

# VETIVER SYSTEM FOR EROSION CONTROL OF LEVEE BANKS AND SEA DIKES IN LOW LYING FLOOD PRONE AREAS



# Flash flood caused enormous damage to infrastructure such as levee banks in the central coastal provinces of Vietnam



## Severe damage to rural roads



# Vetiver stabilisation of river bank before and after vetiver protection



# Vetiver stabilisation of a large levee bank



# Vetiver stabilisation of drainage channel bank before and after



# Stabilisation of aquaculture infrastructure



# Re-enforcing and protecting hard structure of a river bank in Vietnam





# Stabilisation of the inner wall of a sea dike in Nam Dinh province, Vietnam



**When this dike was over topped by a recent typhoon, the unprotected part of the dike was washed away, while the vetiver planted section remained intact.**



**Vietnam, Mekong Delta –  
eight year old vetiver  
stabilizing dike road**



**Note: no erosion evident  
on road shoulder. Much  
lower road maintenance  
costs.**



**Excellent vetiver growth on both  
inside and outside  
batter on this  
Mekong Delta dike**



**The sea-facing wall of this dike was badly damaged (left) while the right side, planted with vetiver remained fairly stable**



**When properly implemented and maintained, the Vetiver System is very effective in stabilising and protecting estuarine dikes from the adverse elements commonly experienced in coastal zone. Participation of local population is the key element to its success. This involves education, providing guidelines, instructions and support to the local people. Last but not least, the enforcement of a firm regulatory program by the local authority**

