C6 ECONOMIC IMPACT OF REHABILITATION OF MINOR TANKS

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Of the estimated 25,000 minor tanks in Sri Lanka about 12,000 are abandoned and the rest are working. In the recent past several national and international agencies helped the Government of Sri Lanka to rehabilitate some of these minor tanks.

Planners and designers who were involved in the rehabilitation of minor tanks did their part of the work with the good intention of helping farmers in rural areas and the economy of the country. However when a large number of tanks are located within the catchment of a major tank rehabilitation can yield negative economic impacts.

In this paper a model is developed to assess the economic impact as a result of rehabilitation of minor tanks. The model was tested using Mahakanadarawa tank in Anuradhapura which has a total of 214 minor tanks within its catchment.

In the analysis a simulation study was carried out to assess the impact of rehabilitation. The total yield from the system of tanks including the major tank was established for different levels of rehabilitation varying from no rehabilitation to 100 per cent rehabilitation.

The results indicate that the maximum yield from the system can be obtained when about 60 percent of the minor tanks are working. Beyond this any rehabilitation results in a decrease in the yield. There are two major reasons for this reduction. One is the large volume of water evaporated from shallow minor tanks.

The other is that yield per hectare is less in minor tanks than in major tanks.

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