# WOCAT

World Overview of Conservation Approaches and Technologies

17TH SYMPOSIUM AND NETWORK MEETING

FELDAFING, GERMANY
8 JUNE - 11 JUNE 2015

PROCEEDINGS

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

u^b
UNIVERSITÄT BERN
CDE
CENTRE FOR DEVELOI AND ENVIRONMENT

Food and Agriculture Organization of the United Nations

ISRIC World Soil Information

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

CIAT International Center for Tropical Agriculture
Since 1967 / Science to cultivate change

ICARDA Science for Better Livelihoods in Dry Areas

ICIMOD

UNIVERSITY OF KWAZULU-NATAL

LIST OF ABBREVIATIONS

ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
ADB	Asian Development Bank, Manila, Philippines
AJZ	AJZ: Association des Jeunes de Zammour, Médenine, Tunisia
ARC-ISCW	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
BSWM	Bureau of Soils and Water Management, Department of Agriculture, Quezon City, Philippines
CACILM	Central Asian Countries Initiative for Land Management, Bishkek, Kyrgyzstan
CAMP Alatoo	Central Asia Mountain Programme, Bishkek, Kyrgyzstan
CDE	Centre for Development and Environment, University of Bern, Switzerland
CGIAR	Consultative Group on International Agricultural Research, Washington, USA
COST	European Cooperation in Science and Technology
DB	Database
DoA	Department of Agriculture
DRR	Disaster Risk Reduction
DSS/ DST	Decision Support System/ Decision Support Tool
FAO	Food and Agriculture Organisation of the United Nations, Rome, Italy
FAO-LADA	Land Degradation Assessment in Drylands, Rome, Italy
GEF	Global Environmental Facility
GO	Government Organisation
GIZ	Gesellschaft für Internationale Zusammenarbeit,
HIMCAT	Himalayan Conservation Approaches and Technologies
ICARDA	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
ICIMOD	International Centre for Integrated Mountain Development, Kathmandu, Nepal
IM	Institutional Member
INGO	International Non-Governmental Organisation
ISCO	International Soil Conservation Organization
ISRIC	World Soil Information, Wageningen, The Netherlands
KM	Knowledge Management
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
LD	Land degradation
LU(S)	Land Use (System)
MoA-Ethiopia	Ministry of Agriculture, Addis Abeba, Ethiopia
MoU	Memorandum of Understanding
NAP	National Action Plan
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
PES	Payments for Ecosystem Services
QA	Questionnaire on Approaches
QM	Questionnaire for Mapping Land Degradation and Sustainable Land Management
QT	Questionnaire on Technologies
SDC	Swiss Agency for Development and Cooperation, Bern, Switzerland
SLM	Sustainable Land Management
SLWM	Sustainable Land and Water Management
SSMP	Sustainable Soil Management Programme, Kathmandu, Nepal
SWC	Soil and Water Conservation
TerrAfrica	TerrAfrica – Regional Sustainable Land Management
UNCCD	United Nations Convention to Combat Desertification, Bonn, Germany
UNEP	United Nations Environment Programme, Nairobi, Kenya
WLRC	Water and Land Resource Centre
WOCATeer	WOCAT collaborator
WOTR	Watershed Organization Trust

SHORT CONTENT

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FOREWORD & INTRODUCTION

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

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

Since 1996, WOCAT has organized International Workshops and Steering Committee Meetings (WWSM) with the goals (a) to bring together the main collaborating and funding institutions and stakeholders, (b) to assess the progress and to exchange experiences, (c) to further develop the programme, (d) to plan for the future and (e) to enhance WOCAT in the host country/region. These Workshops were first held annually and since 2009 biannually. The WOCAT Symposium and the 17th Network Meeting (formerly known as Share Fair and WWSM respectively) took place from June 8-11, 2015 in Feldafing and has been hosted by GIZ.

2014 was an important year for WOCAT, in regards to finalising a new institutional setup, with a much stronger and wider partnership for building a global knowledge management and decision support platform with Consortium Partners. The nine Consortium Partners, namely CDE (University of Bern), FAO, GIZ, ISRIC, ICARDA, ICIMOD, CGIAR, SDC and the University of Kwazulu-Natal (South Africa), have signed the Framework Agreement of WOCAT International. The June 2015 WOCAT Network Meeting has been the first network meeting since the new institutional set-up has been finalized. In addition, the UNCCD recognition of WOCAT as the primary recommended database for SLM best practices reporting was a milestone in WOCAT's history, creating greater presence for WOCAT in the international arena.

The WOCAT Symposium and the 17th WOCAT Network Meeting has been held under the motto "WOCAT goes new – strong platforms and partnerships for spreading SLM" and has been divided in three parts. The event opened on June 8 with the WOCAT Symposium and included a launch event of the new WOCAT Network. It was followed by a one-day field trip in the surroundings of Feldafing and finished with the two-day WOCAT Network Meeting.

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions. This document is not addressed to a broad public and therefore has not been prepared for such a purpose. It is a working document for the further development of WOCAT. Thus some of the issues are presented as reported by the rapporteurs.

WOCAT would like to thank all participants and partner institutions for their contributions and considerable commitment before, during and after the workshop.

SHORT SUMMARY

The 17th WOCAT Symposium and Network Meeting has been held in Feldafing (Germany) on June 8-11 2015. The four days have been structured into three distinctive parts: 17th WOCAT Symposium, Field day and Network Meeting.

The 17th WOCAT Symposium has been held under the theme "WOCAT goes new – Strong platforms and partnerships for spreading SLM". After a welcome speech held by Bruno Schuler (GIZ), and welcoming words by Doris Thurau (GIZ State Office Bavaria), Hanspeter Liniger (WOCAT Director) introduced the Symposium participants to WOCAT's vision for the future of the network. The speech was followed by presentations organized under three broad topics: Topic 1: The importance of SLM platforms and partnerships for the spread of SLM; Topic 2: Successful mainstreaming and spread of SLM using WOCAT and related tools; Topic 3: On-site and off-site benefits/impacts of SLM for knowledge-based decision support. The remaining time of the day was dedicated to various poster market presentations and sharing of informational material. The Symposium has been closed by the launch event of the new WOCAT Network structure.

During the second day a field visit has been organized by GIZ, the hosts of the four day meeting. The field day started in the surroundings of Landsberg city where the participants have been introduced to the morning topics (rural development with regard to villages and country side; initiative, participatory decision process and measures taken in and outside the village). After Landsberg, the field day continued in Puergen, where the participants have been introduced to the village renewal project, visited the surroundings of the village and obtained an overview of the flood preventions measures, greening and infrastructure. After lunch, the afternoon topics (agriculture and soil conservation: process of data collection, scientific evaluation and guidance of farmers) have been introduced at the Agricultural Education Centre in Landsberg. Subsequently the participants visited the farm "Erdweg" in Welshofen and have been introduced to the farm and machinery used for soil cultivation, potential and real soil erosion in fields and accompanying control measures as well as the role of rural self-help groups like the machinery association. The day has been closed with a dinner in Munich.

The third part was formed by the WOCAT Network Meeting, which has been held over two days (10th to 11th June). During the network meeting a variety of key topics have been addressed. After a short synthesis of the 17th WOCAT Symposium and the field day, recent advances in user friendly IT WOCAT applications and tools (WOCAT core, WOCAT audio-visuals and WOCAT tablet app), the new decision support framework for mainstreaming and scaling up of SLM (FAO-WOCAT-GEF), the ELD initiative and the new WOCAT International Strategy have been presented and discussed. Progress reporting at regional, national and international level has been made. At the end of the Network Meeting, key themes for the future of WOCAT have been elaborated, discussed and presented and future planning was outlined. After a short discussion on organizational matters the Network Meeting has been closed.

WORKSHOP PROGRAMME

PART 1 - WOCAT SYMPOSIUM: WOCAT GOES NEW – STRONG PLATFORMS AND PARTNERSHIPS FOR SPREADING SLM

Monday 8 June 2015

07:30 – 08:30	*Breakfast*
08:00 – 08:30	Registration
08:30 – 08:45	**Welcome and opening by organisers** Bruno Schuler (GIZ, WOCAT focal point, Germany)
08:45 – 09:00	**Opening address** Doris Thurau (GIZ, Director of Regional Centres South, Germany)
09:00 – 09:30	**WOCAT goes new – vision for the future** Hanspeter Liniger (WOCAT Director, Switzerland)
	Topic 1: The importance of SLM platforms and partnerships for the spread of SLM *Chair: Walter Engelberg, GIZ, Germany* *Rapporteur: Isabelle Providoli, WOCAT Secretariat, Switzerland*
09:30 – 09:35	Introduction to the topic by chair
09:35 – 09:50	Initiative "One World – No Hunger" (Christina Ketter, GIZ, Germany)
09:50 – 10:05	The BRICKS Project: Building Resilience through Innovation, Communication and Knowledge Services (Félix Compaore, CILSS, Burkina Faso)
10:05 – 10:35	*Group picture followed by coffee break*
10:35 – 10:50	CACILM Phase II: Using WOCAT Tools in Central Asia (Sanobar Khudaybergenova, ICARDA, Uzbekistan)
10:50 – 11:05	The UNCCD Scientific Knowledge Brokering Portal (SKBP) (Victor Castillo, UNCCD, Germany)
11:05 – 11:30	Discussion and conclusion of key issues of topic 1 by chair
	Topic 2: Successful mainstreaming and spread of SLM using WOCAT and related tools *Chair: Dirk Pretorius, SMC Synergy, South Africa* *Rapporteur: Nina Lauterburg, WOCAT Secretariat, Switzerland*
11:30 – 11:35	Introduction to the topic by chair
11:35 – 11:50	Environmental Land Management and Rural Livelihoods (ELMARL) Project in Tajikistan (Kamolidin Abdulloev, Tajik Academy of Agricultural Sciences, Tajikistan)
11:50 – 12:05	Participatory Education: strengthening the dialogue between students and farmers (Helena Cotler, Facultad de Ciencas UNAM, Mexico)
12:05 – 12:20	Using WOCAT and Related Tools to Enhance Mainstreaming of Sustainable Land Management: Experiences from Kagera TAMP (Charles Malingu, Uganda)
12:20 – 12:35	Experiences from Latin America (Meliza González, FAO RLC, Chile)
12:35 – 13:00	Discussion and conclusion of key issues of topic 2 by chair
13:00 – 14:30	*Lunch break*
	Topic 3: On-site and off-site benefits/impacts of SLM for knowledge-based decision support *Chair: Samuel Contreras, Bureau of Soils and Water Management, Philippines*

	Rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat, Switzerland
14:30 – 14:35	Introduction to the topic by chair
14:35 – 14:50	Introduction to Integrated Strategy for Sustainable Land Management in Western PRC (Zengming Song, PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, China)
14:50 – 15:05	Achieving multiple benefits of SLM practices and innovations in the Learning Watersheds in Ethiopia (Gizaw Desta, Water and Land Resource Centre (WLRC), Ethiopia)
15:20 – 15:45	Discussion and conclusion of key issues of topic 3 by chair
15:45 – 16:15	*Coffee break*
16:15 – 17:15	**Poster market and sharing of information material** Synthesis by selected participants
17:15 – 17:45	**Synthesis and closing** Hanspeter Liniger (WOCAT Director), Walter Engelberg (GIZ)
17:45 – 18:00	*Short break*
18:00 – 18:30	**Launch of new WOCAT Network**
18:30	*Welcome drinks followed by dinner*

PART 2 - FIELD DAY: ON AND OFF-SITE BENEFITS & IMPACTS OF SUCCESSFUL PROCESSES AND MEASURES IN UPPER BAVARIA - ORGANIZED BY GIZ

Tuesday, 9 June 2015

07:15 – 08:00	*Breakfast*
08:00 – 09:00	Transfer to excursion site in the surroundings of Landsberg city by bus Introduction to morning topics are given during the trip - Rural development with regard to villages and country side; initiative, participatory decision process and measures taken in and outside the village - In cooperation with the office for rural development in Upper Bavaria, Mr. Klaus Fredrich
09:00 – 09:40	Village of Puergen - Welcome by deputy mayor, Mr. Gerhard Straus, - Introduction by initiator of development process, Mr. Ekkehard Linke - Explanations on the village renewal given by Mr. Klaus Fredrich, Mr. Joachim Schmidt and Ms. Roswitha Karger and a short walk in the centre of the village
09:40 – 10:00	*- "Citizens' Home" and restaurant (Buergerhaus):* *- Discussion of development* *- Coffee and tea*
10:00 – 11:30	Village of Puergen - Visit of the surroundings of the village by bus and short walks: Flood prevention measures, greening and infrastructure like roads
11:30 – 13:00	*Transfer to Landsberg city at river Lech and common lunch with resource persons in a restaurant at the city centre*
13:00 – 14:15	- Transfer to the Agricultural Education Centre in Landsberg - Introduction to afternoon topics: - Agriculture and soil conservation: process of data collection, scientific evaluation and guidance of farmers - In cooperation with the office for food, agriculture and forests, Mr. Max Stadler - Coffee and tea

14:15 – 15:15	Transfer to excursion site by bus
15:15 – 17:00	Farm in Welshofen (Erdweg) - Welcome by farmer, Mr. Peter Eisenhofer - Farm and machinery for soil cultivation - Visit of fields by short walks and explanations given by Mr. Max Stadler and Josef Friedl - Potential and real soil erosion in fields and control measures taken - The role of rural self-help organisations like the machinery association, explained by Mr. Michael Reischl
17:00 – 17:45	Transfer to the city center of Munich
18:00 – 19:30	*Dinner in the restaurant of the city hall of Munich*
19:30 – 20:30	Transfer back to the venue in Feldafing

PART 3 - 17TH WOCAT NETWORK MEETING (17TH WNM)

Wednesday 10 June 2015

Time	Topic
07:30 – 08:30	*Breakfast*
	Chair morning session: Dieter Nill, GIZ, Germany *Rapporteur morning session: Nina Lauterburg, WOCAT Secretariat, Switzerland*
08:30 – 08:45	**Welcome and introduction to WOCAT Network Meeting** Participants expectations, approval of agenda Hanspeter Liniger (WOCAT Director, Switzerland) and Bruno Schuler (GIZ, WOCAT focal point, Germany)
08:45 – 09:15	**Short synthesis of WOCAT Symposium and reflection of field day** Hanspeter Liniger**,** WOCAT Director, Switzerland
09:15 – 10:00	**Elaborate recent advances in the development of new user friendly IT WOCAT applications and innovative WOCAT tools** WOCAT IT vision and concept Kurt Gerber, CDE, Switzerland
10:00 – 10:30	*Coffee break*
10:30 – 11:30	**Elaborate recent advances in the development of new user friendly IT WOCAT applications and innovative WOCAT tools (cont.)** – WOCAT core and presentation of UNCCD SLM Best Practices mandate (Hanspeter Liniger, WOCAT Director, Switzerland) – Audio-visuals and tablet application (Nina Lauterburg, WOCAT Secretariat, Switzerland)
11:30 – 12:00	Present and discuss **decision support framework for mainstreaming and scaling up SLM (FAO-WOCAT-GEF project)** Stefan Schlingloff (FAO, Italy) and Hanspeter Liniger (WOCAT Director, Switzerland)
12:00 – 12:30	**ELD Initiative** Walter Engelberg, GIZ, Germany
12:30 – 14:00	*Lunch break*
	Chair afternoon session: Meliza González, FAO RLC, Chile *Rapporteur afternoon session: Rima Mekdaschi Studer, WOCAT Secretariat, Switzerland*
14:00 – 14:30	Present **WOCAT International Strategy 2015 – 2018** Isabelle Providoli, WOCAT Secretariat, Switzerland
14:30 – 18:00, *Including coffee break*	**Progress report at regional and national level** (Use standardised poster template)

	Time for networking and exchange / free time
18:30 – 19:30	*Dinner*

Thursday 11 June 2015

Time	Topic
07:30 – 08:30	*Breakfast*
	Chair morning session: Daniel Danano Dale, FAO RNE, Egypt *Rapporteur morning session: Isabelle Providoli, WOCAT Secretariat, Switzerland*
08:30 – 09:40	**Progress report at global level** (Use standardised power point template) Rima Mekdaschi Studer (WOCAT Secretariat, Switzerland), and Consortium Partners
09:40 – 10:00	**Discussion and synthesis of reporting** Highlights, opportunities, synergies, needs, bottlenecks
10:00 – 10:30	*Coffee break*
10:30 – 11:00	**Elaboration of key themes for the future** Hanspeter Liniger, WOCAT Director, Switzerland
11:00 – 12:30	**Future planning at global, regional and national level** Group work "WOCAT planning carousel" Isabelle Providoli and Nina Lauterburg, WOCAT Secretariat, Switzerland
12:30 – 14:00	*Lunch break*
	Chair afternoon session: Isabelle Providoli, WOCAT Secretariat, Switzerland *Rapporteur afternoon session: Rima Mekdaschi Studer, WOCAT Secretariat, Switzerland*
14:00 – 15:30	**Presentation of future planning** Presentation of group work, plenary discussion
15:30 – 16:00	*Coffee break*
16:00 – 16:30	**Organisational / administrative matters** Next WWSM; Feedback from participants and evaluation; AOB
16:30 – 17:00	**Closing of 17th WOCAT Network Meeting** Final conclusions by host (Bruno Schuler, GIZ, Germany), WOCAT Director (Hanspeter Liniger, Switzerland), and a Consortium Partner (Claudio Zucca, ICARDA, Jordan)
18:30 – 19:30	*Dinner*

WOCAT SYMPOSIUM: WOCAT GOES NEW

OPENING STATEMENTS

WELCOME AND OPENING BY ORGANISERS

Presented by: Bruno Schuler (GIZ, WOCAT Focal Point, Germany)

Bruno Schuler from the GIZ WOCAT Focal Point warmly welcomed the participants of the WOCAT Symposium in Feldafing in the name of GIZ – the organisers of the WOCAT Symposium and 17th WOCAT Network Meeting. Schuler presented the WOCAT and GIZ staff involved in the organisation of the event and outlined the programme of the event. Schuler highlighted that people involved in WOCAT are one community working with a common goal and that the participants of the meeting are here to exchange, plan further developments and carry WOCAT forward.

OPENING ADDRESS

Presented by: Doris Thurau (GIZ, Director of Regional Centres South, Germany)

Doris Thurau, director of the GIZ State Office Bavaria, made the opening address. Thurau explains that her career involved working on conservation issues in different countries and continents. She outlined the structure of GIZ, the hosts of the WOCAT Symposium and 17th WOCAT Network Meeting. GIZ is the world's leading provider of international cooperation services for sustainable development and is organized as a public enterprise with offices in 120 countries and a decentralized structure. The GIZ State Office Bavaria is associated to the Bavarian Ministry of Agriculture. The latter is dedicated to advocate for sustainable development.

WOCAT GOES NEW – VISION FOR THE FUTURE.

Presented by: Hanspeter Liniger (WOCAT Director, Switzerland)

The aim of the presentation of WOCAT Director Hanspeter Liniger was to provide a general overview of the WOCAT network by determining where the network currently stands and where it wants to go.

Liniger started his speech highlighting the opportunities and challenges of the new institutional setup, which transforms the network from a loose to a committed collaboration. Under this new institutional setup, the WOCAT network also recently obtained the official recognition by the UNCCD as being the "primary recommended database for reporting on SLM Best Practices". Further, the WOCAT network is now part of ICoN SLM - a Network of Networks composed of DNI, WOCAT and GNDRI - which provides science and knowledge support to the UNCCD.

A long road lies behind the achievement of these milestones. Initiated in 1992, the WOCAT network committed itself to work hard in order to change the focus from Land Degradation (LD) to Sustainable Land Management (SLM). As this goal can only be achieved through Knowledge sharing, WOCAT developed standardized tools and harmonized products. Currently more than 500 SLM technologies and more than 250 SLM approaches have been documented and are made available online. This process is however far from over, as developing new tools that address different needs of users (as for instance the tablet application that is currently in the beta phase or a new webpage, which is in planning) will allow to tap into great potential. In addition to new tools, new WOCAT modules are currently being prepared. GIZ for instance, using the existing WOCAT database, develops currently a cost/benefit module and UNEP DEWA, together with the Colorado State University and the World Bank, are working on a Carbon Benefit Project, making it easier for land managers to realize climate change co-benefits of SLM.

According to the WOCAT Director, the road forward encompasses several key components. First, access to knowledge has to be simplified and its use in decision-making has to be further improved. To this end, innovative user-attractive and interactive tools and knowledge products, which take the complexity and the context into account, need to be developed. Second, investing in the next generation is crucial, thus WOCAT has to try it's best to integrate more students and universities. Third, Questionnaires should be restructured, containing a core Questionnaire (Q core) which can be complemented with a supplementary Questionnaire (Q plus) and additional modules. This new set-up will allow for more flexibility while guarantying the high level of quality WOCAT strives to achieve. Fourth, the fact that SLM plays a key role in all three UN conventions (desertification, climate change, biodiversity) has to be officially recognized. Finally, further efforts are needed for spreading SLM through documenting not only on-site but also off-site benefits and by increasingly use the documented knowledge for decision-making. Improved decision support tools and capacity building could achieve the latter objective.

TOPIC 1: THE IMPORTANCE OF SLM PLATFORMS AND PARTNERSHIPS FOR THE SPREAD OF SLM

Chair: Walter Engelberg, GIZ, Germany
Rapporteur: Isabelle Providoli, WOCAT Secretariat, Switzerland

INITIATIVE "ONE WORLD – NO HUNGER"

Presented by: Christina Ketter (GIZ, Germany)

The German Ministry of Economic Cooperation and Development (BMZ) has started the initiative "One World – No Hunger". This initiative addresses six intervention areas, namely (1) food and nutrition security, (2) enhance resilience to prevent famine, (3) promote innovation, (4) promote socially and environmentally sound structural change in rural areas, (5) promote the protection and sustainable use of natural resources in rural areas, (6) promote responsible land use and access to land.

