

# Increasing Incomes in Irrigated Settlements

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OWING TO INADEQUATE rainfall, many crops have to be supplemented with irrigation water, particularly in the dry zone, in order to make optimal use of the sunshine, land, crop varieties and human capital and bring about high productivity for the benefit of growers, consumers and the nation. While irrigation has provided a means of livelihood to hundreds of thousands of farm families, there is a need to review the economic status of the settlers and the sustainability of the irrigation system.

The yields of many irrigated crops including rice, mungbean, cowpea, blackgram and groundnut have remained stagnant over the last eight years. Farm incomes have been very low causing serious hardships to the farming community. Incomes from rice with adequate irrigation water and yielding about 4 tons per hectare (t/ha) are only about Rs 19,000<sup>2</sup> per hectare per season excluding imputed cost (not paying for family labor). Thus with a two season cultivation, the monthly income from farming one hectare of rice is about Rs 3,200 or about Rs 1,300 per acre. The incomes from mungbean, cowpea and blackgram are even less. While the income from chili and onion is much higher at present, expanded cultivation of these two crops for which irrigated land is available plentifully in *yala*, may bring lower returns in the future. With reduced state funds for maintenance of irrigation systems, many of them are in poor condition leading to inadequate, untimely and inequitable water issues. These repairs if not attended to speedily, can cause further damage to a vastly important national resource of inestimable value. While many farmer organizations have taken the responsibility of maintenance of the distributary and field channels, this is not happening satisfactorily in some areas due to lack of organizational skills and the poor financial conditions of the farming community. Extension services are extremely weak in some settlements, with one Agricultural Instructor serving about 4,000 families.

While increases in farm income are badly needed to uplift the economic status of the family as well as the sustainability of the irrigation system, substantial increases of income from cultivation of rice and other field crops cannot be expected due to several fundamental limitations. Taking rice for example, a quantum jump in rice yields would be somewhat difficult to attain. Bringing down the cost of cultivation would be near impossible, and substantially increasing the guaranteed price of rough rice purchases by the State not feasible, particularly when rice can be presently imported and retailed locally for as low as Rs 14.00 a kilogram.

Alternate crops that are more remunerative with assured markets need to be found. Three crops that may be suitable are banana, coconut and grape. Banana is extensively grown under gravity irrigation in Walawe, while coconuts are cultivated to a limited extent in Rajangana, and grapes have

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<sup>2</sup>US\$1.00 = Sri Lanka Rs 40.01 in 1990.

been recently introduced in the Mahaweli System B. Floriculture for export is another attractive proposition. With the introduction of new crops, adoption of new technologies must essentially take place for increased production and high quality. A proper mix of chemical and organic fertilizers must be used to maximize profits and maintain soil fertility.

Since incomes from farming are low, attention should be directed towards increasing settler incomes from off-farm enterprises. This approach receives validity owing to the availability of slack periods in the cropping calendar. For example, although rice cultivation from land preparation to harvest may take five months, only about 45 man-days per acre are required for the actual operations, mainly during crop establishment and harvest.

Examples of such income-generating activities are inland fisheries, bee keeping, animal husbandry, industries that add value to the primary agricultural product, and other industries that are relevant to the locality. In this way the available water, land and human resources will be used for multiple purposes with farming as only one of the activities of the settlers.