Sharing evidence of sustainable land management impacts

Gudrun Schwilch, Rima Mekdaschi Studer, Isabelle Providoli, and Hanspeter Liniger
Centre for Development and Environment (CDE), University of Bern, Switzerland (gudrun.schwilch@cde.unibe.ch)

Ensuring sustainable use of natural resources is crucial for maintaining the basis for our livelihoods. With threats from climate change, disputes over water, biodiversity loss, competing claims on land, and migration increasing worldwide, the demands for sustainable land management (SLM) practices will only increase in the future. For years already, various national and international organizations (GOs, NGOs, donors, research institutes, etc.) have been working on alternative forms of land management. And numerous land users worldwide – especially small farmers – have been testing, adapting, and refining new and better ways of managing land. All too often, however, the resulting SLM knowledge has not been sufficiently evaluated, documented and shared. Among other things, this has often prevented valuable SLM knowledge from being channelled into evidence-based decision-making processes. Indeed, proper knowledge management is crucial for SLM to reach its full potential.

Since more than 20 years, the international WOCAT network documents and promotes SLM through its global platform. As a whole, the WOCAT methodology comprises tools for documenting, evaluating, and assessing the impact of SLM practices, as well as for knowledge sharing, analysis and use for decision support in the field, at the planning level, and in scaling up identified good practices. In early 2014, WOCAT’s growth and ongoing improvement culminated in its being officially recognized by the UNCCD as the primary recommended database for SLM best practices.

Over the years, the WOCAT network confirmed that SLM helps to prevent desertification, to increase biodiversity, enhance food security and to make people less vulnerable to the effects of climate variability and change. In addition, it plays an important role in mitigating climate change through improving soil organic matter and increasing vegetation cover. In-depth assessments of SLM practices from desertification sites enabled an evaluation of how SLM addresses prevalent dryland threats. The impacts mentioned most were diversified and enhanced production and better management of water and soil degradation, whether through water harvesting, improving soil moisture, or reducing runoff.

Among others, favourable local-scale cost-benefit relationships of SLM practices play a crucial role in their adoption. An economic analysis from the WOCAT database showed that land users perceive a large majority of the technologies as having benefits that outweigh costs in the long term. The high investment costs associated with some practices may constitute a barrier to adoption, however, where appropriate, short-term support for land users can help to promote these practices. The increased global concerns on climate change, disaster risks and food security redirect attention to, and trigger more funds for SLM. To provide the necessary evidence-based rationale for investing in SLM and to reinforce expert and land users assessments of SLM impacts, more field research using inter- and transdisciplinary approaches is needed. This includes developing methods to quantify and value ecosystem services, both on-site and off-site, and assess the resilience of SLM practices, as currently aimed at within the EU FP7 projects CASCADE and RECARE.