveness of the system.

- For water management, knowledge generation and processing are taking place at a reasonable scale, while dissemination is still limited to selected locations.

The Rural Advisory Services (RAS)

- The RAS are one of the key actors in the SLM knowledge and decision support system in KR, and the only one which can bring SLM knowledge directly to rural people on a large scale.

- Network of six independent regional public foundations operating in all Raions of the country

- Established 1999 in the whole territory of the KR with support of the Government of Switzerland and the KR, and the World Bank

- Service areas: Virtually all agricultural production topics, small rural business development, organisational development. Some "proper" SLM topics such as pasture, soil fertility and irrigation management are also in their repertoire and have gained importance recently.

- The RAS in their 10 years of existence worked in over 70% of all Aiyl Okrugs and over 50% of all villages. They reached an estimated 25% of all farms and had in total over 50000 permanent clients (nearly 20% of farms). In 2010 their annual turnover was over 40 million KGS (nearly 1 mill. USD). The clients in 2010: Farmer Koshuuns, other farmers and organisations, Ministry of Agriculture, SDC, WB, FAO, GTZ, UNDP, other donors, Micro Credit Agencies and more.

- An outcome assessment carried out in 2010 showed that through RAS services farmers on average increase the productivity and profitability of the respective farm branches by between 20 and over 100%.

9) SDC's current engagement & challenges in SLM & desertification in the light of WOCAT
Yves Guinand, Programme Manager and Focal Point UNCCD, SDC Switzerland (9a_SDC_Guinand and 9b_SDC-Speech_Yves Guinand.pdf)

The Swiss Agency for Development and Cooperation over the past two years encompassed a major reorganization putting into question its development efforts and its focus. Desertification has been one of the issues that needed to be discussed in terms of value and importance within SDC but also for Switzerland. Measures to mitigate and adapt to desertification such as sustainable land management (SLM), has always been an important concern to SDC and Switzerland, but mainly in terms of direct project and programme implementation in the field but less important on the political and the policy side such as the potential support for the implementation of the convention to combat desertification. However, this is changing and that the Swiss Agency for Development and Cooperation's directorate recently decided to engage further and to give more visibility to desertification and SLM issues in general and particularly on the political agenda. There are a couple of milestones on the political agenda this year and next year such as the Conference of Parties, the so-called COP, of the UNCCD in October in South Corea. Previous to this event there will be a high-level Conference at the General Assembly of the United Nations in New York in September, where our president, Mrs. Michline Calmy Rey is likely to head the Swiss delegation, and in 2012 there will also be the 2nd Scientific Conference on desertification that most likely will be organized back to back with another conference in Switzerland of the convention to combat desertification.

Switzerland pro-actively influences the UNCCD reporting system, particularly the reporting templates for best SLM practices. Switzerland lobbied for example at the Committee for the Review of the Implementation of the Convention (CRIC) No 9 in Bonn last February, that existing experiences and work such as the one of the WOCAT network should seriously be taken into consideration for the further development of the country reporting system for the UNCCD monitoring of the implementation of its 10 year strategic plan 2008-2018. To be able to better participate and influence this reporting system, Switzerland would offer an expert to the developing team that works on the development of the reporting system.

The Centre for Development and Environment (CDE) is a longstanding and reliable partner of SDC. CDE proved over the years with its outstanding and innovative work, particularly on environmental issues as well as on sustainable use of natural resources that the substantial financial engagement of SDC was, has been and still is justifiable. And certainly and more over the outstanding work that WOCAT and its secretariat that is part of the CDE, has accomplished on the development of tools for sustainable land management. Over the last years WOCAT has evolved into a leading implementation-oriented, internet-

based information and knowledge exchange tool world-wide. It is not only used by developing country partners of SDC but increasingly in emerging countries and even in industrialized countries. However, SDC also noticed that at times WOCAT is getting overstretched and its secretariat lacks adequate staffing. Furthermore, there are undeniable institutional constraints for WOCAT that hinder the diversification of the financial basis as it would be needed for further and future development.

As the Swiss Agency for Development and Cooperation's funding to WOCAT Secretariat is coming to an end in December this year, a review and evaluation of WOCAT performance is currently on-going. The consultant is at the WOCAT Share Fair in Kyrgyzstan and will interview some of the workshop participants in the coming days. The objectives of the review are to assess the WOCAT programme, and make recommendations for its future development & financing mechanisms.

Under the Global Programme on Food Security, the Swiss Agency for Development and Cooperation remains the most important financial partner for CDE and the WOCAT secretariat. Over the years CDE and WOCAT proved capable to adapt & create new opportunities and to develop new partnerships. This innovative and adaptive capability should remain unchanged and is now once again needed when developing a new concept for WOCAT to enable the diversification of its financial basis.

SDC's financing is result-oriented, and long-lasting commitments are not necessarily the most important objective. WOCAT, especially its secretariat, is now under much pressure to open up, widen its funding opportunities and hence decrease dependence from SDC. The network character makes it difficult to establish exact figures but it is certain that total investments in the WOCAT network by local partners make up an important part but more can and needs to be done. However, to enable WOCAT to access funding resources such as the GEF, the Global Environmental Fund, and other international donor agencies, WOCAT might need to change its institutional set-up away from a CDE University-based secretariat towards and independent institution be it as an independent NGO or as a centre of excellence annexed to one of the international organisations or institutions that work on the SLM issue.

It is undeniable that WOCAT has been successful among many national and international partners in over 40 countries worldwide, but more can and needs to be done, specifically among research institutes of the CGIAR, the Consultative Group for International Agricultural Research, the GEF and particularly the World Bank. If these big institutions do not buy in or only partially, WOCAT's excellent approaches and tools might not have the success they deserve.

It is important to note that WOCAT has now come to a crucial turning point in its history whereby tools have been successfully developed and also presented and published. From now on focus needs to be geared towards institutional change at organisational level, the development of service modules to sell the approach at technical level, and towards more effective international lobbying at political level.

No doubt, success stories are at hand. China for example has taken over the WOCAT assessment tool and published a "Best practices guide for land degradation control in dryland areas of China". For this practice guide China has even taken over the whole layout for the presentation of the various approaches and tools. A loose not yet institutionalised relationship has started with UNCCD since 2009, but which still needs strengthening. But still, much needs to be done in this respect.

These were some thoughts that Yves Guinand shared with the plenum which did not completely reflect SDC's point of view.

Group work: WOCAT action carousel

Task for the group work:

A group work on streamlining SLM KM&DS on all levels was organized. The participants were split into seven groups. The questions 1 to 3 were addressed by two parallel groups and question 4 was addressed by one group only.

The questions were as follows:

1) Role of Knowledge Management and Decision Support?
    Please make a general recommendation on how to streamline SLM in projects / programmes and how to put the emphasis on KM and DS.

2) Joint efforts
    Please specify how joint efforts between different players can be created and how synergies can be used in order to advance SLM KM and DS at global, regional and national level.
    Are other tools beside WOCAT available?

3) WOCAT
    If you are already working with WOCAT please draw some general conclusions:
    a) What is the advantage of the WOCAT network?
    b) What are the most promising products and their use?
    c) What are the needs and contributions of partners (donors, implementing agencies at national and local level)?

4) Key messages
    Please comment and structure the key messages / statements which were given by the input speakers and come up with general recommendations.

Group work WOCAT action carousel (Photos: HP. Liniger and I. Providoli)

Presentation of the group work "WOCAT action carousel"

Group 1: Role of Knowledge Management and Decision Support?

Report by Godert Van Lynden and Lehman Lindeque

Summary of important points discussed:

- KM & DSS should start at the beginning of a project
- SDC (or other donors) can/should "force" their projects to use WOCAT as a standard tool
- WOCAT can ask (but not force) its network members to use WOCAT as a standard tool
- Language is a limiting factor (?) & translation ?
- ? Farmers cannot access the information easily ?
- SLM should be supported or guided by country specific or regional objectives towards achieving sustainability. Complement whatever activities and initiatives are existing, don't reinvent the wheel or work against existing initiatives.
- There is a need for SLM policies and frameworks (a step-by-step approach for development and implementation)
- KM and DS should inform the overall SLM Framework and policies about available technologies, approaches and systems (WOCAT)
- Therefore, there is a need for the following information for informed decision making.
    o Accessibility and dissemination of information;
    o Potential cases where SLM is applicable;
    o Technologies and approaches must be appropriate, affordable and easy to replicate;
    o Use and share all available information and knowledge;
    o Need awareness for informed decision making.

The following points were made with regard to knowledge management:

- KM should be core responsibility of programmes and projects
- Projects and programmes need to identify relevant stakeholders to help with KM implementation
- Resources are needed for implementing KM and Decision Support. Tools for successful use and implementation must also be available and budgeted for.
- KM and Decision Support is a continuous process. Monitoring and evaluation of the process is needed for feedback and to ensure learning and continuous improvement.
- UNCCD – KM: should use WOCAT tools. WOCAT members should contact country representatives, also FAO country office, UNEP, UNDP, WB, ADB, bilateral donors
- Also use occasions to present WOCAT at high level (national seminars, workshops)
- Disseminate through public media (NB: materials needed)
- Good example: KM is key outcome of project in Afghanistan (SLMIO). Started through ICIMOD, was taken up in Afghanistan, donors were approached.

Group 2: Joint efforts for advancing SLM KM and DS

Report by Sanjeev Bhuchar and Nguyen Duyen

Key recommendations

- It is necessary to raise awareness on SLM at all levels. The media should be involved in this campaign as well.
- To strengthen SLM KM and DS at global, regional, national or local levels, existing WOCAT structures should take the lead.

Global / regional level

- Look for synergies between the three Rio conventions (UN FCCC, UN CBD and UNCCD) to maximize the use of WOCAT and avoid duplication. The synergy can be done by creating a platform at regional and national level, putting SLM as teaching tool and for exchanges of SLM KM.
- Linkages with global and regional organizations like UNEP/FAO, CG Centres, ICRAF, Bill Gates Foundation, ICIMOD, ICRISAT, IWMI, ICARDA and national organizations like Sustainable Land Management Institute Organisation in Afghanistan, National Institute of Pedology in Senegal, MBCD (China) and National ministries should be strengthened.
- Look for coordinated donor support.

- More Share Fair events should be organized on a regular basis to exchange lessons learned.
- Importance of regional networks, therefore strengthening capacities of existing regional networks such as HIMCAT to support national network, or set up of new regional networks such as SEACAT (for Southeast Asian countries), SAHELCAT (for Sahel countries), etc.
- WOCAT should provide training for new countries to make use of WOCAT tools.
- Remark: WOCAT database: not easily accessible from remote locations and make it more user-friendly.

National level

- National Governments should be on board as they have an important role in promoting SLM and supporting KM and DS systems. It is important to share with them the SLM benefits and opportunities.
- The national governments should provide enabling frameworks for concerted efforts on SLM by all stakeholders.
- Country-CATs should get "officialised" by involving governmental agencies in the network.
- NGOs working in SLM field should form an association for joint efforts and coordination.
- Local authorities and organizations like community forestry/pasture management committees, water user associations, rural advisory services and filed based projects (for instance on-farm water management (SEP) project of HELVETAS Kyrgyzstan) should be involved for promoting SLM at local level.
- SLM and related KM and DS tools and methods should be included in education and training courses.

Group 3: Questions about WOCAT

Report by Lilia Tverdun and Isabelle Providoli

Overall, everyone agreed that WOCAT is a very useful tool that not only helps to document practices but also brings together practices from all over the world in one database.

a) What is the advantage of the WOCAT network
- A unique network which not only collects SLM world practices but provides opportunity for sharing them, discussing and jointly creating new tools for documenting practices in various issues of SLM
- Open-access network
- Globally – steering and locally – implementation
- Possibility to adopt system in own country

b) What are the most and least promising products and their use
Data base/website is both most promising and least promising. This being influenced by:

- Quality of documented cases
- Scientific and practicability proof
- Accessibility in local language

Promising:
- 4 page summary of QT and QA
- Book, articles, maps
- ➔ All these products can be used at the country level and have monitoring value

c) What are the needs and contributions of partners (donors, implementing agencies at national and local level)?

Needs:
- Donors: need good proposal and customer's feedback
- National level / implementing agencies:
    - o have to keep sustainability and need their monitoring system
    - o need finances, supervision and improvement of tools
- At local level: needs a standard kit

- Partners need to agree first on terminology in other languages (besides English) and make translation possible.
- More WOCAT resource persons need to be trained and be active at local level.
- Contribution to WOCAT database needs to come from commitment of stakeholders working in SLM. Added later by SDC: perhaps make it even mandatory for projects organization to consider contributing to WOCAT

Contributions:
- Financial and technical assistance
- Lobbying and ground implementation
- Building capacity
- Case studies, best practices, lessons learnt

Group 4: Key messages of input speakers

Report by Sally Bunning and Déthié Soumare

Key recommendations

- Create intersectoral SLM framework (wide scope SLM)
- Setup a cross-level communication platform with all actors
- Promote the full set of LADA-WOCAT tools and process (national, sub-national and local)
- Document some experiences of the LADA-WOCAT tools (LUS MAP, QM, LD/SLM maps, QA and QT)
- Organize a workshop to promote awareness on value of WOCAT products for decision making
- Pilot-test and adapt the LADA Local toolbox and provide at least 3 case studies
- Hold a second workshop to feed in-depth findings (DPSIR) to technical and policy level.
- e.g.: impacts on livelihoods and ES
- Establish a close link between KM and M&E to provide more in depth analysis
- Case studies/outputs presented to specific clients (CCD, CBD, FCC, Food security, Poverty and rural development)
- Expand and structure the WOCAT database to be client and ecosystem-oriented
- Develop interactive process to edit and review WOCAT database
- e.g. :WIKI principle
- Develop a training tool on how to assess costs and benefits on livelihoods and ES

Synthesis / plenary / panel discussion with WOCAT Management Group and key persons

The plenary/panel discussion was held simultaneously to the group work reporting. The following key points were highlighted:

- WOCAT is KM and includes DS. WOCAT is under-selling itself and should become "the" KM system. KM is trendy at the moment.
- The use of WOCAT should be linked to country action plans
- WOCAT should collaborate with already existing partnerships and institutions such as e.g. the UN global water management partnerships. Within FAO WOCAT should talk about KM at higher levels and in the regional FAO offices through the country representatives.
- Donors should make the use of WOCAT tools compulsory.
- WOCAT is unique in sharing SLM experiences/practices.
- The WOCAT structure has to change to reply to all the key challenges in SLM. WOCAT has to try to keep a focus and should not try to cover every global issue. Resources are limited therefore WOCAT should concentrate on core business and maintain a wish list according to funds.
- Suggestions came up to re-brand WOCAT e.g. GoCAT, FATCAT, WOGOAT.

Closing

Hanspeter Liniger, WOCAT coordinator (WOCAT Conclusions Share Fair_Liniger.ppt)

Knowledge Management (KM) and Decision Support (DS) for Sustainable Land Management (SLM)

Why? How?

Hanspeter Liniger summarized some striking points:

- Building on existing and innovative knowledge (confirmed)
- Knowledge: looking for successes but also learning from failures
- KM appreciated (tools developed→ adaptation? → further development!)
- DS needed but in initial state → better access to knowledge & further development needed → e.g. website
- Combined tools: WOCAT-LADA, modular but harmonized
- Common SLM KM/DS system:
  Reporting to UNCCD, WB, GEF, Project donors → national monitoring
- not only the end product also the process is important→ capacity building!!!
  →Learning value?!
- Demonstrating the use(fullness)for spreading SLM (e.g. Rural Agriculture Service, RAS)
- Touched by the experiences use of WOCAT tools methods

What is needed to institutionalize WOCAT?

- Resources allocation is too little
  →Resources and commitment needed at all levels
  → Awareness raising on value of KM & DS
- Role and importance of regional & national hubs, and global coordination
- National SLM KM-DS → joint platform (committees, …)
- Not only sharing knowledge on SLM but also knowledge on establishing regional (e.g. CACILM) and national KMDS networks (e.g. Afghanistan, China)
- Development of WOCAT in Central Asia: CAMP, NCCR, Helvetas, PPCR/WB, CACILM, UCA, Kyrgyz National Agrarian University → RAS
- Long-term commitment needed at all levels!
  → Building on existing institutions, partners
- Personal commitment!
→ Remain innovative!!!

What is needed for a next WOCAT phase?

- A good platform, equipment, training, preparation, a clear target and a good team.

WOCAT Secretariat and Management Group (Markus Giger, Sally Bunning, Godert Van Lynden, Rima Mekdaschi Studer, Hanspeter Liniger, Isabelle Provioli (Photo: HP. Liniger)

OPENING AND INTRODUCTION TO WWSM

Rapporteur: Julie Zähringer

Welcome and introduction

Hanspeter Liniger (WOCAT coordinator), (WWSM Naryn introduction_Liniger.ppt)

Hanspeter Liniger welcomed everybody to Naryn and thanked UCA for hosting the event. He furthermore emphasized the importance of the gathering.

The 15th WWSM followed the 2 day WOCAT Share Fair in Bishkek. The outcomes of the Share Fair will be further developed during the 15th WWSM, progress evaluated and directions for the future of the WOCAT network, especially on how to institutionalize WOCAT and how to secure funding, discussed.

A short explanation of the aim and schedule of the workshop was given.

- Improving KM and DS → WOCAT tools and methods
- Including WOCAT in all SLM related projects, programmes, conventions
- Involving all partners: get their interests, inputs, concerns, solutions
- Setting priorities
- Advancing our common vision for WOCAT → GOCAT

Liniger pointed out the importance that countries raise their concerns. The 15th WWSM is the event of the countries and countries should speak up and for this a special feedback mechanism for countries has to be established.

After the welcome and introduction speech, the agenda was approved, a quick round of introduction was made and the expectations of the participants collected.

Introduction of external evaluator Anna Tengberg

Anna Tengberg, the external evaluator of the current WOCAT programme phase was introduced to all the participants. Tengberg already attended the WOCAT Share Fair in Bishkek.

The objective of the WOCAT review is:

to assess the WOCAT programme, especially focusing on the programme phase 2008 – 2011 and make recommendations for its future development & financing mechanisms.

During the 15th WWSM, on Sunday, June 26th, Anna Tengberg had a special session on the WOCAT External Evaluation with the countries.

1 SUMMARY OF SHARE FAIR

Michael Stocking and Hanspeter Liniger (WOCAT coordinator), (Summary Share Fair_Liniger.ppt)

The WOCAT Share Fair was reflected by the participants and a group work on the vision of WOCAT was conducted

Vision: WOCAT is **the** standard for SLM Knowledge Management (KM) and Decision Support (DS)

Hence, WOCAT could facilitate reporting to the UNCCD, but

- how to link with the global level, to center WOCAT in the middle of these activities?
- how to fix/ secure WOCAT at the local level?

Two questions were dealt with

Question 1: What would you have to do (which barrier to overcome) in order to achieve the WOCAT vision at national and global level

- Break down our barriers, increase vision, open up, building national links which are crucial, open up isolated pockets
- Demonstrate value of SLM KM and DS, how it can help in achieving goals and how communities can participate in it
- Language is a barrier, tools need to be available in local language to increase accessibility
- More awareness raising particularly at local / grassroots level
- Foster the methodologies, they are applicable for scientists and technicians, but we have to make them accessible to farmers, therefore translation into local languages is important
- Afghanistan / Tajikistan: how to reach more organization / actors involved in SLM, main barrier is lack of capacity at national level, e.g. human resources, budget, for dissemination organize trainings at university level
- How concept of open source could be emphasized? Because the spirit of the WOCAT is an exchange, so people have to understand that it's not only about receiving information from WOCAT but also about contributing! Change this perception!
- Widen the network to include other actors, such as decision makers etc.
- Help National Networks to get together into Subregional networks! Especially Sahel area!
- Government policies need to facilitate SLM environment → WOCAT needs to mainstreamed into government activities
- We need to show the benefits of WOCAT, create excitement about it, demonstrate it's utility, roadshow for national partners!

Question 2: What do you expect from others? e.g. present management team, major donors, other professionals / networks

- Tajikistan: More trainings, introductory trainings, however, if training is offered people don't participate
- Resource persons at national level for training of trainers
- Exchange of information, share experiences, about challenges faced with implementation of WOCAT between countries
- National level networks and CoP decentralization of WOCAT
- New tools should be developed and validated in a more participatory way together with national initiatives!
- WOCAT should assist the different countries to link up together for experience sharing!
- Financial resources should be shared, developed countries should provide to the developing countries!
- Simplification of questionnaires should by done by WOCAT secretariat? Farmers need light version
- Improving communication from WOCAT secretariat to regional initiatives that will then trickle down to the national level → awareness raising in the regional institutions

Some other recommendations that came up were:
- Make WOCAT more rewarding for professional careers
- Publish peer-reviewed papers in special issues of scientific journals
- Define priority areas for interventions through national mapping exercises

The conclusion was that WOCAT has to change! It cannot continue business as usual! Evolution, upscaling, outscaling, institutionalization is needed to deliver on that vision.

2 PARALLEL SESSION: TOPIC DISCUSSION

2.1. Climate Change (CC) & Disaster Risk Reduction (DRR) modules

Introduction to CC & DRR

Presentation by Markus Giger (1_Introduction CC_Giger.pdf)

Markus Giger gave a short introduction to the basics of climate change. The main projected future climate changes are continued rise in temperature, increased incidence of heat waves and heavy precipitation events, decrease of rainfall in sub-tropical areas, rising sea levels, vanishing glaciers and reduced snow cover. Afterwards he elaborated some country examples related to impact of climate change from Kyrgyzstan UK, France, India, Ethiopia and Sahel.

The second part of his presentation addressed "Adaptation to Climate Change and Climate Variability". He defined adaptation to climate change as: adjustments in practices, processes or structures to take into account changing climate conditions, to moderate potential damages, or to benefit from the opportunities associated with climate change. Likewise he defined vulnerability and resilience. Please refer to the power point presentation in the annex for these definitions.

The mainstream approach to adaptation is increasing resilience and decreasing vulnerability of people and the ecosystem to expected CC impact. He elaborated that the link between disaster risks and climate is obvious and between DRR and climate change adaptation a necessity.

The last part of the presentation was on "mitigation – the contribution of SLM". Agriculture is a major emitter of greenhouse gases (GHG) and accounts for about 14% of global emissions. The conversion of forests to agriculture is a major factor causing deforestation which accounts for an additional 17% of global emissions. The mitigation potential of agriculture is i) enhancing agricultural (soil and above ground biomass) carbon sequestration in production landscapes, ii) reducing nitrous oxide emissions through improved soil and efficient nitrogen fertilizer, and iii) reducing methane emission from flooded rice systems and from ruminant livestock systems.

He concluded that climate change will have negative effects on water availability and food security in many areas. Short term climate variability is a key challenge and becomes even more important under a scenario of climate change. Long term adaptation needs of land use systems need to be understood. SLM can also contribute to mitigation of climate change and Climate change policies (such as REED+, biofuels) will also influence SLM.

Presentation on WOCAT climate change module - Tajikistan experience

Presentation by Julie Zähringer (2a_WOCAT CC Module_Zaehringer.pdf and 2b_WOCAT CC Module.ppt)

Julie Zähringer gave a presentation on the WOCAT climate change module and about the experience from first application in Tajikistan through the Pilot Programme for Climate Resilience (PPCR).

The WOCAT climate change module was developed to evaluate Sustainable Land Management (SLM) technologies and approaches in the context of climate change. The WOCAT climate change module builds on the basic WOCAT questionnaires SLM Technologies and SLM Approaches and evaluates them in the context of climate change. The main question is how resilient or how vulnerable are technologies to climate change.

The WOCAT CC questionnaire is split into three parts: 1) General information, 2) Specification of climate change impacts on SLM technology and 3) Adaptation of technology. For more details please refer to the power point presentation in the annex.

The WOCAT CC module was tested in the PPCR in Tajikistan from April - May 2011. Up to date 20 QCS have been filled covering a variety of agro-climatic zones. The observed CC in Tajikistan is as follows i) clear trend for a temperature increase, ii) observed trend in precipitation change over the last 10 years, clear trend for a decrease in precipitation all over Tajikistan and iii) observed trend in occurrence of extreme events over the last 10 years. Consequently, there is a need for SLM technologies that:
- increase water harvesting and preserve soil humidity
- improve adaptation to warmer temperatures using suitable crop varieties
- increase resistance to pests and diseases

A detailed list on the experience and constraints observed during the first application of the WOCAT CC module in Tajikistan can be seen in the annex. It can be concluded that the WOCAT CC module needs further improvements. Especially the goal of the CC WOCAT module should be clarified. Is the module assessing resilience of SLM technologies to CC? Or is the module documenting existing adaptations to CC through SLM? Or does it assess vulnerability and coping strategies of land users to CC?

The CC questionnaire should be more consistent, the questions should be formulated clearer and appropriate time scales for CC observation and impacts should be defined.

Group work on WOCAT CC module

Task for group work

Three groups were built to discuss the following points:
1) How should WOCAT address the CC issue?
    a) Scope (what are you actually assessing?)
    b) Scale?
2) Are you interested to further assist to develop this questionnaire?
3) Comments to the existing document?

Group work on climate change (Photos: I. Providoli)

Results from groups

1) How should WOCAT address the CC issue

- We should keep in mind that CC is only one factor influencing SLM resilience
- Module should assess adaptation and mitigation (actual and potential)
- Assessment should not only be done on case study level, but land use or ecosystem
- Test and validate questionnaire in a range of environments/AEZ: mountain, dry land, forest, irrigated /wetland. Check in which environments we have interested persons from WOCAT.
- Organisations working in different areas such as ICARDA (dryland), OSS + Agrymet (Sahel), SLMIO Afghanistan (highlands), HIMCAT (ICIMOD) and NEPCAT, FAO East Africa (highland, wetlands), IWMI + Vietnam VEN (tropical) should be involved in developing the QC

a) What is the scope of the assessment?
- How does the technology contribute (now) to climate change adaptation (variability and change)
- How sensitive/resilient is the technology to CC and variability
- Can the technology be adapted (future) to help increase ecosystem resilience (flood drought, extreme events)
- Can the technology be adapted/improved to reduce vulnerability and improve coping strategy

b) Scale

Time scale:
- Address short term variability (unreliability/change in growing season), however also long-term assessment is important
- Long term cycles, e.g 7 or 10 years drought cycle, e.g. breeders developing drought resilient crops
- Pest cycles, e.g. locust every 2 years in Kyrgyzstan

Spatial scale

- Need watershed approach or community territory approach (in flat landscapes) this wider scale is better suited to assessing climate change → range of technologies, land use system, ecosystem functions and resilience
- Important to map upstream and downstream effects
- Need to include to some extent a Livelihoods assessment; possible idea to review and adapt LADA-Local assessment questions so that we identify adaptation capacity of different land user types in the watershed/landscape (assets; organization and institutions; vulnerability etc)
- Need to understand organizational and institutional capacity of land users for coping to change
- Assess capacity of farmers to adapt to change depends on their land use systems and combination of range of technologies – could questionnaire relate to land use system and several technologies.

2) Countries interested to further assist to develop this questionnaire?
- Australia, Bangladesh, Kyrgyzstan, Malawi, Mongolia, Philippines, Senegal, South Africa, Tajikistan (Julie), Kenya and Ethiopia, FAO (Sally)
- QC needs to be tested in additional climatic regions

Discussion
- The groups did not come to a conclusion if CC should be assessed at technology level or at land use system level
- One group suggested that it should also be looked at the watershed / territory level and at different land uses and all of that should be overlaid by a livelihood assessment. In addition to that the LADA local assessment could be used and questions related to CC added. However, other members stated that we might lose focus and that it might be too complex.
- Climate change adaptation versus mitigation: It is clear that mitigation is also important, it would be necessary that the database can be interrogated for C storage capacities of technologies

2.2. Pasture / Grazing land management

The aim of this topic discussion session was to define key issues / challenges in pasture / grazing land management and its sustainable management. According to the experiences of partners key findings and solutions were defined. Keeping these in mind it has to be decided if WOCAT needs, beside what is already available in the basic QT and QA, a module on pasture/ grazing land to fulfill partners needs and demand.

To start with Inam-ur-Rahim (NCCR North South/ UCA) gave a short input presentation on the multiple benefits of pasture / grazing land management and on how to understand pastoralism in the different parts of the world. He emphasized that it is important to evidently show the value pastoralism brings to the society, understand the value chain within the prevailing environmental and social context and become less romantic but rather more productive when talking about pastoralism. This was followed by a plenum discussion in order to identify those topics participants considered most important in terms of pastoralism and with respect to WOCAT. As a result, participants split into three thematic groups to discuss selected issues in more detail.

Group work on pasture management (Photos: R. Mekdaschi, I. Providoli)

Presentation of the main outcomes of the three thematic working groups on pastoralism

Group A: Pastoralism what does it mean?

Group A discussed on how to best define 'pastoralism', i.e. where to draw the line between extensive and intensive production systems taking the issue of scale into consideration. Another point of discussion raised was on how to balance crop encroachment and pastoral production.

