

Economic Aspects of the Ancient Irrigation System of Sri Lanka

Chandana Jayawardana

Abstract

The ancient irrigation system that prevailed in Sri Lanka has been subjected to deep technical investigations. But such investigations in economic terms have not been evaluated, basically due to the lack of information. This paper, tries to develop a plausible methodology to generate revenue from irrigation works, as well as to investigate the potential of such methodology to act as a regulating measure of the demand for for water. Chronicles and inscriptional evidences were evaluated to establish the ownership of the irrigation works and types of payments and revenues associated with each party.

In previous studies, types of revenues were identified as dakapathi, payment to the state in the form of a tax and the bojakapathi, payment to the supplier of water. The application of this payment scheme to a reservoir cascade system determined the rived overall revenue equation. This equation was again analyzed applying the technical restraints and it was proved that water rates could have been used for the sustainable operation of the cascade system.

Chandana Jayawardana Currently works as Project Manager, Cruickshanks Ceylon Pvt. Ltd. B.Sc. (Eng) Hons, MTech, MIET, MIE (SL), C Eng.