

Farm Machinery

Farm mechanization is an important sub-sector for the national economy. Farm mechanization involves introduction of suitable farm machines and their availability either through import or local manufacturing. Farm machinery to promote farm mechanization in the country through development, performance, evaluation and commercialization of appropriate agricultural mechanization technologies by involving both public and private sector organizations.

Farm Machinery

FMI Seeder

- A prototype of the FMI seeder was developed at the workshop of its collaborating manufacturer (M/s Sayyed Machinery Ltd., Lahore).



FMI Seeder

Dibbler (Punch Planter)

- Working with Rice-wheat Consortium for the development of a Dibbler (Punch planter) for direct sowing of wheat in uniformly distributed heavy rice residue as an alternate cheaper option.



Dibbler opening in the field

Wheat Straw Chopper-Cum-Blower

- Introduced and commercialized a tractor operated wheat straw chopper-cum-blower through local industry for improved competitiveness of farming in WTO regimes besides protecting the environment. At present 8 manufacturers are involved in the manufacturing of this machine. More than 350 units were operated by the farmers during the last wheat harvest.



Wheat straw Chopper-cum-Blower

Wheat-Cum-Canola Thresher

- Performance of machine was evaluated and gave encouraging results. The machine was also demonstrated to the canola growers at Faisalabad, Jhang and Gujranwala areas.

Farm Machinery

Groundnut Hand Sheller

- Manufactured one unit of Hand Sheller with the collaboration of a potential manufacturer. The machine was tested at BARI, Chakwal. Average machine shelling capacity and efficiency was 56 kg/h and 90%, respectively at 10 mm concave clearance. The operating cost of mechanical shelling per kilogram of input pods was found to be Rs. 5 as compared to Rs. 34 with traditional shelling.
- Four manufacturers located in Potohar region are manufacturing this machine with the technical assistance of FMI.



Groundnut hand sheller

FMI Flat-bed Dryer for Sunflower and Canola

- A mobile flat-bed dryer was designed and developed.
- Dryer is capable to dry 1.25 tons of sunflower in 3 hours from 35% to 10% moisture content. Cost of drying sunflower using this machine was Rs.1.25/kg.



Mobile flat bed dryer

Peas Planter

- A prototype unit of peas planter was developed at the premises of a collaborating manufacturer (M/s Agri-Tech, Multan).
- Plants peas in 4 rows making 2 beds 30 inches apart will working width of 3 m.
- Performance was evaluated at a farmer's field near Gujranwala with 0.44 ha/t.
- Field capacity and efficiency of 58% when operated at 2.5 km/h forward speed.



Fodder harvesting

Fodder Harvesting

- Four local fodder harvesters namely; Agri-tech rotary fodder harvester, Taj rotary fodder harvester, Mobee's self propelled fodder harvester and AMRI sickle bar fodder harvester were evaluated.
- Field capacities of machines were 0.35, 0.33, 0.16 and 0.27 ha/h with efficiency of 65%, 58%, 53% and 52%, respectively.
- The fuel consumption was 11.4, 12.4, 9.0 and 11.01/h, respectively.

Agricultural Machinery Catalogue

- Conduct a survey of agricultural machinery manufacturers in Punjab, Sindh and NWFP.