The group deducted that it is not appropriate to approach the issue with the term of pastoralism but think of it from the perspective of land use systems: range land, pasture lands, grazing land and grassland. According to Wikipedia: 'Rangelands are distinguished from pasture lands because they grow primarily native vegetation, rather than plants established by humans. Rangelands are also managed principally with extensive practices such as managed livestock grazing and prescribed fire rather than more intensive agricultural practices of seeding, irrigation, and the use of fertilizers'.

Drawing the line between extensive and intensive production system was not that straight forward. Some group members related it to the type of animal feeding, i.e.: opportunistic vs. controlled grazing; nomadism vs. zero grazing and others to the quality of livestock and their products.

The scale must capture offsite-effects. Can the watershed approach be used for offsite effects?

It was concluded it is necessary to understand the complexities and look at 'pastoralism' as a holistic system.

Group B: Ecosystem services of pastoral production

Group B thought about how the value and importance of pastoral production could adequately be recognized and valued. Consequently, the discussion was mainly about the recognition of ecosystems services delivered by pastoralists. The group suggested two ways to do so: **a) Rewarding schemes**, in which pastoralists would be directly paid for the services they deliver by those who profit from it linking upstream and downstream users; and more general **b) Acknowledgement schemes** without direct monetary reimbursement. Both of these systems would require that the **on-site and off-site impacts** of pastoral production can be measured and assessed, which would require the definition of a **baseline** of services and the development of a **standardized methodological toolbox**. Especially the question of how off-site impacts could be measured raised interesting ideas which may need further consideration.

Group C: Knowledge management & capacity building

Starting point for this group discussion was that participants felt a need to improve knowledge management and capacity building for pastoralists / pastoral communities in order to make pastoral production more sustainable in future. Therefore, the group first **identified a number of capacities considered necessary and useful**. These included herders' capacity to assess the extent of degradation; know more about animal health; improve pastures; distinguish good and bad species (plants); increase awareness of legal framework about pasture use and management; increase territorial awareness (knowing border); increase sustainability awareness; be informed about breeding & feeding; market information (access, prices); information about processing of pastoral products.

Then the group thought about **how to achieve these capacities**, such as different forms of training, building networks to share experiences across and within levels; but also the importance of social services and the use of media were mentioned. Finally, the group thought about **particular links to WOCAT**. Ideas included adding particular questionnaire items about pastoral capacities; providing conceptual support to decision-makers; supporting different stakeholders with technologies and measures; or delivering targeted trainings (also for trainers).

Synthesis

After the working groups had presented their outcomes and short discussions Rima Mekdaschi Studer presented briefly the questions related to grazing land and livestock that are already present in the WOCAT basic questionnaires QT and QA (1a_G*razingland module.pdf and 1b_Grazingland module ppt*). Henri Rueff then presented the main messages and the three themes which were identified as being most important and which may be considered for inclusion in a future WOCAT pasture / grazing land module.

What is missing in the WOCAT questionnaires:

1. Boundaries (onsite/offsite), agreed with boundaries given by questionnaire, however watershed scale needs to be quite open and flexible, we could also call it a wind shed.

2. Information needed from livestock: herd composition, what does the pasture production imply for livestock production, age categories of herds are also important, also intake differs with lifecycle of cattle.

3. PES: no need to include them into KM by WOCAT because they are too complex, there are 100 of different approaches, however, economic valuation of pastoral systems could be integrated.

View on Naryn (Photo: HP. Liniger)

Lunch in a yurt (Photo: HP. Liniger)

3 WOCAT PROGRESS (GLOBAL / NATIONAL LEVEL)

3.1. Review global progress (1.11.2009 – 1.6.2011)

Rapporteur: Rima Mekdaschi Studer

3.1.1. Global Management review - CDE

Report by Hanspeter Liniger and Rima Mekdaschi Studer (1_Progress report_CDE_Liniger.ppt and 3_Poster Progress WOCAT global.pdf).

For the Progress Report in table format refer to Annex 2.

3.1.1.1 Knowledge about SWC and SLM

TerrAfrica Publication 'Sustainable Land Management in Practice – Guidelines and Best Practices for Sub-Saharan Africa'

'SLM in practice' was prepared under the Food and Agriculture Organisation's (FAO) leadership, and financed by the multi-donor TerrAfrica Leveraging Fund, the World Bank (WB) and the Swiss Development Cooperation (SDC). The book draws, in particular, on WOCAT's network and its database of SLM knowledge - as well as on WOCAT's first overview book entitled 'where the land is greener'. The guidelines are based largely on an iterative process that tapped into the collected experiences of people and institutions both inside and outside Africa and could only be realised through the guidance, cooperation, and assistance of many contributors who champion SLM as a way to secure environmentally friendly and climate resilient livelihoods.

The document highlights the main principles of sustainable land management (SLM), identifies and analyses best practices for improved productivity, livelihoods and ecosystem services and offers a framework for informed decision-making and investment in SLM on the ground. It is illustrated with 47 case studies from 18 countries and serves as a prototype for regional/ national guidelines. It was published in English and French

The book was launched at the LADA/WOCAT/DESIRE side event at CST2/CRIC9 conference February. 2011 in Bonn and was also distributed at further events such as: 'Private sector agroforestry' conference in Nairobi, Mai 2011, 'First Africa Drylands Week' in Dakar, Senegal, June 2011.
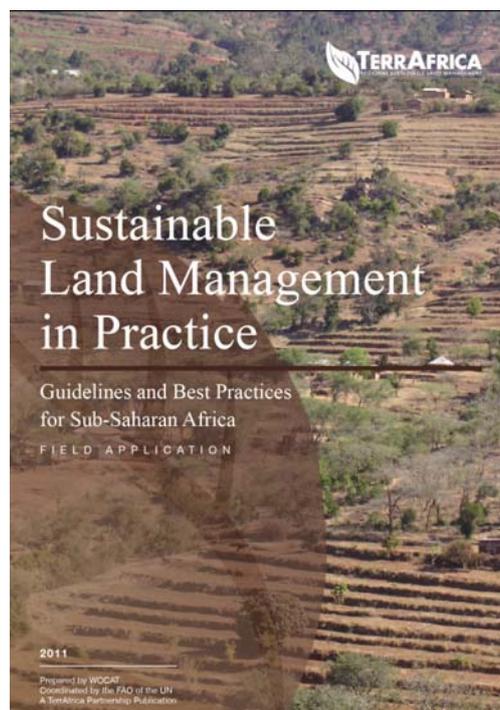
FAO 'State of World Land and Water Report' (SOLAW)

FAO offered WOCAT to contribute to the first 'State of World Land and Water Report' (SOLAW). WOCAT was given the mandate to compile a chapter on 'Coping with degradation through SLWM' (Sustainable Land and Water Management), which is an integral part of Chapter 5 on 'Sustainable land and water uses for food security'.

The WOCAT chapter emphasises the multiple benefits of SLWM, shows and explains principles of successful SLWM practices, discusses how to target SLWM interventions, deals with assessing and monitoring SLWM, and addresses knowledge management and decision support.

'White papers' prepared by the DSD consortium and Special Issue of Land Degradation & Development Journal

The 9th session of the Committee on Science and Technology (CST) of the UNCCD and its 1st Scientific Conference, organized with the support of the Dryland Science for Development (DSD) consortium took place on 25th September, 2009 during COP 9 in Buenos Aires. The Conference addressed the theme "bio-physical and socio-economic monitoring and assessment of desertification and land degradation, to support decision-making in land and water management

WOCAT had the lead in preparing the 'white paper' for working group 2 on 'Monitoring and Assessing Land Rehabilitation and Sustainable Land Management efforts'. The 'white paper' was completed at the

end of 2009. WOCAT also contributed to the 'white paper' of working group 3 on 'Impacts of Economic and Social Drivers and Knowledge Management on Monitoring and Evaluation'.

The outcomes of the DSD 1st scientific conference were published in the Journal Land Degradation & Development in a Special Issue on Understanding Dryland Degradation Trends (Volume 22, Issue 2) March/April 2011. One of the papers with Gudrun Schwilch as main author specifically discusses WOCAT, LADA and DESIRE methodologies. The title of the paper is 'Experiences in monitoring and assessment of sustainable land management (http://onlinelibrary.wiley.com/doi/10.1002/ldr.1040/full).

WOCAT SLM approaches, technologies and mapping databases

The databases on SLM approaches, technologies and mapping and the possibilities to use this data for evaluation, monitoring and decision support is WOCATs big asset and comparative advantage as to other initiatives in the SLM domain. Therefore up-dating and enhancing the quality of data and further populating the databases remain a priority.

The case studies (technologies and approaches) newly documented in the TerrAfrica publication 'SLM in practice' (47), as well as best practices documented by the LADA pilot country Senegal (25) and by the PPCR-WB project in Tajikistan (70) were entered into the on-line WOCAT databases on SLM technologies and approaches. Niger, Senegal and other partner countries are constantly updating and entering new data on-line. The WOCAT secretariat was given the mandate to support in the data quality assurance of the 6 LADA pilot countries, the PPCR-WB project in Tajikistan, CACILM in Central Asia and the DESIRE project.

Updated and newly produced promotion material

Attractive posters (1 WOCAT general, 4 on products, 2 on tools) and concise 4-page flyers (2) were produced to reflect the progress, the different tools, the wealth of knowledge on SLM and examples on how this can be put into value

WOCAT launched a prototype promotion video: 'where the land is greener and the water bluer' (Kenya, August 2010) with the idea to complement the 4 page documentation of technologies and approaches by giving a voice to land users and letting them show and explain what they have done.

'where the land is greener' in Spanish and French

The translation of WOCATs overview book was finished already in 2009. Part 1 and a selection of 12 case studies relevant to the corresponding language regions were included in the translations. The translations will be uploaded to the WOCAT website.

Proceedings WOCAT workshop and steering meeting 2009

The proceedings of the DESIRE/WOCAT Symposium and the annual WOCAT Workshop and Steering Meeting (WWSM 14) which were held in October 2009 in Morocco were compiled and published early 2010 (http://www.wocat.net/en/knowledge-base/documentation-analysis/workshop-proceedings.html).

3.1.1.2   Tool (and method) development

WOCAT on-line database on SLM technologies

After releasing the on-line SLM approach database the new on-line database on SLM technologies was completed and uploaded on the WOCAT website for testing by its partners in June 2010. Several partner countries like Senegal, Niger and Tajikistan started to enter their data directly into the on-line databases which revealed a number of malfunctions which were and are being continuously debugged and improved. The old MS-Access technology database was transferred into the new open source on-line technology database. The WOCAT on-line databases on technologies and approaches were translated into French and Spanish. The development of an off-line system for the databases on SLM technologies and approaches is pending (for more information refer to section 3.3.1 of these proceedings).

Mapping and Map Viewer

The data management application (mapping database) has been finished. However, the development of an interactive on-line MapViewer application is a huge challenge for the development team consisting of WOCAT partners in South African and IT-specialists from CDE with support from the WOCAT team.

A simple Map Viewer was realized which allows analyzing the mapping data (QM) by viewing some predefined maps: such as dominant degradation type, dominant conservation measures, total extent of degradation / conservation measures per map unit, mean rate of degradation change and mean trend of effectiveness of conservation measures per map unit, etc. The Map Viewer can be accessed by the link http://cdewocat.unibe.ch/wocatQM/ (for more information refer to sections 3.3.2, 3.4.4 and 3.4.5)

Testing remote sensing and GIS methods to support LADA-WOCAT-Mapping is being done continuously without additional costs through Post Graduate Studies at CDE.

Watershed management module (QWM)

After the last WWSM in Morocco the Watershed module was further developed taking the comments, critics and suggestions for improvements by the partners into consideration. In April and May 2010 in the framework of an MSc-study the QWM was used and tested in the field in Tunisia. The tool was adapted according to the experience gained in the field. The finalized draft was sent to taskforce members for review. After Tunisia, the University of Kathmandu also started testing or rather applying the watershed management module in the field. The module was translated into French and a first example from Tunisia is available. All material can be downloaded from http://www.wocat.net/en/methods/modules/watershed-management.html (for more information refer to sections 3.3.4 and 3.4.3)

Adaptation to climate change module (Q CCA)

A search for existing tools that assess resilience or sensitivity to climate change was done. The aim was to have an idea what is already being done, where gaps are and what can WOCAT offer without duplicating already ongoing efforts. The conclusion was that most tools assess development projects and how 'climate resilient' their activities are. Until now SLM practices/ technologies as such were not tested for their tolerance or sensitivity to climate variability and change or to their adaptation potential. This is exactly the niche that WOCAT can fill.

A draft version of a climate change adaptation module and a corresponding database were developed for the PPCR project in Tajikistan that started in February 2011. This draft was sent to WOCAT taskforce members for review and further discussions about its suitability to be applied in different context than the Tajikistan project. (for more information refer to sections 2.1 and 3.4.3)

Decision support tools

The decision support system for the selection of most promising SLM technologies ("best practices") was further tested within the EU-DESIRE project and also presented in Mongolia and the LADA pilot countries.

Several meetings between WOCAT and GIZ Germany took place. The development of a joint decision support system on approaches that helps assessing the adoption and up-scaling potential of SLM practices was discussed. The ScalA tool developed by GIZ (ZALF (Zentrum für Agrarlandschaftsforschung), commissioned by GIZ/ Sustainet) is a tool for project managers focusing on the ex-ante assessment of agricultural projects and best practices regarding sustainability, climate relevance and scaling-up potential. The WOCAT-DESIRE tools are more focusing on selecting specific SLM technologies at the local level together with stakeholders. ScalA would be used after the WOCAT-DESIRE local level tool in order to assess how these selected technologies could be up-scaled (through which approach or project). This would include ideas about successful approaches from the WOCAT

knowledge base. A joint 1-2 years project proposal to develop and test the integrated tools (e.g. in Kyrgyzstan or Ethiopia, where both partners are active) will be prepared by GIZ (for more information refer to section 3.4.2 of these proceedings).

Training material for training of trainers (QT, QA and on-line data entry)

Based on the insight and experience gained during the workshop held in Senegal a training of trainers draft manual and training material for documenting SLM technologies and approaches were developed to be further tested in the Tajikistan training workshop. First results showed that the very detailed and structured draft does not allow for flexibility in organizing and designing the workshop and its content. Therefore these manuals need thorough revision before they can be disseminated for use. However, due to human resource and financial constraints this activity was put currently on ice.

3.1.1.3   Information sharing and networking

WOCAT and UNCCD

United Nations Convention to Combat Desertification (UNCCD) aims at becoming a global authority on scientific and technical knowledge pertaining to desertification/land degradation and mitigation of the effects of drought. With guidance from the CST, and taking into consideration the work already undertaken to establish a portal on reporting (PRAIS), the secretariat has started the design of a **knowledge management system**, including traditional knowledge, best practices and success stories on desertification/ land degradation and drought issues. WOCAT thoroughly participated in the discussion on the perspectives on KM for UNCCD by attending the KM side event at CST2/ CRIC9 (February 2011 in Bonn), commenting the draft questionnaire compiled for an online survey on the Knowledge Needs Assessment, partake in the interviews and on-line survey on the assessment of KM needs (March, April 2011)

Markus Giger in the name of WOCAT participated at UNCCD "meeting on methodologies and data needs for the **UNCCD subset of impact indicators**" on 11 June 2010, Bonn. The invited experts discussed on the indicators for monitoring land cover status und poverty and provided input to the UNCCD secretariat. It was concluded that the WOCAT-LADA mapping methodology is a reference that can be used by UNCCD. At least 4 experts made reference to WOCAT-LADA mapping methodologies.

WOCAT thoroughly commented UNCCDs White Paper on: 'Scientific Review in support of refinement of the UNCCD set of impact indicators provisionally accepted at COP 9: Approach, Conceptual Framework, Pre-Participatory Assessment' (October and November 2010). Furthermore Markus Giger participated in the UNCCD technical workshop on **impact indicators refinement**, 16-17 December 2010 in Bonn Germany. WOCAT-LADA tools and indicators were again mentioned as most acceptable to many of the scientist. Together with the KM-Land Indicators (GEF), which are also partly building on WOCAT-LADA, these indicators and tools represent the best available experience in this area.

To further promote the link to global, regional organisations/ programmes and national institutions, WOCAT attended the **UNCCD CST2/CRIC9 meeting** in Bonn, February 2011. Besides joining the official sessions, next to the Swiss delegation, WOCAT was involved in two side events. One was organized by the LADA-WOCAT-DESIRE partnership on 'From assessment to decision making: Tools for policies and action'. In another side event countries were encouraged by FAO and WOCAT to prepare their country PIFs and take up contact with their GEF / UNCCD focal points in order to secure money of the GEF-

STAR allocation as well as send country letters of endorsement in order to be able to participate in the global project to be funded under the GEF-5 replenishment for scaling up of LADA-WOCAT tools.

WOCAT had a well attended and much frequented information stand in the hall and scheduled several discussions and meetings with interested and potential partner organisations and countries (TerrAfrica (WB, NEPAD), FAO-GGWI, IUCN, USAID-Jornada, Mongolia, etc).

WOCAT and FAO-LADA project and FAO

In November 2009 WOCAT participated in a training course for LADA partners on 'Integrating country specific indicators in LADA indicators sets and updating DIS4LADA' held in Alghero, Italy (24th – 27th). On February 16th 2010, a seminar was held at FAO to present the WOCAT and LADA tools, methods and achievements to different FAO sections for awareness raising and assessing possibilities/ opportunities of cooperation. The development of a joint LADA-WOCAT GEF5 proposal on 'Upscaling from Land Resources Assessment to SLM Decision Support and Investments using the LADA/WOCAT approach' was then discussed and drafted.

WOCAT also participated in the Technical LADA Meeting' held in Wageningen and Amsterdam from 6-14 September 2010. Inter alia the 6 LADA pilot countries presented their national and local assessment results, which were followed by a discussion on improvements and new developments of the WOCAT-LADA Mapping tool and on how to improve the structure of the local assessment reports and their interpretation. At the Final LADA Meeting from 6-8 December 2010 in Rom WOCAT presented and discussed the best practices reports submitted by the 6 LADA countries. For this event WOCAT assessed the quality and analysed all best practices compiled through the LADA project and summarized the major results (for more information refer to section 3.1.2).

FAO and WOCAT have throughout this period further developed the proposal (PIF) for a global project to be funded under the GEF-5 replenishment for scaling up of LADA-WOCAT tools in interested countries. For more details on this subject refer to sections 3.3.3. and 5.3 of these proceedings.

WOCAT in Central Asia

WOCAT has been highly promoted during a visit to Tajikistan and Kyrgyzstan in April 2010. On the 23 April an 'Open Day' on 'NCCR North-South Research findings and experiences - future challenges and opportunities for collaboration' was conducted by NCCR North-South and the University of Central Asia (UCA) in Dushanbe, Tajikistan. WOCAT tools, methods and also results from various research studies in the region were presented. A one-day conference with the aim to further increase the knowledge of WOCAT in the region, to promote WOCAT and LADA tools and to create a common SLM knowledge platform in Central Asia was held in Bishkek with representatives from CACILM, GIZ, RAS, Helvetas, TAIC, CAMP Alatoo, Kyrgyz Agrarian University, UCA and NCCR North-South

CACILM is a partnership between Central Asian countries and international donor community to combat land degradation and improve rural livelihoods and adapt to climate change in Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. Projects implemented during the 1st phase of CACILM gained much experience in dealing with issues of land management. Under CACILM phase II it is planned to improve knowledge management by using globally accepted methods for systemization of best practices. The WOCAT format is being used for documenting best practices and experience gained under CACILM I. Two persons per Central Asian country were trained in using the WOCAT methodology for documenting best practices during a workshop held in Dushanbe in April 2011. 25 Technologies and Approaches are currently being documented and will be reviewed and quality checked by WOCAT.

The Pilot Programme for Climate Resilience (PPCR) in Tajikistan consists of six components. CDE was rewarded to conduct the study in Phase 1 of the PPCR, in the framework of Component A5 Agriculture & Sustainable Land Management. Phase 1 is a preparatory phase to identify and recommend options and opportunities in sustainable land management (SLM) for adaptation to climate change, and for making recommendations on their up-scaling in Phase 2. WOCAT methods and tools were used to make an inventory, document and review sustainable land management technologies and approaches and to analyse their adaptation to climate change. For the latter a module on CC adaptation was specifically developed. WOCAT was also involved by assisting in training, developing a climate change adaptation tool (module and database), quality assurance of documented case studies and backstopping mainly for the analysis of data and compilation of a Tajikistan overview book.

WOCAT in Mongolia

In 2010, two WOCAT missions were requested by the SDC - Coping with Desertification Project (CODEP) in Mongolia: The first was to assist in harmonizing the monitoring of desertification and good

land management. The mission in March 2010 assisted on bringing together all the relevant national institutions and projects and in getting the agreement of harmonizing the monitoring and assessment of desertification. This was endorsed by a ministerial declaration. List of monitoring indicators were discussed and a national taskforce established to further develop the methodology.

A backstopping mission in June 2010 was requested by SDC as a further step to assess local institutional capacities in geoinformation management related to desertification and to support CODEP and Desertification Study Centre (DSC) in view of information and communication technologies used in Component four 'Technology and Knowledge Management'. Based on the findings a proposal linking geospatial information with field monitoring of land degradation as well as SLM and capacity development to combat desertification in Mongolia was submitted to SDC and the Mongolian Partners.

In the mission of May 2011 discussions revolved around a successful integration of a knowledge based decision support system which needs a strong cooperation among governmental institutions, a joint capacity development addressing all institutional levels and a common methodological approach in monitoring of relevant environmental and socio-economic parameters. Based on the findings the proposal on National Desertification Monitoring System Mongolia - Monitoring and Knowledge Management System on Sustainable Land Management, Land Degradation and Desertification was revised, adapted and submitted for funding.

3.1.1.4   Training, education and research

Training workshops

Senegal: The 'Institut de Pédologie' in Dakar organized a WOCAT training workshop on documenting and evaluating SLM technologies (QT) and approaches (QA) from 13 – 17 December 2010 in Thies, Senegal. This workshop was followed by a mapping training workshop in April 2011.

Tajikistan: In the framework of the PPCR Project in Tajikistan a training workshop on documenting and evaluating SLM technologies (QT) and approaches (QA) was held in April 2011. The newly drafted module/ questionnaire on adaptation to climate change was also introduced and tested. Furthermore a training workshop for CACILM was organised by WOCATs partners in Tajikistan (May 2011).

Mongolia: WOCAT conducted training workshop in Mongolia for the Desertification Study Centre (DSC) in June 2010 and in May 2011. The workshops consisted mainly of field days during which issues of assessing and monitoring degradation and SLM were presented, shown with the help of concrete and vivid examples and discussed among all participants.

FAO: Training of trainers on LADA-WOCAT tools through FAO in regional trainings in LADA countries, Haiti, Kagera River Basin: Rwanda, Burundi, Tanzania, Uganda, etc (for more information refer to share fair day1 keynote 3e and section 3.3.3).

Education

Through the assignment at the University, every year students are involved in WOCAT related activities. They collect data, analyse the database, test and further develop the methodology. In 2010 supervision of a South African PhD-study on 'Mapping land degradation and natural resource conservation in South Africa' helped in further consolidating the usefulness of the WOCAT-LADA mapping tool. Several Swiss MSc students were involved in Indonesia (using WOCAT in a watershed), Tunisia (testing watershed module), Senegal (inventory of best practices), Mongolia and Tajikistan. WOCAT methods and tools were included in curricula of several Universities (for more information refer to section 3.4.6).

Research

WOCAT was invited to become part of by the Green Water Credits (GWC) programme of ISRIC. This project is active in two countries: Kenya and Morocco and there are plans to include China and Algeria. The GWC is a financial facility to support farmers, to make: initial investments (short term) and maintenance investments (long term) in appropriate green water management. GWC is a field application of WOCAT (for more information refer to share fair day1 keynote 3 d). WOCAT is key to the project, providing examples of successful green water management practices and a method to assess (e.g. through mapping), monitor and evaluate these. During a workshop in Morocco from 22 - 25 September 2010, the role of WOCAT and its knowledge management system was elaborated on.

The recognition and central role of WOCAT and its tools within the EU-research project DESIRE (2007-2012) has increased more and more over the project years. If remaining project funds allow, a DESIRE book in the style of 'where the land is greener' will be produced based on the technologies, approaches and maps of the DESIRE study sites.

One activity line of the project 'Linking geospatial information and capacity development to combat desertification in Mongolia' involves creation of a joint research partnership linking local governmental and academic institutions founded in natural resources research and based on a capacity development programme in management and modelling of geospatial information. Joint research activities are also planned between the National University of Mongolia and UniBE students (CDE/ WOCAT).

3.1.1.5   Basic enabling activities and the way forward at the global level

Global management

A management meeting conducted at FAO in Rome from 15-17 February 2010 and regular skype conferences at the beginning of 2010 were held to further plan and agree upon WOCAT strategy (the way forward), actions, responsibilities, partnerships as well as harmonizing and mainstreaming WOCAT/ LADA tools and methods. The intent to improve the communication within the management team could not be kept up during the second half of 2010 and in 2011. The main task of global management is to coordinate the programme and maintain good relations to donors.

In the course of 2010, Markus Giger joined the WOCAT team especially to support promoting WOCAT, the process of securing new and continuous funding as well as defining the way forward for WOCAT after 2011.

Strategy and planning of the way forward for WOCAT after 2011

The topic of how to ensure WOCATs core funding in future is and remains a big concern of WOCAT, CDE and SDC as its current main donor. Several meetings with CDE and SDC on the way forward also in view of the next funding phase took place throughout 2010 (21.9.2010, 20.10.2010, 11.11.2010, 2.12.2010). Additional non SDC funding is required for the WOCAT programme to assure the growing global programme activities and particularly to secure sufficient capacity for WOCAT at CDE as well as to fulfil SDCs conditions for co - financing.

To that end WOCAT has engaged a consultant to help develop a funding strategy (business plan) and proposals as well as a concept note for WOCAT 2011+, to position WOCAT in global programmes (such as UNCCD, GEF, WB,) and in view of global issues (e.g. Climate Change, Food Security, Disaster Risk Reduction, Water). A draft concept note was prepared which, after being presented and discussed during the steering meeting in Kyrgyzstan, will be send to several potential partners and donors to get their reactions and improved commitment to WOCAT. The concept note describes in a concise form WOCAT's position and offer to initiate a new global partnership to upscale knowledge management and decision support in SLM.

During the share fair and WWSM15 in Kyrgyzstan several discussions and group work sessions revolved around how to include/ mainstream WOCAT and WOCAT-LADA tools at the local, national and regional level as well as in programmes with global concerns (for more information and results refer to the share fair day 2 and section 4 of these proceedings). Based on these discussions as well as on the early recommendations of the WOCAT evaluation 2008-2011 and donor's request options for a new WOCAT institutional set up were argued during the steering meeting (refer to section 5.2).

WOCAT external evaluation and review 2008-2011

The objectives of the review are to assess the WOCAT programme, especially focusing on the program phase 2008 – 2011. This includes assessing the relevance of WOCAT to development needs and priorities, the overall performance of the programme, its institutional set-up and management, its cost-efficiency and funding strategy, and to make recommendations for its future development and financing mechanisms. Anna Tengberg, the external evaluator, came for face-to-face meetings with SDC, CDE and WOCAT representatives to Bern at the end of may, attended the WOCAT Share Fair in Bishkek and the WWSM15 in Naryn as an observer and interviewed WOCAT partners at national, regional and international level. Her final report is expected in September 2011.

Basic enabling activities by the WOCAT secretariat

- Maintaining/ Sustaining the network, backstopping and support to network members
- Maintenance of databases and website
- E-mails: main persons involved in maintaining and enhancing the contacts and reacting to requests are: Isabelle Providoli, Rima Mekdaschi Studer, Gudrun Schwilch, Christine Hauert, Franziska Jöhr, Godert van Lynden and Hanspeter Liniger.
- Co-organising of WOCAT share fair in Bishkek (21-22.6. 2011) and WOCAT Workshop and Steering Meeting 15 in Naryn, Kyrgyzstan (23-28.6. 2011).

- Production of WOCAT Workshop and Steering Meeting 14 (Morocco, 2009) proceedings
- Handling of sales and distribution of overview book, SLM in practice and promotion material
- Assist in WOCAT external evaluation

Changes in staff of the secretariat: Christine Hauert left September 2010 and Mats Gurtner March 2011; new 55% senior research scientist (Isabelle Providoli) and two part time assistance (both 50%) March 2011.

