

Shimeles Damene Shiene

ZEF- Ecology and Development Series No 89

Effectiveness of soil and water conservation measures for land restoration in the Wello area, northern Ethiopian highlands

Improper land use has resulted in vegetation and soil degradation in the Ethiopia highlands. Soil erosion is among the major causes of crop yield losses in the region. To counteract this process, the government implemented various soil and water conservation interventions for land restoration. This study was conducted in the North and South Wello zones of the Amhara National Regional State. It evaluates the role of farmland terracing and exclosure in land restoration based on soil, crop yield and satellite data. The analysis reveals that terraces on farmland not only reduce soil erosion but also help to maintain soil fertility and crop productivity. On the other hand, exclosures on degraded land allow the restoration of vegetation cover and soil organic matter content. The study provides information to support decision makers in the development of strategies and policies for restoration of degraded land.