The global program is meant to address the factors hindering the wide application and sustainable and effective promotion of improved soil, water and vegetation management practices. Therefore, in a

number of countries, the global project will promote practical implementation and capacity development at scale and will at the same time facilitate scientific cooperation and knowledge exchange among practitioners and policy makers, at national and international level.

The program started with a budget of 40 Million EURO and a previewed running period of 3 years in January 2015. Strong synergies in terms of networking and knowledge management as well as propagation of good practices and lessons learned are anticipated with the WOCAT network.

Several questions regarding the networking potential between the global program and WOCAT emerge:

- What needs occur from this networking strategy?
- What is the networking strategy for the global program?
- Who does WOCAT link to those needs?
- How can feedback loops be established with WOCAT for joint learning?

In conclusion, it is anticipated, that WOCAT has high potential as a networking partner for the overall bracket on SLM. Very good relationships are already established with the bilateral country and sector programs implemented by GIZ. The Global Program builds on these relationships and linkages. WOCAT could play an important role not only in documenting and sharing the results from the field implementation, but also for comparative analysis and communication between the different country initiatives.

THE BRICKS PROJECT: BUILDING RESILIENCE THROUGH INNOVATION, COMMUNICATION AND KNOWLEDGE SERVICES

Presented by: Félix Compaore, (CILSS, Burkina Faso)

The objective of the Building Resilience through Innovation, Communication and Knowledge Services (BRICKS) Project for Africa is to improve accessibility of best practices and monitoring information within the Sahel and West Africa program portfolio on sustainable land management.

The BRICKS project is financed by the World Bank for a 6 years period which started in 2013. The project is carried out by three regional centers of excellence, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS), the Sahara and Sahel Observatory (OSS) and the West and Central Africa Office of International Union for Conservation of Nature (UICN). The BRICKS project has been designed to complement the Sahel and West Africa Program (SAWAP) in support of the Great Green Wall Initiative (GGWI) which itself is a portfolio of investment projects currently carried out in 12 countries: Benin, Burkina Faso, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal, Soudan, Chad and Togo.

The BRICKS project has three components, the first component being knowledge management. The outcome of this component is operational knowledge inside and outside the Sahel and West Africa Program (SAWAP) in support of the Great Green Wall Initiative (GGWI). The portfolio is regularly exchanged through a regional learning hub that networks institutions and individuals that are implementing the 12 SAWAP/GGWI country operations. The second component is the program monitoring support. There are two outcomes from this component. First, additional monitoring tools and training are deployed at regional and country levels to track processes and impacts from the portfolio of projects. Second, the SAWAP portfolio is regularly monitored against a set of thematic and process indicators. Finally, the third component is the project management. The outcome of this component is that the management of the regional BRICKS project is carried out efficiently and effectively.

BRICKS will be co-implemented at regional level by CILSS, OSS, and IUCN. CILSS will lead the regional knowledge management activities, OSS will be responsible for geospatial services and portfolio monitoring and evaluation (M&E), and IUCN will lead in the areas of biodiversity, networking strategies, and strategic communication.

Within the Knowledge Management component, an inventory of existing best practices in SLM, natural resource management and climate change adaption within the 12 countries involved in SAWAP is being elaborated. In order to do so, existing work, including the work of WOCAT, is systematically analyzed. Specific objects are (1) to identify and review existing best practices which have been documented so far (2) analyze and organize those best practices (3) elaborate an inventory of those best practices as well as recommendations regarding their use in the 12 countries involved in SAWAP.

It is planned to hire a firm to do it. This study is taking place at a moment where various works of capitalization of good practices were already conducted in the region. This is why we want to establish a partnership with WOCAT in order (1) to share its experience in the production of attractive and accessible manuals and fact sheets and (2) to establish an appropriate method of collection and analysis of data on good practice. In this dynamic, we also want to involve WOCAT in the Technical Committee for follow-up of this study for a real synergy of action and for a technical and scientific quality.

CACILM PHASE II: USING WOCAT TOOLS IN CENTRAL ASIA

Presented by: Sanobar Khudaybergenova (ICARDA, Uzbekistan)

Land degradation in Central Asian countries (CACs) is a serious threat, particularly considering the sizeable share of agriculture in these countries' GDP. Causes of land degradation are not only in irrational use of water resources but also in the legacy of the pre-independence (pre-1991) system of land management when maintenance of soil health was the least important factor. Among different types of degradation soil salinization, erosion, and desertification are prevalent in Central Asia from such causes as high water losses from irrigation networks and overgrazing.

The Central Asian Countries Initiative for Land Management (CACILM) is a long-term multi-country partnership aimed at restoring, maintaining, and enhancing the productive functions of land in Central Asia, which lead to improved economic and social well-being of those who depend on these resources, while preserving the ecological functions of the land. Phase-I of CACILM carried out during 2006–2009 succeeded in attracting US$ 155 million for various projects targeting sustainable land management (SLM). A wealth of information has been generated and knowledge acquired within the CACILM projects as well as other projects that are available but widely dispersed. The purpose of this project is to contribute in building a knowledge platform to consolidate existing knowledge.

During the Phase-I, 24 technologies were submitted to WOCAT network for further dissemination. At present, the project has synthesized 90 promising technologies and approaches, among which 48 are from the WOCAT database.

The context within which knowledge management should focus and function can be characterized by the term "moving target", where the CACs' natural resource management (NRM) strategies and policies have gradually evolved since independence more than 20 years ago. The following two factors alone, land tenure and land area, already provide great diversity that a knowledge management system needs to address.

Four target agro-ecosystems selected as the areas for intervention are designed to reduce drastic differences between NRM systems existing in CACs. The project identifies major knowledge gaps regarding SLM in agriculture and promote best options to fill these gaps.

Interventions have been tailored to all levels of stakeholders involved in SLM ranging from producers to those engaged in policy development.

The overall goal is that rural livelihoods are made more lucrative and resilient in the face of land degradation and climate variability and change. The overall objective is the widespread understanding and application of SLM practices developed and promoted in CACILM.

Three project outcomes can be identified: (1) Knowledge about SLM in CACs is synthesized, packaged, and disseminated (or ready for dissemination) in forms that facilitate widespread uptake by various stakeholders; (2) CACILM stakeholders can find and use up-to-date resources, information, and people with up-to-date knowledge on SLM and link with worldwide resources; (3) Policy-makers have understood the most important findings of CACILM in SLM.

The project consists of three components. Component 1 "Knowledge Synthesis and Generation" consists of three activities: Knowledge synthesis (existing knowledge and knowledge gaps identification); Knowledge generation about SLM practices (filling knowledge gaps); Knowledge packaging and dissemination. Component 2 "Knowledge Packaging and Dissemination" consists of there activities: Typology of stakeholders and knowledge dissemination pathways; Knowledge exchange on technical packages; Capacity building and sustainable access to knowledge. And component 3 "Using Knowledge in Policy Dialogue" consists of two activities: Enhancing evidence-based knowledge; Policy dialogue to facilitate adoption of SLM.

The project has been facilitating interested target group members in exploring technical and policy options for SLM. These groups were determined during the planning phase of the project, where the influence pathways, key audiences, and desired outcomes to achieve interactions with each user group were determined in detail.

The indicative target groups include women and men in: (i) Key decision- and policy-making units responsible for SLM in each CAC (Ministries of Finance and Economics, Planning, Agriculture, Water, and Environment); (ii) Non-governmental organizations (NGOs) and rural development agencies working in each country and at regional level; (iii) National research and extension agencies, farmers, and farmers' organizations; (iv) International donor community active in Central Asia; (v) Smallholder farmers and herders whose livelihoods depend on agriculture; (vi) Rural communities in areas with scarce land and water resources and suffering from land degradation.

Target areas for the project are four agro-ecosystems present in all CACs that represent important environments for human livelihoods. These agro-ecosystems comprise: (i) irrigated agriculture, covering a relatively small area of about eight million hectares, but at the same time providing most of the agricultural products in the region; (ii)mountains, constituting over 90% of the area of Kyrgyzstan and Tajikistan; (iii) rangelands, constituting the largest portion of land resources in Kazakhstan, Turkmenistan, and Uzbekistan; and (iv) rainfed.

THE UNCCD SCIENTIFIC KNOWLEDGE BROKERING PORTAL (SKBP)

Presented by: Victor Castillo (UNCCD, Germany)

The UNCCD Scientific Knowledge Brokering Portal (SKBP) is a knowledge brokering system that aims to improve access to and the consumption of scientific and technical information on desertification, land degradation, and drought (DLDD) matters. It is designed to act as a "bridge to bridges" which connects volunteer institutional partners at the national, regional and global level under one search tool.

Several DLDD knowledge repositories exist and capture information for the assessment, monitoring, planning and management of land and land resources. But, most operate individually and concentrate their resources on developing knowledge products. Searching and accessing this information can still be challenging for users, who must search through multiple repositories to find and validate the information they need.

The SKBP uses advanced search technologies as well as a spatial (mapping) interface to assist users in finding the most relevant information sources. It increases visibility and enables access to valuable knowledge products, developed by its partners, and enables the partners to receive feedback from the users of that information. As a priority, the portal initially aims to consolidate DLDD best practice references and access points under a unified search portal.

This portal delivers information from databases and repositories of participating partners. It sources information directly from the partners, without having to store or organize this information into a UNCCD database or repository. Each partners' information updates to databases that have been linked to the SKBP will be simultaneously "searchable" through the portal.

The SKBP interactive web maps present knowledge bases that have been identified by UNCCD country Parties for sharing good practices and other information on desertification, land degradation and drought.

Current partners cooperating in the SKBP Pilot are WOCAT, ISRIC, CSIC, AGRIS and TECA from FAO, and (for the interactive maps) the Jornada Dryland Research Program, USDA-ARS.

SKBP will be rolled out in phases, allowing for future enhancements to be integrated provided that support for this initiative increases over time. It will gradually expand content coverage over time to facilitate access to various types of DLDD data for UNCCD stakeholders.

TOPIC 2: SUCCESSFUL MAINSTREAMING AND SPREAD OF SLM USING WOCAT AND RELATED TOOLS

Chair: Dirk Pretorius, SMC Synergy, South Africa
Rapporteur: Nina Lauterburg, WOCAT Secretariat, Switzerland

ENVIRONMENTAL LAND MANAGEMENT AND RURAL LIVELIHOODS (ELMARL) PROJECT IN TAJIKISTAN

Presented by: Kamolidin Abdulloev (Tajik Academy of Agricultural Sciences, Tajikistan)

Among 28 countries in Europe and Central Asia, Tajikistan is estimated to be the most vulnerable to climate change impacts due to its high exposure and sensitivity combined with a very low adaptive capacity. The agricultural sector of Tajikistan is subject to lower and more erratic rainfalls, as well as dryness of water resources due to the possible temperatures rising in the region, high evaporation, reducing the accumulation of snow in the mountain glaciers and increased frequency of extreme events. Climate change and variability are likely to pose certain risks, especially for those who prefer natural agriculture or pasture management that just reinforces the need for sound principles of land management.

General adoption of the strategies and practices on sustainable land and water management for agricultural ecosystems will help the farmers and communities in addressing the above problems, to adapt and become more resilient to climate change by increasing wellbeing of local population, and will contribute in solving food security and restoring productive natural resources.

The Environmental Land Management and Rural Livelihoods Project is being financed by the Pilot Program for Climate Resilience (PPCR) and Global Environment Facility (GEF). The Project goal is to enable the rural population to increase its productive assets in ways to improve the management of natural resources and resilience to climate change in selected climate vulnerable sites. The project will facilitate the introduction of innovative measures on land use and agricultural production by providing small grants at the village level and grants for the Pasture User Groups (PUGs) at jamoat level in order to implement joint plans of pasture management, livestock sector, also for the Water User Associations (WUAs) to introduce sustainable on-farm water management practices. The Project comprises three components to be implemented in the period of five years: 1. Rural Production and Land Resource Management Investments; 2. Knowledge Management and Institutional Support, and 3. Project Management and Coordination.

These components include a set of grants from the PPCR and GEF that betrays the particular importance of the grant sources for the Project funding. This innovative combination of the PPCR and GEF grant

funding will help in scheduling a scope of work under the Project and enable to implement certain activities on a pilot basis that otherwise could not be implemented at this level.

Key partners are the Committee for Environmental Protection (Implementing Agency), the Ministry of Finance, the PPCR Secretariat in Tajikistan, Farkhor, Kulyab, Khovaling, Baljuvan, Tavildara and Jirgatal districts, the German Agency for International Development (GIZ) with its GREAT program which provides additional support to the community-based Project planning and institutional development, as well as technical agricultural advisory services.

At this stage, the Project has already signed contracts with the Project Implementation Group Consultants, with the Coordinators of the Committee for Environmental Protection to carry out financial management, disbursements, procurement process, environmental management, social development, monitoring and evaluation. Workshops on coordinating the Project were held in the districts, as well as a series of trainings and meetings were conducted for specialists and technical personnel. Contracts with the Facilitation Organizations to support to joint planning, community mobilization and to the investments implementation in agricultural production at the village level both in the lowlands and uphills, a plan for on-farm water management and pasture management was designed.

PARTICIPATORY EDUCATION: STRENGTHENING THE DIALOGUE BETWEEN STUDENTS AND FARMERS

Presented by: Helena Cotler (Facultad de Ciencas Unam, Mexico)

Teaching about soil conservation issues to college students must go outside the classroom to take advantage of the accumulated experience of the farmers. In Mexico, along with a high degree of environmental degradation there is also the presence of organized groups that have adapted conservation practices in an atmosphere of cooperation, which has enabled the development of sustainable land management. As a means of bringing theory into practice we used a methodology which consists of two stages. The first one is for farmers to provide a practical education in the field to college students. This practice was conducted in the State of Tlaxcala, in central Mexico. For several days, farmers explain their reasons to applied different soil conservation practices and apply them in conjunction with the students. Also they explain the social, economic, and organizational requirements for each of these practices. For their part, the students apply the theoretical knowledge acquired in the classroom, identifying indicators of degradation and soil conservation as a means to assess the impact of the practices, which are discussed and appropriate by farmers. The second stage is performed in the classrooms and consists of comparing the environmental, social and cultural conditions required for the establishment of practices in Mexico in relation to similar practices systematized in WOCAT for different countries and environments. With this, the students can expand their knowledge of the requirements for such practices.

The experience gained from these exchanges has been mainly in three areas. First, an education that is not only based on theory but favors the knowledge of the conditions of the country is strengthened. The goal is for students to leave better prepared to face the challenges of sustainable land management. Second, the approach with farmers has proven to be an excellent way to increase their pride and dignity. According to them the possibility of this type of training is an incentive to continue working together. Finally, the possibility of having a database with management practices such as WOCAT broadens the perspective of students, while enriching their vision of environmental, social, economic and organizational aspects required to implement practices of sustainable management.

USING WOCAT AND RELATED TOOLS TO ENHANCE MAINSTREAMING OF SUSTAINABLE LAND MANAGEMENT: EXPERIENCES FROM KAGERA TAMP

Presented by: Charles Malingu (Uganda)

Kagera Trans-boundary Agro-ecosystems Management Project (TAMP) used WOCAT/LADA tools to document sustainable land management (SLM) practices in selected riparian micro-catchments of the Kagera River. Documentation served two purposes: (i) evaluation of project outputs against baselines established in 2010; and (ii) generation of a dynamic knowledge base for sustainable adoption and scaling up of improved management of soil, water, vegetation and ecosystem biodiversity. Both objectives were necessary steps in the process of generation of evidence to support government decision to mainstream SLM technologies and approaches into departmental or sector-wide work plans and budgets.

Methods included field surveys using standardized WOCAT questionnaires for technologies (QT), approaches (QA) watershed management (QW) and mapping (QM); land degradation assessment (LADA) in dry lands templates; and in-house questionnaires, key informant interview guides and focus group discussion guides, for quantification and disaggregation of farm household data. Over 30 SLM specialists with different backgrounds and experiences in natural resources management selected at least 6 well-established technologies and approaches from each Kagera basin country. The selected practices were used as case studies to demonstrate best practices. Nearly 180 field assistants with tertiary qualifications in natural or environmental science education and field experience were then recruited to collect data at farm household, community and micro-catchment levels. To improve the quality of documentation, leading SLM specialists within each country who were not part of the field teams were consulted to authenticate data and facilitate the data filtering process.

As a result, 19 technologies and approaches from Kagera TAMP were accepted as meeting the quality requirements for storage and display on the global WOCAT database. Additionally, reports have appeared in leading regional mass media of how SLM technologies and approaches generate local, national and global benefits including (i) restoration of degraded lands, (ii) agro-biodiversity conservation and sustainable use and improved agricultural production, (iii) increased rural farm household food security and improved rural livelihoods, and (iv) enhanced protection of the international waters of the Kagera river. A number of local governments in Uganda have adopted resolutions to mainstream Kagera TAMP micro-catchment SLM methodologies into their work plans and budgets. National SLM focal point departments and ministries have commended the quality of the documents, databases and maps. Mainstreaming within national work plans is expected, but the capacity for advocacy using WOCAT/LADA evidence needs to be supported further.

EXPERIENCES FROM LATIN AMERICA

Presented by: Meliza González (FAO RLC, Chile)

Several initiatives aim to document and promote regional SLM practices in Latin America and the Caribbean. However, no standardized methodology or tool is systematically used. Thus, the information generated by these initiatives is not uniform and of varying quality, which makes comparison difficult.

WOCAT methodologies and tools would be ideal to fill this void, but are currently not widely used in the region, as they suffer from some region specific problems. The latter have been analyzed by assessing opinions of former regional WOCAT users. Two main problems have been found. First, the extensive and detailed

questionnaires seem to be an obstacle. Second, while the interface of the database itself is available in Spanish, almost no WOCAT outputs (books, case studies, etc.) are. This even holds four several case studies conducted in Spanish speaking countries. Given that language barriers are non-negligible, Latin American and Caribbean users can not directly see the benefits of the WOCAT methodology and tools, and might thus be reluctant to use them.

To address these issues, the WOCAT team at FAO's regional office for Latin America and the Caribbean published a regional module of the Technology questionnaire (QT). The module is based on the original QT but adapted to the Latin-American conditions and combined with the module for climate change (CC). To additionally shorten the questionnaire, digital answering options have been included. Moreover, the instructions on how to fill in the questions have been separated from the latter, and are now presented in an appendix. For an overview of the new regional module, including a detailed description of changes with respect to the original QT, pilot tests as well as first results, refer to http://www.fao.org/3/a-i3741s/index.html.

The regional module has been used since 2013 and systematized so far 15 new SLM practices from 6 countries. Further improvements will be made with respect to (i) the compatibility with the global WOCAT platform (ii) additional shortening of the questionnaires (iii) documenting more practices in order to increase the content available in Spanish and thus the attractiveness of WOCAT in Latin America and the Caribbean. Current ideas include also the possibility to try the module on unconventional practices, such as aquaculture, or to think about how to integrate ancient-traditional knowledge components of SLM practices.

TOPIC 3: ON-SITE AND OFF-SITE BENEFITS/IMPACTS OF SLM FOR KNOWLEDGE-BASED DECISION SUPPORT

Chair: Samuel Contreras, Bureau of Soils and Water Management, Philippines
Rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat, Switzerland

INTRODUCTION TO INTEGRATED STRATEGY FOR SUSTAINABLE LAND MANAGEMENT IN WESTERN PRC

Zenming Song (PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, China)

Land degradation remains one of our greatest challenges today. This is not just because of the threat of desertification or wind storms – a threat made worse by climate change - but because the land remains our key resource for food production and prosperity. The livelihoods of rural people are threatened, and that affects us all. All agencies and stakeholders have to work together. The GEF-PRC Partnership was the first of its kind in the world. Its achievements are visible in terms of the vast areas already conserved: but there are further improvements both necessary and possible The PRC-GEF Partnership's accomplishments are also noteworthy because of the shared ideas that have led to synergies. It is the work of a group of people who have sought to charter a path towards a vision of a better landscape.

The Partnership has developed strategy for the next 10 years. The objective, scope, strategic priorities, financing mechanism and institutional arrangement were all redesigned and confirmed. The objective of the strategy is to improve management land and water resources, reduce poverty, increase incomes, protect biodiversity and combat climate change in Western PRC (Figure 1). The strategy will guide a new Partnership of agencies involved in sustainable land management to improve the implementation of projects and programmes. Coordination will be through similar arrangements to the previous PRC-GEF Partnership. The new Partnership will

continue to stimulate exchange of experience and it will promote climate resilient SLM technologies to further the goal of "green development", and innovative approaches to both implementation and to funding.
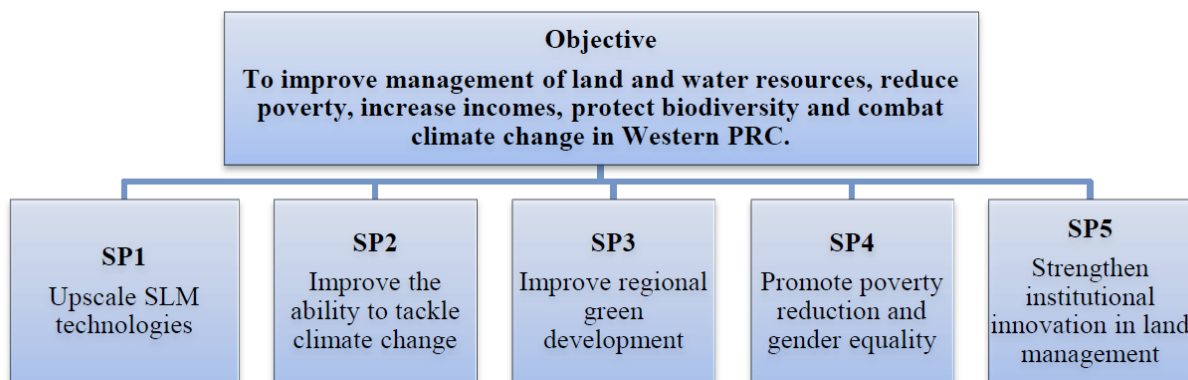
Figure 1: Strategic priorities (SP) to reach the overall objective

The Partnership will strengthen the cooperation will different stakeholders from both national and international. WOCAT has contributed to up-scaling of best practices of SLM in the past 10 years and its role should be enhanced and cooperation should be explored in the future.