Planned but not realized

Due to human and financial resources constraints and a shift in emphasis from tool development and output production to elaborating a strategy for securing funding and mainstreaming or WOCAT-LADA tools into major SLM programmes and institutions the following planned activities could not be realized

WADI and global map: further discussions

- New WOCAT website

- Offline Version

- Interactive map test workshop

- Training kits

- No global Training of Trainers (ToT)

- Official country and TF support letter, MoU

3.1.2.   **Funding 2010/ 2011**

WOCAT core funding 2010 and 2011 in USD (Expenditures up to 1.7.2011)

Donors	Budget 2010	Budget 2011	Expenditures 2010	Expenditures 2011
SDC	532'000	532'000	302'200	309'000
FAO TerrAfrica	70'000		260'000	
FAO - LADA	20'000		25'000	
FAO - SOLAW	32'000		32'000	
Bern University	15'000		15'000	
CODEP Mongolia	32'500	32'500	32'500	20'000
PPCR Tajikistan		39'000		39'000
CDE		99'600		13'000
DESIRE		6'000		600
Total	**701'500**	**709'100**	**666'700**	**381'600**

Exchange rate assumed throughout 2010: 1 USD = 1 CHF

SDC: The annual budget allocated to WOCAT core activities for the current phase 2008-2011 is CHF 432,000 per year (exception: CHF 473,000 for 2008). An extra fund of CHF 200 000 to cover WOCATs deficit reached by the end of 2010 (also carried over from 2009) was approved by SDC and was split over 2010 and 2011.

FAO: TerrAfrica guidelines for best SLM practices: By the end of 2010 FAO had transferred CHF 109'000 (equivalent to USD 90'000) for producing the English version of the publication: 'SLM in practice (CHF 39'000 in 2009 and CHF 70'000 in 2010). By the end of 2010 TerrAfrica expenditures amounted CHF 395'000 leading to a deficit of almost CHF 300'000. This deficit, however, also includes working hours that went into producing the French version of the publication.

WOCAT has received a second payment of USD 20,000 in 2010 from FAO – LADA based on a contract for a financial contribution of USD 48,000 for backstopping activities of the LADA-project at national and local level. The first instalment paid in 2009 was USD 15'000 and a third instalment is remaining for 2011.

Within the contract for the contribution to the first State of the World Land and Water Report (SOLAW) a payment of about USD 32'000 was received.

UNCCD/ Bern University: The paper 'G. Schwilch, B. Bestelmeyer, S. Bunning, W. Critchley, J. Herrick, K. Kellner, H.P. Liniger, F. Nachtergaele, C.J. Ritsema, B. Schuster, R. Tabo, G. van Lynden and M. Winslow. 2011. Experiences in monitoring and assessment of sustainable land management. Land Degradation & Development: Special Issue on Understanding Dryland Degradation Trends. Volume 22, Issue 2, pages 214–225' was directly funded with CHF 15 000 by the University of Bern (different account than WOCAT).

CDE: WOCAT has submitted a proposal to CDE asking for a financial support to employ an external consultant during 2011 for a limited period of time (460 h), which was granted early 2011. The consultant's assignment is to help developing a funding strategy and business plan and to deliberate proposals for WOCAT 2011+, to position WOCAT in global programmes (such as UNCCD, GEF, WB,) and in view of global issues (e.g. Climate Change, Food Security, Disaster Risk Reduction, Water).

DESIRE: DESIRE mandated WOCAT to compile, quality check and layout the documented SLM technologies and approaches for publishing an overview book of best practices analysed at test sites in the DESIRE partner countries. This assignment is being realized by the two assistants, which received thorough training and instructions beforehand.

Proposal for a supplementary credit submitted to SDC:

WOCAT has made investments over the last 2 years, which could not be covered by the existing funding. An over-expenditure of about CHF 200'000 was recorded by the end of 2010. This over-expenditure can be attributed to:

- Support and activities for UNCCD (such as preparation and participation at UNCCD meetings (COP and CST/CRIC), scientific input and writing of "White Papers" for CST, discussions on impact indicators and CST KM system)
- Production of TerrAfrica Publication 'SLM in practice- guidelines and best practices for sub-Saharan Africa
  - o expanded to more than double the original size (enriched with 13 SLM groups and 47 case studies from all over sub-Saharan Africa)
  - o French version
- LADA-WOCAT GEF5 proposal preparation
- Dollar and Euro exchange rate

This over-expenditure was communicated in the reports and discussed in a special meeting already on 27.11.2009 and in several follow-up meetings between WOCAT/CDE and SDC during 2010. Based on the extra value of the above mentioned activities and the achieved outputs, WOCAT requested SDC for an additional financial contribution of CHF 200'000, which was granted.

3.1.2.1   Budget 2011

The budget for 2011 amounts to USD 709'100 and the expenditures made up to July 2011 were USD 381'600 resulting in a remaining budget of USD 327'500 until the end of the year.

The current funding phase which is mainly dominated by SDC will terminate by the end of 2011.

3.1.3. Financial contributions 2010/ 2011

Financial contribution of WOCAT network partners in USD

	2009			Sep92-Oct 09	2010/2011			Sept 92-June 11
	Nov 08-Oct 09				Oct 09-June 11			
	Cash	In-kind	Total	Total	Cash	In-kind	Total	Total
Afghanistan (Helvetas, SLMIO)					70'000	27'000	97'000	97'000
Bangladesh (CHTDB)	4'000		4'000	21'100	2'200	10'000	12'200	33'300
CACILM (GIZ,)					90'000		90'000	90'000
Cambodia					250'000	30'000	280'000	280'000
CDE/ University			0	73'200	114'000	0	114'000	187'200
Central Asia CAMP			0	60'640	0		0	60'640
China (ADB/ GEF-national level)			0	89'100	30'000	30'000	60'000	149'100
China (FJSWCO, ADB/ FSWCC)			0	69'000			0	69'000
China (SWCMC)			0	397'700			0	397'700
CIS – Vrije Universiteit			0	126'350			0	126'350
CTA			0	26'500			0	26'500
DANIDA			0	355'700			0	355'700
DED (Niger)			0	6'000			0	6'000
Ethiopia (ESAPP)			0	59'735			0	59'735
Ethiopia (MoA, WFP)	10'950		10'950	74'850	50'000	10'000		74'850
FAO (WOCAT mgt, LADA, Asia and the Pacific, Kagera, ….)	41'000	30'000	71'000	1'211'040	100'000	10'000	110'000	1'321'040
FAO (LADA, TerrAfrica, SOLAW)					122'000	0	122'000	122'000
GEF (UNU-INWEH)	15'000		15'000	15'000			0	15'000
Ghana (VECO)			0	3'000			0	3'000
GTZ (OSS, DSS)			0	243'000			0	243'000
IBSRAM			0	5'500			0	5'500
ICARDA			0	35'000			0	35'000
ICIMOD	21'300	13'900	35'200	123'700	35'000	0	35'000	158'700
ICRISAT (Niger)			0	31'000			0	31'000
IDRC			0	85'000			0	85'000
India (ORISSA)	7'000		7'000	109'955			0	109'955
India (WDCU)			0	75'000			0	75'000
Indonesia (ASOCON)			0	104'028			0	104'028
Indonesia (GOV.)			0	63'028		5'000	5'000	68'028
INSAH (CILSS)			0	10'000			0	10'000
ISRIC		30'000	30'000	370'000	25'000	0	25'000	395'000
Kazakhstan			0	25'150			0	25'150
Kenya (MoA-SWC)			0	20'500			0	20'500
Kyrgyz Rep (Camp Alatoo, UNCCD-GTZ/ OECD, UCA, NCCR)			0	101'700		7'000	7'000	108'700
Madagascar (DERAD)	900		900	900		2'000	2'000	2'900
Nepal (University of Kathmandu)						15'000	15'000	15'000
Mongolia (SDCBern)	32'500	0	32'500	65'000	32'500	0	32'500	97'500
Mongolia (CODEP)	57'500		57'500	114'188	35'000	5'500	40'500	154'688
Morocco (MADRPM, DESIRE)			0	52'800	7'200	15'500	22'700	75'500
Nicaragua (PASOLAC/ GTZ/ LA)			0	74'000			0	74'000
Niger (GREAD)	2'950	650	3'600	3'600	18'500	10'000	28'500	32'100
Nigeria (Uyo University)			0	4'200			0	4'200
OSWU			0	4'000			0	4'000
Pakistan (IC)			0	6'500			0	6'500
Philippines (BSWM/ UPLB/ PHILCAT)			0	89'850	5'500	5'000	10'500	100'350
RSCU/ RELMA			0	186'500			0	186'500
Russia (University of Moscow)					0	35'000	35'000	35'000
SADC			0	6'000			0	6'000
SDC	441'100		441'100	4'130'150	532'000	0	532'000	4'662'150
SDC (CA, IRHA, COP8)			0	69'000			0	69'000
SDC (Impact Monitoring)	5'000		5'000	37'900			0	37'900
Senegal (INP, CSE)	21'406		21'406	21'406	1'012'000	150'000	1'162'000	1'183'406
Serbia (Belgrade University)		4'000	4'000	75'000	0	3'500	3'500	78'500
South Africa (DoA, NDA/ ARC- ISCW)*			0	470'746	4'000	51'000	55'000	525'746
SOWAP (Syn.)			0	89'700			0	89'700
Syngenta Foundation			0	131'500			0	131'500
Tajikistan (NCCR, MoA, PPCR)			0	23'500	15'000	5'000	20'000	43'500
Tanzania (MAFS-SCLUPU)			0	7'890			0	7'890
Thailand (LDD)			0	51'500			0	51'500
Togo (University of Lomé)			0	6'367		200	200	6'567
UNCCD	12'000		12'000	12'000			0	12'000
UNEP			0	100'000			0	100'000
Vietnam					3'000	10'000	13'000	13'000
WASWC			0	15'500			0	15'500
Total	640'106	78'550	718'656	9'776'173	2'552'900	436'700	2'989'600	12'765'773

3.1.4. **Publicity**

- WOCAT on the Internet (www.wocat.net): see statistics below

- WOCAT newsletter (2x) and contributions to other newsletters

- WWSM14 proceedings 2009 and proceedings of the WOCAT-DESIRE symposium

- **Meetings and workshops:**

  LADA / WOCAT:
  - Participation at the training course of 'Integrating country specific indicators in LADA indicator sets and updating DIS4LADA', Alghero, Italy (24-27 November 2009.
  - Participation at the Technical LADA Meeting: Global Land Degradation Assessment and Analytical Models for interpretation of local and national land degradation assessment results. Wageningen, 6-14 September, 2010
  - LADA final meeting, Rome (6-8 December, 2010)
  - Tropentag (Zürich, 14–16 September 2010),
  - International Conference on 'Advanced Scientific Tools for Desertification Policy' (DeSurvey, Rome, 28-29 September 2010)
  - Launch of DesertNet International (Rome, 30.9.2010)
  - Participation at GEF KM: Land Expert Workshop on SLM Indicators, in Rome on 1 October, 2010
  - Keynotes on SLM knowledge management and decision support at: Landcon meeting (Xi'an, Shaanxi Province, China from 11-15 October, 2010)
  - Participated in UNCCD technical workshop on methodologies and data needs for the UNCCD subset of impact indicators (11 June 2010)
  - Participated in UNCCD technical workshop on impact indicators refinement, 16-17 December 2010 in Bonn Germany
  - Participation in UNCCD CRIC9/CST2 meeting 15-23 February 2011, Bonn. Joint WOCAT/LADA/DESIRE side events and stand.
  - Dissemination event of the rural poverty report 2011 of IFAD, SDC and CDE, 17. June 2011

- **Promotion material / Posters:**
  - Poster presented at UNCCD CRIC9/CST2, flyers for distribution
  - Poster stand at the dissemination event of the rural poverty report 2011 of IFAD, SDC and CDE, 17. June 2011.

- **Papers presenting WOCAT:**
  - Experiences in monitoring and assessment of sustainable land management, by G. Schwilch, B. Bestelmeyer, S. Bunning, W. Critchley, J. Herrick, K. Kellner, H.P. Liniger, F. Nachtergaele, C.J. Ritsema, B. Schuster, R. Tabo, G. van Lynden and M. Winslow, in Land Degradation & Development, 2011, Volume 22, Issue 2, p. 214 – 225.

- **Books**
  - „Sustainable Land Management in Practice – Guidelines and Best Practices for Sub-Saharan Africa" available in French and English
  - 'where the land is greener' in French and Spanish available only on-line
  - UNCCD – WOCAT brochure 'benefits of SLM in French and Spanish available also on-line

3.1.5. **WOCAT website statistics**

Compiled by Cinzia De Maddalena

See http://pragmas.dyndns.org/cgi-bin/awstats.pl?month=all&year=2011&output=main&config=www.wocat.net&framename=index

Website statistics Oct 2009 to 14 June 2011 (19.5 months): total requests, pages, and distinct hosts

The website statistic was analysed in three categories: requests, pages and distinct hosts. The WOCAT website consists of several "pages" such as home, methods. A "page" "contains different files such as graphics, HTML document, etc. A "request" is a hit for a specific file on a page by a website visitor. If a page consists of several files such as various images, style sheets, HTML document etc. for each file a hit will be recorded. Due to this reasons it is more appropriate to focus on distinct hosts or number of visits instead of requests and pages.

In general, the website statistics needs to be interpreted with some caution. The number of requests does not reflect the number of visitors because each graphic file on a web page counts as one request. On the other hand, certain visits are not counted, if the user has visited this page before and it is still in his cache and not refreshed or the Internet Service Provider's (ISP) cache has saved it, because somebody else from the same ISP has looked at that page recently. The proportion of requests retrieved from the cache can make up to 50%, so half of the user's requests are not counted.

Further reading on http://www.motive.co.nz/glossary/hits.php and www.analog.cx/docs/webworks.html.

	Website statistics Oct 09 to 14 Jun 11 (19.5 months)	Website statistics Nov 08 to 18 Sep 09 (10.5 months)	Website statistics 2010	Website statistics 2008
Total requests	39,511,201 (66,517 /day)	651,798 (1,850 / day).	1,946,858 (5,469 / day)	664,002 (1,814 / day)
Total pages	348,459 (587 / day)	300,430 (852 / day).	204,817 (561 / day)	317,870 (868 / day)
Distinct hosts **(number of different computers)**	720 (53 / day)	19,627 (61 / day)	18,377 (50 / day)	23,081 (39 / day)

Compared with the previous periods the current period from October 2009 until June 14 2011 reports an increasing trend in the domain of requests. This can be due to further development on the website including an increase of files per page. In contrast to this increase the amount of different entered pages and distinct hosts diminished. A reason might be that with time the amount of users did not increase significantly but their frequency of visiting WOCAT's website rose significantly. By comparing the two time periods it should be taken into account that the length of the evaluated periods are not equal and therefore it can result in a wrong interpretation. Anyway, the distinct hosts rose from 2008 to 2010 which is a positive trend which shows public interests for WOCAT.

The graph below shows "requests" and "pages" from October 2009 to June 2011. There are significant peaks of "pages" before the WOCAT WWSM.

WOCAT Website Statistics
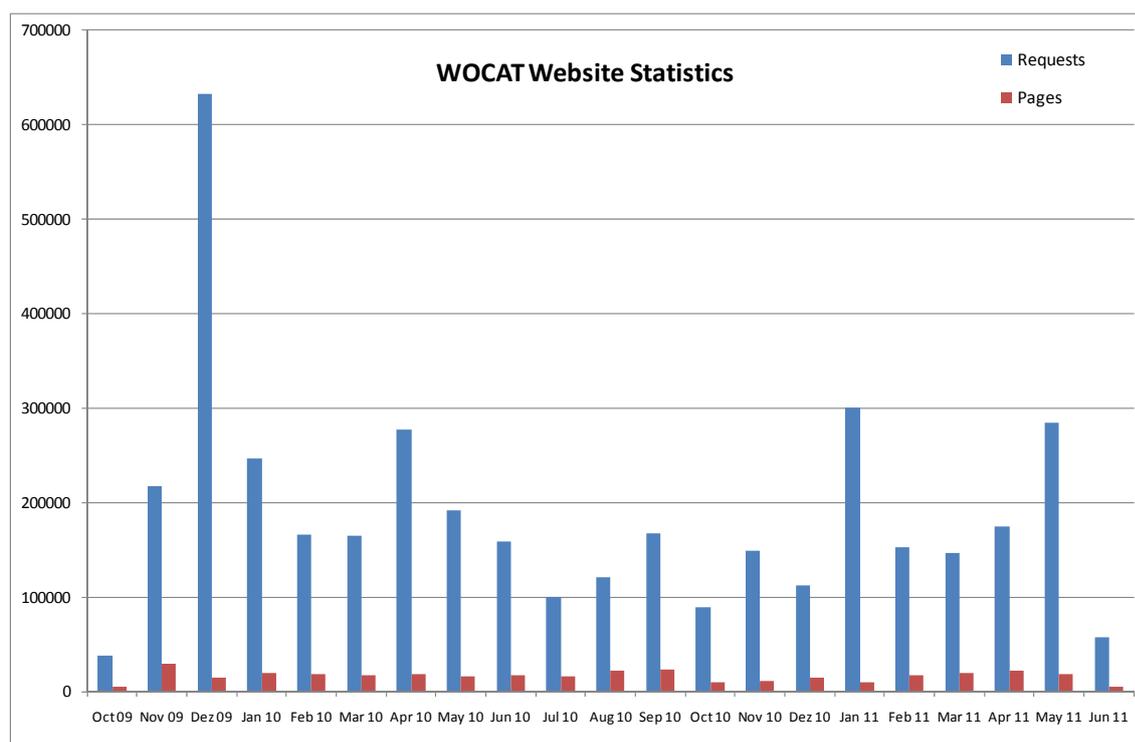
Most requested pages and downloaded files with total hits (Oct 2009 to 14 June 2011)

1. Home   30,261
2. News – Events   14,110
3. Knowledge base   6,016
4. Methods   4,971
5. Knowledge base - SLM Technologies and approaches   4,474
6. Site function (Create new account)   4,017
7. Download Goggle Earth file *Wocases*.(kmz)   2,982
8. Network   2,729
9. Vision – Mission   2,191
10. Download *SLM in practice – Terrafrica* (pdf)   1,265
11. Methods – Database and manual (QT/QA)   1,240
12. Download *Overviewbook* (pdf)   1,718
13. Download Proceedings *WWSMPhilipines07* (pdf)   649
14. Download *No-tillSwiss_Sturny* (pdf)   561
15. News – Events – WOCAT Symposium 2011   393
16. Download *Mapping questionnaire french* (pdf)   373
17. Download thesis *Gurtner* (pdf)   356
18. Download *WOCAT2010_selfstanding* (pps)   331
19. Download *WOOK_PART2.1* (pdf)   321
20. Download *WOOK_PART1* (pdf)   301

Home with 30,261 requests is the absolute leader of the requested pages. But this is rather pointless as it only indicates that many people get to the WOCAT home page but maybe not any further.

Duration of stay on website (Oct 2009 to 14 June 2011)
Average stay on website: 255s

0s-30s:	73%	of visitors
30s-2mn:	7.6%	of visitors
2mn-5mn:	5.2%	of visitors
5mn-15mn:	5.9%	of visitors
15mn-30mn:	3.4%	of visitors
30mn-1h:	3% of visitors	
1h+:	1.7%	of visitors

Common search terms (Oct 2009 to 14 June 2011)
1. WOCAT   3681 hits
2. Where the land is greener   287 hits
3. www.wocat.net   213 hits
4. Bodendegradierung   127 hits
5. Kaffeeanbau ökologisch   120 hits
6. WOCAT database   99 hits
7. Bodendegradierung (Definition)   76 hits
8. Landcon 1010   75 hits
9. Dimensions of knowledge   48 hits
10. Sustainable land management (Definition)   37hits

3.1.6.   **Global Management review - FAO**

Report by Sally Bunning (2_Progress report_FAO_Bunning.ppt)

FAO Programs and Actions that contribute to WOCAT during 2010-2011

FAO contributes to WOCAT as a member of the management team with the aim of providing technical support to enhance the knowledge base and country capacities through its Member Countries and intergovernmental processes.

In partnership with WOCAT, FAO has actively mainstreamed WOCAT tools into the LADA - Land degradation in drylands - project and methods and tools for the assessment and mapping of land degradation (LD) and sustainable land management (SLM) at (sub) national and local levels. As a result, the assessment process enables countries, not only to assess the negative trends of land degradation (LD) but to confront this information with the positive trends due to sustainable land use systems and management practices (SLM) i.e. where land resources are being sustained or improved due to interventions for land resources protection/ conservation, sustainable management and restoration/rehabilitation.

LADA-WOCAT methods and tools for LD and SLM assessment and mapping were jointly developed with the 6 pilot countries to provide an integrated biophysical and socioeconomic assessment and use of the DPSIR framework. It has resulted in

- (sub)national assessments and maps of Land use systems, LD types, extent, severity, causes, drivers, impacts, and SLM practices (type, extent, effectiveness) in the 6 pilot countries (Argentina, Cuba, China, Senegal, South Africa and Tunisia);

- best practices assessments and publications in 4 of the 6 countries (China, Senegal, South Africa and Tunisia) using the WOCAT questionnaires for assessing S:M Technologies (QT) and approaches (QA);

- local level assessments in 3 to 6 sites in each pilot country using a combined set of methods and tools that includes the assessment of land resources (vegetation, soil, water) , LD trends, SLM practices and their impacts on livelihoods and ecosystem services (productive, regulating, supporting and sociocultural); and.

- The partial use of the above tools in some other countries and projects (Mali, Tajikistan, Kyrgyzstan and other Asian countries)

FAO supported the development of the SLM in Practice Handbook for TerrAfrica, including mobilizing the funding through the World Bank and providing guidance and technical inputs for its preparation and publication for UNCCD CST and CRIC in Bonn in 2011. Moreover, FAO is funding the reprinting of SLM in Practice and will distribute the publication widely

Through this joint LADA-WOCAT process and the TerrAfrica publication, FAO actively contributed to the outreach and publicity of WOCAT with UNCCD Secretariat and countries and the TerrAfrica programme and partners.

FAO has developed with WOCAT, a proposal (PIF) for a global project to be funded under the GEF-5 replenishment for scaling up of LADA-WOCAT tools in interested countries with a view to support them in decision making at national, sub-national and local levels for SLM implementation and investment and for more effectively implementing and monitoring progress towards the 10 year strategic programme of the UNCCD. FAO is currently actively seeking from potential partner countries, letters of interest for the project that provide the GEF national focal point endorsement and an indication of country allocations from the GEF STAR resources and cofounding possibilities

FAO has contributed technical support in the development of the WOCAT module to asses and map watersheds (2010) and the module to assess climate change adaptation and resilience (2011) and it will pilot test and further develop these tools in 2 to3 sites in both Kenya and Ethiopia through a Swedish funded project on SLM and CC adaptation (June 2011-Dec 2012)

3.1.7. **Global Management review - ISRIC**

Report by Godert Van Lynden

ISRIC activities end of 2009 – mid 2011

- Continued as member of the Management Team (since WWSM1)
- Assisting in general coordination of the network, but...
  - Activities gradually reduced due to decreased funding (phasing out of DESIRE activities);
    - ~~2 WOCAT Newsletters (December 08, July 09);~~ }
    - ~~Maintenance of WOCAT-L (mailing list);~~ } *(activities stopped)*
    - ~~Co-organising WWSM13~~ }
  - Regular feedback on Email requests;
  - Contribute to QM revision and db / Website
  - Presentation for and enhancing contacts with external groups;
  - PR activities and exploring additional funding opportunities (esp. within other project proposals, e.g. "WOLADA". MASSAGE, GWC).
- WOCAT within other (ISRIC) projects:
  - DESIRE
    - WOCAT mapping component major component in DESIRE WB1;
    - attended DESIRE WB leaders meetings;
    - attended 4th DESIRE plenary meeting (China, Oct. 09);
  - LADA (finished à "WOLADA" GEF proposal?);
  - Green Water Credits: implementation of WOCAT!! (see also presentation in Share fair).

Impression during transfer day (Photo: HP. Liniger)

3.2. National progress / Poster market

Please note that not all active WOCAT countries were able to provide a narrative progress and workplan report. Please refer to annex 2 and the CD for the national progress posters presented at the 15th WWSM.

Sow Samba presenting national progress poster at poster market (Photos: I. Providoli)

3.2.1.   Asia

3.2.1.1   Afghanistan

Institution: Sustainable Land Management Institute Organization

Contact person: Helaluddin Musadiq (helal.musadiq@slmi.org.af), (*1_AFCAT poster.pdf*)

Progress report November 2009 – June 2011

SLMI is a collaborative initiative involving eleven institutions working in Afghanistan in the field of water and land management and environmental conservation. SLMIO is funded by SDC (major donor) and other partners. Helvetas has been given the mandate to establish SLMIO, in close collaboration with SLMIO partners.

Knowledge Management is one of the main objectives of SLMI Organization and use of WOCAT tool and methods has been selected as one of the main ways for achieving this objective. Based on the initiatives and learning from other countries, for instance Nepal, China, Bangladesh, Myanmar, etc., SLMIO is in the process of setting up Afghanistan Conservation Approaches and Technologies (AFCAT) network, starting with the Central Highland regions, and linked to national AFCAT initiative planned by the Ministry of Agriculture, Irrigation and Livestock (MAIL; Government of Afghanistan).

In the year 2010, SLMI organized two WOCAT trainings in Bamyan, Afghanistan. One of them was conducted with the support of the International Centre for Integrated Mountain Development (ICIMOD), Bamyan University, Helvetas and Agha Khan Foundation (AKF). The participants visited a project site of the AKF for practical works.

The WOCAT QT and QA have been translated into Persian so that the national professionals are able to make use of the tools and methods effectively.

An AFCAT coordinator has also been recruited who will be responsible for the overall management of the AFCAT database system in SLMIO.

The Technical Advisor (Watershed Management) of Helvetas Afghanistan has made substantial contribution to the preparation of the WOCAT module on Watershed Management, which is almost now finalized.

Funding for AFCAT activities under SLMIO level and partners remain committed for using and promoting WOCAT tools and contributing to AFCAT. AKF provided funding support for WOCAT trainings in 2010.

Five case examples have been documented in the field but they remain to be entered into the database.

SLMIO team is sharing information about WOCAT with many other organizations and individuals. Helvetas has included WOCAT as one of the tools and methods for documenting their SLM practices and also allocated resources for doing so.

SLMIO team: Sanjeev Bhuchar, Mohammed Khalid Azami and Helaluddin Musadiq (Photo: HP: Liniger)

Work plan July 2011 – July 2012

At least three more WOCAT trainings will be organised in 2011-2012. One training will be conducted in Bamyan in September 2011 with ICIMOD's support.

About 20 SLM case examples from Central Highlands of Afghanistan are planned to be documented and shared during this reporting period.

AFCAT database will be set up and fully functional by July 2012.

About 20,000 USD are allocated for AFCAT related activities, including training and documentation in 2011-2012 and some more contributions are expected from partners. Watershed module and climate change modules will be translated into *Dari* by July 2012 and also tested in the field.

SLMIO will continue to share information about WOCAT and AFCAT at various platforms and the tools will be also included in academic courses of SLMIO and Bamyan University.

SLMIO and partners hope to continue participating and contributing to the global and regional WOCAT initiatives in future.

3.2.1.2   Bangladesh

Institution: BANCAT

Contact person: Sudibya Kanti Khisa(skhisa@yahoo.com), (*2_BANCAT poster.pdf*)

Progress report November 2009 – June 2011

- BANCAT WG Meeting: Personal telephonic discussions were held with some of the working group members of BANCAT on how to carry on further documentation of SLM technologies with more active involvement of the members.

- BANCAT website updated: BANCAT fact sheets posted in the website as per work-plan.

- Publication of BANCAT fact sheets: BANCAT fact sheets were published with funding from ICIMOD with active support from Ms. Isabelle Providoli, the former HIMCAT Coordinator, ICIMOD, Kathmandu, Nepal.

Work-plan July 2011 – July 2012

- Get together of BANCAT WG members: Meeting is planned to be arranged (although very difficult to get all /many of them together) with BANCAT WG members subject to the availability of their time to attend the meeting. Funding: USD100 (Required)

- Documentation of SLM/WM Technologies and Approaches: Subject to the availability of fund from different sources, more SLM/ WM Technologies and Approaches will be documented. It is expected that fund will be available from ADB funded CHTRDPII Funding:USD10,000(Required)

- Updating BANCAT website: BANCAT activities will be regularly posted in website. Funding: USD 200 (Required) . Our website was hacked, salvage is underway, if not possible, and there will be a new domain registration.

- Technical advice and support: Technical advice and supports will be provided to the development of CFs by the beneficiary farmers of HKI, Khagrachari and to the NGOs involved in implementation WMsc of CHTRDPII. Funding: No fund will be required)

3.2.1.3   China

3.2.1.3.1   Institution: Songliao water resources commission

Contact person: Mr. Meng Linggin

Progress report November 2009 – June 2011

Since 2006 technologies of SWC and land use management were collected. By 2009 17 technologies were documented. The technologies with the characteristic of practicability and low cost were compiled into a book and used by farmers in Northeast China. During the "International Symposium on Soil Quality Management of World's Black Soils" some experts visited the place in Heilongjiang province to see these SWC technologies in the field. By 2010, these SWC measures were tested and monitored in some small watersheds and on an experiment farm (station). These studies were conducted by Songliao Water Resources Commission and Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences. The outcome of these studies will be reported by the end of 2012.

