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Taxation in Pakistan's Agriculture

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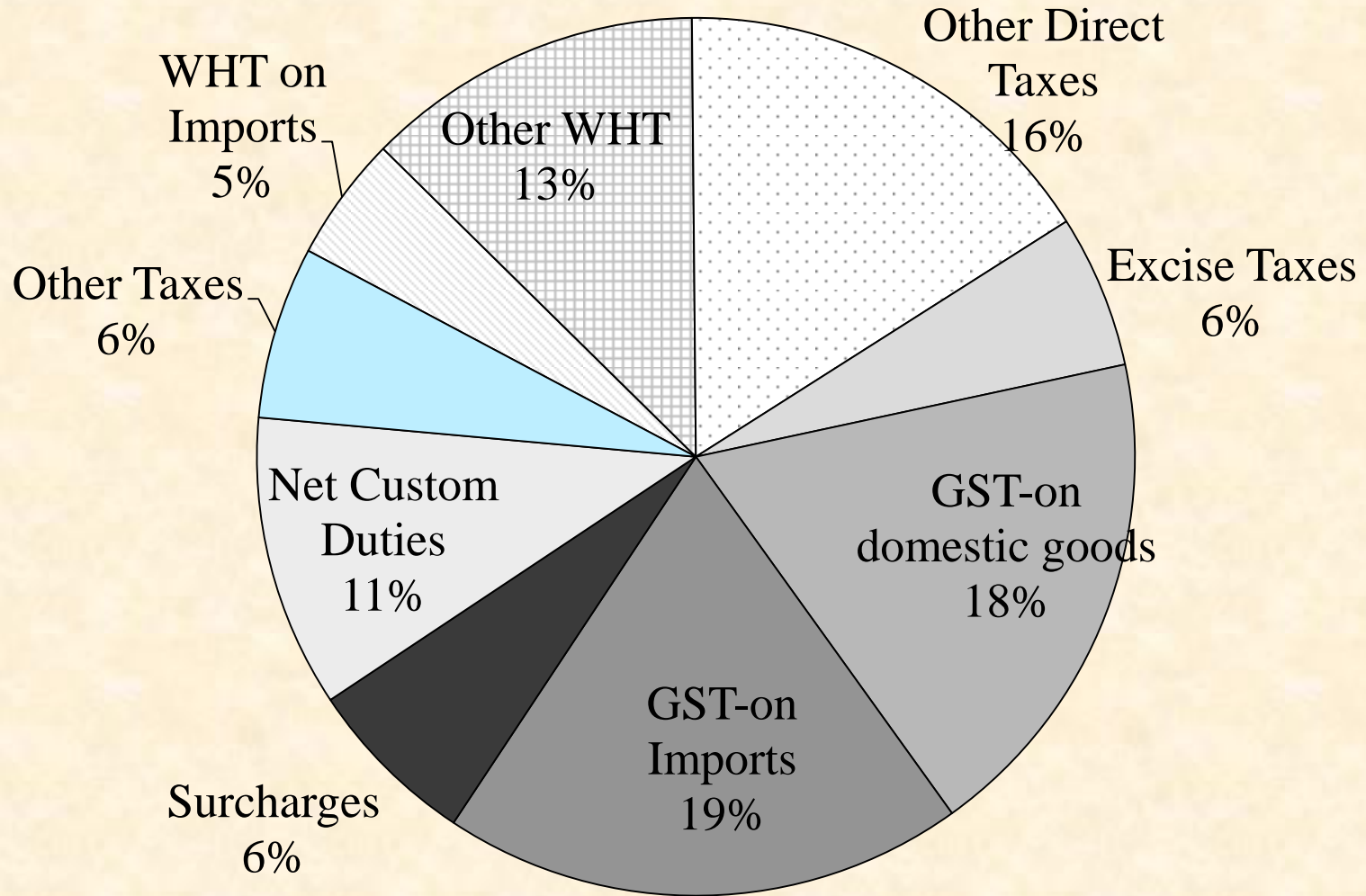
Islamabad, Pakistan

Context of the Study

- **MNFSR wanted to understand agriculture's position in regard to taxes**
 - **PSSP had been working on a new Social Accounting Matrix, with better energy and tax structures (had input from FBR)**
 - **Looked at actual collections by provincial and Federal governments;**
 - **Distortions from policy on prices, and simulations for some alternative tax regimes**
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Overall Tax Collection by Type of Tax

