

## MECHANIZATION NEEDS OF RICE FARMERS IN SRI LANKA

Fredrick Abeyratne, M.R.T. Jayasuriya,  
Kapila Gunasekera and Ben Basnayake.  
Agrarian Research & Training Institute, Colombo 07.

Draught is a major cost component in paddy production in Sri Lanka. A decade ago, tractor ploughing accounted for nearly 45% of land preparation for paddy cultivation. Threshing and land preparation were the two major operations that tractors were in demand, and it was the only machine sorted. However, over the years, costs of imported tractors and hire charges have gone up immensely. Also, the annual irrigated cropping pattern also has been going through a change. Hence, an island wide survey conducted to ascertain the present mechanization needs of rice farmers, revealed that land preparation, threshing, transplanting and harvesting were in order of priority for mechanization and there was a change in the machines desired.

For example, 4% of the sample owned a thresher and 70% of them hired out the thresher, more than a third owned sprayers and 8.8% owned 2 wheel tractors. There was clearly a low demand for 4 wheel tractors in contrast to a decade back and buffalo use was very marginal in the dry zone. These changes are due to the spiralling cost of labour and the availability of relatively affordable equipment such as threshers and sprayers.

The above findings indicate the need for research into developing suitable land preparation equipment. More research is needed to develop threshers that are affordable. There is also the need for more training in use and maintenance of machines. This will increase use efficiency as well as help to translate need into a demand. This change in the mechanization adoption in the country should be viewed with caution. It is important to study the impact of this new trend on productivity and its implications on the labour use pattern.