WOCAT External Review 2011

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ABBREVIATIONS AND ACRONYMS

AEZ	–	Agro-Ecological Zone
AsDB	–	Asian Development Bank
BANCAT	–	WOCAT in Bangladesh
CACILM	–	Central Asian Countries Initiative in Land Management
CBD	–	Convention on Biological Diversity
CDE	–	Centre for Environment and Development
CATIE	–	Centro Agronómico Tropical de Investigación y Enseñanza
CIAT	–	Centro International de Agricultura Tropical
CMS	–	Content Management System
COP	–	Conference of the Parties
COST	–	European Cooperation in the field of Scientific and Technical Research
CST	–	Committee on Science and Technology (of the UNCCD)
DESIRE	–	Desertification mitigation and remediation of land project
DSS	–	Decision Support System
ETHIOCAT	–	WOCAT in Ethiopia
EU	–	European Union
FAO	–	UN Food and Agricultural Organization
GEF	–	Global Environment Facility
GIS	–	Geographical Information System
GIZ	–	Deutschen Gesellschaft für Internationale Zusammenarbeit
GLADA	–	Global Land Degradation Assessment
GLADIS	–	Global Land Degradation Information System
GLASOD	–	Global Assessment of Human Induced Soil Degradation
GM	–	Global Mechanism
HIMCAT	–	WOCAT in the Himalayan region
IAEA	–	International Atomic Energy Agency
ICIMOD	–	International Centre for Integrated Mountain Development
ICM	–	Integrated Coastal Management
ICRAF	–	World Agroforestry Centre
ICT	–	Information and Communication Technology
IFAD	–	International Fund for Agricultural Development
IFS	–	Integrated Financing Strategy
IITA	–	Agricultural Research for Development in Africa
INRM	–	Integrated Natural Resources Management
ISRIC	–	World Soil Information
IWRM	–	Integrated Water Resources Management
LADA	–	Land Degradation Assessment in Drylands project
LDC	–	Least Developed Country
LUS	–	Land Use System
MDG	–	Millennium Development Goal
MENARID	–	Middle East and North Africa Regional Initiative to combat Desertification
MONCAT	–	WOCAT in Mongolia

MOU		Memorandum of Understanding
NAP	–	National Action Programme to Combat Desertification
NCCR	–	National Centre of Competence in Research
NEPCAT	–	WOCAT in Nepal
NRE	–	Division of Natural Resources and Environment of SDC
PALM	–	Sustainable Land Management in the High Pamir and Pamir-Alai Mountains Project
PEMSEA	–	Partnerships in Environmental Management for the Seas of East Asia
PES	–	Payment for Environmental Services
PRAIS	–	UNCCD Performance Review and Assessment of Implementation System
QA	–	Questionnaire for Approaches
QCC	–	Questionnaire for Climate Change
QM	–	Questionnaire for Mapping
QT	–	Questionnaire for Technologies
QW	–	Questionnaire for Watersheds
RELMA	–	Regional Land Management Programme in East and Southern Africa
SDC	–	Swiss Agency for Development and Cooperation
Sida	–	Swedish International Development Agency
SIDS	–	Small Island Developing States
SLEM	–	Sustainable Land and Ecosystem Management
SLM	–	Sustainable Land Management
SLMIO	–	Sustainable Land Management Institute Organization
SOLAW	–	The State of Land and Water Resources
SOWAP	–	Soil and Water Protection project
SWC	–	Soil and Water Conservation
SWOT	–	Strengths, Weaknesses, Opportunities and Threats
UNCCD	–	United Nations Convention to Combat Desertification
UNDP	–	United Nations Development Programme
UNEP	–	United Nations Environment Programme
UNFCCC	–	United Nations Framework Convention Climate Change
UNU	–	United Nations University
WADI	–	World Atlas on Desertification, Land Degradation and Drought and Improvements
WCMC	–	World Conservation Monitoring Centre
WWSM	–	Annual WOCAT Workshop and Steering Meeting

Contents

1. Executive Summary

The World Overview of Conservation Approaches and Technologies (WOCAT) was launched in 1992, as a global network of Soil and Water Conservation (SWC) specialists. WOCAT is comprised of a Secretariat at the Centre for Development and Environment at the University of Bern that coordinates the network of around 60 members. The Secretariat is supported by a Management Board that includes CDE, FAO and ISRIC, and a number of task forces. WOCAT initially focused on developing standardised tools for documenting, monitoring and evaluating SWC know-how and on disseminating it globally in order to promote exchange of experience among practitioners. The main objective of WOCAT's current phase (2008-2011) is to consolidate and broaden the WOCAT programme and network, its activities and the quality of its outputs, by guaranteeing the core functions of WOCAT in terms of coordination, capacity strengthening, and SLM knowledge management.

The objectives of the present 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. The methodology used for the evaluation included 6 steps: (i) review of databases, tools and documents; (ii) preparation of Inception Report and face-to-face meetings with SDC, CDE and WOCAT representatives; (iii) participation as observer in WOCAT Share Fair, and 15th Annual WOCAT Workshop and Steering Meeting; (iv) interviews with WOCAT partners at national, regional and international level; (v) triangulation of findings; and (vi) presentation of findings to SDC, CDE and WOCAT in Bern.

The WOCAT knowledge base has been considerably enhanced during the review period and its methods and tools have been further developed to integrate new issues, such as climate resilience and watershed management. WOCAT offers a unique standardized methodology and tools for documenting and evaluating SLM approaches and technologies and innovative templates for dissemination of key information of best practices to field practitioners, decision-makers and policy-makers, including the UNCCD and GEF focal points. The WOCAT methods and tools have been used in more than 50 countries to document more than 300 SLM technologies and 200 SLM approaches and more than 500 practitioners have been trained in the application of the tools. This has resulted in high quality publications developed together with key UNCCD partners on SLM best practices in different regions of the world, including Sub-Saharan Africa and the Himalayan Region, as well as in countries such as Bangladesh, China, Ethiopia, Mongolia, Nepal, Senegal, South Africa, Tajikistan and Tunisia. WOCAT is thus highly cost efficient and a one dollar investment from SDC has leveraged on average seven dollars from the WOCAT partners.

However, the WOCAT network has outgrown its current organisational structure and to further enhance its performance, it is necessary to decentralise its management and strengthen its institutional status. There is also a need to shift emphasis from development of tools and methods to practical applications of them for upscaling of SLM in countries and regions affected by land degradation. The main recommendations of the review are summaries below:

Linkages to development priorities
WOCAT has strong links with development priorities, such as the Millennium Development Goals (MDGs), the UNCCD 10-Year Plan and the Land Degradation focal area of the Global Environment Facility (GEF) and is well positioned to address emerging issues related to climate change and disaster risk reduction, but needs to focus more on policy and institutional challenges to SLM upscaling.

WOCAT's performance
The WOCAT database needs to become more user friendly and a manual or guidelines on how to use the different questionnaires are needed. There is also need for better tracking, through the WOCAT Secretariat and the website, of where WOCAT tools and methods have been taken up as well as of research conducted by the WOCAT network. This would give a clearer picture of WOCAT's global uptake and also improve sharing of information and research results across the network.

Development and application of methods and tools
WOCAT should develop a light version of the questionnaire on technologies (QT) to make it easier to adopt as a standard for reporting on SLM best practices to the UNCCD. The lighter QT could also integrate the most critical questions in the questionnaire on climate change (QC) to reduce the number of questionnaires that need to be filled. To achieve upscaling of SLM, the WOCAT tools need to be linked to guidance on how to create incentives for SLM and how to access SLM finance. WOCAT should not launch the development of new tools, but instead explore how the WOCAT tools can be combined with already existing tools for accessing SLM finance, cost-benefit analysis, assessment of climate change adaptation and mitigation benefits, IWRM, ICM, etc.

Dissemination strategy and outreach
WOCAT needs to strengthen its dissemination and advocacy strategy to reach out to policy-makers. WOCAT should also strengthen its branding of tools and publications to improve its visibility, and start using modern ICT, such as social networking tools and blogs, to moderate its task forces/communities of practice.

Institutional set-up
The institutional status needs to be strengthened to make WOCAT more international and improve access to funding. The WOCAT membership status needs to become more formalized with designation of WOCAT focal points. Having CDE as a partner with a link to universities worldwide provides an important additional asset to the WOCAT network.

Management of the WOCAT network

The management of the WOCAT Network needs to become more decentralized and make use of regional nodes to increase its effectiveness. The regional nodes should be in charge of WOCAT training and quality control within their regions. The WOCAT Secretariat should focus on training of trainers, global maintenance and updating of the standardized tools, together with more strategic issues, such as reporting and monitoring of SLM at global level for the UNCCD, GEF and other relevant multilateral mechanisms and programmes. WOCAT should consider establishing an Expert Panel for scientific and strategic advice. WOCAT also needs a full time manager that can lead resource mobilization as well as outreach and advocacy efforts at international level.

Financing strategy

WOCAT could become more cost-efficient in the future by devolving full responsibility for WOCAT case studies and training to competent national and regional partners. Co-financing to WOCAT has to be better tracked to demonstrate its effectiveness. WOCAT needs a business plan on how to diversify its funding base at national, regional and international level. Opportunities to accessing funding are closely linked to the strengthening of its institutional status.

SDC can assist WOCAT in diversifying its funding base by organizing donor meetings and support the establishment of donor partnerships by providing catalytic funding. SDC can also enhance the mainstreaming of WOCAT in its own projects and programmes across its Regional Divisions, and support WOCAT activities of scientific and strategic relevance for the UNCCD and other multilateral mechanisms and processes through CDE and NCCR North-South.

Innovative measures to strengthen WOCAT's financial sustainability at all levels need to be implemented to secure the future of the network. This could include providing certain services on a cost-recovery basis, requests for core contributions from network members, and continued mobilization of resources through regional programmes and international projects, such as LADA and DESIRE.

2. Introduction and Objectives

2.1. Context

With support from Swiss Agency for Development and Cooperation (SDC) and its Division of Natural Resources and Environment (NRE)[1], the World Overview of Conservation Approaches and Technologies (WOCAT) was launched in 1992, as a global network of Soil and Water Conservation (SWC) specialists supported by a Secretariat at the Centre for Development and Environment at the University of Bern. It was a response to the heavy focus on documenting soil degradation in the 1970s and 1980s, while the more complicated task of presenting SWC solutions had been largely neglected. WOCAT therefore focused on developing standardised tools for documenting, monitoring and evaluating SWC know-how and on disseminating it globally in order to promote exchange of experience among practitioners. WOCAT's methodology was originally designed to focus mainly on soil erosion and fertility decline in erosion-prone areas, but other land degradation types were included as the methodology evolved. There was also a shift from the more narrow focus on SWC to Sustainable Land Management (SLM) aligning WOCAT more with the international development agenda related to land and natural resources management.

The first external review of WOCAT took place in 1998 at the end of the second phase of WOCAT to form the basis for decisions related to a third phase of funding from SDC to the programme. The review recommended the continued and enhanced support for WOCAT, but came up with a list of 14 recommendations, of which many focused on the need to produce outputs from all workshops and data gathering exercises and to continue with the development of a database of technologies. Broader recommendations that are still relevant include:

- The development relevance of WOCAT needs to be defined and justified
- WOCAT must address the use of the outputs for development purposes
- WOCAT should seek to decentralize some of its coordinating functions to regional centres
- SDC should implement WOCAT in its own projects with SWC components
- Diversification of funding for future developments and upscaling

In 2007, SDC commissioned an external review of the NRE mandate of CDE that is hosting the WOCAT programme. The review found that:

- WOCAT is one of the key assets of CDE and that CDE should continue to develop the programme in innovative ways
- NRE should continue to support WOCAT and foster the synergies with the concerned geographic divisions.

Finally, the GEF-funded project on Land Degradation Assessment in Drylands (LADA) that has collaborated with WOCAT on national assessments of land degradation and

[1] WOCAT predates the creation of NRE.

SLM in six pilot countries was evaluated in late 2010 and early 2011. Recommendations for a follow-up phase of relevance to WOCAT include:

- Need to put emphasis on the institutionalization of LADA[WOCAT] outputs
- Concrete applications of the LADA[WOCAT] methodology need to be identified
- Local assessments should…. provide information that can be translated into concrete proposals for action.

2.2. The objectives of the review

The main objective of SDC/NRE's contribution to the current phase of WOCAT (2008-2011) is to consolidate and broaden the WOCAT programme and network, its activities and the quality of its outputs, by guaranteeing the core functions of WOCAT in terms of coordination, capacity strengthening, and knowledge management. However, SDC has recently undergone a restructuring to align its activities with global agendas and to show more impacts of its development assistance as well as to increase its visibility. The NRE Division has therefore ceased to exist and the WOCAT programme now falls under the Global Programme on Food Security (GPFS).

Against this background, the objectives of the present review are to assess the WOCAT programme, especially focusing on the programme 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 (see Annex 1 for detailed Terms of Reference).

3. Methodology

The methodology used for the evaluation included the following six steps:

1. Review of databases, tools and documents: WOCAT has since its launch in 1992 generated an array of outputs (Annex 2) that have been reviewed in terms of quality, relevance and user friendliness.

2. Preparation of Inception Report and face-to-face meetings with SDC, CDE and WOCAT representatives in Bern 30 May to 1 June 20011.

3. Participation as observer in WOCAT Share Fair, Bishkek, and 15th Annual WOCAT Workshop and Steering Meeting, Naryn, Kyrgyzstan, Central Asia, 21-27 June 2011.

