

## AGRICULTURE GROUNDNUT POD SEPERATOR

### APPLICATION :

With a tractor-powered, portable ground nut pod separator that can efficiently separate 400-500 kg of ground nut pod each hour, just three people are needed to harvest a one acre land for 4 hours with 2% waste.

<b>ORGANISATION/INSTITUTION</b>	: RUTAG IIT MADRAS
<b>TECHNOLOGY READINESS LEVEL</b>	: After successful field trials, it's ready for business development.
<b>PRINCIPAL INVESTIGATORS</b>	: Mr. Raja Karunakaran Ramco Institute of Technology

### PROBLEM ADDRESSED :

- 30 agricultural labours are required to manually separate ground nut pods over the course of four days on one acre of land.
- Finding agricultural workers for the above mentioned tasks is a challenge for farmers.
- Small-scale farmers cannot afford the limited supply of expensive portable groundnut pod separating equipment.

### ABOUT THE TECHNOLOGY :

With a tractor-powered, portable groundnut pod separator capable of efficiently processing 400-500 kg of groundnut pods per hour, only three individuals are needed to harvest one acre of land in just four hours, with only 2% waste. This significantly reduces labor costs and increases profitability compared to manual separation, which requires 30 individuals. Additionally, the separation and processing of groundnut pods for one acre takes just 2.4 hours.

### SOCIAL IMPACT

- Addresses the main challenge of labour shortage.
- Ease of operation provides better accessibility.
- The cost effectiveness makes it affordable to small farmers.
- Low maintenance costs, minimum wastage as low as 2%, results in increase in profit for the farmer.

### END USERS/CUSTOMERS

Small/Marginal farmers with land holdings

### PRODUCT IMAGE



### USP

- Defect-free groundnut pods from the crop are harvested..
- Low maintenance cost due to simple mechanisms used.
- Cost of the machine is lower compared to existing automated machines.
- The equipment efficiently separates groundnuts without requiring users to hold the plant until all groundnuts are extracted, ensuring safety.