

## **NOTE ON JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND**

Kerala is abundant in water resources, blessed with 44 rivers, but the state has so far explored only about 1/3<sup>rd</sup> of the already identified hydropower potential. Even though effort had been spared for the planning of major hydro electric projects, due to involvement of huge forest land, the projects were held up for want of forest clearance as well as environmental clearance from MoEF. Taking these factors into consideration, the KSEBL has decided to implement small hydro electric projects involving limited requirement of forest land.

In Hydro Electric Projects the Potential energy of water is stored in a higher level and utilized for power production i.e. two factors are involved for hydro power generation. One is availability of water flow and the second is "head or fall" in topography. These two factors are available mainly in the hill ranges and therefore all hydro power projects are invariably located in the hills/ forest area of the Western Ghats. Now a days any river flowing adjacent to forest is also considered as part of the forest. Thus, it becomes inevitable to locate the weir of Valanthode Small Hydro Electric Project also in the forest lands of Akampadam Forest Range under Nilambur North Forest Division. Only the weir portion is proposed in forest and all other components of the scheme are proposed in private land.

This scheme which is a run-of-the river scheme, envisages construction of a diversion weir of maximum height 8.50m and length 101m across the Kuruman Puzha, a tributary of Chaliyar. This will result in temporary water impoundment of 0.222 ha of forestland in river bed itself. Owing to the small size of the weir and negligible inundation, the impact on the forest will be nil. Further, the project execution will not directly or indirectly affect the forest dwelling communities. The total forestland required for the project is only 0.9354 Ha, of which 0.086 Ha could be handed over back to forest department after construction activities are over.

The proponent is obliged to follow the Forest Conservation Act (1980). Accordingly, 0.9354 Ha of land has to be acquired for compensatory afforestation (see Annexure III of Part II for details). Additional land available at Adyanpara Small Hydro Electric Project can be utilised for compensatory afforestation in consultation with the State Forest Department.

The Board is working out the possibilities of taking up other renewable sources of energy. Small hydro projects up to 25MW capacity is considered as renewable energy source project by the Ministry of New & Renewable Energy (MNRE) and is promoting it by giving incentives. Thus, the proposal for the Valanthode Small Hydro Electric Power Project seems to be safe from socio-economic and environmental perspectives.

  
Project Manager