

Welcome to Presentation

**Present Status of Custom Hiring of
Agricultural Machinery in
Bangladesh**

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Introduction of Custom Hiring.....

From the primitive stage of agricultural operation done by sharing basis with the neighbor people, now it is converted to custom hiring term in business.

At a Glance of **Agricultural Status** in Bangladesh

Total farm holding	: 1,51,83,183
Total area	: 14.86 million hectare
Forest	: 2.599 million hectare
Cultivable land	: 8.52 million hectare
Cropping intensity	: 191%
Single cropped area	: 2.236 million hectare
Double cropped area	: 4.107 million hectare
Triple cropped area	: 1.485 million hectare
Net cropped area	: 7.828 million hectare
Contribution of agriculture sector to GDP	: 19.29%
Contribution of crop sector to GDP	: 13.44%
Manpower in agriculture (% of Total manpower)	: 47.5%
Total food crop production	: 37.266 million metric ton

Source: DAE/AIS 2013, BBS 2012

Percentage of **Land Holdings** in Different Farm Segment

Segment of Land Holding	1983-84	1996	2008
Small Farm (0- 1 ha)	70.34	79.87	84.27
Medium Farm (1 – 3 ha)	24.72	17.61	14.19
Large Farm (3 ha and above)	4.49	2.52	1.52
Total	100.00	100.00	100.00

Population of Custom Hiring Agricultural Machinery in Bangladesh

S/N	Name of Farm Machinery	Quantity
1.	Tractor	60,000
2.	Power Tiller	700,000
3.	Rice Transplanter	150
4.	Seeder	500
5.	Irrigation Pumps (DTW+STW+LLP)	1,729,500 (35,322+1,523,609+170,569)
6.	Sprayer	3,00,000
7.	Thresher	4,30,000
8.	Maize Sheller	30,000
9.	Combine Harvester	130
10.	Reaper	500

Supply of Agricultural Machinery in Bangladesh

S/N	Name of Machinery	Mode of Supply
1.	Tractor	100 % Import (India)
2.	Power Tiller	100 % Import (China)
3.	Rice Transplanter	100 % Import (Korea, China)
4.	Seeder	75 % Local and 25 % Import
5.	Irrigation Pumps	80 % Local and 20 % Import
6.	Sprayer	90 % Local and 10 % Import
7.	Thresher	100 % Local
8.	Maize Sheller	100 % Local
9.	Combine Harvester	100 % Import (India, Korea & China)
10.	Reaper	100 % Import (China, Vietnam & India)

Custom hiring **Charge** in Bangladesh

S/ N	Name of Machinery	Use of Crops	Charge (BDT./ha)	Charge (USD./ha)
1.	4 Wheel Tractor	Rice (2 pass)	6,670.00	86.00
		Wheat (2 pass)	6,670.00	86.00
		Potato (4 pass)	13,340.00	171.00
		Maize (2 pass)	6,670.00	86.00
		Mustard (2 pass)	6,670.00	86.00
2.	2 Wheel Tractor	Rice (3 pass)	7,780.00	100.00
		Wheat (3 pass)	7,780.00	100.00
		Potato (6 pass)	15,560.00	200.00
		Maize (3 pass)	7,780.00	100.00
		Mustard (3 pass)	7,780.00	100.00

1 USD = 78 BDT

Continue...

Custom hiring **charge** in Bangladesh

S/N	Name of Machinery	Use of Crops	Charge (BDT./ha)	Charge (USD./ha)
3.	Irrigation Pump	Rice (Full Time)	33,590.00	430.00
		Wheat (3 Times)	8,890.00	114.00
		Potato (3 Times)	8,890.00	114.00
		Maize (3 Times)	8,890.00	114.00
4.	Rice Transplanter		7,410.00	95.00
5.	Rice Thresher		3,950.00	50.00
6.	Wheat Thresher		4,940.00	64.00
7.	Maize Sheller		6,000.00	77.00
8.	Combine Harvester	Rice	12,350.00	158.00
		Wheat	14,820.00	190.00
9.	Transportation up to 5 km (round trip)		1,000.00	13.00
10.	Transportation for 5 km to 20 km (round trip)		1,500.00	20.00

Operation Cost of Combine Harvester for Rice Harvesting in Bangladesh

- ▶ Effective Field Capacity: 1 acre/hr
- ▶ Fuel Consumption: 9 lit/hr Or 9 lit/acre
- ▶ Fuel Price = $9 \times 44.00 = \text{Tk. } 630.00/\text{acre}$
- ▶ Operator + Lubricant + Others = $\text{Tk. } 250.00/\text{acre}$ (Maximum)
- ▶ Total Cost = $\text{Tk. } 880.00/\text{acre}$
- ▶ Harvesting Charge = $\text{Tk. } 5,000.00/\text{acre}$
- ▶ Profit = $\text{Tk. } 4,620.00/\text{acre}$
- ▶ **Profit per Day (10 hrs) = $\text{Tk. } 46,200.00$**
- ▶ Profit per Month (30 days) = $\text{Tk. } 13,86,000.00$