Workplan July 2011 – July 2012

Continue the documentation of technologies mentioned above. These practical technologies can be used in other places in the world, especially in black soil areas. The testing of 11 SWC measures that are used in Northeast China will be finished before 2012 and two QTs will be filled.

3.2.1.3.2   Institution: GEF LD CPMO and Gansu PMO

Contact person: Song Zengming, Wang Yaolin, (*3_China Progress_Wang Yaolin.pdf*)

Progress report November 2009 – June 2011

We started the second stage of PRC-GEF Partnership on Land Degradation in Dryland Ecosystems. The work on documenting the Best Practices for SLM in Northwest China was put into the component 1 of the project. The objective is to compile and publish the Best Practices for Land Degradation Control in North China (second volume).

A team of experts from 6 project provinces was set up for this initiative. They have selected totally 18 technologies and 18 corresponding approaches for documentation. Training was held for the team before an investigation and analysis in the field. From March 2011 onwards, they started the investigation, analysis, and documentation with the WOCAT tools. The draft of the documentation has taken shape and was reviewed by an expert panel in June 2011.

Workplan July 2011 – July 2012

Some complementary investigation in the field will be carried out to reinforce the documentation. In addition, picture compilation and writing polishing will continue. It will be published and brought to an international symposium on the project scheduled in August 2012.

3.2.1.4 Central Asia

3.2.1.4.1 CACILM (Regional)

Contact person: Jamal Annaklycheva

Progress report and work plan

Within the framework of CACILM pilot documentation of three best practices using WOCAT tools (two technologies and one approach) was generated from January to March 2011 through the implementation of CACILM national projects in Central Asia. The following practices were documented:

- Energy efficiency technology "Reduces pressure on forest resources by improved thermal insulation in private houses". The technology has been successfully applied and has proven its sustainability in the project "Sustainable Management of Natural Resources in Gorno-Badakhshan", Tajikistan.

- "Rehabilitation and protection of state forests jointly by the State Forestry Agency and local forest users based on long-term agreements" (so-called "Joint Forestry Management"). The approach is worked out and successfully applied in the project "Sustainable Rehabilitation and Development of Flood Plain Forests in Gorno-Badakhshan", Tajikistan.

- Technology: "Cultivation of sainfoin on high mountain pastures – Suusamyr Valley". The technology is described in CACILM project in Kyrgyzstan "Demonstrating Sustainable Mountain Pasture Management in the Suusamyr Valley, Kyrgyzstan".

Practices are published in WOCAT online DB. The experiences are successfully evaluated and it was decided to continue the documentation of best practices of CACILM projects in the WOCAT format. Therefore, a regional WOCAT training was held from April 18th to 22nd, 2011 in Dushanbe, Tajikistan for national coordinators of CACILM Multi-country capacity building project and national resource persons, who are responsible for the subsequent documentation of best practices at the national level. The training was conducted by representatives of Bern University, Centre for Development and Environment (CDE).

Five national working meetings are planned in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan with CACILM projects and other involved stakeholders in the field of SLM in May 2011. It is planned to make the list of best practices available for further documentation at the national working meetings.

During 2011 the two projects (CACILM Multi-country capacity building project and CACILM Knowledge Management project) will be documenting the selected best practices. For these purposes, resource persons who went through WOCAT Regional Training in Dushanbe in April 2011 will be involved.

3.2.1.4.2 Kyrgyzstan: Kyrgyz National Agrarian University

Contact person: Abdybek Asanaliev, (*4_Kyrgyz Nat Agrar Uni.pdf*)

Progress report November 2009 – June 2011

- During the reporting period 8273 households were trained jointly with the FAO Project: "Immediate support to most vulnerable farming households to protect their livelihoods and to restore agriculture production".

- 4005 kg lucerne seeds and 16914 kg sainfoin seeds were distributed and used on a cultivated area of 455 ha. In addition, 89,000 kg superphosphate and 89,000 kg carbamide were distributed.

- About 4000 households in seven regions were trained for sustainable crop management.

Workplan July 2011 – July 2012

- SLM technologies are planned for documentation in 2011.

- 2 trainings for crop management and 1 training for sustainable pasture management are planned in Suusamyr valley in 2011.

3.2.1.5   HIMCAT

Institution: ICIMOD

Contact person: Madhav Dhakal, (*5_HIMCAT-NEPCAT.pdf*)

Progress report November 2009 – June 2011

The BANCAT fact sheets containing 21 SLM practices (technologies and approaches) have been published and shared by BANCAT team with the technical and financial support of ICIMOD.

The 2nd Steering Committee (SC) meeting of NEPCAT was organized in March 2010 and one day NEPCAT workshop was organized jointly by the Department of Soil Conservation and Watershed Management and ICIMOD in July 2010. The major decision of the workshop was to conduct a training on "Documentation of Sustainable Land Management (SLM) technologies and approaches using WOCAT method" to document more promising SLM technologies and approaches in Nepal and publish them as 2nd NEPCAT fact sheets. The training was organized from 25 to 29 October 2010. Till date (12th of May), eleven case studies (Ts & As) from Nepal have been compiled. The contributors of the NEPCAT fact sheets-2 are various government departments and nongovernmental organizations/ institutions including Department of Soil Conservation and Watershed Management, Department of Agriculture, Kathmandu University, International Development Enterprises–Nepal, Sustainable Soil Management Program, Local initiatives for Biodiversity Research and Development, ICIMOD and others.

Similarly, two trainings on "Documentation of Sustainable Land Management (SLM) Technologies and Approaches using WOCAT method" were organized in Myanmar (February 2010) and in Afghanistan (September 2010). In Myanmar the training was organized jointly by the Ministry of Forestry and ICIMOD, and in Afghanistan it was organized by Sustainable Land Management Institute. About 50 SLM professionals from 3 countries have been trained on WOCAT methods.

WOCAT method was also introduced in ICIMOD's Low Cost Soil and Water Conservation Training in March/ April 2010, and an introductory presentation of WOCAT/ HIMCAT in the HKH was shared in the FAO's workshop on "Validating the New Generation of Watershed Management in Asia and Pacific".

The ICIMOD team contributed to WOCAT task forces over the year. Contributions were testing watershed module in the field together with Kathmandu University and providing inputs to WOCAT for the preparation of climate change adaptation module.

The HIMCAT extranet site is maintained and continued. Three issues of HIMCAT newsletters have been published and shared among network partners.

The extranet site is still not too active and the contributions from members are limited.

Workplan July 2011 – July 2012

An important activity planned for 2011 is the NEPCAT fact sheet-2 publication; the target is to publish at least 20 case studies (Ts & As) by the end of 2011. The NEPCAT factsheet-2 is a publication which includes successful and widely implemented SLM practices by the contributing partner institutions and organizations. The contributors of NEPCAT fact sheet -1 were SSMP and ICIMOD whereas the contributors of fact sheet -2 will be GOs, INGOs and a University working in Nepal.

ICIMOD, as being the focal point for the HIMCAT network, is planning to organize trainings on "Documentation of Sustainable Land Management (SLM) Technologies and Approaches using WOCAT method" together with SLMI in Afghanistan in September 2011. Pakistan Forest Institute in Peshawar is very keen to publish PAKCAT fact sheets; ICIMOD will provide support to PFI for the same in 2012.

ICIMOD will continue contributing to WOCAT task forces especially for testing watershed module by August, 2011 and climate change module in 2012.

The HIMCAT extranet will be continued and further activated. New information about HIMCAT countries will be included on the website. The publishing of two HIMCAT newsletters per year (in July and December) will be continued. The HIMCAT countries and WOCAT networks will be further strengthened.

3.2.1.6 Mongolia

Institution: Geoecology Institute

Contact person: Mandakh Nyamtseren, (6_*MONCAT.pdf*)

Progress report November 2009 – June 2011

The WOCAT initiative in Mongolia began in 2008 with support and assistance of SDC project, entitled Coping with Desertification. The Geoecology Institute was selected as leading institution for running the WOCAT initiative in Mongolia. At early stages of development we struggled with problems of human capacity in using the WOCAT tools. The first two years were therefore dedicated to educate national specialists, provide technical assistance, and build up mutual understanding on needs and necessities of the WOCAT tools for Mongolia. Since 2010, actual implementation of WOCAT initiative was started. During the years of 2009 and 2010 activities mainly directed to identify and document proper SLM technologies and approaches. To date the WOCAT database for Mongolia consists of 35 technologies and 5 approaches. The documented technologies cover broad issues, for instance, technologies related to pasture management, soil conservation, restoration of mining land, rehabilitation of abandoned croplands etc.. The main pitfalls of the WOCAT initiative in Mongolia can be related to lack of communication with relevant stakeholders, inappropriate data and information sharing and technological issues.

Workplan July 2011 – July 2012

For the next years the WOCAT initiative in Mongolia is planning to implement the following activities:

- Identify and document technoloies and approaches relevant to western Mongolia
- Develop map using WOCAT/LADA approach
- Improve MONCAT database

3.2.1.7 Philippines

Institution: PHILCAT through the Bureau of Soils and Water Management

Contact person: Samuel M. Contreras, (7_*PHILCAT.pdf*)

Progress report November 2009 – June 2011

In 2009, PHILCAT became "silent" for a while. Nonetheless, members have actively continued relevant activities particularly in the areas of promotion, awareness-raising and advocacy campaign, and research and development on soil and water conservation. Exchange program on Sustainable Land Management (SLM) with regional partners such as Bhutan was also undertaken during the last quarter of the year which opened possible avenues for regional cooperation on SLM implementation. In 2010, PHILCAT regained its strength and membership was expanded to include other interested national government agencies and non-government organizations. There were five (5) SWC technologies and three (3) approaches initially documented as they provided significant impacts to the rural communities. These will be fully documented using WOCAT's QA and QT. Four (4) SLM best practices were also documented as part of the UNCCD 4th National Report using PRAIS portal. Four (4) quarterly meetings were held since last year and in the process new members were briefed and oriented about WOCAT methodology and tools and its database. PHILCAT also participated in the inception workshop for the FAO-BSWM project "National Capability Building for Land Degradation Assessment and Climate Change Adaptation" in which WOCAT QM is an important component. It is still a long journey ahead to optimize the application of WOCAT KM platform. In this regard, PHILCAT members will continuously work together to promote WOCAT methodology and tools to document, disseminate, and facilitate broader adoption of SWC approaches and technologies in the Philippines.

Workplan July 2011 – July 2012

Our work plan for July 2011 - July 2012 focuses on awareness-raising and advocacy campaign, capacity building, and strengthening our knowledge management and decision support on SLM using WOCAT methodology and tools. It is expected that these efforts will facilitate the effective dissemination of location-specific SLM best practices and ensure their up-scaling and replication in land degradation hot spots and critical areas. Knowledge Management (KM) and Decision Support (DS) is an important thematic cluster of the updated Philippine National Action Plan (NAP) to combat desertification, land degradation and drought (DLDD). Therefore, a proposal will be prepared to secure internal funding to implement the KM component of the NAP using the WOCAT platform. More ground implementations of SWC projects are targeted and the process could be properly documented through WOCAT methodology

and tools. The National Capability Building on Land Degradation Assessment (LADA Project through TCP with FAO) will be on its peak of implementation during the period. WOCAT QM will be applied to map and determine land degradation hot spots and appropriate SWC measures in specific Land Use System (LUS) and administrative unit. Therefore, a briefing and orientation about WOCAT tools and database management will be undertaken in late July 2011 to be followed by training in November 2011 with our partner agencies representatives as participants. Progress of all activities relevant to knowledge management on SLM using WOCAT methodology will be monitored and assessed during PHILCAT's regular quarterly meetings.

3.2.2. **Africa**

3.2.2.1 **Ethiopia**

Institution: Ministry of Agriculture and Rural Development

Contact persons: Daniel Danano and Richard Fulss

Progress report November 2009 – June 2011

ETHICAT shared the new website which the Ministry of Agriculture launched in April 2011 with the support of GIZ:

http://www.slmethiopia.info.et/

3.2.2.2 **Morocco**

Institution: University Mohammed V

Contact persons: Abdellah Laouina and Nadia Machouri, (8_*Morocco.jpg*)

Progress report November 2009 – June 2011

We have realised during this period the documentation of:

4 Technologies:

- Assisted regeneration of cork oak in forest land
- Crop rotation Cereal / leguminous in the rainfed agro-pastoral
- Fodder cultivation: example the lupine
- Rainfed tree plantation: olive associated with annual cultivation

3 Approaches:

- Assisted regeneration of cork oak
- Crop rotation Cereal / leguminous
- Rainfed land development

2 Techniques recently introduced in our study area:

- Gullies correction by atriplex plantation: Atriplex plantation in 2009, and Monitoring for 3 years of atriplex by different measurement techniques

- Mulching and minimum tillage: Use of mulching in barley fenced plot, Minimum tillage (5cm) and Monitoring for 3 years by different measurement techniques

Workplan July 2011 – July 2012

- Contribution to watershed module development and testing: WOCAT tools applied to the watershed at scales:
  - o Hannanat catchement (0,2 km^2)
  - o Bouregreg watershed (9700 km^2)
- Evaluation of some of the techniques described in the Roose book (Masters Students research)

3.2.2.3   Niger

Institution: GREAD

Contact person: Abdoulaye Sambo Soumaila

Progress report November 2009 – June 2011

After more than 6 years of slowdown, WOCAT Niger has restarted its activities from 2008 under the leadership of GREAD. It was on one hand to update Niger database developed since 2002 and on second hand to recreate network of institutions and projects involved in the area of SWC in Niger.

During the period 2009-2011 the following results were achieved:

1. concerning the management of online database, it was realized:

   - first, collection of data of 71 technologies and 25 approaches (11 potential technologies will be added to this list). These data were validated and will be integrated into the global database as soon as the situation in Niger for internet connection and electricity will be improved.

   - second, database of institutions and programmes operating in the area of SWC in Niger. We are currently elaborating a database in ACCESS format for the management of this information.

2. about reactivation of WOCAT in Niger, around one hundred organizations have been contacted. These contacts in 2009 and 2010 led to establishment of strategic partnership with some institutions such as ROSELT, CCA, CNEDD, Special programme of SWC, NGO AD Nourriterre Tahoua. But the absence of a country programme for Niger has not allowed the development of these strategic partnerships.

3. on cooperation with WOCAT international coordination, several achievements: participation at annual workshop of 2009, 3 contracts (TerrAfrica book, workshop in Senegal and Training Module) and two successive supports (2009, 2010).

Ultimately, this year 2011 should show the main objectives of data collection and publication. We must add that we have received 2 students from Europe universities (French –Polytechnic school of Zurich- and Belgium) who are conducting PhD research in the field of water and soil conservation. Also, several international researchers had contacted GREAD to receive documentation on WSC technologies and approaches.
The results are still very modest. But the coming months should enable GREAD to honour its commitments.

Workplan July 2011 – July 2012

2010-2011 Workplan is based on four main activities:

- the book's publication and entry of data into the database in June 2011 with a presentation of results in July-August 2011;

- preparation and organization of a workshop on WOCAT tools during the period September-December 2011;

- launch of an extension programme of WOCAT tools with NGOs, development projects and Secondary Schools (January-April 2012);

- writing and publication of the paper on methods for evaluating the impact of SWC technologies and approaches (September 2011-July 2012).

During this period, we will change our strategy. WOCAT coordination will receive a report.

3 questions now: how relationship between WOCAT Niger and international coordination, what approach of funding and long run goals, and with which institutions?

3.2.2.4   Senegal

Institution: National Institute of Pedology (INP) leader of SLM group (pedologie@inp.sn/www.inp.sn)

Contact person: Samba SOW (samba_sow@hotmail.fr), (9_*SENCAT.pdf*)

Progress report November 2009 – June 2011

Within the Sustainable Land Management project (SN-GEF), INP is responsible for inter-sectoral coordination and for leading the group which worked on those SLM activities listed in the 2010 work plan:

Employment of an expert for the synthesis of existing technical documents on SLM in order to prepare the legal document named "Cadre National d'Investissement Stratégique pour la GDT (CNIS-GDT)" (= National Framework for Strategic Investment in SLM).

A national communication campaign to sensitize policy makers and stakeholders for the SLM approach was conducted. INP has developed a communication plan that has been validated by the "Comité Restreint de la GDT (COM-R)" (=Restricted SLM Committee). It identifies the strategies and means of communication to be implemented in order to educate all stakeholders on the importance of SLM so that it will be integrated into all policies, plans and development programs. In addition radio emissions and press conferences are being provided to raise awareness about the crucial dimension of SLM.

Conducted field missions: A mission of "inventory of actors, approaches and technologies in SLM" was conducted in the regions of Ziguinchor, Sédhiou, Kolda, Kedougou, Tambacounda, Diourbel and Matam with the aim to set up a database for the establishment of CNIS-GDT and SenCat. Additional workshops were organized with the support of the Polytechnic University of Catalunya (UPC) and titled "Workshops for extension and coordination of development partners in SLM" held in the regions of Dakar, Saint Louis, Kaolack and Louga.

More than ten workshops for all of the "Comité de Développement Local (CLD)" (=Regional Development Committee) were held at the national level. The COM-R (of which the INP is part) led a series of workshops for all the CLDs in the different intervention areas of the pilot project funded by the GEF. The objective was to sensitize all stakeholders and especially local decision makers on the need for SLM in programmes and local development plans.

Awareness raising for technicians (representing the governmental ministries at the regional level) about the planned database and the WOCAT tools in order to strengthen their capacities was done.

In December 2010 a capacity building workshop on the use of the questionnaires QA and QT was held for members of the COM-R and the implementing agencies of the SLM project (SN-GEF). The training included theoretical and practical aspects and was provided by experts from WOCAT International. This was followed by a training workshop for the same participants in May 2011 on the QM. This training was provided by a national LADA / WOCAT expert.

Software and other computer equipment for the establishment of the database were acquired.

Workplan July 2011 – July 2012

- Capacity building for members of regional committees SENCAT on WOCAT tools (QA, QT and QM);
- Documentation and mapping of SLM technologies and approaches in place at least eight rural communities in the project intervention SLM;
- Contacting the 8 countries of the Sahel to the establishment of national networks;
- A workshop for the establishment of sub-regional network (SAHELCAT)

3.2.2.5   South Africa

Institution: Department of Agriculture, Forestry and Fisheries

Contact person: Lehman Lindeque, (10_*South Africa.pdf*)

Progress report November 2009 – June 2011

- Complete QM Matrix for 820 000 km² as part of the LADA National Assessment
- Complete 1 QT questionnaire for TerrAfrica Guidelines/book on grazing land management for commercial farmers.
- Develop QM Training manual with FAO on facilitation of typical Participatory Expert Assessment Workshop and how to complete QM Matrix as part of consensus mapping process.
- Training on WOCAT/LADA QM Methodology at LADA Regional Training Workshop (Lesotho, Botswana, Swaziland, Mozambique, Zimbabwe).

- Inputs towards changes in QM Manual codes and definitions based on experience with LADA National Assessment.
- Presentation at FANRPAN High Policy Meeting and Land Degradation Short Course on WOCAT QM Methodology and link towards informed decision making.

Workplan July 2011 – July 2012

- Meetings with potential stakeholders to implement WOCAT in South Africa
- Preparation for WWSM 16 in Southern Africa
- Development of Decision Support System and products for informed decision making based on WOCAT/LADA QM data collected during LADA National Assessments
- Involvement in QM Training (Himalaya Region and other countries based on needs and funds available)

3.2.3. **New initiatives**

3.2.3.1 **Cambodia**

Institution: Department of Agricultural Land Resources Management, Ministry of Agriculture, Forestry and Fisheries.

Contact person: Dr Sovuthy Pheav (sovuthypheav@yahoo.com), (1_*Cambodia.pdf*)

Progress report November 2009 – June 2011
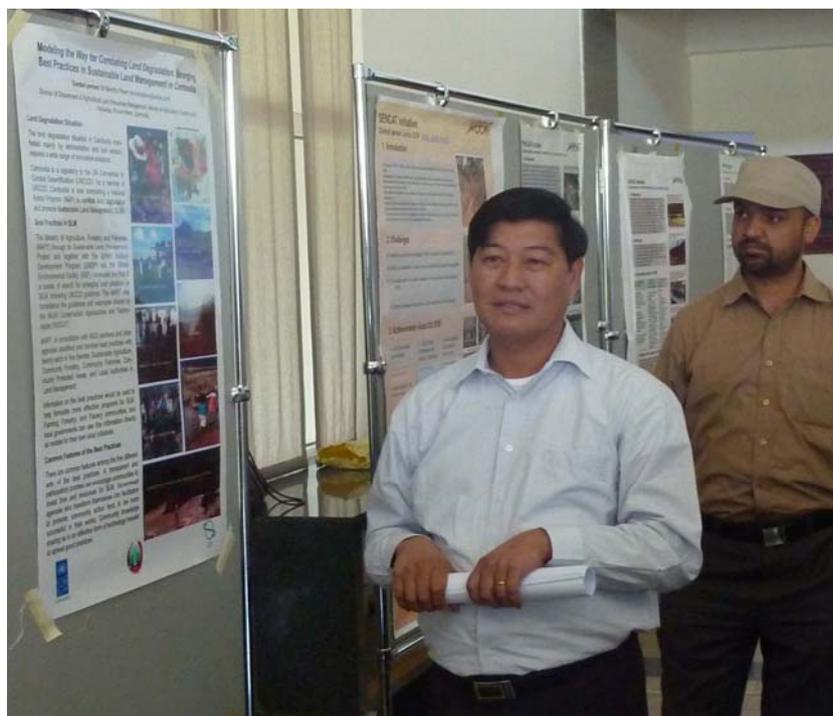
Sovuthy Pheav presenting poste rat poster market (Photo: I. Providoli)

The Ministry of Agriculture, Forestry and Fisheries (MAFF) through its Sustainable Land Management Project which is supported by the United Nations.

Development Programme (UNDP) and the Global Environment Facility (GEF) conducted the first of a series of search for emerging best practices in SLM, following UNCCD guidance.

MAFF, in consultation with NGO partners and other agencies identified an initial twenty Best Practices for each of the five themes: Sustainable Agriculture, Community Forestry, Community Fisheries, Community Protected Areas, and Local Authorities in Land Management and a total of one hundred Best Practices. These include programmes in sustainable agriculture, agro-forestry, forest protection and forest regeneration. At the same time, farming communities, local governments can use this information directly as models for their own local initiatives. It may be noted that the 100 Best Practices cited here is an initial list only. Many other emerging best practices facilitated by both government and non-government organizations are waiting to be studied and documented.

If the enabling environment would be provided, more communities, communes as well as field offices of the government units would be able to adapt these best practices in their own situations. These technologies and approaches can be promoted in wide areas (in most communes) and at lower costs to government.

Workplan July 2011 – July 2012

- Setting up a WOCAT network in Cambodia, and conducting a training-workshop on LADA-WOCAT tools and procedures.

- Five of each of the above 5 themes or a total of 25 best practices (technologies and/or approaches) will be further reviewed by MAFF research committees as well as partner researchers. This will be also in consultation with partner NGOs, to the extent possible. The review studied the nature of the practices; their strengths and limitations; and the extent of their spread.

- Uploading of Cambodia Best Practices to WOCAT electronic - platform- further editing for international audience.

- Benchmark study on local Agro-forestry practices in Cambodia (hopefully to be funded by FA-JICA Project, and of FA – DANIDA AF Project).

- Collaboration with AIT to document good practices in mechanization in sloping land and formulation of proposed retrofitting of farm machinery to suit to slopy land conditions (prevent erosion).

- National recognition of good practices in agribusiness/private sectors in SLM (announcement and selection of nominees, field validation, and publication of results)

- National BP Awards Program on Good Practices in SM and Adaptation to Climate Change to be held every 2-3 years (i.e. selection of nominees, field work for validation of presentations, announcement of awardees in a conference and publication of results).

- Study tour by the MAFF key leaders (also Technical Review Teams of UNCCD NAP preparation) on locally supported watershed approach to SLM (in Siem Reap province of Cambodia: 4 watersheds) and neighbouring countries.

3.2.3.2 University of Central Asia, Mountain Societies Research Centre

Countries: Kyrgyzstan, Kazakhstan, Tajikistan

Contact person: Chad Dear

Progress report November 2009 – June 2011

University of Central Asia's Mountain Societies Research Centre (MSRC) played a small role in reviewing WOCAT documentations generated from the Agriculture and SLM component of the first phase of the Pilot Programme on Climate Resilience, a project implemented by CDE. Having gained a better understanding of the WOCAT tools and the potential for such tools to complement the research, academic programming, professional training, and knowledge management aims of MSRC, the Centre worked with Bettina Wolfgramm to develop a rudimentary concept note outlining the potential development of a "Sustainable Land Management Unit" within MSRC. MSRC presented this concept note at the WOCAT Share Fair in Bishkek.

Workplan July 2011 – July 2012

MSRC will continue to work with Bettina Wolfgramm and others from the WOCAT Secretariat to develop the concept note and identify appropriate funding opportunities. If appropriate opportunities are identified, MSRC will work with key actors to generate and submit a full proposal. In any proposal generated, it would be clear that MSRC is part of an academic institution and is not working directly with communities implementing SLM. MSRC could therefore play a role in providing technical support to organizations, projects, and others using WOCAT, but MSRC would not actively participate in WOCAT documentation. MSRC's primary focus is research and any development of an SLM Unit would have academic research and the application of such research as its primary focus. In addition to academic outputs, MSRC would seek to identify collect, organize, and make available SLM knowledge relevant to the region. MSRC would also seek to develop short-cycle trainings based on the lessons learned from WOCAT documentations and research complementing the documentations. In the future, MSRC may use WOCAT documentation to help develop contextually-relevant undergraduate and graduate level curriculum.

3.2.3.3   Vietnam

Institution: National Focal Point, Vietnam UNCCD office

Contact person: Duyen Nguyen (duyennv@gmail.com), (2_*Vietnam.pdf*)

Workplan July 2011-July 2012

WOCAT has not been introduced officially in Vietnam yet. However, the group of consultants working for the Global Mechanism in formulating Integrated Financing Strategy use the WOCAT tool as a tool for field missions. The Objective for this period is setting up a VietCAT and operationalize the VietCAT.

The main steps for setting up VietCAT have been ellaborated. In order to implement the work plan, we need backstopping and resource persons for training in Vietnam. Furthermore, we also need some money for startup and organizing training and coordinating activities.

Responsible for establishment of the VietCAT could be the national focal point (for the time being: Mr. Nguyen Van Duyen (duyennv@gmail.com) currently working at Vietnam UNCCD office. The main group to be identified as the platform for VietCAT could be Vietnam Environment Network (VEN). VEN shall take lead in this process as VEN include members in many different organizations such as: consultants, NGOs, universities/institutes, and donor agencies. Mr. Nguyen Van Duyen is founder and manager of VEN.

3.2.3.4   Russia

Institution: Institute of Ecological Soil Science, Moscow Lomonosov State University, Moscow, 119992, Russian Federation

Contact persons: Prof. Kust German – Executive Director and Dr. Andreeva Olga – Senior researcher

German Kust from the Moscow Lomonosov State University joined the WWSM for the first time. He showed high interest for the WOCAT network and is planning the following activities:

Work plan July 2011 - July 2012

Activity	Time	Comments
Identification of national institutes/organizations and individuals in Russia having any WOCAT experience	August 2011	Possibly needs help from CDE data base
Preparation and dissemination of the general assessment report on the WOCAT activities at international/national/ regional levels and possible benefits for Russia	September 2011	
Discussion of possible advantages of WOCAT methodology application with representatives of Russian Ministry of agriculture and Ministry of natural resources and environmental protection	October 2011	Probably needs support letter from CDE
Workshop (round table) with parties involved on the future programme of WOCAT development in Russia and neighboring countries	November 2011	The further work plan depends on the results of this meeting

3.3. Updates on different WOCAT tools

3.3.1.   Online Technology / Approach database demonstration

During the 15th WWSM an online Technology / Approach data entry demonstration was given by Julie Zähringer. The Technology and Approach databases can be accessed through the following links: Questionnaire Technology (QT) http://cdewocat.unibe.ch/wocatQT/ and Questionnaire Approach (QA) http://cdewocat.unibe.ch/wocatQA/. After login the user can navigate through the menu. Under "data capturing and management" new QT and QA data can be added or already entered data can be viewed / edited / deleted. Once the data entry is finalised the user has to "approve display" of the data, after that the data gets reviewed by the WOCAT Secretariat and once the data entry is finalised the dataset will be published for public display.

Under "technology search" and "approach search" respectively, the approved and on public display data can be searched. A 4-page summary can be generated.

3.3.2.   Online map viewer

A simple **Map Viewer** has been developed which allows analyzing the mapping data (QM) by viewing some predefined maps.