4. Interviews with WOCAT partners at national, regional and international level (see Interview Matrix in Annex 3): A group discussion was organized with the 15 countries that attended the 15th WOCAT Annual Workshop in Naryn, which included: Afghanistan, Bangladesh, Cambodia, China, Ethiopia, Kyrgyzstan, Malawi, Mongolia, Morocco, Nepal, Philippines, Senegal, South Africa, Tajikistan and Vietnam. All the countries with the exception of Malawi and Tajikistan also

presented posters or made presentations on the progress with WOCAT at country level, including the main challenges.

Informal discussions were also held with regional partners that attended the Share Fair in Bishkek, which included ICIMOD, IWMI and ICARDA. In addition, face-to-face or telephone interviews were held with 6 international partners.

5. Triangulation of findings from reviews, interviews and participant observation to cross-examine results and overcome biases.

6. Presentation of findings to SDC, CDE and WOCAT in Bern on 23 August 2011 on the key conclusions and recommendations to allow for clarifications for the final version.

Limitations of the methodology:
Not all network members were present at the 15th WWSM and it proved difficult to identify the right persons to contact in countries and organizations that did not attend the meeting due to the lose nature of the network and lack of designated focal points (see Section 6).

Definitions used by WOCAT:
SLM: the use of land resources, including soils, water, animals and plants for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and ensuring their environmental functions;
SWC: activities at the local level that maintain or enhance the productive capacity of the land in areas affected by, or prone, to degradation;
SLM Technologies: agronomic, vegetative, structural and/or management measures that prevent and control land degradation and enhance productivity in the field;
SLM Approaches: ways and means of support that help introduce, implement, adapt and apply SWC technologies on the ground.
(Liniger & Critchley, 2008).

4. Relevance of the WOCAT program to development priorities and needs and the global SLM agenda[2]

Analysis of the relevance of WOCAT to development priorities, as laid out in global frameworks, such as the UN Millennium Development Goals (MDGs), the UNCCD 10-Year Plan, the GEF-5 Land Degradation Strategy and in the Global Plan of Action for

[2] This section addresses objective 1 in the TORs on the relevance of WOCAT to development priorities and needs. It starts with analyzing the linkages between WOCAT, SLM and overarching development frameworks in order to answer the question if WOCAT is providing the missing link to enhance SLM (1a) (this is also further discussed in Section 5.3), followed by a stocktaking of the latest challenges in SLM (1c) to identify how WOCAT can contribute to these challenges (1d) and its relevance (1e). Te changing Swiss context in SDC (1b) is described in the background section (Chapter 2).

Food Security, is based on the analysis provided in Annex 4 as well as on interview responses, especially from WOCAT's global partners.

4.1 Relevance to MDGs

WOCAT was in general considered to be very relevant for meeting development priorities, especially MDG-7, but it was considered weak in making the link to the policy level. The analysis in Table 1 indicates that WOCAT can contribute to achieving all the 6 MDGs through application of its tools leading to upscaling of SLM to reverse land degradation and improve productivity. The most direct links are with MDG-1 on Eradicate extreme poverty and hunger and MDG-7 on Ensure environmental sustainability. However, WOCAT can also contribute to meet the other MDGs by reducing the work load for women and children in agriculture through more productive farming systems and to improved health among rural household by improving food security and nutrition.

According to the interviewees, links to the food security and disaster-risk reduction agendas could be strengthened. It was pointed out that WOCAT tools and methods, although very relevant to development, are not properly promoted and that there is a need to move to application of the tools to scale up SLM and to capture cost-benefit relations. WOCAT was also considered to be very relevant for monitoring and evaluation of sustainable land management and for adaptation of farming systems to climate change impacts. WOCAT's usefulness to address climate change is illustrated by the Pilot Programme for Climate Change Resilience in Tajikistan that is supported by the Workd Bank and implemented by CDE. The Programme has undertaken an assessment of climate change resilience of SLM measures using the WOCAT methodology[3] with the objective to identify SLM practices that can be applied to improve rural livelihoods and resilience to climate change, and make recommendations for feasible policy and legal frameworks for their upscaling.

[3] Wolfgramme B. et al, 2011: Tajikistan Pilot Programme for Climate Resilience. Component 5: Phase 1 Agriculture & Sustainable Land Management. Draft Report, 8 August 2011, 41 pp.

Table 1: WOCAT's linkages to the MDGs

Millennium Development Goals	Impacts of Land degradation on MDGs	Contribution by WOCAT to meeting MDGs
MDG 1 Eradicate extreme poverty and hunger	Depletion of livelihood assets, and undermined food security.	WOCAT provides a useful tool for upscaling of SLM best practices that can reverse land degradation (LD) and improve land productivity and increase food production. Providing riks reducing options to poor land users
MDG 2 Achieve universal primary education	Loss of livelihood opportunities reduces the ability of children to participate in full-time education (forcing children to work), and displaced families.	SLM can reverse LD and improve productivity. WOCAT activities targeting children include integration of LD and SLM into secondary school curricula, including production of education tools for school children to use simplified WOCAT methodologies to assess land degradation and SLM around their schools (Mongolia)
MDG 3 Promote gender equality and empower women	Increased work load for women in agriculture leads to additional burdens on women's health and reduced time to participate in decision-making.	SLM best practices can reduce the work load for women.
MDGs 4, 5, 6 Reduce child mortality; Improve maternal health; Combat HIV/AIDS, malaria and other diseases	Declining food security, maternal health and availability of potable water.	SLM best practices can improve food security and safe water availability.
MDG 7 Ensure environmental sustainability	Negatively impacted natural resources and productive ecosystems.	SLM improves the provision of a wide range of ecosystem services and contributes to soil retention, water regulation, carbon sequestration, and restoration of important habitats for biodiversity.

Conclusions and recommendations:
WOCAT can contribute to achievement of all seven MDGs, and in particular to MDG-1 and MDG-7. It also need to articulate its relevance to other development issues, such as food security and disaster risk reduction, and communicate its links to development much more clearly.

4.2 Relevance to UNCCD and GEF

WOCAT has clear linkages with the UNCCD 10-year plan (Annex 4) and provides useful tools for scaling up of SLM as well as monitoring and evaluation of interventions to meet its strategic objectives 1) to improve the living conditions of affected populations, and 2) to improve the conditions of affected ecosystems. WOCAT has also demonstrated through a joint publication with the UNCCD (see Annex 1) that it can be used to identify global benefits and ecosystem services emanating from SLM thereby also contributing to objective 3) of the 10-year plan to generate global benefits through effective implementation of the UNCCD. Finally, WOCAT also contributes to objective 4) to mobilize resources to support implementation of the Convention through building effective partnerships between national and international actors, by providing an already functioning network of around 60 SLM institutions from national, regional to global level.

Among its partners, WOCAT is considered relevant to developed as well as developing countries and integration of the tools and methods into the UNCCD at international level is considered important. The relevance of WOCAT to the UNCCD can also be seen in the already existing use of WOCAT tools and methods in a number of UNCCD-related GEF-supported programmes on combating land degradation that were mentioned by the interviewees, such as:

- The global **Land Degradation Assessment in Drylands (LADA)** supported by FAO/UNEP/GEF that has used WOCAT for its national level assessment of 'bright spots' and 'hot spots' in six pilot countries.
- **The Peoples' Republic of China-GEF Land Degradation Partnership** that is led by the State Forestry Administration in China in collaboration with the Asian Development Bank (AsDB). It has published one volume on SLM Best Practices that have been documented and presented using WOCAT standardized tools and templates. A second volume is under preparation.
- **TerrAfrica** – a regional World Bank-led and GEF-supported programme linked to the implementation of the UNCCD in Sub-Saharan Africa – contracted the WOCAT Secretariat to develop guidelines on SLM and identify best practices that have been published in a TerrAfrica Partnership Publication and a second volume is under discussion.
- **Central Asian Countries Initiative in Land Management (CACILM)**, which is a GEF supported initiative linked to the implementation of the UNCCD is using WOCAT methods and tools in its knowledge management component.
- The **SLM Ethiopia Programme** is using the WOCAT methodology and tools for knowledge management and it has also published a book on Sustainable Land Management Technologies and Approaches in Ethiopia, based on WOCAT.
- The UNDP/GEF funded **LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management (LDC-SIDS Umbrella Project)** that is assisting a total of 48 LDCs and SIDS, has used WOCAT tools in Cambodia in collaboration with the Global Mechanism (GM) of the UNCCD to finalise the UNCCD National Action Programme (NAP) and to develop an Integrated Financing Strategy (IFS) for the

UNCCD. WOCAT tools are also used in Vietnam to develop an IFS for the UNCCD with support from the GM.

- The **UNCCD Performance Review and Assessment of Implementation System (PRAIS)** has developed a simplified template for best practices on SLM technologies, including adaptation that has borrowed some elements from WOCAT[4], but the information is not sufficiently structured for entering into a database and perform search and query that can inform upscaling of SLM. The more sophisticated WOCAT tools are still needed to bridge the gap from documentation and identification of a best practice, assessment of its replicability (adaptation to the local context), and decision-support for investments in SLM (see examples above as well as Sections 5.2 & 5.3).

The SLM projects and programmes mentioned above do in fact constitute most of the current GEF funding to large-scale initiatives that are supporting the implementation of the UNCCD with the notable exception of the IFAD-led Middle East and North Africa Regional Initiative to Combat Desertification (MENARID) and the World Bank-led India Sustainable Land and Ecosystem Management (India-SLEM) programmes that have not yet adopted WOCAT tools. Linkages with the GEF-5 Strategy for Land Degradation are also obvious (see Annex 4), especially its Objective 4 on adaptive management and learning, but through the projects and programmes identified above, WOCAT has also demonstrated that it can be used in agriculture and rangeland systems (Objective 1), forest landscapes (Objective 2), and in integrated landscape management (Objective 3).

Conclusions and recommendations:
WOCAT is the most advanced standardized SLM knowledge management platform integrating ecological, social and economic issues and can therefore contribute significantly to the implementation of the UNCCD 10-Year Plan and provide useful tools for monitoring and evaluation, and documentation and upscaling of SLM best practices. It can also assist GEF to meet the 4th Objective of its Land Degradation Strategy on adaptive management and learning as well as contribute to its other objectives through upscaling of SLM on the ground in different land use systems. UNCCD and GEF focal points need to become aware of WOCAT's potential and how to use the tools.

4.3 New SLM challenges

Several country partners as well as some of the international partners pointed out that many of the remaining SLM challenges are not technical or biophysical in nature, but are related to governance, policies and institutions. This includes challenges related to:

- Intersectoral coordination and need for mainstreaming of SLM to ensure funding allocations from appropriate sectors
- Poor land management planning and the need for streamlining of WOCAT tools in preparation of such plans
- Lack of enabling policies for SLM

[4] ICCD/CRIC(9)/INF.2, 2010: Template and reporting guidelines for affected country Parties. 60 pp.

- Need for new legal context for SLM
- Fragmented knowledge and information on SLM
- Lack of human and institutional capacities, knowledge and networking

Climate change was considered to be the main biophysical challenge to SLM mentioned by country partners, and linkages were also made to increased incidence of flash floods, droughts and disease pressures. Water conservation and need for watershed and river basin approaches to SLM were also considered important. Problems related to water resources management included surface water quality decline and lowering of surface water availability and the ground water table. Other SLM challenges included biological degradation of pasture lands and reduction of palatable species due to overgrazing, spread of weeds and invader plants, land fertility decline and low crop productivity due to intensified land use, and deforestation. International partners also stressed the challenges posed by climate change and the linkage to soil carbon. General environmental impacts of food production, on biodiversity, ecosystems and water resources, were also considered important. In addition, scaling up of best practices coupled with improved monitoring and evaluation of SLM was a key concern among the international partners.

WOCAT has taken steps to address emerging issues in SLM, such as climate change, water resources management and ecosystem services, which will be discussed further in Section 5. However, WOCAT has so far not been strong in integrating policy and institutional issues to address SLM challenges related to intersectoral coordination and mainstreaming, with the exception of the Pilot Programme for Climate Resilience in Tajikistan (see section 4.1).

Conclusions and recommendations
WOCAT is well positioned to address emerging issues related to climate change, disaster risk reduction as well as other biophysical issues, but needs to focus more on policy and institutional challenges to SLM upscaling.

5. Overall WOCAT Performance

5.1. WOCAT Global Secretariat[5]

The performance of the WOCAT Secretariat is assessed against the Results Framework in the approved SDC Project Document for the period 2008-2011 (Annex 5). Progress reports on project activities and delivery of results together with financial reports are submitted biannually to SDC. The assessment of the achievement of the five expected results for the period 2008-2011 are largely based on these reports and is summarised below as a background to the more detailed assessment of the functioning of the overall WOCAT Network in section 5.2.

[5] This section addresses objective 2a of the TORs (Annex 1)

1. Support (backstopping) for the production of outputs at national and regional level. Analysis and synthesis regarding emerging global issues.

High quality backstopping services have been delivered by the Secretariat throughout the project period. The number of SLM technologies and approaches in the WOCAT database has increased substantially and also resulted in a number of high quality national and regional publications. The development of a world map of SLM measures has not been completed, but a contract with the EU Joint Research Centre and UNEP to contribute to a World Atlas on Desertification, Land Degradation and Drought and improvements (WADI) has been signed. However, if the WADI initiative is not moving forward, it may be of limited relevance to produce a global map of SLM at this stage of WOCAT when instead local maps are being used in the Decision-Support System (DSS) that is under development together with the DESIRE project (see result 2).

A more strategic achievement under this result was the contribution to the White Paper prepared for the 2009 Session of the Committee of Science and Technology (CST) of the UNCCD where WOCAT led the working group on 'Monitoring and Assessing Land Rehabilitation and SLM efforts' and also participated in the working group on 'Impacts of Economic and Social Drivers and Knowledge Management of M&E' that resulted in a special issue of the Journal Land Degradation and Development where WOCAT staff authored and co-authored several papers.

