

Agriculture

Agriculture sector is a vital component of Pakistan's economy as it provides the raw materials to down the line industries and helps in poverty alleviation. This sector contributed 19.8 percent in GDP and it remains by far the largest employer absorbing 42.3 percent of the country's total labour force. The agriculture sector growth is contingent on favorable weather conditions. There is a strong relationship between agriculture and climate—temperature, precipitation, floods and other aspects of weather that finally affect economic performance including agriculture production, commodity prices and finally economic growth. The emerging challenges of national food security and climate change have shifted the policy focus globally towards the development of agriculture sector during past few years. The high potential of this sector in earning valuable foreign exchange has been greatly realized through tapping the potential in value addition sectors. Pakistan's agriculture community consists of small farmers having various limitations in their day to day farming

practices that have been translated into the fact that per yield level in Pakistan has been graded in the lower to middle ranged economy fulfilling the propensity to cater the food requirements of its growing population and with current pace of development envisages to slip to the lower ranged economies having ability to cater the nutritional needs of its population by the year 2030.

The government is focusing on improving agricultural productivity by increasing crops yield, systematic application of better inputs and advance technology to enhance profitability of the farming community, improve competitiveness and ensure the environmental sustainability of agriculture. The overall objective is to achieve a sustained agriculture growth rate of four to five percent per annum to support the overall GDP growth trajectory.

To protect the farmers from the vagaries of unprecedented climate change and global slowdown in commodity prices, the government announced Kissan Package in September, 2015.

Box item 1: Prime Minister's Agriculture Package of Rs 341 billion

A mega relief package of Rs 341 billion has been announced by Prime Minister of Pakistan for small farmers including direct cash support and provision of soft agriculture loans. It is aimed at introducing progressive agriculture on scientific lines, reducing production cost of crops and make the small farmers prosperous. Under the package

- ▶ Small farmers would get the chunk of Rs 147 billion as direct benefit while Rs 194 billion has been allocated for agriculture loans.
- ▶ The farmers cultivating rice and cotton at up to 12.5 acres of land would be given cash support of Rs 5,000 per acre. The government on this facility will bear the cost of Rs 20 billion each for rice and cotton crops.
- ▶ Announced setting up a Rs 20 billion fund to reduce prices of fertilizers which will lessen Rs 500 per bag of Potassium and Nitrate fertilizers. Also, the government was negotiating with local fertilizer manufacturers and gas companies to revert the increase in prices of fertilizers which has gone up by Rs 200 per bag.
- ▶ It had been decided to provide Liquefied Natural Gas (LNG) to fertilizer companies to overcome the shortages of gas supply.
- ▶ The government would bear the Rs 2.5 billion premium on the agricultural insurance which will benefit 0.7 million small farmers.
- ▶ Solar tubewells would be provided on mark up free loans to the farmers who own up to 12.5 acre of land. The

mark up of seven years would be paid by the federal government with a cost of Rs 14.5 billion. This would ensure a saving of Rs 1,600 and Rs 500 per day for the farmers running tubewells on diesel for five hours daily and on petrol for same duration, respectively.

- ▶ The electricity price for running tubewells at peak hours has been fixed at Rs 10.35 per unit and Rs 8.85 at off-peak hours. The sales tax on these bills amounting Rs 7 billion would be borne by the federal government.
- ▶ The custom duty, sales tax and withholding tax on the agriculture machinery has been reduced from 45 percent to nine percent.
- ▶ The rice millers has been given full exemption on the turn-over tax for year 2015-16.
- ▶ The traders of agriculture commodities, fruits, vegetables and fish would get an exemption of three years on income tax while the sales tax on cold chain machinery has been reduced from 17 to seven percent.
- ▶ The installation of production unit of Halal meat that will be registered before December 31, 2016 will be given a four-year exemption on income tax.
- ▶ The government would provide Rs 30 billion as the fifty percent guarantee to banks on loans. This will benefit around 0.3 million farmer households through Rs 0.1 million each with collateral loans.
- ▶ The time-limit to pay back Rs 34 billion outstanding loan on the rice traders has been extended up to June 30, 2016.
- ▶ The government and the State Bank of Pakistan are working over reducing the mark-up rate on agriculture loans by two percent which would give a benefit of Rs 11 billion per annum to farmers.
- ▶ The Zarai Taraqiati Bank Limited and commercial banks would provide one-window facility to the farmers seeking loans.
- ▶ The value of production unit has been increased from Rs 2,000 to Rs 4,000 which would help farmers get doubled the amount of loan against their land value.
- ▶ A committee under supervision of Federal Minister for National Food Security & Research has been set up which would workout the ways to increase per acre yield and reduction of agriculture inputs.