Billion Rs. – FY 2013



Source: FBR for Federal Taxes, Economic Survey for Provincial Taxes

Est. Federal Taxes paid by Agriculture

	Paid by Agriculture	Overall Federal Collection	% Paid by Agriculture
Direct Taxes	<i>(Rs. Billion)</i>		<i>%</i>
WHT on Imports	7.4	743	1.0
Indirect Taxes	<i>(Rs. Billion)</i>		<i>%</i>
Excise taxes	2.6	121	2.1
GST – Domestic	20.9	413	5.1
GST – Imports	12.5	430	2.9
Surcharges	0.3	142	0.2
Custom duties	2.1	249	0.8
Import duties rebate	-0.1	-8	-0.8
TOTAL	45.7	2,091	2.2

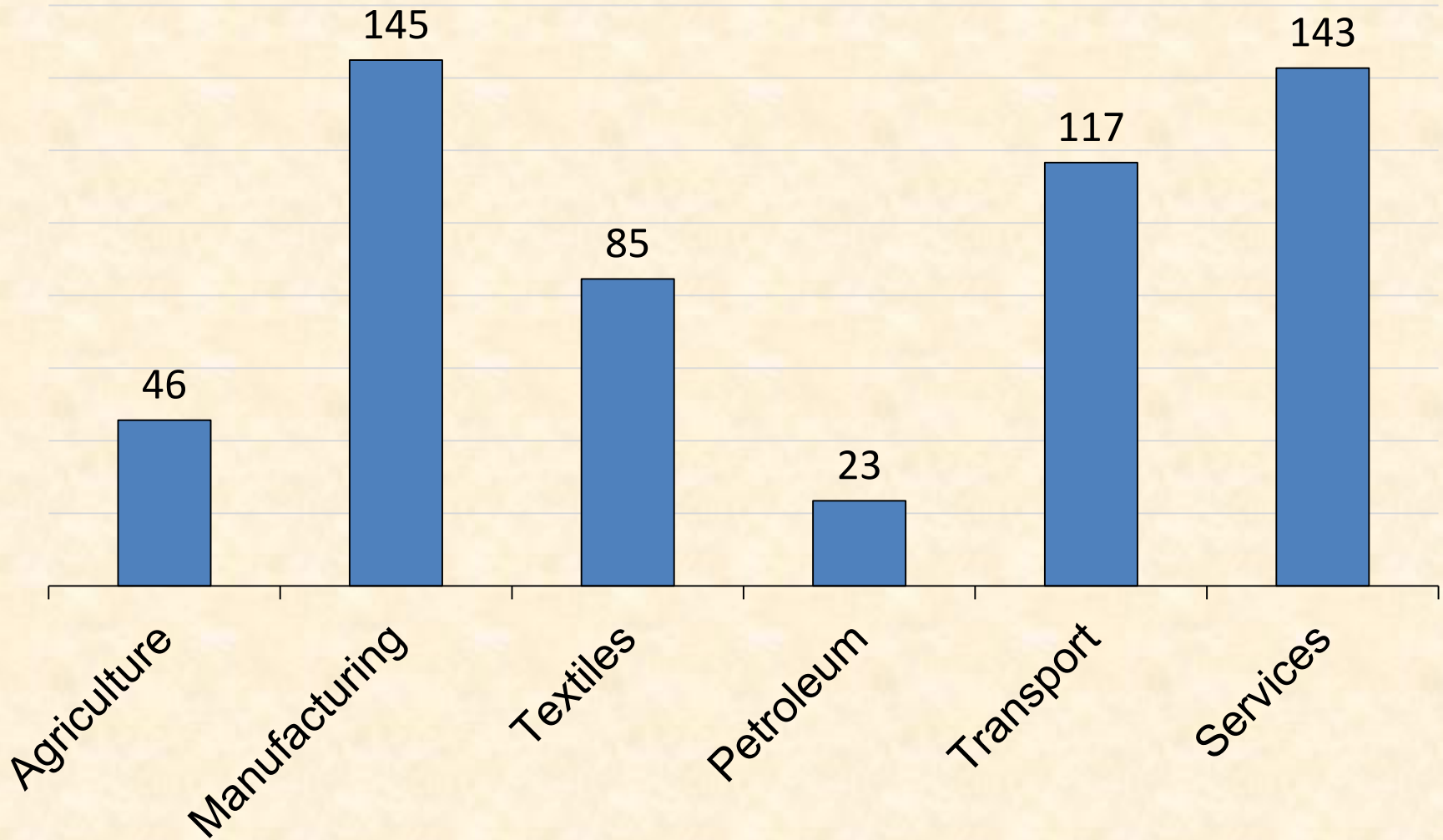
Source: Calculated using FBR Annual report and IO ratios from SAM 2011

