

The VETIVER SYSTEM in RURAL ROADS



Low maintenance, sustainable (lasts 100 years) and can involves local population



Culvert bridge in a flood zone. Annually the stream shifts its course



Same bridge one year later. Road bed & stream bank are stabilized



After 4 years, the bridge survived 2 cyclones



Sustainable protection of small concrete works in dry and wet seasons



Insures low maintenance of side drains



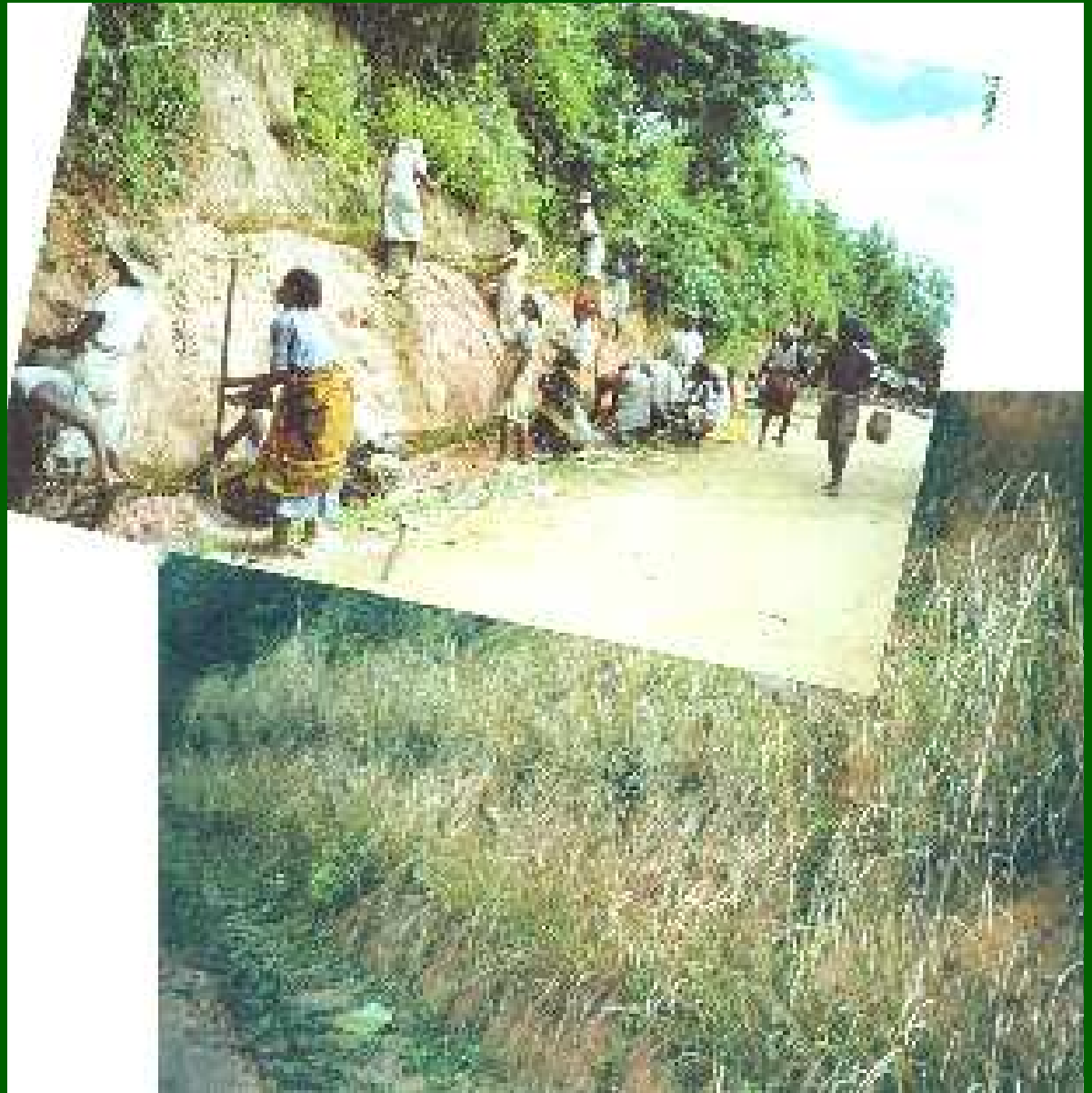
In high flow areas, gabions are stabilized with vetiver hedges



One yr after



**Community
planting of
vetiver
along steep
road side**



one year after



Vetiver rows protecting roadbed leading to submersible bridge



Assuring year-round roadway and bridge will remain aligned during flash floods



Eliminating gullying at elbow of rural road (Malaysia)



The rural farm-to-market road was washed out annually until a row of vetiver was planted uphill.



Rural road

Water force reduced & spread