ACHIEVING MULTIPLE BENEFITS OF SLM PRACTICES AND INNOVATIONS IN THE LEARNING WATERSHEDS IN ETHIOPIA

Gizaw Desta Gessesse (Water and Land Resource Centre WLRP, Ethiopia)

In Ethiopia, land degradation is a serious problem and a threat to the country's future economy. In response, landscape management is a concern of the Ethiopian government in seeking to rehabilitate degraded landscapes, improve food security and enhance climate change adaptation and mitigation. However, the challenge remains to integrate interventions on natural resources management, agricultural production, livelihood improvement, and institutional mechanisms to achieve multiple benefits.
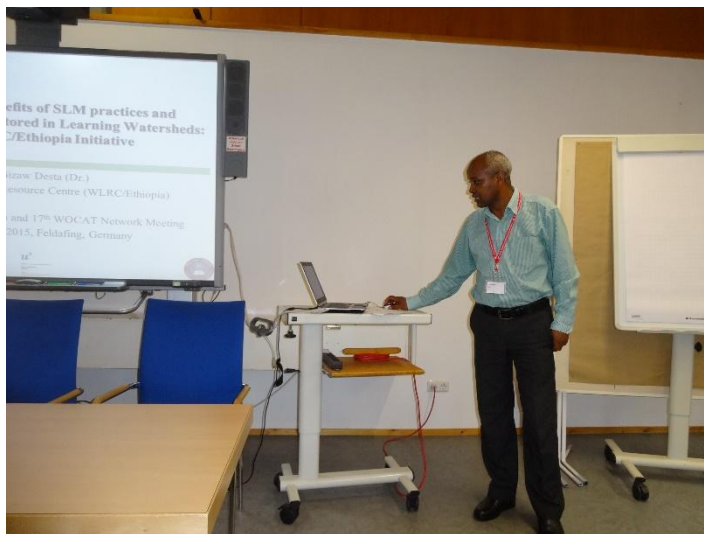
WLRC in Ethiopia - through the collaborative Learning Watershed initiative - is working to implement integrated SLM practices in order to support farmers to adopt sustainable land management and production technologies and approaches, assess benefits, and provide knowledge and tools for development practitioners and policy makers to support informed decision-making and scaling up of SLM. A collaborative Learning Watershed model is implemented and promoted in six watersheds, in which land users, researchers, development actors and policy makers can collaborate to implement a mosaic of SLM practices such as exclude interference and restore degraded lands; implement bunds and drainage channels integrated with fodder species on farm lands; promote improved agricultural technologies in crop, livestock and machineries; develop integrated homestead management packages; establish innovations for income generation for youths and women; and monitor impacts of the integrated Learning Watershed approach.

The rehabilitation of communal hillsides has encouraged the cut-and-carry grazing system with improved fodder production, restoration of degraded soils and biodiversity, and support beekeeping, fruit production and fattening to generate income. In addition to the reduction of concentrated overland runoff and erosion, bunds and drainage channels on downstream farmlands also support high fodder production and fodder seeds by excluding free grazing. This in turn improves the availability of fodder for improved livestock production and restore the soil fertility by using soil improving fodder species and leaving more crop residues on the fields. Introduction and promotion of improved crop varieties and agronomic

practices, forage varieties, animal breeds, tillage, seeder and threshing implements help to improve farm productivity, income and livelihoods of land users. Such integrated practices have created further opportunities such as an increase in the volume and duration of stream flows for downstream high-value crop irrigation production and strengthen self-help groups to produce energy saving stoves, prepare seedlings in nurseries, and provide threshing and animal health services. To ensure sustainability of the SLM practices, encourage collaboration across sectors and address social and economic needs of communities, joint planning and monitoring of actors and a formal watershed committee are institutionalized, and impacts are regularly monitored.

The Learning Watershed model enhances sustainable land management practices and innovations through applying integrated and collaborative approaches that help improve the degraded ecosystem services and achieve multiple benefits. To facilitate knowledge management and up- scaling of the SLM practices and approaches, WLRC is applying the WOCAT tool to establish database of SLM practices, Watershed Performance Assessment tool and Exit Strategy guideline.

POSTER MARKET AND SHARING OF INFORMATION MATERIAL

ECOSYSTEM SERVICES FROM INTEGRATED FOREST-FARM SYSTEM MANAGEMENT IN GHANA

Poster market contributor: Edmund Asare (Department of Forest Sciences, FI-00014 University of Helsinki, Finland)

Improved soil fertility management practices (ISFM) provide multiple onsite and offsite benefits, which can be economically significant, including regulation of the flow of water and sediment, control soil erosion, sheltering native biodiversity, supplying non timber forest products, supporting various ecosystem functions particularly hydrology, reduced agricultural water demand, storage of carbon in soil, reduced vulnerability to drought and flooding, replenish nutrient-depleted soil, higher and resilience farm productivity, improved household food security and improved income levels. Offsite benefits are associated with regulation of, such as, the flow of water and sediment, and storage of carbon. Schemes such as conditional payment of ecosystems services (cPES) have been focused chiefly at forest conservation to safeguard these benefits. Onsite productivity benefits for instance can play an important role in poverty alleviation as well, provide greater remunerative and balancing economic viability for adoption. However, both offsite/onsite benefits do not emanate without costs. For instance, onsite benefits composed with difficulties associated with inflexibility, high transaction costs, and lack of equity and long-term financial security for smooth adoption. This paper contribute to on-site and offsite ecological benefits of value-added soil health management practices in Ghana. Using conceptual analyses and a series of evidence-based case studies, the study examines classical instances of community driven nature conservation sheltering native biodiversity, supplying non timber forest products and supporting various ecosystem functions particularly hydrology. The study reveals, that, integrating and adopting site-specific conservation schemes and practices has the ability for delivering the twin goals of conservation and livelihood security. For example, different tillage initiatives such as cover crops (Mucuna utilis) cultivation, composting, half-moon and the zai carried out on a small integrated degraded forest sites at Kanpuo in Upper West Region, have tremendously, yielded lush green forests, improved vegetative cover, reduced soil erosion, increased wildlife and enriched grazing grounds. As a result, these have increased crop yields, improved household food security, improved income levels and community ownership. Hence, conservation work in such areas requires a stepwise and holistic approach including comprehensive recognition of the natural and social values, capacity building among local communities and design of locally suited incentives with participatory planning and implementation.

GREEN WATER CREDITS AND ITS APPLICATION

Poster market contributor: Zhanguo Bai (Soil and land degradation assessment and restoration, ISRIC - World Soil Information, Netherlands)

Green Water Credits (GWC) is an innovative investment mechanism for upstream farmers to practice sustainable land management (SLM) that also generates benefits for downstream water users including drinking water and hydropower companies. The SLM measures could be innovative or well-documented WOCAT technologies and approaches adapted to the local situation. Normally, the SLM practices of upstream farmers - such as mulching or terracing - are insufficiently recognized and unrewarded by the downstream community. By setting up an investment mechanism to reward these activities, and by performing cost-benefit and feasibility studies, farmers can better organize themselves for implementing the practices on a regional scale. The concept has been proven in Kenya and tested in the catchment around the Danjiangkou Reservoir – the water source for the South-to-North Water Transfer which has diverted 10-12 billion cubic meters of water per year from the Reservoir on the Han River, a tributary of Yangtze River, to Beijing City and the arid northern China through a canal of 1400 km; and also piloted in Morocco and Algeria.

In order to run the GWC concept, an analytical toolkit, i.e., Green&Blue Water Assessment Package (GB-WAP) has been developed. It allows quantification of erosion reduction, yield increase, sedimentation amounts, water availability, and electricity production that is needed to calculate the economic costs and benefits of prospective SLM measures. This information allows the development of a financial mechanism in e.g. river basins, based on upstream supply and downstream demand of water services for long term investments in communities. The package also includes presentation and decision support system.

RESTORING SOIL FERTILITY AND AGRO-ECONOMIC VALORIZATION OF DEGRADED LAND BY INCLUSIVE WATERSHED MANAGEMENT IN THE CASE OF SOUTH WEST BURKINA FASO

Poster market contributor: Martin Baumgart (AFC Consultants International Bonn, Germany)

Climate change seriously affects the agriculture sector in Burkina Faso. Unadapted land use practices and increasing pressure on suitable cropland due to the increasing demographic growth rate of approximately 2,5\% per year as well as an absence of alternative income sources have been causing severe land and natural resources degradation; e.g. loss of vegetation coverage by about 60\% during the last 15 years in

the South-West Region of Burkina Faso mainly related to a high demand on fire wood as primary energy source and for local beer (dolo) production. A continuing reduction of vegetation cover is likely to radically increase soil erosion effects by heavy winds and floods further affecting agricultural productivity as the principal income basis entailing both unforeseen socio-economic and environmental impacts on the rural population.

In order to reduce the local vulnerability the EKF-project focuses on the application of adaptation measures on both, meso and micro level. As for that, the project assists service providers within integrating adaptation measures into their advisory services by providing process support, technical advice and training. Moreover, EKF promotes the sustainable development of adapted species and varieties for agrosilvo-pastoral systems and biodiversity in close partnerships with research institutions.

By the introduction and sensibilization of climate change adaptation measures such as soil and water conservation methods in suitable watersheds of selected communities, farmer trainings in the construction of technical-physical (stone rows, dikes, dams) and biological (planting along stone rows) erosion protection methods and furthermore, strengthening the capacities of rural smallholders within the introduction of best agricultural practices (adapted seeds, storage facilities to produce compost and irrigation systems like drip irrigation) into their existing cultivation practices, EKF contributes significantly to the adaptation of rural production systems to climate change. This will increase, diversify and stabilize yields as well as income therefore improving the resilience of rural households.

Only the involvement and a strong ownership of the local population allows to restore up to 5000 ha degraded land per year significantly and further revalorize it by planting about 50.000 trees and shrubs like Moringa oleifera, Jatropha curcas and other species with the potential to create and to diversify long-term income. After a short period of time the beneficiaries are encouraged to recultivate their soils even with crops which have been abandoned in the past. Recent findings show that implementing the ``cordons pierreux method'' with additional tree planting along the stone rows accelerates the self-healing process of soils in terms of enhanced organic matter content and other bio-chemical parameters.

The intense participation of all stakeholders in the planning and implementation process is a proven concept for strengthening personal initiative and sustainability. Stuff of government structures, interest groups, small industry associations and local administration at various levels (macro, meso, micro) are included through training courses and other support measures of the project like the GIZ Value Chain Approach or Farmer Buisness Schools.

KNOWLEDGE-BASED DECISION SUPPORT AND SLM: THE CASE OF REHABILITATION OF DISPERSIVE SOILS IN THE EASTERN CAPE PROVINCE, SOUTH AFRICA

Poster market contributor: Heinz B*eckedahl (Professor, University of Kwazulu-Natal (UKZN), South Africa)*

Large parts of south and southern Africa are plagued by the presence of dispersive soils. Until recently, little or no cognisance was taken of a soils susceptibility to dispersion when rehabilitation of erosion and/or degradation was being undertaken. The single greatest challenge is that with a dispersive soil, many of the conventional SLM techniques that minimise runoff by maximising infiltration are contraindicated. The consequence has been the widespread failure of conservation berms and gabion systems.

More recently, rehabilitation in a Sustainable Land Management (SLM) context has had to be re-thought to incorporate a greater level of community involvement, partly to facilitate strategies which include means of poverty alleviation, which have in turn necessitated a more labour intensive approach than the previous sometimes over emphasis on agricultural engineering techniques. The focus has therefore shifted to a greater emphasis on 'green engineering' and softer forms of intervention that change the slope and surface water hydrology less drastically, and so carry a lower risk of soil piping.

This paper focuses on how rehabilitation techniques, used in conjunction with the soil characteristics, have changed to include more labour intensive methods, but which have had the additional advantage of generating less dispersion. These techniques are easily adopted by the labour-intensive poverty alleviation schemes, and are also significantly easier to maintain than complex engineering structures.

DEVELOPING EFFECTIVE PARTNERSHIPS FOR USING WOCAT-LADA TOOLS IN YEMEN AND OMAN

Poster market contributor: Muhammad Bhatti (WOCAT Symposium poster market contributor. Land and Water Officer, FAO, United Arab Emirates)

The main goal was to develop effective partnerships with the appropriate and concerned organizations in Yemen and Oman, respectively to introduce WOCAT-LADA Tools to address the severe land degradation in both countries for sustainable land resources management. As a first step, awareness was created among the key potential partners and their skills were developed to observe and document the land degradation and identification of the best practices to address their severe physical and biochemical land degradation problems.

Comprehensive 5 days training courses including one day field work were conducted during 2013 in Yemen and 2014 in Oman on the use of WOCAT-LADA tools for evaluating and documenting land and water management practices. The main purposes of the trainings was to document local land and water management knowledge as applied in the field by land users and evaluate its impact and appropriateness for scaling up the best practices to other localities in the country and in the other countries of the region for improving food and nutrition security. In addition, the interested partners were also encouraged to register with WOCAT Secretariat and form a network at national level.

More than 20 trainees participated in each of the country in the trainings and in one day field work to learn the questionnaires that were provided both in English and Arabic. They have taken part in the classroom orientations, interactive discussions and a field practical day where the use of the WOCAT-LADA Tools.. Several of the trainees were women from the Extension Department of the Ministry of Agriculture. The lists of the participants and the training agendas will be provided as Annex in the full paper.

After the practical work in the field, plenary sessions were conducted where the way forward was discussed. Issues / challenges in the documentation of the technologies and approaches were raised and discussed, and the corresponding possible options and solutions recommended. These included; the relations between land users and government institutions used to be better in the past compared to what it is currently and hence it needs to be improved through discussions and raising the awareness of land users on the importance of the documentation work as it will contribute to the improvement of land and the livelihoods. The discussions helped to better understand the objective of the training and reaching agreements for documenting at least one technology, one approach and map them.

The networks established and the documentation work started in both countries. This paper presents the approach and methodology applied for introducing WOCAT LADA Tools and the results achieved along with their merits and demerits.

SLM MAINSTREAMING IN LAND RESOURCES DEVELOPMENT AND POLICIES IN THE NENA

Poster market contributor: Daniel Danano Dale (Land Management and Tenure Officer, FAO, Egypt)

There is increasing degradation of soil resources in the Near East and North Africa (NENA) region due to population pressure, urbanization and expanding infrastructure into fertile farmlands, inappropriate land use practices and lack of good governance on land. Reversing the effects of degradation and desertification is not always possible and is more difficult for drier environment with shallower soils of NENA countries. The Food and Agricultural Organization, Office for the Near East (FAORNE) has initiated a program for sustainable land management and tenure to scaling up good practices for land and soil management and responsible tenure governance systems that tackle the problem of degradation, desertification and poor soil fertility. FAORNE is applying the WOCAT-LADA tools that help in assessing, mapping and monitoring land degradation as well as documenting good practices. A Regional WOCAT-LADA Network has been established in 2012 to take the responsibility for documenting, evaluate and screen the good practices from many countries in the region for SLM mainstreaming and support policies development. The WOCAT-LADA Network aims to harmonize efforts in knowledge management and decision support for up-scaling SLM. In addition to this, FAORNE is further engaged in raising awareness on the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests" in the Context of National Food Security to set out principles and internationally accepted practices to guide the preparation and implementation of policies, laws and actions to tenure governance. Good governance polices in land coupled with locally acceptable technologies and approaches are proved instruments for SLM adoption at local and national level. Insecurity in land tenure and absence of good governance in land tenure have been obstacles for mainstreaming SLM in efforts for combating land degradation, adaptation to climate change in investments on land. About 157 people have been trained in the use of WOCAT-LADA tools for SLM promotion and 108 people participated in the Awareness raising workshop on the Voluntary guideline from all countries in the region.

SUCCESSFUL MAINSTREAMING AND SPREAD OF SLM USING CONSERVATION APPROACHES AND TECHNOLOGIES

Poster market contributor: Prakash Keskar (Watershed Organisation Trust (WOTR), India)

Agriculture in India is largely dependent on the monsoons. A failure of the monsoons not only severely impacts the agricultural sector and the nearly 60\% of India's population who depend on it for sustenance and livelihoods, but also the overall economic well-being of the country. Overall, only 30\% of cultivated lands in India have access to assured irrigation; the rest 70\%, known as ``rainfed agriculture'', depend solely on the rains. Here, poor rains or drought spell financial (and often social) ruin and despair.

In monsoon-dependent agrarian economies, experience has shown that the best way to maximize in-situ rainwater capture in order to increase water security for drinking, assured protective irrigation and improved soil moisture regimes, is to mobilize communities to regenerate the watersheds they inhabit in a comprehensive and integrated manner.

Watershed development seeks to harvest as much falling rain as possible within the drainage catchment and store it, above and below ground. The operational principle is: ``break the speed of rushing water; make it walk; stop it and let it sink into the ground''. This means undertaking soil and water conservation measures on a ``ridge-to-valley'' basis across the landscape and drainage channels, supported by appropriate land use and land husbandry practices. These include vegetative, mechanical and hydraulic interventions such as water absorption trenches (WATs), continuous contour trenches (CCTs), afforestation, grassing and pasture protection, farm and compartment bunds, farm ponds, gully plugs, earthen and masonry check weirs, percolation tanks or impoundment embankments – all of which, together, ensure that rainwater is retained as long as possible within the area it falls in.

To facilitate community engagement, the Watershed Organization Trust (WOTR) developed an approach called Participatory Net Planning (PNP)[1] This methodology enables conservation measures to be planned on private, common and public land holdings with the active participation of owners and key stakeholders. It takes into consideration the specific nature of the land, its current use, potential and treatments required to enhance productivity sustainably. Such an approach secures ownership and 'buy-in' amongst the various stakeholders and thus enhances survivability of works undertaken. It also enables the formulation of implementable activities, budgets and time lines and robust monitoring of measures undertaken. Equally importantly, it facilitates mutual learning through the dialogue between indigenous and modern knowledge systems in regard to soil and water conservation practices, thus leading to the adoption of new and effective ways of doing things which last.

The PNP methodology, which has evolved over the years and been adapted to local contexts, is now a mandatory practice for planning conservation measures in India's country-wide, Integrated Watershed Management Program (IWMP) funded by the government.

MAINSTREAMING AND SCALING UP OF SLM PRACTICES: EXPERIENCE AND LESSONS LEARNED FROM CACILM PARTNERSHIP PROGRAM IN UZBEKISTAN, CENTRAL ASIA

Poster market contributor: Gulchekhra Khasankhanova (Design and Research UZGIP Institute, MAWR, Tashkent, Uzbekistan)

The Republic Uzbekistan is a double land-locked country, centrally situated in the heart of Central Asia within the Aral Sea basin. Almost 80\% of the country area is comprised of deserts and semi-deserts, including the Kyzylkum, the largest desert of Central Asia. The most serious ecological problems threatening the country's natural resources are: incremental soil and water salinization, soil erosion, increasing level of overgrazing and deforestation and loss of biodiversity. There is a broad agreement that among the countries, Uzbekistan is one of the most vulnerable to climate change due to high sensitivity of its arid arable land, high density of population and growing concern about food security.

The Central Asian Countries Initiative for Land Management (CACILM) is a multi-country and multi-partner long-term program in the spirit of UNCCD aimed at restoring, maintaining and enhancing productive functions of land in five countries of Central Asia. CACILM Partnership Program is addressed to two target tasks: stabilization of ecosystems integrity, and improvement of vital rural living standards in the Central Asian countries. National Programming Framework on sustainable land management (SLM) forms its strategic basis for each participating country. The objective of the CACILM Program in Uzbekistan is to combat desertification and land degradation by strengthening and promoting SLM approach and practice between all the interested parties.

The assessment is based on comprehensive analysis of extent, causes, cost and impact of land degradation and results of SLM activities at national and multi-country levels. Knowledge of spatial and temporal assessment of Desertification, Land Degradation and Drought (DLDD) is gained through application of the FAO LADA and WOCAT knowledge tools and methods. Economic and finance analyses were undertaken based on the farm level data, and review of analytical reports and publications.

The most notable achievements of CACILM Phase I are the following: (i) functional partnership among the national, regional and international structures; (ii) comprehensive approach to SLM, starting from the testing and adapting the best practices to the institutional and legislative reforms; (iii) developed National Financial Strategy for resource mobilization on SLM for further implementation; (iv) improved communication, exchange of experience through broad participation and awareness of targets groups, networking national and regional SLM experts, and (v) increased interaction of global Rio Conventions. The most successful SLM approaches and practices have been selected, documented and integrated into global WOCAT knowledge base.

The results presented in this paper highlights that (i) incorporate assets and outputs of the CACILM Partnership Program into national and sectoral plans are essential for promoting reliable monitoring and assessment of DLDD and SLM measures; (ii) technical interventions need to be accompanied by institutional change and strengthening the inter-sector coordination and knowledge management. The experience and lessons learned in the framework of CACILM projects ensure the enable environment for mainstreaming and replication of SLM practices at the national, sub-regional and global levels.

The results presented in this paper demonstrate the advantages and effectiveness of beneficial cooperation and partnerships under CACILM, and considerably contribute to develop platform for

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[1] Can be accessed at: http://www.wotr.org/sites/default/files/PNP-Handbook_0.pdf

interaction, exchanges and learning, and incorporating of SLM practices into national planning and management to improve agricultural productivity and ecosystem services in support of food security and human livelihoods.

WOCAT PILOT PROJECT IN CAMBODIA

Poster market contributor: Sitha Mom (Hilfswerk der Evangelischen Kirchen Schweiz (HEKS), Cambodia)

The two main natural disasters are flooding and drought. It is important to note that natural disasters in Cambodia are climate change related, and that the rural population is vulnerable due to low adaptive capacity. Agricultural infrastructure is virtually non-existent, which means that the majority of farmers depend on favorable weather conditions for agricultural production.