<i>(Billion Rs.)</i> Taxes paid by Ag. on Inputs:	Indirect				Direct	T O T A L
	Excise	Dom. GST	Imp. GST	Net Custom Duties	WHT on Imports	
Crops	0.0	0.9	0.7	0.2	0.6	2.4
Fruit & Veg & Livestock	0.0	0.0	0.2	0.2	0.2	0.6
Food Manufacture (incl. Feeds)	2.4	1.4	1.3	0.9	0.5	6.5
Other Manuf. (incl. Pesticides)	0.1	0.3	0.7	0.5	0.2	1.7
POL & Energy	0.0	0.6	0.5	0.4	0.0	1.5
Fertilizer	0.0	17.7	9.1	0.0	5.8	32.6
Transport & oth. Serv.	0.1	0.1	0.2	0.2	0.0	0.5
TOTAL	2.6	20.9	12.5	2.4	7.4	45.7

Note: Calculations assume all indirect taxes, and WHT on imports passed on to buyers.

Federal Taxes Paid

Agriculture vs Other Sectors (Billion Rs.)



Agriculture Tax Potential

(Based on 2007-08 SAM)

<u>Simulated Income Tax on Large & Med. Farmers</u>	Change in Govt. Revenues (Base Value = Rs. 1118 Bn)	
	Billion Rs.	% Change
5% Income Tax	47.5	4.2%
10% Income Tax	95.0	8.5%
15% Income Tax	142.4	13.0%

Ag. Tax Impact on Household Expenditure

(Based on 2007-08 SAM – Percentage Changes)

	AGTAX5	AGTAX10	AGTAX15
Larger & Medium Farmers	-5.2	-10.3	-15.5
Small Farmers	-0.1	-0.1	-0.2
Landless Farmers	-0.1	-0.2	-0.3
Rural farm-wage earners	0.0	0.0	0.0
Rural non-farm-wage earners	0.1	0.3	0.4
Urban households	0.3	0.6	0.9
Total	-0.4	-0.8	-1.2

Agriculture Input-Output Structure

Agricultures Payments:	Billion Rs. (FY 2013)	IO Ratio
A: Total Intermediate Cost *	1,072	17%
B: Indirect Taxes on Intermediates	46	1%
C: Value Added of Agriculture**	5,269	82%
Gross Output (A+B+C)	6,387	100%
Indirect Taxes as % of Int. Cost (B:A)	4.3%	
Indirect Taxes as % of Value Added (B:C)	0.9%	