1USD = 78 BDT

Case Study- Farmer's point of view

Parameters	Combine Harvesting	Manual Harvesting
Harvesting Cost (Tk./ acre)	5,000.00	6,500.00
Saving (Tk./ acre)	1,500.00	
Saving (%)	30 (Minimum)	

Case Study- Harvester Owner's point of view

Parameters	Combine Harvester
Earning (Tk./acre)	5,000.00
Cost (Tk./acre)	880.00
Profit (Tk./acre)	4,120.00
Total acres harvested per season	300
Total profit per season (Tk.)	12,36,000.00

Farmers **Advantage** of Custom Hiring in Bangladesh

S/N	Advantage
1.	No Investment
2.	Pay only basis of operation
3.	Cheaper than traditional method
4.	Operation quality is better than traditional method.
5.	Cheaper for low use and specialized machine
6.	A custom operator's specialized skills and experience can be easily utilize
7.	Use of multiple machines for multiple purpose operations
8.	Tension free operation
9.	Save money, time and labor.

General Advantage of Custom Hiring in Bangladesh

S/ N	Advantage
1.	Generate new non-farm employment opportunity
2.	Customer hiring system is better for small farming
3.	Productivity is higher due to timeliness operation
4.	Production input cost is lower
5.	Increased the cropping intensity.
6.	Increased the total cultivable land

Need to proper support for Custom Hiring Business

S/ N	Required Support
1.	One stop Credit facility for the purchase of machinery
2.	Low interest rate for credit (Now it is more than 15 %)
3.	Government Subsidy
4.	Rural road development for easy movement
5.	Road permit from BRTA
6.	Technical support for repair and maintenance.

Conclusion

Yearly use of farm equipments are very less as it is used only season basis, so that small and medium farmers are not able to used by owning farm equipments due to highly uneconomical

Custom Hiring Machinery used in Bangladesh

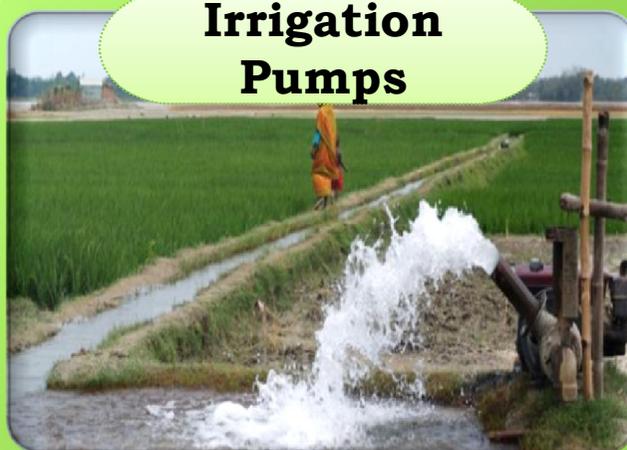
Tractor



Power Tiller



Irrigation Pumps



Rice Transplanter

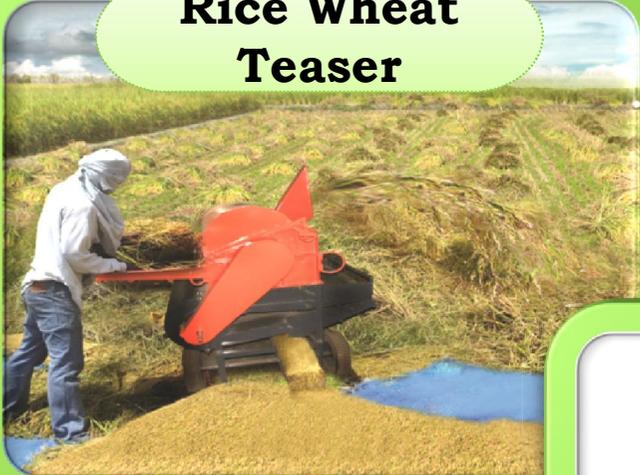


USG Applicator



Custom Hiring Machinery used in Bangladesh

Rice Wheat Teaser



Reaper Binder



Combine Harvester



Maize Sheller



Reaper





Bangladesh

Scale 1:48,000,000
Azimuthal Equal-Area Projection
0 800 Kilometers

Thank you