Source: Press Release by Prime Minister's Secretariat

Performance during 2015-16

During FY 2016, the performance of agriculture sector as a whole remained dismal as it witnessed a negative growth of 0.19 percent against 2.53 percent growth during the same period last year. The growth of crops declined by 6.25 percent, while the other sub component of Agriculture sector like Livestock, Forestry and Fishing posted positive growth of 3.63 percent, 8.84 percent and 3.25 percent, respectively. The growth of sub Sector of crops included important crops, other crops and cotton ginning remained negative as it posted a growth of -7.18 percent, -0.31 percent and -21.26 percent which impacted negatively on crops as a result became the reason of negative growth of Agriculture sector. The last negative growth in Agriculture was witnessed in 2000-01, when agriculture growth declined to 2.18 percent. Important crops having a share of 23.55 percent in agricultural value added has witnessed negative

growth of 7.18 percent on account of large decline in cotton production (27.83 percent), rice production (2.74 percent) and maize production (0.35 percent) during 2015-16 against negative growth of 0.52 percent during the same period of last year. While only wheat and sugarcane production witnessed a positive growth of 1.58 percent and 4.22 percent respectively, as compared to last year. Other crops contributed 11.36 percent in value addition of agriculture witnessed a decline of 0.31 percent during 2015-16 against positive growth of 3.09 percent during the same period last year due to decline in the production of pulses, fruits and oilseeds posting negative growth of 12.49 percent, 2.48 percent and 9.56 percent, respectively. With drop in cotton production by around 27.83 percent this year the Cotton ginning having a share of 2.32 percent in value addition of agriculture has suffered badly and posted a negative growth of

Agriculture

21.26 percent compared to 7.24 percent growth during the same period last year.

The Livestock sector having contribution of 58.55 percent in the agriculture recorded a positive growth of 3.63 percent during 2015-16 compared to 3.99 percent growth during the same period last year. The Fishing sector having contribution of

2.17 percent in agriculture value addition recorded a growth of 3.25 percent compared to 5.75 percent growth of last year. Forestry sector having contribution of 2.06 in the agriculture value addition posted a growth of 8.84 percent this year as compared to the negative growth of 10.43 percent last year. (Table 2.1)

Table 2.1: Agriculture growth percentages (Base=2005-06)

Sector	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16(P)
Agriculture	0.23	1.96	3.62	2.68	2.50	2.53	-0.19
Crops	-4.16	0.99	3.22	1.53	2.64	1.04	-6.25
i) Important Crops	-3.74	1.50	7.87	0.17	7.22	-0.52	-7.18
ii) Other Crops	-7.24	2.27	-7.52	5.58	-5.71	3.09	-0.31
iii) Cotton Ginning	7.29	-8.48	13.83	-2.90	-1.33	7.24	-21.26
Livestock	3.80	3.39	3.99	3.45	2.48	3.99	3.63
Forestry	-0.07	4.76	1.79	6.58	1.88	-10.43	8.84
Fishing	1.40	-15.20	3.77	0.65	0.98	5.75	3.25

Source: Pakistan Bureau of Statistics
P: Provisional

Pakistan has two crop seasons, "Kharif" being the first sowing season starting from April-June and is harvested during October-December. Rice, sugarcane, cotton, maize, moong, mash, bajra and jowar are "Kharif" crops. "Rabi", the second sowing season, begins as on October-December and is harvested in April-May. Wheat, gram, lentil (masoor), tobacco, rapeseed, barley and mustard are "Rabi" crops. Pakistan's agricultural output is closely linked with the availability of irrigation

water. During 2015-16, the availability of water for Kharif 2015 stood at 65.5 million acre feet (MAF) showing a decrease of 5.5 percent over Kharif 2014 and 2.4 percent less than the normal supplies of 67.1 MAF. During Rabi season 2015-16, the water availability remained at 32.9 MAF, which is 0.6 percent less than Rabi 2014-15 and 9.6 percent less than the normal availability of 36.4 MAF. (Table 2.2) .

