

## **VETIVER GRASS with Microbial Inoculants: Effect on Terrace Stabilization & Sustainable Farming in Mountains**

S. P. Yadav  
CWDS  
P. O. Box 7923 Kathmandu-Nepal  
cwds@wlink.com.np

Terrace cultivation is the age-old farm practice in the hills and mountains of Nepal. Due to increased population and degraded ecology soil erosion and land slides have become the regular phenomena during rainy season every year. Besides many related ill-effects, this had led to decreased farm production deteriorating the economy and livelihood of the farming communities. Several technologies have been and are being tried and tested for terrace and slope stabilization in the mountains. CWDS started working with Vetiver Grass Technology (VGT) on its own Demonstration Farm (alt. 6500 ft.) and in farmers fields in 2001. Simple procedure of planting VG alone and VG supplemented with microbial inoculants on terraces, slopes and in gentle slope gullies were done in the year 2002. Microbial inoculants in the form of EM (Effective Microorganisms) were applied in the soil before planting VG and supplemented with spraying of EM at intervals. Incorporation of microbial inoculants (EM) has been very effective in increased tillering and vegetative growth of VG, in better soil stabilization in all the treatments resulting into improved soil condition for better farm production. Microbial inoculants are responsible for increasing the organic matter content in the soil due to better VG hedges and increased mycelium population due to EM applications has soil binding characteristics resulting into better impact of VGT so far observed in terms of VG hedge growth, soil stabilization and farm production.