



Procurement of 20 JCBs by Administration of District Sivagangai

The Hon'ble High Court of Madras (Madurai Bench) directed Sivagangai District Administration to desilt and restore water bodies. The District had Farmers Contribution Fund available at District Watershed Development Agency in Sivagangai, which could be utilized for desilting 184 water bodies. But, the Administration went a step ahead and decided to create assets of its own with which it could desilt all 184 water bodies initially and later utilize it for other water bodies like tanks, ooranies, supply channels, rivers as also for eviction of encroachments. The decision to purchase 20 JCBs was a result of this lateral thinking. These JCBs could also be used for removal of prosopis juliflora from farmers' lands at cheaper rates (only diesel cost to be paid by the interested farmers).

District Administration purchased 20 JCB machines out of the above farmers contribution fund and utilized them for desilting water bodies. Prosopis juliflora in 164 km stretch of rivers, such as Vaigai



(48 Kms), Uppar (11 kms), Palar (30 kms), Manimutharu (11 km), Thenaru (8 Kms), Saruganiyaru (10 Kms) and Virusuliaru (12 Kms) was cleared. This enabled free flow of water in river and also eradicated the growth of prosopis in agricultural land as its seeds were now not dispersible through water.

This would also help to bring more land area under cultivation. The recurring expenditure on salary of drivers of JCBs and fuel for them was to be met out from District Mineral Foundation Trust fund and general funds of urban and rural local bodies.

For sustainable agriculture or development, the augmentation of ground water resources becomes necessary. The water body restoration advisory committee suggested the district administration to construct a sub surface dyke across Vaigai River near Thirupachethy in Sivaganga District to recharge the groundwater. The gradient of the riverbed is also much suitable for the construction of sub surface dyke. This was also done with 20 JCBs purchased were utilized by the district administration without availing any

additional financial assistance from the state government.

The procurement of JCBs brought perceptible improvements as the administration could itself de-silt the water bodies and clear jungle without resorting to the highly expensive contract system, which was dispensed with. The panchayats were strengthened as they could effectively get desilting done and maintenance of water bodies was possible at cheaper rates. As a result a number of ground water recharge structure created, ground water level upgraded. There was a significant reduction in the gap between irrigation potential created and irrigation potential utilized. Cost Reduction of 30% to 40% was achieved. The underground water level increased by more than 30 to 40 feet in the adjoining radius of upto 7 Kms stretch away from the sub surface dykes constructed in Vaigai River, with the help of procured assets.



With the construction of sub dykes, there is no need of additional surface reservoirs, no siltation and no loss of reservoir capacity. Environment-friendly, it can be implemented with locally available resources and makes good quality water available, which is not contaminated by insects or bacteria. No land is submerged and therefore nature is not altered in any way and people are not displaced.

After the construction of sub surface dykes in, Thiruppachethi and Muthanenthal villages of Sivaganga district, the ground water level has increased. An average of 30 to 40% percent of reduction is achieved in the gap between irrigation potential created and irrigation potential utilised.

With desilting and clearing of 10 major rivers from prosopis trees now there is free flow of water. Farmers of all the villages were benefitted as the water in tanks is availed for irrigation. The public are benefitted as drinking water bore wells and all drinking water sources are being recharged and rejuvenated in all the villages. After removal of prosopis Juliflora from agricultural lands more area was brought under cultivation. Barren land was converted to fertile land.



Increase in the area under agriculture has increased income of farmers.

265 PWD tanks, 113 ponds, 1,693 minor irrigation tanks and 3,351 small ponds and ooranies in village panchayats were desilted. 6,47,182 cubic meters of silt has been removed and 3250.5 Km of inlet/outlet channels have also been desilted.

The Sivaganga is a rainfed, drought prone district. All water bodies were dry before cleaning of inlet channels, and now all water bodies are filled with rain water and the district has witnessed two years of successful farming owing to the desilting by JCBS with public participation.

The district was adversely affected by gaja cyclone. Disaster Management trained Volunteer groups and JCBS were pressed into service to set right the uprooted trees and to remove the debris at considerably lesser period of one day.

With the help of these 20 JCBS, 200 tanks and land worth Rs. 500 crores were freed of encroachment, 300 acres additional jungle land brought under cultivation and 370 crore litres of water was saved. Due to improved water management, the single crop land stands converted into double crop land and the cropping pattern has also changed.