As HEKS Cambodia has been working with various partners on enhancing soil fertility through sustainable land management since over a long period, an analysis of fostered SLM technologies and approaches is clearly indicated.

In 2014, HEKS Cambodia implemented a pilot project for using WOCAT decision support tools ``Use of WOCAT tools for Sustainable Land Management (SLM) knowledge management and decision support'' in Kampong Chhnang Province, Cambodia. The project was aimed to identify and develop possible sustainable land management solutions in Cambodia. For this the WOCAT-DESIRE framework is used, which is adaptable to the specific local context and can be either kept broad or be limited to specific key topics. For the HEKS pilot project a specific focus on climate change adaptation and disaster risk reduction (floods and droughts) is planned.

The WOCAT-DESIRE decision support methodology consists of the following parts:

- Part 1: Identification of existing and potential SLM strategies
- Part 2: Assessment and documentation of existing and potential SLM strategies
- Part 3: Selection and decision on SLM strategies to be implemented
- Part 4: Implementation of the selected SLM strategy and impact monitoring

12 SLM Technologies and 4 SLM Approaches are documented and used for mainstreaming into partner projects of HEKS in Cambodia.

KNOWLEDGE MANAGEMENT (KM) IN CACILM- PHASE II - NEXT STEP ON USING WOCAT TOOLS IN TAJIKISTAN

Poster market contributor: Gulniso Nekushoeva (Soil Science Institute of Tajik Agricultural Academy of Science (TAAS), Tajikistan)

More than 60% of the population of Tajikistan are highly dependent on agriculture for their livelihoods. But current farming systems cannot provide sufficient income due to widespread land degradation processes as a result of unsustainable land management and due to the high vulnerability to climate change. SLM practices, documented earlier in Tajikistan and all CA regions, reveal the potential of SLM to counter land degradation and to decrease the vulnerability to climate change. The three year project, KM in CACILM Phase II, started in 2013 and built a new partnership between 5 CAC which has been established to facilitate the dissemination of innovative SLM practices in four main agro-ecosystems of the region: rainfed cropland; irrigated agriculture; mountain ecosystems and rangelands.

The overall goal of CACILM phase II is to improve local community livelihood through promotion and up-scaling of SLM practices at different levels in areas prone to land degradation, thereby enhancing food security and mitigating climate change impacts.

Methods used include: synthesis and generation of existing SLM knowledge, identification and filling of knowledge gaps; knowledge exchange, packaging for dissemination; The Similarity and Suitability mapping Analysis. Climate change modeling; establishment of demonstration field plots. Transformation of knowledge: Producing dissemination material on Tajik and Russian language for all SLM stakeholders from land users to decision makers. Using video clips and mass media for SLM knowledge sharing.

Several results can be identified. Over the last 15 years, different international programs and projects such as CAMP, CACILM- GIZ in all CA regions, and NCCR-N-S, PALM, PPCR in Tajikistan, in cooperation with government organizations and NGOs, documented SLM best practices. Up to now, more than 100 Tajik SLM technologies and approaches are available in the WOCAT Database. A draft version of an overview book of SLM practices (PPCR-2011) with 70 SWC case studies has been published. All this existing material significantly accelerates (in comparison to other CAC) the process of selection of SLM technologies. A total of 55 best practices were pre-selected at the beginning of the CACILM-II project. During national stakeholders workshops a prioritization of best practices has been made, and finally 36 out of the 55 SLM technologies have been identified for further prioritization at a regional workshop. In order to enhance the implementation potential of using SLM practices, a packaging approach was used for each agro-ecosystem.

Four demonstration plots on main agro-ecosystems of Tajikistan have been established. Farmers field days have been organized. Recommendations in brochures, booklets flyers, calendars, posters format for the implementation of this innovative SLM practices have been published. Several video-clips have been produced, and interviews on radio, TV etc. have been done. In order to facilitate the dissemination of suitable technologies at a large scale to similar areas in the CA region, similarity maps have been generated at regional level by using expert criteria and the available general datasets.

20 SLM practices from Tajikistan are currently included in a draft version of the CACILM-II book, which includes a total of 90 SLM best practices of all CA regions.

In conclusion, the establishment of the regional KM platform of CACILM-II lead to a strengthening of the collaboration among SLM partners from 5 CAC countries. It is still necessary to finalize the peer-review process of the last documented Tajik SLM practices in order to make them available for global access in the WOCAT database and to support the publication of the Tajikistan SLM overview book.

SCALING SUSTAINABLE LAND MANAGEMENT: BENEFITS ASSOCIATED WITH A DEVOLUTION MODEL IN EASTERN AFRICA

Poster market contributor: Joy Tukahirwa (LandCare network, Uganda)

A mismatch between benefits accruing from using sustainable land management (SLM) innovations (technologies, approaches and methods) and adoption rates remains a dilemma in degradation prone areas in Africa, which critically demands policy innovations.

The aim is to articulate a devolution model, whose foundation pillars are anchored in policy reforms involving transfer of functions to more localized institutions that empowers stakeholders towards scaling SLM innovations. The model capitalizes on multi stakeholder platforms to access a large consortium of actors, each playing important roles at multi scales. The model further takes advantage of participatory methods in problem definition, social network analysis, policy analysis, benefits of decentralization form of governance to leverage support and buy-in necessary for operationalising an effective scaling strategy centered on understanding local contexts; facilitating learning alliances; monitoring performance; implementing tangible action including creating enabling environment; and continuous capacity building.

Results in form of achievements associated with the model specific to Ethiopia and Uganda are isolated namely: a systematic strategy for ten devolution structures (IPs) at multi scales mainstreamed under decentralized local government authorities; enabling policy environment beyond capacity building; institutional strengthening and human resource development and increased allocation of resources to SLM by local government. Tangible results in central Ethiopian highland include: 10.24 ha community land fenced for regeneration, seed bulking on 8 community nurseries; distribution of 62, 463 seedlings; 234 km of soil conservation structures; formulation and ratification of 2 bylaws with 608 households benefiting from SLM innovations. In eastern Uganda on Mt Elgon slopes results include distribution of 71,903 tree seedlings, nurturing 219 seedlings in 6 community nurseries, building capacity of 153 IP members in seed collection, formulation and ratification two bylaws and one ordinance at district level as well as 8,435 ha regenerated. Policy recommendations in support of devolution model include investment in creating enabling environment, including incentive packages for adopters; mainstreaming Innovation Platforms in local government structures; and intricate knowledge management; continuous capacity building; advocacy and awareness building and a positive political will.

HOW TO SAVE MONEY: CHEAPER PRODUCTION AND LESS WORK

Poster market contributor: Katja Wiese (NatureFund, Germany)

With dynamic agroforestry, the farmers in the Patuca National Park, Honduras, got to know a new method of reforestation with which they can save money. How do saving, reforestation, and conservation come together?

Quite easily, as dynamic agroforestry uses the natural principles of succession and diversity. Expensive chemical fertilizer or pesticides are no longer necessary. The expenses for vegetable plants and tree seedlings disappear with dynamic agroforestry, as everything is being produced locally without the usual heavy physical labour.

It almost sounds too good to be true. But in 2011, Naturefund introduced this method in the Patuca National Park as a test, and the success rates speak for themselves. After 18 months, all the areas where dynamic agroforestry was introduced are densely covered in growth again, and the people obtain more food from this land than they ever have before.

Lázaro Sauceda lives with his family in the village of Las Milpas, which is located in the middle of the national park. He organised himself together with other farmers in a cooperative (APROCAMIL) in order to collectively sell their products better. Lázaro says: "Before I started using dynamic agroforestry, my wife Digna had to go to the market at least once a month in order to earn about 75 US$ just to feed the family. Very often she didn't manage this, and therefore the family meals were very unbalanced." Digna explains further: "My family consists of five people. We supply ourselves with milk as we have several cows. But sometimes I had to go to the village which is located about one hour from here by boat. Sometimes when I arrived there were unpleasant surprises, essential things that I needed, such as cooking bananas or yucca wouldn't be there."

Digna, like many other mothers from Las Milpas, could often only cook unbalanced meals for her family. Since her and her husband Lázaro have introduced dynamic agroforestry to their finca, the situation has changed completely. "Today it is often the case that the five of us go to the fields and have very little to do. Those days where a great deal of physical effort was needed, hardly occur any more. At the same time we have much more to eat than we have ever had before. Now we can find everything on our finca, also bananas and yucca. Now it happens more often that we give away parts of our harvest to other families who are only growing cocoa without the dynamic agroforestry method. Seriously, working at the finca has become wonderful." Thus ends Digna her story. In Las Milpas, more and more families are converting to the dynamic agroforestry method, as they can see by using it they can save money, and at the same time the labour that was previously required, such as weeding or fighting against plant diseases, is significantly reduced.

Dynamic agroforestry is a method that also allows the family to spend more time with each other. Almost unnoticed a whole new approach to nature develops that reminds people a bygone age where the harmony between humans and nature was the basis for feeding the family.

LAUNCH OF NEW WOCAT NETWORK

At the end of the Symposium, a launch event celebrating the start of a new WOCAT era took place.

During the event, the new institutional structure of WOCAT has been presented to the participants (see Figure 2). WOCAT now consists of WOCAT International and WOCAT Regional/National. WOCAT International is responsible for strategic guidance and is composed of the WOCAT Secretariat (Director, Coordinator, required staff) and nine Consortium Partners:

- University of Bern, Centre for Development and Environment (CDE)
- Food and Agriculture Organization of the United Nations (FAO)
- ISRIC - World Soil Information
- Swiss Agency for Development and Cooperation (SDC)
- International Center for Agricultural Research in the Dry Areas (ICARDA)
- International Centre for Integrated Mountain Development (ICIMOD)
- International Centre for Tropical Agriculture (CIAT)
- Consultative Group on International Agricultural Research (CGIAR)
- University of Kwazulu-Natal
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
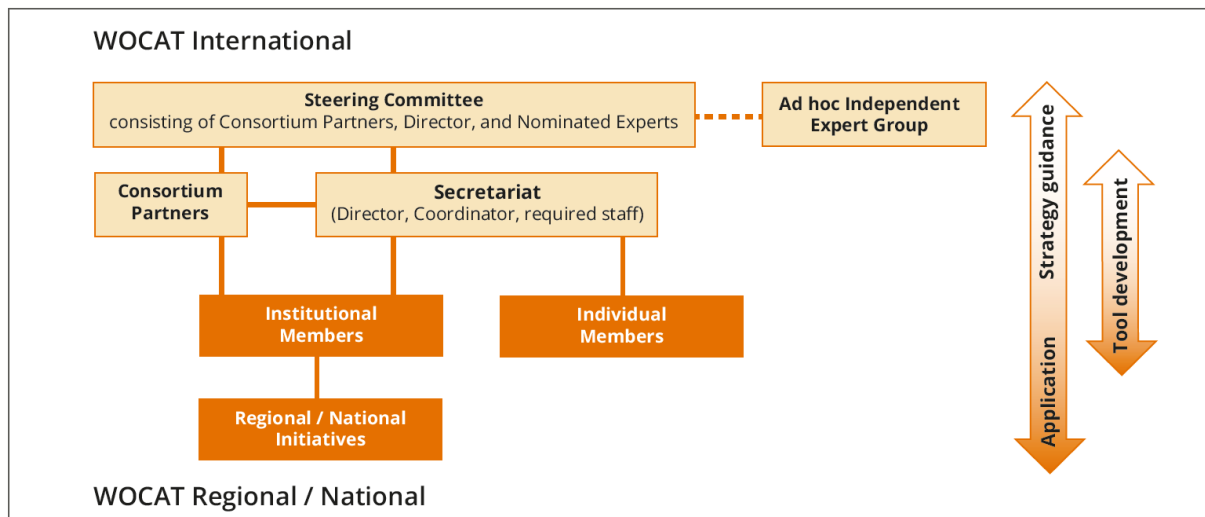

Figure 2: New Institutional WOCAT Network Set-Up

WOCAT Regional/National with partners in over 50 countries applies WOCAT tools and methods and is together with WOCAT International responsible for Tool and Method development.

17ᵀᴴ WOCAT NETWORK MEETING

Chair morning session: Dieter Nill, GIZ, Germany
Rapporteur morning session: Nina Lauterburg, WOCAT Secretariat, Switzerland

WELCOME AND INTRODUCTION TO WOCAT NETWORK MEETING

The chair of the morning session, Dieter Nill from GIZ (Germany) welcomed the participants to the 17th WOCAT Network Meeting and gave a short overview over the schedule of the two-day meeting.

SHORT SYNTHESIS OF WOCAT SYMPOSIUM AND REFLECTION OF FIELD DAY

Presented by: Walter Engelberg (GIZ, Germany) and Hanspeter Liniger (WOCAT Director, Switzerland)

Walter Engelberg and Hanspeter Liniger reviewed three key aspects of the field day:

- The Village Renewal Project in Pürgen, which's main objective was to redesign the pond of the village, is a good example of a whole village initiative with community building character. Due to this project, the quality of life has improved and a new village gathering point (the new pond) has been built. The successful disaster risk reduction project aiming to reduce flood risks has also been highlighted.
- The Landsberg Agicultural Education Centre provides a good example for a well-organized, practical and very field oriented research center.
- The Welshofen machinery ring is a good example of a well-organized self-help group. Engelberg highlights the importance of pro-active professional advisory services and mentions Max Stadler from the machinery ring as a unique example illustrating good practice in this domain.

Several key issues from the WOCAT Symposium have been mentioned:

- Off-site benefits of SLM are important. Disaster Risk Reduction (DDR) is becoming increasingly important and Payments for Ecosystem Services (PES) can be a key factor allowing to promote SLM.
- Research and education are crucial as they allow involving the next generation (for instance students). To achieve that goal, further teaching materials are needed. Liniger identifies a lot of room for synergies between research and implementation (ex: WLRC; Mexico).
- Major Land Management projects are currently partly using WOCAT, there is still a great potential for synergies within and among projects. Feedback to WOCAT is important.
- Recognition of the multi-level (local, regional, national, global) and multi-stakeholder nature of the context is crucial.
- Better tools for sharing, accessing and using knowledge need to be developed (videos, tablet applications etc.). National and regional projects have to be flexible in order to account for different contexts but they still need to be standardized and harmonized. Major players and opportunities which could involve WOCAT have to be explored and awareness of WOCAT has to be raised at the regional and institutional level (e.g. in Latin America). Finally yet importantly, the role and set-up of WOCAT in the different countries has to be strengthened (it is more than just collecting data and applying a database).

RECENT ADVANCES IN THE DEVELOPMENT OF NEW USER FRIENDLY IT WOCAT APPLICATIONS AND INNOVATIVE WOCAT TOOLS

VISION AND CONCEPT

Presented by: Kurt Gerber (CDE, Switzerland)

The WOCAT IT system(s) will have to undergo substantial changes in order to address new demands. Several key points have been identified:

- The online questionnaire needs a redesign. Until today, a common IT concept is missing; QT, QA and QM are currently built as "three separate houses" and there is a patchwork of different applications.
- Additional demands include:
  - o The availability of a light version, i.e. a low-level entry point allowing an easier start to enter practices in the system.
  - o The possibility to run WOCAT IT tools and questionnaires on different devices (mobile, tablet etc.)
  - o The possibility of an application based access (UNCCD SKBP, KLINK, National or Regional Platforms)

The WOCAT IT task force fixed the timeline for the anticipated changes during an externally moderated task-force workshop. The highest priority is associated to the redesign of the WOCAT Questionnaire databases and applications and to the elaboration of a new communication strategy (to be done in 2015). These two objectives are directly followed by the construction of a new, multilingual, WOCAT website (2016 and later).

The redesign of the WOCAT Questionnaire databases and applications will include:
- An entry form for Technologies and Approaches
- Attractive and user-friendly design
- State of the art software
- A multilingual entry form
- An off-line version of web-applications
- Bandwidth-optimised content

The 2016 and beyond objective of constructing a new WOCAT website will include:
- Improved design
- Improved search engine visibility
- Bandwidth-optimised content
- Additional graphical material and enriched WOCAT success stories
- More visibility for donors
- Inclusion of social media channels
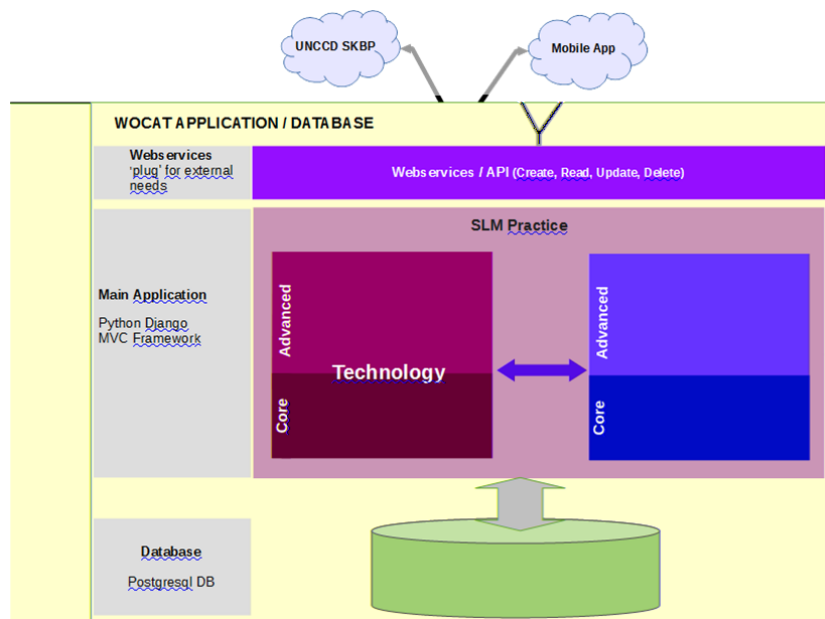
Figure 3: New WOCAT Application/Database Architecture

WOCAT CORE AND UNCCD SLM BEST PRACTICES MANDATE

Presented by: Hanspeter Liniger (WOCAT Director, Switzerland)

The WOCAT questionnaires have been developed and revised over more than 20 years with the first version made in 1994. The current 2015 versions are based on the last revision made in 2008 and consist of QT basic and QA basic. However, as users' needs change over time, WOCAT tries to respond and further develop its products taking into account users' needs. Several users requested to:

- Break down the complexity and volume of the WOCAT questionnaires. WOCAT received frequent requests from users asking for a less time consuming, less extensive and less complex version of the WOCAT questionnaire (referred to as Q *light*)
- Simplify complex questions as they are often either wrongly answered or not answered at all.
- Create a basis (set of key questions) from which to connect to other initiatives (SLM, FAO etc.). This with the aim of creating a global standard with a common denominator (the set of key questions).

These WOCAT light key questions will build the basis for a flexible and modular system, built on a set of questionnaires with different levels of details and various thematic extensions. The current QT basic and QA basic will be split in two levels of details:

- Q core = WOCAT light: contains a set of core (or key) questions selected from Q basic.
- Q plus = WOCAT advanced: corresponds to the current versions called Q basic, contains in-depth information and covers more aspects compared to Q core.

QT and QA remain two separate questionnaires and provide together a comprehensive picture of a SLM practice. The separation into Q core and Q plus allows however for more flexibility. The plus questions can be added on demand, section by section. Moreover, Q core will be the starting point to link up with thematic and/or institutional modules (in-depth information referring to specific topics and/or tailored information that meets the needs of the institutions).
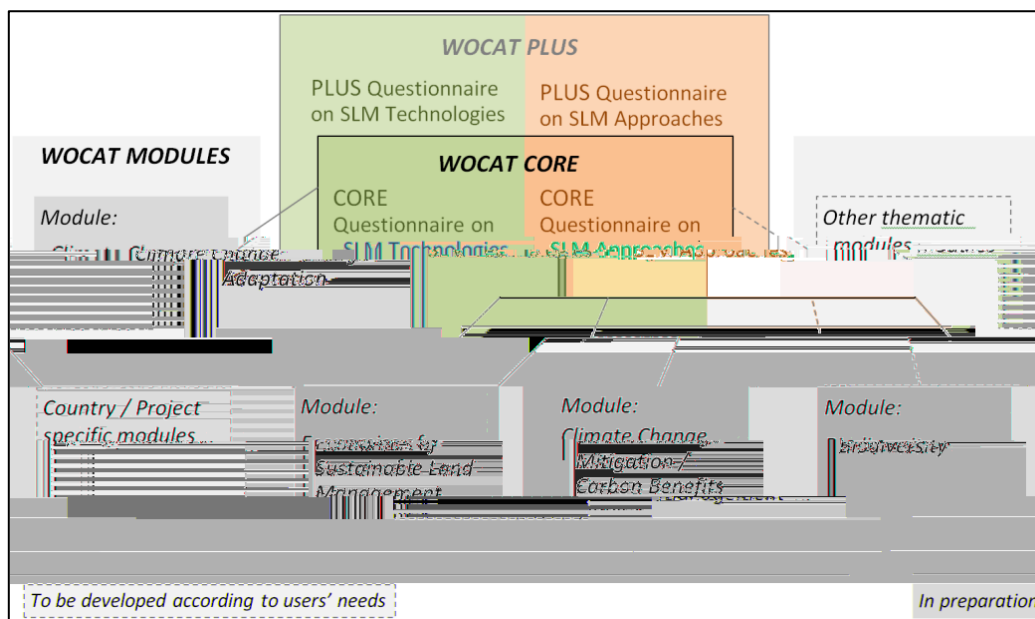
Figure 4: New WOCAT questionnaire set-up - Q core, Q plus and modules

The following set of criteria and principles guides the selection of core questions:

1. Reduce length and complexity of Q while focusing on a minimum set of questions necessary to provide a concise documentation of a SLM Technology
2. Compatibility and comparability with "old data" has to be guaranteed
3. Take into account WOCAT output formats (especially 4 page summary) and earlier proposals for a Q light formats
4. Involve entry questions for thematic modules (e.g. on CC, watershed management, economies of SLM, etc.)
5. Questions are easy to answer and with high information value
6. Simplify questions which proved to cause problems in the documentation process and generally resulted in poor data quality or data gaps
7. Maximum of standardized structured questions (as before)

The major results of the 2015 revision are:

- An optical separation of Q core and Q plus questions
- A considerable reduction of the volume of questions for Q core: 56% shorter for QT (from 55 to 24 pages) and 48% shorter for QA (from 25 to 13 pages).
- A considerable simplification of questions for Q core (e.g. section on technical specifications/ establishment and maintenance activities, inputs and costs are in Q core not specified per measure.)
- Revision/refining of specific questions
- New numbering of questions
- Free test fields for comments allowing for more flexibility
- Very few new questions
- Indication on appropriate source(s) of information for each question (i.e. questions to be answered by farmers, by land-owners, etc.)
- Add "not relevant/not applicable" option where it makes sense

AUDIO-VISUALS AND TABLET APPLICATION

Presented by: Nina Lauterburg (WOCAT Secretariat, Switzerland)

WOCAT strives to develop new attractive user-friendly tools and products. **Videos** are one of the new tools and are already partially available. Videos are jointly produced with innovative land users, they thus give land users a voice and show how they adapt to a changing environment in an attractive, authentic and personalized manner. The objective is to enhance existing SLM knowledge (Ts and As) with videos in order to support awareness raising and scaling up. These new products help to address various new target groups at different levels and thereby allow to tap into great potential.

