

ADOPTION OF RECOMMENDATIONS RELATED TO THE USE OF STRAIGHT FERTILIZERS IN PADDY

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Sri Lanka has to considerably increase productivity of rice farming to meet the future demand of the growing population and to maintain the present level of near-self sufficiency. The adoption of improved rice varieties and improved cultural practices are considered as possible solutions. As a key input, to optimise the use of chemical fertilizer, the Department of Agriculture has been providing straight fertilizer (SF) recommendations coupled with recycling of rice straw to supplement the inherent soil fertility.

The present study was done to determine farmers' knowledge level of fertilizer recommendations, attitudes towards recommendations, adoption levels, to identify socio-economic factors affecting adoption and to suggest possible means of increasing adoption.

A field survey was conducted in the Batalagoda major irrigation scheme in Kurunegala district. A structured questionnaire was used to collect primary data. Of a total of 225 trained farmers, 45 were selected randomly to represent all seven Agricultural Instructors' divisions of the Batalagoda irrigation scheme. Data analysis was done using the SPSS software package. Multiple regression models were used to determine the effect of knowledge, attitudes towards recommendations and availability of market facilities on the adoption process.

In the sample, the percentages of farmers having high, medium and low knowledge on recommendations were, 33, 31 and 36 respectively. Few farmers had a complete knowledge of the advantages of straw recycling. Farmers with positive, neutral and negative attitude towards recommendations were 64%, 29% and 7% respectively. Multiple regressions showed that all the considered factors were significant at 0.05 probability level while explaining 76% of the variability in the dependent variable. Adoption of SFs was high (53% farmers) in the study area. However, there were 36% non-adopters with 11% partial adopters, indicating a high potential to increase the effectiveness of the promotion programmes.

Major constraints to poor adoption included the non-availability of straight fertilizers at the local market and the uncertainty of success associated with SF. Additional labour requirement for straw recycling, fear of possible difficulties at the time of ploughing and possible weed and disease spread were causes for concern to farmers.

The majority of farmers have medium to high knowledge of fertilizer recommendations. This shows the effectiveness of training programmes. Farmers' positive attitudes indicate that the promotion of SF could have a high chance of success in the future. However, the extension message of the Department of Agriculture concerning straw application needs to be considerably strengthened to achieve a high degree of success.