

**Scheme for Compensatory Afforestation over double the extent of degraded forest land in lieu of forest land diverted for relocating Thrissur Zoo to Puthur**

It is proposed to relocate Thrissur zoo to forest land at Puthur. An isolated bit of reserved forest having an extent of 136.86 hectare is identified for establishing Thrissur Zoological Park. The actual extent of forest land required for non forest purpose is 18 hectares as per the detailed design of all facilities in the new location. This is about 13% of the forest area. As per the norms followed by the Ministry, compensatory afforestation is to be done over 30% of the forest land proposed for diversion. This works out to 41 hectares.

The Thrissur Zoological Park is established by Kerala Forest Department. So the user agency in the application under the Forest (Conservation) Act 1980, is Kerala Forest Department. The forest land proposed for diversion falls in Pattikkad Forest Range in Thrissur Forest Division. So the Department has identified patches of degraded forest land within the jurisdiction of Thrissur Forest Division. The following locations have been identified.

Sl. No.	Name of Forest Division	Name of Forest Range	Name of Location	Extent in Hectare	Present Status
1	Thrissur	Wadakkanchery	Nelluvai	28	Open degraded forest
2	Thrissur	Wadakkanchery	Varavoor	9	Open degraded forest
3	Thrissur	Wadakkanchery	Wadakkanchery	10	Open degraded forest
4	Thrissur	Wadakkanchery	Mayannur Block 1	8	Open degraded forest
5	Thrissur	Wadakkanchery	Mayannur Block 2	5	Open degraded forest
	Total			60	

The above locations need rehabilitation. The original forest in the area is of the type moist deciduous (Southern Tropical Moist Deciduous). The degradation is mainly due to biotic interference and annual fire. The area falls in a dry belt in Thrissur District. Therefore, comprehensive soil and moisture conservation techniques have to be adopted for raising successful plantation. Since the forests lie close to human habitation, the raising of plantation is proposed to be entrusted with the JFMCs in the location.

It is proposed to take advantage of the root stock available in the localities. Since the existing tree stock is poor and the forest floor is covered with weeds and grasses, planting of basketted seedlings of indigenous species is proposed. The seedlings will be raised near the


human habitation at localities where sufficient water is available. The species proposed for planting would include *Tectona grandis*, *Termenalia paniculata*, *Terminalia tomentosa*, *Termenalia belerica*, *Grewia tilae7folia*, *Syzygium spp.*, *Phyllanthus emblica*, *Gmelina arborea*, *Xylia xylocarpa*, *Schleichera oleosa*, *Sterospermum chelenoides*, etc. Seeds of the above species will be collected and germinated in the nursery in the month of December-January. Germinated seeds will be transplanted into polythene bags filled with forest soil, sand and cow dung in the month of January. The planting site will be weeded in March. Planting pits of size 30 cm X 30 cmX30 cm will be taken during pre-monsoon period in April-May. Healthy seedlings grown in the polythene bags will be planted during monsoon months of June-July. Planting will be done at an average spacing of 3 m X 3 m. Around each plant an inward slopping platform of size 60 cm X 60 cm will be taken along with the planting for conserving moisture. The planting lie will be along the contour. The JFMC members will protect the plantation from grazing and fire. Since the site is degraded and deficient in nutrients, organic fertilizer at the rate of 100 grams/plant will be applied in the first two years. The plantations will be maintained for five years.

Detailed cost estimates have been prepared for all the above locations. The details are attached as annexure 1 to annexure 5. The costs are summarized below.

Diversion of Forest Land for Thrissur Zoological Park Project-Compensatory Afforestation Scheme (Amount in Rupees)								
	Division: Thrissur			Range: Wadakkancherry				
Sl.No	Location	Area (Ha)	Year1	Year 2	Year 3	Year 4	Year 5	Total
1	Nelluvai	28	3250000	1145000	585000	401000	401000	5782000
2	Varavoor	9	1060000	442000	200000	140000	140000	1982000
3	Wadakkancherry	10	1124000	415000	210000	145000	145000	2039000
4	Mayannur Block 1	8	950000	360000	186000	134000	134000	1764000
5	Mayannur Block 2	5	642000	254000	147000	114000	114000	1271000
	Total	60	7026000	2616000	1328000	934000	934000	12838000
	Cost per Ha.		117100	43600	22133.33	15566.67	15566.67	213966.7

For preparing the cost estimates, minimum wage rate for forestry works in Kerala of Rs.290 is adopted. In addition to the basic wage, variable DA is also included. The existing rate of variable DA for Thrissur District is Rs.145.

The plantation will get established in 5 years. The compensatory afforestation plantations will provide full scale ecological services in 20 years.

  
**Divisional Forest Officer**  
**Thrissur Forest Division**