2. Additional and enhanced tools for exchange of knowledge and decision support developed.

A new website has been launched based on content management system (CMS) that is frequently visited according to WOCAT website statistics in the 14th WWSM with an average of almost 2,000 requests per day during its first year of operation (2008-2009), which is slightly higher than for the old website. The old questionnaires on technologies and approaches have been updated and a new questionnaire for mapping has been developed together with the LADA and DESIRE projects. New tools to address climate change issues and watershed management have also been developed. The WOCAT tools have also been used in developing a decision-support system for SLM and for mapping individual study sites through the DESIRE project. The main outstanding issue is the functioning of the global database that needs to be debugged.

3. WOCAT Network enhanced and consolidated.

The network has been consolidated and expanded. New partners have joined this phase of WOCAT, including e.g. Afghanistan, Bhutan, Ghana, Madagascar, Myanmar and Pakistan but with very varying degrees of activity. All partner countries participate using their own funding, except for some small support from the WOCAT Secretariat to selected countries for participation in annual workshops and occasional training workshops. There are still gaps in WOCAT's global coverage. The Secretariat has participated in global events, such as COP9 of the UNCCD to promote the integration of WOCAT in environmental and development processes at national and international level. These efforts have yielded some successes, such as the use of WOCAT in the international programmes listed in Section 4. However, it is a major disappointment that

WOCAT has not yet been adopted as a standard reporting tool by the UNCCD PRAIS initiative.

4. Partners trained to run WOCAT programme in their countries and regions. Use of research to support WOCAT's mission and develop tools and outputs.

As a result of training provided by the WOCAT Secretariat, several countries are now able to apply the WOCAT tools and methods and conduct training workshops without direct involvement of the Secretariat (e.g. HIMCAT (at regional level), South Africa Niger and Senegal, China, Ethiopia, Bangladesh, etc.). In terms of research, a number of MSc and PhD studies are linked to WOCAT (see below) and a number of scientific papers based on the WOCAT methodology have also been published in journals, such as Land Degradation and Development. However, the development of training manuals on how to apply WOCAT tools seems to be lagging behind, making them less user friendly than they could be.

5. Keep the WOCAT programme and network running at a basic level.

The WOCAT Secretariat has performed the basic functions required to keep the network running, and organised annual meetings and overall maintained regular contacts and good relations with network members. However, some aspects of this result have been hampered by human resource constraints, especially efforts to find new donors to WOCAT to diversity the funding base of the Secretariat.

Conclusions and recommendations:
The performance of the WOCAT Secretariat has overall been good with excellent summaries of major achievements and financial information in the Semi-annual Reports to SDC. Most of the expected results have been delivered, with the exception of the global SWC/SLM map, which is under the WADI initiative. However, it is questionable whether a global map is still useful for WOCAT that could instead focus on more strategic issues of relevance to the UNCCD.

In conclusion, the major achievement of the WOCAT Secretariat was to develop tools and ensure their applicability according to evolving demands and needs from various partners. However, progress with diversifying the funding base of the Secretariat has been limited.

5.2. WOCAT Network[6]

WOCAT's overall performance as a network is assessed along the four dimensions of knowledge identified in the WOCAT Strategy that was adopted in 2008 and its five objectives. Although the strategy provides a coherent framework for action, it does not include any indicators or performance targets. Suitable indicators have therefore been identified in consultation with the WOCAT Secretariat for the purpose of this review.

Objective 1: Coordinate the network, maintain and update the global database and tools and support basic training of specialists. Secure the necessary funding for maintaining these fundamental activities.

Performance indicators	Results from review of website, database, tools and reports	Feedback from network partners

Newsletters; annual meeting (WWSM) reports and number of participants; quality and functionality of global website; usefulness of WOCAT tools; number of training workshops and experts trained; annual funding to the global secretariat.	• WOCAT Newsletter published regularly until March 2010
	• WWSM reports from 1998 to 2009 with approximately 15-25 countries attending the meetings (15 in 2011)
	• Online, open access database with case studies from more than 50 countries:
	  o 363 Technologies
	  o 201 Approaches
	• QT – 50 pages long. Shorter version also needed.
	• QA – 25 pages long.
	• QM –has been pilot tested in South Africa and used in DESIRE project, but requires base map
	• QWatershed – links to existing IWRM watershed management tools should be established
	• QC - Climate Change – these questions could be integrated into QT and QA
	• Training of over 500 SLM specialists from 40 countries
	• Funding to Secretariat more or less constant and mostly from SDC
		• Timely feedback from the WOCAT Secretariat is not always forthcoming
		• The website is useful, but could become more user-friendly, and users should be able to upload information on the global website. The editing and quality control by WOCAT secretariat takes time and they should trust their partners, which would improve ownership
		• The website should have information on the short-term and long-term strategy of the Secretariat
		• Publications are more useful than the database, but all publications should be available for download, which is currently not the case
		• The database needs to be improved. It is too complicated and it has taken too long to improve
		• QT&QA are useful, but guidelines/manuals on how to use them is missing
		• Training has been provided by WOCAT/CDE and ISRIC and at regional centres and has been satisfactory

Conclusions and recommendations
Database: The structure of the database was criticized by many partners from national to international level. It was considered difficult to use and the content not easy to understand. However, the database has a new online feature that is very attractive that

[6] This section addresses objective 2b of the TORs (Annex 1).

automatically generates a four-page summary of selected technologies and approaches. It follows the template developed for the book 'Where the Land is Greener' and should enhance the usefulness of the database substantially both for practitioners that need quick and easy access to information on practices/ best practices (technologies and approaches) and for training purposes. In the future it should also be possible to download these summaries as PDF files. It is important that information about this new feature is disseminated and also that the WOCAT logo appears on these summaries to strengthen the WOCAT branding of the product.

Questionnaires: A user friendly manual or guidelines on how to use the different questionnaires are needed. Such a publication should start with first presenting the conceptual approach, including the DPSIR and/or MA framework, followed by a presentation of the different modules and estimates of how much they cost to apply in the field in terms of person days, etc. This would hopefully result in more user friendly information for practitioners. The next step would be to provide guidance on out- and up-scaling through decision support, access to SLM finance, etc. Currently, no integrated guidance is provided on how the WOCAT tools could be used and combined with other tools to achieve upscaling of SLM (only partly through the DESIRE project).

WOCAT should also consider developing lighter versions of it questionnaires, especially the QT that is very long and takes time to complete. Lighter versions of the QT and QA should also integrate the most critical questions in the QC to reduce the number of questionnaires that need to be filled for e.g. UNCCD reporting purposes. Finally, it could be explored how to link the Watershed module to existing IWRM tools in a case study.

<u>Objective 2:</u> Increase – and capitalize on – knowledge about SWC and SLM. The WOCAT knowledge base is enhanced to cover major regions and land systems worldwide and its quality is ensured. Analysis and synthesis of this knowledge is made available to evaluate the positive environmental, social and economic contribution of SLM to sustainable development

Performance indicators	Results from review of website, database and publications	Gaps in WOCAT database highlighted by network partners
Indicators: Increase in number of technologies and approaches entered into the database; number of regions, countries and land systems covered by the database; publication of WOCAT synthesis reports and books.	• 60 new technologies and approaches from WOCAT network countries during the period 2008-2011 are reported in the Semi-annual progress reports, together with numerous new case studies from TerrAfrica, LADA and DESIRE countries. • Publications, such as: TerrAfrica	*Thematic* • Rangelands/pastures • Water resources • Wet tropical areas • Marine ecosystems • Forest • Farming systems and livelihood issues • GIS maps allowing for establishment of baselines on vegetation cover, socio-economics, • Making it possible to search on ecosystems, AEZ and LUS in the database • Chemical pollution • Large-scale commercial farming in e.g. Russia, Argentina and southern Brazil

	guidelines: SLM in Practice, ETHIOCAT BANCAT, MONCAT, China overview on best practices; NEPCAT Fact Sheets, BANCAT (2) Fact Sheets, HIMCAT Newsletters, Mali best practices, Caritas-Tajikistan Best Practices • LADA best practices reports from China, Senegal, South Africa, Tunisia, Argentina and Cuba	• Cost-benefit analysis of SLM • Quantification of climate change adaptation benefits as well as mitigation (e.g. carbon sequestration) benefits of SLM *Geographical* • Latin America • North America • Caribbean and Pacific SIDS • Australia • WOCAT is not strong enough in some regions of Africa • Europe • Middle East

Conclusions and recommendations

The WOCAT knowledge base has been considerably enhanced during the review period, as evidenced by publications of technologies and approaches from different regions of the world, such as Sub-Saharan Africa and the Himalayan region, as well as countries, such as China, Mongolia, Bangladesh, Nepal, Ethiopia, Senegal, South Africa, Tajikistan and Tunisia.

National network members mainly highlighted thematic gaps in terms of land use systems that should be included in the WOCAT database and the most frequently mentioned gap was on rangeland and pasture management followed by management of water resources and forests. International network members also pointed out a number of thematic gaps, such as need for tools for cost-benefit analysis and for estimation of climate change adaptation and mitigation benefits of SLM. But they also highlighted regions of the world where they thought WOCAT should become more active. The wet tropics and Latin America were identified by most as priority regions for strengthening of WOCAT.

Before WOCAT expands its geographical and thematic coverage, it should take stock of existing approaches and tools that could be linked to WOCAT's modules. For example water resources management could capitalize on IWRM approaches and tools (e.g. the IWRM toolbox developed by the Global Water Partnership), while other issues mentioned by WOCAT partners, such as marine and coastal ecosystems, may be outside of the scope of WOCAT, and could be covered by existing tools (e.g. Integrated Coastal Management (ICM) tools developed by PEMSEA).

In conclusion, WOCAT should first of all identify how to address the gaps mentioned above by combining its own tools with already existing tools for e.g. cost-benefit analysis, assessment of carbon benefits, IWRM, ICM, etc. relevant to SLM, and not

launch the development of new tools of its own. Geographical gaps could be filled by inviting new partners to join the network that already have a strong baseline of relevant SLM and regional experiences, such as for example CIAT and CATIE in Latin America, IITA in the humid tropics, etc.

<u>Objective 3:</u> Enhance – and capitalize on – WOCAT tools and methods. The WOCAT tools and methods are recognized as a world standard for documentation, evaluation and dissemination of SWC/SLM. At the global level they are improved and updated. At the regional level, they are tailored to different stakeholder needs.

Performance indicators	Results from review of website, database, tools reports and publications	Feedback from network partners
Number of institutions from global, regional and national level that have voluntarily or spontaneously adopted WOCAT as a standard approach for documenting and disseminating SLM best practices; number of adapted and tailor- made tools.	• The UNCCD has not yet adopted WOCAT as its standard for documentation of best practices and are instead using a simplified template developed by UNEP/WCMC for PRAIS that has been inspired by WOCAT • There are no tailor-made tools available offering e.g. different levels of details in light or full version according to stakeholder needs – just standard questionnaires for all countries and contexts	Countries where WOCAT has been adopted as a standard: • Senegal, China, Ethiopia, South Africa (at provincial level), Philippines International institutions: • Universities: Where the Land is Greener has been adopted as a course book at the Free University of Amsterdam, National University of Mongolia, University of Berne, Philippines, Tajikistan, Serbia and others • WOCAT has been adopted as one of several best practices databases in FAO. Simplified questionnaires would facilitate the adoption of the tools outside of the Land and Water Division • ISRIC is promoting WOCAT in all its relevant projects and introduced WOCAT into LADA, SOWAP, DESIRE and Green Water Credits • World Bank and AsDB are using WOCAT on a project-by-project basis – it has not been adopted as a standard Regional institutions: • ICIMOD has adopted WOCAT as a standard in its HIMCAT network

Conclusions and recommendations
WOCAT should try to simplify its questionnaires, especially the QT, to make it easier to adopt as a standard for reporting on best practices at country and international level. Longer and more complex version of the questionnaires can be used for investment planning and upscaling of SLM where more thorough and integrated analysis is needed of biophysical, social and economic impacts.

<u>Objective 4:</u> Expand WOCAT network and knowledge sharing. WOCAT moves mainstream in an increasing number of global, regional and national institutions. Knowledge about SLM is shared effectively.

Performance indicators	Results from review of website, database and publications	Feedback from network partners
Use of WOCAT tools and methods in major international, regional and national SLM programmes and projects; WOCAT's contribution to investment in, and upscaling of SLM through financial institutions and development agencies, such as the Development Banks, IFAD, UNDP and Ministries of Finance.	WOCAT tools and methods are used in at least 50 countries and in the following major SLM programmes: • TerrAfrica • CACILM • PRC-GEF Partnership on Land Degradation • Ethiopia SLM • Tajikistan Pilot Programme for Climate Resilience • South Africa Ministry of Agriculture (Mapping)	• IWMI is using WOCAT tools in SDC funded projects in Central Asia. • GIZ is using WOCAT partially, as it also has its own standards. GIZ is promoting WOCAT for regional knowledge management under CACILM • FAO: New research project on Water Harvesting in Africa with EU funding is using WOCAT questionnaires –TerrAfrica, Kagera project, Land & Water Division, a little in Forestry • ALTERRA Research Centre at University of Wageningen is using WOCAT tools • AsDB has used WOCAT in China and in CACILM, but not in the wetter, tropical areas of Asia, but there is potential for further use in new projects. • SDC: WOCAT is used in knowledge management projects; Mongolia, ICIMOD and Central Asia, through Helvetas; Bolivia; Afghanistan • UNEP/UNU/GEF: WOCAT is used in the Pamir-Alai SLM (PALM) project that also involves CDE

Conclusions and recommendations

WOCAT tools and methods have been adopted by a large number of international as well as national initiatives. However, it is very difficult to gain an overview of all the programmes, projects and institutions where WOCAT is used, as WOCAT is spreading through networking and informal sharing of knowledge. To get the full picture of where WOCAT has been taken up, the use of WOCAT methods and tools should be tracked better through the WOCAT Secretariat and the website.