Table 2.2: Actual Surface Water Availability

(Million Acre Feet)

Period	Kharif	Rabi	Total	% age increase/decrease over the Avg.
Average system usage	67.1	36.4	103.5	-
2007-08	70.8	27.9	98.7	- 4.6
2008-09	66.9	24.9	91.8	-11.3
2009-10	67.3	25.0	92.3	-10.8
2010-11	53.4	34.6	88.0	-15.0
2011-12	60.4	29.4	89.8	-13.2
2012-13	57.7	31.9	89.6	-13.4
2013-14	65.5	32.5	98.0	-5.3
2014-15	69.3	33.1	102.4	-1.1
2015-16	65.5	32.9	98.4	-4.9

Source: Indus River System Authority

I. Crop Situation

The agriculture mix of Pakistan is heavily based on important crops (wheat, rice, sugarcane maize and cotton) which account for 23.55 percent of the

value added in overall agriculture and 4.67 percent of GDP. The other crops account for 11.36 percent of the value added in overall agriculture and 2.25 percent of GDP. Livestock

Pakistan Economic Survey 2015-16

contributes 58.55 percent to agricultural value addition and 11.61 percent to GDP. Forestry contributes 2.06 percent to agricultural value addition and 0.41 percent to GDP. Fishing

contributes 2.17 percent to agricultural value addition and 0.43 percent to GDP. The production performance of important crops is given in Table 2.3.

Year	Cotton (000 bales)	Sugarcane	Rice	Maize	Wheat
2009-10	12,914	49,373	6,883	3,261	23,311
	-	-	-	-	-
2010-11	11,460	55,309	4,823	3,707	25,214
	(-11.3)	(12.0)	(-29.9)	(13.7)	(8.2)
2011-12	13,595	58,397	6,160	4,338	23,473
	(18.6)	(5.6)	(27.7)	(17.0)	(-6.9)
2012-13	13,031	63,750	5,536	4,220	24,211
	(-4.1)	(9.2)	(-10.1)	(-2.7)	(3.1)
2013-14	12,769	67,460	6,798	4,944	25,979
	(-2.0)	(5.8)	(22.8)	(17.2)	(7.3)
2014-15	13,960	62,826	7,003	4,937	25,086
	(9.3)	(-6.9)	(3.0)	(-0.1)	(-3.4)
2015-16 P	10,074	65,475	6,811	4,920	25,482
	(-27.8)	(4.2)	(-2.7)	(-0.3)	(1.6)

Source: Pakistan Bureau of Statistics

P: Provisional (July-March), Figures in parentheses are growth/decline rates

a) Important Crops

i) Cotton:

Cotton being a cash crop and an essential source of raw material to the textile, enables the textile industry to survive and expand its base. The cotton has share of 1.0 percent in GDP and contributes 5.1 percent in agriculture value addition. This year the production of cotton massively declined therefore, to maintain the supply chain of cotton to the textile industry, the import of raw cotton during July-March 2015-16 has increased to 345.363 thousand tonnes compared to 97.354 thousand tonnes during same period last year showing a growth of 254.75 percent while in value terms it reached to US\$ 588.236 million against US\$ 224.647 million witnessing growth of 161.85 percent. During 2015-16, the cotton crop was sown on an area of 2917 thousand hectares, showing a decrease of 1.5 percent over last year's area of 2961 thousand hectares. Cotton production for the year 2015-16 stood at 10.074 million bales against 13.960 million bales last year showing a decline of 27.8 percent. Cotton crop suffered multiple shocks this

season such as prolonged and frequent rains badly hit the standing cotton crop, additional crop losses came from severe attack of pink bollworm. While the crop generally becomes more susceptible to pest attacks during rainy season, the risks heightened further this year as the plant was still in the early stage of growth due to sowing delays. At the same time, low prices discouraged farmers from investing in fertilizer and pesticides. The area, production and yield of cotton for the last five years are shown in Table 2.4 and Figure 2.1.

