DESIRE REPORT series

Database with evaluated and successful or promising strategies from all study sites

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May 25th 2009

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Report number 48
Series: Scientific Reports

Deliverable 3.2.1

This report was written in the context of the Desire project
www.desire-project.eu

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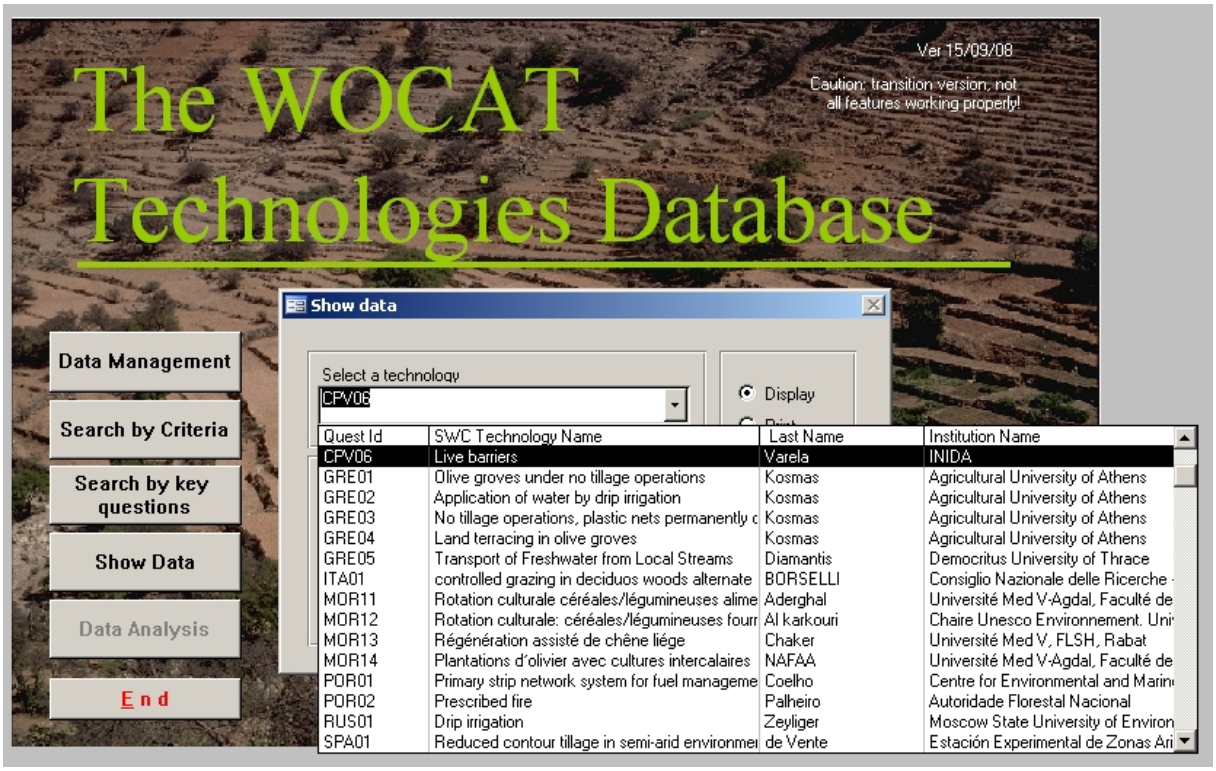
DESIRE

Deliverable 3.2.1

Database with evaluated and successful or promising strategies from all study sites



15 May 2009

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Introduction

The overall aim of WP3.2 is to document and evaluate in each study site 3 – 5 existing and potential strategies to combat desertification and land degradation, which have been identified in the stakeholder workshop 1 of WP3.1 (see also deliverable 3.1.1 and 3.1.2). This is done during the 2-3 months following the stakeholder workshop. It helps to better understand the reasons behind successful field experiences and it is also the foundation for the selection and negotiation process in WP 3.3.

