Degraded Gullies Can be Made Productive

Throughout the ANRS, including the AMAREW Project pilot watersheds, deforestation aggravates excess run-off and causes gully erosion on productive farmlands at the foot of hillsides. In our Project area, most farmlands at the foot of degraded hillsides are highly dissected with gully erosion. Increasing amount of extensive productive farmland is lost through gully erosion each year. However, with proper management, gully beds and sides could be converted into productive land for livestock feed, growing construction and fuel wood, and fruit tree production.

BEFORE: The Lenche Dima watershed is a typical example where the devastating effect of gulley erosion could be illustrated. The watershed has a total area of 1500 ha of which cultivated land covers 900 ha. It is estimated that there is about 20 km of gulley network within the cultivated land. Reclaiming these gullies has been taken as a major challenge for the watershed communities.

AFTER: The project used very simple sand bag check dams since the availability of stone for gabion and loose stone check dam is limited. Once adequate silt is accumulated, usually after the first three or four rains, multi purpose forage species were directly sown on the silt layer. The community divided the whole gully length into small sections and allocated each to a user who has land holding adjacent to the gully. The user has the right to utilize the grass employing the cut and carry system and harvesting any other proceeds. He also has the obligation for maintaining the physical structures before and after the rains, plant trees and other plants as appropriate.