

## **ECONOMICS OF TRACTOR DRIVEN HIGH CAPACITY PADDY COMBINED THRESHER AND PADDY HARVESTER IN ANURADHAPURA DISTRICT**

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In order to assess the economic viability of combine harvester operation in paddy harvesting, compared to manual harvesting and threshing with high capacity combine thresher, this study was conducted in Anuradhapura District, which is one of the major paddy cultivation areas in Sri Lanka. This Study also tried to understand the constraints in combine harvester operation in paddy harvesting. Data pertaining to 2011/2012 *Maha* season were collected by personal interview using a structured questionnaire from randomly selected 30 farmers, who used combine harvester and 30 farmers, who used combine thresher for harvesting their paddy. Ten combine harvester owners, ten combine thresher owners and five rice millers were also interviewed. Study showed that the combine harvester increased the net farmer income by Rs. 11750 per hectare compared to manual harvesting and threshing with combine thresher. Total paddy cultivated area in 2010 *Yala* and 2010/2011 *Maha* was 103243 ha. If half of this area were harvested by combine harvester, the total economic benefit would be Rs. 696 Mn. Combine harvester is a good solution for labour scarcity problem especially during harvesting period. According to the finding, this machine can replace 29.5 labour days per hectare. Financial viability of combine harvester and combine thresher is very sound. High moisture content of the harvested paddy is one of the major issues in combine harvester. Lack of proper drying facilities at farmer level, forced the farmers to sell their harvest at lower rates that always prevailed during harvesting period than government certified price of Rs. 30 per kg. The rice millers (buyers) when purchasing the moist paddy, farmer has to pay Rs. 0.25 for each percent of moisture above 14% plus Rs. 0.50 per kg of paddy. The efficiency of combine harvester operation can be increased with bigger plot size, improved cultural practices to prevent lodging and improved operator skills through proper training programs.

**Key words:** Combine harvester, Combine thresher, Financial viability