

# WOCAT Strategy (2008 – 2012)



## About this strategy

This statement of WOCAT strategy for the period 2008-2012 is the product of experience gathered in the World Overview of Conservation Approaches and Technologies (WOCAT) programme since its inauguration in 1992. It is a result of internal evaluation and consultation on the future of the programme, in which all partners were involved.

This document determines the direction of the WOCAT programme for the next five years, including:

- the vision and mission of the programme
- WOCAT's contribution to Sustainable Land Management (SLM)
- organisation, management and funding
- roles and responsibilities at two levels: global programme and national/regional initiatives
- fields of activity with, in the annex document, specific objectives, target groups, expected results, dissemination strategy and outcomes

This strategy statement on the one hand defines WOCAT's objectives at the global level, and on the other hand is intended to provide guidelines for coordinating the common efforts of national and regional WOCAT participants as well as potential donors and research partners.

As WOCAT operates at two levels, this strategy only allows for determining and steering its direction and monitoring outcomes at the global level. Because WOCAT is not centrally organized, it can only give suggestions and ideas to effect implementation at the national and regional level.

## WOCAT's vision and mission

**WOCAT's vision** is that land and livelihoods are improved through sharing and enhancing knowledge about sustainable land management.

**WOCAT's mission** is to support innovation and decision-making processes in sustainable land management, particularly in connection with soil and water conservation (SWC).

This is done by:

- connecting stakeholders,
- analysing and synthesising experiences and setting direction,
- enhancing capacity and knowledge,
- developing and applying standardized tools for documenting, monitoring, evaluating, sharing and using knowledge

**WOCAT's target group is SWC specialists:**

- at the field level, including agricultural advisors, project implementers, and land users,
- at the (sub-)national level, including planners, project designers, decision makers, and researchers,
- at the regional and global levels, including international programme planners, and donors.

### The History of WOCAT

Despite global concern about desertification and other forms of land degradation, and the many years of effort and investment made in prevention, cure or rehabilitation, the processes of land degradation persist. It has been estimated that 23 per cent of all usable land on earth has been affected by human-induced soil degradation to a degree sufficient to reduce its productivity (World Atlas of Desertification - UNEP 1997, GLASOD - Oldeman et al. 1990) [and these figures are most probably still valid.] Although both land users and soil and water conservation (SWC) specialists have developed (and continue to enlarge on) a wealth of know-how related to land management, improvement of soil fertility, and protection of soil, water and vegetation resources, implementation of this know-how still lags far behind. One reason for this is that much of this valuable knowledge is poorly documented and thus mostly not accessible to analysis, evaluation and dissemination. Knowledge related to SWC often remains only a local, individual and institutional resource, unavailable to others working in comparable areas and seeking to accomplish similar tasks.

It was in this context that WOCAT was founded, in 1992, as a global network of SWC specialists. An important consideration was the awareness that while there had been a heavy focus on documenting soil degradation in the past, the more complicated task of presenting SWC / sustainable land management practices had not yet been undertaken in a consistent and comprehensive way. WOCAT has developed standardized tools for documenting, monitoring and evaluating SWC know-how and for disseminating it around the globe as a means of facilitating the exchange of experience. Joint and participatory development of the programme on the part of all participating institutions has permitted continuous improvements and adaptations to users' needs.

WOCAT's methodology was originally designed to focus mainly on soil erosion and fertility decline in erosion-prone areas. Nevertheless, in the course of further developing and applying this methodology, other land degradation types were included. Today, WOCAT focuses on all aspects of sustainable land management: soil, water, vegetation and animals.

Based on the needs of WOCAT participants, formerly standardized tools were developed into a modular and flexible methodology. There has also been a shift from pure data collection to evaluation and monitoring, as well as to training and research.



## WOCAT's field of expertise: Sustainable Land Management

The main objective of Sustainable Land Management (SLM) is to promote human coexistence with nature with a long-term perspective so that the provisioning, regulating, cultural and supporting services of ecosystems are ensured. SLM is an essential prerequisite to sustainable development; progress should be made simultaneously at all levels. In terms of such concerns as food security, poverty alleviation, livelihood improvements, water conflicts and ecosystem services, SLM is an important local issue that is also a global concern.