Three different video types are currently being produced and are available on www.wocat.net, Vimeo and Youtube:

1. General SLM videos:

    - 7-10 minutes
    - Cover a certain topic in the field of SLM
    - Can be used for example in presentations, trainings or for broadcasting on TV
    - Existing examples include for instance "Principles of SLM" or "For greener land and bluer water"

2. Instructional videos

    - Audiovisual guide for implementation of SLM Ts and As from land user to land user
    - Aim to motivate land users to replicate a practice
    - Storyboard consists of three parts: 1) contextualisation and problem 2) illustration of implementation and functionality of the technology 3) illustration of impacts, benefits and future developments
    - Existing examples include for instance videos on stone lines or conservation agriculture.
    - A manual for instructional videos with background research on rural development, explanations for the use of videos, guidelines for practical implementation, video structure, storyboard, post production process etc. is currently available as a draft. The draft needs however further testing and refinements

3. Short video clips on SLM Technologies and Approaches

    - Short statements by land users regarding particular aspects of a SLM Technology or Approach.

Generally, the existing videos are very well received locally and regionally. In the future video products will cover a wide range of ecosystems, SLM groups and continents.

Besides the increasing use of videos, WOCAT is about to develop a **tablet application**. A prototype of the application is already finished. With this prototype, WOCAT currently explores the potential of tablet applications to disseminate SLM knowledge to a broad public. For now, the prototype is a videobook (showcase), based on Adobe content viewer, with only a few case studies and no possibility to add data. In the future, the application should ideally allow data collection and include a direct link to the online WOCAT databases.

DECISION SUPPORT FRAMEWORK FOR MAINSTREAMING AND SCALING UP SLM (FAO-WOCAT-GEF PROJECT)

Presented by: Stefan Schlingloff (FAO, Italy)

The Land Degradation Assessment in Drylands (LADA) project (2006-2011) and WOCAT developed a set of methodologies and tools for the assessment of land degradation and SLM at various levels. Based on this background, the project GCP/GLO/337/GFF on Decision Support for Mainstreaming and Scaling up of Sustainable Land Management (DS-SLM) will address global as well as national and local land degradation issues and focus at creating a better understanding for land degradation and the generation of decision support tools to promote SLM. The project has been developed since 2013 and will be implemented from 2015 to 2018 in partnership with 15 countries and WOCAT. The project addresses the Global Environment Facility's (GEF) strategic objects LD-1, LD-3 and LD-4 and has two overall objectives:

- **Environmental objective**: the project aims to contribute to combating desertification, land degradation and drought (DLDD) worldwide through scaling up sustainable land management practices based on evidence-based and informed decision making.

- **Development objective**: the project aims to increase the provision of ecosystem goods and services and enhance food security in countries and regions affected by DLDD through the promotion of SLM, integrated management, and efficiency in the use of natural resources

Fifteen countries are involved in the project (Morocco, Tunisia, Lesotho, Nigeria, Bangladesh, China, Philippines, Thailand, Bosnia & Herzegovina, Turkey, Uzbekistan, Argentina, Colombia, Ecuador and Panama). GEF allocates a total of 6'116'730 USD to the overall project budget of 44'214'077 USD. The project consists of three project components:

- **Component 1** "National and local decision-support on combating DLDD and promoting mainstreaming and upscaling of SLM best practices":

  o **Outcome 1.1**: SLM best practices mainstreamed into national and/or sub-national agricultural and environmental plans and investment frameworks, policies and programs to address DLDD in 15 countries

  o **Outcome 1.2**: Upscaling of SLM best practices catalysed in countries through targeted actions on the ground and strategic decision making from local to national levels.

- **Component 2** "Global DLDD and SLM knowledge management and decision-support platform":

  o **Outcome 2.1**: Knowledge management and decision-support system and tools used to support evidence-based strategy formulation at national level for promoting SLM and contributing to global processes to address DLDD.

- **Component 3** "Monitoring, evaluation and dissemination of project results":

  o **Outcome 3.1**: Project implementation based on adaptive results-based management

The project will be declared operational by FAO as soon as all 15 countries signed the Government Cooperation Programme. Next steps include the designation of a country national focal point, the recruitment of a project manager, the elaboration of a first draft of a country workplan and a project start-up workshop in Rome (September 2015).

Figure 5: Decision Support Framework for SLM mainstreaming and scaling out

ELD INITIATIVE

Presented by: Walter Engelberg (GIZ, Germany)

The Economics of Land Degradation (ELD) initiative of the EU, BMZ, UNCCD and KFS was set up in 2012 in order to promote global understanding and awareness on the economic importance of productive land. To achieve this objective, appropriate valuation approaches and methodologies (market and non-market based) for land degradation and ecosystem services will be developed by a network of research and policy institutions (SIE, UNEP, UNU, ANU, UNDP, ICARDA, a.o.) applying harmonized methods (total economic value). GIZ is hosting the Secretariat of the initiative. Figure 7 provides an overview of the outputs and deliverables of the project, several reports are already available (c.f. Figure 6):
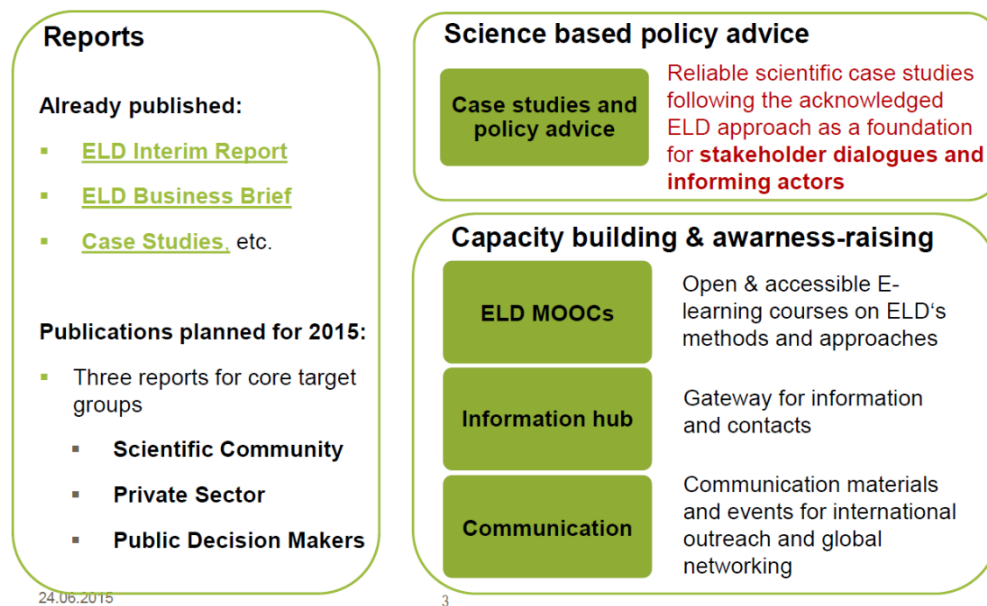
Figure 6: Outputs and deliverables

Politicians and land-users are increasingly interested in data on benefits and costs of land management technologies (direct onsite costs and benefits as well as indirect on and offsite benefits). The ELD project thus proposes to elaborate a special WOCAT-ELD module, which links ELD valuation of ecosystem benefits with the WOCAT SLM database. WOCAT as the recommended database for best practices and technologies in SLM should include tools for comprehensive economic valuation. The proposed WOCAT-ELD module would therefore:

- Outline a framework for prioritization for ecosystem services affected by SLM technologies.

- Provide a standardized tool for step-by-step guidance to economic assessments

- Blend into the WOCAT logic and database

- Establish functional cross-linkages within the WOCAT catalogue

- Allow comparison of benefits from SLM technologies across spatial boundaries

- Have to be linked with enhanced information on on-farm economic impacts of SLM

Next steps towards the WOCAT-ELD module include (1) the definition of the framework of ESS valuation (i.e. conceptualize strategic goals, target groups, outcome and focus and identify relevant ESS and their assessment methods); (2) the definition of required data inputs and variables (i.e. operationalize methods and functionalities within a database, assess the available information in the WOCAT database and list required variables and/or feasible proxy indicators); (3) develop a user interface for data input (i.e. establish the data input page using the WOCAT design and ensure the visibility of the progress throughout data input) and (4) pilot test the module (i.e. test the module in the field within a well-known and researched context).

WOCAT INTERNATIONAL STRATEGY 2015-2018

Presented by: Isabelle Providoli (WOCAT Secretariat, Switzerland)

Sustainable land management (SLM) seeks nothing less than to ensure the harmonious coexistence of humankind and the natural world for today's generation and future generations, in particular by enabling our ecosystems to continue providing the services so viral to life on earth. SLM means

maintaining healthy land resources (soil, water, vegetation and animals) including their productive functions (e.g. food security), ecological functions (e.g. water, nutrient and carbon cycles), and biodiversity. SLM provides flexible, adaptable solutions in a world of fast-changing conditions (e.g. climate change and variability, extreme weather events), social conditions (e.g. migration, feminization of agriculture), and economic conditions (e.g. changing markets). Global and local development challenges demand that land users innovate and find ways of managing their land sustainably, staying resilient in the face of change and maintaining or improving their livelihoods and living conditions. Thus proper knowledge management and decision support are essential for SLM to reach its full potential. Without effective knowledge management and decision support tools and processes, land degradation and land resource management will continue to be addressed in an ad hoc manner, all too often overlooking, ignoring, or only selectively applying useful knowledge and experience gained over the years in various regions.

WOCAT addresses these challenges by aiming to improve land resources and ecosystems (including soils, water, flora and fauna) and people's livelihoods by sharing, enhancing, and using SLM knowledge. WOCAT's mission is to support adaptation, innovation, and decision-making around SLM. This includes enhancing land productivity and water use efficiency, improving provisioning of ecosystem goods and services, sustainable use of biodiversity, and contributing to food security, climate change adaptation/mitigation, and reducing disaster risks and land and water conflicts. Collectively, these activities should facilitate cost-effective investments in SLM and scaling up of SLM, gradually reducing land degradation. WOCAT's overall goal is to unite knowledge management and decision support efforts, gradually spreading SLM among all stakeholders. This will be done by means of the following:

- Building and maintaining an effective global network of SLM specialists, including formation of new partnerships and maximization of synergies.
- Further developing standardized tools and methods for knowledge management and decision support at the local, national, and global level.
- Building and maintaining a global knowledge base on SLM, synthesizing experiences, and disseminating targeted information via different media.
- Enhancing the capacity and knowledge base of a range of actors (e.g. implementers, researchers, trainers, educators) to promote SLM adoption at different scales.
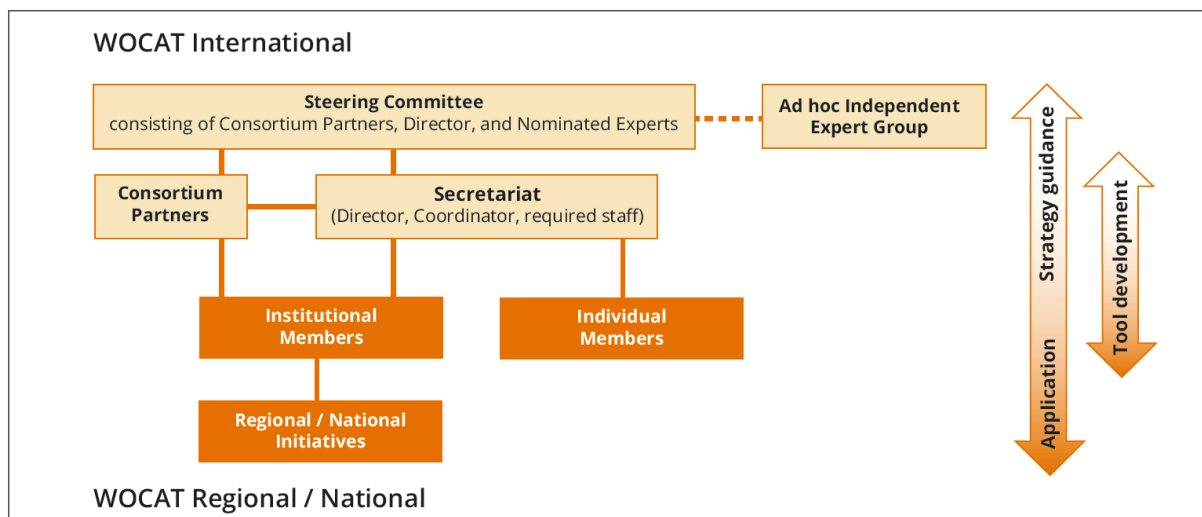
Figure 7: Organizational structure of the WOCAT Network

Providoli presented the **new institutional set up of the WOCAT Network** (see Figure 7) and underlined several key points:

- Any institution supporting the vision and mission of WOCAT can become a WOCAT Network Member. If wished they sign voluntarily a Memorandum of Understanding (MoU) defining their specific roles and functions. MoUs are declarations of intention that do not include binding commitments. MoUs between the WOCAT International Secretariat and regional/national organisations, institutions and projects, help to formalize and facilitate collaboration between the WOCAT International Secretariat and WOCAT Regional/National.
- The role of institutional members (IM):
  - o Activities of the IMs are contributing to the implementation of the WOCAT International Strategy (2015-2018).

- o IMs can use the WOCAT tools and methods in their respective work field with proper acknowledgment.
    - o IMs contribute to the global WOCAT knowledge base and database by sharing their data with the Secretariat. The data remains the property of the institution that provided it.
    - o IMs will report on activities related to implementation of WOCAT tools and methods within their field of work.
    - o Each IM operates in an autonomous, decentralized, and self-funded way.
- The role of the WOCAT International Secretariat:
    - o The role of the Secretariat is to support the Director in the management and coordination of the WOCAT Network and in empowering the Network Members.
- Specific roles and functions of Institutional Members can be specified by IM's and may include for example:
    - o Play a role in promoting, mainstreaming and out-scaling of SLM in their country/region.
    - o Play a role in promoting the use of WOCAT methods and tools, and spreading of the WOCAT programme in their country/region.
    - o Further develop WOCAT methods and tools, testing hem and conducting relevant research on impacts of SLM in their country/region.
    - o Apply WOCAT methods and tools for decision support and up-scaling of SLM good practices in their country/region.
    - o Secure funding for the WOCAT activities in their country/region.
    - o Etc.

The goal of the **WOCAT International Strategy 2015-2018** is that land users and the public benefit from more secure ecosystem services, thanks to greater adoption, adaption, dissemination, and mainstreaming of SLM in our fast-changing world. Several outcomes and key outputs have been defined in order to achieve the overall goal of the strategy:

- **Outcome 1**: Enhance knowledge and tools for evidence-based decision-making, adaptation, and dissemination of SLM at different scales (local, landscape/watershed, national). Key outputs of Outcome 1 are:
    - o A decision support framework developed, tested, and adapted to users' needs.
    - o Tools for increased recognition of SLM's overall impacts (including off-site benefits within landscapes/watershed) for decision-making, land use planning, implementation, and policy formulation developed and/or enhanced.
    - o Standardized tools and methods for SLM knowledge management that are available and further updated and developed, addressing diverse national and global issues; introduction of innovative tools (e.g. mobile phone/tablet computer application, videos, webinars) to disseminate and/or collect knowledge.
    - o Continuously enlarge the global knowledge and database on technologies and approaches; improve the quality of existing and new data; enlarge the global knowledge and database on national and regional SLM mapping.
    - o Enhance global and national SLM knowledge products (synthesis reports, guidelines, books, videos etc.)
- **Outcome 2**: Engage institutions/organizations, policymakers, private sector, civil society organizations and the general public, who adopt and mainstream SLM as key cross-cutting approach to tackle global issues. Key outputs of Outcome 2 are:
    - o Advocacy products such as policy briefs, brochures, flyers, and videos.
    - o Advocacy campaigns on the impacts and benefits of SLM.
    - o SLM knowledge and evidence of overall impacts of SLM applied by institutions/organizations, policymakers, etc. in decision-making, land use planning, implementation, and policy formulation.
    - o Regional and national networks/hubs established which promote use and adaptation of WOCAT products to local/regional contexts (including translation into local languages.
- **Outcome 3**: A recognized, jointly developed, and supported harmonized global WOCAT SLM platform for knowledge management and decision support. Key outputs of Outcome 3 are:
    - o An effective global SLM network that provides basic and advanced services.
    - o Harmonized and standardized knowledge management and decision support platform (linking practical, technical, and scientific information).
    - o Knowledge base adapted and revised to fulfil the requirements of harmonizing and improving links to existing knowledge management tools and databases.
    - o User-friendly web applications, including offline functionality.
    - o A revised multilingual platform and website.

    o Linkages and collaboration with other knowledge management platforms.

Finally, Providoli outlined the framework of the newly proposed **WOCAT Fundraising Strategy**. This strategy distinguishes between the funding for the WOCAT Secretariat and the funding for outcomes and key outputs of the WOCAT International strategy 2015-2018:
- Funding for the WOCAT Secretariat is split in two parts:
  - o Funding to cover basic functioning and services:
    - Annual contributions of Consortium Partners, foundations, private companies etc. and/or percentages of project funds earmarked to the Secretariat (e.g. 5%) and/or combined with funding for advanced services.
    - Contributions from national and/or regional WOCAT focal points or initiatives to the WOCAT Secretariat for anticipated or rendered services.
  - o Funding to cover advances services:
    - Funds included in project/programmes or linked to specific products.
    - Revenues from advanced services (e.g. capacity building, training events).

PROGRESS REPORT AT REGIONAL AND NATIONAL LEVEL

PROGRESS REPORT – CAMBODIA

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: Cambodia
Institution: HEKS/EPER
Contact person: Norng Sivouthan

Progress report July 2013 – June 2015 (2 years)
HEKS Cambodia, in cooperation with the Centre for Development and Environment (CDE) of the University of Bern and its local partner SOFDEC/LAREC, implemented a 1 year pilot project in 2014. The objective of the project was to identify and develop possible sustainable land management solutions for Cambodian farmers. Three parts were organized and implemented as below.

- Part 1: HEKS stakeholder workshop-1: in June 2014 a WOCAT workshop was organized to identify promising strategies for land conservation in the local context. Farmers, village leaders, local government authorities and NGO staffs identified 8 existing and 3 potential solutions.
- Part 2: Assessment and documentation: Conducted assessment and documentation of existing and potential SLM strategies - local SLM solutions documented using WOCAT questionnaires. CDE played main roles technically on overview of documented WOCAT SLM technologies and approaches; stage of intervention and tolerance to climate change; and global WOCAT database.
- Part 3: HEKS stakeholder workshop-2: in December 2014 a second WOCAT workshop was organized to discuss and prioritize the identified technologies and approaches for local implementation. The technologies that scored the highest were compost, SRI, home garden.
- 12 technologies and 4 approaches have been identified using the WOCAT-DESIRE methodology.
  - o 12 SLM Technologies were documented: compost, mulching with hyacinth, SRI, ponds, home garden, sugar palm on rice field dykes, stylo grass, biochar, cashew living fence, Norias, biogas, stabilization of irrigation channels with old rice bags.
  - o 4 SLM Approaches were documented: model farmer, water user group, rice bank, Local Agricultural Center (LAREC).

The traditional SLM technologies have been implemented by local farmers and small farmers. These technologies are organic fertilizer (manure), earth dykes, irrigation of paddy fields using water-pumping wheels (Norias), long and medium term rice varieties, sugar palm tree grown on rice field dykes.

To addition, HEKS and partner organizations have introduced more SLM practices to farmers for increasing yields, resisting to climate risk, and contributing to environmental conservation. These introduced SLM practices are short-term rice varieties, flood-tolerant rice varieties (floating rice), direct mulching in flooded areas, composting, systems of rice intensification (SRI), and water management.