* *Based on Input-Output ratios from SAM 2011*

** *Econ. Survey 2013: GDP fc of Agriculture excl. cotton ginning*

Summary on Taxes on Agriculture

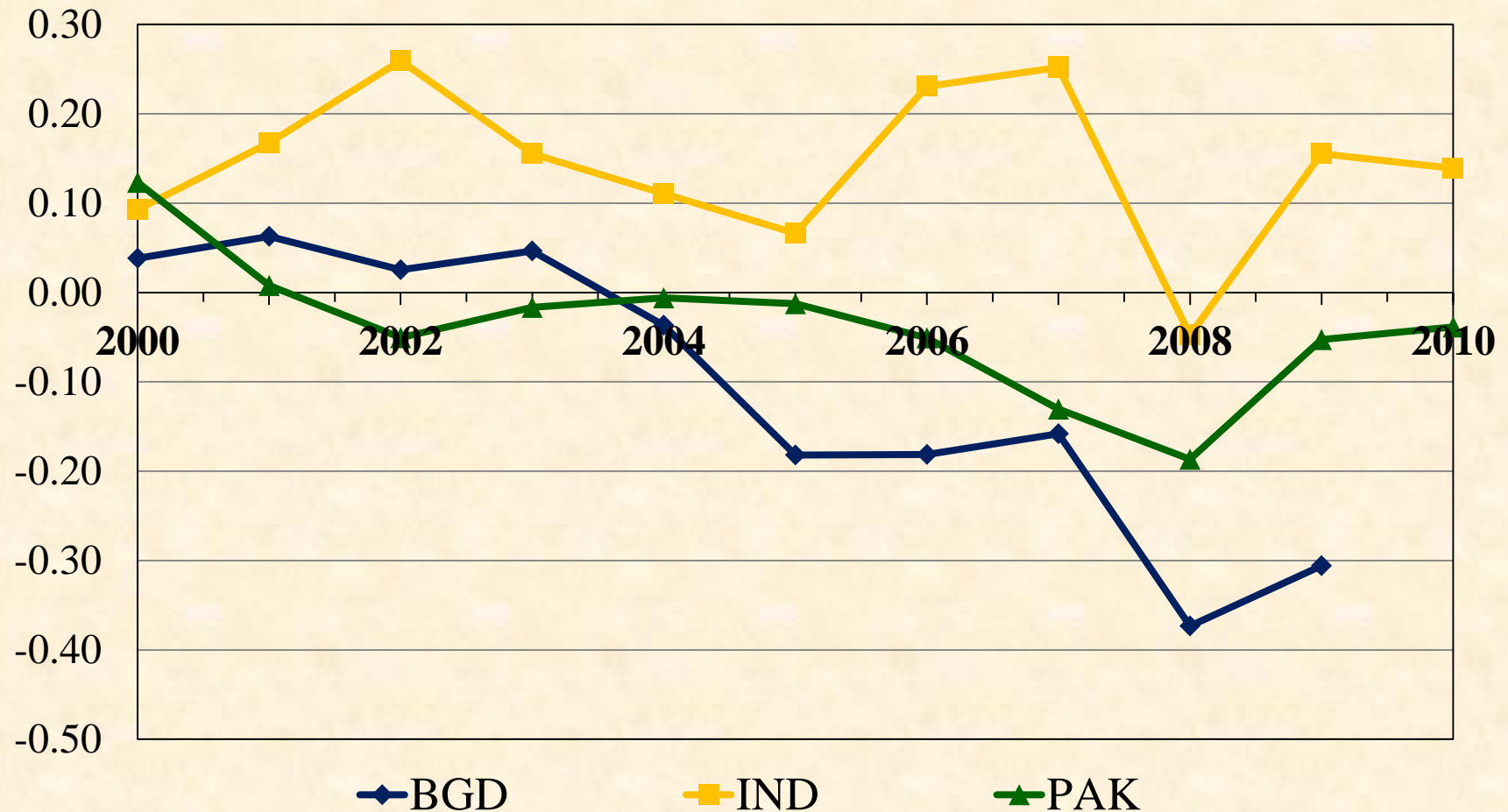
- **Main tax is on fertilizer**
 - (reduces its use)
- **Retailing GST not used**
 - Could be collected by provinces
- **What tax revenues to attribute to agriculture?**
- **Large potential for agricultural income tax relative to current tax collections**
 - Small costs to consumers (reduced income) and producers (% of value added)

Price Distortions

- **Nominal rates of Assistance**
- **Ad hoc policy changes**
 - **Currently: wheat, sugar, yarn**
- **Overvaluation of the Exchange rate**

Nominal Rates of Assistance to Agriculture

Bangladesh, India, and Pakistan; 2000 - 2010



Price Distortions in Agriculture

Wheat – Rs. per 40 kg

	Feb 2015*	2013-14	2010-11 to 2012-13
Export Parity Price	791	1112	1144
Import Parity Price - Karachi	1,243	1587	1621
Import Parity Price - Multan	1,339	1667	1701
Avg. Domestic Wholesale Price	1325	1425	1183
Avg. Wholesale Price India (Punjab)	na	871	747

Source: Agricultural Policy Institute (API)

** Estimated using API methodology*

Price Distortions in Agriculture

Rice – Rs. per 40 kg

	Feb 2015	April 2013	2012-13 (Jul-April)
Basmati			
Export Parity Price	2,486	2183	2022
Avg. Domestic Wholesale Price	2,822	4703	4099
Avg. Wholesale Price India (Punjab)			
Irri			
Export Parity Price	700	769	787
Avg. Domestic Wholesale Price	1,235	1755	1652
Avg. Wholesale Price India (Punjab)	na	1695	1434

Source: Agricultural Policy Institute (API)

* Estimated using API methodology

Price Distortions in Agriculture

Sugarcane – Rs. per 40 kg

	Feb 2015	2013-14	2010-11 to 2012-13
Export Parity Price	77	111	150
Import Parity Price - Punjab	113	148	189
Import Parity Price - Sindh	117	153	195
Avg. Domestic Wholesale Price	119	178	183

Source: Agricultural Policy Institute (API)

** Estimated using API methodology*

Simulated Tax on Import 'TMYARN'

Import Duty on YARN increased by 15 p.p.

