# COUNTRY REPORT (Islamic Republic of Pakistan)

by

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# Amjad Brothers Zari Industry, Summandri Road, Faisalabad, Pakistan Ushed in 1978, started manufacturing maize shellers, irrigations summ

and seed drills

S.NO.	Machine/implement manufactured	Quantity
1	High capacity rice thresher	250
2	Wheat thresher	200
3	Wheat straw chopper	30
4	Maize sheller	25
5	Reaper	20
6	Rotavator	50
7	Multicrop seed drill	60
8	Band placement drill	50
9	Inter-culture machinery	30
10	Front blade	20
11	Rear blade	50
12	Different machines	On order

## Pakistan Agricultural Machinery and Implements Manufacturers Association (PANIMA)

- PAMIMA was established in 1984 in Pakistan.
- Objectives was to work for the common interest of manufactures, present issues to different government bodies and develop links with research institutions and universities.
- There are about 500 members of this association.
- It has four local chapters (one in each province).
- The major centers of farm machinery manufacturers are in Daska, Gujranwala, Hafizabad, Lahore, Okara, Faisalabad, Mianchannu, Multan, Rahimyar Khan, Takht Bhai and Benazirabad. They have the capabilities of making all type of farm machines.
- It has been organizing annual meetings at different regions of Pakistan.

#### <u>Agriculture</u>

- Pakistan is predominantly an agricultural country and it's almost 70% of the economy is based on agriculture.
  - Contributes 21% to the GDP
  - Employs 43.7% of the total work force
  - Serves as a major supplier of raw materials to the industry
  - Contributes substantially to Pakistan's export earnings
  - Major crops (wheat, rice, cotton & sugarcane) contribute 31.1% to the value added in overall agriculture and 7.1% to GDP
  - Minor crops account for 11.1% of value added in overall agriculture
  - Total Population (2011): 184.35 million
  - Rural population: 68%

#### FARM MACHINERY AND TRACTOR MANUFACTURING

- 1. Mechanization in Pakistan is growing rapidly with the introduction of farm machinery in last three decades
- 2. There are five makes of tractors, which are manufactured in the country
- 3. Most of the farm implements and machines are manufactured in the country
- 4. Tillage implements, reaper-windrower, threshers, combine harvesters, seeders, band placement drill, zero tillage drill, wheat straw chopper, dryers, etc. are the major technologies which have brought positive change in the field of agricultural mechanization

1.	Deletion achieved in tractor manufacturing (%)	85
2.	Working number of tractors (Million)	0.57
3.	Tractor annual production capacity (Million)	0.065
4.	Total farm power in the country (Million kW)	30.5
5.	Available farm power (kW/ha)	1.1
6.	Hectares of cultivated area for which, a 50 hp tractor is available	37

#### MECHANIZATION EXTENT OF CROP PRODUCTION OPERATIONS

Crop	land Preparat- ion	Sowing	Irrigation	Spraying	Inter- culture	Harves- ting	Threshing
Wheat	Semi Mech.	Low Mech.	Partial Mech.	Low Mech.	Nil	Semi Mech.	Full Mech.
Cotton	Semi Mech.	Full Mech.	Partial Mech.	Full Mech.	Full Mech.	Nil	-
Rice	Full Mech.	Nil	Partial Mech.	Nil	-	Semi Mech.	Partial Mech.
Sugarcane	Partial Mech.	Partial Mech.	Partial Mech.	Nil	Semi Mech.	Nil	-
Maize	Full Mech.	Semi Mech.	Partial Mech.	Nil	Semi Mech.	Low Mech.	Full Mech.
Potato	Full Mech.	Semi Mech.	Partial Mech.	Full Mech.	Full Mech.	Partial Mech.	-
Pulses (Grams)	Low Mech.	Full Mech.	Low Mech.	Nil	Low Mech.	Nil	Full Mech.

	Land development implements	Origin	Local content(%)
12	Front blade	Pakistan	100
13	Rear blade	Pakistan	100
14	Land leveler	Pakistan	100
15	Cultivator	Pakistan	100
	Planting Implements		
16	Seed Drill	Pakistan	100
17	Maize and cotton planter	Pakistan	100
18	Groundnut planter	Pakistan	100
19	Ridger	Pakistan	100
20	Ridger (Imported)	Pakistan	60
21	Post hole digger	Pakistan	100
22	Potato planter	Pakistan	100
	Weeding and hoeing implements		
23	Bar harrow	Pakistan	100
24	Sprayers and broadcasters	Pakistan	100
25	Power sprayer	Pakistan	100
26	Power sprayer	Italy	60
27	Scraper	Pakistan	100
28	Plank (iron)	Pakistan	100
29	Border disk	Pakistan	100
30	Border disk	UK	60
31	Ditcher	Pakistan	100