Workplan July 2015 – June 2017 (2 years)

- To introduce 12 identified technologies and 4 approaches to HEKS/EPER partners and relevant stakeholders
- To promote SLM practices with local partners
- To mainstream concept of WOCAT and identified technologies and approaches to partner project implementation
- To monitor and support partners to implement SLM technologies
- To attend the 18th WOCAT Network Meeting

PROGRESS REPORT- CHINA

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: China
Institution: CPMO of PRC-GEF Partnership on LD in China
Contact person: Song Zengming, Duan Mingyan

Progress report July 2013 – June 2015 (2 years)
After the publication of the *Best Practices for Sustainable Land Management in Dryland Ecosystems of China II* (English and Chinese versions) in April 2013, CPMO of the Partnership applied a new GEF grant project—Climate Resilient Sustainable Land Management in Western PRC Project (1 Feb 2015-31 Jan. 2018). The project covers six provinces/ARs in western PRC (Inner Mongolia, Shaanxi, Gansu, Qinghai, Sichuan and Guizhou) where it will test various SLM measures, including maintain closure against grazing, shelterbelt forest in degraded grasslands, fish-scale pit adverse-slope site preparation, grass grid and barriers, plantation of *Pinus sylvestris var. mongolica* at sandy land, plastic film mulching for afforestation, confier-broadleaf mixed forest in semi-arid area, solar cooker, sealing a mountain pass for banning grazing and drylot feeding, returning straw to field, loess terraced fields, wind power utilization technology, shelterbelt forest on farmland, drip irrigation under plastic mulching, water tank, biogas digester, peddle mulching, grass grid and barriers, high vertical sand barrier, oasis agro-forestry, afforestation seeding in rainy season, reseeding of deteriorated grassland, eco-agriculture, planting and grazing under forest, eco-tourism, rotation, etc.
The development strategy for the second phase of the Partnership—*Integrated Strategy for Sustainable Land Management in Western PRC (2014-2023)*--was developed, which identified five strategic priorities in the next ten years at the national level, including upscale SLM technologies, improve the ability to tackle climate change, improve regional green development, promote poverty reduction and gender equality, and strengthen institutional innovation in land management. It pointed out that the Partnership will continue to cooperate with WOCAT in promoting and applying SLM measures and approaches to make new contributions to sustainable development in drylands.

Work plan July 2015 – June 2017 (2 years)
The new Climate Resilient Sustainable Land Management in Western PRC Project will continue to apply and further promote SLM best practices and approaches in the western areas of China combing with climate change addressing and green development to improve sustainable development of desertified and rock desertified lands in western PRC.
Under the development strategy of the second phase of the PRC-GEF Partnership on LD in Dryland Ecosystems (2014-2023), more SLM models and measures will be tested and promoted, and the ability of sustainable development in western PRC will be further improved. The Partnership will also combine SLM measures with climate change and biodiversity to further increase land productivity and people's livelihoods in the western regions. And it will also share China's experience with other countries in Central Asia and Africa.

PROGRESS REPORT – ETHIOPIA

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: Ethiopia
Institution: Water and Land Resource Centre (WLRC/Ethiopia)
Contact person: Gizaw Desta (gizaw.d@wlrc-eth.org)

Progress report July 2013 – June 2015 (2 years)

Since 2012, Water and Land Resource Centre (WLRC) began documentation of SLM practices integrated with the Learning Watersheds program using WOCAT tools. Guiding on the principles of SLM practices and land use systems, documentation was made for six Technologies and five Approaches that are already practiced in the Learning Watersheds. The key criteria in selecting the Technologies and Approaches were relevance to increase in land productivity, increase in short- and long-term benefits, and at same time reduce land degradation, encourage the participation of the community, and enhance collective actions and benefit sharing. More importantly, the documentation gave focus on integrated practices with added value on the generation of multiple benefits.
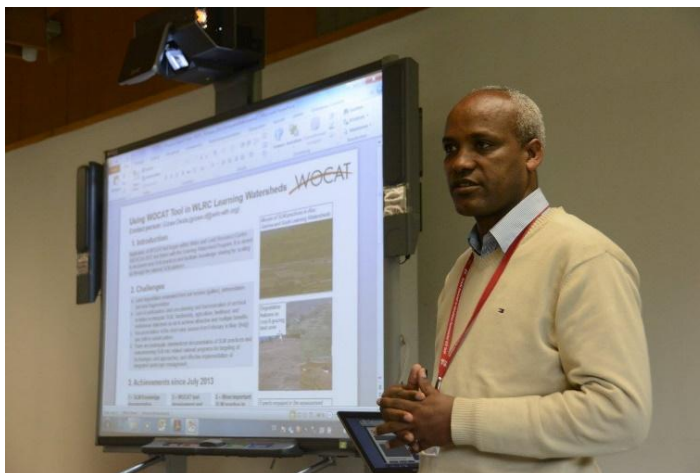
The documentation of SLM practices cover major land use systems such as crop, grazing and degraded lands; capture practices responding to both production and environmental benefits; and innovations in social mechanisms and livelihoods. The documented Technologies include area closure on degraded lands, gully rehabilitation and management (grazing and crop lands), Teff row planting (on crop lands), vegetated graded soil bunds (crop lands), homestead package (settlement), and energy saving stoves. The five SLM approaches include Learning Watershed, Voluntary Community Organizations and Mobilization, Farmer-Research-Extension Group (FREG), Zero Grazing, and Community based Animal Health Workers (CAHWs). Aiming to facilitate targeting and scaling up of SLM practices, development of a working document on field applications of SLM technologies and approaches specific to Learning Watersheds is undergoing.

In the Learning Watersheds, not only specifications of the integrated Technologies and Approaches but also their impacts were assessed and measured. Monitoring was made both with direct measurement such as productivity, stream flows and beneficiaries, and analyzing perceptions of the beneficiaries. In addition, the integrity of activities for achieving multiple objectives of SLM were assessed using adapted Landscape Performance Scorecard (LPS) tools. The framework measured the performance of conservation, production, livelihood, social and institutional goals of the Learning Watersheds.

Workplan July 2015 – June 2017 (2 years)

For the period July 2015 – June 2017, the following activities are planned:

- Documenting new Technologies and Approaches and refining the already documented databases
- Publish and disseminate working paper and fact sheets of Technologies and Approaches in the LWs
- Strengthen the capacity of SLM practitioners and land users through training of WOCAT tools and methods
- Streamline WOCAT tools and methods into national watershed and landscape development initiatives and university graduate programs in the form of practical / seminar courses to spread its use as a knowledge management and decision support tool.
  - o Integrate WOCAT tools into the existing WLRC programs, for example with WALRIS, Ethiopian Learning Landscapes Network and Landscape Platforms, and Learning Watersheds
  - o Linking WOCAT tool with graduate student seminars for documenting Technologies, Approaches and mapping
  - o Mainstream WOCAT tools and methods in SLM and CRGE country initiatives and up-scaling of LW practices to large number of farmers through farmer-to-farmer extension system or training and

support of community resource people who serve as community-based trainers, and requires the development of community-based learning sites.
• Coordinate National/country WOCAT initiatives

PROGRESS REPORT – FAO CAIRO

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Institution: FAO Cairo
Contact person: Daniel Danano

Progress report July 2013 – June 2015 (2 years)

Sub regional and country level trainings have been conducted on the use of WOCAT-LADA tools for SLM scaling up. Venue of the training were (June 2012 in Lebanon, November 3012 in Cairo, March 2013 in Yemen, December 2014 in Oman, April 2014 in Amman and May 2014 in Beirut) The training was organized jointly by FAORNE, the Ministry of Agriculture of the countries, universities, research centers, IUCN and ICARDA.
About 140 persons have attended 5 days training and 66 persons participated in a one day introductory courses. Participants represented various ministries, universities, CSOs and research institutes. By the end of each session participants acquired knowledge and skills on the use of WOCAT-LADA tools for evaluating and documenting land management practices and mapping land degradation. Women participation was inspiring standing at 50%. They were among the trainees who performed well and showed keen interest to understand the use of the tools and their practical application. Some of them explained that they are motivated by the training and promised they will be applying it for monitoring and evaluation in the projects they are involved.

The collaboration among various organizations and in particular with the universities, ministries and the three UN organizations (FAO, IUCN and ICARDA) in bringing together expertise and resources allowed to effectively conduct the various training, with the knowledge and skills transfer to trainees well communicated. So far at least 3-4 technologies and approaches have been documented in some countries.

Initial steps are taken to establish SLM Networks in most countries. It is expected and some have already started to take responsibilities to coordinate the documentation and evaluation of practices using the WOCAT LADA tool. FAO RNE is maintain the list of Network members and provides close technical backstopping to the Network activities.

Workplan July 2015 – June 2017 (2 years)

• Conduct review workups for quality checking / assurance of the document technologies and approaches
• Conducting more training in countries where country level training is useful
• Strengthening of country SM Networks by supporting them and participating in their annual meetings
• Screening the best practices from the documented technologies and approaches and produce SLM package in the country

PROGRESS REPORT – KAZAKHSTAN

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Institution: KM-CACILM II project ICARDA-CAC
Contact person: Sanobar Khudaybergenova.

Progress report July 2013 – June 2015 (2 years)

Knowledge Management project in CACILM Phase II, implemented by the International Center for Agricultural Research in the Dry Areas (ICARDA),and supported by the International Fund for Agricultural Development (IFAD) since February 2013, aims to establish a knowledge platform to consolidate knowledge generated within phase I of CACILM and to outscale sustainable land management (SLM) approaches and technologies in 5 participating countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan).

Up to date, the Kazakhstan team has held nine Field days, acquired additional knowledge and skills on SLM. Moreover, with acquired knowledge on SLM national team was able to provide access to training for young scientists (master's and doctoral level) to conduct bias correction of climate change models and to develop similarity maps. Likewise, this knowledge will be used by young scientists for their master and doctoral thesis. Such understanding and ownership of the products developed during the project provides continuity of activities initiated by the project. A number of communication materials were prepared during the reporting period including recommendations, books, folding table calendar with information on promoted technologies, infographics, videos for training and promotion purpose of selected SLM.

Communication and feedback from end-users uncovered the significant necessity of constantly evolving knowledge, for instance on innovative resource-saving technologies to grow crops, for farmers and agribusiness professionals particularly taking into account open economy market conditions (as opposed to centrally planned economy which older generation still assumes) to achieve better competitive advantage. The crucial challenge still remains to link those who largely involved in knowledge generation side with those who largely involved in livelihood or business oriented knowledge user side.

Workplan July 2015 – June 2017 (2 years)

The project consists of three components - Knowledge Synthesis (Generation), Packaging and Dissemination, and Using Knowledge in Policy Dialogue on SLM. By the end of the project in January of 2016, the Kazakhstan team will continue to consolidate additional SLM technologies and approaches used by local agricultural production producers into easily accessible products; organize trainings for national staff on WOCAT mapping; field evaluation plots to validate proposed SLM and adaptation to CC options and demonstrate promising technologies and prepare cost benefit analysis using survey data.

PROGRESS REPORT – KYRGYZSTAN

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country:
Institution: KM-CACILM II project ICARDA-CAC
Contact person: Sanobar Khudaybergenova

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Up to date, the Kyrgyzstan team has held 14 Field days, acquired additional knowledge and skills on SLM. Moreover, with acquired knowledge on SLM national team was able to provide access to training for young scientists (master's and doctoral level) to conduct bias correction of climate change models and to

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PROGRESS REPORT – LATIN AMERICA

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: Latin America
Institution: FAO Regional Office for Latin America and the Caribbean (RLC, located in Santiago de Chile)
Contact person: Benjamin Kiersch benjamin.kiersch@fao.org / Meliza González meliza.gonzalez@fao.org

Progress report July 2013 – June 2015 (2 years)
An adjusted version of QT and summary was proposed (shorter, digital content, integrating climate change information), reviewed by 10 experts and 20 technicians in 2 workshops (Santiago in 2013; Oruro, Bolivia in 2014) and several internal meetings.
Publication of 15 technologies and 1 approach systematized with the modified questionnaire (QT Module).
A first attempt to collect aquaculture practices was made.

Pending issues identified:

- Space to integrate cultural aspects and traditional knowledge of technologies in the questionnaires and in the summary.
- Limited availability of Spanish materials is an important barrier for spread the use of WOCAT data base in LAC.

Workplan July 2015 – June 2017 (2 years)
We have learned that the questionnaire format can be tailored to individual needs as long as the compatibility with global WOCAT database is ensured.
It is planned to evaluate the use of WOCAT light version for systematizing information about technologies and approaches from SLM in Latin America.

We continue to work on a shorter and user-friendly tool (WOCAT app?), with complete and clear guidelines, and compatible with the global WOCAT database, adjusted to regional needs.

We will explore resources for an efficient communication campaign, addressed to key institutions and relevant extension actors in the region, and make training workshops to get more people involved in WOCAT.

We will work on integrated WOCAT into FAO activities at field and regional level through the Regional Initiative on Family Farming and Territorial Development.

PROGRESS REPORT – NIGER

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: Niger
Institution: Group of Research, Studies and Actions for Development, GREAD
Contact person: Abdoulaye Sambo Soumaila, President

Progress report July 2013 – June 2015 (2 years)
The period July 2013 - June 2014 was marked by:

- strengthening strategic partnership agreements between WOCAT / GREAD, MASNAT, OSEA and AND NGO's involved in the Abalak department;
- The contract with the Ministry of Planning for the mapping of TFP interventions in the PDES 2012-2015
- Continued data collection with micro projects of CCA

The period July 2014 - June 2015 is characterized by:

- The contract with ACF Dakar for realization of a study on identification of a monitoring system of Herders movements;
- Participation at the 3rd scientific conference of the UNCCD in Cancun (Mexico);
- The implementation of the project "values Chains, Chains of peace in the department of Abalak"
- Elaboration of the number 1 of the Independent Review of Political Economy and Ecology;
- Continued collection of data from CCA micro projects
- Participation at WOCAT Annual Workshop in Munich

Workplan July 2015 – June 2017 (2 years)
The period July 2015 - June 2016 will be marked by:

- Participation (September 2015) at a meeting of humanitarian plaidoyer in Paris (France) within the framework of the preparation of the climate forum of Paris
- Continuation and completion of the data collection operation as additional funding has been obtained;
- Strengthening the Capacity of the Independent Review of Political Economy and ecology;
- Organization of an International Workshop on Sustainable Management of Lands in pastoral areas (February 2016)
- Revival of strategic partnership with the CCA and other national resilience programs
- Implementation of monitoring/evaluation of FLEUVE project activities;

The period July 2016 - June 2017 include the following main activities:

- Preparation and organization of the workshop to validate the data collected;
- Introduction of data in the global database with the condition of a strategic partnership with international WOCAT;
- Preparation and organization of a regional workshop on WOCAT tools;
- Continued diversification and improving WOCAT tools

PROGRESS REPORT – PHILIPPINES

WOCAT - Narrative progress report for WWSM proceedings
Country: Philippines
Institution: PHILCAT thru the Bureau of Soils and Water Management
Contact person: Samuel M. Contreras

Progress report July 2013 – June 2015
The PHILCAT was able to secure funds to implement the project "Development of Decision Support Tools on Sustainable Land Management to Address Abiotic Stresses in Areas Vulnerable to Climate Change" (PHILCAT Project). Central to the implementation of this project is the utilization of WOCAT QT and QA in the documentation of SLM best practices in 5 priority ecosystems, namely: 1) Highland with smallholder farmers producing high value crops; 2) Irrigated rice production system; 3) Natural resources and forest ecosystem; 4) Small islands vulnerable to typhoons; and 5) Highlands with corporate farming system. In preparation to the documentation activity, two trainings on the use of QT and QA were conducted with 50 participants while 5 seminar-workshops (with 40 participants each) were held to initially identify and select soil conservation approaches and technologies from the 5 priority ecosystems. In the process, four approaches and nine technologies were initially identified for documentation using QA and QT, respectively. The documentation is currently underway and will be completed until July 2015.

During the period, the PHILCAT also participated in related regional and international events which include the FAO Expert consultation on SLM held in Bangkok, Thailand on Sep. 2-3, 2015 and the WOCAT launch, "A knowledge management platform goes new", held in Mexico City on March 11, 2015 as a side event of the 4th Special Session of the Committee on Science and Technology of the UNCCD. Some policy actions were pursued in terms of 1) draft substitute bill on Soil and Water Conservation Act 2015 which was presented in different meetings and conferences, and 2) the alignment of the National Action Plan to the UNCCD's 10-year Strategic Plan and Framework which is on its final stage of completion. The Aligned NAP considers SLM knowledge management as of one of its sub-programs.

Work plan July 2015 – June 2017
From July 2015 – March 2016, PHILCAT will focus its effort on the following: 1) documentation of 4 approaches and 9 technologies using QA and QT, respectively; 2) entering of data into the WOCAT database; 3) preparation of the compendium of SLM best practices; 4) establishment of the PHILCAT web page; and 5) preparation of SLM IEC materials for dissemination to land users and policy and decision makers. These activities are in support to the implementation of the project "Development of Decision Support Tools on SLM to Address Abiotic Stresses in Areas Vulnerable to Climate Change" which is being implemented until March 2016. Follow up activities will be undertaken to ensure the sustainability of the gains of the project.

The Global project "Decision support for mainstreaming and scaling up SLM" being spearheaded by FAO will be implemented during the period and therefore it is a very important component of the work plan for the period. The project will also involve capacity building on the use of WOCAT-LADA tools.

As usual, the quarterly meeting of PHILCAT will be conducted on a regular basis, to review and evaluate the work plan with respect to the project's accomplishment and to refine it if so required.

PROGRESS REPORT – SOUTH AFRICA

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: South Africa
Institution: UKZN
Contact person: Heinz Beckedahl

**Progress report July 2013 – June 2015
(2 years)**
During this period South Africa (Department of Agriculture, Fisheries and Forestry) commissioned the University of KZN to become part of the International WOCAT Consortium. One of the main reasons for this decision was to indicate the commitment from South Africa to continue the involvement in WOCAT activities and the establishment of a regional WOCAT node in Southern Africa. Two national WOCAT steering committee meetings were conducted to address the issues of establishing a management structure for WOCAT and to secure funding for the management and implementation of WOCAT in South Africa. A GEF project proposal (including major WOCAT activities) was prepared by a consortium of partners (part of the steering committee) in November 2014. The proposal is currently being evaluated by the Department of Environmental affairs and the outcome is expected within the next few months.

WOCAT has been included in a project that is currently being funded by the Department of Environmental Affairs (DEA) in which various Sustainable Land Management (SLM) information sources (e.g. WOCAT) are being evaluated to be part of a DEA SLM Decision Support System (SLMDSS). The framework for a WOCAT based SLMDSS has been developed and a prototype is currently being developed.

Workplan July 2015 – June 2017 (2 years)

- Implement an effective WOCAT management structure in South Africa
- Integrate the WOCAT QM methodology in DAFF's LandCare business plan model
- Integrate the WOCAT knowledge database into various platforms in South Africa e.g. the Natural Resource Porgrammes of the Department of Environmental affairs (current research being conducted), Extension Suite Online of DAFF
- Evaluate the use of the WOCAT knowledge database in identifying appropriate rehabilitation options for some of the major rehabilitation projects in South Africa – e.g. the Rehabilitation of the proposed Ntabalenga dam area in the Eastern Cape
- Secure funds to initiate the capturing of new technologies and approaches case studies and to initiate the development of Implementing Guidelines as part of the WOCAT knowledge database – more detailed guidelines on the implementation of technologies
- Secure funding to establish WOCAT pilot/demonstration sites – GEF 6 project proposal submitted

PROGRESS REPORT – UZBEKISTAN

WOCAT - Narrative progress report for WOCAT Network Meeting proceedings
Country: Uzbekistan
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Progress report
Four SLM technologies have been documented (Grazing land: *(i)* creation of pistachio plantations; (ii) pasture rotation; (iii) use of saline artesian water to crop farming in the Kyzylkum desert. Tree plantations: (i) afforestation of degraded irrigated croplands). Two SLM approaches have been documented: (i) Community-based forestry in Karakalpakstan; (ii) Farmer Field Schools on the irrigated croplands. Regional practical trainings have been organized on the basis of WOCAT tools and methods (Dushanbe, 20 April 2011). A national SLM-CB Workshop has been organized on selection and prioritization of the SLM technologies and approaches for WOCAT database (Tashkent, 2011). SLM best practices have been shared with decision makers like key ministries and agencies - members of CACILM NCC (the Ministry of Agriculture and Water Resources, Environmental Protection Committee, Ministry of Economy, Ministry of Finance, scientific and public institutions, etc.).

Several efforts have been made to improve the conditions for successful SLM mainstreaming:

- The additions to laws and 2 by-laws, and recommendations developed and adopted with direct contribution of national projects;
- National Financial Strategy for resource mobilization for SLM interventions and measures developed by the multicountry SLM-Capacity Building project for further implementation;
- Benefits and outcomes of the national and multicountry projects;
- Improved communication, exchange of experience: broad participation and awareness of different targets groups (science, responsible institutions, public society and local communities), and establish network of national and regional SLM experts;
- Increased interaction of Rio Conventions, understanding at the national level that the land is the link for climate change adaptation, drought mitigation, and water and biodiversity conservation;
- Launched CACILM program at national level (new projects under GEF -5 STAR programmed to CACILM; mainstreaming of SLM policies and practices into national level planning).

The main assets of CACILM-I confirm a high efficiency and acceptability of the GEF programmatic approach for UNCCD stakeholders in Uzbekistan. The most obvious achievements of the CACILM Phase 1 were classified as: (i) the existing partnership between the international, regional and national structures, (ii) a comprehensive approach to SLM, from the develop and documentation of best practices and their application, as well as institutional and legislative reform, (iii) at least of 5 000 people of the country trained through CACILM network and knowledge products, (iv) enhanced wider participation and awareness on CACILM activities at all levels. Achieved result of CACILM SLM projects at national and multi-country level provides a favorable conditions and advantages for positive effect on agricultural development, by means of: i) improvement of the current weaknesses of the national data information base and ii) enhancement institutional capacity of the countries in order to assess, monitor and rehabilitate of degraded and salt affected lands.

Workplan July 2015 – June 2017 (2 years)
National activity will be focused on the following priority directions:

- documentation of new technologies and approaches in support of knowledge and skills on SLM/SSM benefits;
- to provide a set off indicators and promoting the cost-benefit analysis, environmental and social assessment needs of selected SLM technologies and approaches to enhance its application and scaling up in wide landscapes and affected regions;
- to develop of the new WOCAT tools, such as the watershed module and the impact monitoring tool, including to extend and translation of the WOCAT questionnaires and tools;
- to promote information sharing and networking of the WOCAT at local and national levels.
- to develop curriculum, training modules and training program for target groups at local and sub-national levels.