<u>Objective 5:</u> Generate new knowledge through research and share and enhance knowledge through training and education.

Performance indicators	Results from review of website, database, reports and publications	Feedback by network partners
Use of research conducted by WOCAT members/partners to Improve WOCAT tools and methods and to identify emerging issues and themes for new WOCAT tools and modules	• 20 MSc theses from CDE related to WOCAT in different parts of the world, and two PhD thesis testing different methodologies (2005) • SOWAP (Soil and Water Protection Project –UK, Belgium, Hungary, Czech Republic) • Collaboration with DESIRE on DSS (countries around the Mediterranean) • Scientific publications on M&E of SLM and DSS linked to the UNCCD White paper • IAEA (2004 – soil erosion measurement using radionuclide methodologies) • Two PhDs funded by COST (European Cooperation in the field of Scientific and Technical Research, 2004)	• Mongolia, Nepal, Vietnam, Morocco, Senegal, South Africa, China have research programmes that are using WOCAT • MSc students have used the WOCAT methodology at CDE and Free University of Amsterdam • PhD on decision support in South Africa in collaboration with LADA/WOCAT • DESIRE project and PhD student linked to WOCAT; and PhD student at ITC, the Netherlands • Research students at CDE have been verifying the information collected by WOCAT • Relevant CDE/NCCR Research Programmes with linkages to WOCAT are 11: Land Resource Potential (Central Asia & Horn of Africa); and 12: Landscape Transformation (Southeast Asia, Horn of Africa & East Africa)

Conclusions and recommendations

WOCAT is benefitting from research undertaken throughout the network from national to international level. All research activities are supported by funding additional to the WOCAT core programme and they bring considerable benefits in terms of testing of methods and tools, analysis of the database as well as capacity building of students in developing and developed countries.

Synergies with CDE's research programmes are the most obvious research linkages and having CDE as a partner with a link to universities worldwide provides an important additional asset to the WOCAT network.

However, this review had difficulties finding any overview of relevant research and any coherent strategy at global level in the identification of research themes and topics. The lack of top-down steering also has positive aspects and has given the participating institutions the freedom to support the research most relevant to them. Better tracking of research in the network would nevertheless be useful and could enhance the sharing of relevant research findings between all network members.

5.3 Innovativeness of WOCAT methodology and tools[7]

The analysis of the innovativeness of WOCAT methodologies and tools is based on the reviewers own observations as well as a participatory SWOT analysis conducted at the 15th WWSM in 2011. The tools include:

Questionnaires: QT, QA, QC, QW for documenting SLM case studies are also discussed in section 5.2. The QT and QA are widely tested and used and do not seem to need any further development. However, lighter versions for reporting to e.g. the UNCCD needs to be developed and regular maintenance and updating of the standardized tools need to continue. The QC and QW are useful additions to better integrate climate change and water resources management issues into WOCAT. However, the question remains whether the QC and QW need to be stand-alone tools or whether they can be integrated into the QT and QA. One suggestion provided in section 5.2 is to develop light versions of the QT and QA for the UNCCD that integrate the most critical questions from the QC and QW to reduce the number of questionnaires that need to be filled for reporting purposes. Use of WOCAT for upscaling of SLM through investment planning would still require the full questionnaires and all appropriate modules to be filled.

Database on technologies and approaches: An on-line/open access database with a total of 363 technologies and 201 approaches is discussed more in detail in section 5.2.

Templates for summarizing key features of SLM best practices: A template for a four-page summary of technologies as well as approaches was developed for the book 'Where the Land is Greener' that combines a short narrative description with a very innovative way of illustrating land use, climate, degradation type and SWC/SLM measure, and environmental, human and economic factors. The success of the template is shown by the rapid uptake by many countries that have published their own 'WOCAT books' using this template. It has recently also been added as a feature to the WOCAT database where four-page summaries for selected technologies and approaches can be generated. The TerrAfrica book is using an adapted template that provides a six-page summary of a major technology type/group, supported by 2-page summaries of case studies. This template puts more emphasis on the economics of the technologies and is a useful tool for supporting SLM investment planning.

Mapping tools: WOCAT collaborated with the UNEP/FAO/GEF funded Land Degradation Assessment in Drylands (LADA) project and DESIRE on further development of the WOCAT Questionnaire for Mapping Land Degradation and Sustainable Land Management (QM) that makes it possible to construct a database for each country with a base map of different land-use systems (LUS) in the country as well as other environmental and socio-economic data. The terminal evaluation of LADA rated this tool very highly, but did not give much recognition to WOCAT for its development, while the mapping task force that met at WWMS 15 pointed out remaining problems with

[7] This section addresses objective 3 of the TORs (Annex 1).

determining land degradation type and area affected. The QM, just like the old GLASOD assessment of desertification, is based on expert opinion, but the difference is that it is stratified by LUS and based on the opinion of a larger number of experts as well as feedback from a number of participatory workshops. The QM is thus innovative, but seems to need further refinement including a user-friendly interactive tool to compile, view and harmonize the information with various experts. WOCAT has to ensure that its initial investments and further inputs into the QM are acknowledged.

Decision Support System (DSS): Development of DSS for the local level is supported through the DESIRE project (EU funded project on Desertification mitigation and remediation of land – a global approach for local solutions). It comprises a three-step procedure starting with participatory identification of existing and potential SLM strategies, followed by assessment of SLM strategies using the WOCAT questionnaires, and finally the selection of the most promising strategies using a decision-support tool and selection of options in the WOCAT database. The development of a DSS for SLM is a major step towards scaling up of the best practices entered into the WOCAT database.

However, in order to scale up SLM, decision-support tools need to be combined with guidance on how to create incentives for SLM and how to access SLM finance. The lack of any **guidance on SLM finance** is the main gap in the WOCAT toolbox identified by this reviewer. SLM finance can be accessed through for example:

- Mainstreaming of SLM into relevant policies, sectors and investment frameworks, including credit schemes;
- Market-based mechanisms (e.g., PES/Green Water Credits, carbon markets, certification, eco-labelling, etc.);
- Bilateral as well as multilateral donor funding, such as the GEF;
- Climate change adaptation funding, such as the Climate Change Investment Funds (CIF) and the Adaptation Fund linked to the Clean Development Mechanism (CDM); and
- Other innovative financial mechanisms, such as tax breaks, etc.

The weaknesses with WOCAT according to the SWOT analysis include lack of coordination with donor/financing mechanisms as well as weak links to policy and institutional processes. However, as can be seen from the list above, combining WOCAT tools with guidance on SLM finance could also help addressing some of the policy and institutional challenges to SLM that were identified as gaps in WOCAT in Chapter 4.3, especially for intersectoral coordination and mainstreaming. WOCAT could thus promote the use of its own tools in combination with other existing tools important for upscaling of SLM, such as guidelines for development of Integrated Financing Strategies (IFS) for SLM developed by the GM of the UNCCD (already combined with WOCAT tools in Cambodia and Vietnam), guidance on carbon finance in dryland afforestation developed by CDE, cost-benefit analysis of SLM, etc.

Finally, WOCAT also needs to continue to identify, through its task forces, how SLM relates to other natural resources management issues, such as Integrated Water Resources Management (IWRM) and Integrated Coastal Management (ICM), and how WOCAT

tools can be combined with these other NRM tools (see Objective 3). This would avoid that WOCAT duplicates other ongoing efforts in NRM when it further refines its own tools and modules.

Conclusion and recommendation:
WOCAT offers a unique standardized methodology and tools for documenting and evaluating SLM approaches and technologies and innovative templates for dissemination of key information of best practices to field practitioners and decision-makers. WOCAT has also started to link the use of its tools to decision-support systems for scaling up of SLM.

To achieve upscaling of SLM, the WOCAT tools need to be linked to guidance on how to create incentives for SLM and how to access SLM finance.

5.4 Effectiveness of its dissemination strategy[8]

WOCAT has developed useful publications and other outreach material for different target audiences (see Annex 2), from practitioners in the field (e.g. brochures, fact sheets using standard templates), teachers and researchers (books, scientific papers), planners (books, fact sheets, maps), decision-makers (brochures, DSS tools) and policy-makers (i.e. videos, UNCCD White Paper). Most of this material is available on the WOCAT website and it has also been disseminated among network members at WOCAT Share Fairs, to the international scientific community at international conferences, such as ISCO, and to global decision- and policy-makers at the COPs of the UNCCD.

However, as was noticed already in section 4, WOCAT has not been very successful in getting its message across on its relevance to meeting development priorities, and at communicating with policy makers at different levels, including UNCCD and GEF focal points. WOCAT would therefore benefit from having a more clearly articulated dissemination and advocacy strategy that identifies its different target audiences and matching publications and outreach material for each group. WOCAT may also consider making use of WOCAT champions at international events to attract the attendance of high-level policy makers. Such champions could include Ministers from WOCAT countries that are attending the UNCCD COPs, high-level officials from its international Management Board members, well known environmental activists, celebrities, etc.

In addition, the WOCAT branding of its publications and outputs need to be improved, as WOCAT is not very visible in some recent publications, as for example the best practices books published in collaboration with TerrAfrica, CARITAS Tajikistan, and LADA, as well as the MONCAT fact sheets and Green Water Credits, etc. For instance, WOCAT's contribution to LADA almost goes unnoticed in LADA's Terminal Evaluation where WOCAT is not referred to as a partner and service provider, only as an already existing

[8] This section addresses objective 4 of the TORs (Annex 1).

tool that LADA is further developing. Despite these challenges, there are opportunities to publish more through WOCAT's international network members. For example, AsDB, indicated a clear interest during this review to support publication and dissemination of best practices in high quality publications from its region. However, WOCAT needs to ensure visibility in future publications of this nature.

Finally, WOCAT also needs to make better use of modern information and communication technology (ICT) and web-based tools that could make the work of its task forces more interactive. The task forces (see 6.1) could be transformed to communities of practice moderated using social networking tools, blogs, etc. The SLM Ethiopia Programme provides a good model for how to upgrade the use of ICT in WOCAT (http://www.slmethiopia.info.et/).

Conclusions and recommendations:
WOCAT needs to strengthen its dissemination and advocacy strategy to reach out to policy-makers, including UNCCD and GEF focal points. It also needs to strengthen its branding of tools and publications to improve its visibility, and start using modern ICT, such as social networking tools, to moderate its task forces/communities of practice.

6. Adequacy and efficiency of institutional set-up and management of WOCAT

6.1. Institutional set-up[9]

WOCAT is a knowledge management network. Network organizations rely on trust and are often characterized by flat hierarchy, self-governing teams and heavy use of temporary structures, such as project teams, task forces, etc. They balance flexibility with a certain level of predictability[10]. WOCAT is comprised of a Secretariat in Berne that coordinates the network of around 60 partners. The Secretariat is supported by a Management Board that includes CDE, FAO and ISRIC, and a number of task forces that are set up during the annual international workshop and steering meetings. The task forces are set up to further develop the WOCAT methodology and tools, deal with special methodological, technical and management issues, and to support national and regional institutions. There are currently seven task forces on:

1. Decision support tool
2. Questionnaire module
3. Impact monitoring
4. Mapping
5. Digital products
6. WOCAT in research, training and education
7. Strategy and communication

[9] This section addresses objective 5 of the TORs (Annex 1).
[10] Borgati, S.P. & Foster, P.C., 2003) The Network Paradigm in Organizational Research: A review and Typology. Journal of Management, 29(6): 991-1013.

The active partners have varied a lot over time, as can be seen in the WWSM reports from 1998-2009. There are currently around 25 active initiatives at national and regional level in the WOCAT network, according to the global website. However, the WOCAT network is very loose and informal and there have never been any formal agreements or memoranda of understanding between the Secretariat in Bern and country partners. This has led to an unclear membership status and problems in getting WOCAT accepted in national institutions in charge of land and water management and implementation of the UNCCD, especially where the national lead institution for WOCAT is a scientific and/or academic institution.

According to country partners, formalization of the membership status would facilitate institutionalization and mainstreaming of WOCAT at national level, which would also make it easier to access funding and promote the uptake of WOCAT tools and methods for reporting to global conventions on land related issues. Several countries suggested that an MOU be combined with the designation of an official country representative. However, to retain the flexibility and inclusiveness of the current network structure, the designation of a focal point should not exclude the participation of several partners and institutions from the same country.

The members of the management board, FAO and ISRIC, also have an unclear institutional relation with WOCAT. There has never been any formal agreement or MOU between CDE and FAO, and the one between CDE and ISRIC is out of date. It was suggested that having a more formal agreement would enable the representatives on the management board to draw in more support from their institutions to WOCAT. This could be one way of strengthening the support from FAO and ISRIC towards WOCAT core objectives and commitments. So far, FAO's and ISRIC's support has mainly been project based and no resources have been provided to support the functioning of the WOCAT Secretariat.

