WATER RESOURCES OF KANYAKUMARI DISTRICT

Dr. C. Sankar,

Assistant Professor of History,

Lard Jeganath College of Education,

K.K. District.

Abstract

Water resources are natural resources of water that are potentially useful. Uses of water include agricultural, industrial, household, recreational and environmental activities. All living things require water to grow and reproduce. 97% of the water on the Earth is salt water and only three percent is fresh water. Slightly over two thirds of this is frozen in glaciers and polar ice caps. The remaining unfrozen fresh water is found mainly as groundwater, with only a small fraction present above ground or in the air. Fresh water is a renewable resource, yet the world's supply of groundwater is steadily decreasing, with depletion occurring most prominently in Asia, South America and North America, although it is still unclear how much natural renewal balances this usage, and whether ecosystems are threatened. The framework for allocating water resources to water users is known as water rights.

Key words: Tamiraparani, Pazhayar, Pechiparai Dam, Perunchani Dam, Chittar Dam-I, Chittar Dam-II, Anandanar Channel, Padmanabhapuram Puthanar Channel, Chittar Pattanam Channel.

Introduction:

Surface water is water in a river, dams, canals, ponds and lake or fresh water wetland. Surface water is naturally replenished by precipitation and naturally lost through discharge to the oceans, evaporation and groundwater recharge. Although the only natural input to any surface water system is precipitation within its watershed, the total quantity of water in that system at any given time is also dependent on many other factors. These factors include storage capacity in lakes, wetlands and artificial reservoirs, the permeability of the soil beneath these storage bodies, the runoff characteristics of the land in the watershed, the timing of the precipitation and local evaporation rates. All of these factors also affect the proportions of water loss. Human activities can have a large and sometimes devastating impact on these factors. Humans often increase storage capacity by constructing reservoirs and decrease it by draining wetlands. Humans often increase runoff quantities and velocities by paving areas and channelizing the stream flow.

The total quantity of water available at any given time is an important consideration. Some human water users have an intermittent need for water. For example, many farms require large quantities of water in the spring, and no water at all in the winter. To supply such a farm with water, a surface water system may require a large storage capacity to collect water throughout the year and release it in a short period of time. Other users have a continuous need for water, such as a power plant that requires water for cooling. To supply such a power plant with water, a surface water system only needs enough storage capacity to fill in when average stream flow is below the power plant's need. Nevertheless, over the long term the average rate of precipitation within a watershed is the upper bound for average consumption of natural surface water from that watershed. Natural surface water can be augmented by importing surface water from another watershed through a canal or pipeline. It can also be artificially augmented from any of the other sources. However in practice the quantities are negligible. Humans can also cause surface water to be "lost" through pollution.

Rivers

Rivers provide the important source of irrigationin Kanyakumari District. The major river in the district is Tamaraparani locally known as Kuzhithuraiar. This river has got two major distributaries namely Kodayar and Paralyar. There are many distributaries for Kodayar river of which Chittar-I and Chittar-II and major ones. The origin of Thamirabarani River is Western Ghats and the river confluences with Arabian sea near Thengapattanam, at a distance of about 56km west of Cape Comorian, the southernmost tip of India.

1	Tamiraparani
2	Pazhayar
3	Valliar
4	Ponniavaikal
5	Paraliyar

Dams

The location of this district is bounded by sea on one side and mountains on other side and good rain fall help to store waters well. There are many channels like.

These are at the end of hills, which helps to store water by dam, which are very cheap to construct. There is also a power project at Kodaiar. This is due to heavy rainfall and availability of water storage facilities. This district also called a dam city.

1	Pandiyan Dam
2	Puthen Dam
3	Pechiparai Dam
4	Perunchani Dam
5	Chittar Dam-I
6	Chittar Dam-II

Pechiparai Dam

The European Engineer, Minchin, constructed Pechiparai Dam during the period 1897-1906. This was built across Kodayar River about a mile below the confluence of the tributaries Kallar, Kittar and Kuttiyar at Pechiparai, a place 11km north of Kulasekaram and is 45km from Nagercoil. The cost of original construction was Rs.26/- lakhs. The dam is a straight gravity type masonry dam of 425.5M long 120.760M high above the deepest foundation.

Perunchani Dam

This dam was built during the period 1948-1953 by the erstwhile T.C.State. This was built across River Paralayar at Perunchani, a place about 10 km east of Kulasekaram and 42 km North-West of Nagercoil. It is across a picturesque valley between 2 hillocks forming an ideal site. The dam is straight gravity masonry dam of 373.10 M long consisting of 275.28 M of bulk head section. A drainage gallery of 1.52 X 2.29 M has been provided in the middle river section for a length of 45.70 M which serves a longitudinal inspection Chamber as well as out let for the seepages from the foundation.

Chittar Dam I

The Chittar Dam I is constructed across River Chittar I which has its source in the mountains in klamala Reserve Forest, near Ettukani and Vandiplavukani at an elevation of over 2000ft above M.S.L and is it about 2.00 km upstream of the confluence of the River with Kodayar.

Chittar Dam II

It is constructed across River Chittar II which has its source in klamala Reserve Forest at an elevation of about 2300ft above M.S.L and is about 2.00km upstream on the southern and eastern slopes of Kurinchimalai and after running for 10.00km merge at Sivologam estate to form Chittar II and then flows for 4.8km and joins with Kodayar.

Neyyar Dam

Neyyar dam situated in Kerala state is the source of supply for Kanyakumari Branch Channel. It takes off from the left Branch Channel of Neyyar at km 38.616. Normally 152cs to be available at Kollengodu head works for the ayacut in Tamil Nadu.

Channels

These are six channels in the District.

1	Pandiyan Kal
2	Thovalai Channel
3	Regulatory Channel
4	Anandanar Channel
5	Padmanabhapuram Puthanar Channel
6	Chittar Pattanam Channel

Reference

1. http:\\www.kanyakumari.tn.nic.in/irregation.htm
2. PWD File No:316 year 1914.
3. Perumal, T.P., Tamil Nadu Maavatta Kurippukal
4. Kanyakumari where 3 Seas meet Brouchers By Ministry of Tourism
5. Tamil Nadu Government Gazette No. 19 Chennai, Wedensday, May 17, 2006.
6. Nagam Aiya, V., The Travancore State Manual, Vol. II, Trivandrum, 1906.