- Dominant Degradation Type
- Dominant Conservation Measure
- Total Extent of Degradation per Map Unit
- Total Extent of Conservation Measures per Map Unit
- Mean Degree of Degradation
- Mean Effectiveness of Conservation Measures per Map Unit
- Mean Rate of Degradation Change per Map Unit:
- Mean Trend of Effectiveness of Conservation Measures per Map Unit

During the 15th WWSM Godert Van Lynden gave a demonstration of the map viewer. The Map Viewer can be accessed through the following link http://cdewocat.unibe.ch/wocatQM/ . After login the user can navigate through the menu. Please go to "mapping data management" and click on "data analysis". Please select a country and a base map edition, e.g. Morocco and Sehoul 2009. For the query "dominant degradation type" the following map gets generated:

Legend:
- No degradation
- Erosion by water, Area<6%
- Erosion by water, 6%<Area<=10%
- Erosion by water, 10%<Area<=25%
- Erosion by water, 25%<Area<=50%
- Erosion by water, Area>50%
- Water degradation, Area<6%
- Water degradation, 6%<Area<=10%
- Water degradation, 10%<Area<=25%
- Water degradation, 25%<Area<=50%
- Water degradation, Area>50%
- Chemical soil deterioration, Area<6%
- Chemical soil deterioration, 6%<Area<=10%
- Chemical soil deterioration, 10%<Area<=25%
- Chemical soil deterioration, 25%<Area<=50%
- Chemical soil deterioration, Area>50%
- Physical soil deterioration, Area<6%
- Physical soil deterioration, 6%<Area<=10%
- Physical soil deterioration, 10%<Area<=25%
- Physical soil deterioration, 25%<Area<=50%
- Physical soil deterioration, Area>50%
- Biological degradation, Area<6%
- Biological degradation, 6%<Area<=10%
- Biological degradation, 10%<Area<=25%
- Biological degradation, 25%<Area<=50%
- Biological degradation, Area>50%
- Erosion by wind, Area<6%
- Erosion by wind, 6%<Area<=10%
- Erosion by wind, 10%<Area<=25%
- Erosion by wind, 25%<Area<=50%
- Erosion by wind, Area>50%
- Mapping Unit

*Morocco: base map edition Sehoul 2009, dominant   Legend
degradation type.*

3.3.3.   **Input presentation: use of WOCAT Tools in the Kagera Basin**

Lehman Lindeque, LADA/WOCAT South Africa, Sally Bunning and Monica Petri, FAO Rome (WOCAT Tools_Kagera Basin.pdf)

The objective of the presentation was to report on and to demonstrate the use of WOCAT tools in the Kagera Basin covering parts of Rwanda, Burundi, Uganda and Tanzania.

The Kagera TAMP project is funded through the Global Environment Facility (GEF) in partnership and with co-funding from the governments, partner programmes and donors at country and regional levels. The project development phase was executed by the UN Food and Agriculture Organization (FAO) with support of the United Nations Environment Programme (GEF-UNEP), as implementing agency. The full project is implemented and executed by FAO. The project is managed by both agriculture- and environment-sector agencies through National Technical Advisory Committees in the four beneficiary countries (Burundi, Rwanda, Uganda and Tanzania). The long-term environment and development goal of the project is to support adaptive management and the adoption of an integrated ecosystems approach for the management of land recourses in the Kagera Basin over the medium to long term.

The use of WOCAT tools was discussed under the following headings:

a) Development of LUS Base Maps for QM assessments
    Two workshops were held in Burundi and Rwanda during November and December 2010 for the training and participatory development of LUS Base Maps for the four countries. Participants were also trained on the use of the LADA QM Software. 21 GIS Specialist were trained.

b) Mapping LD and SLM in the Kagera Basin using the WOCAT/LADA QM

In total 101 contributing specialists and 15 GIS Specialists participated in three separate organized Participatory Expert Assessment Workshops during December 2010 and January 2011. In total 611

Mapping Units were grouped into 230 Groups and a QM Matrix was completed for all 230 unique groups. The workshop data was verified by testing the perceptions of contributing specialists and comparing general perceptions with workshop results. Through a process of consensus, changes was made to data were necessary. A basin tour during March 2011 was also used as means of verification of PEA Workshop data. An interesting point mentioned and illustrated using graphs, was the direct correlation between the quality of QM data collected during the PEA Workshop and the years of relevant experience of contributing specialists. The case of Rwanda with a few contributing specialists with experience and Tanzania with a lot of experienced specialists were used to illustrates the importance of inviting the 'right' people to a PEA workshop to ensure reliable and good quality data.

c)   QT & QA Training

During March 2011, a three (3) day training course was held in Kigali Rwanda to train 12 representatives from all four countries in the use of the WOCAT technologies and approaches questionnaires. Three days for training was a bit short, but we also managed to develop a way forward and set out the process to follow in completing the questionnaires for identified SLM practices from the QM assessments. The process flow or lifecycle for QT and QA in the Kagera Basin involve the following steps:

- ID SLM technologies and approaches;
- Planning the assessment
- Completing QT & QA
- Search for missing information and consult with experts in the field
- Quality control of questionnaires and data
- Capture QT & QA in database

3.3.4.   **Watershed module: latest update**

Rima Mekdaschi Studer (watershed WWSM_ 2011.ppt)

The aim of the watershed module questionnaire (QW) is to show spatial arrangement and the interrelation of the different technologies/ measures - where in the system, topo-sequence - and help to evaluate impact and outcomes of these techniques holistically - as a system. Ideally all (or at least a number) of the different technologies and approaches that exist and are applied in a watershed are documented separately in a QT or QA beforehand.

In the following table the structure of the watershed management questionnaire is shown. In addition points raised by the taskforce members during WWSM14 (Morocco, October 2009) are indicated in *italics* and the way these were addressed during the revision that took place early 2010 briefly outlined. The in the questionnaire newly formulated or added questions are marked in brackets.

The first point raised was to call the module watershed management module and not watershed system module. Watershed system is a misleading term referring more to physical interrelations.

The watershed management questionnaire (QW) is divided in three parts that correspond to the technology questionnaire.

Part 1: General information	1.1 Contributing watershed management *specialist*
	1.2 Brief identification of watershed
	1.3 Watershed *information*
	1.4 Description of the watershed (*transect* drawing and supporting maps)
	1.5 Land use

Revised **definitions** of Watershed and Watershed Management (page i, 2 and 8)

Specialist(s): specified that specialists need to know the watershed and the land users who live in the watershed → participatory approach (less quantifiable data, trade-off) (page ii)

Clarified **objective** of the documentation: assessment of impacts after implementation → documenting experiences (page 3, Q 1.3.3)

Scale of the watershed

- Suitable for Mini-Micro, Medium scale (page 3, Q 1.3.1)
- Less suitable for Macro → divide to and focus on sub-watersheds

Divide watershed into 1-4 **sections along a transect** (page 5, Q 1.4.1)

Mountain headwater streams flow swiftly down steep slopes and cut a deep V-shaped valley. Rapids and waterfalls are common.

Low-elevation streams merge and flow down gentler slopes. The valley broadens and the river begins to meander.

At an even lower elevation a river wanders and meanders slowly across a broad, nearly flat valley. At its mouth it may divide into many separate channels as it flows across a delta built up of river-borne sediments and into the sea.

Zone 1 Headwaters

Zone 2 Transfer Zone

Zone 3 Depositional Zone

From Miller (1990).

Map is needed to define/ place these sections within a watershed (page 6, 1.4.2)

Part 2: Watershed characteristics and its management	2.1 Overview
	2.2 *Natural environment*
	2.3 *Human environment*
	2.4 Watershed *management*

In section 2.1, the **overview**, major differences of the 2-4 sections in a watershed should be highlighted. The overview has to provide a comprehensive / concise picture of the watershed and its management.

In the following questions describe for each section of the transect separately:

Land use types (Part 1) (page 6, Q 1.5)

Natural environment (e.g. rainfall, climate, slopes, altitude etc) (pages 11-15)

2.2.10 Availability of water					
		Section 1	Section 2	Section 3	Section 4
Surface water (permanent)					
Surface water (rainy season only)					
Depth of ground water table (in m.)		……	……	……	……

Under natural environment added questions on soil depth, texture and stoniness of terrain which were critizised as missing and considered very relevant soil information

Human environment (e.g. population density, occupation, land tenure) (pages 16 -19)

However, some aspects of human environment describe an interrelation among sections (e.g. upstream/ downstream)

2.3.8   Are there socioeconomic interactions between upstream and downstream resource users in the watershed?

no ☐   yes ☐

Relevant questions were found missing → added questions on the effect of migration on watershed management; constraints related to land tenure; difference in resource use of the different stakeholders within a watershed (pages 16 and 17; Q 2.3.2, 2.3.4, 2.3.5).

Approaches & enabling environment should be more prominent → added a table on approaches similar to that for technologies) (pages 24-26, Q 2.4.2.4 and Q 2.4.2.5)

Policy and institutional aspects are relevant at watershed level and were emphasized (page 23)

2.4.2.3 On what (map, law, management plan, organization, etc.) is the watershed management officially based? If possible provide the reference.

………

Challenge:

How to show / express **sensitivity and/or tolerance to climate extremes** for the whole watershed (page 22)

2.4.1.4 Under climatic extremes, are the technologies applied as a system in the watershed tolerant of or sensitive to:

	Tolerant technologies / QT codes[1]	Sensitive technologies / QT codes[1]	not known
Temperature increase	....	....	☐
Temperature decrease	....	....	☐
Seasonal rainfall increase	....	....	☐
Seasonal rainfall decrease	....	....	☐
Heavy rainfall events (intensities and amount)	....	....	☐
Windstorms / dust storms	....	....	☐
Floods	....	....	☐
Droughts / dry spells	....	....	☐
Decreasing length of growing period	....	....	☐
Others (specify):…………………….	....	....	☐

Part 3: Analysis of watershed management	3.1 *Impacts*: benefits and disadvantages
	3.2 *Institutional and policy aspects*
	3.3 Concluding statements

Points raised in the plenum

The watershed management module (QWM) could be a very useful tool for setting a baseline for further monitoring of SLM. The question that was raised is how. Nepal uses the tool for monitoring by documenting according to a time sequence. The problem that they are facing is how to archive case studies that were documented several times over time.

Furthermore the question on: 'for what scale is the QWM suitable' came up especially after the presentation from Nepal about testing of the QWM in the Koshi transboundary river basin *(wsmodule sabita.ppt).* Experience from the FAO SLM project in the Kagera river basin confirmed that large basins need to be divided into sub-basins ($< 25'000$ km^2). In Afghanistan the watersheds considered to be documented by QWM range from 17- 30 km^2.

It was pointed out that within the sections across the transect it should be possible to allocate the different land tenure arrangements that can occur in a watershed. It should be possible to give a percentage of the different land tenures encountered within a section.

Another point raised was how to deal with 'Integrated water resources management', which in some countries like the Philippines have more relevance than a watershed. A 'water resource' can be on a scale "of a well" and therefore could be considered as an integral part of a watershed. It was suggested to add a question at the very beginning of the questionnaire were it could be specified if the information pertains to watershed or to water resources management. The suitability of QWM for integrated water resources management should be tested in the frame of a student's master thesis.

Sabita Aryal from Kathmandu University, Nepal tested the watershed module questionnaire in the Koshi basin and declared that it costs around USD 1'500 to properly document a watershed using the WOCAT tool. Priliminary results can be seen in the presentation "*WSmodule sabita.ppt*" on the CD.

3.3.5. **WOCAT for new comers**

A short input presentation on "WOCAT for new comers" was given by Isabelle Providoli. Participants from the following six countries were interested: Cambodia, Malawi, Senegal, South Africa, Tajikistan and Vietnam. An introduction to WOCAT in general, the WOCAT tools and methods was provided, followed by an explanation of the use of WOCAT products. Furthermore, the WOCAT network in general and particularly the regional Himalayan Conservation, Approaches and Technologies (HIMCAT) was presented as an example with a detailed elaboration on the Nepal Conservation, Approaches and Technologies (NEPCAT) country initiatives. After that the Technology and Approach questionnaires were presented and the "Guidelines how to start a new country initiative" discussed. The participants were very interested and it was a very interactive session with a lot of discussion and further clarifications. The various presentations can be found on the CD in the folder "WOCAT for new comers".

3.4. Task forces

The 14th WWSM in Morocco was dedicated to the work of five task forces. The task forces were the following: 1) Impact monitoring, 2) Decision support, 3) Watershed / climate change module, 4) Mapping, and 5) Digital products, whereas the 6th task force on Research, training and education was not discussed. Compared to the 14th WWSM where taskforce activities were central, the 15th WWSM in Kyrgyzstan stressed topics that were particularly relevant to Central Asia and put emphasis on institutionalizing WOCAT and securing funding at global level, hence the task force progress was only touched marginally. The following task force progress can be reported:

3.4.1. **Impact monitoring (IM)**

The overall aim of the taskforce is to develop **an instrument / tool for participatory impact monitoring and assessment at the local (land user) level**. At the 14th WWSM a list of key indicators was compiled (please refer to proceedings of 14th WWSM).

At the 14th WWSM the following next steps were defined:

- Review list of indicators and methods alongside QT, QA and QM for harmonisation

- Include available IM information from other programmes/ projects (e.g. CACILM)

- Clarification of indicators for more sophisticated technical level assessment, e.g. enabling environment, cost-benefit, carbon sequestration

- Test draft IM tool by WOCATeers with students

Unfortunately the IM task force had no clear taskforce leader and was due to other priorities not continued. However, an elaborated list of key indicators is available which could be a base for further development.

3.4.2. **Decision support tool**

Progress Report Nov 2009 to June 2011

Report by Gudrun Schwilch, 9.6.2011

Taskforce members 'Decision support tool': *Gudrun Schwilch, Lehman Lindeque, Njeru Lewis, Rokhaya Daba Fall, Abdoulaye Soumaila, Kanysh Nurymgereyev, Nadia Machouri, Wang Fei, Miloud Chaker, Richard Fulss, Alexander Schöning, Yuji Niino*

3.4.2.1 **Local (technology) level**

Testing local tool in WOCAT countries:

Many members of the taskforce had planned to test the local tool, but unfortunately, they did not materialize due to various reasons.

Improvements and guidelines:

The improvement of the local tool and the rewriting of the DESIRE guidelines into more general WOCAT DST guidelines have not been achieved due to funding constraints. However, the DESIRE decision support tool has been evaluated and described in a scientific paper, which has been submitted to the journal 'Ecological Economics': Schwilch G., Bachmann F., de Graaff J. (2011). Decision support for selecting SLM technologies with stakeholders. Ecological Economics (submitted).

3.4.2.2   Local (approach) level

Discussion with Sustainet:

On 1 November 2010, a meeting took place in Eschborn/Germany with participation from WOCAT, GIZ and ZALF (Zentrum für Agrarlandschaftsforschung, Germany). The aim of the meeting was to discuss potential integration of the WOCAT/DESIRE decision support tool with the ScalA tool developed by GIZ (ZALF, commissioned by GIZ/Sustainet). ScalA is a tool for project managers focusing on the ex-ante assessment of agricultural projects and best practices regarding sustainability, climate relevance and scaling-up potential. The WOCAT-DESIRE tools are more focusing on selecting specific SLM technologies at the local level together with stakeholders. The integration was identified and the development of a joint decision support system on approaches that helps assessing the adoption and upscaling potential of SLM practices discussed. ScalA would be used after the WOCAT-DESIRE local level tool in order to assess how these selected technologies could be upscaled (through which approach or project). This would include ideas about successful approaches from the WOCAT knowledge base. The meeting ended with the suggestion to develop a joint project proposal for 1-2 years to develop and test the integrated tools, e.g. in Kyrgyzstan or Ethiopia, where both partners are active. The proposal is still being developed. However, discussions with possible funders (two GIZ projects) have taken place and one of them has shown interest.

3.4.2.3   Regional (mapping) level

Progress has been made with the software upgrade and use of Dynamic Maps Software as an off-line viewer for the QM Data collected during the LADA National Assessment. Dynamic Maps Software has also been used to display and query QM data towards the development of NRM Strategy for the North West and Western Cape Provinces. In the coming year, more attention will be given towards incorporating Dynamic Map software, the national QM data and other relevant data sources into a comprehensive Decision Support System to enable informed decision making at national or regional level. A paper and poster presentation to describe the process towards informed decision making was presented at WWSM 15 Share Fair in Bishkek.

3.4.2.4   Integration of the two levels

Training for WOCAT countries:

A national training on WOCAT tools for the local level took place in Senegal in Dec 2010. However, the focus on decision support and integration of levels remained minimal.

Promotion:

Keynote presentations on 'SLM knowledge management and decision support' where held at LANDCON meeting (Xi'an, Shaanxi Province, China from October 11th to 15th, 2010), Tropentag (Zürich, 14–16 September 2010) and the International Conference on 'Advanced Scientific Tools for Desertification Policy' (DeSurvey, Rome, 28-29 September 2010).

3.4.3.   Watershed / climate change module

Progress Report Watershed Management & Climate Change Modules

Report by Rima Mekdaschi Studer, June 2011

Taskforce members for 2010/ 2011: Sanjeev Bhuchar, Rima Mekdaschi Studer,
Sudibya Kanti Khisa, Laouina Abdellah, Rachid Bouabid, Sabita Aryal, Madhav Dhakal, Niranjan Sahu, Sally Bunning, Isabelle Providoli, (Daniel Danano)

Planned for 2010	Achieved in 2010/ 2011
Incorporate the improvements and changes suggested	Changes were incorporated end of 2009.
Solve still open questions. How? E.g. consult experts, TF meeting	Due to financial constraints no TF meeting could be held.
	WOCAT staff meeting at CDE to solve open questions on impact issues.
	Draft sent to Sanjeev and Sally for review early 2010.
	Comments considered and adjustments made.
Send draft for field testing to WOCAT partners interested	Field testing in Tajikistan, Tunisia and Nepal

Collect, consolidate experiences and comments from the field and finalize QW	Comments from Tunisia and corrections done accordingly→Final draft
	Case study from Tunisia will serve as an example for other contributors
Send final version to taskforce members for approval	Final version sent to taskforce members early 2011
Final approval at WWSM 15	
Translate QW into French, Spanish, etc	QW was translated into French in September 2010
First draft of adaptation to climate change (CC) module	Search for existing tools that assess resilience or sensitivity to climate change (end of 2010)*
	Based on Literature, a Q CC from ICIMOD and China (based on WOCAT QT) a very first draft was developed.
	Working group meeting including CDE, WOCAT, NCCR and PPCR Tajikistan, early March 2011. Draft was thoroughly reviewed and further developed.
	Adaptations and corrections were made accordingly and draft was sent for review to PPCR members, CDE, FAO and ISRIC. End of March a final draft was ready for testing in the field.
	After testing in the field within the framework of the PPCR, final corrections were made and the tool was ready to be used in Tajikistan.
	Q CC adaptation was translated into Russian
	Development of CC adaptation access database.
	Q adaptation to CC was sent to taskforce members for revision and comments in April 2011
Draft Q CC discussed at next WWSM	Q adaptation CC draft ready
	Q mitigation not yet developed

The following institutions and countries promised to test QW in the field and see what works and what does not work: LADA (Senegal, Haiti), Nepal, India and Morocco

Budget: The module was tested by students (Tunisia (and Tajikistan)) to save costs. The translation of the watershed questionnaire into French was done by the francophone student who was in Tunisia.

* The aim of this search was to have an idea what is already being done, where gaps are and what can WOCAT offer without duplicating already ongoing efforts. The conclusion was that most tools assess development projects and how 'climate resilient' their activities are. Until now SLM practices/ technologies as such were not tested for their tolerance or sensitivity to climate variability and change or to their adaptation potential. This is exactly the niche that WOCAT can fill. The literature review also showed that a **climate change module** as is planned by WOCAT could be linked to the Climate Change Knowledge Portal of the World Bank that predicts climate scenarios for different regions and to UNFCCC Local Coping Strategies Database.

3.4.4.   **Mapping**

Based on South Africa's experience with the LADA National Assessment of LD and SLM, a Training Manual for facilitating a typical Participatory Expert Assessment (PEA) Workshop and guidance toward completion of the QM Matrix by consensus, were completed under the auspices of FAO (LADA Project). Together with the training manual, substantial inputs have also been made towards the improvement of the QM Manual, specifically by updating and adding to the codes, definitions and explanations.

The LADA Access Database for capturing QM data was also tested in the Kagera project in Central/East Africa. The data base is very good for data capturing (off-line), data editing and to prepare the data for incorporating into a GIS System, but not that good as a facilitating tool during a PEA Workshop for consensus mapping purposes.

Working plan 2010

Mapping taskforce members for 2010: Godert van Lynden, Carin Pretorius, Kurt Gerber, Wang Fei, Azhar Yeszhanova, Hubert George, Bolor Radnaabazar, Lamchin Munkhnasan, Rokhaya Daba Fall, Lehman Lindeque (Jamal Al Karkouri, Mohammed Sfa, Wolfgang Prante)

Item	Responsible	Deadline	Achieved in 2010/2011	Comments
Identify Task Force members (NB: that can really contribute)	Godert	Immediate	Partly	
Plan (int'l) mapping training	WOCAT MG, secretariat	A.s.a.p., but system must work	Not achieved, as system did not yet work flawlessly	*But needed and requested (e.g. by Afghanistan, Nepal)*
Finish on-line Viewer development	Kurt, Carin	End of 2009	Simple version (view-only) active June 2011	
Decide on pre-defined map queries for on-line viewer	TF members	Workshop before end of 2009	Some queries done (for simple viewer), without workshop	
Using and testing On-line QM system (and give feedback!!!)	TF members, all	Ongoing!	Should be done more intensively.	*Who does actually give feedback?*
Off line data entry system (Desktop application)	Kurt, Carin	End of 2010; also discuss in above workshop	No developments?	*But Lehman exploring alternative options*
Off-line viewer	Kurt, Carin	End of 2010	idem	

3.4.5. Digital products

Progress Report Nov 2009 to June 2011

Report by Gudrun Schwilch, Kurt Gerber, Carin Pretorius

WOCAT website

The website has regularly been updated with important news, events and publications. The website statistic can be seen in the chapter global progress report.

Map Viewer

Due to technical and staff constraints further development of a preliminary version of an interactive on-line map viewer could not be followed up. Discussions were held between LADA and WOCAT concerning an off-line MapViewer during the LADA technical meeting held in Wageningen in September.

However, it was possible to develop a simple map viewer which allows analyzing the data by viewing some predefined maps. Please refer to section 3.1.1. (part 2) and 3.3.2 of these proceedings.

Online technologies and approaches databases

The on-line technology database has been completed and all data from the previous Access-Databases have now been transferred. Please refer to section section 3.1.1. (part 2) and 3.3.2 of these proceedings.

3.4.6.   **WOCAT in research and education**

The task force on "WOCAT in research, training and education" was not discussed at the 14th WWSM in Morocco and no action plan was developed. However, although there was no defined action plan still some progress can be reported:

3.4.6.1   **Centre for Development and Environment, University of Berne**

Contact person: Hanspeter Liniger

- Testing new tools with postgraduate students (especially use of Remote Sensing / GIS for assessing SLM, development and use of decision support tools at local and regional / national level; identifying land use systems, land degradation and SLM and their impacts on ecosystem services).
- Supervision of MSc and BSc theses: e.g. in Tajikistan, Mongolia
- Using WOCAT in MSc training in the spring semester
- Involvement of CDE/WOCAT in the Green Water Credit project will be further explored.

3.4.6.2   **Dept. of Ecolog. Engineering, Faculty of Forestry, Serbia**

Contact person: Miodrag Zlatic

Expected Output	Planned Activities	Achievements
WOCAT promotion	(1) Education of students on IV year of studying	(1) Lectures on IV year of studying at DEE (Faculty of Forestry) (1.2.) Involving WOCAT in 1 Ph.D
	(2) Engaging Students Forum of WASWC in QTs and QMs	(2) Organized work with Student's Forum for QM in in 3 districts in Serbia
	(3) Promotion at the ESSC Congress, 9-13 May 2011), Thessaloniki	(3) Promotion at ESSC Congress: through the presentation "Work of student's Forum of WASWAC".
Further action on QM	(1) Continuing work on QM	(1) QM data was collected for 3 districts

3.4.6.3   **Vreije Universität Amsterdam**

Contact person: Will Critchley

- Under an FP7 EU project called "WHaTeR" which focusses on water harvesting in Africa a series of revisits after 10-20 years will be done by various partners. The basic tools will be QA/QT –basic.
- One outcome will be a book for Earthscan on Water Harvesting in SSA. Countries covered are in East (Kenya, Tanzania, Ethiopia), West (Burkina Faso, Mali, Niger, Ghana) and Southern (Zimbabwe, South Africa) Africa.
- Students are involved in the WHaTeR project, e.g. one student is looking at Joint Forest Management (JFM) in India.

Furthermore, Universities in countries: Russia, Kyrgyzstan, Mongolia, Nepal, Morocco, and the Philippines are using the WOCAT tools.

4 INSTITUTIONALIZING WOCAT AND SECURING FUNDING

4.1. Group work on institutionalizing WOCAT and securing funding

4.1.1. WOCAT Global level funding: the obstacles

- SDC wants to see other donor contribution

- Funding (e.g. GEF, WB, …) priorities for national / regional level ($\rightarrow$ little for global, more consultancies than programme contributions)

- Demand for support from global level needs to come from countries

- WOCAT network, adaptation of tools methods, harmonizing, prototypes, …continuity is a prerequisite for national/regional programmes:
$\rightarrow$ WOCAT global level enables National / Regional programmes
$\rightarrow$ National / Regional programmes buy the services from the global level (earmark a percentage of the funding for Global Support)
and / or
$\rightarrow$ Funding agencies earmark a percentage of their SLM project funding for SLM KM and DS towards global WOCAT level

4.1.2. National / regional working groups

Task for the group work *(Task_Group work.ppt)***:**

The groups had to discuss the following questions regarding institutionalizing WOCAT and securing funding:

at (A) National level, (B) Regional level:

1) What is already established?

2) What is planned? What are next steps to get there?

3) What is needed from the global level and what global support activities could be included in WOCAT national action plans? (e.g. ToT, MoU, quality assurance, technical assistance, adaptation of tools, …)

Results from the working groups:

4.1.2.1 **Tajikistan, Mongolia, China, Russia** *(1_Taj_Mon_Chin_Rus.ppt)*

(A) National level

Mongolia and China have already established WOCAT networks.

Mongolia has a MONCAT Secretariat, a local network and a review panel and is planning to review Ts/As in the database, to do QM testing and to do a joint action among the institutions to support the mapping tool.

China has an informal WOCAT body and is planning to establish a special WOCAT team.

Tajikistan and Russia have no WOCAT initiative established yet. Tajikistan is planning to create a WOCAT Tajikistan Secretariat and to set up a local WOCAT team and Russia is planning an initial WOCAT workshop to involve single parties in Russia.

Regarding the need and support from the global level the four countries concluded the following:

- MoU between WOCAT and national institutions

- Cooperation with neighboring countries / regional cooperation

- Project proposal to donors (UNCCD, FAO, GEF, ADB etc.,) and funding support

- Technical support and backstopping service from WOCAT Secretariat (conducting TOT)

- Cooperation and support from experienced WOCATers

(B) Regional level

On regional level nothing is established yet, but there is potential to create a regional management team and network such as UNCCD, CC and FAO etc..

Next steps for this could be:

- Joint project proposal from regional management team

- Regional training, workshop, e-learning

- MoU among regional countries

The global level would have to assist in establishing a regional institutional mechanism of WOCAT programme (network), provide a consultancy service for general assessment, monitoring/evaluation, and planning and provide financial support.

4.1.2.2 **Philippines, Cambodia and Vietnam** *(2_SEA group.ppt)*

(A) National level

The Philippines has already organized PHILCAT with 18 members consisting of national government agencies and non-government organizations. At present there are no firm funding sources to implement WOCAT activities and the network relies on very limited funds provided by some members.

PHILCAT intends to:
– develop a compendium of SLM success stories, best practices, knowledge products and training materials
– integrate WOCAT tools to KM and DS system of the Updated UNCCD National Action Plan (NAP)
– next step: prepare project proposal for possible internal funding

Cambodia and Vietnam have not yet established their country level WOCAT but have very strong interest to establish their own initiative. Both countries intend to establish a country level WOCAT. The next step is to conduct a country level consultation to organize at WOCAT national level.

