

Protection of river banks by using Vetiver System Technology in Malappuram district of Kerala

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Abstract

During 2009 a project to implement Vetiver System Technology for river bank protection was accepted by the administration of Malappuram District of Kerala. The project was implemented jointly by the administration led by the District Collector of Malappuram and India Vetiver Network. The main object of the Project was to protect the banks of four major rivers of Malappuram district, Bharatha, Kadalundi, Chaliyar and Tirur puzhas. The Government converged the River Management Fund (RMF) with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) which provided the wage component. The project took the help of local self government departments (LSGDs), the grass root level implementing agencies. Twenty eight panchayaths, selected on the basis of volume of sand mining and area of the river banks. completed the first and second phases. After identifying VS-9 as the suitable ecotypes of Vetiver, District 'Kudumbashree' mission (a society formed for the upliftment of women by the government) established Vetiver nurseries. Personnel of MGNREGS identified vulnerable areas in each panchayath to be protected by Vetiver hedges. The technical team of the panchayath prepared detailed estimates. Simultaneously, training programme on all aspects of vetiver planting and maintenance were conducted at panchayath level for grass root level workers, peoples' representatives, and MGNREGS organizers.

The implementation was inaugurated at Kuttippuram in October 2009. Vetiver was planted at spacing of 15 cms. between 2 plants in the row. The distance between rows varied from 1 to 1.5 mts. depending on the gradient. The number of rows was determined based on the width of the slopes. Initially irrigation was carried out where ever soil moisture was low. The growth of plants was regularly observed and recorded. The data collected revealed that survival 8/9 months after planting was 84.9%. Total number of tillers supplied for planting was 52,39,184 and 43,93,891 survived. The area covered under the project was 87.36 ha. and amount spent from MGNREGS as wages was Rs.72.28 lakhs. The number of working days created was 57824.

It was proved that river banks could be protected by right type of noninvasive south Indian Vetiver. VS technology should be applied at a much wider scale for protecting the rivers of the state using this funding and participatory model.