FAO & WOCAT through GEF-funded global project «*Decision Support for Mainstreaming and Scaling Up of Sustainable Land Management*», and national CACILM Phase II SLM projects (The WB, UNDP, GIZ, IFAD, ICARDA and other), will: 1) facilitate training, guidelines and modules on WOCAT tools and methods for national experts and professionals; 2) publish and disseminate CACILM -2 fact sheets; 3) organize CACILM Phase II fact sheets' promotional workshops at national and sub-national levels by the end of 2015.

PROGRESS REPORT AT INTERNATIONAL LEVEL

PROGRESS REPORT – WOCAT INTERNATIONAL SECRETARIAT

Presented by: Rima Mekdaschi Studer (WOCAT Secretariat, Switzerland)

WOCAT Network achievements:
Institutional anchoring with a formalized set up:

- The Framework Agreement was progressively signed by nine Consortium Partners (CDE, CIAT, FAO, GIZ, ICARDA, ICIMOD, ISRIC, SDC, and the University of Kwazulu-Natal (South Africa)), the latest in August 2014. It formalizes the up to now informal global network, defining the WOCAT Network as WOCAT International, and WOCAT Regional and National.
- A WOCAT launching event of the new institutional set-up took place at the 3rd UNCCD Scientific Conference in Mexico (March 2015) and another took place at the WOCAT Network Meeting in Germany (June 2015).
- The first Steering Committee Meeting (SCM) held in June 2014, at which the nine Consortium Partners and the WOCAT International Secretariat took part, marked the beginning of the joint commitment and shared responsibility for the functioning of the WOCAT Network. During the SCM the very early draft of the new WOCAT strategy 2015-2018, the implementation of the Framework Agreement and rules and ways of cooperation/ defining the partnership were discussed. In addition, task forces for different urgent matters such as: 1) WOCAT database/web-application and core/light questionnaire, 2) new strategy 2015-2018 and funding strategy, 3) internal and external communication strategy and 4) education were formed.

UNCCD recognition:

- An agreement between UNCCD (the United Nations Convention to Combat Desertification) and WOCAT was signed in April 2014. UNCCD identified WOCAT as primary recommended database for best practices on SLM technologies. The WOCAT Secretariat started to develop a user-friendly web-application for data entry of SLM Best Practices by UNCCD Parties, also linking the UNCCD database to the WOCAT database. The UNCCD's official recognition gives WOCAT the mandate to support the 194 signatory countries in recording their own SLM best practices and using the SLM

knowledge of stakeholders worldwide – from land users to decision-makers – to improve local land management.

New WOCAT International strategy 2015-2018, funding strategy and communication strategy:
- A new WOCAT Strategy (2015 – 2018) was developed with and approved by consortium partners.
- The funding strategy is still under elaboration and negotiation.
- A draft of the communication strategy was developed and will be shared with consortium partners and network members.

Standardized tools & methods achievements:
- Database/web-application and website: a 'new' vision for the WOCAT International database/web-application was contemplated and a module-based action plan with cost estimations and priority setting is currently being elaborated. The highest priority (for 2015) is the revision of the WOCAT questionnaire entry form for the Technologies/Approaches Questionnaire. The 2nd priority (for 2016 or dependent on available funds) is the revision of the WOCAT website and to develop a multilingual website.
- WOCAT core & plus questionnaires and data entry: A core & plus technology and approach questionnaire is currently under development as a basis for harmonization and compatibility with other databases and organizations (e.g. UNCCD SLM BP mandate).
- Decision support: WOCAT and FAO jointly developed further the Methodological Framework for the FAO-WOCAT technical guidelines on Decision Support for Mainstreaming and Scaling-up of SLM. A decision support and DRR tool at watershed/landscape level, based on the DESIRE-WOCAT methodology, was piloted in Tajikistan (SDC and Caritas) and will be further tested in other areas.

SLM knowledge base achievements:
- More than 345 technologies and approaches (270 QTs and 78 QAs) have been documented, quality checked and, if possible, quality improved. Seventeen DESIRE maps and map layers from the UNWRA project Palestine, Haiti, Kenya, Mauretania, Nepal, Spain, Tajikistan and Tunisia have been added to the mapping database.
- Several national and regional publications are now available: Afghanistan fact sheets (Helvetas Swiss Intercooperation); Overview of soil and water conservation practices for the adaption to climate change - A methodology based on WOCAT for Latin America and the Caribbean (FAO-LAC); WOCAT article in Rural 21, the International Journal for Rural Development Vol 47. Nr. 4 2013.
- Diverse videos (trailer "Improving Land Productivity and Environmental Protection – Principles of Sustainable Land Management" (UNCCD COP11, Namibia 2013), several instructional videos (5 from IFAD, 9 from Tajikistan)) and a prototype of the tablet application are now available.

Training, education and research achievements:
- Several training videos on documenting SLM technologies and approaches using the WOCAT methodology and tools have been produced.
- Guidelines for the production of instructional videos have been elaborated (IFAD).

New partnerships and projects achievements:
Several new partnerships have been formalized with the signing of MoUs:
- A memorandum of understanding between DRYNET and WOCAT was signed in July 2014. Joint programmes and projects in closing the loop between the field and the policy are likely to be very attractive for donors.
- The "international consortium of scientific and knowledge networks on land degradation/ desertification and sustainable land management ICON-SLM" including DesertNet International (DNI), WOCAT and the Global Network of Desert Research Institutes (GNDRI) has signed a cooperation agreement in September in support of UNCCD´s newly emerged Science-Policy Interface (SPI).
- Access Agriculture and WOCAT have signed a Memorandum of Understanding in December 2014. Jointly they will promote and advance the production, translation, distribution and use of quality farmer training videos in local languages.
- Signing of a Memorandum of Understanding with the Economics of Land Degradation (ELD) Initiative and WOCAT is envisaged in 2015.

Several new projects have been prepared and/or implemented:
- UNCCD reporting on good practices
- GEF FAO-WOCAT project on "Decision Support for Mainstreaming and Scaling out of Sustainable Land Management (DS-SLM)" with 15 partner countries (kick off workshop August 2015).

Outlook 2015+:
- Further identification and search for funding opportunities in line with the WOCAT International Funding Strategy.
- Finalize the WOCAT International Strategy and the internal and external Communication Strategy (with taskforce members).
- Strengthen the National/Regional WOCAT network.
- Finalize the new IT WOCAT database/web-application vision and approve a clear road map at the next Steering Committee Meeting.
- Further development of a core/light and basic/advanced technology and approach questionnaire, linked to a new user-friendly WOCAT questionnaire entry form.
- Implement the revision of the WOCAT web-application/database.
- Data Transfer of UNCCD SLM BP and finalization of UNCCD entry form.
- Link WOCAT to other platforms (e.g. Agriwaterpedia, online K-Link tool, etc.).
- Further development of a decision support framework jointly with the new FAO- WOCAT/ GEF SLM DS-SLM project.

PROGRESS REPORT – ISRIC

Presented by: Godert Van Lynden (ISRIC)

During the reporting period (July 2013 – June 2015), ISRIC has been involved in several key projects and partnerships (e.g. WOCAT, RECARE, Green Water Credits (Algeria) and Green Water Credits (China)). Several achievements have been made since July 2013:

SLM Knowledge Product achievements:
- In the framework of the RECARE project, DSS was further tested and developed, several technologies and Approaches have been documented and several study site maps have been elaborated.
- In the framework of the Green Water Credit project (in Algeria and China) GWC reports have been prepared and include several SWC aspects.

WOCAT tool development achievements:
- Within the RECARE project, the DESIRE DSS has been adapted.
- TF DB and Web applications have been developed.

WOCAT training, education and research achievements
- A WOCAT training for the RECARE project took place in Switzerland in April 2014.
- Two trainings for the RECARE project on WOCAT/DESIRE/RECARE DSS with stakeholder interactions took place in the Netherlands and in Iceland in 2014 and 2015.
- WOCAT related courses for WUR students and other groups took place during the annual ISRIC Spring School.
- TF on Education: inventory and harmonisation of educational WOCAT materials and courses.

WOCAT related events/conferences achievements
- ISRIC participated at several WOCAT related events and conferences (One Health Conference (Switzerland, 2013); Climate Smart Agriculture (South Africa, 2013); UNCCD CRIC (Germany, 2014); WCSS (South Korea, 2014); WOCAT first SCM (Switzerland, 2014); WOCAT TF meeting and database and web application development (Switzerland, 2015); UNCCD CST (Mexico, 2015); GSW (Germany, 2015))

Outlook 2015+:
- Include WOCAT tools and methods within new projects.
- Better integration of "soils" aspects in WOCAT (and v.v.).
- More WOCAT PE through the ISRIC Global Network.
- Contribute to the database and web apps development Task Force.

- Revive the WOCAT in Education Task Force.
- Continue WOCAT courses for university, spring school and others.
- Encourage research (by students) on the impact of SLM, impact of WOCAT, cost and benefits of SLM, etc.
- Contribute to multimedia (e.g. video) and social-media applications.
- Use and publicize WOCAT in the new World Soil Museum.
- Co-convene WOCAT session in EGU 2016.
- Assist in developing the fundraising strategy for WOCAT International with other Consortium Partners, implement WOCAT Strategy and Action Plan.

PROGRESS REPORT – UNIVERSITY OF KWAZULU-NATAL (SOUTH AFRICA)

Presented by: Heinz Beckedahl (University of Kwazulu-Natal (UKZN))

During the reporting period (July 2013 – June 2015), the University of Kwazulu-Natal has been involved in several key projects and partnerships (e.g. WOCAT, Gweru (Zimbabwe), UNISWA (Swaziland), MLU). Several achievements have been made since July 2013:

SLM Knowledge Product achievements:
- Sustainable Agriculture in Shewula, Swaziland, final stages before being published.
- Community use of wetlands, some research papers submitted for print.
- Land Degradation associated with infrastructure development in SA & Lesotho, some papers published.
- Urban Water supply issues in Zimbabwe, one paper published.
- The use of LADA as a management tool for SA national Parks, about to go for publication.
- Movement towards proof of web services (beta testing and proof of concept important for mainstreaming WOCAT with DEA).
- Mapping tool developed further together with ESRI and DARD (about to go public).
- Use of WOCAT tools to develop the budget for LandCare (Budget submitted).

WOCAT tool development achievements:
- Involved in developing tools for wetland management.
- Tools for community forestry.
- Land use change monitoring using WOCAT.
- Refining the mapping and spatial decisions support module (final stages).

WOCAT training, education and research achievements:
- Several projects involving PhD students in SA, Lesotho, Zimbabwe and Swaziland.
- Collaboration with MLU (Halle, Germany).
- Training in WOCAT at undergraduate level at UKZN and to a lesser extent UNISWA.
- About to start a project on community level intervention against erosion in urban areas (new project).
- Work of Dirk with DEA on SLM and rehabilitation in the Ntabaleng area of the E Cape.

WOCAT related events/conferences achievements:
- Paper presented at IECA conference in USA in Nashville in 2014.
- WOCAT will be included in presentations to the Southern African Association of Geomorphologists SAAG.
- International Vetiver Network Conference (expected presence in 2016).
- Represented at LaRSSA (land degradation and rehab).

Challenges:
- Initial resistance to the approach (why should it be formalized?).

Outlook 2015+:
- Ongoing projects.
- Trying to persuade three key donors for funding.
- Three major project proposals with several countries in the region, currently looking for partners:
  - Rehabilitation strategies for countries/regions, based on LADA mapping tool and incorporation of community perceptions of Ecosystem Good & Services and student training module.
  - Developing regional SLM Best Practice for southern Africa.

o　　Climate-smart, community based rehabilitation of degraded rural areas and poverty alleviation.

PROGRESS REPORT – GIZ

Presented by: Bruno Schuler (GIZ, WOCAT focal point*)*

During the reporting period (July 2013 – June 2015), GIZ has been involved in several key projects and partnerships (e.g. Sectoral project Sustainable Agriculture (NAREN), Convention project to Combat Desertification (CCD), Sector project Powering Agriculture (PowAgri), Sector project Development of Rural Areas, multiple bilateral development projects working in SLM (Central Asia, Ethiopia, Niger, Burkina, etc.), Direct financial contribution of 30,000 Euro per year to WOCAT Secretariat). Several achievements have been made since July 2013:

SLM Knowledge Product achievements:
- Introduction of 50 technologies and approaches from West Africa into the WOCAT database.
- Review on 25 years of soil rehabilitation and protection in the Sahel (publication).

WOCAT training, education and research achievements:
- Integrated Participatory Watershed Development Approaches in Eastern/Southern Africa, India and Brazil – International exchange on concepts, methods, techniques and impact in India (GIZ-FAO-WOTR).
- Training course on land management in Feldafing.
- Regional training courses on climate change and agriculture (Thailand and Togo).
- Training courses on MOSA (Caribbean countries, Ecuador).

WOCAT related events/conferences achievements:
- Stockholm World Water Week (SWWW) 2014 (Sweden).
- IFPRI Conference in Addis (Ethiopia).
- Global Landscapes Forum (GLF) in Lima (Peru).
- International Conference on Soils, Food Security and Sustainable Land Management in Tutzing (Germany).
- Global Soil Partnership, Assembly in Rome, participation of GIZ as member.

Challenges:
- Finance for WOCAT International needs acquisition in various projects of short duration (three years).
- High service fees of WOCAT due to high salary level in Switzerland.

Outlook 2015+:
- Partnerships and funding opportunities in regions/countries.
- Dissemination of SLM training courses through WOCAT Network (climate change in sustainable agriculture, MOSA, impact monitoring, seed legislation).
- Co-funding of WOCAT Secretariat.
- Cooperation with secretariat and consortium partners and national partners in national and international events to promote WOCAT and SLM.
- Realizing potential cooperation benefits between WOCAT and Agriwaterpedia.

PROGRESS REPORT – CDE

Prepared by: Gudrun Schwilch (CDE)

During the reporting period (July 2013 – June 2015), the CDE has been involved in several key projects and partnerships (BMBF WOCAT-GLUES publication project; GEF - medium-size project: "Sustainable Land Management and Climate Change Mitigation Co-Benefits (SLM-CCMC)"; Large IFAD grant project on "Strengthening the Capacity of Rural Extension Services in Knowledge Management and Decision Support

for Up-scaling Sustainable Land Management"; DRR platform Swiss NGOs; WB/TerrAfrica guidelines on rangeland management; EU FP7 RECARE on sustainable land care in Europe; CASCADE; SNIS project CC adaptation and migration; SCOPES project; iSQAPER). Several achievements have been made since July 2013:

SLM Knowledge Product achievements:
- A Sahara and Sahel Observatory (OSS) MENA-DELP mandated study on potentials and examples of SLM good practices adapted to the desert zones of Algeria, Egypt, Jordan, Morocco, and Tunisia and the requirements for their implementation was accomplished by the CDE. The MENA-DELP project aims at a better understanding of the linkages between desert ecosystem services and desert livelihoods for an informed decision-making.
- Within the SDC DRR Programme in Central Asia a video on "SLM awareness raising at national level" was finalized. It will be screened in 2015 on the national TV channel in Tajikistan and at the International Water Forum in Dushanbe, Tajikistan.

WOCAT training, education and research achievements:
- WOCAT pilot in Cambodia (HEKS): 1st (June 2014) and 2nd (December 2014) decision support stakeholder workshop to select the most promising options for local implementation were held in Kampong Chhnang.
- DRR and watershed management – Tajikistan (SDC Tajikistan)
- IWSM training for the Helvetas/Acted/GIZ project in the Ferghana valley, in Khujand (Tajikistan) on 3/4 Nov 2014
- Kick-off and training workshop for GLUES
- Training courses (COST Action ES4011, EU CASCADE, EU RECARE, IGS, PhD students (7-11 April 2014, Bern, Switzerland))
- Training videos on documenting SLM technologies and approaches (GLUES)
- Manual for cost-efficient Land Use Planning - Tajikistan

Outlook 2015+:
- Initiate the development of new modules such as e.g. carbon benefit. (GEF-PIF proposal on carbon mitigation accepted).
- Joint publication with GLUES Sustainable Management Programme funded by Bundesministerium für Bildung und Forschung (BMBF) on "SLM research put to practice", to overcome the science - practice/policy gaps.
- Follow up on ECO-DRR publication with Swiss DRR platform.
- Follow up on WB/ TerrAfrica good practices publication on rangeland management.

PROGRESS REPORT – ICARDA

Presented by: Claudio Zucca (ICARDA)

Progress report July 2013 – June 2015 (2 years)

During the reporting period (July 2013 – June 2015) ICARDA has developed several activities of relevance to WOCAT, particularly in the frame of on-going projects in Central Asia and in Ethiopia.

In Central Asia, within the project "Knowledge Management in CACILM II" (KM-CACILM II; 2013-2016), 42 technologies and approaches were documented and are under analysis for possible upgrade to WOCAT entry level. One video on No-Till technology was produced and disseminated. A "Mountain Forum" has been organized in Dushanbe, (Tajikistan, 7-11 June 2015), where CACILM project staff presented mountain agroecosystem technologies.

In Ethiopia, two projects are running in synergy: "Reducing land degradation and farmers' vulnerability to climate change in the highland dry areas of north-western Ethiopia" (2013-2016) and "Combating land degradation and improving productivity through integrated watershed management, monitoring, and community participation" (2012-2016). Several experimental and demonstration activities being conducted to test and demonstrate sustainable management practices (improved crop varieties and farming systems, improved crop-livestock integration, water harvesting and supplemental irrigation, and the use of energy efficient stoves to reduce the need for firewood).

ICARDA staff has participated to the WOCAT training organized by FAO in Amman (April 2015) and contributed to the setting-up of a WOCAT national network in Jordan.

Workplan July 2015 – June 2017 (2 years)

With reference to the above mentioned KM-CACILM II project, by the end of it five to 10 WOCAT-based factsheets will be produced for dissemination purposes and one additional video will be produced on the potential of pistachio plantations in arid lands, targeting stakeholders.

In Ethiopia, by 2016 the results of the research will be screened and synthesised. Some of them may be selected for documentation as WOCAT entries.

During the coming 2 years ICARDA will be fully committed to submit project proposals in line with the WOCAT thematic priorities, to contribute to the WOCAT development (knowledge base and tools), and to support the WOCAT secretariat, in collaboration with the other WOCAT partners.

ICARDA will be also committed to give internal and external visibility to WOCAT. Internally, seminars and training sessions will be organised and information will be circulated. The first internal open seminar has been planned for the 8th of October 2015 (Amman).

PROGRESS REPORT – FAO

Presented by: Stefan Schlingloff (FAO, Italy)

During the reporting period (July 2013 – June 2015), several WOCAT related projects at FAO/NRL have been prepared and/or implemented:

- Project preparation grant for "DS-SLM", Activity/Output:
  - o Preparation of the global project "DS-SLM" with emphasis on global (2nd) project component (decision support platform).
  - o Technical Guidelines on diagnostic and decision support for mainstreaming and scaling up of SLM

- Kagera TAMP, Activity/Output:
  - o More than 50 case studies from riparian countries of the Kagera river (Burundi, Rwanda, Uganda, Tanzania) prepared following WOCAT QA/QT.
  - o 22 of these case studies have been quality checked and published through the WOCAT database.

- Outlook 2015-2018 – Decision support for mainstreaming and scaling up of SLM (DS-SLM):
  - o A federated FAO-WOCAT, online and open access DLDD and SLM decision-support platform established that links technical and scientific information and data, networks, country partners, and 2-5 global/(sub)regional partners and programs.
  - o Consolidated, validated guidelines for harmonized approaches and standardized methods and tools to assess land management systems in terms of DLDD and SLM available and supporting informed decision making for upscaling of SLM best practices.
  - o Strengthened country capacity for DLDD and SLM scaling up delivered by FAO-WOCAT and through regional and inter-regional capacity development and experience sharing processes.

- o LPFN Meeting (Rome, July 2015); DS-SLM project launch workshop (Rome, September 2015); UNCCD COP (Ankara, October 2015); WOCAT-LADA tools for restoring degraded lands (Amman, April 2015).

PROGRESS REPORT – ICIMOD

Not present at WOCAT Network Meeting – No progress report available

PROGRESS REPORT – CIAT

Not present at WOCAT Network Meeting – No progress report available

PROGRESS REPORT – SDC

No progress report required

ELABORATION OF KEY THEMES FOR THE FUTURE

Presented by: Hanspeter Liniger (WOCAT Director, Switzerland)

Hanspeter Liniger started this introductory part of the session on future planning with several important remarks. Liniger highlights the fact that WOCAT is not centralized in Switzerland but that instead, WOCAT highly depends on its members, providing inputs on new developments and that everybody is free to contribute. The WOCAT team in Bern reacts to requests and proposes new developments trying to respond to the different requests. Subsequently, feedback from members on the usefulness of the proposed new developments is crucial in order to assess whether the proposed developments respond to the initial requests. Some new developments (e.g. 4 page summary or videos) are not directly demanded by members, but proposed by the WOCAT Secretariat. Currently, several new key developments (WOCAT core, WOCAT Strategy, the proposed new interactive database, the proposed new homepage, etc.) are in need of feedback from WOCAT members. Several questions should be directly addressed on the country level:

- What are the most important issues at country level?
- What would help the different country level organizations the most?
- How to organize with a minimum effort (low hanging fruits)?
- Other questions directly concern the consortium partners:
- What is their role within WOCAT?
- How they define their role?

Some questions concern all WOCAT members:

- Where and how can we get the financial support needed. Should we chase donors or create more awareness → by increasing awareness, donors will react as people from different countries are lobbying for the same cause.
- How can we show and prove on and offsite benefits of SLM measures? Proving the existence of these benefits could be a breakthrough for the recognition of SLM.