(B) Regional level

There is no regional level WOCAT yet in South East Asia. The plan is to organize a sub-regional level WOCAT (e.g. SEACAT) as networking mechanism within the sub-region. The next steps for this are to:
– inform other Southeast Asian countries who may be also interested of joining the sub-regional level WOCAT
– undertake consultation and organizational meeting which include briefing and orientation about WOCAT
– provide backstopping to sub-regional and national levels by established national level WOCAT

The SEACAT network would need support from the global level to:
– facilitate the sub-regional consultation and organizational meeting to organize SEACAT and necessary funding support
– training of Trainers and piloting of WOCAT tools quality assurance, technical assistance (training materials/modules, trainers)
– formal Invitation from WOCAT, Memorandum of Understanding
– linkage with international donors

4.1.2.3 HIMCAT group (Afghanistan, Bangladesh and Nepal) *(3_HIMCAT group.doc)*

(A) National level

All the three countries are part of the Himalayan Conservation Approaches and Technologies (HIMCAT) network and have already established WOCAT country initiatives. In Afghanistan, the Sustainable Land Management Institute Organization (SLMIO) is a collaborative initiative of GO, Inter GO and NGO (12). The Afghanistan Conservation Approaches and Technologies (AFCAT) is one of the main components of SLMIO and is mainly funded by SDC and supported by 12 member organization either in cash or kind www.slmio.org.af.
The Bangladesh Conservation Approaches and Technologies (BANCAT) is run in the form of a professional association by a working group of the experts from different organization and freelancers www.bngcat.org.
The Nepal Conservation Approaches and Technologies (NEPCAT) is a loose network with a Steering Committee. The Director General of the Department of Soil Conservation and Watershed Management is chairing the committee and ICIMOD is the Secretariat.

The three country initiatives have several activities planned such as QT, QA and QM trainings, testing of the WOCAT watershed module, and incorporating the WOCAT tools in university curricula. More details on more activities can be seen in the word file on the CD.
For all the three country initiatives it is crucial to get funding to implement their future activities.

From the global level the countries expect to get training on QM, financial support or help in contacting donors, and MoUs between WOCAT and national institutions.

(B) Regional level

The Himalayan Conservation Approaches and Technologies (HIMCAT) network is the regional WOCAT network in the Himalayan region. The HIMCAT is coordinated by ICIMOD. Several WOCAT country initiatives are already established or currently building up, such as in Afghanistan, Bangladesh, Bhutan, Nepal.

4.1.2.4 Africa group (Malawi, Morocco, Senegal and South Africa) *(4_Africa-group.ppt)*

(A) National level

In lot of African Countries the main SLM actors know about WOCAT but nothing is institutionalized at the moment. Currently active countries are Ethiopia, Morocco, Niger, Senegal and South Africa. In Senegal, for example the SENCAT has been established with 53 work societies.

The group work was mainly focusing on Senegal / SENCAT. Currently the following steps are planned:
- to continue to promote WOCAT in the small existing group and to raise awareness of all SLM actors
- to reintroduce WOCAT to those who are collaborating with others department to establish a programme
- enlarged the group at sub national level and formalized the existing SENCAT platform through a legal document, which will be presented to the government.

From the global level the countries expect support for funding, technical assistance, training (ToT), tools to collect data, to do monitoring and assessment and for data management and MoU's between WOCAT and national institutions.

(B) Regional level

There is no regional WOCAT yet in Africa. The countries agreed to start at national level first and then move on to the regional level. First discussion already started at Sahel level – SAHELCAT.

4.1.3.   **Global Working Group**

Tasks for the group work: Institutionalizing SLM KM and DS (WOCAT) and securing funding:

1) Change is needed: what are the options? → pros / cons → preliminary valuation.
2) What are next steps and how to get there?

Participants: Sally Bunning (FAO), Godert van Lynden (ISRIC), Hanspeter Liniger (CDE), Markus Giger (CDE), Yves Guinand (SDC), Anna Tengberg (review WOCAT), Lehman Lindeque (South Africa), Dethie (Senegal), Sanjeev, (Asia)

Facilitation: Markus Giger

Results of group work reported by Markus Giger *(WOCAT network options.doc)***:**

Reasons for change

a. Strong wish of main funder
b. SDC reorganization: questions about visibility and impact
c. Limited access to important funders
d. More international basis and branding
e. Lose network not conducive to attract funds, informality of the network
f. Regional representation should be improved, alignment with global agendas
g. Country and regional ownerships
h. Lack of visibility of the activities at national level

Possible functions of the network

Exchange between regions
Mainstreaming of SLM methods
ToT, capacity building

Problems

Lack of feedbacks
Strategy without targets
Lack of MoUs, lack of contact with policy level at national level, process of entry at national level
Lack of lobbying, PR

Opportunities

Networks are of very high value (facebook…); as such WOCAT has a good value
Need to look into the soft skills

Preliminary Analysis of Options for a new Institutional Set-Up of WOCAT

Two options prevailed in the discussion:

1. A consortium of different interested institutions.
    This consortium would be attached to an international organization or a partner in the South. As an example the following model was discussed: IFAD (mgt, coord., funding); FAO (policy, technical assistance, mainstreaming); CDE,ISRIC (technical assistance, capacity building, development of tools etc.); regional nodes (capacity building, techn. assistance)

2. Creating International NGO.
    The NGO could be Swiss based or not. An example could be the Afghanistan Model where a number of institutions fund an independent NGO that provides services to the partners.

However there is still a need to also look at the other options. The WOCAT secretariat will deepen this analysis further and consult with the management group.

A detailed table of all the elaborated options can be seen in table 1.

Table 1: Overview Table of all Options preliminarily assessed: Priorities for assessment

Model	Consortium of different interested institutions, attached to an international organization or a partner in the South	Hosting at CDE, but only with light management structure, most services outsourced	Creating International NGO. (Swiss-based?) following the Afghanistan Model	Merging with a registered international network with technical unit in Bern and regional nodes.	Embedded in a single international organization	Not for profit private company	CGIAR model
Overall preliminary Assessment	Positively Rated Could give international status to WOCAT. Build on respective strengths of different partners.	Low rating Threat of loss of technical experience that is tied to CDE. Not desired by CDE.	Positively Rated Independence of interference from institutions. Sustainability not clear. Especially by regional representatives.	Rated medium To be explored. This is a variation of the model to the right. Examples: --DRYNET: has already links with UNCCD. Explore options and lessons from DRYNET. Risk created by dryland focus. BothEnd: a northern Institution?	Low rating Risk of being dissolved into a big organization and bureaucratic red tape.	Low rating Not desirable; can only generate income from services; (cannot access dvpt funds?); complete change of model.	Low to medium rating Requires a multi-lateral agreement between partners; could be very demanding and lengthy process; but rated positively by some.
Models:	World Vegetable Center? ICIMOD? (Inter-gov. organization). RIICE		Models: SLMIO, IIED, ICRC, CARE, CONCERN,	BothEnds Drynet	Some negative examples were given.		
Synergies with in-house activities	High, divided tasks and responsibilities among institutions		Low, but can exist with member organizations				
Cost-efficiency	Cost-savings; Greater impact; but large coordination effort		Good				
Possibility for building a strong	Yes, depending on these partners		Yes				

decentralized regional networks							
Possibility to attract funding	Mobilize internal and external funds¸ funding synergies; attract funding also at regional level		Good				
Influence on mainstreaming and policy processes at different levels	High, depending on partners		Potentially good, especially advocacy, More than currently.				
Risk of competition between agencies	Risk is less, if we build on the comparative advantages		Medium				
Possibility to involve a range of stakeholders	Yes, if regional networks are empowered		Yes, high, opportunity for contractual arrangements				
Other potential partners/consortium members	CGIAR, UNEP, GIZ, bilateral funders, potential private partners, ICIMOD, WB, regional banks		To be explored.				
Sustainability	Rather good		medium				
Possibilities for regional nodes	Need for strong regional nodes, (Impression of a northern institution?) ICIMOD FANRPAN (Southern Africa) UCA SahelCAT? OSS CILSS; AgrHymet FARA		Regional representatives rate this option quite high; but there may be problems to include governments; needs to be built up from scratch ICIMOD FANRPAN (Southern Africa) UCA SahelCAT? OSS CILSS; AgrHymet FARA				

5 STEERING MEETING

5.1. Report back from SWOT

At the 15th WWSM a SWOT survey of existing WOCAT knowledge management and decision support system was done. About 45 participants attending the 15th WWSM participated in the survey.

The results for Strengths / Weakness / Opportunities / Threats are displayed with the following code: **bold: mentioned by more than 4 participants**; *italic: mentioned by 2-4 participants*; underline: mentioned by 1 participant), *(1_SWOT analysis_details.ppt)*

Strengths

- **Unique KM system for SLM, standardized and practical tools for sharing and use of knowledge**
- **On-line / open access databases**
- **Network at different levels and well developed, replicable**
- **Knowledge platform**
- **Brings together multiple stakeholders, voluntary, committed partnership**
- **Supports national initiatives**
- *Attractive as DS tool*
- *LADA WOCAT toolkit*
- *A standard learning process, support in concept formulation*
- *Dynamic addressing new challenges (e.g. CC)*
- *Well supported by international agencies*
- *Capacity building*

Weakness

- **No coordination at national and regional level**
- **More links to policy and institutional processes needed**
- **Language issue**
- **Database needs to be more accessible and targeted to clients and ES**
- **Database not 'comprehensive' (AEZ, LUT, measures)**
- On-line database not completed, maintained and updated, not user friendly, Data quality?
- *Financial basis not diversified*
- *Evaluation and analysis tool not well developed*
- *DS not clear; Impact assessment*
- *Not focused enough in tool development, too ambitious ↔ tools need to be diversified*
- *Time consuming*
- *Targeted at ind. components of a broader system*
- *Not widely/ well known*
- Need for off-line database
- Network not formalized, need wider partnership
- Not enough involvement of partner countries and relevant partners
- Too academic, not strong enough at grassroot level
- Need more trained and skilled people
- Secretary stretched, not business oriented
- Does not fund and advocate funding by donors

Opportunities

- **Improves knowledge on SLM, SLM attracting increasing attention**
- **Good tool for standardized SLM KM in projects and programmes, KM buzzword, increased recognition of WOCAT**
- **network at all levels and open for everybody (multistakeholder)**
- **Sharing lessons learned globally, promotes and spreads best practices**
- *Strengthen database by contributing relevant QTs and QAs (gaps)*
- Become standard after new and focused strategy
- Commitment of increasing number of countries
- Includes policy makers
- Better management by land users
- CC module for SLM planning and implementation
- Incorporating WOCAT at local level planning using DESIRE
- For further M&E
- Translation of website via google translator
- Use 2011 technology (social media, facebook, apps for smartphones)
- Improvement of functionality and accessibility
- Improvement of analysis tools
- Find a new name for the network (not the tools)
- For UNCCD national action plan, tools for KM and DS of convention
- South America should come on board

Threats

- **Database and website need to be improved and become more user friendly (improve accessibility)**
- *Risk of not harvesting the fruits of invested efforts in SLM KM , institutional change needed*
- *More KM and DS systems emerging, WOCAT not enough known/ visible*
- *Poor funding and implementation strategy by WOCAT*
- Risk of not sufficiently linking with UNCCD
- Risk of opening up to wider partnerships
- Maintenance of worldwide WOCAT could be a problem
- Secretariat in Switzerland
- Tools too complex
- If WOCAT 'stops' nobody to take lead role in SLM KM and DS. Activities in countries will decline
- Self-funding of countries (sustainability)
- Lack of training and backstopping by WOCAT
- Interpretation of QM data and ability to address specific needs for SLM practice prioritization
- Lack of funding for implementation of technologies

In addition to the SWOT survey the following questions were asked:

1. What kind of support do you require / do you expect from global WOCAT for your work in SLM?

The most mentioned support was training and capacity building (training material, resource persons, training of trainers), technical and financial support. Detailed results are as follows:

Support required	Number of participants
Training and capacity building (training material, resource persons, training of trainers)	14
More technical support (also in local languages) / Toolbox	10
Financial support	8
Knowledge (adapted for different levels) and DS	5
Proper feedback on country contributions	2
Quality assurance	1
Functional database	1
Standardization of tools	1
More client oriented	1
UNCCD focal point to disseminate SLM	1
Setting up a country WOCAT network	1
MoU	1
To create wider use of WOCAT in FAO	1

2. How do you see the role of the WOCAT Management / WOCAT Secretariat?

The majority of the participants see the role of the WOCAT Management / WOCAT Secretariat in the coordination of the network, in resource mobilization (also for partners) and the facilitation of trainings. Detailed results are as follows:

Role of WOCAT Management / WOCAT Secretariat	Number of participants
Coordination of network (pro-active and reactive)	14
Resource mobilization (for partners)	6
Facilitation (trainings)	5
Backstopping	5
Linking partners (networking, countries and regions)	4
Lead in further tool development/ improvement and collaborate with partners	4
Encourage regional networks	3
Enlarged management (national, donors),	3
Advocating SLM (multi-sectorial approach)	3
Communication (tool development and problems encountered)	2
Support of national initiative	2
Link to research	2
Transparent management	1
Assign responsibilities	1
Securing funding for global level	1
Promote WOCAT (in SLM, DRR, CC institutions)	1
Regular consultation	1
Countries activities in line with WOCAT strategy	1
Web – Forum	1

3. Did WOCAT have an impact on your national activities and policies, e.g. country NAPs, country SLM initiative?

17 participants mentioned that WOCAT has an impact at national level, out of which 5 are related to UNCCD. 10 participants mentioned that WOCAT has no impact yet on national level.

Impact of WOCAT on national activities and policies	Number of participants
At national level (SLM initiatives, strategic plans)	12
UNCCD (reporting, impact indicators)	5
No impact yet	10

5.2. Institutionalizing and securing funding

(2_Steering Meeting.ppt)

A big challenge for the WOCAT network is to institutionalize WOCAT on different levels and to secure funding. Currently WOCAT is initiating a new global partnership to upscale knowledge management and decision support in SLM and is seeking new partners to (1) develop further its potential to manage land-based project investments to meet the challenges of climate-change mitigation and adaptation, biodiversity conservation, water management and disaster-risk reduction; (2) meet country and project obligations to have KM and DS systems in place to draw upon experiences of SLM for future investments; (3) provide a better platform for reporting, tracking and managing SLM technologies and approaches.

Different national / regional groups were discussing the questions to institutionalize WOCAT on different levels and to secure funding at (A) National level and (B) Regional level. The working groups discussed:

1) What is already established?

2) What is planned? What are next steps to get there?

3) What is needed from the global level and what global support activities could be included in WOCAT national action plans? (e.g. ToT, MoU, quality assurance, technical assistance, adaptation of tools, …)

Some country initiatives are already well established, whereas others are in the buildup phase. Regional WOCAT networks only exist in the Himalayan region as HIMCAT and are currently under discussion in the Sahel region (SAHELCAT). Other regional networks do not exist yet but should further be explored and strengthened.

The main requests of the groups for support from the global WOCAT level were:

- MoU between WOCAT and national institutions

- Facilitate cooperation with neighboring countries / regional cooperation

- Facilitating networking / exchange

- Support project proposal to donors (UNCCD, FAO, GEF, ADB etc.,) and funding support

- Technical support and backstopping service from WOCAT Secretariat (conducting TOT)

- Cooperation and support from experienced WOCATers

Detailed results of this group work can be seen in section 4.1. of these proceedings.

Likewise these issues were discussed at global WOCAT level: How to institutionalize SLM KM and DS (WOCAT) and secure funding:

1) Change is needed: what are the options? → pros / cons → preliminary valuation.

2) What are next steps and how to get there?

Preliminary analysis of options for a new Institutional Set-Up of WOCAT

Two options prevailed in the discussion:

1. A consortium of different interested institutions.
   This consortium would be attached to an international organization or a partner in the South. As an example the following model was discussed: IFAD (mgt, coord., funding); FAO (policy, technical assistance, mainstreaming); CDE,ISRIC (technical assistance, capacity building, development of tools etc.); regional nodes (capacity building, techn. assistance)

2. Creating International NGO.
   The NGO could be Swiss based or not. An example could be the Afghanistan Model where a number of institutions fund an independent NGO that provides services to the partners.

However there is still a need to also look at the other options. The WOCAT Secretariat will deepen this analysis further and consult with the management group. A detailed table of all the elaborated options can be seen in table 1.

5.3. GEF-LADA-WOCAT project

Land Degradation Assessment and Monitoring for Sustainable Land Management Decision Support and Scaling up of Best Practices, LADA-WOCAT

Opportunity for funding WOCAT plans of action and mainstreaming

Presentation by Sally Bunning (3_SC-GEF project.ppt)

Sally Bunning gave an overview of the GEF/FAO project: Land Degradation Assessment and Monitoring for SLM Decision Support and Scaling up of Best Practices.

Key figures of the project are as follows:

- Partnership: LADA-WOCAT
- GEF funds US$6,000,000
- Estimated co-funding US$ 13,206,000
- Duration 4 years - FAO GEF implementing and executing agency
- Contracts for WOCAT and country partners and partner SLM programmes (GIZ, SDC etc)

It's a global project proposal (PIF), under GEF-5, for scaling up of LADA-WOCAT tools in interested countries. The aim is to support countries:

- to conduct assessments and mapping at national, sub-national, local levels (use of LADA-WOCAT tools);
- to use findings to support decision making at N- S- L levels for scaling up of SLM programmes and investment (KM + DS)
- to contribute to NAP/UNCCD impact /progress monitoring (link with PRAIS process (and synergies with biodiversity CBD + climate change UNFCC)

→more effective implementation, monitoring, reporting on progress towards UNCCD 10 year strategic programme.

FAO has invited countries who have expressed interest (COP, CRIC, CST etc.) to participate in the project. Letters were sent with the project proposal to country contact points (FAO; WOCAT) with draft PIF project information form. FAO Representatives /Regional offices can help countries

Interested countries have to send country letters of endorsement from GEF National Focal Point in order to be able to participate in the project asap. More details can be seen in the power point presentation on the CD.

5.4. Tentative global activity plan for 2011+

5.4.1.   CDE

Planned activities 1.7.2011- 31.12.2011

Basic enabling activities at global level (top priority)

Outputs (→ deadlines):

- Concept note and responses from major partners (→June-July)
- External evaluation, consultation with Management Team (→ Mid Aug)
- Proposal for new institutional set up and funding strategy (→ Sept)
- Draft fund raising proposal for enlarged WOCAT programme (→ Aug)
- Concept on how to streamline WOCAT into main donor agencies (→ Aug)
- New institutional set-up (→ deadline?)
- MoUs with partners (MG, Secretariat with partners ?)

Activities:

- Consultancy for concept note, funding strategy/ business plan, funding proposals, and planning of the way forward
- External evaluation: consider report and recommendation for planning next phase
- Explore the most promising options for institutional set-up
- Send concept note to partners and potential donors requesting their vision on how to strengthen partnerships and possible collaboration in the future.
- In preparation for writing a business plan a survey on the need of the global WOCAT coordination and secretariat will be sent to partners and key institutions
- Strengthen efforts to streamline WOCAT in global, regional and national programmes: UNCCD, UNEP/UNDP, GEF, WB, ADB, ACSAD and country programmes,
- Develop new collaboration and funding proposals and negotiations with donors (new funding phase)

Knowledge about SWC and SLM

- More appealing PR products (on website)
- Proceedings WWSM 2011
- Up-date and enhance quality of data and further populate database with incoming technologies and approaches from partners
- Publications (on mapping and/or best practices)

Tool (and method) development

- On-line data bases debugged, user - friendly data entry and all data from access database transferred (including French and Spanish data sets)

Information sharing and networking

- Promote publicity and visibility: attendance of and side event at UNCCD-COP10 (October 2011) in South Korea.
- Follow up on GEF5 WOCAT-LADA proposal and promote link to global, regional and national programmes/ institutions (UNCCD, WB, IFAD, ...)
- Pursue already running projects (Mongolia, Tajikistan …)

Training, Education and Research

- Training workshops and training of trainers (upon demand subject to funding of all costs)
- Testing new tools with postgraduate Students (RS/GIS for assessing SLM; DS tools at local and regional/national level; identifying land use systems, land degradation and SLM and their impacts on ecosystem services) (University budget)
- Research: Green Water Credit project, Mongolia proposal 'Linking geospatial information and capacity development to combat desertification in Mongolia' (additional budget)

Activities beyond 2011 will depend on the new institutional set up of WOCAT and will probably be dominated by the process of transforming from the present structure to a new set-up. Please refer for more details to section 5.5. of these proceedings.

5.4.2. **FAO**

Report by Sally Bunning

Actions planned and immediate follow up to the workshop (June 2011 - Dec 2012)

In FAO, information on Land management technologies and approaches, including technical guidance, case studies, spatial data on land use, natural resources status and trends, and managed production systems, remains dispersed among the various Technical Departments and (sub)Regional and country offices.

It is proposed to undertake a concerted effort among FAO Technical Divisions led by NRL and with support of the FAO Regular Programme, the WOCAT CDE team, network and partners (IFAD, TerrAfrica, MENARID, etc.) to consolidate and validate the available information, to the extent possible through the further use of WOCAT and other relevant tools, and to facilitate access to information for the major ecosystems (drylands – arid, semi-arid, sub-humid; humid tropics; temperate; highlands; wetlands; estuarine and coastal zones; etc.) and range of production systems (forest, range-land- pastoral, agrosilvopastoral, rainfed and irrigated cropping, crop-livestock systems etc.). Efforts would be made to expand the knowledge base in particular on the costs and benefits of SLM best practices/ technologies (soil, water, crop, livestock, pasture, rangeland and forest management), their impacts on livelihoods and ecosystem services and their contributions to climate change adaptation and mitigation as well as biodiversity conservation and sustainable use. It would include information on the extent and effectiveness of SLM approaches such as people-centred participatory approaches, negotiated territorial approaches, securing land tenure, access to resources and equity, labour, incentive measures and other human dimensions. The expanded knowledge base and information system should aim to be available for Rio+20 Conference in 2012.

As mentioned above ; FAO will pilot test and further develop in consultation with the WOCAT Secretariat and task forces, the WOCAT modules to assess and map watersheds and to assess climate change adaptation and resilience respectively in 2 to3 sites in both Kenya and Ethiopia through a Swedish funded project on SLM and CC adaptation (June 2011-Dec 2012).

FAO will continue to provide technical advice to the WOCAT network and process and through its work with Member countries and intergovernmental processes will continue to support the use of WOCAT tools in agricultural development programmes and policies and investment frameworks and as a planning tool for reversing LD and promoting SLM.

More specifically FAO will see how WOCAT tools could be promoted through the UN Water platform, in which FAO is an active partner, and through the Global Soil Partnership that is to be launched by FAO in September 2011. This will aim to strengthen the use and further development of the knowledge base and capacities on soil and water management in rainfed and irrigated systems (crop, livestock, forest) and on ecosystems at risk from change (climate change, market forces, demographics) with a focus on integrated soil and water management through watershed, landscape and holistic ecosystem approaches. In this regard, FAO would like to highlight its forthcoming flagship publication on the State of the World's Land and Water Resources (SOLAW, 2011) which has been prepared with contributions from many partners including WOCAT and presents the state of knowledge, strengths and weaknesses and draws attention to the main ecosystems at risk.

5.4.3. **ISRIC**

Report by Godert Van Lynden

Plans for 2011 - 2012

- Continue in WOCAT Management Team? (tbd by Steering meeting and depending on new institutional structure!);
- New collaboration agreement with CDE (and FAO / others, depending on new institutional structure;
- Cont'd WO-co-co-ordination, newsletter (?); PR activities and funding issues;
- Enhance and encourage use of WOCAT in projects, esp. in GWC;
- Contribute to training and backstopping where required, esp. in mapping;
- Investigate Use of WOCAT (Involve students?).

Funding

- Unclear at the moment, needs to be solved

5.5. Update on new funding phase 2012+

The current funding phase which is mainly dominated by SDC will terminate by the end of 2011.

Funding beyond 2011 has been approved by SDC in December 2011.

The WOCAT network will transform itself from the present, largely-informal but active network into a new structure. For this transformation a two-year transition period (2012-2013) is proposed, followed by a two year consolidation period (2014-2015).

SDC's contribution for 2012-2013 is for the global component, the secretariat, to enable the transition to the new WOCAT structure during this transition period. SDC's contribution is expected to help attracting other bilateral long-term donors to run the global secretariat of the network as well as for WOCAT regional and national programmes and projects. During the following consolidation period (2014-2015), SDC will only continue to fund the global component, if the financial base of the secretariat can be diversified. SDC co-funding within the new WOCAT structure is not excluded but would be directed more to specific services or products supplied by the WOCAT network.

5.6. Organizational and administrative issues

Global Management

- CDE: Hanspeter Liniger (Global coordinator; Secretariat)
- FAO: Sally Bunning
- ISRIC: Godert Van Lynden
- Secretariat: CDE is hosting the WOCAT Secretariat

For the moment the Global Management Group will stay in place, however depending on the new organisational set-up changes might occur.

Discussion

- It was suggested that an Advisory Board (not only a Steering Meeting) with global and regional representatives should be put in place. Institutions like GEF, UNCCD Secretariat, etc. should be asked to join the future WOCAT Advisory Board.
- Once the new institutional set up is clear management improvements will be discussed.

5.7. Next WWSM

Currently WOCAT is initiating a new global partnership to upscale knowledge management and decision support in SLM and is seeking new partners. As the new WOCAT partnership and the new Institutional set-up of WOCAT is not clear yet discussions about the next WWSM are at present not clear either.

However, regardless of the new Institutional set-up of WOCAT countries made suggestions to host the next WWSM.

The following suggestions were made:

- South Africa and Malawi suggested a regional workshop in Southern Africa showing a regional context. A special emphasis could be put on mapping.
- ISRIC in Wageningen, the Netherlands.
- Afghanistan, SLMIO.
- Mongolia.

→ Everybody agreed that Southern Africa would be a good offer.

→ A cycle of 18 months was suggested, so that the next WWSM would be end 2012 / beginning 2013.

Thank you

A big thank you goes to our local organisers Mira Arynova and Fatima Yunuza from the Regional Coordination Office, NCCR North-South in Bishkek. Thanks to them the WOCAT Share Fair and the WWSM was well organised and was running smoothly.

Fatima Yunuza and Mira Arynova from the Regional Coordination office in Bishkek (Photo: I. Providoli)

5.8. Feedback from participants and evaluation

A general evaluation / feedback form about the WOCAT Share Fair and the 15th WWSM was sent to the participants of the 15th WWSM after the workshop. We received a total number of 16 feedbacks.

Evaluation results - WOCAT Shar Fair and WWSM Bishkek, Naryn, June 2011

Rating from 1 (= poor) to 5 (= very good)

Questions	No. Of answers	Average rank
1. Content WOCAT Share Fair		
a) Did the WOCAT Share Fair meet your expectations?	16	4.1
b) Day 1: Did the 6 keynote presentations on "*SLM facing global and local needs*" meet your expectations?	16	4.1
c) Day 1: Did the poster market meet your expectations?	16	4.3
d) Day 2: Did the 9 input presentations on *"a joint way forward in SLM knowledge management and decision support"* meet your expectations?	16	4.1
e) Day 2: Did the group work "WOCAT action carousel" meet your expectations and was it useful?	16	4.1
f) Will your institution benefit from the knowledge gained during the two WOCAT Share Fair days?	16	3.9
2. Usefulness of WOCAT Share Fair for networking among SLM practitioners?		
a) Was the WOCAT Share Fair useful for networking among participants?	16	4.3
b) Was participation and interaction at the WOCAT Share Fair encouraged?	16	4.4
c) Was adequate time provided for questions and clarification?	16	4.2
3. Logistics		
a) Was the conference venue Hotel Ak Keme adequate?	16	4.6
b) How do you rate the organisation of the WOCAT Share Fair?	16	4.4
c) Was the length (2 days) of the WOCAT Share Fair adequate?	13	4.5
d) Was the hotel accommodation in Bishkek adequate?	15	3.5
4. Content 15th WWSM		
a) Did the 15th WWSM meet your expectations?	16	4.0
b) Could concerns of countries / participants be addressed?	16	3.9
c) Day 1: Did the parallel session on "climate change and disaster risk reduction" meet your expectations?	12	4.2
d) Day 1: Did the parallel session on "pasture / grazing land management" meet your expectations?	11	3.7
e) Day 3: How did you like the national progress / poster market of the countries?	15	4.6
f) Day 4: Was the group work on institutionalizing WOCAT and securing funding at global / regional / national level interesting and helpful?	16	4.1
g) Day 4: Was the Steering Meeting organised adequately?	15	4.1
h) Day 4: Were countries able to intervene and contribute at the Steering Meeting?	14	4.3
5. Field day		
a) Did the field day in Jergetal and Ming Bulak meet your expectations?	16	3.9
b) Were interactions enhanced and was knowledge exchange fruitful?	16	4.1
6. Usefulness of 15th WWSM for networking among SLM practitioners?		
a) Was the 15th WWSM useful for networking among participants?	15	4.5
b) Was participation and interaction at the 15th WWSM encouraged?	16	4.6

c) Was adequate time provided for questions and clarification?	15	4.3
d) Was adequate time provided for group work?	15	4.2
7. Logistics		
a) Was the workshop venue at UCA adequate?	16	4.1
b) Was the stay in community based guest houses adequate?	16	4.1
c) How do you rate the organisation of the 15th WWSM?	16	4.2
d) Was the length (4 days) of the 15th WWSM adequate?	15	4.0

The following table lists the expectations mentioned by the participants at the beginning of the WWSM. Each participant filled in the table with the expectations reached on the last workshop day and gave a ranking to every issues mentioned.