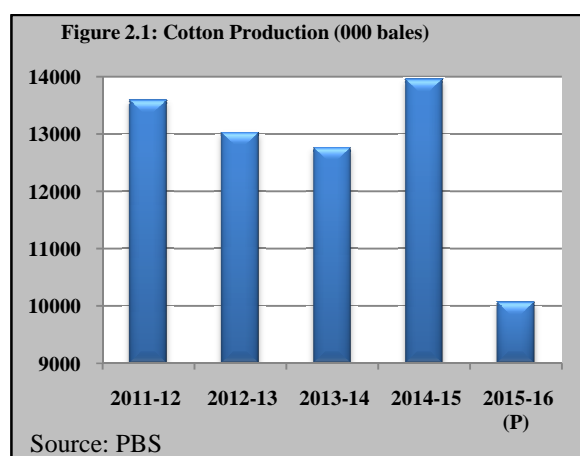


Table 2.4: Area, Production and Yield of Cotton

Year	Area		Production		Yield	
	(000 Hectare)	% Change	(000 Bales)	% Change	(Kgs/Hec)	% Change
2011-12	2,835	-	13,595	-	815	-
2012-13	2,879	1.6	13,031	-4.1	769	-5.6
2013-14	2,806	-2.5	12,769	-2.0	774	0.6
2014-15	2,961	5.5	13,960	9.3	802	3.6
2015-16(P)	2,917	-1.5	10,074	-27.8	587	-26.8

Source: Pakistan Bureau of Statistics P: Provisional (July-March)

World Cotton Outlook

The production and consumption of major cotton growing countries are given in Table 2.5.

Table 2.5: Production and Consumption of Major Cotton Growing Countries (Million Tonnes)

	2013-14 E	2014-15 E	2015-16 P
Production			
China	6.93	6.48	5.17
India	6.77	6.46	5.88
USA	2.81	3.55	2.82
Pakistan	2.08	2.30	1.53
Brazil	1.73	1.55	1.50
Uzbekistan	0.94	0.89	0.86
Others	4.97	4.87	4.28
World Total	26.23	26.11	22.03
Consumption			
China	7.52	7.48	7.11
India	5.52	5.39	5.26
Pakistan	2.47	2.50	2.19
Europe & Turkey	1.61	1.69	1.71
Vietnam	0.69	0.90	1.10
Bangladesh	0.88	0.94	1.05
Brazil	0.86	0.79	0.77
USA	0.77	0.78	0.78
Others	3.88	3.85	3.83
World Total	23.88	24.34	23.80

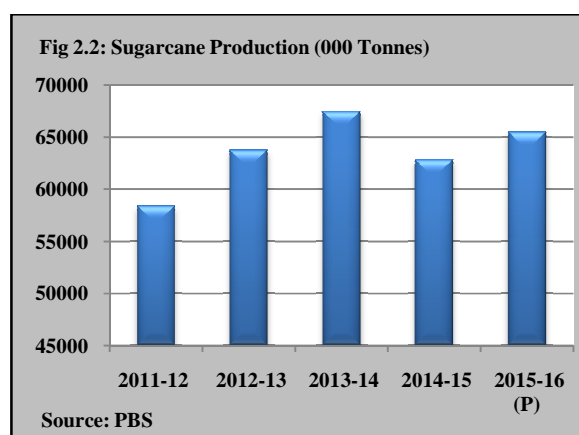
Source: Pakistan Central Cotton Committee, Ministry of Textile Industry

E: Estimated, P: Projected

ii) Sugarcane:

Sugarcane is high value cash crop of Pakistan and significantly important for sugar and sugar related industries in the national economy of our country. Its production accounts for 3.2 percent in agriculture's value addition and 0.6 percent in overall GDP. During 2015-16, the area sown for sugarcane crop stood at 1132 thousand hectares compared to last year's area of 1141 thousand hectares showing a decline of 0.8 percent. Sugarcane production for the year 2015-16 increased to 65.5 million tonnes from 62.8 million tonnes of last year's production showing an increase of 4.2 percent. The decline in area is due to disposal problem of cane and payment difficulties restricted acreage of sugarcane that shifted sugarcane area to other competitive crops.

