Apart from these projects the district is rich with several hundred tanks and wells which are also important sources of irrigation. There are about 164 canals covering a length of about 279 km.

**Power:** Periyar Hydro Electric Scheme was commissioned in 1958 and this was the first Hydro Electric Station in the district. This project was designed to utilize the discharge from Periyar lake below the existing tunnel where a head of about 1230 feet was available for power production. The total capacity of electric power generated in this project is 140 M.W. This project is situated near the southwest of Cumbum Valley. The second project is situated near Surulipatti village, near east of Cumbum Valley. Called the Suruli Scheme, it generates 35 M.W. of electricity.

### III PREVIOUS WORK

Nelson (1868) was the first person who worked on this district and gave an account on the flora of Madurai (in the Madura Country Manual which has a list of plant names supplied by Mr. Turnbull). *Beddome (1867), *Bourne (1899) and *Barber (1905) made very few collections from Cumbum and Periyakulam hills on their way to Kodai hills. Blatter & Hallberg (1918) with a team of botanists from Bombay were the pioneers who made the first attempt to botanize High Wavy's Mountain. They collected about 2000 specimens which were housed at Blatter's Herbarium, St. Xavier's College, Bombay. From this single exploration trip at High Wavy's Mountains, Blatter described 6 new species of orchids. Blatter (1929) recorded 26 species of mosses belonging to 22 genera from High Wavy's Mountains. *Jacob (1925) made a moderate collection from Cumbum R.F., High Wavy's Mountains and Thekkadi near Kerala border and most of his collections are deposited in MH. D'Almeida (1926) described a new species of fern from High Wavy's Mountains based on Hallberg's collection and also gave a list of ferns available in that area.

Blatter (1927) gave a list of 32 orchids collected from High Wavy's Mountains during May 1917 including 4 new taxa and deposited them in Kew. Fischer (1928) described a new species of orchid, *Zeuxine blatteri*, based on Blatter & Hallberg's material collected in High Wavy's Mountains which is now synonymised under *Z. gracilis*. Blatter (1928) described a new species of orchid from High Wavy's Mountains, namely *Disperis monophylla* (Ref. Gamble, Fl. Pres. Madras 3: 1033. 1957) which is also synonymised under *D. neilgherrensis*. Hutton (1948) observed the mass flowering in *Phlebophyllum kunthianum* (=*Strobilanthes kunthianus*). Mrs. Cautlay (1943), *Manager (1951-53) and *Gopalan (1953-55) of High Wavy's Estate made a few collections from High Wavy's Mountains. Subramanyam *et al.* (1961) listed Pteridophytes from Cumbum Valley and Pachakumatchi hills. Balakrishnan & Subramanyam (1963) described a new genus and a species of Acanthaceae near Alagar hills.


* - The year(s) referred here is based on the collections made by the collector(s) deposited in MH, Coimbatore and MCH, Madurai.