



## Sustainable Land Management in the Ethiopian Highlands

Mitiku Haile (1), Jan Nyssen (2), and Tesfay Araya (3)

(1) Department of Land Resources Management and Environmental Protection, Mekelle University, Mekelle, Ethiopia (gualmitiku@yahoo.com), (2) Department of Geography, Ghent University, Belgium (Jan.Nyssen@UGent.be), (3) Department of Crop and Horticultural Sciences, Mekelle University, Belgium (tesfayaraya@gmail.com)

Through centuries of farming practices the farmers and pastoralists in Ethiopia were managing their land resources pertaining to the needs of prevalent populations. With an increasing population and growing demands, more land was put under cultivation. Subsequently forest areas were cleared, encroaching agriculture into steep slopes and areas that were not suitable for agricultural activities. Land degradation and particularly soil erosion by water not only reduced the productivity of the land but also aggravated the effects of drought, such as famine and migration. Obvious signs of degradation in the highlands of Ethiopia are wide gullies swallowing fertile lands and rock outcrops making farming a risky business. But also less visible sheet erosion processes result in a tremendous loss of fertile topsoil, particularly on cropland.

Efforts have been made by the farming communities to mitigate land degradation by developing local practices of conserving soil and water. With keen interest and openness one can observe such indigenous practices in all corners of Ethiopia. Notwithstanding these practices, there were also efforts to introduce other soil and water conservation interventions to control erosion and retain the eroded soils. Since the early 1980s numerous campaigns were carried out to build terraces in farmlands and sloping areas. Major emphasis was given to structural technologies rather than on vegetative measures. Currently the landscape of the northern highlands is dotted with millions of hectares of terraced fields and in some places with planned watershed management interventions including exclosures. Apparently these interventions were introduced without prior investigating the detailed problems and conservation needs of the local population. Intensive research is undertaken on the processes of degradation, the impact of the different intervention measures and the role of communities in sustainably managing their land. This paper attempts to review the relevant studies undertaken with emphasis on the approaches to sustainable land management.