The objectives of WP3.2 are: (1) To document and evaluate each identified locally applied technology and approach in a structured and standardized way; (2) To guarantee a certain level of data quality through a review and quality assurance process; and (3) To enter this information into the WOCAT database in order to share it with other sites as well as globally.

The documentation and evaluation is done with the WOCAT basic questionnaires on SLM technologies and approaches (see www.wocat.net). These were revised by WOCAT and provided to DESIRE. They come along with a database system, which was updated as well.

For the training of these tools to the study sites specific guidelines were written (DESIRE report No 7). These guidelines explain to the study site facilitators how to use the WOCAT questionnaires and databases and how to assure quality of the data. Some have translated the questionnaires into their local language (e.g. Portuguese, Turkish, Chinese).

Methodology

The questionnaires provide a framework for documentation and evaluation and guide through all relevant aspects of SLM. By filling in the questionnaires the contributor not only documents knowledge and establishes a database, but also reviews and evaluates the SWC/SLM practice. The know-how is tapped from several sources and interaction is stimulated during the documentation and evaluation process.

Strategies to be documented consist of technical measures as well as implementation approaches. SLM Technologies are understood as agronomic, vegetative, structural and management measures that control land degradation and enhance productivity in the field. The questionnaire on technologies addresses the specifications of the technology (purpose, classification, design and costs) and the natural and human environment where it is used. It also includes an analysis of the benefits, advantages and disadvantages, economic impacts, acceptance and adoption of the technology. SLM Approaches are ways and means of support that help to introduce, implement, adapt and apply SLM technologies on the ground. An SLM approach consists of all participants (policy-makers, administrators, experts, technicians, land users, i.e. actors at all levels), inputs and means (financial, material, legislative, etc.), and know-how (technical, scientific, practical). Questions focus on objectives, operation, participation by land users, financing, and direct and indirect subsidies. Analysis of the described approach involves monitoring and evaluation methods as well as an impact analysis. A questionnaire on technology and a corresponding questionnaire on approach together describe a case study / strategy within a selected area.

Specialist assessing and discussing SLM technologies with land user in Morocco (Photo Gudrun Schwilch)

Resulting database

All study sites (except Mexico) have entered their documented technologies and approaches into the WOCAT database. These were then compiled into one database file, forming the result of this deliverable 3.2.1. The following database files are submitted with this report:

- WocatQT.mdb: software to run technologies database
- WocatQA.mdb: software to run approaches database
- WocatData.mdb: data file containing technologies and approaches data
- folder \images containing all images (.jpg) related to the technologies and approaches

The software is running in Microsoft Office Access 2003

Overall, there are **42 technologies and 20 approaches**, as listed in the tables below.

SLM technologies database:

Country	Code	Name of technology	Author
Botswana	BOT04	Roof Rainwater harvesting system	Atlhopheng Julius, University of Botswana
Botswana	BOT05	Biogas	Sebego Reuben, University of Botswana
Botswana	BOT06	Solar Cooker	Mulale Kutlwano, University of Botswana
Botswana	BOT07	Game Ranching	Mphinyane Wanda N, University of Botswana
Chile	CHL01	No tillage	Carlos Ruíz, Instituto de Investigaciones Agropecuarias (INIA)

