The Operation System of the Ancient Irrigation System in the Dry 212 Proximity Zone: A Study of Ancient Canals in Sri Lanka Chandna Rohana Withanachchi¹

ABSTRACT

Water as a natural resource combines with origin of human community. It is often connected with the Social, Political and Agricultural Sectors. In some communities, people regard water as the symbol of their faith. Accordingly, it has become evident that, numerous concepts of water resource management have been developed throughout the world along with the civilization.

Knowledge and experience gathered over the ages in Sri Lanka on technology and techniques have contributed to the local irrigation and water management system. This had been a continuous process since the pre-Anuradhapura Era (before 6th century BC) through Polonnaruva period (up to 12th century). The irrigation methodology is broadly divided into two major categories: dam based irrigation system and reservoir based irrigation system.

The ancient irrigation was an effulgence of experiences. Maximization of water efficiency can be identified as main goal and purpose of irrigation system. This irrigation system, which was built centering the tanks and dams, was taken more closely by the canals to the people. The reason for that was the water of the tanks and dams had been to send to the related fields by the canals.

Many evidences about canal ways relating the ancient irrigation can be found through the literary sources and the inscriptions. In addition to this, the facts of ruined canal ways can be found largely. When examining these canal ways, it is clear that there had been a unified irrigation system, by the canals in the dry zone of Sri Lanka. That is a good fact for the greatest water management of this country.

It is expected to do an examination about the ancient canals and their operation in the dry zone, by this research.

Keywords: Water management, Irrigation, Water supply, Agricultural needs

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