Another weakness with the present institutional set-up is that WOCAT is not an independent institution and lacks a legal personality, making it difficult to enter into direct agreement with donors and accessing development funding outside of SDC. The 15th WWSM concluded that a business as usual scenario for WOCAT in terms of institutional set-up is therefore not an option. Two feasible options for the institutional strengthening of WOCAT were identified:

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 (management, coordination., funding); FAO (policy, technical assistance, mainstreaming); CDE & ISRIC (technical assistance, capacity building, development of tools etc.); regional nodes (capacity building, technical assistance)

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

Regarding the first option to become an International Consortium, the risk is that a large organization, such as for example FAO or IFAD, could swallow up WOCAT and, due to decisions outside of the control of the network members, decide to phase it out. An example of this scenario is provided by the closing down of the Sida-funded Regional Land Management (RELMA) Programme in East and Southern Africa. Once the full responsibility for RELMA was transferred from Sida to ICRAF, which was hosting the RELMA Secretariat, the programme was phased out. However, if the circumstances are right, an international organization could mobilize substantial support from its own resources to sustain the WOCAT Network.

The second option of becoming an International NGO, would give WOCAT a clear institutional identity coupled with a legal personality that would make it possible for WOCAT to directly enter into contractual agreements with partners and donors without having to go through CDE, which is currently the case, or another international institution, which would be the case under the consortium model. Afghanistan provides a model on how to set up an NGO linked to WOCAT. Afghanistan has created an NGO called SLMIO that is a network of NGOs working on SLM in Afghanistan that together mobilizes funding for new programmes and projects where the WOCAT tools and methods have been adopted as a standard. However, this option may require more up-front investment of new resources than the consortium model, as well as management capacity that is currently not available in the WOCAT Secretariat.

A risk with both options above is that they turn out to be more costly than the present set-up, with CDE hosting a small WOCAT secretariat that is working in synergy with its research programmes. Moreover, care has to be taken not to lose the link with relevant CDE research programmes that have added value to the WOCAT Network by using PhD and MSc students to validate and test WOCAT methods and tools, which is a very cost-efficient way of bringing in scientific support to WOCAT.

Conclusions and recommendations:
WOCAT's institutional status needs to be strengthened to make WOCAT more international and improve access to funding without losing the link to relevant CDE research programmes.

The WOCAT membership status needs to become more formalized with designation of WOCAT focal points.

6.2 Management of the network[11]

According to many network members, the WOCAT Secretariat is at times overstretched and is not able to provide timely feedback to requests. However, this seems to have improved in recent years with the introduction of new positions, but there are still

[11] This section addresses Objective 6 of the TORs (Annex 1).

technical and managerial constraints. It was also pointed out that the WOCAT Secretariat needs a permanent management team that is working full time, with clearly defined responsibilities. In addition, it was suggested that the management board be opened up for new institutions to join. This suggestion has already been tested in an earlier phase of WOCAT, but some partners of the enlarged Management Board put their national and regional priorities first, which did not add global value to the Board. However, new global partners that are showing interest in WOCAT could be invited to join. More frequent contact between the members of the Management Board would also be useful and regular teleconferences amongst the expanded management group have in the past proved to be useful.

One suggestion to overcome the technical constraints in the Secretariat is to establish a panel of experts that WOCAT can draw on for development of global publications, such as the book Where the Land is Greener and the TerrAfrica publication on SLM in Practice, to ensure high quality and timely delivery of outputs. Such a technical panel could be linked to CDE and its existing research networks (e.g. NCCR North-South). The experts would have to provide some time for free, but could be contracted on a needs basis for contributing to WOCAT global publications.

It was also suggested that the WOCAT Secretariat needs to become more client oriented and less driven by technical and scientific issues, and that links to policy processes at national and international levels need to be strengthened. The panel of experts suggested above could also help formulating high-level strategic policy advice targeted to the UNCCD Focal Points and in particular to the COPs of the UNCCD and other relevant conventions and international processes, such as the CBD and UNFCCC.

It was also felt that the current management of the Network is too closely linked to CDE at the University of Bern. The 1998 External Review of WOCAT recommended decentralization of the network and establishment of a number of regional centres. This resulted in the establishment of WOCAT regional nodes at ICARDA for the Middle East and Central Asia, and at ICRISAT for West Africa. However, with the reorganization and downsizing of WOCAT activities, their involvement phased out. Therefore, the only fully successful example of the establishment of a functional regional node is the institutionalization and mainstreaming of WOCAT in ICIMOD and the establishment of the regional HIMCAT network for the Himalayan region that involves very active WOCAT countries, such as Bangladesh, Nepal and Afghanistan.

Central Asia also has some regional collaboration on WOCAT through CACILM, but there is as yet no clear designation of a regional institution in charge of coordinating the regional network. Other regions that have expressed a wish to establish regional/sub-regional nodes and networks include the Sahelian region (SAHELCAT), Southeast Asia (SEACAT) and Southern Africa. At the 15th WWSM in 2011, it was widely felt that further decentralization of WOCAT along these lines was needed, as regional initiatives could solve regional problems without involving the secretariat in Bern, leading to cost savings and increased efficiency. This could improve WOCAT's performance also in terms of knowledge management and client orientation. Having a full-time manager, who

could lead resource mobilization efforts at international level, as well as outreach and liaison with regional and international partners, would further enhance the efficiency of WOCAT. The WOCAT Secretariat could also possibly be moved to a developing country to increase ownership and reduce costs for its operations.

A possible way of organizing the WOCAT Network in the future is provided in Figure 1. However, it should be noted that it is a very schematic representation and does not include all WOCAT countries. It is trying to illustrate how to further decentralize the WOCAT network based on some of the recommendations discussed above.

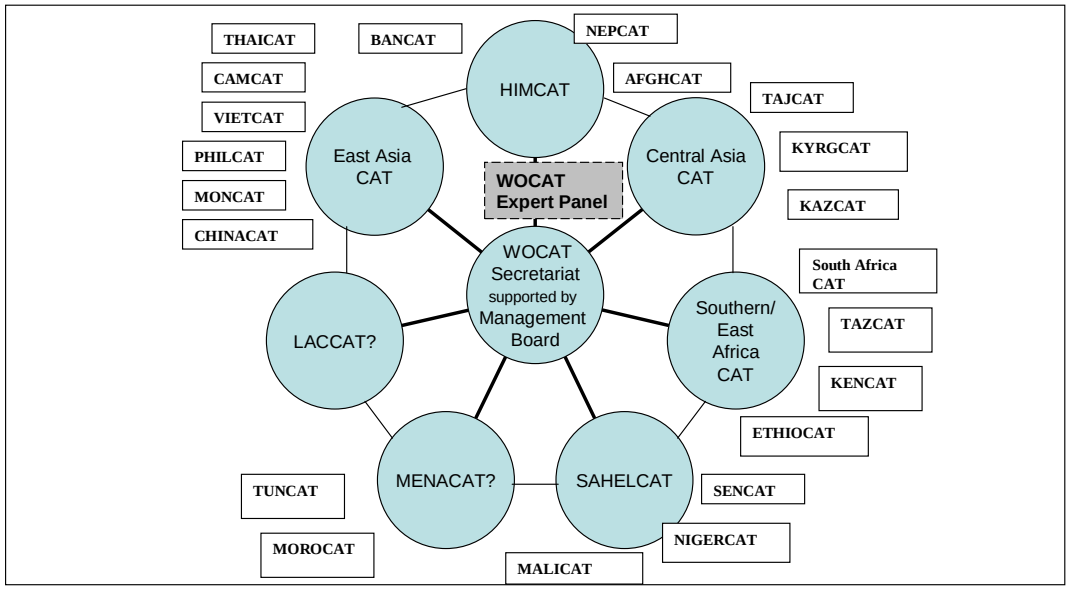

Figure 1. Outline of possible future structure of WOCAT Network.

The WOCAT Secretariat could provide support to countries in setting up sub-regional networks following the HIMCAT model. The process should be demand driven and if no strong interest or leadership is shown by the countries or a regional institution, then WOCAT should accept that they are not yet ready for further engagement. WOCAT could also strengthen its ties with donors that are active in SLM programmes in the different regions, such as IFAD in the MENA region, AsDB in East Asia, GIZ in Central Asia and World Bank in Sub-Saharan Africa, to explore their interest in supporting WOCAT activities at regional level that could inform their investment programmes and projects in SLM.

The regional nodes should be responsible for supporting WOCAT in the countries within their remit and provide training to new partners within the region that would like to join

the WOCAT Network. The global WOCAT Secretariat should focus on training of trainers and global maintenance and updating of the standardized tools, as well as on strategic issues, such as identifying emerging issues that need to be addressed by the WOCAT tools, collaboration with international partners and initiatives, such as UNCCD and LADA, and should maintain close links with research on SLM.

Conclusions and recommendations:
The management of the WOCAT Network needs to become more decentralized and make use of regional nodes to increase its effectiveness. The regional nodes should be in charge of WOCAT training and quality control within their regions.

The WOCAT Secretariat should focus on training of trainers, global maintenance and updating of the standardized tools, together with more strategic issues, such as reporting and monitoring of SLM at global level for e.g. the UNCCD, GEF and other relevant multilateral mechanisms and programmes.

WOCAT should consider establishing an Expert Panel for scientific and strategic advice.

WOCAT needs a full time manager that can lead resource mobilization as well as outreach and advocacy efforts at international level.

7. Cost-efficiency, effectiveness and funding strategy[12]

7.1. WOCAT funding and cost- efficiency

Since its start in 1992, WOCAT has received a total amount of funding of US$12.4 million from its partners of which around 38 percent has come from SDC (Table 2). The funding from SDC has mainly gone to supporting staff at the WOCAT Secretariat based at CDE in Bern, to organizing the annual workshops and steering meetings and to sponsoring of a number of participants, as well as to material and targeted studies (see Semi-Annual Reports to SDC 2008-2010). The Secretariat has funding for two full-time positions that are currently spread over 5 part-time positions. In the current phase of WOCAT, co-financing has mainly come from other projects that have collaborated with WOCAT, such as SOWAP, LADA, TerrAfrica and DESIRE. Around 25 percent of co-financing has come directly from the WOCAT countries to support the documentation and assessment of best practices at national level.

[12] This section addresses objectives 7, 8 and 9 in theTORs (Annex 1).

Table 2: Overview of budget 1998-2009 (according to WWSMs 1998-2009)

Year	Cash (US$)	In-kind (US$)	Number of donors & countries	Funding from SDC (and in % of total)	Total (US$)
1992-1997	1,242,460	436540	13	603,000 (36%)	1,679,000
1998	292,485	281,015	14	150,000 (26%)	573,500
1999	335,500	179,500	19	200,000 (39%)	515,000
2000	339,500	136,900	18	180,000 (38%)	476,400
2001	314,235	105,500	17	175,000 (42%)	419,735
2002	409,000	169,700	24	260,000 (42%)	623,700
2003	421,480	55,100	14	300,000 (64%)	476,580
2004	499,600	122,700	23	300,000 (46%)	622,300
2005	660,100	126,990	21	361,050 (45%)	787,090
2006	818,702	116,100	24	423,050 (45%)	934,802
2007	849,275	213,267	21	364,850 (34%)	1,062,542
2008	672,388	136,980	17	474,000 (58%)	809,368
2009	640,106	78,550	15	446,100 (62%)	718,656
2010*	2,304,400	444,700	26	532,000 (20%)	2,749,100
Total	9,799,231	2,603,542		4,769,050 (38%)	12,402,773 (92-09)

The fact that this relatively modest amount of funding - around US$600,000 per year over a 20-year period, supporting a network of around 60 partners - has supported the training of 500 SLM specialists, and resulted in a wide range of SLM tools, a global database with more than 300 technologies and 200 approaches, as well as a vast number of best practices publications, must in itself be considered a cost-efficient use of funding. The effectiveness of WOCAT to raise co-funding and thus to maximize the programme impact has remained relatively constant.

However, this reviewer believes that the in-kind contributions from network members, especially from countries, have been seriously underestimated given the range of outputs and publications that have been generated during the review period. This is confirmed by preliminary financial figures for the current phase of WOCAT 2008-2011 (Annex 7) where the total co-financing is estimated at almost US$14 million and SDC's share of the total comes to only 12 percent. This indicates that WOCAT is highly cost efficient and that a one dollar investment from SDC has leveraged on average seven dollars from the WOCAT partners.

A rapid appraisal was made at the 15th WWSM of the cost of undertaking a WOCAT case study using the QT and/or QA (Table 3). These numbers should be considered as back-of-the-envelope calculations, as there seem to be no systematic effort of assessing the cost of applying the different WOCAT tools. Although the numbers are rough estimates, it can be concluded that once capacity in using WOCAT has been built up in a region or country, it becomes much cheaper and cost-efficient to apply the tools without central involvement of the WOCAT Secretariat in Bern.

Table 3: Costs for documenting WOCAT case studies by different partners

Country/Region	Average cost for a WOCAT case study* (US$)
Central Asia (CACILM)	800
China	600-1,400
Kyrgyzstan	1,000
South Africa	2,000
Bangladesh	500
Philippines	1,000-1,500
WOCAT-CDE	8,000-10,000**

*More detailed assessment of the costs needs to be done at all levels.
**1,500-2,000 when training has already been done and quality assurance not so rigorous.

Conclusions and recommendations:
WOCAT has been a very cost-efficient undertaking over the review period, but could become even more cost-efficient in the future by devolving full responsibility to competent national and regional partners to do their own documentation and quality control of WOCAT case studies and organize their own training.

Co-financing to WOCAT has to be better tracked in order to demonstrate the effectiveness of the programme.

