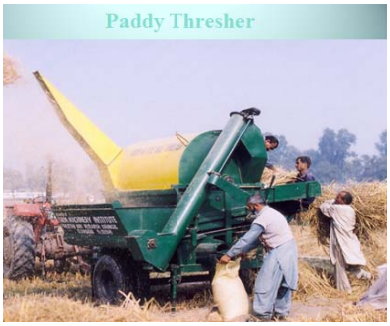
# PARC Accomplishes Development of Paddy Thresher

**Paddy Manual Threshing**




**Paddy Thresher at work**

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## Challenge

- Traditionally, rice is threshed with manual beating or bullocks/tractor treading followed by manual cleaning. This extends threshing time to 3 – 4 months, exposing the produce to bad weather conditions.
- This system is highly laborious, time consuming and causes heavy post-harvest losses in yield and quality.
- Challenge was to develop a rice thresher for reducing labor, time, and post-harvest losses.

## Interventions

- In late 70s, PARC under IRRI-PAK Project initiated the development of a rice thresher.
- In early 1980s, an axial flow multi-crop thresher was developed for rice and wheat. Despite extensive demonstration, it could not be adopted by the rice growers because it was not suitable for multi crop threshing.
- In 1988, PARC in collaboration with two local manufacturers developed a Hold-on Paddy Thresher that also was not adopted by the farmers due to its low capacity.
- Again, in 2002, an axial flow machine imported from Thailand was extensively tested on local varieties in major rice growing areas and modified according to test results.
- Later, it was extensively tested on IRRI varieties. Encouraging performance of the machine led to its large-scale adoption by the farmers.
- In 2003, PARC signed an agreement with six local manufacturers for its commercial production in the country.

## Outcomes

- Since 2009, 16,000 units have been manufactured which are being utilized by the rice growers of Sindh and Baluchistan provinces.
- Currently, >10 manufacturers are producing about ~1,500 units per season in Faisalabad, Rahim Yar Khan, Nawab Shah, and Larkana.
- Its grain output is 1.5-2.0 ton/hr, with 99% cleaning efficiency.
- It reduces the threshing season from 4 months to only 25 days.
- The net saving from one machine is Rs. 0.88 million per season.
- Since 2002, it has benefited the country worth 20 billion rupees.

## Way forward

- Modifying the machine to be more energy efficient
- Up-scaling the manufacture through public-private partnership