The increase in production is due to favourable weather condition. The area, production and yield of sugarcane for the last five years are given in Table 2.6 and Figure 2.2.



Pakistan Economic Survey 2015-16

Table 2.6: Area, Production and Yield of Sugarcane

Year	Area		Production		Yield	
	(000 Hectare)	% Change	(000 Tonnes)	% Change	(Kgs/Hec.)	% Change
2011-12	1,058	-	58,397	-	55,196	-
2012-13	1,129	6.7	63,750	9.2	56,466	2.3
2013-14	1,173	3.9	67,460	5.8	57,511	1.8
2014-15	1,141	-2.7	62,826	-6.9	55,062	-4.3
2015-16(P)	1,132	-0.8	65,475	4.2	57,840	5.05

Source: Pakistan Bureau of Statistics

P: Provisional (July-March)

iii) Rice:

Rice is an important food and cash crop in Pakistan and it is the second staple food after wheat. It accounts for 3.1 percent in the value added in agriculture and 0.6 percent of GDP. During 2015-16, rice crop was cultivated on an area of 2748 thousand hectares showing a decrease of 4.9 percent over last year's area of 2891 thousand hectares. Rice production remained 6811 thousand tonnes, showing a decline of 2.7 percent over corresponding period of last year's record production of 7003 thousand tonnes. Rice area decreased due to less economic returns to the farmers on account of decline in rice prices both domestically and globally during last year's crop. Depressed prices and rising cost of production encouraged farmers to substitute rice with fodder and maize. The heavy downpours in July, 2015 also affected paddy cultivation. This sharp drop in prices mainly reflects pressure of large carryover stock from a record FY 2015 rice harvest. Specifically, abundant rice supply (owing to healthy crop in both FY 2014 and FY 2015), and sluggish exports particularly of Basmati, has led to a steep rise in rice stocks. In the case of

Basmati rice, Pakistan's exports are already facing tough competition from India in the UAE market. As for the export of non-basmati varieties is concerned, severe drought in Thailand—the largest exporter of non-basmati varieties created opportunities for Pakistan to increase exports. The rice exports particularly Basmati rice also remained subdued in 2015-16 compared to last year. Whereas other varieties of rice exports improved in quantity by 9.9 percent. The area, production and yield of rice for the last five years are shown in Table 2.7 and Figure 2.3.

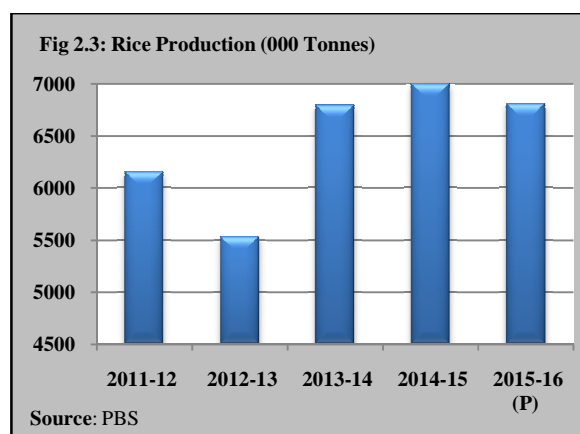


Table 2.7: Area, Production and Yield of Rice

Year	Area		Production		Yield	
	(000 Hectare)	% Change	(000 Tonnes)	% Change	(Kgs/Hec.)	% Change
2011-12	2,571	-	6,160	-	2,396	-
2012-13	2,309	-10.2	5,536	-10.1	2,398	0.1
2013-14	2,789	20.8	6,798	22.8	2,437	1.6
2014-15	2,891	3.7	7,003	3.0	2,422	-0.6
2015-16(P)	2,748	-4.9	6,811	-2.7	2,479	2.4

Source: Pakistan Bureau of Statistics

P: Provisional (July-March)

iv) Wheat:

Wheat is the most popular food crop of Pakistan and its products are used in a number of ways.