7.2. WOCAT funding strategies at national, regional and international levels

WOCAT countries are using a number of different strategies to mobilize funding to WOCAT, which includes:

- Mainstreaming of WOCAT into agricultural programmes that also include funding from other bilateral and multilateral donors – e.g. Ethiopia and Senegal.
- WOCAT has been linked to development of Payment for Environmental Services (PES) schemes - e.g. Green Water Credits in Morocco and Kenya; Nepal.
- WOCAT has been linked to larger watershed management programmes – e.g. Afghanistan.
- Detailed mapping of land degradation and possible solutions has lead to out- and up-scaling - e.g. application of DSS in South Africa.
- Integration of WOCAT in curricula at universities – e.g. Nepal, Bangladesh, Kyrgyzstan, Morocco, Russia, Mongolia, etc.
- Mainstreaming of WOCAT in NGOs working in rural development – e.g. Helvetas in Kyrgyzstan and Caritas in Tajikistan.
- Establishing a national NGO with focus on SLM to improve resource mobilisation – e.g. Afghanistan

At regional level, the HIMCAT network coordinated by ICIMOD is so far the first example of the establishment of a regional platform that can also be used for resource mobilization purposes. However, it could also be argued that WOCAT has benefited from

pooling of regional resources for knowledge management in SLM in other regional programmes it has collaborated with, such as TerrAfrica and CACILM. Hence, opportunities for resource mobilization at regional level should be further explored under the proposed new network model for WOCAT with establishment of several regional nodes/centres.

Several international institutions are already using WOCAT for assessments that inform investments in SLM, and WOCAT best practices are included in several country investment frameworks in Africa as well as in China. WOCAT has thus already been mainstreamed to some extent in major SLM initiatives, such as TerrAfrica and the PRC-GEF Land Degradation Partnership, as well as in LADA, and the CACILM programme. However, the funding is mobilized on a project-by-project basis and no core funding has so far been allocated from international institutions to the WOCAT Secretariat or operation of the network, with the exception of FAO's and ISRIC's costs related to participating in WOCAT's Management Board.

To improve the funding to the WOCAT Secretariat, it was suggested that projects and other users should be charged a fee for WOCAT services. It was also pointed out that if WOCAT was easier to use, it would make it easier to mobilize funding within FAO from other Departments, such as Forestry. Strong advocacy and promotional material was considered necessary to mobilize funding and attract new partners to WOCAT. It was also suggested that new partners would be asked to sign an MOU that requests a minimum contribution of core funding to the network or allocation of a percentage of funding to the WOCAT Secretariat from SLM projects using WOCAT methods and tools.

SDC, the main donor to WOCAT, could assist in organizing donor meetings and donor partnerships, in establishing endowment funds, etc., but indicates that it would be easier to provide this support if the WOCAT Secretariat had a more international status, and new people were brought in from outside of CDE from other centres and network partners. As was recommended in the previous reviews of WOCAT, SDC should also mainstream the use of WOCAT in its own NRM projects. Some evidence of this already taking place was presented in Section 5.2 (Objective 4) in particular in Mongolia and Central Asia, but there seems to be room for a more systematic promotion of WOCAT methods and tools in SDC projects across all its Regional Divisions. A certain percentage of funding from these projects could then be allocated to the WOCAT Secretariat for provision of training, and maintenance and updating of the tools.

Core SDC support to WOCAT could also be provided through the National Centre of Competence in Research (NCCR) North-South at the University of Bern through the establishment of a WOCAT Expert Panel with a mandate to provide scientific and strategic advice on: global reporting and monitoring of SLM for UNCCD; and SLM and global development agendas, including food security; and emerging SLM issues of relevance to the UNCCD and other multilateral mechanisms and processes, such as GEF, CBD and UNFCCC.

SDC stresses that WOCAT needs a business plan on how to diversity funding and this should also include the types of SDC funding discussed above. The WOCAT Secretariat has initiated the development of a business plan and discussions and negotiations are ongoing with a large number of international partners, such as the UNCCD, IFAD, World Bank and UNDP, about collaboration and funding.

Conclusions and recommendations:
WOCAT urgently needs a business plan on how to diversity its funding base at all levels. Opportunities to access funding at national, regional and international level are closely linked to the strengthening of its institutional status.

SDC can assist WOCAT in diversifying its funding base by organizing donor meetings and it is recommended that it supports the establishment of donor partnerships by providing catalytic funding.

SDC can also enhance the mainstreaming of WOCAT in its own projects and programmes across its Regional Divisions, and support WOCAT activities of scientific and strategic relevance for the UNCCD and other multilateral mechanisms and processes through NCCR North-South.

7.3 Financial sustainability

The financial sustainability of WOCAT needs to be addressed at several levels: funding of the Secretariat at CDE and the Management Group; funding of regional network nodes; and continued funding at country level. Some suggestions on how to improve the financial sustainability provided by network partners include:

- A formal MOU that specifies the expected in-kind contribution to WOCAT from the country.
- Dissemination of promotional material and success stories based on WOCAT case studies would enhance the interest in WOCAT at all levels.
- WOCAT training could be provided on a cost-recovery basis and costs could be minimised by using already trained people at regional level, i.e. delinking the responsibility for the training from the Secretariat at CDE. For example ICIMOD is already providing training on a cost recovery basis.
- Global support to the WOCAT Secretariat could be included in national action plans to pay for backstopping, maintenance of the tools and to assist countries to respond to emerging issues.

Other examples of successful resource mobilization to WOCAT in its current phase include the collaboration with other international donor funded projects, such as LADA and DESIRE, and this type of efforts to mobilise resources should continue. However, strengthening of WOCAT's institutional status would make it easier for WOCAT to approach donors directly in its own name, which would also enhance the visibility and recognition of WOCAT as the main service provider.

Conclusions and recommendations:
Innovative measures to strengthening WOCAT's financial sustainability at all levels need to be implemented to secure the future of the network. This could include providing certain services on a cost-recovery basis, requests for core contributions from network partners, and continued mobilization of resources through regional programmes and international projects, such as LADA and DESIRE.

8. Conclusions and recommendations

8.1. Summary of conclusions and recommendations[13]

Overall, WOCAT has delivered the expected results for the review period 2008-2011 in an efficient and cost effective way. However, the WOCAT network has outgrown its current organisational structure and to further enhance its performance, it is necessary to decentralise its management and strengthen its institutional status. There is also a need to shift emphasis from development of tools and methods to practical applications of them for upscaling of SLM in countries and regions affected by land degradation. The main issues that need to be addressed to bring about this transformation of WOCAT are summarised in Table 4 below.

Table 4: Summary of major conclusions and recommendations

Linkages to development priorities	• WOCAT can contribute to achievement of all seven MDGs, and in particular to MDG-1 and MDG-7. It also needs to articulate its relevance to other development issues, such as food security and disaster risk reduction, and communicate its links to development much more clearly. • WOCAT is the most advanced standardized SLM knowledge management platform integrating ecological, social and economic issues and can therefore contribute significantly to the implementation of the UNCCD 10-year plan and provide useful tools for monitoring and evaluation, and documentation and upscaling of SLM best practices. It can also assist GEF to meet the 4th Objective of its Land Degradation Strategy on adaptive management and learning as well as contribute to its other objectives through upscaling of SLM on the ground in different land use systems. UNCCD and GEF focal points need to become aware of WOCAT's potential and how to use the tools. • WOCAT is well positioned to address emerging issues related to climate change, disaster risk reduction as well as other biophysical issues, but needs to focus more on policy and institutional challenges to SLM upscaling.
Improving performance	• The database needs to become more user-friendly. Information about the new online feature that automatically generates a four-page summary of selected technologies

[13] This section addresses objective 10 of the TORs (Annex 1).

	and approaches should be disseminated and the WOCAT logo should appear on these summaries. • Geographical gaps could be filled by inviting new partners to join the network that already have a strong baseline of relevant SLM and regional experiences, such as for example CIAT and/or CATIE in Latin America, and IITA in the humid tropics. • A user friendly manual or guidelines on how to use the different questionnaires are needed. Currently, no integrated guidance is provided on how the WOCAT tools could be used and combined with other tools to achieve upscaling of SLM (only partly through the DESIRE project). • To get the full picture of where WOCAT has been taken up, the use of WOCAT methods and tools should be tracked better through the WOCAT Secretariat and the website. • Research undertaken throughout the WOCAT network brings considerable benefits in terms of testing of methods and tools, analysis of the database, capacity building of students in developing and developed countries as well as additional funding, but needs to be better tracked.
Development and application of methods and tools	• WOCAT offers a unique standardized methodology and tools for documenting and evaluating SLM approaches and technologies and innovative templates for dissemination of key information of best practices to field practitioners and decision-makers. • WOCAT should develop a light version of the QT to make it easier to adopt as a standard for reporting on SLM best practices to the UNCCD. The lighter QT could also integrate the most critical questions in the QC to reduce the number of questionnaires that need to be filled. • The longer version of the QT is still needed for investment planning and upscaling of SLM for more thorough and integrated analysis of biophysical, social and economic impacts. • To achieve upscaling of SLM, the WOCAT tools need to be linked to guidance on how to create incentives for SLM and how to access SLM finance. • WOCAT should not launch the development of new tools, but instead explore how the WOCAT tools can be combined with already existing tools for e.g. accessing SLM finance, cost-benefit analysis, assessment of climate change adaptation and mitigation benefits, IWRM, ICM, etc.
Dissemination strategy and outreach	• WOCAT needs to strengthen its dissemination and advocacy strategy to reach out to policy-makers. • WOCAT also needs to strengthen its branding of tools and publications to improve its visibility, and start using modern ICT, such as social networking tools and blogs, to

	moderate its task forces/communities of practice.
Institutional set-up	• The institutional status needs to be strengthened to make WOCAT more international and improve access to funding. • The WOCAT membership status needs to become more formalized with designation of WOCAT focal points. • Having CDE as a partner with a link to universities worldwide provides an important additional asset to the WOCAT network.
Management of the network	• The management of the WOCAT Network needs to become more decentralized and make use of regional nodes to increase its effectiveness. The regional nodes should be in charge of WOCAT training and quality control within their regions. • The WOCAT Secretariat should focus on training of trainers, global maintenance and updating of the standardized tools, together with more strategic issues, such as reporting and monitoring of SLM at global level for e.g. the UNCCD, GEF and other relevant multilateral mechanisms and programmes. • WOCAT should consider establishing an Expert Panel for scientific and strategic advice. • WOCAT needs a full time manager that can lead resource mobilization as well as outreach and advocacy efforts at international level.
Financing strategy	• WOCAT could become more cost-efficient in the future by devolving full responsibility for WOCAT case studies and training to competent national and regional partners. • Co-financing to WOCAT has to be better tracked to demonstrate its effectiveness. • WOCAT needs a business plan on how to diversify its funding base at national, regional and international level. Opportunities to accessing funding are closely linked to the strengthening of its institutional status. • SDC can assist WOCAT in diversifying its funding base by organizing donor meetings and could support the establishment of donor partnerships by providing catalytic funding. • SDC can also enhance the mainstreaming of WOCAT in its own projects and programmes across its Regional Divisions, and support WOCAT activities of scientific and strategic relevance for the UNCCD and other multilateral mechanisms and processes through CDE NCCR. • Innovative measures to strengthen WOCAT's financial sustainability at all levels need to be implemented to secure the future of the network. This could include providing certain services on a cost-recovery basis, requests for core contributions from network members, and continued mobilization of resources through regional programmes and international projects, such as LADA and DESIRE.

8.2. Vision for a new phase of WOCAT[14]

With a strengthened institutional structure, WOCAT should become a recognised international knowledge hub for SLM that provides:

(i) tools and guidance and training of trainers to countries, regional as well as international institutions and conventions, on documentation and assessment of SLM best practices;
(ii) decision-support system for upscaling of SLM; and
(iii) guidance on how to create incentives and access financing for SLM upscaling by using expertise of its network members.

To improve its financial sustainability, the WOCAT Secretariat could charge a fee for provision of some of these services, while WOCAT countries mainstream WOCAT into relevant sectors and programmes to ensure core funding at national level. WOCAT also needs a business plan that identifies multiple and innovative sources of funding, including use of market-based mechanisms.

Furthermore, WOCAT should become part of a strategic alliance supporting the implementation of the UNCCD that includes major GEF-funded initiatives (e.g. Great Green Wall for the Sahara and Sahel Initiative) and it should also forge closer linkages with other key UNCCD partners, such as IFAD, GM, UNDP, UNEP, World Bank, Regional Development Banks, etc.

Annexes:

1. TORs of the External Review
2. Reviewed material
3. Interview matrix
4. Linkages to UNCCD 10-Year Plan and GEF-5
5. WOCAT Results Framework 2008-2011
6. Persons consulted
7. Financial information 2008-2011

[14] This section addresses objective 11 of the TORs (Annex 1).

Annex 1: TORs for the Review

Objectives:

The objectives of the review are to assess the WOCAT program, especially focusing on the program phase 2008 – 2011 and make recommendations for its future development & financing mechanisms.

1. Assess the relevance of the WOCAT program to development priorities and needs.
    a. Is WOCAT providing a missing link to enhance Sustainable Land Management (SLM)?
    b. Has the global/Swiss? Context changed since to onset of the program?
    c. What are the latest developments and challenges in SLM?
    d. How can WOCAT contribute to these challenges?
    e. What is the relevance of WOCAT at global, regional and national level?