Within SLM, WOCAT focuses mainly on efforts to prevent and reduce land degradation through Soil and Water Conservation (SWC) technologies and their implementation approaches. The use and sharing of information related to these efforts is a key asset of WOCAT. Training enhances capacities for better SWC implementation. This leads to improved knowledge management. The aim of WOCAT, as a network, is to increase the awareness and motivation of planners and decision makers as well as land users and agricultural advisors. WOCAT hopes to reduce investment failures by providing knowledge support concerning the advantages and disadvantages of available alternatives, based on a wide range of experience in the field.

“The success or failure in resource management by human societies is controlled by three components of human-environment interactions: information on the state of the environment, motivation to manage sustainably the environment, and capacity to implement a sustainable management of the environment.” (*Gordon 2001 in GEC Editorial by Eric F. Lambin in Global Environment Change 15 (2005): pp 177-180*)

The extent and effectiveness of SLM / SWC today, be it within a given region or even less on a worldwide scale, is not known. There is, therefore, a pressing need to assess these issues, not least in view of the heavy investments being made in this sector. By providing the appropriate tools and networks required for conducting such an assessment, WOCAT can play an important role in this domain.

### Definition of terms

**Sustainable Land Management (SLM)** is defined as 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 the maintenance of their environmental functions.

**Soil and Water Conservation (SWC)**, within the context of WOCAT, is defined as activities at the local level that maintain or enhance the productive capacity of the land in areas affected by or prone to degradation. SWC includes prevention or reduction of soil erosion, compaction and salinity; conservation or drainage of soil water; maintenance or improvement of soil fertility, etc.

**SWC technologies** are agronomic, vegetative, structural and management measures that prevent, mitigate or rehabilitate land degradation and enhance productivity in the field.

**SWC approaches** are ways and means of support that help to introduce, implement, adapt and apply SWC technologies on the ground.



**front page:** Irrigation of traditional paddy rice terraces in Nepal. (Hanspeter Liniger)

**left:** Rice terraces on valley bottom and grazing land on slopes in Orissa, India. (Hanspeter Liniger)

**centre:** Familiarization with WOCAT tools during a training workshop in Bangladesh, with the support of a WOCAT trainer from the Philippines. (Godert van Lynden)

**right:** Improved management can lead to better conservation and increased output, for example by turning open access grazing into cut-and-carry fodder production systems (Iran). (William Critchley)

## WOCAT's achievements and impacts

WOCAT tools provide a unique, widely accepted and standardised method of application. They include three comprehensive questionnaires and a database system that cover all relevant aspects of SWC technologies and approaches (as case studies), as well as an assessment of area coverage of degradation and conservation. WOCAT's database currently comprises datasets on 380 technologies and 240 approaches from over 40 countries, of which a subset of 160 technologies and 90 approaches are quality assured. Many of these have not been reported comprehensively elsewhere. A selection of 42 technologies and 28 approaches are documented in a global overview book together with an analysis, conclusions and policy points. An interactive and scale-independent mapping methodology has been developed and used in pilot countries. The WOCAT knowledge base is in the public domain.

Furthermore, WOCAT is a very active and successful network of soil and water conservation specialists. The annual workshops are usually attended by 30 to 50 participants from around 20 to 25 countries. Over 80 institutions worldwide have thus far been involved in WOCAT. The methodology has been jointly developed with these participants and institutions.

At the national and regional level, WOCAT is often included in ongoing projects, moves mainstream in local programmes, and becomes part of a national strategy. Its tools are used to document and evaluate local conservation successes and help to share them among others. WOCAT enables practitioners to make informed choices rather than following set prescriptions of 'what to do'. The successful use of WOCAT in SWC implementation at the field level has, for example, been reported from Ethiopia, the Philippines, and Central Asian countries. It is likely that others have also used WOCAT's knowledge base and its methodology to implement SWC technologies and approaches, but have not yet reported it to the network. Likewise, many technologies and approaches are stored in local WOCAT databases and in local languages.

