

PRVST (Protection of River banks Through Vetiver System Technology) in Malappuram , Kerala



A Malappuram Experience –
Done by INVN in collaboration with the district
administration, Malappuram



Main objective of the effort

To Protect the
banks of four
major rivers –
Bharatha puzha
Kadalundi Puzha
Chaliyar
Tirur puzha
And their
tributaries.



Other Objectives

Rejuvenation of plants

Carbon sequestering

Soil fertility improvement

Bio control of pests

Land beautification

Handicraft making



Flood is a regular scene



Earlier experiments – constructing stone walls



They were went to walls



A big loss to the Exchequer



The remains trigger environmental degeneration.



How we have done the work

Stage I (June–July 2009)

- ▣ INVN Submitted a detailed project proposal before the Government
- ▣ Government accepted the project and selected INVN & LSGD's the implementing agencies.
- ▣ Govt. gave permission to converge RMF with MGNREG

Stage II (July–August 2009)

- ▣ District kudumbashree mission was asked to establish vetiver nurseries (of VS 9 Ecotype)
- ▣ The MGNREGS functionaries along with INVN volunteers identified the potential areas in each panchayath to establish VST
- ▣ Block/panchayth level technical team prepared detailed estimates with the help of INVN based on the rates approved by DLTC & SLTC

Nursery activities of kudumbashree Groups



After pretreatment they
planted the tillers



Each group consists of 5-7 members



Stage III (Aug-Sept 2009)

- ▣ Monitored the progress of 11 kudumbashree vetiver nurseries
- ▣ Training sessions were conducted at block and Panchayath level for
 - Grass root level workers
 - Peoples' representatives
 - MGNREG functionaries
 - Organisers
- ▣ Awareness classes were conducted for
 - Public
 - Farmers

Stage IV (Oct 2009–April2010)

- ▣ Inaugurated the implementation phase
- ▣ Started to Implement the project at various panchayaths.
- ▣ Directed all panchayaths to complete the first phase before May

Stage VI (May–June 2010)

- ▣ Accumulated the data from the field
- ▣ Consolidated the data
- ▣ Strategies designed for rectifying the errors and mistakes
- ▣ Pre arrangements made for the second phase.

July 2010– May 2011

- ▣ Started the second phase
- ▣ All the errors were rectified
- ▣ Gap filling was done
- ▣ More documentation done

What INVN has done ?

Helped in

- Identification of suitable ecotypes
- Forming vetiver nurseries
- Conducting awareness and technical classes
- Evaluation and documentation

The work in progress @ Certain Panchayaths







River Bank before planting
Cheriyamundam Gramapanchayath



Land preparation



Land preparation



Three months after planting





Five months after planting



Poorappuzha – Parappanagadi gramapanchayath

Two weeks after planting



Three weeks after planting



Four weeks after planting



Four months after planting



Six months after planting



The site now



VST to restrengthen the riverside pathways
At Tirurangadi gramapanchayath

At the time of planting





Same site after 3 months





To strengthen the already existing retaining wall



Planting Process





The retaining wall is in danger zone









VST application in Vazhakkad Panchayath

















A glance at the work done

As per the data consolidated in May



Tiller distribution

Number of tillers supplied---

52,39,184

Number of tillers planted ---

51,71,858

Number of tillers survived ---

43,93,891

Number of tillers destroyed ---

777967



Wage Distribution

Total area of planting --

107.36 hectare

Amount spent from
MGNREGS as wages --

152.28 lakhs

Total working days created-

12182



Survival & Casualty

Percentage of survival ---

84.96

Percentage of casualty---

15.04



Reasons for casualty

Drought



Reasons for casualty

Salinity of the water during planting time



Reasons for casualty

Illegal sand
mining



Reasons for casualty

Flood during
planting time



Full protection to the banks now



Vetiver hedges on the banks of chaliyar



Cut leaves are used as fodder





VST Supports other crops



VST Prevents sand mining and soil erosion



A new road has been constructed along the river bank





The steep areas are widely protected



VST restrengthenens the road





Hedges formed within months



Pruning is done regularly



Illegal sand mining is prevented to a certain extent





Vetiver hedges just days after a flood



Extension activities for future

Handicraft Making

A minimum of 15 self help Groups will be trained in handicraft making ,using vetiver grass as raw material With the help of india Vetiver Network

This initiative definitely will enhance the emerging tourism industry in Malppuram



Handicrafts made out of Vetiver grass



Handicrafts made out of Vetiver grass



Fodder Processing Units

One fodder processing unit in each block will be established to produce quality fodder out of vetiver leaves



Mulching and Thatching Material

Each GramaPanchayath can directly sell the vetiver grass as thatching & mulching material



A source for planting Material

The External row will be kept as a source for planting material– tillers for the future applications of VST

Especially in farms

In order to

To preserve soil fertility

To prevent soil erosion

To fix nitrogen

To increase productivity

To resist pests

To demarcate properties

To recharge the ground water

Awareness classes for farmers will be started soon .



Conclusion

- ▣ PRVST becomes a typical example for participatory approach
- ▣ PRVST becomes a best convergence model of government & special funds

THANK YOU