	Average rank*	No. of answers
General Remarks		
To learn more about WOCAT	4.0	25
How to establish a national network	3.4	24
Integrate WOCAT methods and tools in projects	3.3	24
Implement decisions taken at previous WWSMs	3.1	22
Future vision of WOCAT	3.9	28
Development of a business plan	2.7	23
Knowledge about SWC and SLM		
Use of WOCAT	3.8	24
How to produce more client oriented products	2.9	25
How to assess impact of WOCAT	3.0	26
Information on CC and DRR	3.1	25
Tool (and method) development		
Learn about WOCAT tools and how to use them	3.4	25
Learn about the CC and DRR module	3.2	26
Decision support process becomes clearer	3.1	23
Improvement of existing tools	3.1	25
Information sharing and networking		
Share experiences	4.2	26
Encourage implementation at regional/ sub-regional level	3.8	25
Research, training and education		
How to involve donors in research related to WOCAT	3.3	23

* Rating from 1 (= poor) to 5 (= very good).

ANNEX 1A: FIELD TRIP REPORT

Report by Janyl Kojomuratova

The CAMP Alatoo Public Foundation has organized the field visit to Naryn oblast, Naryn rayon for the 15th annual WOCAT workshop participants. During the field visit the following were presented: approach on sustainable pasture management; its particular tools and techniques, which were developed within the framework of the GIZ funded Project on "Sustainable pasture management in basins of the rivers Jergetal and Onarcha".

The field participants were divided into two groups and visited the Project pilot territories, i.e. Jergetal and Minbulak A/O (local self-governments).

Field visits during the field day (Photos: HP. Liniger, I. Providoli)

In each A/O Pasture committees presented the approaches used by them, i.e. sustainable pasture management, including the following tools: development of annual pasture use plan, elaboration of pasture management plan and their implementation via rehabilitation of the pasture infrastructure. Moreover, it was noted that the elaborated and presented tools facilitate implementation of the new law "On pastures" (adopted in 2009).

After the meetings in the Pasture Committees' offices there were organized field visits aiming at demonstrating such tools as pasture carrying capacity assessment, winter fodder conservation and herd management.

The pasture carrying capacity assessment is one of the functions of the Pasture committees. A person in charge of the pasture monitoring, has demonstrated to the workshops' participants the farmers' method on pasture carrying capacity assessment, which differs from the scientific method by simplicity and accessibility, as farmers have difficulties with application of the complicated scientific methods.

Field visits: pasture carrying capacity assessment (Photos: HP. Liniger)

A specialist from the Microcredit Agency has briefly presented the basic rules of the loans' granting (by seeds) to local population to be used for winter fodder production – sainfoin, which perfectly grows under the climatic conditions of Naryn oblast. Besides, a technical data sheet on sainfoin growing, developed by the CAMP Alatoo, was also demonstrated.

Within the framework of the Project, awareness is being created among the pasture users pertaining to the livestock productivity rise through improvement of their genetical potential. The local veterinarians have demonstrated the first results of artificial insemination of the cattle breeds "Simmental" and "Limousine".

Field visits: Artificial insemination of cattle breeds (Photos: HP. Liniger)

The workshop participants asked a lot of interesting questions to Mrs. Jumabaeva Salamat (assistant of the project coordinator, CAMP Alatoo) and Mr. Isakov Azamat (the project coordinator of CAMP Alatoo) during the field visit.

Special contribution in Jergetal by Bernd Steimann

In his short presentation, Bernd Steimann focused on two selected aspects of his PhD study which he partly conducted in Jergetal village. In a first part he focused on the existence and emergence of socioeconomic disparities at the level of rural households. A quantitative household survey carried out in Jergetal in spring 2007 revealed a striking gap between wealthy and poor households in terms of livestock ownership, which is a common wealth indicator in rural Kyrgyzstan. On one hand, there are many households with no animals of their own, as well as numerous smallholders with very small private flocks. On the other hand, there are a few large farm households with large private flocks and access to more private arable land per capita than others. Further qualitative analysis showed that these disparities are not entirely new, but already existed in the socialist economy and were later on reproduced by the rapid and often intransparent process of agricultural privatization. In a second part, he then showed how these disparities influence people's strategies to access and use pasture resources. In a situation where several authorities over pastures overlap and rules are often not properly communicated and enforced by the state, wealthier households can refer to formal rules and regulations when they are handy for securing their claim over pastures, but also recombine these rules with other less formal strategies and routine behavior, such as customary law. At the same time, less wealthy households are often unaware of the existing pasture law, or else have no means of referring to or circumventing it. Although the new law on pastures passed in 2009 by the Kyrgyz parliament and newly established local pasture users' committees have addressed some of these problems, socioeconomic disparities persist and may seriously hamper a just and fair allocation of pastures in future.

Reference: Programme and Field Guide (2_Manual WOCAT transfer_field day.pdf)

ANNEX 1B: HERDER MANUAL

During the transfer day to Naryn Inam Ur-Rahim elaborated on pasture management and the herder manual.

Inam explaining the herder manual (Photos: HP. Liniger)

Rangelands and pastures are the dominating land use systems in Central Asia. Over the past 150 years, Kyrgyz herders have faced many changes, and adapted to the Tsarist and the Soviet Union regimes which challenged and eroded traditional herding practices. Since independence in 1991, they have faced the new challenge of collective farms being dissolved and the assets distributed among family households. The result of this policy was the abrupt ending of many Soviet large-scale features and services of livestock rearing, including veterinary services, winter fodder supply from neighboring countries and transportation to and from summer pastures.

Many families were overwhelmed at handling their own smaller stock of animals in an efficient, economic and ecologic manner, leading to major destocking, overgrazing of near-village pastures and the underutilization of distant pastures. Many households were forced to revert to self-subsistence and many lack the necessary experience for herding and pasture management. Unclear regulations and mechanisms to access pasture resources further accentuated pastoral resource degradation.

To overcome the challenge of inappropriate pasture utilization, the Kyrgyz Government recently took measures to decentralize the pasture management and monitoring responsibility to the village level. Under the new pasture law, every village administration ('Ayl Okmotü') has to establish Pasture Committees that look after pastures. Most of the generated revenue from pastures is now to be used at the local level. This has increased the ownership of herders over pastures. However, it has also brought new challenges, including the lack of simple, appropriate tool for herders and pasture committee members to better manage and efficiently monitor pastures and livestock.

This manual intends to fill this gap. The author and research team have collected remaining traditional and practical knowledge and skills from experienced herders, and combined this knowledge and practice guidelines with relevant, current scientific knowledge and best practices. The manual includes important and localized information, ideas and guidelines, presented in a concise and clear manner. Versions are available in Kyrgyz, Russian and English. Ultimately, it is anticipated that this manual will enable current and future herders to become the custodians of pastures and livestock as a national resource and heritage of great importance, and to improve both pasture quality and livestock output.

This manual consists of several complementary parts.

Part A is dedicated to the 100 most important and desired pasture plants and to the 20 least wanted but frequent weeds or toxic plants. The classification is based on the assessment of experienced herders throughout Kyrgyzstan. Through participatory appraisals plants were identified, ranked and ultimately

selected as belonging to one of the two categories. The plants were assessed with respect to their desirability by different livestock, their habitat, tolerance to grazing, drought, and frost as well as their seasonal appearance.

Part B presents a pragmatic approach to sustainable pasture management by shedding light on concepts such as grazing behavior of livestock, explaining the importance of appropriate grazing and herding or how to assess and regularly monitor pasture quality. This part also includes explanations along with tips and tricks on how to improve pastures e.g. through weed, pest and rodent control as well as seeding and fertilization.

Finally Part C addresses concrete measures for an improved livestock management e.g. via tips for different feeding strategies, health management and disease control or breeding.

Part D encompasses different annex material such as a glossary, different forms and a register with key words and the respective page number.

To make the manual a usable document, the information about pasture assessment and monitoring are designed for training the herders and different types of pasture users association (like pasture committees). It may include an initial on the job training of the trainers (ToT). The ToT training will include the creation of participatory pasture inventory, participatory village level pasture assessment, creation of a participatory pasture management and monitoring plan and extending on the job training. The trainers may then extend the training at village and pasture levels.

Impressions during the field / transfer day (Photo: HP. Liniger)

Yurt during field / transfer day and cultural event in Naryn (Photos: I. Providoli)

Additional impressions during the field / transfer days (Photos: HP. Liniger)

Overview map
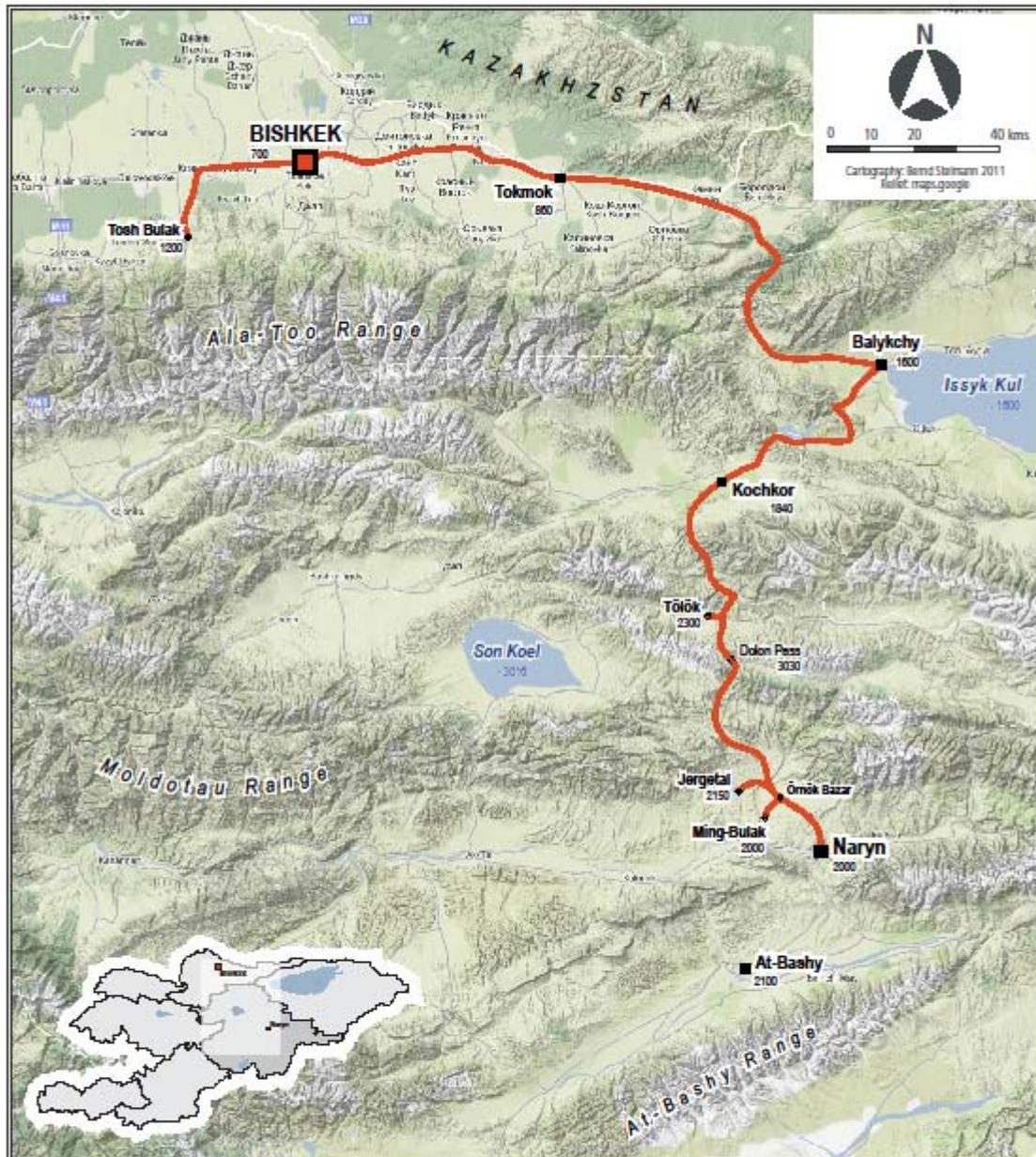
Map of Kyrgyzstan: route from Bishkek to Naryn, (1_OverviewMap.pdf)

ANNEX 2A: NATIONAL PROGRESS POSTERS

November 2009 – June 2011

The following countries presented a national progress poster at the 15th WWSM. The posters can be found on the CD.

Asia

Afghanistan

Bangladesh

China

Central Asia:

    Kyrgyzstan

HIMCAT

Mongolia

Philippines

Africa

Ethiopia (webpage): www.slmethiopia.info.et

Morocco

Senegal

South Africa

New country initiatives

Asia

Cambodia

Vietnam

GLOBAL PROGRESS POSTERS

November 2009 – June 2011

The Global Progress Poster can be found on the CD.

ANNEX 2B: GLOBAL PROGRESS TABLE

November 2009 – June 2011

Objectives / Expected results	Activities	Major global activities planned → activities achieved
1) Knowledge about SWC and SLM Support (backstopping) for the production of outputs at national and regional level. Analysis and synthesis regarding emerging global issues.	• support the production of national overviews • produce dissemination materials: Use of WOCAT (posters, pamphlets, videos) • develop a world map on the major SLM measures • enlarge the number of documented and evaluated SLM technologies and approaches in the global database • assess / analyse SLM knowledge gained through WOCAT and show their contribution to global issues • promote and support the establishment and operation of national peer review panels to ensure and enhance the quality of the information • compile an inventory of global prototype technologies (covering the spectrum according to WOCAT SLM categorization system) • produce prototypes of conservation maps at different scales, for different AEZ/ continents. • analyse successful technologies on their applicability for different natural and human environments • develop WOCAT label and standards	• ***Proceedings WWSM14 Morocco, October 2009 compiled and published.*** • Printing and launch of TerrAfrica publication: SLM in practice - guidelines and best practices for SSA (English and French) → ***English version finalized and ready for printing, September 2010; French version translated and ready for print February 2011; First launch at UNCCD CST2/CRIC9 conference Feb 2011 in Bonn. Distribution at further events: 'Private sector agroforestry' conference in Nairobi, May 2011, 'First Africa Drylands Week' in Dakar, Senegal, June 2011.*** • FAO 'State of the World Land and Water Resources' (SOLAW): compilation of chapter 5.1 on halting land degradation for food security → ***Chapter could be finalized in the envisaged time.*** • DSD (UNCCD): finalizing White Paper for working group II and publish article in 'Land Degradation and Development' journal. → ***White paper finalized in December 2009. Contribution to the Special Issue of Land Degradation & Development Journal 'Experiences in monitoring and assessment of sustainable land management' published in March/April 2011 (V 22, Issue 2).*** • Further support the production of national overview books and outputs → ***Mongolia, Bangladesh fact sheets, Senegal, Tunisia, PPCR Tajikistan, CACILM.*** • Up-date the database case studies and further populate the databases with good quality data → ***New case studies of TerrAfrica guidelines, Senegal, Niger and Tajikistan entered directly into on-line database; Remaining case studies transferred from off-line to on-line database.*** • New promotion material for WOCAT → ***flyers and posters for the joint exhibition of CDE/ WOCAT and UNCCD at the second International Conference on Climate, Sustainability and Development in Semi-arid Regions (ICID 2010), for UNCCD CST2/CRIC9 conference (Feb 2011) in Bonn, for Share Fair and 15th WWSM June 2011 in Bishkek and Naryn; WOCAT prototype promotion video: 'where the land is greener and the water bluer' (filmed in Kenya, August 2010).*** • Support and review of best practices documentation in the 6 LADA countries → ***Review of Chinese, South African, Argentinean, Cuban, Senegalese and Tunisian best practices reports.*** • World Atlas of Desertification (and improvements) (WADI): initiate proposal for

Objectives / Expected results	Activities	Major global activities planned → activities achieved
		selected countries e.g. Mongolia, Argentina, Iceland, Senegal?, China?, etc. → *no follow up yet.*
		• Pursue global map of SLM: for BIP2010 (for UNCBD in collaboration with FAO) → *no follow up yet.*
2) Tool (and method) development Additional and enhanced tools for exchange of knowledge and decision support developed	• elaborate questionnaire modules on issues like watershed management, poverty alleviation, carbon sequestration and other upcoming important issues • further develop and adapt the SLM categorization system to include newly integrated issues of the revised questionnaires • make available prototype of overview books (guidelines, templates) • develop tools to assess SLM technologies / approaches / and their spread with regard to global conventions and MDGs • develop enhanced data analysis and evaluation tool -> decision support tool (validation/evaluation of SLM, planning of SLM)	• Finalize on-line QT tool development, continue work on off-line version →*Constant debugging of on-line SLM technologies database; data transfer from access database to on-line database ongoing; off-line version: no follow up.* • Further develop interactive MapViewer→ *Preliminary version of an on-line map viewer was developed early 2010, programming of predefined maps to view from on-line QM data. Simple Map Viewer developed (May 2011).* • Test workshop for interactive map data entry/ editing tool → *no follow up yet.* • Finalize watershed management module → *Tested in Tunisia (April 2010); Module finalized and filled in example from Tunisia; Module translated to French.* • Develop climate change module→ *Draft of CC adaptation module developed for PPCR project in Tajikistan (March 2011). Draft sent to taskforce members; Database for CC adaptation module created (May 2011.* • Joint WOCAT-GIZ decision support system on approaches→ *Meetings held in June 2010 at CDE Bern and November 2010 in at GIZ Eschborn. Project proposal to develop and test the integrated decision support tools needs to be prepared (initiation by GIZ), first contacts to test countries established.* • Develop training kit for QM, QT, QA: manuals, presentations, videos, etc. →*Training of trainers draft manual and training material for documenting SLM technologies and approaches developed (February 2011) and tested in Tajikistan training workshop (April 2011). Needs revision before further use.*
	• adapt database to new questionnaire developments (in new on-line software) • advance mapping system (new software/mapping tool in cooperation with FAO/UNEP to incorporate GIS/RS as well as expert knowledge on spatial distribution of degradation and conservation) • develop new database system (new software), including feedback mechanism for quality assurance • build an interactive data entry, viewing and updating system • develop holistic methodology including (a) SLM identification through stakeholder workshops, (b) SLM documentation and evaluation with questionnaires and (c) comparative analysis of SLM options with the	

Objectives / Expected results	Activities	Major global activities planned → activities achieved
	help of a decision support tool • develop method and identify indicators for local level assessment (jointly with University of East Anglia, FAO/ UNEP/ UNU/ GEF/UNDP) • develop guidelines for documentation, evaluation and use of SLM knowledge (also for global and national review panels) • set up training modules on SLM knowledge management using WOCAT tools	
3) **Information sharing and networking** WOCAT Network enhanced and consolidated	• strengthen partner in the use of WOCAT • add new partners and consortium members in SDC priority regions where WOCAT is not yet well established. • sponsor participation of WOCAT partners at WWSMs to enhance exchange, contacts and cooperation between different countries • participate in International Conferences and meetings to promote WOCAT (e.g. at events of UNCCD, IUSS and ISCO; LADA) • integrate WOCAT in environmental and development processes at the global (UNCCD, UNCBD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral projects). Give special attention to SDC priority countries • continue and enhance the WOCAT e-mail list and newsletter • establish and maintain links to other networks • regional / international exchange visits • improve platforms for communication to facilitate contacts and knowledge sharing between WOCAT partners • add new partners and consortium members in regions where WOCAT is not yet well established.	• Further enhance the WOCAT network; promote / link to global / regional programmes and national organisations / institutions → *WOCAT and UNCCD: interview and on-line survey on the assessment of CST KM needs (March, April 2011); UNCCD CST2/CRIC9 meeting in Bonn, (16 to 25.2.2011); UNCCD technical workshop on impact indicators refinement (16-17 December, 2010) in Bonn; Zero Draft White Paper on the Scientific Review in support of refinement of the UNCCD set of impact indicators provisionally accepted at COP 9: Approach, Conceptual Framework, Pre-Participatory Assessment (October and November 2010); UNCCD meeting on methodologies and data needs for the UNCCD subset of impact indicators (land cover status und poverty) on 11 June 2010, Bonn.* → Collaboration with FAO LADA (Phase 1): *Training course on 'Integrating country specific indicators in LADA indicators sets and updating DIS4LADA', held in Alghero, Italy (24 – 27 November 2009); Technical LADA Meeting: Global Land Degradation Assessment and Analytical Models for interpretation of local and national land degradation assessment results. Wageningen (September 6 – 14, 2010); LADA final meeting, Rome (6-8 December, 2010). Since 2011 phasing out.* → Assist countries in preparing their country PIFs for the next/ new LADA-WOCAT phase: during *UNCCD CST2/CRIC9 side event (February 2011); WWSM15 (June 2011).* → WOCAT in Mongolia**: *CDE/ WOCAT backstopping of the process of harmonizing and standardising the methodology for assessment and monitoring of desertification in Mongolia (March and June 2010); CDE/ WOCAT draft proposal (October 2010 and May 2011) for linking geospatial information and capacity development to combat desertification in Mongolia; Bringing together*

Objectives / Expected results	Activities	Major global activities planned → activities achieved
		all the relevant national institutions and projects. → Collaboration with WB in Tajikistan: *Tajikistan Pilot Program for Climate Resilience (PPCR) Phase 1 (March to September 2011).* • Further enhance the WOCAT network and provide active support, backstopping and e-mail communication → *Seminar at FAO for awareness raising and assess possibilities/ opportunities of cooperation with different FAO sections (16.2.2010).* → *Promotion of WOCAT in Central Asia in April 2010 with an 'open day' and several meetings with GIZ, CACILM, DEZA DRR Central Asia.* → *WB and FAO for a follow up on TerrAfrica and Great Green Wall initiative.* → *GEF KM: Land Expert Workshop on SLM Indicators, Rome on 1 October, 2010.* → *Share fair (21-22.6. 2011, Bishkek) and WOCAT Workshop and Steering Meeting 15 (23-28.6. 2011, Naryn).* → *Contributing to WASWC e-library on integrated watershed management.* • Attend meetings and conferences to enhance WOCATs publicity and visibility → *Keynotes on SLM knowledge management and decision support at: Landcon meeting (Xi'an, Shaanxi Province, China from 11. -15. October, 2010);* → *Tropentag (Zürich, 14–16 September 2010);* → *International Conference on 'Advanced Scientific Tools for Desertification Policy' (DeSurvey, Rome, 28-29 September 2010;* → *Launch of DesertNet International (Rome, 30.9.2010);* → *UNCCD CST2/CRIC9 meeting in Bonn, (16 to 25.2.2011);* → *First African Drylands week Dakar, Senegal 10-17 June 2011;* → *Disseminiation event of he rural poverty report 2011 of IFAD, Bern (17.6. 2011).* • Motivate and assist new WOCAT initiatives → *13.8.2010 Tel Conference Roshan Cooke (GM/ IFAD on new Vietnam initiative).* → *Arab Center for Studies of Arid Zones and Dry Lands - ACSAD (meeting on 29.10.2010, preparation concept note).* → *Senegal (Institut de Pédologie).* → *New initiatives: Bhutan, Cambodia, Vietnam, Russia and Malawi.*

Objectives / Expected results	Activities	Major global activities planned → activities achieved
		• Participation in the preparation and training of regional training centres for LADA/WOCAT tools → *no follow up yet.* • Support implementation of country and TF workplans with official WOCAT letter to partner institutions → *no follow up yet.*
4) Training, education and research Partners trained to run WOCAT programme in their countries and regions. Use of research to support WOCAT's mission and develop tools and outputs	• conduct additional international 'Training for National Trainers / Facilitators' workshops • provide support and expertise for additional national and regional initiation and training workshops, upon request from national / regional institutions • facilitate / assist in links to research (e.g. DESIRE, COST, NCCR) • publish in appropriate journals • promote and provide supervision for MSc, PhD thesis addressing knowledge gaps • develop training modules, manuals and teaching material for universities and extension services	• Training: → *WOCAT training workshops Mongolia, June 2010 and May 2011.* → *Introduction and national training on WOCAT tools for the local level, Senegal (13-17 December 2010).* → *National training Senegal (April 2011) on WOCAT mapping.* → *Training workshops in the framework of the PPCR project Tajikistan (April 2011).* → *CACILM training (May 2011).* → *Haiti, 1-5 March 2010, Kagera Training-Workshop: Rwanda, Burundi, Tanzania, Uganda (River Basin) on LADA-WOCAT tools by FAO.* • Conduct training for trainers on QT/QA, QM, QW? (after the tools + databases are finalized) → *no follow up yet.* • Education → *Supervision of PhD-study on 'Mapping land degradation and natural resource conservation in South Africa'.* → *MSc-study carried out in Senegal, Indonesia, Tunisia, Mongolia, Tajikistan.* → *Supervision of BSc-studies.* → *3-day and 1-day field course on Sustainable Land Management in April 2010 and April 2011; Field course, Kenya September 2010.* → *Visiting lecturer at two Universities in China (following Landcon conference).* • Research → *Further involvement in the Green Water Credits programme of ISRIC (attending workshop in Morocco 22 - 25. September 2010).* → *Further involvement in DESIRE Project.* → *Joint research activities with National University of Mongolia and UniBE students (CDE/WOCAT) to explore the potentials of geostatistics and spectral -, object - and time-series analysis.*

Objectives / Expected results	Activities	Major global activities planned → activities achieved
5) Basic enabling activities at the global level Keep the WOCAT programme and network running at a basic level	• maintain and update global DB • organize one international WOCAT Workshop and Steering Meeting (WWMS) per year followed by proceedings • produce newsletter (half-yearly, with active participation of national/regional initiatives) • enhance e-mail communication and mailing list (WOCAT-L) • keep website up-to-date • build up a pool of trainers and trained specialists • coordinate programme, and maintain good relations to donors • update brochures, flyers, etc. (promotion of WOCAT) • update WOCAT CD-ROM (every 3-4 years) • invest in finding new donors	• Follow-up with LADA on the proposal for a next/ new LADA-WOCAT phase→ **on-going.** • Secure new and continued funding through the development of a financial strategy → ***Proposal for a supplementary credit submitted to SDC to cover over-expenditure due to the TerrAfrica publication granted end of 2010; Proposal for engaging a consultant submitted to CDE and granted February 2011.*** • Identify possibilities of including WOCAT in ongoing and new programmes related to current global issues such as climate change, dry lands/ desertification and poverty alleviation→ ***Consultant Michael Stocking is engaged early 2011. Concept note drafted and distributed during WWSM15 (June 2011).*** • WOCAT Management meeting (CDE, ISRIC, FAO) and monthly Skype conferences → ***Management meeting at FAO in Rome from 15-17 February 2010 and regular skype conferences at the beginning of 2010; Later Skype conferences at irregular intervals.*** • Clarify the roles of the management members: FAO, ISRIC and CDE→ ***pending.*** • Facilitate taskforces on mapping, decision support, watershed and climate change module (and impact monitoring) → ***not very active.*** • Support implementation of country and TF work plans with official WOCAT letter to partner institutions → ***no follow up.*** • Maintenance of databases (including address database)→***On going at a minimum due to lack of human resources.*** • Improve user-friendliness of the new WOCAT website, translate into French and Spanish and up-date regularly → ***Updating and improvement of website ongoing very slowly due to lack of human resources, no follow up on translation.*** • Bottleneck human resources → ***Christine Hauert left in September 2010 and Mats Gurtner in March 2011; One 55% senior research scientist and two part time assistance were employed from March 2011 onwards.*** • ***Organize Share Fair (21.-22.6. 2011, Bishkek) and WOCAT Workshop and Steering Meeting 15 (23-28.6. 2011, Naryn), Kyrgyzstan.*** • ***WOCAT newsletter published in April 2010, News from the WOCAT Secretariat sent to all registered network members (December 2010, and March 2011).*** • ***WOCAT Evaluation 2011 (2008-2011).***

→ Grey shaded areas refer to activities that will be or were done with NRE-CDE contributions, the non-shaded areas depicts the activities that are / could be done using other sources of financial contribution.

ANNEX 3: WORK PLANS JULY 2011 – JULY 2012

Please note that not all active WOCAT countries were able to provide a workplan. The following workplans have been submitted.

