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"Management of land use systems for enhanced food security: conflicts, controversies and resolutions"

Reversing Natural Degradation into Resilience: The Afar Case

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Abstract

In Afar region, pastoralists and agro-pastoralists, a semi-mobile population, belong mostly to hierarchically structured clans. They use traditional farming systems that were previously sustainable. More than half of the 1.4 million inhabitants (56 %) live below the poverty line. The main cause of the increasing degradation of natural resources is their excessive use, which is on the rise due to strong population growth, high livestock density and reduced access to land. The validity of former land-use arrangements is being weakened by conflicts among clans and competition between traditional ownership rights and the official land ownership claims of the government.

Increasing degradation of vegetation and soils is accompanied by lower yields. Pasture land for herds is reduced; some areas are no longer available for production at all, and the growth of fodder plants decreases both in quantity and quality. Crust formation on the soil surface reduces water infiltration and most of the rain runs off. This surface water rapidly accumulates and causes deep erosion gullies through which the water quickly drains off the land. Groundwater levels drop, making less water available for people, animals and plants. Droughts and floods lead to crop failure and the loss of animals. Acute malnutrition is therefore widespread in the Afar Region, which especially effects women, infants and young children due to insuffient diets. Also conflicts are getting more.

Approach: GIZ implements a new approach to Ethiopia, using soil and water harvesting methods successfully tested in the Sahel. In the fertile but degraded valley areas, the effects of strong runoff of rain water and sporadic flash floods are reversed by a holistic approach based on water-spreading weirs. This leads to the rehabilitation of the valleys which can then be used for cultivation of animal feed and food and provide access to water for people and animal. River banks with their trees are protected and the groundwater level rises providing water for shallow wells. This approach combined with intensive training strengthens the resilience of the pastoralists and agro-pastoralists to the impacts of climate change offering economic options and reducing conflicts.

Keywords: Food security, gender, reduce conflicts, soil rehabilitation

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