

B-05 Adoption of rice production technology and effect on production cost of rice under a major irrigated system in Kilinochci District

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A field survey to study the adoption level of rice production technology was conducted under a major irrigation system in Kilinochchi district. A total of 70 farmers from 8 major irrigation tanks were interviewed with the prepared questionnaire.

It was found that almost all the farmers cultivated new improved rice varieties. However 59% of the farmers did not renew their seed paddy for more 5 years. In the use of fertilizer, 91% of the farmers are using phosphorus and potash more than the recommended rate. But 82% are using nitrogenous fertilizers less than the recommended rate. Of this 36% are using half the recommended nitrogen. 2% of the farmers are not using any weed control measures, while 89% are using either 3,4 DPA or MCPA followed by hand weeding. In the adoption of plant protection practices 75% of the farmers were able to control the important insect pests. However the adoption of control measures for insects like mites and thrips was found to be very low since the farmers are not aware of the proper control measures. 30% of the farmers obtained a yield less than 2t/ha, while 43% obtained 2 to 3 t/ha. Only 18% were able to obtain yields more than 3.5 t/ha. Non-renewal of quality seed paddy and low level nitrogen application seems to be the major factors attributed for the low average yield. It was found that the cost of production of rice was Rs.29,661/= per hectare which was equivalent to 3489 kg of rice at the market price.

The high cost of production could be attributed to the low yield and high cost of essential inputs and labour wages. Only 18% of the farmers were able to produce a little more than the rice equivalent required to meet the cost. However 36% of the farmers were able to produce to meet the paid out cost. Rest of the 46% farmers were not able to produce even to meet the paid out cost.

Production cost of rice

Cost components	Cost per hectare (Rs.)	Rice equivalent (kg/ha)	Percentage
Labour	9561.00	1125	32
Farm power	8735.00	1028	30
Fertilizers	5822.00	685	20
Agro-chemicals	3023.00	355	10
Other items	2520.00	296	8
Total	29,661.00	3489	100
Paid out cost	24,136.00	2839	81.4
Family labour contribution	5,525.00	650	18.6
Total	29,661.00	3489	100.0