China	CHN51	Terrace	Wang Fei, Institute of Soil and Water Conservation, CAS and MWR
China	CHN52	Check dam for land	Wang Fei, Institute of Soil and Water Conservation, CAS and MWR
China	CHN53	Year-after-year terraced land	Wang Fei, Institute of Soil and Water Conservation, CAS and MWR
Cape Verde	CPV01	Dams	Bentub Jailson, INIDA
Cape Verde	CPV02	Muret	Bentub Jailson, INIDA
Cape Verde	CPV03	Arborização	Varela Larissa, INIDA
Cape Verde	CPV04	Terraços reforçados por murros de pedra	Varela Larissa, INIDA
Cape Verde	CPV05	Barreiras Vivas de Leucaena	Varela Larissa, INIDA
Cape Verde	CPV06	Live barriers	Varela Larissa, INIDA
Greece	GRE01	Olive groves under no tillage operations	Kosmas Costas, Agricultural University of Athens
Greece	GRE02	Application of water by drip irrigation	Kosmas Costas, Agricultural University of Athens
Greece	GRE03	No tillage operations, plastic nets permanently on the soil surface	Kosmas Costas, Agricultural University of Athens
Greece	GRE04	Land terracing in olive groves	Kosmas Costas, Agricultural University of Athens
Greece	GRE05	Transport of Freshwater from Local Streams	Diamantis Vasileios, Democritus University of Thrace
Italy	ITA01	controlled grazing in deciduos woods alternate to grazing rangeland	Borselli Lorenzo, Consiglio Nazionale delle Ricerche - Istituto di Ricerca per la Protezione Idrogeologica
Morocco	MOR11	Rotation culturale céréales/légumineuses alimentaires	Aderghal Mohamed, Université Med V-Agdal, Faculté des Lettres et Sciences Humaines, Chaire Unesco-GN
Morocco	MOR12	Rotation culturale: céréales/légumineuses fourragères (lupin)	Al karkouri Jamal, Chaire Unesco Environnement. Université Mohamed V. Faculté des Lettres et des Sciences humaines
Morocco	MOR13	Régénération assisté de chêne liège	Chaker Miloud, Université Med V, FLSH, Rabat
Morocco	MOR14	Plantations d'olivier avec cultures intercalaires	Nafaa Rachida, Université Med V-Agdal, Faculté des Lettres et Sciences Humaines, Chaire Unesco-GN
Portugal	POR01	Primary strip network system for fuel management	Coelho Celeste, Centre for Environmental and Marine Studies - University of Aveiro
Portugal	POR02	Prescribed fire	Palheiro Pedro, Autoridade Florestal Nacional
Russia	RUS01	Drip irrigation	Zeyliger Anatoly, Moscow State University of Environmental Engineering
Spain	SPA01	Reduced contour tillage in semi-arid environments	de Vente Joris, Estación Experimental de Zonas Aridas (EEZA-CSIC)
Spain	SPA02	Vegetated earthen-terraces	de Vente Joris, Estación Experimental de Zonas Aridas (EEZA-CSIC)
Spain	SPA03	Organic mulch under almond trees	Solé Benet Albert, Estación Experimental de Zonas Aridas (EEZA-CSIC)
Spain	SPA04	Water harvesting from concentrated runoff for irrigation purposes	de Vente Joris, Estación Experimental de Zonas Aridas (EEZA-CSIC)
Spain	SPA05	Ecological production of Almonds and Olives	de Vente Joris, Estación Experimental de Zonas Aridas (EEZA-CSIC)
Tunisia	TUN09	Jessour	Ben Zaied Mongi, Institut des Regions Arides (IRA)
Tunisia	TUN10	Gabion check dam	Chniter Mongi, Commissariat Régional au Développement Agricole (CRDA)
Tunisia	TUN11	Rangelands resting	Ouled Belgacem Azaiez, Institut des Régions Arides (IRA)
Tunisia	TUN12	Tabia	Ouessar Mohamed, Institut des Régions Arides (IRA)

Tunisia	TUN13	Cistern	Ouessar Mohamed, Institut des Régions Arides (IRA)
Tunisia	TUN14	Recharge well	Ouessar Mohamed, Institut des Régions Arides (IRA)
Turkey	TUR01	Rotational Grazing	Zengin Mehmet, University of Selcuk, Faculty of Agriculture
Turkey	TUR02	Strip farming	Zengin Mehmet, University of Selcuk, Faculty of Agriculture
Turkey	TUR03	Drip Irrigation	Zengin Mehmet, Univ. of Selcuk, Faculty of agriculture, Dept. Of Soil Science
Turkey	TUR04	Fodder Crop Production	Tolay İnci, Eskişehi Osmangazi University, Faculty of Agriculture

SLM approaches database:

