ชื่อเรื่อง **Status on the Promotion of Vegetative Soil Moisture Conservation Technologies and Adaptive Research in India**

ชื่อผู้วิจัย M.C. Lodha

ชื่อหน่วยงาน Former World Bank Agriculturist, Currently a Watershed Management Consultant, INDIA

ปีที่ดำเนินการ

ปีที่พิมพ์รายงาน

Abstract

In the review of experiments and field performance, evidences suggested the vegetative barriers in conjunction with appropriate maintenance are suitable to reduce runoff between 35 to 70% with the best results on shallow soils. At all sites with more than 650-700 mm rainfall vetiver hedges proved significantly better than all other technologies for reduction of soil loss which varied between 24% to 70% in six year pulled comparision. In physical terms vetiver hedge reduced the soil loss from 8-11 tons per ha to 2-3 tons per ha (less than 6-7% slope which is within the acceptable limits). Well established contour/anti slope hedge apart from the reduction in soil loss and runoff gave incremental yields from 15% to 45% in both litrite and black soils.

We, based on experiment and experiences, believe that the porous barrier (using vetiver and other grass in single or in combination) technology is fully suitable for areas receiving more than 650-700 mm annual rainfall and where farmers are fully motivated to actively participate in planting and maintenance. The quality control is particularly important in respect of being able to provide good planting material and to ensure that the planting is only done when soil moisture status is satisfactory, there is minimal delay between up rooting the planting material in the nurseries and field planting and the two-three slips are accurately placed at 10 cm distance in well prepared furrows. We also need to focus more on training of extension services and farmers in this technology.