Paddy Threshers

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Type of Machines

• Small capacity engine driven threshers
• Medium capacity two wheel tractor powered threshers
• High capacity combine threshers powered by either four wheel tractor PTO or separate engine
Population and use

- **Low capacity machines**- Small scale farmers specially in mountainous areas

- **Medium Scale machines**- Specially farmers having less than 0.25 ha.

- **High capacity combine threshers**- Large scale cultivation areas having more than 0.5 ha holding size
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Accidents from different farm machinery
Mode of damages

- Environmental damage
- Grain damage
- Human damage
- Machine damage
Environmental damage

• Pollution (Dust, pollution of drinking water)
• Sound (Sometimes more than 95 dB continuously)
Grain damage

- Quantitative
  - Un-threshed losses (Unrecoverable)
  - Separation losses (Unrecoverable)
  - Shattering losses (Partly recoverable)

- Qualitative
  - Cracked grains
  - Milled (de-husk) grains
  - Tailed grains
  - Grain with pedicels

Total losses sometimes reach up to 20%
Human damage

• Injuries (Temporary damages)
  – Finger and hand damages

• Long term permanent damages
  – Back pain, loss of sense of fingers, hearing loss etc

• Loss of lives
  - Many accidents caused entangling with the unprotected PTO shafts.
Machine damage

- Poor manufacturing quality
- Poor material quality
- Wrong designs

Because of the unreliable machines, unnecessary delay in harvesting
Future trend

• Use of threshers is slowly diminishing and combine harvesters are catching up the market.

• Is it necessary to concentrate on threshers