Documentation of scattered knowledge is demanding for the collector as well as for the resource person. But an important effect of this process is self-evaluation and self-teaching of all persons involved. This is often reported as an enriching and stimulating process. On the other hand, data quality is a concern. This requires a thorough and interactive review process that involves the joint efforts of land users, technical specialists and researchers. Research is also conducted to better understand the ecological, social and economic causes of degradation, to analyse what works and why, and how to modify and adapt particular technologies and approaches to locally specific circumstances and opportunities.

As a spin-off from its original aim, WOCAT has been used in training and education at various levels (from land user level to university). Over 500 SWC specialists from 40 countries have learned about the WOCAT methodology in WOCAT training workshops so far. Training and capacity building can today be counted among the major aims of WOCAT.

There are many more achievements than listed here, but they are found at the local level. Overall, WOCAT is a process: it is demand-driven, on-going and continuously changing.

## WOCAT – the four dimensions of knowledge

"Knowledge" - a crucial aspect of WOCAT – is treated in multiple dimensions:

1. Knowledge related to **SWC / SLM**: innovative methods and an extensive network of both land users and soil and water conservation specialists have enabled WOCAT to accumulate a wide base of know-how;
2. Knowledge related to documentation and evaluation **tools and methods**: through the process of refining its methodology and tools, WOCAT has developed substantial experience and know-how on documentation and evaluation procedures;
3. Knowledge related to **information sharing and networking**: the establishment of an intellectual environment conducive to sharing and networking simplifies the dissemi-



nation of acquired knowledge to others working in the same areas and seeking to accomplish similar tasks;

4. Knowledge related to **research, training and education**: Due to requests to use the WOCAT methods and tools, WOCAT has conducted a large number of training workshops throughout the world. Due to emerging knowledge gaps, WOCAT has become more and more involved in research. These experiences have enabled WOCAT to gather a wealth of knowledge related to research, training and education methods.

The fields of activity to be presented under the objectives below will reflect these four areas of knowledge.

## Organisation and funding of WOCAT

### WOCAT at the global level

Global management is the executive body at the global level. It is responsible for the overall coordination and development of WOCAT and currently consists of the Centre for Development and Environment (CDE), World Soil Information (ISRIC), and the Food and Agriculture Organisation of the UN (FAO).

**Global management** is assisted by a **secretariat** (currently at CDE), which

- acts on requests from global management;
- responds to correspondence and requests;
- distributes materials and tools;
- hosts the global database;
- assists in the organization of global workshops and steering meetings.

**Task forces** are set up to

- further develop methodology and tools,
- deal with special methodological, technical or management issues,
- support national and regional institutions.

Task forces are set up during the **annual international workshop and steering meeting** of volunteer members of major participating institutions.

The **steering meeting** consists of the global management institutions and at least 3 additional participating institutions, preferably from various continents. It constitutes itself during the annual international workshop from among those institutions/persons present.

