



EROSION PREVENTION STUDY

Italy, 1988

PROJECT CHARACTERISTICS

Works: Controlled application of biodegradable and polymer geonets at high altitude in the Alps.

Purpose: Assess the capability of geonets in preventing erosion and in promoting revegetation of barren slopes

Dimensions and Materials:

- Biodegradable geojute: 300 m²
- Polymer geonet: 200 m²



PROFESSIONAL SERVICES PERFORMED

Planning of the controlled application. Technical specifications. Monitoring of soil loss, geonet behaviour and vegetation growth for more than 2 years since installation.

Organisation of an International Workshop on Soil Conservation and Environment Restoration with Bio-engineering Methods at High Elevation in the Alps

In 1988, the ITC (International Trade Centre of UNCTAD/GATT) sponsored an experimental and controlled installation of a biodegradable geonet. The installation was carried out on a ski piste at 2000 m elevation, in the Alps at the head of Susa valley. To allow better evaluation of the tests results, it was decided to install 2 different materials in parallel and a strip of unprotected slope was used for comparison.

The biodegradable geonet and the polymer geonet were placed on a steep slope actively eroded. Erosion and soil grain washout were measured for more than 2 years. Laboratory tests were carried out. The results pointed out that the geojute adhered tightly to the soil and stones and showed a high water retention capacity while the polymer geojute proved to be very good in promoting vegetation but not possessing with adequate drapability.