	Primary tillage implements	Origin	Local content(%)
32	Moldboard plough	Pakistan	100
33	Disc plough	Spain/Pak.	60
34	Chisel plough	Pakistan	100
35	Chisel plough	Spain	100
36	Rotary cultivator	Italy	60
37	Rotary cultivator	Yugoslavia	60
38	Rotary cultivator	West-Germany	60
39	Sub-soiler	Pakistan	100
	Secondary tillage implements		
40	Disk harrow	Spain	60
41	Disk harrow	Pakistan	90
42	Disk harrow	Australia	80
43	Wheelbarrow sprayer	Pakistan	100
	Harvesting machinery		
44	Reaper-windrower	Pakistan	100
45	Combine harvester	Denmark	Nil
46	Potato digger	Pakistan	100
47	Groundnut digger	Pakistan	100
	Threshing machinery		
48	Wheat thresher	Pakistan	100
49	Multi-crop thresher	Pakistan	100
50	Sunflower thresher	Pakistan	100
51	Maize sheller	Pakistan	100

	Handling & haulage machines	Origin	Local content(%)
52	Trolley	Pakistan	100
	Others		
53	Cane crusher	Pakistan	100
54	Chaff cutter	Pakistan	100
55	Manure spreader	UK/Pak.	100
56	Grain dryer	Pakistan	100
57	Sugar extractor	Pakistan	100
58	P.T.O pulley	Pakistan	100
59	Pump	Pakistan	100
60	Diesel engine (high speed)	China	60
61	Milk production machinery	12 local different technologies	100
62	Farm level food processing machinery	4 local different technologies	100
63	Machinery livestock and poultry	2 local different technologies	100
64	Lawn Mowing Machinery	10 local different technologies	100
65	Horticultural Equipment	2 local different technologies	100

#### **Mechanization Issues**

- Under-utilization of tractor power
- Lack of machinery for value addition of farm produce and equipment for precision farming
- ➤ Use of old combine harvesters for wheat and rice, causing grain and quality losses
- Lack of machinery for livestock and dairy farming
- Increasing cost of inputs
- > Limited availability of capital for machinery purchase
- Lack of standard and quality products
- Small land holdings and poor economic condition of farmers
- Inadequate custom hiring services
- Lack of coordination among researchers, machinery manufactures, extension workers and farmers
- Lack of awareness of farmers

# GOVERNMENT POLICY AND INCENTIVE FOR PROMOTION OF MECHANIZATION

- Provision of machinery on cost sharing basis
- > Training and awareness to the farmers and end users
- Banking loan facility
- > Tax rebates on agricultural machinery
- > Higher per acre yield incentive in terms of machinery
- Contribution of NGOs for promotion of machinery
- ➤ Demonstration, exhibition of agricultural machinery to the farmers and manufacturers

#### Agricultural Machinery Manufacturing Issues

- The research and development facilities (R&D) by private sector almost do not exist in the country.
- Few large farm machinery manufacturers which have separate R&D section in their premises, whereas the rest of manufacturers do not have even a single person on their staff that could read drawings or consult reference book/guide and design. Moreover, majority of the small and medium units have unqualified foremen in their workshops. There is an acute need to train them and they should hire qualified manpower to have best quality manufacturing
- They face difficulties in obtaining loans for improving infrastructures for agricultural machinery production.

  Lack of incentives to enabling them to up-grader their industrial activities and to meet the global challenges.

### Agricultural Machinery Manufacturing Issues

- There is need for the government to evolve an effective policy for boosting and modernizing farm machinery manufacturing industry in the country.
- In the past implement manufacturing industry has been provided incentive of zero duties/taxes, few years ago this industry has been subjected to 16%GST. For promotion of mechanization in the country, removal GST on this industry is suggested
- Joint venture avenues for sophisticated and complex machinery like rotavator, disc plow, vegetable and paddy transplanters, combine harvester, sugarcane harvester, cotton picker etc. need to be exploited with attractive government incentives in soft term loan, duty import structure and tax holidays. This will help in upgrading mechanization level, attract foreign investors and create more employment opportunities in this sector.

#### **STRATEGY**

- Incentives to manufacturers in terms of credit on low interest rates, decreasing GST on agricultural machinery and provision of subsidy on agricultural machinery.
- Establishing raw material banks and common facilities centers at various farm machinery manufacturing clusters.
- Establishing central facilities of manufacturing of specialized/critical components like gears, sprockets, wearing parts of soil-engaging parts which will promote quality in manufacturing besides creating additional job opportunities for skilled manpower.
- PAMIMA needs to be encouraged to play its due role of upgrading manufacturers' premises facilities, creating their own R&D and producing quality products at competitive prices to meet emerging challenges.
- Establishing farm machinery testing centers near farm machinery manufactures clusters.

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