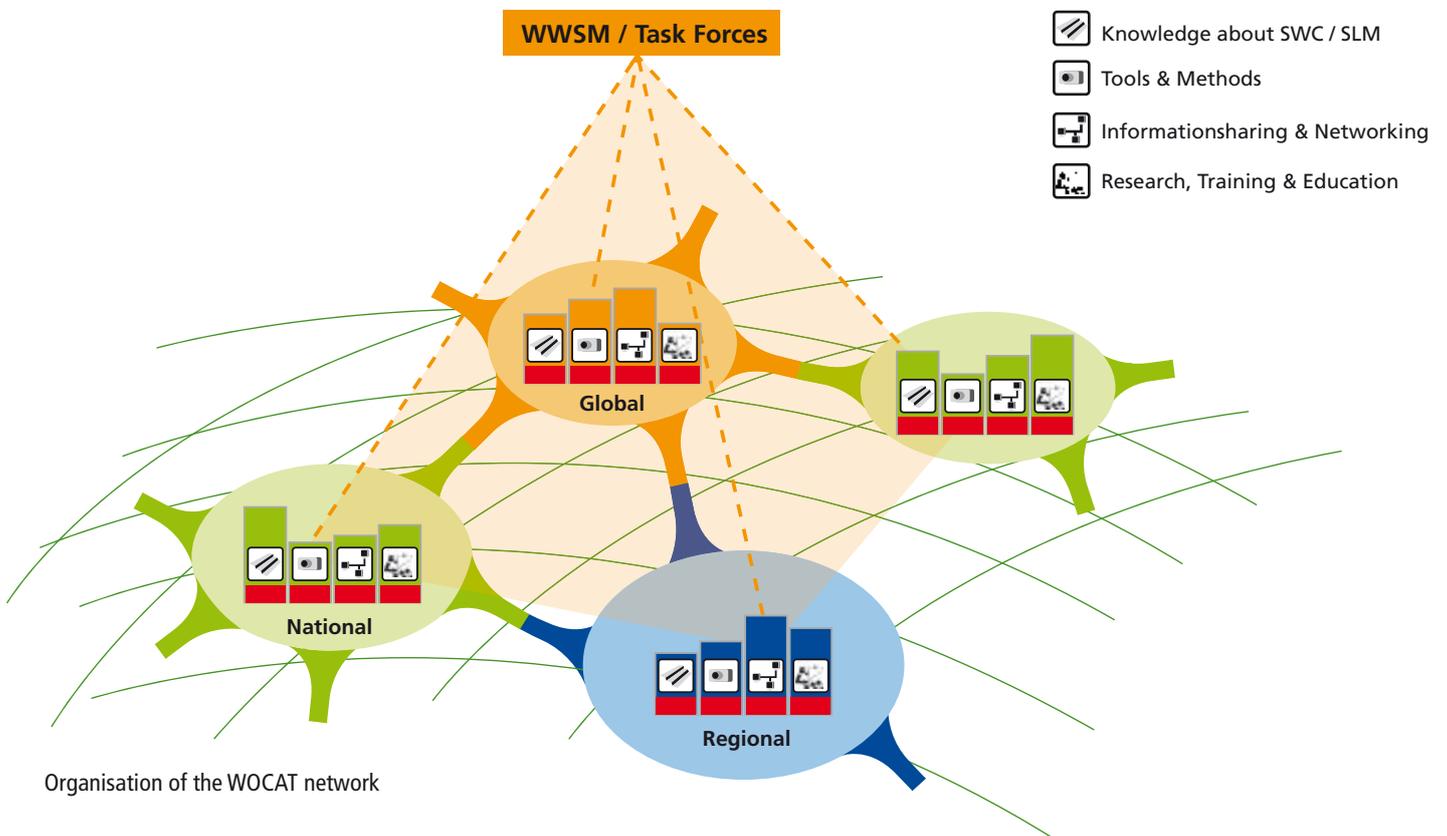
### WOCAT at the national and regional level

The formation of national and regional teams is based upon the interests of the **participating institutions**. This may be a single institution in one area of a country, a group of institutions in a country, a collaborative grouping of countries and /or institutions in a region or, again, a single institution with a regional mandate. All are considered participating institutions. Participation in WOCAT at the country or regional level is referred to as a **national / regional initiative**; in some cases, participants might give themselves individualized names (such as ETHIOCAT in Ethiopia or BANCAT in Bangladesh). These operate in an autonomous, decentralized and self-funded way. Training workshops, for example, are organized and funded by the requesting institution; only resource person(s) can be paid by the global management. Memoranda of Understanding (MoU) can be developed between the global and national /regional levels in order to help clarify their respective roles. WOCAT at the national level may address local governments' strategies for complying with international protocols.



**left:** A women's group preparing a field for planting in South West Uganda. Gender sensitivity is essential in understanding and documenting good land management practices. (William Critchley)  
**centre:** Vineyards in Switzerland that are planted up and down the slope to facilitate access with machines: despite this the soil is well protected due to permanent green cover between the vines. (Hanspeter Liniger)

**right:** Knowledge related to SWC often remains only a local or individual resource, unavailable to others working in comparable areas and seeking to accomplish similar tasks (India). (Gudrun Schwilch)



Organisation of the WOCAT network

## Funding

Current annual funding for global WOCAT is at the level of approximately Euro 300,000. Taking into account national and regional contributions (in cash and kind), a total of nearly Euro 700,000 is invested in WOCAT annually. WOCAT at the global level does not provide funding for the national and regional levels.