2. Review the overall WOCAT performance based on the goals and objectives of the WOCAT strategy reflecting the four dimension of knowledge (according to WOCAT strategy paper):
    - Knowledge related to SWC / SLM
    - Knowledge related to documentation and evaluation tools and methods
    - Knowledge related to information sharing and networking
    - Knowledge related to research, training and education:

    a. Review specific objectives and expected results particularly for phase 2008-2011
    b. Review WOCAT's achievements (impacts and outcomes) from 1993 to date – overall and for selectively chosen WOCAT initiatives at regional/national level, by referring also to the previous evaluation's findings and relating them to the recent impacts and outcomes
3. Evaluate the overall performance and contribution of WOCAT to Sustainable Land Management.
    a. Do information and products provided by WOCAT meet beneficiaries' (partners, users) needs?
    b. How appropriate and innovative is the overall methodology?
    c. How appropriate and innovative are the specific tools: at local level, at national/regional level and at global level.
    d. What could be improved?
    e. Are there user statistics / concrete examples about the usefulness of WOCAT (tools, database, products, …) and for whom? E.g. case study template (standardized summary sheets) has been taken over by a number of countries and institutions such as China, Nepal, Bhutan, Mongolia etc..

4. Review dissemination strategy of WOCAT on a global/regional/national level.
    a. Is the dissemination strategy appropriate?
    b. Does it reach the partners/beneficiaries?
    c. What could be improved?

5. Assess adequacy and efficiency of institutional set-up
    a. What are the roles and responsibilities at the two levels: global programme and regional/ national initiatives? Is this institutional set-up adequate?
    b. What defines successful partner collaboration and what are constraints?
    c. What sense of ownership do partners have?
    d. How could the institutional set-up be improved?

6. Assess adequacy and efficiency of management.
    a. How is the set-up and the functioning of the management
    b. How is the decision making process?
    c. How is communication within main collaborating institutions and towards the outside?

    d. How adequate is monitoring and reporting?
    e. How could the management be improved?

7. Assess cost-efficiency, effectiveness and funding strategy.
    a. Make an overall assessment of WOCAT's cost efficiency and effectiveness.
    b. Where have been and are the bottlenecks of funding so far and what will be needed for the future (funding strategy?).
    c. What is the funding strategy of regional/national partners?
    d. How could cost-efficiency, effectiveness and the funding strategy be improved?
    e. What are the opportunities/possibilities and constraints/limits for financial diversification?

8. SDC's role as co-funding agency of WOCAT.
    a. What is SDC's contribution to the core activities?
    b. What is SDC's institutional responsibility towards such Swiss Centers of Excellence? Why is there so much reticence/opposition/resistance at SDC to further core fund/contribute to the Secretariat? It is a Swiss Center of Excellence in SLM that made its proof also at international level. As a small Swiss Centre it is virtually impossible to find international co-funding for the secretariat, with the exception of project related funding which is already working. The consultant needs to discuss this central question with SDC responsible persons and decision makers.
    c. What is the role of SDC in promoting, supporting, additional fund raising, and creating donor alliances?

9. What is the role of other co-funding agencies/projects/programs?
    a. How is the collaboration between WOCAT and other projects/programs/conventions, e.g. LADA, UNCCD?
    b. Review collaboration, synergies, strategic alliances of WOCAT with other global programs and what could be improved

10. Produce a clear set of concluding lessons and make recommendations for corrective actions to improve organization and performance to achieve better delivery of WOCAT's mission

11. Outlook of WOCAT's role/niche in the future

Annex 2: Reviewed material

Project document and strategy

- Projektbeschrieb. Vertrag Nr. 81009210. WOCAT – Soil and Water Conservation. SDC. 9 pp.
- WOCAT strategy 2008-2012: http://www.wocat.net/en/vision-mission/strategy.html
- WOCAT Semi-annual reports 2008-2010

External review reports

- Stocking, M., Pozzi, A., 1998: WOCAT External Review 1998. 39 pp
- Schaffner, R., Guenat, D., 2007: External Review: NRE Mandates to CDE. 41 pp
- Kellner, K., Risolo, C. & Metz, M , 2011: Terminal Evaluation of the UNEP/FAO GEF Project 'Land Degradation Assessment in Drylands (LADA)'. UNEP Evaluation Office, May 2011. 38 pp.

List of the network participating institutions:
http://www.wocat.net/en/network/organisation/participating-institutions.html
Ongoing collaborations: http://www.wocat.net/en/network/activities/ongoing-collaborations.html

Annual WOCAT Workshop and Steering meeting (WWSM) Proceedings 1998-2009: http://www.wocat.net/en/network/activities/steering-meetings.html or http://www.wocat.net/en/knowledge-base/documentation-analysis/workshop-proceedings.html

Tools:

- Case study assessment (QT and QA): http://www.wocat.net/en/methods/case-study-assessment-qtqa/questionnaires.html
- Spatial assessment (SLM mapping): http://www.wocat.net/en/methods/spatial-assessment-qm.html
- Decision support: http://www.wocat.net/en/methods/decision-support.html
- Watershed module
- Climate change module

Video:
For Greener Land and Bluer Water

Brochures:
WOCAT, 2011: Knowledge Management and Decision Support for Sustainable Land Management.4 pp.

Global/Regional books and papers:
Akhtar-Schuster, M., Bigas, H., Thomas, R., 2010: Monitoring and Assessment of Desertification and Land Degradation: Knowledge Management, Institutions and Economics. White Paper of the DSD Working Group 3. UNU Desertification Series No. 9. 126 pp.

Bühlmann, E et al., 2010: Geographic information system–based decision support for soil conservation planning in Tajikistan. Journal of Soil and Water Conservation, 65:151-159.

CDE/WOCAT/University of Bern, 2011: Coping with degradation through SLWM. For SOLAW – Part II, Chapter 5.2, FAO in press. 35 pp.

Gitonga, J.L., Ngeru, J.N., Limiger, H.P., 2008: Impacts of conservation tillage on soil water and crop production – a case study on the Northwestern footslopes of Mount Kenya. In: Goddart et al (eds.):No-Till Farming Systems. Special publication No. 3, World Association of Soil and Water Conservation. Bangkok, 2008, 373-382.

Hurni H, Wiesmann U, (eds.) 2010: *Global Change and Sustainable Development: A Synthesis of Regional Experiences from Research Partnerships. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South*, University of Bern, Vol. 5. Bern, Switzerland: Geographica Bernensia, 578 pp. [ISBN: 978-3-905835-13-7]. Part IV from "Global Change and Sustainable Development: A Synthesis of Regional Experiences from Research Partnerships".

Liniger, H.P., Douglas, M., Schwilch, G., 2004: Towards Sustainable Land Management – 'Common Sense' and some other key missing elements (the WOCAT experience). *Paper for ISCO Conference* 2004. 6pp

Liniger, H.P. et al, 2008: Where the land is greener – documenting and evaluating No-Till Knowledge and Experiences. . In: Goddart et al (eds.): *No-Till Farming Systems*. Special publication No. 3, World Association of Soil and Water Conservation. Bangkok, 2008, 469-478.

Liniger, H.P., Mekdasci Studer, R., Hauert, C., Gurtner, M., 2010: *Sustainable Land Management in Practice – Guidelines and Best Practices in Sub-Saharan Africa*. TerrAfrica, WOCAT and FAO. 246 pp.

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Reed, S.E. et al., 2011: Cross-scale monitoring and assessment of land degradation and sustainable land management: A methodological framework for knowledge management. *Land Degradation & Development*, 22, issue 2:261-271

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WOCAT, 2007: *Where the land is greener – case studies and analysis of soil and water conservation initiatives worldwide*. Eds: Liniger, H.P. & Critchley, W., 364 pp.

National/ Regional WOCAT publications/ Fact Sheets

- HIMCAT Newsletters – 8 newsletters published between 2007 and June 2011 with updates and descriptions of SLM practices

- NEPCAT Fact Sheets
    a. ICIMOD, 2008: Natural resources management approaches and technologies in Nepal. (30 technologies and approaches)

- BANCAT (2)
    a. Kisha, S. K., J.U. Shoaib and N.A. Khan. 2006: Selected Natural Resource Conservation Approaches and Technologies in the Chittagong Hill Tracts, Bangladesh, BANCAT, CHTDB. Khagrachari. 186 pp.
    b. Khisa, S.K. & Shoabib J.U. (eds.), 2009: Selected natural resources management approaches and technologies from different agro-ecological zones of Bangladesh. BANCAT, Khagrachari, Bangladesh (16 technologies and 7 approaches); Fact Sheets.

- China:
    a. PRC-GEF Partnership in Dryland Ecosystems & China-LADA, 2008: Best Practices for Land Degradation Control in Dryland Areas of China. China Forestry Publishing House, 2008. 216 pp.
    b. Second Best Practices report under preparation.

- Ethiopia:
    a. EthioCAT, 2010: Sustainable Land Management Technologies and Approaches in Ethiopia (Daniel Danano Dale). Ministry of Agriculture and Rural Development, Ethiopia. 2010. 318 pp. http://www.slmethiopia.info.et/

- Senegal:
    a. Ndiaye. D.S. & Touré A., 2010: Best Practices. Recueil d'experiences de gestion durable des terres au Sénegal. Centre de Suivi Ecologique, 2010. 98 pp. (19 technologies)

- South Africa:
    a. Lötter. L. et al, 2009: Sustainable Land Management Practices of South Africa, 211 pp. (20 technologies and 19 approaches)

- Tunisia:
    a. Taamallah, H. (ed.), 2010: Gestion Durable des Terres an Tunisie: bonnes pratiques agricole. 108 pp. (24 technologies and approaches)

- Mongolia:
    a. MONCAT – Book of 81 pp published in Mongolian
    b. 10 Technologies and 2 Approaches are available in English fact shets. www.moncat.mn

- Europe:
    a. Conservation Agriculture in Europe: an approach to sustainable crop production by protecting soil and water? SOWAP, 2006. 109 pp.
    b. http://www.sowap.org/comms/wocat.htm (UK, Belgium, Hungary and Czech Republic)

- Kenya and Morocco: Green Water Credits: http://www.greenwatercredits.net/

- Mali: Etude diagnostique, technique et siocioeconomique pour la gestion durable des Terres au Mali.(Lewis, C. et al. 20XX, 236 pp.)

- Caritas Tajikistan: Best Land Use Practices: Description of the pre-selected contest applications for best land use practices in Muminabad District (Stark, M., 2008, 10 pp, 8 technologies)

- Eritrea: Land Management in the Central Highlands of Eritrea – A Participatory Appraisal of Conservation Measures and Soils in Afdeyu and its Vicinity (Mats Gurtner et al., 2006), including 23 technologies in 2-page fact sheets.

LADA project

- National best practice case studies:
  - Cuba / Argentina (did not use WOCAT format)
  - China – see above
  - Tunisia – see above
  - Senegal – see above
  - South Africa – see above.
- Field Manual for Local Level Land Degradation Assessment in Drylands. LADA-L Part 1: Methodological Approach, Planning and Analysis. 76 pp
- Field Manual for Local Level Land Degradation Assessment in Drylands. LADA-L Part 2: Local Assessment: Tools and Methods for Fieldwork. 133 pp

DESIRE project

WOCAT in DESIRE:

- http://www.desire-his.eu/index.php?option=com_content&view=section&id=7&Itemid=606&lang=en
- http://www.desire-his.eu/index.php?option=com_content&view=article&id=198%3Adatabase-of-evaluated-strategies-from-all-study-sites&catid=22%3Aevaluating-strategies&Itemid=178&lang=en

Students' theses

20 MsC studies found on the WOCAT website:
http://www.wocat.net/en/knowledge-base/documentation-analysis/documentation-database.html?no_cache=1&tx_mmdamfilelist_pi1%5Bviewmode%5D=category%3A6&tx_mmdamfilelist_pi1%5Bpointer%5D=0&tx_mmdamfilelist_pi1%5Bmode%5D=category%3A11

Annex 3: Interview matrix

	National partners	Regional partners	International partners	SDC/CDE
Relevance of the WOCAT program to development priorities and needs and the global SLM agenda				
MDGs	How does WOCAT contribute to achieving the MDGs in your country?	How relevant is WOCAT for the MDG agenda in your region?	How relevant is WOCAT for the MDG agenda?	SDC: How relevant is WOCAT for your support to the MDG agenda?
UNCCD & GEF	Is WOCAT used to implement the UNCCD in your country? How? Are you aware of any GEF projects in your country that use WOCAT tools?	Do you see any synergies between the UNCCD and WOCAT? Are you aware of any GEF projects in your region that use WOCAT tools?	Do you see any synergies between the UNCCD and WOCAT? Are you aware of any GEF projects in your institution that use WOCAT tools?	Has SDC actively promoted the use of WOCAT in other projects linked to the UNCCD? Is CDE involved in any GEF projects that are using WOCAT tools and methods?
New challenges	What are the latest developments and challenges in SLM in your country?	What are the latest developments and challenges in SLM in your region?	What are the latest developments and challenges in SLM at global level?	SDC: To what extent is SLM a priority for you? CDE: What are the new challenges in SLM?
Overall WOCAT Performance				
Objective 1: Coordinate the network	Do you receive regular updates from WOCAT/CDE? How useful are the global WOCAT website and database? Which tools do you use? Have you benefitted from any WOCAT training – how was it?	Do you receive regular updates from WOCAT/ CDE? How useful are the global WOCAT website and database? Which tools do you use? Have you benefitted from any WOCAT training – how was it?	Do you receive regular updates from WOCAT/ CDE? How useful are the global WOCAT website and database? Which tools do you use?	
Objective 2: Increase – and capitalize on – knowledge about SWC and SLM	Are there any major land systems in your country that WOCAT need to cover in the future? Do you have access to WOCAT books and synthesis reports? How useful are they?	How is the coverage of WOCAT in your region? Are there any major gaps? Do you have access to WOCAT books and synthesis reports? How useful are they?	Are there any major gaps in WOCAT's global coverage that need to be addressed to make WOCAT more useful for your institution?	CDE: Are there any major gaps in WOCAT's global coverage that need to be addressed to make WOCAT more useful ?
Objective 3: Enhance – and	Has WOCAT been adopted as a standard for documenting and	Has WOCAT been adopted as a standard for documenting and	Has WOCAT been adopted as a standard for documenting and	