Country	Code	Name of approach	Author
Chile	CHL01	Zero Tillage	Ruiz Carlos, Instituto de Investigaciones Agropecuarias
Cape Verde	CPV01	Formation, Information et Sensibilisation	Tavares Jacques, Instituto Nacional de Investigação e Desenvolvimento Agrário (INIDA)
Cape Verde	CPV02	Protection des versants	Tavares Jacques, Instituto Nacional de Investigação e Desenvolvimento Agrário (INIDA)
Cape Verde	CPV03	Arborisation	Tavares Jacques, INIDA
Greece	GRE01	Sustainable development of olive groves I	Kosmas Costas, Agricultural University of Athens
Greece	GRE02	Sustainable use of water	Kosmas Costas, Agricultural University of Athens
Greece	GRE03	Sustainable development of olive groves II	Kosmas Costas, Agricultural University of Athens
Greece	GRE04	Sustainable development of olive groves III	Kosmas Costas, Agricultural University of Athens
Greece	GRE05	Combating Soil Salinization	Giougis Ioannis, Democritus University of Thrace
Morocco	MOR11	Rotation culturale céréales/légumineuses alimentaires ou fourragères	Al Karkouri Jamal, Chaire Unesco Environnement. Université Mohamed V. Faculté des Lettres et des Sciences humaines
Morocco	MOR13	Régénération assistée du chêne liège	Chaker Miloud, Faculté des Lettres et Sciences Humaines, Département de Géographie
Morocco	MOR14	Mise en valeur des terres en Bour	Nafaa Rachida, Université Mohammed V Agdal, Faculté des Lettres et des Sciences Humaines, Chaire Unesco-GN
Portugal	POR01	Forest Intervention Area	Coelho Celeste, Centre for Environmental and Marine Studies - University of Aveiro
Russian Federation	RUS01	Living together- thinking on common	Zeyliger Anatoly, Moscow State University of Environmental Engineering
Spain	SPA01	Regional rural development programme	de Vente Joris, Estación Experimental de Zonas Áridas (EEZA-CSIC)
Tunisia	TUN09	Soil and Water Conservation Technologies and Watershed Management Approach	Mahdhi Naceur, Institut des Régions Arides de Médenine
Turkey	TUR01	Pasture Management	Zengin Mehmet, Univ. of Selcuk, Faculty of Agriculture
Turkey	TUR02	Crop Production	Zengin Mehmet, Univ. of Selcuk, Fac. of Agric., Dept. of Soil Sci.
Turkey	TUR03	Minimum Water Use	Zengin Mehmet, Univ. of Selcuk, Faulty of Agric. Dept. of Soil Sci.
Turkey	TUR04	Fodder Crops Production	Tolay İnci, Eskişehir Osmangazi University, Faculty of Agriculture

Conclusion and outlook

The work with the WOCAT questionnaire was demanding for the study site teams, but also very enriching and giving many new insights into applied technologies and approaches. Through the standardized documentation these documented case studies get comparable and exchangeable throughout all DESIRE sites and worldwide.

9 study sites (with 28 technologies and 15 approaches) have participated in the WB3 contest for the best documented strategies. Their data is currently being reviewed by the contest jury. The data of the other study sites will be reviewed afterwards. The study sites will then be requested to update their data based on the comments of the reviewers.

WOCAT is currently working on a new on-line system of the database and will transfer all the DESIRE technologies and approaches to this new system in the near future.

References

- DESIRE report No 7: Guidelines for WB3 Part II: Assessment of Conservation Strategies - Assessment and documentation of existing and potential prevention and mitigation strategies. Authors: Gudrun Schwilch, Hanspeter Liniger, Felicitas Bachmann.
- WOCAT questionnaire on SLM technologies (in English, French, Spanish, Turkish, Portuguese, Chinese), see also http://www.wocat.org/quest.asp
- WOCAT questionnaire on SLM approaches (in English, French, Spanish, Turkish, Portuguese, Chinese), see also http://www.wocat.org/quest.asp
- WOCAT global databases: see www.wocat.net/databs.asp

Attachments

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