Asia	**Africa**	**Europe**
Afghanistan	Morocco	Serbia
Bangladesh	Niger	
Cambodia	Senegal	
China		
Central Asia:		
UCA		
HIMCAT		
Mongolia		
Philippines		
Vietnam		

Afghanistan WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Set up AFCAT database	Documentation of potential SLM technologies and approaches	1	8	SLMIO	Questionnaires, internet, travel costs	20,000 USD	20,000 USD	AFCAT coordinator SLMIO MD SLMIO TA	SLMIO	July 2011-2012
Professionals (male and female) trained on WOCAT tools and methods	WOCAT training	2	2	SLMIO and ICIMOD, with contribution from participating institutions	Training hall, logistics, questionnaires, field travel	10,000 USD	10,000 USD	AFCAT coordinator SLMIO MD SLMIO TA	SLMIO	July 2011-2012
Participation in WOCAT annual workshop	Preparation of progress and annual plans and special presentations if required	1	1	SLMIO			3,000 USD	SLMIO MD	SLMIO MD	To be announced by WOCAT

Prepared by: Helaluddin Musadiq   Total: US $ 30, 000 US $ 33, 000

Bangladesh WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months	Institution	Materials / equipment	Available	Required		Commitment by	
Awareness raising and adoption of sustainable land management practices	Field training on sustainable upland management technologies to NGO staff and beneficiary farmers of CHTRDPII	3	BANCAT IFESCU BFRI	WOCAT and BANCAT materials		Funding will be available from CHTRDP-II	Sudibya Kanti Khisa	Sudibya Kanti Khisa, Prof(Dr.) Serajul Haque, Dr.S.P. Paul	Oct,2011 to June,2012
Sustainable land management practices adopted by the beneficiary farmers	Providing technical advice to on-going activities on Contour Farming by the beneficiary farmers of HKI, Khagrachari	1	BANCAT	WOCAT and BANCAT materials		Funding will be available from HKI	Sudibya Kanti Khisa	Sudibya Kanti Khisa,	April, 2012
Publication of documented technologies and approaches	Documentation of SLM/WM Technologies and Approaches: Subject to the availability of fund from different sources, more SLM/ WM Technologies and Approaches will be documented. It is expected that fund will be available from ADB funded CHTRDPII	3	BANCAT IFESCU BFRI	WOCAT and BANCAT materials		USD 10,000 (Funding expected to be available from CHTRDP-II	Sudibya Kanti Khisa	Sudibya Kanti Khisa, Prof(Dr.) Serajul Haque, Dr.S.P. Paul	2012
Salvage or new domain registration with the updated contents	Website has been hacked. BANCAT activities will be regularly posted in website. New domain registration	1	BANCAT	BANCAT		USD200	Sudibya Kanti Khisa	Sudibya Kanti Khisa,	Very soon
Review of BANCAT activities	Arrange get-together of BANCAT WG members:	1	BANCAT IFESCU	BANCAT IFESCU		USD100	Sudibya Kanti Khisa	Sudibya Kanti Khisa,	2012

	Meeting will be arranged with BANCAT WG members subject to the availability of their time to attend the meeting.			BFRI	BFRI					
Technical advice and support to desiring organizations	Technical advice and supports will be provided to the development of CFs by the beneficiary farmers of HKI, Khagrachari and to the NGOs involved in implementation WMsc of CHTRDPII.	1		BANCAT	BANCAT	Not required	Not required	Sudibya Kanti Khisa	Sudibya Kanti Khisa	2012

Prepared by: Sudibya Kanti Khisa   Total: US $ 10,300

Cambodia WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months	Institution	Materials / equipment	Available	Required		Commit-ment by	
LADA-WOCAT tolls and procedures will be introduced and trained nationally.	Conducting a training-workshop on LADA-WOCAT tools and procedures to members of WOCAT network in Cambodia.		DALRM			20,000-30,000 USD	Representative DALRM and SLM	DALRM	2011-2012
International audiences will be attracted.	Uploading of Cambodia Best practices to WOCAT electronic platform-further editing		SLM and DALRM			5,000 USD	Representative SLM and DALRM	SLM	2011-2012
Approaches and technologies on local agro-forestry will be documented.	Benchmark study on local agro-forestry practices in Cambodia		FA, SLM and DALRM			20,000-30,000 USD	Representatives of FA and SLM	SLM	2011-2012
Approaches and technologies in farm mechanization will be documented.	Collaboration with AIT to document good practices in mechanization in sloping land and formulation of proposed retrofitting of farm machinery to suit to slop land conditions (prevent erosion)		DAEng, SLM and DALRM			20,000-30,000 USD	Representatives of DAEng and SLM	SLM	2011-2012
Good practices in agribusiness/private sector in SLM will be nationally recognized	The activities include an announcement and selection of nominees, field validation, and publication of results		SLM, MAFF and DALRM			50,000-100,000 USD	Representative SLM and DALRM	SLM	2011-2012
National Best Practices Awards Programme on good practices in	The activities include selection of nominees, field work for validation of presentations,		SLM, MAFF and DALRM			50,000-100,000 USD	Representative SLM and DALRM	SLM	2012 onwards

SLM and adaptation to climate change to be held every 2-3 years.	announcement of awardees in a national conference, and publication of results.									
Watershed approach to SLM will be introduced to, and strengthened for key MAFF leaders	Conducting a study-visit for Kay MAFF leaders on locally supported watershed approach to SLM (visit 4 local watersheds), and neighbouring countries			SLM and DALRM			20,000-30,000 USD	Representative SLM and DALRM	SLM	2012 onwards

Prepared by: Dr Sovuthy Pheav and a Representative SLM project   Total: US $ US $ 235,000

Note:

MAFF: Ministry of Agriculture, Forestry and Fisheries

DALRM: Department of Agricultural Land Resources Management

DAEng: Department of Agricultural Engineering

FA: Forestry Administration

SLM: Sustainable Land Management Project in Cambodia (NB: Will be finished by September 2011, and seeking for further extension)

China: Songliao water resources commission WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Complete 2 QTs	Through investigation in field and scientific experiment in experimental stations of SWC in Heilongjiang province, fill in 2 QTs.	2	2	Songliao water resources commission	500 USD	500 USD		Meng LQ	Meng LQ	Sep. 2012

Prepared by: Mr. Meng Lingqin   Total: US $ 500   US $

China: GEF LD CPMO and Gansu PMO WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Publish the Best Practices for Land Degradation Control in North China(second volume)	Supplementary investigation, analysis,writing, polishing, translation and so on.	7	7	CPMO and PPMO	Vehicle,and office equipment	120000	120000	Liu Yong	CPMO and 6 PPMO	Before August 2011
An intrnational symposium	One of tasks is to promote WOCAT	6	6	CPMO	Printing materials			Liu Yong	CPMO	August

Prepared by: Wang Yaolin   Total: US $ 367000 US $ (total budget)

Central Asia, UCA: WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Funding**		**Responsible person(s)**	**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Proposal to establish an SLM unit within UCA's Mountain Societies Research Centre	Continue working with key partners to refine the concept note and identify appropriate funding sources	0.05	12	UCA/MSRC	NA			Chad Dear		July 2012

Prepared by: Dear Chad   Total: US $ na   US $ na

HIMCAT / ICIMOD WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**			**Funding**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
NEPCAT factsheet-2	Compile and edit case studies collected from the various contributors and publish the second NEPCAT fact sheet	1	2	ICIMOD & contributors		19875		Madhav, Rajan	DSCWM, IDE-Nepal, LIBIRD, ICIMOD, KU, SSMP, DOA and others	July-December 2011
Task force products	Testing of CC module	1	.5	ICIMOD & SSMP			need to be planned	Madhav & SSMP	Madhav	March-April 2012
Task force products	Testing of watershed module	1	1	KU		available, reflected in progress budget		Sabita Aryal	KU	August 2011
HIMCAT extranet maintained	Continue HIMCAT extranet	1	.25	ICIMOD		700		Madhav, Deependra	Madhav	4th Q 2011
HIMCAT newsletters	Compilation and sharing of 3 HIMCAT newsletters	1	.5	ICIMOD		1000		Madhav, Rajan	Madhav	July, December 2011 and July 2012
HIMCAT country networks strengthened	Provide support to up-coming HIMCAT initiatives	2	.5	ICIMOD				Madhav, Rajan	National teams	Ongoing
WOCAT trainings in HIMCAT region	WOCAT training in Afghanistan and Pakistan	1	1	ICIMOD, SLMI (Afg) and PFI (Pak)		2000	For Pakistan	Madhav, Sanjeev, Musadiq ,and Tariq	SLMI, PFI	Afghanistan: September 2011, Pakistan 1st Q of 2012

Prepared by: Madhav Dhakal   Total: US $ 23575   US $

Mongolia WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Funding**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Identify and document technoloies and approaches relevant to western Mongolia	Field trip	3	5	Geoecology Institute/Kho vd EPA	Fiels survey equipments, e.g. GPS, soil charts etc.	3000	8000	Mandakh	Geoecolog y Institute	July-Aug 20118 April 2012
Develop map using WOCAT/LADA approach	Literature review, data collection, field survey, data analysis, mapping	5	6	Geoecology Institute/Kho vd EPA	Field survey equipment	5000	12000	Mandakh		June-Sep 2011
Improve MONCAT database	Updating existing Ts, Quality assurance of newly documented Ts	1	7	same		1200	4500	same	same	Oct-Jun 2012

Prepared by: Mandakh Nyamtseren   Total: US $ 9200   US $ 24500

The Philippines WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Estimated Funding US$**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
WOCAT Promotion Materials	• Presentation of WOCAT methodology and tools in BSWM	2	2 sessions	BSWM and PHILCAT members	WOCAT training materials, Office Supplies, & Computer	500	1,000	S. M. Contreras	S. M. Contreras	Aug 2011
	• Adoption of WOCAT tools and methodology in the KM and DSS for SLM (i.e. NAP implementation)	3	4			500	1,000			Sep-Dec 2011
National WOCAT Orientation & Training	• PHILCAT re-orientation for inter-agency members & others (e.g. LADA participants)	3	1 session	BSWM and PHILCAT members	WOCAT Training Materials	1,500	1,500	S. M. Contreras and R. Carating	S. M. Contreras and R. Carating	August 2011
	• Undertake training and workshops on LADA including development of Land Use System for QM application	5	2 sessions	BSWM in cooperation with different agencies	LADA/ WOCAT Training materials	2,000	2,000	R. Carating and invited LADA experts	R. Carating	Aug 2011-Oct 2012
Application of WOCAT methodology and tools	• Documentation of SLM best practices thru PHILCAT members	15	10	PHILCAT	WOCAT QT, QA, & QM	1,000	2,000	Members of PHILCAT	S. M. Contreras	Oct 2011 - Jul 2012
Monitor and assess status of PHILCAT activities	• Conduct quarterly meeting of PHILCAT	18 members	5 meetings	PHILCAT	Office supplies; Reports on activities	500	1,200	S.M. Contreras & PHILCAT Secretariat	S. M. Contreras	Jul 2011 – Jun 2012
Preparation of proposal on KM and DSS on SLM using WOCAT methodology and tools	• Prepare project proposal and present to the Bureau of Agricultural Research (BAR) for funding	1	1	BSWM with PHILCAT members as reviewer	Baseline information; Office supplies	200	300	Soil and Water Conservation Division personnel	S. M. Contreras	Jul 2011

Prepared by: Samuel M. Contreras (BSWM)   Total: US $ 6,200   US $ 9,000

Vietnam WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Estimated Funding US$**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Setting up VietCAT	Setting up a core group of experts									July-Aug 2011
	Discuss with Vietnam UNCCD office on coordination									Aug – Oct 2011
	Training and awareness rising at national level									Nov 11- Feb 12
	Formulating a proposal for VietCAT									Oct 11- Jan 12
	Piloting at field									May – July 12
	Translation of guideline, questionnaires into Vietnamese									Feb – July 12
	Adaptation of tools									June July 12
	Training of Trainers									Nov 11- April 12
	Participating in regional discussion and preparation for setting up a SEACAT									Sep 11- July 12
	Involving in global WOCAT									Jan – July 12

Morocco WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Funding**		**Responsible person(s)**		**Timetable**
		Person months	x	Institution	Materials / equipment	Available	Required		Commit-ment by	
1-Gullies correction by atriplex plantation	Monitoring	2x3	6		500 US$		500			Will be Achieved in 2012
2- Mulching and minimum tillage	Monitoring	2x3	6		500 US$		500			Will be Achieved in 2012

3-Contribution to watershed module development and testing:	WOCAT tools applied to the watershed at scales :
	
	  +Hannanat catchement (0,2 Km^2)
	
	  +Bouregreg watershed (9700 Km^2)
		3x4	12		1800 US$	800	1000			Will be Achieved in 2012

4-Evaluation of some of the techniques described in the book published by Roose and al.	Evaluation	11x1	11		1200 US$		1200			Will be Achieved in 2012

Prepared by: Abdellah Laouina and Nadia Machouri

Total: US $ 800   US $ 3200

Niger WORKPLAN for: July 2011 – July 2012										
Expected outputs	**Activities**	**Input**				**Funding ($ us)**		**Responsible person(s)**		**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Book: Water and soil conservation in sahel: case of Niger	Elaboration of a document on water and soil conservation in sahelian countries	1	2	GREAD	QA, QT, online database, computers	0	2,000	Abdoulaye Soumaila	GREAD	End date: August 2011
Online data	Entering data into online database	1	2	GREAD	Online database, computer, internet connexion	0	1,000	Abdoulaye Soumaila	GREAD	End date: August 2011
Dissemination of WOCAT tools	Promoting WOCAT at secondary schools	2	3	GREAD, Issa korombé Niamey, CEG III Niamey, CEG II Niamey, CEG I Ouallam, CEG I Tillabéry	Presentations, CD-ROM, docs	0	1,500	Saley Garba Wonkoye Djibo Banaou?	GREAD CCA?	December 2011, February 2012, April 2012
Applying WOCAT tools in Niger and a report	Organization of workshop on water and soil conservation in sahel	5	3	GREAD and partners	Presentations, WOCAT tools, computers, etc.	0	25,000	Abdoulaye Soumaila, Dougbédji Fatondji	GREAD	March 2012
Applying WOCAT tools by Niger NGO'S and projects.	Training workshop	2	4	GREAD	Wocat tools, computers, etc.	0	7,500	Boukar Attari ?	CNEDD?	November 2011, January 2012 and June 2012

Prepared by: Soumaila Abdoulaye Sambo   Total: US $ 0 US $ 37,000

Senegal WORKPLAN for: July 2011 – July 2012											
Expected outputs	**Activities**	**Input**				**Funding ($ US)**		**Personne responsable**		**Personnes ressources**		**Timetable**
		Person x months		Institutions	Matériels / Equipment	Montant estimé	Bailleurs potentiels	Nom	Institution	Nom	Institution	
1. SenCAT est installé et fonctionnel	Information des acteurs intervenant dans la GDT		annuelle	COM-R, Agences d'exécution projet GDT			BM (Projet GDT)	Samba Sow	INP			avril
	Organisation Assemblée générale constitutive			COM-R, Agences d'exécution projet GDT				Samba Sow, Ibrahima Dème	INP			Avant fin mai
	Installation du secrétariat de coordination			Présidence AG								Avant fin mai
	Installation des sous-comités QA, QT et QM	4 à 7 représentants du COM-R par sous comité			Secrétariat			Président secretariat				juin
	Mise en place de la plateforme numérique d'échange du SenCAT		annuelle	Ensemble des institutions			BM (Projet GDT)	Samba Sow	INP		WOCAT	juillet
	Participation à la réunion annuelle du WOCAT international						BM (Projet GDT)	Ndeye S. Fall	INP			Fin juin

								BM (Projet GDT)	Ibrahima Dème, NS Fall	INP				Mars
2. Au moins 20 membres du réseau sont formés au remplissage et à l'utilisation du QM	Préparation de l'atelier sur le QM	5	3 mois	Secretariat				BM (Projet GDT)	Ibrahima Dème, NS Fall	INP				Mars
	Tenue de l'atelier sur le QM	30	5 jours	Secrétariat				BM (Projet GDT)	S. Sow, I. Déme, N.S. Fall	INP			Consultant	Avril-Mai
3. Au moins 5 pratiques GDT sont introduites au sein de la base de données mondiale	Identification des pratiques GDT à documenter	30	2 semaines	Sous-Comité QA et QT Secrétariat				BM (Projet GDT)	Présidents sous-comités/secrétariat					juillet
	Planification des activités de collecte de données	5	2 semaines	Sous-Comités QA et QT				BM (Projet GDT)	Présidents sous-comités					Juillet
	Collecte et Saisie des données	5	2 mois	Sous-Comités QA et QT				BM (Projet GDT)	Présidents sous-comités					Aout\septembre
	Validation et transmission a Wocat international	30	2 semaines	SenCAT				BM (Projet GDT)	Président secrétariat					Octobre
4. Au moins une carte locale (CR) des systèmes d'utilisation des terres est réalisée	Identification de la zone	30	3 semaines	Sous-Comité QM/ Secretariat				BM (Projet GDT)						Fin mai
	Planification de la collecte des données	5	2 semaines	Sous-Comité QM/Secrétariat					Président sous-comité QM					Juin
	Collecte et Saisie des données dans le QM	5	2 mois	Sous-Comité QM				BM (Projet GDT)	Président sous-comité QM					Juillet
	Validation et transmission des données au sein de la base de données mondiale	5	2 semaines	SenCAT				BM (Projet GDT)	Président secrétariat					Septembre
Bilan	Atelier présentation du bilan 2011 et PTA 2012	30		SenCAT				BM (Projet GDT)	Président secrétariat					Avant fin novembre 2011

Serbia WORKPLAN for: July 2011 – July 2012									
Expected outputs	**Activities**	**Input**				**Funding**		**Responsible person(s)**	**Timetable**
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Further activities	Contacts with national donors	1	2	Dept. for Ecological Engin. (Fac of Forestry) DEE (FF)			500	Miodrag Zlatic, Mirjana Todosijevic	Dept. for Ecological Engin. (Fac of Forestry) DEE (FF)	Dec. '11 - Feb. '12
WOCAT promotion	- Training of new students (Student's Forum of WASWC); - LANDCON Conference, May 2012	10	2	DEE (FF)			1 000	M. Zlatic, Mirjana Todosijevic	Dept. for Ecological Engin. (Fac of Forestry)	Sept. '11 - Oct. '11
Further action on QM	Updating QM for 3 districts and collecting data for 2 more	5	4	DEE (FF)			5 000	M. Zlatic, N. Dragovic, M. Todosijevic	Dept. for Ecological Engin. (Fac of Forestry)	Jan '12 - July '12
Further action on QT, QA	Continuing work in Serbia	5	3	DEE (FF)			5 000	M. Zlatic, N. Dragovic, M. Todosijevic, J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	April '12 - July '12
Quality control	Feedback meeting	5	1	DEE (FF)			1 000	M. Zlatic, S. Kostadinov, R.Kadovic, N. Dragovic	Dept. for Ecological Engin. (Fac of Forestry)	July '12
Overview book	Overview book	4	2	DEE			2 500	M. Zlatic, S. Kostadinov, N. Dragovic, M. Todosijevic J. Tomicevic	Dept. for Ecological Engin. (Fac of Forestry)	Aug '10 - Oct. '10

Prepared by: Miodrag Zlatic   Total: US $ US $ 15 000

ANNEX 4: LIST OF PARTICIPANTS 2011

1. List of participants at 15th WWSM (Naryn)

Last name	First name	Institution	Address	Country	email
Akhmadi	Khaulenbek	Institute of Geoecology	Ulaanbaatar 211238	Mongolia	khaulenbek@yahoo.com
Aryal	Sabita	Kathmandu University, Nepal	PO Box 62, Dhulikhel	Nepal	sabita@ku.edu.np
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Azami	Mohammad Khalid	Helvetas Afghanistan	Kabul	Afghanistan	khalid.azami@helvetas.org
Bhuchar	Sanjeev	Helvetas	Taimani Project, 4 street, Kabul	Afghanistan	sanjeev.bhuchar@helvetas.org
Bodemeyer	Reinhard	CACILM Multicountry Secretariat /GIZ	Kievskaya 96-a, 720040 Bishkek	Kyrgyzstan	reinhard.bodemeyer@giz.de
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Contreras	Samuel	Bureau of Soils and Water Management	SRDC Bldg. Elliptical Road cor. Visayas Aven., Diliman, Quezon City	Philippines	sammycontreras@yahoo.com
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Deme	Ibrahima	Institut National de Pedologie	BP 10709, Dakar	Senegal	iboudeme@gmail.com
Dieme	Ibrahima	Institut National de Pedologie	BP 10709, Dakar	Senegal	ibadieme@yahoo.fr

Ferguson	Made	Concern Worldwide - Afghanistan	Qal-E-Fatullah, Street 4, Kabul	Afghanistan	made.ferguson@concern.net
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Giger	Markus	Centre for Development and Environment (CDE)	University of Berne, Hallerstrasse 10, CH-3012 Bern	Switzerland	Markus.Giger@cde.unibe.ch
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Izabekova	Venera	SEP project, Helvetas Kyrgyzstan	Jalalabad	Kyrgyzstan	venera.izabekova@helvetas.kg
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Kholov	Narzimurod	Ministry of Agriculture	Dushanbe	Tajikistan	cawmp_tj@yahoo.com
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Stocking	Michael	University of East Anglia	School of International Development - DEV, NR4 7TJ Norwich, ALD	United Kingdom	M.Stocking@uea.ac.uk
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Yunuza	Fatima	NCCR North-South	138, Toktogul Str, Bishkek	Kyrgyzstan	fatima.yunuza@ucentralasia.org
Zaehringer	Julie	Pilot Programme for Climate Resilience: Component A5, Centre for Development and Environment (CDE)	Rudaki Avenue 131, Flat 19, Dushanbe	Tadjikistan	julie_z60@hotmail.com
Zhang Kebin		China National Training Center on Combating Desertification	Beijing Forestry University, PO Box 160, Beijing 100083	China	ctccd@bjfu.edu.cn

2. List of participants only at WOCAT Share Fair (Bishkek)

Last name	First name	Institution	Address	Country	email
Abdyllaeva	Jyldyz	SEP project, Helvetas Kyrgyzstan		Kyrgyzstan	
Ahmadov	Dilshodbek	Ministry of Agriculture		Tajikistan	
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Ashimov	Kamil	Agrarian University, Forestry Department	69 Mederov Str., 720005 Bishkek	Kyrgyzstan	
Ashirov	Altynbek	SEP project, Helvetas Kyrgyzstan		Kyrgyzstan	
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Group picture at WOCAT Share Fair in Bishkek (Photo: HP. Liniger)

Front row: Bolor Radnaabazar, Ilka Starost, Isabelle Providoli, name not know, Helaluddin Musadiq, Mohammed Khalid Azami, Agha Samim Shirin, Sanjeev Bhuchar, Samuel Contreras, Yves Guinand, Almaz Imanaliev, Erkin Koichumanov

Second row: Jyldyz Mukhametsalieva, Duyen Nguyen, Aizhamal Bakashova, Aida Gareeva, Larisa Bloshinskaya, Nadia Machouri, Verena Izabekova, Julie Zähringer, Sally Bunning, Manzura, Nazaramonova, Sa'dy Odinashoev, Sabita Aryal, Edith Ramonyai Machuene, name not know, name not know, Zhang Kebin, Lianda Lotter, Lydia Pluess, Suzan Mulaudzi Thizwilondi

Third row: Natalia Mityakova, Bettine Wolfgramm, Jamal Annaklycheva, Alona Reichmuth, Osilaja Oluwaseun, Sovuthy Pheav, Déthié Soumare Ndiaye, Bayasgalan Mijiddorj, James Chimphamba, Sudibya Kanti Kisha, Abdybek Asanaliev, Ndeye Sokhna Fall, Inam Ur-Rahim, Hanspeter Liniger

Forth and back row: Vitaly Gromov, Godert Van Lynden, Zaya Batjargal, Farrukh Nazarmavloev, Anna Tengberg, Tuychiboy Safarov, Rustam Rahimov, Narzimurod Kholov, Yi Shaoliang, Ibrahima Deme, Richard Fulss, Markus Giger, Rokhaya Daba Fall, Lehman Lindeque, Ahmadov Dilshodbek, German Kust, Oyture Anarbekov, Henri Rueff, Jozef Turok, Sow Samba, Matraim Jusupov, Brigitte Stöppler, Altynbek Ashirov, Lilia Tverdun, name not know, Ibrahima Dieme, Khaulenbek Akhmadi, Made Ferguson

Group picture on transfer day to Naryn (Photo: HP. Liniger)

ANNEX 5: CONTENT CD-ROM

1. Proceedings: Proceedings15th WWSM.pdf

2. Photo selection

3. Presentations

3.1. WOCAT Share Fair

Day 1: Morning Session	**Day 2: Morning Session**
– 0_WOCAT intro_Liniger.pdf and ppt – 1_SLM_CC_PPCR_Wolfgramm.pdf – 2_SLM_flood-disaster_Manzura.pdf – 3a_SLM_water_ICARDA_Turok.pdf – 3b_SLM_water_SEP project_Pluess.pdf – 3c_SLM_water_IWMI_Anarbekov.pdf – 3d_SLM_water_ISRIC_Van Lynden.pdf **Day 1: Afternoon Session** – 3e_SLM_water_Kagera_Bunning et al.pdf – 4_SLM Mapping_Lindeque.pdf – 5a_SLM_pastoralism_herder manual_Inam.pdf – 5b_SLM_pastoralism_Symposium_Henri.pdf – 6_SLM_new developments_CAMP_Ruslan.pdf **Day 1: Poster Market** **Countries** **Afghanistan** – HELVETAS_SLM_final_Afghanistan.pdf **China_Zhang Kebin** – China 1_WOCAT Kyrgyzstan-I.pdf – China 2_WOCAT Kyrgyzstan-II.pdf – China 1_WOCAT Zhang Kebin.pdf **Mongolia** – Poster_Rangeland Monitoring and Management_Mongolia.pdf – Presentation_ Rangeland Monitoring and Management_Mongolia.pdf **Senegal** – Poster_Best practices in Senegal5.pdf – Presentation_Best practices in Senegal5_demo.pd **South Africa** – South Africa_LADA poster 2011.pdf **Hosts_co-hosts** **CACILM** – CACILM 1_Knowledge _Management_Poster.pdf – CACILM 2_MCB-Project_Poster.pdf **WOCAT_global** – WOCAT 1_Poster_WOCAT general.pdf – WOCAT 2_Poster_Decision Support.pdf – WOCAT 3_Watershed Module Poster.pdf – WOCAT 4_Poster_Where the land is greener_small.pdf – WOCAT 5_Poster SLM in Practice.pdf	– 1_Tajikistan_World Bank_Kist.pdf – 2_CACILM_Jamal.pdf – 3_FAO Central Asia.pdf – 4_UCA_Chad.pdf – 5_MoE Senegal_Dethie Soumare.pdf – 6_Beijing Forestry University_GEF_Zhang Kebin.pdf – 7_SLMIO Afghanistan_Helaluddin M.pdf – 8_Rural Agriculture Service_Katz.pdf – 9a_SDC_Guinand.pdf – 9b_SDC-Speech_Yves Guinand.pdf **Day 2: Afternoon Session** – Closing: WOCAT Conclusions Share Fair_Liniger.ppt

3.2. 15th WWSM

Day 1: Friday 24.6.
 	
1_Welcome & introduction
– WWSM Naryn introduction_Liniger.ppt
 	
2_Summary Share Fair
– Summary Share Fair_Liniger.ppt
 	
3_Parallel Session
Climate change
– 1_Introduction CC_Giger.pdf
– 2a_WOCAT CC Module_Zaehringer.pdf
– 2b_WOCAT CC Module.ppt
Pasture
– 1a_Grazingland module.pdf
– 1b_Grazingland module.ppt
 	
Day 2: Saturday_Field day_25.6.
– 1_OverviewMap.pdf
– 2_Manual WOCAT transfer_field day.doc
 	
Day 3: Sunday 26.6.
1_Global progress report
– 1_Progress report_CDE_Liniger.ppt
– 2_Progress report_FAO_Bunning.ppt
– 3_Poster Progress WOCAT global.pdf
 	
2_National progress report
– 1_AFCAT poster.pdf
– 2_BANCAT poster.pdf
– 3_China Progress_Wang Yaolin.pdf
– 4_Kyrgyz Nat Agrar Uni.pdf
– 5_HIMCAT-NEPCAT.pdf
– 6_MONCAT.pdf
– 7_PHILCAT.pdf
– 8_Morocco.jpg
– 9_SENCAT.pdf
– 10_South Africa.pdf
 	
New initiatives
– 1_Cambodia.pdf
– 2_Vietnam.pdf
	3_Input presentation
	– WOCAT Tools_Kagera Basin.pdf
	
	4_Watershed management module
	– Watershed WWSM_2011.ppt
	– WSmodule sabita.ppt
	
	5_WOCAT for new comers
	– 1_WOCAT general 2010_IP.ppt
	– 2_WOCAT technology.ppt
	– 3_WOCAT approach.ppt
	– Guidelines getting started.pdf
	– WOCAT questionnaires: CC, QA, QM, QT, Watershed module
	
	Day 4: Monday 27.6.
	1_Group work
	– Task_Group work.ppt
	– Nat_reg_working groups
	   o 1_Taj_Mon_Chin_Rus.ppt
	   o 2_SEA group.ppt
	   o 3_HIMCAT group
	   o 4_Africa_group.ppt
	– Global working group
	   o WOCAT network options.doc
	   o
	
	2_Steering Meeting
	– 1_SWOT analysis_details.ppt
	– 2_Steering Meeting.ppt
	– 3_SC-GEF project.ppt	