Animal Feed With Potato Waste

Technology Description

- Potato waste with other feed ingredients like mustard oilcake, rice polish, de-oiled rice polish, maize, mineral mixture, urea and salt are used in making feed. Maize and oilcake are grinded in hammer mill. Then all feed ingredients are mixed in ribbon blender for 15 min. Feed ingredients in form of mash are passed through palletizer to form pellets. Pellets are dried to about 11% moisture for storage.

Name Of institute:
Central Institute of Post Harvest Engineering and Technology, Ludhiana

Stage of development:
Ready for Commercialization

Patent status:
No

Scientific Experts:
Dr. Devinder
Dr. Sangeeta Chopra,
Director, Central Institute of Post Harvest Engineering and Technology, Ludhiana - 141 004

Country Context

- Background
  In India feeding about 300 million cattle and buffalo population for milk production is a big challenge. Feed alone accounts for 50 to 75% of total livestock production expenditure. Thus, Potato processing waste can efficiently be used to reduce grains used in cattle feed.

- Benefits / Utility
  - Utilisation of by-products of potato processing industry
  - Reduces grain use in cattle feed
  - Relatively cheap, easily digestible source of energy for animals

- Country Context
  India has a huge population of cattle, buffalo and other farm animals. Grains are essential component of cattle feed. Replacing/reducing grains with potato processing waste will make more grain available for human consumption.

- Scalability
  - Viable for small and medium enterprises in vicinity of potato processing plants
  - Scalable based on plant capacity

- Business and Commercial Potential
  - Huge quantity of feed is required to feed vast population of milk producing animals

- Social impact of the technology
  - Reduction in use of grain in cattle feed
  - Low value potato processing waste is converted into value added product
  - Solution to problem of waste disposal from potato processing plant
  - Added income to entrepreneurs
  - New potential ingredient for feeding cattle

- Limiting factors for large scale commercialization
  - Regular supply of potato waste for making animal feed
  - Moisture reduction, transportation and microbial spoilage

- Potential investors to this technical innovation
  - Potato processors
  - Cattle feed manufacturers
  - Dairy owners

- Financials
  - Total Capital Investment (excluding land and licensing fees): Rs. 25.00 lakhs
  - Rated capacity: 25 metric tonnes/month
  - Variable cost (per month/unit): Rs. 4.00 lakhs
  - Expected sale/unit: Rs. 55 lakhs/annum
  - No. of units to be sold for monthly break even on variable cost: 12 metric tonnes/month

- Target Market / Customer
  - Potato processing industry owners
  - Cattle feed / animal feed manufacturers
  - Large scale dairy owners
  - Potato growers.