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LONG -TERM ENVIRONMENTAL AND ECOLOGICAL STUDIES OF POOYAMKUTTY HYDROELECTRIC PROJECT IN THE WESTERN GHATS OF KERALA - PRECONSTRUCTION STAGE ANALYSIS

K. Balasubramanyan
P. Vijayakumaran Nair
S. Sankar
K.K. Narayanan Nair
Mammen Chundamannil

KERALA FOREST RESEARCH INSTITUTE
PEECHI, THRISSUR

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The Pooyamkutty hydroelectric project envisages harnessing the power potential of two major rivers, viz. Pooyamkutty (plate 1) and Idamalayar, both tributaries of river Periyar. A complex of six reservoirs and four separate hydel schemes viz., Anamalayar, Upper Idamalayar, Mankulam and Pooyamkutty with an installed power generating capacity of 750 MW are contemplated (Fig. 2).

The project area is located in the Idukki District, Kerala State and falls within latitude 10° to 10° 15' N and longitude 76° 40' to 77° 10' E with the elevation ranging from about 50 m to 1300 m. The forest area falls within the Malayatoor and Munnar Forest Divisions. An abandoned old Alwaye - Munnar road is the only means of transport within these reserves. The catchment area of the four hydel schemes together cover an area of about 355 km^2. Fig. 3 depicts the physiography of the project area. The project area also has some scenic beauties with cascades. (Plate 2).

Except for some observations made by the Kerala State Electricity Board, nc detailed information is available on the vegetation and wildlife, human settlements and land use pattern in the project area to facilitate impact assessment during and after the implepentation of the project. The following aspects were studied to generate baseline data.