The current main donor is the Swiss Agency for Development and Cooperation (SDC) with a contribution of about Euro 270,000 per year. Other donors (previous and/or ongoing) include: FAO, UNEP, DANIDA, and the Syngenta Foundation. This funding serves mainly to support basic enabling activities; some funding was, however, also targeted to specific projects (eg the book 'where the land is greener') or contained a set amount devoted to national activities (eg, a split of 50% core and 50% national in the case of DANIDA).

The minimum amount needed for funding the basic enabling activities at the global level (see objective 1 below) is currently about Euro 300,000. This is needed to guarantee WOCAT's continued functioning at the most essential level (knowledge sharing network and maintenance of global database). Described in the following objectives (and their activities in the annex) are options and opportunities for donors to choose and set directions for specific outputs they would like to see generated.

As activities exceeding WOCAT's basic level as well as increased requests from the national and regional levels will require a corresponding expansion of WOCAT's basic enabling activities, parts of this additional funding will have to be devoted to the global management level.



## Basic enabling activities at the global level

**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 of WOCAT.

The aim of objective 1 is to keep the WOCAT programme and network running at a basic level. This is the level which allows the users to communicate with global WOCAT, to share knowledge among the network partners, and to get backstopping and support for basic training. Additional funding is required for the specific fields of activity such as methodology development, production of outputs, or training for trainers.

Global management has the following responsibilities:

- Technical: coordination of development and maintenance of tools and other technical products and outputs
- Topical knowledge: maintain and strengthen the ability of the global management team to keep abreast of field developments and scholarship in the field of SLM
- Organizational: linkage to regional/national initiatives, organization of annual international workshops and steering meetings
- Coordination: promotion of WOCAT, publications, representation at international programmes and events, coordinate task forces
- Funding (acquisition and coordination): management of core funding proposals
- Monitoring of the WOCAT programme: development and carrying out of monitoring procedures to document outcome, impact and evidence on demand
- Training and Education: provide support and backstopping for regional/national training courses

## Fields of activity at global and national/regional level

### Knowledge about SWC and SLM

**Objective 2: Increase – and capitalize on – knowledge about SWC and SLM**

The WOCAT knowledge base is enhanced to cover major regions and land use 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.

WOCAT will expand on practices in use around the world that have not yet been documented and evaluated. The aim is to cover all major (geographical and agro-climatic) regions and all major land use systems worldwide with at least a few examples of each (cases studies as well as maps). This will enlarge the global database and SLM knowledge. Combined with the WOCAT tools (see below), decision making for SLM at local level (through the choice of suitable technologies and approaches) and at the regional / national level (through mapping of degradation and conservation) will be enhanced.

WOCAT promotes and supports the establishment and operation of national peer review panels to ensure and enhance the quality of the information passed on. In addition, a global panel for the peer review of technologies and approaches provided will be established.



**left:** A village discussion in Burkina Faso as part of a SWC approach involving different stakeholders. While participatory, there are important questions to consider such as: who has a say? and who is marginalised? (Hanspeter Liniger)

**centre:** Preparing terrace risers on the Loess Plateau in China. Heavy labour inputs and financial investments are sometimes needed to maintain terraces and their productivity. (Hanspeter Liniger)

**right:** The annual WOCAT Workshop and Steering Meeting (WWSM), here in South Africa in October 2006, allows to exchange experiences and further develop the WOCAT programme and methodology. (Mats Gurtner)

WOCAT has already gained considerable knowledge in SWC/SLM, on which it is possible to capitalize. This large body of information will be used to help address such global issues as poverty alleviation, carbon sequestration, water security, desertification remediation, biodiversity conservation, and sustainable natural resource management.

Output related to these issues will contribute to public awareness of the importance of SLM and to an overview of national/regional SLM activities and achievements. This will help to attract funding for SLM.