capitalize on – WOCAT tools and methods	disseminating BPs in your country? Why (not)? How could it be improved?	disseminating BPs in your institution? Why (not)? How could it be improved?	disseminating BPs in your institution? Why (not)? How could it be improved?	
Objective 4: Expand WOCAT network and knowledge sharing	Are WOCAT tools and methods mainstreamed in SLM programmes and projects in your country?	Are WOCAT tools and methods mainstreamed in SLM programmes and projects in your region (regional and national)?	Are WOCAT tools and methods mainstreamed in SLM programmes and projects in your institution?	SDC: Are WOCAT tools and methods mainstreamed in SLM programmes and projects in your institution?
Objective 5: Generate new knowledge	Do you know of any research conducted by WOCAT partners? How has it benefitted your work/institution?	Do you know of any research conducted by WOCAT partners? How has it benefitted your work/institution?	Do you know of any research conducted by WOCAT partners? How has it benefitted your work/institution?	CDE: How has your research contributed to improvement of WOCAT tools and methods, and identification of innovative approaches and emerging issues?
Adequacy and efficiency of institutional set-up and management of WOCAT				
Institutional set-up & management	What are you role and responsibilities vis-à-vis the global WOCAT Secretariat? Does your institution have an MOU with CDE? How could the institutional set-up and management be improved?	What are you role and responsibilities vis-à-vis the global WOCAT Secretariat and the national partners in your region? Does your institution have an MOU with CDE? How could the institutional set-up and management be improved?	What are you role and responsibilities vis-à-vis the global WOCAT Secretariat and national partners? Does your institution have an MOU with CDE? How could the institutional set-up and management be improved?	CDE: How could the institutional set-up and management be improved?
Funding strategy				
Funding strategy	How do you mobilise funding to WOCAT? Do you use any innovative financial mechanisms for scaling up of SLM (e.g. PES schemes, carbon and/or climate change adaptation funding, involvement of the private sector through PPPs)?	How do you mobilize funding to WOCAT at regional level?	How do you mobilize funding to WOCAT in your institution? Does WOCAT inform upscaling of SLM in investment programmes and projects?	CDE: How do you mobilize funding to WOCAT at global level? How could the strategy be improved?

Annex 4: Linkages to UNCCD 10-Year Plan and GEF-5

UNCCD 10-year plan:

Strategic objective	Expected impact	Indicators	Contribution by WOCAT
1: To improve the living conditions of affected populations	**1.1.** People living in areas affected by desertification/land degradation and drought to have an improved and more diversified livelihood base and to benefit from income generated from sustainable land management. **1.2.** Affected populations' socio-economic and environmental vulnerability to climate change, climate variability and drought is reduced.	**S-1:** Decrease in numbers of people negatively impacted by the processes of desertification/land degradation and drought. **S-2:** Increase in the proportion of households living above the poverty line in affected areas. **S-3:** Reduction in the proportion of the population below the minimum level of dietary energy consumption in affected areas.	SLM can reverse LD, improve land productivity and improve rural income. WOCAT provides a useful tool for upscaling as well as M&E of SLM
2: To improve the condition of affected ecosystems	**2.1.** Land productivity and other ecosystem goods and services in affected areas are enhanced in a sustainable manner contributing to improved livelihoods. **2.2.** The vulnerability of affected ecosystems to climate change, climate variability and drought is reduced.	**S-4**: Reduction in the total area affected by desertification/land degradation and drought. **S-5**: Increase in net primary productivity in affected areas.	WOCAT provides a useful tool for upscaling as well as M&E of SLM and in the case of mapping (QM) also of land degradation
3: To generate global benefits through effective implementation of the UNCCD	**3.1.** Sustainable land management and combating desertification/land degradation contribute to the conservation and sustainable use of biodiversity and the mitigation of climate change.	**S-6:** Increase in carbon stocks (soil and plant biomass) in affected areas. **S-7:** Areas of forest, agricultural and aquaculture ecosystems under sustainable management.	Upscaling of SLM best practices can improve the provision of a wide range of ecosystem services and contribute to soil retention, water regulation, carbon sequestration, restoration of important habitats for biodiversity, etc. WOCAT also provides tools for M&E of ecosystem services. The recent

			development of the climate change and the watershed module illustrate the responsive way of WOCAT to upcoming global issues…
4: To mobilize resources to support implementation of the Convention through building effective partnerships between national and international actors	**4.1.** Increased financial, technical and technological resources are made available to affected developing country Parties, and where appropriate Central and Eastern European countries, to implement the Convention. **4.2.** Enabling policy environments are improved for UNCCD implementation at all levels.	**S-8:** Increase in the level and diversity of available funding for combating desertification/land degradation and mitigating the effects of drought. **S-9:** Development policies and measures address desertification/land degradation and mitigation of the effects of drought.	The WOCAT network already has around 60 members with technical know-how in SLM and access to counterpart funding for upscaling of SLM. WOCAT together with LADA made special efforts supporting interventions of UNCCD, GEF, WB

GEF-5 Land Degradation Results Framework

Objective	Outcome	Output
LD-1: Agriculture and Rangeland Systems: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities	**1.1:** An enhanced enabling environment within the agricultural sector **1.2:** Improved agricultural management **1.3:** Sustained flow of services in agroecosystems **1.4:** Increased investments in SLM	**Output 1.1** National policies that guarantee smallholder and community tenure security **Output 1.2** Types of Innovative SLWM practices introduced at field level **Output 1.3** Suitable SLWM interventions to increase vegetative cover in agroecosystems **Output 1.4** Appropriate actions to diversify the financial resource base **Output 1.5** Information on SLM technologies and good practice guidelines disseminated
LD-2: Forest Landscapes: Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependant people	**2.1:** An enhanced enabling environment within the forest sector in dryland dominated countries **2.2:** Improved forest management in drylands **2.3**: Sustained flow of services in forest ecosystems in drylands **2.4:** Increased investments in SFM in dryland forests ecosystems	**2.1**National policies that guarantee smallholder and community tenure security **2.2** Types of innovative SFM practices introduced at field level **2.3** Suitable SFM interventions to increase/ maintain natural forest cover in dryland production landscapes **2.4** Appropriate actions to diversify the financial resource base

		2.5 Information on SFM technologies and good practice guidelines disseminated
LD-3: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape	**3.1:** Enhanced cross-sector enabling environment for integrated landscape management **3.2:** Integrated landscape management practices adopted by local communities **3.3:** Increased investments in integrated landscape management	**3.1** Integrated land management plans developed and implemented **3.2** INRM tools and methodologies developed and tested **3.3** Appropriate actions to diversify the financial resource base **3.4** Information on INRM technologies and good practice guidelines disseminated
LD-4: Adaptive Management and Learning: Increase capacity to apply adaptive management tools in SLM/ SFM/INRM by GEF and UNCCD Parties	**4.1:** Increased capacities of countries to fulfill obligations in accordance with the provisions provided in the UNCCD. **4.2:** Improved GEF portfolio monitoring using new and adapted tools and methodologies	**4.1** At least 50 countries implementing UNCCD priorities with improved monitoring of impacts at national level **4.1** All country investments in LD Objectives 1-3 are linked to UNCCD action programs and national reporting process **4.2** GEF-financed projects contribute to SLM/SFM/INRM knowledge base

Annex 5: WOCAT Results Framework 2008-2011

Expected results	Activities
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 SWC measures • enlarge the number of documented and evaluated 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 SWC 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
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 SWC categorization system to include newly integrated issues of the revised questionnaires • make available prototype of overview books (guidelines, templates) • develop tools to assess 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)
	• 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) SWC identification through stakeholder workshops, (b) SWC documentation and evaluation with questionnaires and (c) comparative analysis of SWC options with the help of a decision support tool • 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
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 (eg 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.
Research, training and education 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 (eg 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
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

Annex 6: Persons consulted

Countries	International institutions
Afghanistan: Mr Helaluddin Musadiq Mr Mohamed Khalid Azami (Helvetas) Mr Sanjeev Bhuchar (Helvetas)	**GIZ:** Mr Reihard Bodemeyer (CACILM)
Bangladesh: Mr Sudibya Kanti Khisa	**ICIMOD:** Mr Madhav Dhakal
Cambodia: Mr Sovuthy Pheav	**ICARDA:** Mr Jozef Turok
China: Mr Zhang Kebin	**IWMI:** Mr Oyture Anarbekov
Ethiopia/GIZ: Mr Richard Fulss	**SDC:** Mr Yves Guinand Mr Anton Hilber Mr Markus Bürli Mr Willi Graf
Kyrgyzstan: Ms Natalia Mityakova (CACILM) Mr Abdybek Asanaliev Ms Jamal Annaklycheva (CACILM)	**CDE:** Mr Hans Hurni Mr Peter Messerli
Malawi: Mr James Chimphamba	**FAO:** Ms Sally Bunning Mr Dominique Lantieri
Mongolia: Ms Mijiddorj Bayasgalan Mr Khaulenbek Akhmadi	**ISRIC:** Mr Godert Van Lynden
Morocco: Ms Nadia Machouri	**AsDB:** Mr Frank Radstake
Nepal: Ms Sabita Aryal	**World Bank:** Mr Steve Danyo
Philippines: Mr Samuel Contreras	**Free University of Amsterdam:** Mr Will Critchley
Senegal: Mr Ibrahima Deme Mr Dethie Soumare Ndiaye	**WOCAT Secretariat:** Mr Hanspeter Liniger Ms Rima Mekdaschi Studer Ms Isabelle Providoli Ms Gudrun Schwilch Mr Markus Giger
South Africa: Mr Lehman Lindique Ms Lianda Lotter	
Tajikistan: Mr Sa'dy Odinashoev Mr Davlatbek Davlatov Ms Julie Zäheringer	
Vietnam: Mr Duyen Nguyen	

Annex 7: Financial information 2008-2011

WOCAT Total and Co-Funding 2008-2011							
			Cost per Unit USD	**amount**	**Cost Total USD**		other donor
CDE	**Markus Giger**				**50,000**		
CDE 2011	**Consultant**		**50,000**	**1**	**50,000**		CDE
FAO-LADA	**National Mapping exercise Training and product**	**in 6 pilot countries**	**250,000**	**6**	**1,500,000**		LADA
	Documentation of best practices	**training courses**	**50,000**	**3**	**150,000**		
FAO	**on-line Approach database**	**consultancy Carin**	**20,000**	**1**	**20,000**		FAO
	FAO- SOLAW	**writing chapter**	**32,000**	**1**	**32,000**		
UNCCD	**Consultancy**	**Best practices**	**12,000**	**1**	**12,000**		UNCCD
	Brochure	**Benefits of SLM**	**50,000**	**1**	**50,000**		CDE Mandat
	DSD conference paper	**Peer reviewed**	**15,000**	**1**	**15,000**		Uni Bern/ Gudrun Diss
UNU-INWEH	**KM-Land**	**impact indicators**	**16,000**	**1**	**16,000**		Original contract was USD 50'000, cancelled after first payment
DESIRE	**Development of 3-step participative selection method**		**300,000**	**1**	**300,000**		EU research FP6
	Application of method incl. documentation of Ts and As	**at 14 study sites**	**20,000**	**14**	**280,000**		

	WOCAT mapping training and production	**at 16 study sites (waterhseds)**	**10,000**	**16**	**160,000**		
TerrAfrica	**production of guidelines**	**English**	**400,000**	**1**	**400,000**		WB
		French	**50,000**	**1**	**50,000**		
	reviewing experts	**13 groups and 47 case studies**	**500**	**60**	**30,000**		
	printing and distribution		**50,000**	**2**	**100,000**		
ISRIC	**Management group member**				**110,000**		30000x2, 25000x2
FAO	**Management group member**				**200,000**		
ICIMOD			**35,000**	**4**	**140,000**		
CACILM					**90,000**		
National Overview books*			**180,000**	**7**	**1,260,000**		* China, Mongolia, Bangladesh, Nepal, Senegal, Ethiopia, Tunesia,
Training workshops**	**QT and QA**		**50,000**	**7**	**350,000**		** 1 Senegal, 3 ICIMOD, 2 FAO (Haiti, Kagera), 1 China
Each dataset of technology and approach	**Compiled**		**1,500**	**40**	**60,000**		
	Quality assured		**2,000**	**100**	**200,000**		
Mapping	**workshop**		**50,000**	**2**	**100,000**		Senegal, Indonesia
Tool Development	**PhD Tajikistan**		**100,000**	**1**	**100,000**		

Mapping tool development	**PhD South Africa**		**50,000**	**1**	**50,000**		
Tool testing	**Partner countries**		**10,000**	**2**	**20,000**		
	Student work MSc		**20,000**	**9**	**180,000**		2 Indonesia, 1 Tunisia, 1 Kenya, 2 Argentina, 1 Senegal, 1 Iceland, 1 Ethiopia
	BSc		**10,000**	**4**	**40,000**		2 DESIRE, 2 TerrAfrica
Country Initiatives*	**In cash and in kind contributions**				**7,000,000**		* based on numbers from 2010
WWSM	**Preparation**						
	Workshop		**250,000**	**3**	**750,000**		
	Proceedings		**10,000**	**3**	**30,000**		
Total					**13,845,000**		
Budget of SDC 2008-2011					**1,968,000**		SDC annual budget of CHF 432,000 allocated to WOCAT core activities for the current phase 2008-2011. Exception: CHF 473,000 for 2008.
% of total budget contributed by SDC					**14**		Extra fund of CHF 200 000 approved for 2010/2011)