

ชื่อเรื่อง

**Vetiver Based Agroforestry for Soil and Water Conservation**

ชื่อผู้วิจัย

B.S. Nadayoudar

ชื่อหน่วยงาน

University of Agricultural Sciences Dharwad, INDIA

ปีที่ดำเนินการ

ปีที่พิมพ์รายงาน

### **Abstract**

In the semiarid tropics of Northern Karnataka, India with erratic rainfall and fragile nature of soils, conservation of top fertile soil and water for maintaining the productivity of lands is considered a dire need. Agroforestry practices involving trees, grasses and fruit yielding crops are making inroads in the land use practices followed by farmers. An unstructured survey conducted during 1994 and 1995 in agro-climatic zone I, II III and VIII of Karnataka revealed that, vetiver grass is preferred owing to its non-browsable nature by cattle where cattle are let loose during most part of the year. In addition, the root system of this grass binds soil particles together, thus avoiding erosion due to torrential rains and land slopes over 2 per cent. Creating live bunds of vetiver grass intermixed with several multipurpose tree species across the slope at a distance of 20 to 40 meters is the most preferred practice, leading to sustainable production. However, careful watch on *Striga lutea* a root parasitic weed on this grass as well as *Sorghum bicolor* a predominant cereal grain crop of the area is required. In highly eroded wastelands, vetiver grass is most desired species by farmers for gully plugging.