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EVALUATION OF IRRIGATION WATER
AT
THE RIGHT BANK SYSTEM
OF
SENANAYAKE SAMUDRA (GAL-OYA)
BY

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A RESEARCH REPORT SUBMITTED
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ABSTRACT

Water is an essential factor for plant growth. About three fourth of Sri Lanka comes under dry-zone, in which water becomes particularly a limiting resource during 'Yala' season. Therefore, it is very important, a farmer in dry zone has to use water at optimum level. Eventhough, up to now irrigation water in Sri Lanka is unpriced. Lack of participation of water users in system management and inadequate funds for operation and maintenance (O & M) activities has been estimated through many studies. However, the O & M fee collection was collapsed due to many reasons.

The objective of this study is to estimate the economic value of irrigation water in crop farming at Senanyake Samudra (Gal-oya) Right Bank system. Data needed for this study were collected from Senanayake Samudra Right Bank System area through a sample survey, using an interview schedule. The sample consisted of 30 farmers selected on a combination of random sampling (multiple stage sampling) methods.

Linear programming technique was used as the method of analysis profit maximization through crop cultivation was considered as the objective under constraints of land, labour, capital and water. Technical crop water requirement were calculated using CROPWAT, a computer programme. The results indicated that based on current condition of crop cultivation and market for inputs and products, the economic value of irrigation water was Rs.2,246/- per two acre feet.

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