## Tools and methods

### **Objective 3: Enhance – and capitalize on – WOCAT tools and methods**

The WOCAT tools are recognized as a world standard for documentation, evaluation and dissemination of SWC/SLM. At the global level they are improved and updated. At national/regional level, they are tailored to different stakeholder needs.

In order to offer services to national and international initiatives, WOCAT documentation and evaluation methods and data management tools constantly need to be improved and updated. The modular system is designed in a flexible way to allow improvements according to changing client needs over time. Better procedures for quality assurance will be developed, starting from the collection of data at field level with the land user, quality control at national and regional level, data input in the database, panel review, publication and summary, and the use of WOCAT data. WOCAT will further enhance data analysis and evaluation tools to validate and evaluate SLM. Such decision support tools give advisors, politicians, donors and others an important advantage in decision-making and planning in SLM.

WOCAT has gained considerable experience and expertise in tool development, documentation and evaluation procedures, research, training and education, global networking and knowledge sharing, which can be capitalised on for the creation of attractive public goods. WOCAT aims to become a recognized world standard for documentation, evaluation, monitoring, and dissemination of SWC in global (e.g. UNCCD, LADA) and national programmes (such as national CCD, government and NGO projects) as well as in local projects. Certification can further enhance its recognition and provide evidence of its impact in SLM.

Upon request, the above-listed experiences can be adapted for use in modules and documents tailored to the specific needs of various stakeholders and target groups. All these products can be marketed at the local or national level. They should be designed in a flexible way to allow adaptation and improvement over time according to the changing needs of users.

## Information sharing and networking

### **Objective 4: 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.



The WOCAT network, methods and tools are moving mainstream in a number of programmes and institutions at the global (eg UN-Organisations), regional (eg CGIAR centres) and national (eg ministries, NGO's) levels. This is achieved through active promotion and participation at all levels.

WOCAT mainly works through its partners all over the world. It is the participating institutions that run WOCAT at the regional and national level. They are the ones who use the WOCAT tools and methods, provide and use the WOCAT knowledge, and learn from each other through the network.

The WOCAT network for the sharing of knowledge is enhanced through improved platforms of communication, mailing lists, newsletters, backstopping, facilitation of knowledge exchange, participation at conferences and seminars, etc. WOCAT also strengthens networking at national and regional levels and establishes and maintains links to other networks.

## Research, training and education

### **Objective 5: Generate new knowledge through research and share and enhance knowledge through training and education**

WOCAT builds strong research coalitions to compile SWC/SLM knowledge and to identify and fill knowledge gaps. WOCAT supports the sharing and enhancement of knowledge about SLM through training and education.

WOCAT is facilitating research in two ways. On the one hand, WOCAT tools and methods are used in research to document and evaluate sustainable land use and to compile scattered knowledge. Secondly, WOCAT documentation exposes knowledge gaps, which lead to new research questions. WOCAT aims to build up transdisciplinary research capacity to identify key issues for research and make the findings available for use by the different target groups. WOCAT also provides a platform to link SWC implementation (land users and extension) with research.

Training is important for enhancing capacity at the subnational, national and regional levels as well as for the dissemination of SLM. Training and capacity enhancement are needed, among other things, to:

- include WOCAT in the countries/region (training of national and regional institutions through global WOCAT, including training for trainers)
- document, evaluate, monitor, disseminate and use SWC knowledge at the regional, national, project and expert levels (through national/regional WOCAT)
- identify, address and fill knowledge gaps (training and education at the university level)
- review technologies and approaches, including data quality management and certification (training for reviewers)
- use WOCAT tools for decision making (planners, specialists)
- increase knowledge about SLM / SWC (agricultural advisors, project personnel, students)

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**left:** Grazing land has been neglected and viable solutions, especially for drylands, need to be further identified and documented: here is an example from Central Asia. Land use rights is a major issue. (Hanspeter Liniger)

**centre:** An integrated agroforestry system where several SWC measures have been combined to rehabilitate formerly degraded land and bring it back into production. (Mats Gurtner)

**right:** SWC research should seek to incorporate land users, scientist from different disciplines and decision-makers. A woman mulching a vegetable bed and exploring organic farming in the Solomon Islands. (William Critchley)