Being the staple diet of most of the people, it dominates all crops in acreage and production. Wheat accounts for 9.9 percent of the value added

in agriculture and 2.0 percent of GDP of Pakistan. During 2015-16, area under wheat cultivation has increased to 9260 thousand hectares from last year's area of 9204 thousand hectares which shows an increase of 0.6 percent. While production of wheat stood at 25.482 million tonnes during 2015-16, showing an increase of 1.6 percent over the last year's production of 25.086 million tonnes. The production increased as crop was sown at appropriate time and available moisture particularly in Barani Track supported germination/growth and availability and use of inputs remained adequate. The position is given in Table 2.8 and Figure 2.4.

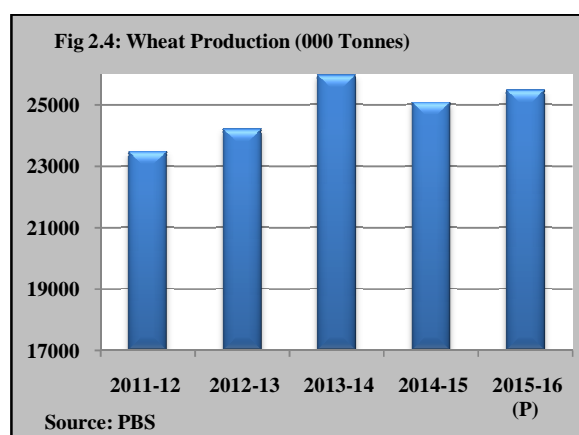


Table 2.8: Area, Production and Yield of Wheat

Year	Area		Production		Yield	
	(000 Hectares)	% Change	(000 Tonnes)	% Change	(Kgs/Hec.)	% Changes
2011-12	8,650	-	23,473	-	2714	-
2012-13	8,660	0.1	24,211	3.1	2796	3.0
2013-14	9,199	6.2	25,979	7.3	2824	1.0
2014-15	9,204	0.1	25,086	-3.4	2726	-3.5
2015-16(P)	9,260	0.6	25,482	1.6	2752	0.9

Source: Pakistan Bureau of Statistics
P:Provisional(July-March)

v) Maize:

Maize contributes 2.2 percent to the value added in agriculture and 0.4 percent to GDP. During 2015-16, cultivated area under maize crop has increased to 1144 thousand hectares, showing an increase of 0.2 percent over last year's area of 1142 thousand hectares. Maize crop production stood at 4.920 million tonnes during 2015-16, showing a decrease of 0.3 percent over the last year's production of 4.937 million tonnes. The position is presented in Table 2.9 and Figure 2.5.

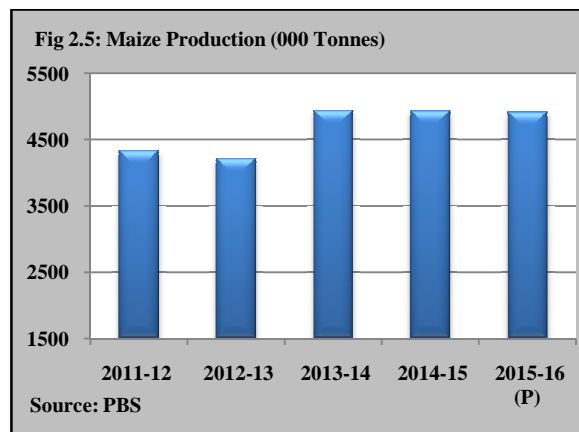


Table 2.9: Area, Production and Yield of Maize

Year	Area		Production		Yield	
	(000 Hectares)	% Change	(000 Tonnes)	% Change	(Kgs/Hec.)	% Changes
2011-12	1,087	-	4,338	-	3,991	-
2012-13	1,060	-2.5	4,220	-2.7	3,981	-0.3
2013-14	1,168	10.2	4,944	17.2	4,233	6.3
2014-15	1,142	-2.2	4,937	-0.1	4,323	0.2
2015-16(P)	1,144	0.2	4,920	-0.3	4,301	-0.5