Finally, Liniger outlined the four key topics on which the different groups of participants should perform a brainstorming:

1) Adaptation of WOCAT tools and methods to the needs of major LM projects/institutions/partners (outcome 1: enhanced knowledge & tools):
   a. Tool development: Need for better tools for sharing, access and using of knowledge, using audio-visuals, video, radio, theater, smartphones, tablets, etc.
   b. Needs for national, regional and project flexibility and yet keeping it harmonized and standardized?
   c. Exploring the major players and opportunities for involvement of WOCAT: e.g. Land degradation neutrality, SDGs, ...?
2) Mainstreaming - strengthen the use of WOCAT tools and methods by major LM projects/institutions/partners (outcome 2: engaged institutions):
   a. Already improved use and collaboration but there still is potential for strengthening the use of WOCAT, what are potential synergies?
3) Multi-level, multi-stakeholder, partnerships (outcome 3: engaged institutions / SLM as key cross-cutting approach)
   a. Multi-level: local, regional (catchment / landscape), national (policy /institutional), global?
   b. Multi-stakeholder: major target group(s): how to improve their involvement?
      i. Awareness raising about WOCAT, its tools & methods.
      ii. Better involvement of target groups (involving farmers, involving service and strengthen agricultural extension services, enhancing policy dialogue and creating an enabling institutional and legal environment).
4) Off-site benefits and the role of research

   a. PES, a key issue for promoting SLM?
   b. DRR, a key issue for promoting SLM?
   c. Role of research:
         i. Support proper M&E → cost/benefit analyses?
        ii. Synergies between research and implementation?
       iii. More teaching materials?

FUTURE PLANNING AT GLOBAL, REGIONAL AND NATIONAL LEVEL

The participants of the second day of the WOCAT Network meeting have been split up in groups and performed a brainstorming on the four topics outlined by Liniger in the previous presentation (c.f. section "Elaboration of key themes for the future"). The participants prepared a list of points related to each topic and presented them during short presentations. The following list contains all points mentioned by the different groups as submitted by the participants:

TOPIC 1: ADAPTATION OF WOCAT TOOLS AND METHODS TO THE NEEDS OF MAJOR LM PROJECTS/INSTITUTIONS/PARTNERS

- Too much focus on name of WOCAT, rather on SLM benefits?... *(this is WOCAT meeting)*
- ... or WOCAT as umbrella – bringing people together. Use research/students to link with the SLM impacts in the field
- How to communicate with grass root level (back & forth)? More attention for extension/advisory services etc.;
- Improving connection between national/local & global level. Different tasks/responsibilities between global/regional/national/local level should be clear.
- Communication within network to be improved, esp. between global and nat. level, eg. in elaboration of tools. Is less than in beginning years of WOCAT.
- Who is the audience? Communication methods are different for different levels.

- Questionnaires not best format - but interviews? (*NB: intended for standardised documentation*)
- Better interaction with and among network members / eg. w'shop participants?
- Farmers are interested in (4p) questionnaire formats (TAJ)
- What is the knowledge that can be gained from the documentation? *Yes, a lot of different aspects.*
- Better communicate the results – more images? *(already different formats, e.g. multimedia, video, tablet app, etc.)*
- Often farmers are very well aware of problems
- Results are important: research, extension, govt., farmers, how to involve each of these?
- Include private & int'l companies
- Screening system for technologies needed (before documentation)
- DSS for identification & selection needed *(does exist: DESIRE/RECARE)*
- What are the risks of a certain technology *(also part of the DSS)*
- Technologies are just documented case studies, not representative for the technology as such. It cannot copied blindly – this risk needs to be emphasised *(correct, but can be used as example)*
- Which case studies should (not) be in the db? For instance unique small experimental plot. What criteria to apply?
- Corrections needed to db content

- IP issues ("illegal" copying of results)
- Mapping refinement needed
- WOCAT is leverage to secure funds (PHILCAT), so important that tools are in good order
- Improve communication; more active exchange fora (GIZ)
- Opportunity to contact all WOCATeers – or on a regional basis? (*Yes, address list, but through secretariat)*
- Off line db!
- Recommendations: what technology is working under what conditions?
- Different case studies of the same technology: redundant or good? Individual case studies almost always somewhat different, but common denominators can be identified --> the more cases the better
- Climate adaptation. CC module needs to be digital (in db)!
- What are benefits for contributors of case studies? (PHI, private sector)
- Need to solve certain (not all) questions with land users
- Some people love the 4p summary and want to bypass the questionnaire /db
- Language issues
- Benefits for contributors (also land users)
- Difference between tools and methods?
- Common denominators and conditions – global applicability (esp. of techn.)
- Do the tools reach policy makers?
- Training on the use of questionnaires and db?

TOPIC 2: MAINSTREAMING - STRENGTHEN THE USE OF WOCAT TOOLS AND METHODS BY MAJOR LM PROJECTS/INSTITUTIONS/PARTNERS

- Do we have the right material - Dissemination of technologies is not = advocacy?
- Who are the decision makers (depending on level, differences in countries)
- Requires resources / incentives (depending on target group)
- Who are the key stakeholders for WOCAT to support mainstreaming
- Better define roles and responsibilities
- Mainstreaming of WOCAT vs. mainstreaming of SLM

- Focus on WOCAT as an approach, not focus on case studies
- Stronger presence in social media discussion fora
- Work with "DigitalGreen" for material such as video
- Involve grassroot and policy level
- International NGO (e.g. Via Campesina)
- Use of champions and/or Ambassadors
- "Branding"/certification could be interesting for private sector involvement
- Research institutions to provide more facts and figures on benefits of SLM ($\rightarrow$ time)
- Link with UNFCCC and CBD, consider CC perspective
- Network members to participate in planning meetings of local decision makers
- Involve financing institutions for investment in SLM -> role of Consortium

TOPIC 3: MULTI-LEVEL, MULTI-STAKEHOLDER, PARTNERSHIPS

- Create focal points for WOCAT (national and regional)
- Use existing regional networks
- Establish SLM needs and role for WOCAT
- Identify relevant partners (multi-level governmental departments)
- Continue training capacity building/training of trainers
- Involve media (TV, radio etc.)

Need assistance:

- Training of trainers
- Awareness creation material – e,g, videos
- Partner MOUs
- Database of network partners and profiles
- Major funding institutions – top down awareness of WOCAT tools and methods
- Promote the use of WOCAT tools not WOCAT as organization

TOPIC 4: OFF-SITE BENEFITS AND THE ROLE OF RESEARCH

Role of research, pre-conditions:

- Provide SLM advice to decision making
- Tackle main research questions
- Integrate sociologist, economist, anthropologists in research and in WOCAT community
- Integrated approach, no specialist research: the practitioners cannot put pieces together alone

Approach:

- Involvement of local communities as co-researchers
- Involving policy makers in the process of research
- Engagement of education institutions, universities, in research (theory vs practice); provide verified tools to universities
- Focus on KM to disseminate research findings
- Capacity building for policy makers, NGOs, research inst.)
- Create WOCAT magazine

Communication, dissemination, fund raising:

- Examples of good successful feedback systems, best ways to incorporate it, and best ways to communicate SLM
- Research to understand how to best approach donors, capacity building on fund raising

Policy oriented:

- Research to improve policies
- Policy related research
- Focus on socio-economic research to inform policy

Social and economic:

- SLM research to focus on SE problems and constraints to upscaling and adoption of SLM
- Focus on human dimension of SLM, what are the barriers to implementation

- Focus on human-environmental interactions
- Demography and SLM
- Specific impacts on target groups
- CBA
- Economic impact, cost of inaction, economics of SWC
- Develop ELD module, link research to it
- Public-private partnership (x2), study the case of ELC (Economic Land Concessions), and land use change (agricultural land to industrial land)

Applied SLM research and upscaling:

- Understanding scaling process
- Assess sustainability of SLM, although through modelling
- Long term research for evidence-based advocacy
- Screening SLM techn. in view of application
- Piloting SLM practices that are new to an area, and improve them
- Packages of practices for landscape mosaic, suggest main options and additional ones, diversification of approaches (x2)
- Benefit sharing in landscape, integrated catchment approach
- Facilitate cooperation of research and projects in impact monitoring
- Applied action research, collecting user fee-back in iterations (x2)

Best adaptive options and wise implementation:

- How to select best option for the situation? Better classification criteria to support users' choice.
- How to implement it correctly avoiding risks? Need for additional material, instructions, and manuals.
- How to select best option in view of CC, CC resilient: mainstream CC in SLM.
- Hazard/vulnerability assessment at broader scale, based also on CC research, drought.

ORGANISATIONAL/ADMINISTRATIVE MATTERS

Several organisational matters have been briefly discussed. Niger, Bhutan, Tajikistan, Ethiopia, Panama and Chile have been mentioned as potential host countries for the next WOCAT meeting. After the organisational and administrative session, PowerPoint copies of MoUs have been made available for interested parties and a group picture has been taken.

CLOSING OF 17ᵀᴴ WOCAT NETWORK MEETING

Presented by: Bruno Schuler (GIZ, WOCAT focal point) and Hanspeter Liniger (WOCAT Director)

Bruno Schuler thanked the participants in the name of the organizing committee for the fantastic atmosphere and described the WOCAT members as an almost family like community that shares the same vision and mission. He particularly liked the fruitful collaboration and highly valued suggestions that have been shared over the past three days.

He highlighted that several organisations disposing of an abundance of competence and experience are not yet partners of WOCAT. He proposes to make a list and approach and motivate these organisations to become WOCAT partners. Creating awareness in the general population – also in Europe, which also suffers from serious erosion issues - will be an important step allowing to strengthen the WOCAT Network.

Hanspeter Liniger emphasized the crucial importance of WOCAT Regional/National, stated that he is more than happy to share and collaborate with all members and underlined the important role of feedback to advance the shared vision. He also wished he had more time to bond with the participants. With its new structure, WOCAT is now an organized network capable of building up strong partnerships. Liniger, however, also mentioned that the role of WOCAT International still needs additional clarification, that the consortium partners need to find their roles within the Network and that funding is still a key issue. He stated that the CDE is willing to continue to host the Secretariat with two full time positions (Director and coordinator). Finally, the WOCAT director acknowledged the excellent organisation by the hosts and thanked all participants and consortium partners for the great collaboration during the whole event.

ANNEX A: LIST OF PARTICIPANTS

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ANNEX B: WOCAT WORKPLANS

Cambodia WORKPLAN for: July 2015 – June 2017								
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
12 technologies and 4 approached are introduced and applicable with HEKS partners	Introduce 12 identified technologies and 4 approaches to HEKS/EPER partners and relevant stakeholders	20	3	HEKS and Partners (SOFDEC/LAREC, AK, SACRED, CIRD…)	- final project report - posters on identification and raking technologies and apporaches	n/a		HEKS staff		2015 & 2016
Technologies and approaches are implemented.	Promote SLM practices with local partners	6	24	HEKS and Partners (SOFDEC/LAREC, AK, SACRED, CIRD…)	- IEC material on SLM technologies and practices - case study of good practices on SLM	n/a		HEKS staff and partners		2015 - 2017
The identified technologies and approaches are integrated	Mainstream concept of WOCAT and identified technologies and			HEKS and Partners (SOFDEC/LAREC, AK,	- project log-frame - project design	n/a		HEKS staff and partners		2015 - 2017

into partner proposal development.	approaches to partner project implementation.			SACRED, CIRD...)	- WOCAT project and its report					
Partners have confident to implement and the technologies are applied.	Monitor and support partners to implement SLM technologies	7	24	HEKS and Partners (SOFDEC/L AREC, AK, SACRED, CIRD...)	- field montoring sheet - field monitoring report template	n/a		HEKS staff		2015 - 2017
HEKS staff have exchange knowledge and experience on SLM	Attend the 18th WOCAT Network Meeting	1		HEKS	- invitation letter - program of WNM - case study or good practice of SLM in Cambodia - presentatio n	n/a		HEKS staff		2017

Prepared by: Mom Sitha   Total: US $ US $

China WORKPLAN for: July 2015 – June 2017										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months	Institution	Materials / equipment	Available	Required		Commit-ment by		
Combat land degradation and increase land productivity in Inner Mongolia	Implement and promote various SLM measures, such as afforestation, pit site preparation,forest tending and management,forest irrigation,sand barriers,etc.		CPMO and Inner Mongolia PMO	Field equipment and field activities	220000	220000	Song Zengming	CPMO and Inner Mongolia PMO	Before 31 Jan. 2018	
Combat land degradation and increase land productivity in Shaanxi	Implement and promote various SLM best practices,such as small watershed management,intercropping,straw mulching,shelterbelt on farmland,climate-smart agriculture,etc.		CPMO and Shaanxi PMO	Field equipment and field activities	220000	220000	Song Zengming	CPMO and Shaanxi PMO	Before 31 Jan. 2018	
Combat land degradation and increase land productivity in Qinghai	Implement and promote various SLM best practices,such as afforestation seeding in rainy season,reseeding of deteriorated grassland,agricultural protection forest in mountain land,solar cooker,biogas digester,etc.		CPMO and Qinghai PMO	Field equipment and field activities	220000	220000	Song Zengming	CPMO and Qinghai PMO	Before 31 Jan. 2018	
Combat land degradation and increase land	Implement and promote various SLM models,such as counter-slope soil preparation of		CPMO and Gansu PMO	Field equipment and field activities	220000	220000	Song Zengming	CPMO and Gansu PMO	Before 31 Jan. 2018	

productivity in Gansu	fish-scale pit, water tank, biogas digester,sandy land cultivation, biogas digester, solar cooker,peddle mulching,jujube planting,etc.									
Combat land degradation and increase land productivity in Sichuan	Implement and promote various SLM measures,such as eco-agriculture, planting and grazing under forest,eco-tourism,community development, solar energy, clean energy technology,Construction of irrigation drainage,etc.			CPMO and Sichuan PMO	Field equipment and field activities	130000	130000	Song Zengming	CPMO and Sichuan PMO	Before 31 Jan.2018
Combat land degradation and increase land productivity in Guizhou	Implement and promote various SLM best practices,such as maintain closure against grazing,featured forest planting and management, low-productivity forest improvement, grassplanting under forest,grazing under forest,etc.			CPMO and Guizhou PMO	Field equipment and field activities	130000	130000	Song Zengming	CPMO and Guizhou PMO	Before 31 Jan.2018

Prepared by: Song Zengming   Total: US $ 1140000 US $ 1140000

Ethiopia WORKPLAN for: July 2015 – June 2017									
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable
		Person x months	Institution	Materials / equipment	Available	Required		Commit-ment by	
SLM Knowledge and tools developed / enhanced	Document new Technologies and Approaches and refining databases, and mapping	5	6	WLRC	Paper, map sheets, poster paper	----	15000.00	Gizaw D Bekure M, Hassen M, Woreta A WTs		October 2015 – June 2017
	Produce and disseminate synthesis/working paper, fact sheets and leaflets of SLM practices	1	4	WLRC, WOCAT internation al	Paper, Toner, print ink		18000.00	Gizaw Desta	Gizaw Desta	July 2015- March 2016
	Adapt tools/framework to assess benefits/performance of integrated landscape management	3	12	WLRC, ELL, other new partners	Paper	4000.00	12000.00	WLRC team		July 2015 – June 2017
	Strengthen the capacity of SLM practitioners and land users through training of WOCAT tools and methods (70-80 trainees)	8	18	WLRC, Agriculture offices,	Training tools, paper, manuals, vehicles		30000.00	WLRC team with partner teams	Gizaw Desta	July 2015 – June 2017
WOCAT tools and methods mainstreamed into the national SLM/CRGE	Mainstream WOCAT tools and methods into national watershed and landscape development initiatives (eg.	5	20	WLRC, MOA/SLM, MOEF/CRGE , GiZ, WOCAT Int.			45000.00			July 2015 – June 2017

programs	Workshops)									
	Link WOCAT tools with University graduate student program in form of seminars/practicals	3	9	WLRC	Guideline, mapping tools, paper		12000.00	WLRC team		July 2015 – June 2017
	Targeting /up-scaling of SLM practices in SLM/CRGE watersheds to large number of farmers through farmer-to-farmer extension system or support of community resource people who serve as community-based trainers	6	36	WLRC, MOA/SLM, MOEF/CRGE, GiZ,	Fact sheets, Guideline, mapping tools, paper	5000.00	50000.00	WLRC team, SLM, CRGE teams		January 2016 – June 2017
WOCAT National /Regional initiative strengthened	Linkage with Ethiopian Learning Landscapes Network and landscape platforms; SLM platforms	3	6	WLRC, ELL network, SLM platform		3000.00	8000.00	WLRC team	Gizaw Desta	July 2015 – June 2017
	Linkage with WALRIS knowledge management platform	3	36	WLRC			6000.00	Gizaw, Yohannes, Samual		July 2015 – June 2017

Prepared by: Gizaw Desta (WLRC/Ethiopia)   Total: US $ 12000 US $ 196000.00

Niger WORKPLAN for: July 2015 – June 2017										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Strengthening of Independent review of political economy and ecology	Elaboration of summaries and reports/analysis Edition/publication of review	3	12	GREAD	Computers, etc.	5,000 $	0	Harouna Garba	GREAD	1 number per month during the period considered
QT and QA documented, validated and introduced into on line database	Collection data Validation workshop Entering data in online database	10	12	GREAD	Computers, logistics of data collection	25,000 $	15,000 $	Abdoulaye Sambo Soumaila	GREAD	Continuous activity during the period Dead line: 31/12/2016
Organization of an International Workshop on Sustainable Management of Lands in pastoral areas	Preparation Organization Elaboration of final report	3	7	GREAD	Computers, administrative logistics	0	50,000 $	Abdoulaye Sambo Soumaila	GREAD	February 2016 Preparation begins August 2015
Use of WOCAT tools by students	Preparation of programme Organization of workshop at school	2	5	GREAD	WOCAT docs, computers and retro projector	0	2,500 $	Ibrahim Saliah	GREAD	4 presentations per year in each school selected
Regional	Preparation	3	7	GREAD	Wocat	0	50,000 $	Abdoulaye	GREAD	During 2017

workshop on WOCAT tools	Organization Elaboration of final report				docs, computers, administrative and technical logistics			Sambo Soumaila Adamou Amadou Kalilou		year
Revival of strategic partnership with the CCA and other national resilience programs	Contact with partners Meetings Finalization of MoU	2	12	GREAD	Administrative materials and logistics	0	1,500 $	Abdoulaye Sambo Soumaila	GREAD	Continuous activity during the period
Administrative management	secretariat	1	24	GREAD	Secretariat materials and logistics	1,750 $	1,250 $	Harouna Garba	GREAD	Continuous activity during the period

Prepared by: Adamou Amadou Kalilou, Financial administrator   Total: US $ 31,750 US $ 120 250

Philippines WORKPLAN for: July 2015 – June 2017										
Expected outputs	Activities	Input				Estimated Funding US$		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Documented Soil Conservation Approaches and Technologies using WOCAT methodologies	• Field interview of land users and project implementers using QT and QA • Processing and review of QT and QA outputs	4 4	3 1	BSWM in partnership with PHILCAT members BSWM	QT and QA, GPS, Camera Computer	4,500 500	4,500 500	Project Staff & PHILCAT members Project Staff	F. Ventigan F. Ventigan	Jun – Aug 2015 Sep 2015
Compendium of Best Practices	• Consolidation of documented best practices and entering into the WOCAT Database • Video documentation of selected SLM practices	4	2	BSWM and PHILCAT members BSWM	Computer Auidio-video	1,000	1,000	Project Staff	S. M. Contreras	Oct – Nov 2015

		2	2		equipment				G. Sienna	Oct-Nov 2015
						2,200	2,200	Project staff		
Documented activities – multi-media	• Undertake video coverage of project activities	2	Every event	BSWM	Video equipment	2,000	2,000	Project staff	G. Sienna	Jul, 2015 – Mar 2016
Project Web page with database of SLM best practices	• Web page designing and operationalization	1	3	BSWM	Computer	1,000	1,000	Hired IT personnel	F. Ventigan	Jul – Sep 2015
SLM IEC Materials	• Preparation of flyers and brochures of SLM best practices	4	4	BSWM	Computer, Office suppliies, documented SLM practices	1,000	1,000	Project staff	G. Sienna	Dec 2015 – Mar 2016

SLM mainstreamed and scaled up	• Participate in the implementation of the Global project "Decision support for mainstreaming and scaling up SLM (FAO Project)			BSWM and partner agencies		45,000	45,000	R. Caratng	R. Carating	Aug 2015 – Jul 2017
Monitor and assess status of PHILCAT activities	• Conduct quarterly meeting of PHILCAT	18 members	5 meetings	PHILCAT	Office supplies; Reports on activities	1,200	1,200	S.M. Contreras & PHILCAT Secretariat	S. M. Contreras	Jul 2015 – Jun 2017

Prepared by: **Samuel M.Contreras (BSWM)**   Total: **US $ 58,400   US $ 58,400**

South Africa WORKPLAN for: July 2015 – June 2017										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commit-ment by	
Develop WOCAT SLM Decision Support System for DEA	1. Develop SLMDSS prototype 2. Demonstrate the prototype 3. Get approval to develop the SLMDSS for DEA	2	2	SMC Synergy/CE IT		Yes		Dirk Pretorius	Dirk Pretorius	01/06/2015 to 31/03/2016
Using QM in mapping degradation in the Ntabalenga dam catchment	1. Develop stratification system 2. QM assessment 3. Develop spatial database 4. Use information to identify priority areas for intervention	2	4	SMC Synergy	2 X Computers 2 X Projectors Flip charts	Yes		Dirk Pretorius	Dirk Pretorius	01/06/2015 to 31/03/2016
Use WOCAT knowledge database in identifying rehabilitation options for the Ntabalenga restoration programme	1. Identify main degradation problems 2. Search QT dababase 3. Prepare report on options to consider for rehabilitation projects	1	2	SMC Synergy		Yes		Dirk Pretorius	Dirk Pretorius	01/06/2015 to 31/03/2016

Establish WOCAT-SA management structure	1. Secure funding to appoint WOCAT secretariat 2. Appoint WOCAT secretariat 3. Secure funding for WOCAT implementing plan	2	2	WOCAT Steering Committee		No		WOCAT Steering Committee	Dirk Pretorius/ Lehman Lindeque/ Dirk Pretorius/ Heinz Beckedal	01/05//2015 -

Prepared by: Total: US $ US $