Appraising and Selecting SLM Solutions A methodology based on stakeholder participation and global best practices

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Agricultural advisors in desertification-prone areas are often confronted with the need to find ways to improve land and water productivity in order to support land users in their local area.

- --- How and where can they find best practices, proven strategies, new ideas?
- --- How can they proceed in appraising and selecting identified options?
- ---- How can they do it in collaboration with stakeholders to enhance ownership?

These questions drove the development of this three-part methodology for participatory SLM appraisal and selection.

Part I - Identification

Identify existing and potential SLM strategies using a participatory learning approach (Stakeholder Workshop 1)

This methodology was developed by the EU project DESIRE in collaboration with WOCAT

The complete methodology is being tested by DESIRE in 16 study sites around the world and will be used in various WOCAT initiatives.

Further testing and application is welcome!



Identifying land degradation and conservation measures with the help of photographs and the water and biomass cycles during the 3-day stakeholder workshop. Learning together in the local context and simultaneously combining scientific and local knowledge.

Part II – Assessment

Evaluate, document and share the identified SLM options with standardised questionnaires





A no-till system with crop residue management for medius scale wheat and barley farming.

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se problems titonal tillage practices are often inappropriate, leading to various problems: disk plough operations make solls more ble to erosion, evaporation, loss of organic matter and nutrients (due to inversion of soil) and thus reduce soil fertirithermore, land preparation often takes place when soils are too dry or too vert. The soils in this area have a veak re, due to low organic matter content, and are thus susceptible to compaction. Energy input in conventional tillage is ligher than in NTT.



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in: - increase/maintain water stored in soil
- increase in organic matter
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DESIRE

Desertification mitigation and remediation of land – a global approach for local solutions (EU FP6; www.desire-project.eu)

WOCAT

World Overview of Conservation Approaches and Technologies (www.wocat.net)

References

Schwilch, G., Bachmann, F. and Liniger HP, 2009: Appraising and selecting conservation measures to mitigate desertification and land degradation based on stakeholder participation and global best practices. Land Degradation and Development 20: 308–326.

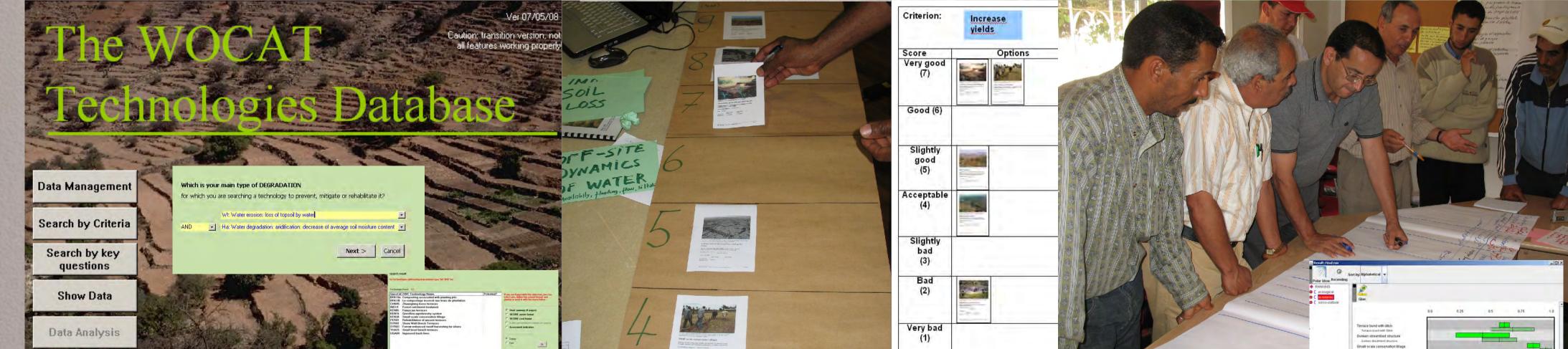
Liniger, HP and Schwilch, G., 2002. Enhanced Decision-Making Based on Local Knowledge - WOCAT Method of Sustainable Soil and Water Management. Mountain Research and Development, 22(1) : 14-18.

WOCAT 2007. Where the land is greener: Case studies and analysis of soil and water conservation initiatives worldwide. Editors: Hanspeter Liniger and William Critchley. Interaction between land users and experts using WOCAT questionnaires which help to understand the reasons behind successful local experiences of technical measures as well as implementation of approaches.

Standardisation allows adding to and sharing of experiences worldwide through the WOCAT database

Part III - Selection and decision making for implementation

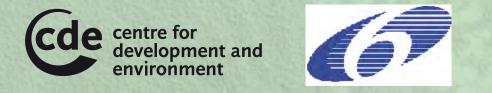
Select the most promising strategies with a decision support tool (Stakeholder Workshop 2)







World Overview of Conservation Approaches and Technologies



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Selection of options is based on a search of the WOCAT database, leading through a series of key questions. Setting criteria, scoring, and the decision making process are supported by a software based on multi-criteria evaluation. Both tools are embedded into a stakeholder workshop, guiding the participants through the process and allowing them to negotiate the best option(s) in a structured way.

Recommendations

Any SLM implementation should be preceded by such a participatory and structured appraising process starting from initial collective learning on desertification problems and respective solutions to the description and evaluation of identified local solutions and to the joint selection and decision-making for implementation. Preliminary evidence from application within DESIRE suggests that it has the potential to engage stakeholders and integrate local and scientific knowledge in a structured process. At the same time it contributes to a global knowledge base, is flexible enough to be adapted to specific local or regional conditions and allows sharing of SLM knowledge worldwide.