- Raises Government revenue by Rs. 1.2 Billion (0.1%)
- Has some impact on weaving & knitwear value added

Value Added of:	Value in Base (Rs. Million)	% Change	Value after TMYARN
Mining	301,468	0.1	301,678
Ginning (Lint)	12,205	0.0	12,208
Spinning (Yarn)	83,287	0.1	83,391
Weaving (Cloth)	44,846	-1.3	44,258
Knitwear	7,131	-3.5	6,884
Garment	31,346	0.0	31,336
Other Textiles	38,918	-0.2	38,852
Other Manufacturing	1,732,794	0.0	1,732,892
Energy, Constr. & Services	5,652,408	0.0	5,652,889

Summary of Price Distortions

- **NRAs have declined over the years, but have generally been net taxation in Pakistan (versus India)**
 - While above is true, there are continuing ad hoc policy decisions leading to distortions
- **Internal prices/export parity prices: wheat 1.66; Irri rice 1.76; basmati 1.14; sugar 1.55**
- **Costs per ton to export at Feb market prices:**
 - Wheat: \$133.50 per ton; sugarcane: \$10.50 per ton
- **Import tax on yarn has mainly distributional effects but also probably long run disincentives**

Thank You!

Implicit Benefit for Farmers

- **Adjusted Gross Margin is about Rs. 50,000 per acre**
- **Cost of irrigation infrastructure, and its O&M estimated between Rs. 2,958 and Rs. 4,460 per acre**
 - Much more than what is paid as *abiana*
 - 6-10% of the AGM
- **i.e. farmers benefit from a subsidy equivalent to 6-10% of their value added**
- **However, farmers pay implicit taxes from border price effects**
 - A tax of 4.5% on output prices = 6% tax on value-added
- **Implicit taxes and implicit subsidies cancel out**

Import Duty on YARN increased by 15 p.p.

(continued)

	<i>Exports</i>		<i>Imports</i>	
	<i>Value in Base (Rs. Mill)</i>	<i>% Change</i>	<i>Value in Base (Rs. Mill)</i>	<i>% Change</i>
Agriculture	24,534	0.1	83,390	0.0
Mining			284,690	-0.1
Ginning (Lint)	3,639	0.0	63,881	0.0
Spinning (Yarn)	68,361	-0.1	18,069	-32.9
Weaving (Cloth)	242,430	-1.5	4,883	0.1
Knitwear	96,041	-4.5		
Garment	104,871	0.0		
Other Textiles	47,690	-0.3	3,059	0.0
Other Manufacturing	446,954	0.1	1,250,893	0.0
Energy, Const., Services	467,548	0.1	467,849	-0.1

Annual Costs of Irrigation Assets

Two Alternative Plans Compared

	Higher Cost Scenario			Low Cost Scenario		
	Total Costs	Acreage	Per acre costs	Total Costs	Acreage	Per acre costs
	Rs. Mill.	(M. Acres)	(Rs./Acre)	Rs. Mill.	(M. Acres)	(Rs./Acre)
Dams	26,771	29.0	924	19,630	32.0	614
Headworks/Barrages	5,518	21.5	414	4,046	24.4	193
Main Canals	27,550	21.5	1,381	20,202	24.4	965
Distributaries & Minor Canals	17,429	21.5	836	16,102	24.4	746
Inter-river Link Canals	4,473	21.5	234	3,280	24.4	157
Drainage, Flood control, Small Dams	4,626	21.5	226	4,274	24.4	198
Others	1,992	21.5	445	1,841	24.4	85
Total Cost Irri. Assets	88,360		4,460	69,375		2,958

Adjusted Gross Margin

Three Farm Sizes in Pakistan, 2012 -- (Rupees)

	Small	Medium	Large
	< 5 Acres	5 - 12 acres	> 12 acres
Value of production	699,545	693,837	626,960
Less:			
Purchased Inputs	166,024	165,535	127,476
Hired labor	32,256	21,914	26,246
Adjusted Gross Margin	501,265	506,388	473,238
Total Acres (000s)	9,546	10,393	9,534
Avg. Adj. GM / acre	52,510	48,725	49,636