# Groundnut Digger

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<th>Innovator</th>
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**Problem addressed:**
Groundnut growing farmers are facing an arduous task of collecting leftover groundnut pods under the soil which are picked up manually consuming lot of labor and time. The yield of the crop is affected as up to 20 percent of pods are left underground during harvest. Complete digging out of all the groundnut pods from the soil is not possible as manual labor is scarce, costly and other means are not available. Innovator Yusuf Khan observed the problem as he himself is a farmer and developed Groundnut Digger to solve the problem faced by the farmers.

**Product:**
The innovator has developed a tractor operated machine, which mechanically digs out the left over pods from the soil. It consists of elaborate system of crankshafts, flywheel, connecting linkages and rotating vanes on a shaft. A sieve is provided with a vibrating mechanism to filter the groundnut from the soil. As the tractor moves forward, the vanes rotate and dig into the ground, scoop and drop the soil-groundnut mixture into a vibrating storage unit with a sieve base. The system of linkages and drives vigorously vibrate the entire unit to shake the soil loose and the groundnuts stay trapped at the top in the central storage unit as the soil gets sifted out onto the ground. A window hatch is provided at the back that can be lifted and the groundnut taken out by a person into a basket.

**Technical specifications**
- Traction vehicle: A tractor (35HP or more)
- Length – 6 feet, Height- 1 feet
- Sieve – 5 feet x 5feet
- Gear Box to rotate PTO Shaft.
- It weighs 300-400 kg

**Price:**
Rs. 1, 25,000 per unit. (Ex-factory India price + packaging). The price does not include transportation costs, taxes, etc.

**Time to deliver:**
10 day after confirmed order with 50% as advance payment.
## Key Competitive Advantage:
- It consumes 4 litre of diesel/hr and digs out groundnuts pods of about 400 kg from one hectare per day, compared to manual method which would take 75 labors to finish in day.
- The units can also be run on uneven terrain and can be used to shift out small stones, solid residue and garbage from field and country roads.

## Achievements:
He was awarded by NIF under the National Award category in the third competition in the year 2005 and supported under MVIF scheme of NIF. Apart from this Yusuf Khan was also nominated for the Asian Innovation Awards at Singapore in 2005 as he qualified among the ten finalists. Innovator till now has sold more than 400 units in Rajasthan.

## IPR Status:

## BD website link:
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