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**Documenting Water and Soil Conservation Techniques in Niger to
Better Target Extension Activities**

ERIC TIELKES, CHRISTIAN HÜLSEBUSCH

University of Hohenheim, Centre for Agriculture in the Tropics and Subtropics, Germany

Abstract

Intensive agriculture in dryland regions containing marginal lands and high population is leading to degradation of the available resources. The three most important agriculturally induced degradation processes are erosion, nutrient mining and organic matter decline.

Development programs dealing with the management of natural resources have often given disappointing results for various reasons. The most important and often cited reason is the lack of attractive direct or indirect monetary returns and the farmers' inability to perceive the long-term problems associated with land degradation. Therefore, training of the people involved in such programs is an essential component to better focus the technologies and to demonstrate the potential benefits. This also includes the development of efficient extension materials such as posters and leaflets.

To better target the technologies, existing soil and water conservation technologies used by farmers, development projects and non-governmental organisations (NGO) have been documented in a detailed database in Niger using the WOCAT (World Overview of Conservation Approaches and Technologies) methodology. The approaches used by the development projects and NGOs to introduce these technologies were documented as well. Further, the survey elicited farmers' perceptions of the effectiveness of the different conservation technologies.

The database, which at present describes 31 technologies and 9 approaches, was established by a Nigerien soil and water conservation association (ANCES). This association was created in order to establish an exchange of knowledge and technologies on soil and water conservation between research and development organisations.

On the basis of this database, appropriate technologies that are currently available and which have the potential to ameliorate degraded lands or prevent further degradation are identified with the participation of researchers, development workers and NGO representatives. For these technologies, special training programs as well as extension materials are developed and presently tested in several resource management projects in Niger. In a next phase, the technologies will be vulgarised involving other NGOs and farmers.

Keywords: Extension, water and soil conservation, West-Africa, WOCAT