Source: Pakistan Bureau of Statistics
P:Provisional(July-March)

b) Other Crops

The production of Jawar and Bajra crops during 2015-16 witnessed positive growth of 40.0 percent and 1.4 percent respectively, due to increase in area cultivated. While Gram crop, one of the largest Rabi pulse crop in Pakistan, accounting for the 76 percent of the total production of pulses in the country and it occupies about 5 percent of the Rabi cropped area witnessed a decline 17.7 percent as the production of gram during last few years' showed

erratic trends due to mainly dependence on intensity of rains .The production of Barley and Rapeseed & Mustard witnessed decline in its production by 3.2 percent and 1.0 percent respectively, during 2015-16 as compared to the same period last year. The decrease in production is due to decrease in area cultivated. While the production of Tobacco remained the same when compared to the production of same period last year as there is no change in area cultivated .The area and production of other crops are given in Table 2.10.

Table 2.10: Area and Production of other Kharif and Rabi Crops

Crops	2014-15		2015-16 (P)		% Change in production over Last year
	Area (000 Hectares)	Production (000 Tonnes)	Area (000 Hectares)	Production (000 Tonnes)	
Bajra	462	295	486	299	1.4
Jowar	195	115	274	161	40.0
Gram	943	379	945	312	-17.7
Barley	68	63	66	61	-3.2
Rapeseed & Mustard	214	196	211	194	-1.0
Tobacco	54	120	54	120	0.0

Source: Pakistan Bureau of Statistics
P: Provisional (July-March)

During 2015-16, the production of Potatoes, Chillies and Onions grew positively witnessing a growth of 3.4 percent, 2.1 percent and 0.2 percent respectively, comparing to production of same period last year. The reason for increase in production is increase in area cultivated.

However, the production of pulses Mash, Masoor (Lentil) and Moong decreased by 15.6 percent 4.4 percent and 0.8 percent, respectively. The area and production of other crops are given in Table 2.11.

Table 2.11: Area and Production of Other Crops

Crops	2014-15		2015-16(P)		% Change in production over Last year
	Area (000 Hectares)	Production (000 Tonnes)	Area (000 Hectares)	Production (000 Tonnes)	
Masoor	17.7	9.0	17.0	8.6	-4.4
Moong	127.4	98.8	146.3	98.0	-0.8
Mash	20.8	9.0	19.2	7.6	-15.6
Potatoes	170.5	3,997.6	176.2	4,134.6	3.4
Onions	130.5	1,671.0	130.6	1,674.6	0.2
Chillies	62.5	139.7	64.2	142.6	2.1

Source: Pakistan Bureau of Statistics
P: Provisional (July-March)

i) Oilseeds

The major oilseed crops grown in the country include Sunflower, Canola, Rapeseed/Mustard and Cotton. During the year 2014-15 total availability of edible oil was 3.523 million tonnes. Local production of edible oil contributed 0.556

million tonnes while import of edible oil/oilseeds was 2.967 million tonnes. The edible oil import bill during 2014-15 was Rs.269.412 billion (US\$ 2.663 billion).

During 2015-16 (July-March), 2.205 million tonnes edible oil of value Rs.136.920 billion (US\$

1.392 billion) was imported showing an increase of 24.5 percent against the same period 2014-15 (July-March). Local production of edible oil during 2015-16 (July-March) is estimated at 0.462 million tonnes. Total availability of edible oil from all sources is estimated at 2.667 million tonnes during 2015-16 (July-March). The area and production of oilseed crops during 2014-15 and 2015-16 is given in Table 2.12.

World oilseed market has been showing downward trend since last few years which has also affected local market of oilseeds/edible oil. Local market is likely to prevail around Rs. 2,000 per 40 kg for canola crop produce during 2015-16. Last year canola produce was procured at Rs 2,020 to Rs.2,100 per 40 kg. Low prices in the market discouraged the oilseeds growers and resulted decrease in area under sunflower and canola crops during 2015-16.

Table 2.12: Area and Production of Major Oilseed Crops

Crops	2014-15 (July-March)			2015-16 (July-March) (P)		
	Area	Production		Area	Production	
	(000 Acres)	Seed (000 Tonnes)	Oil (000 Tonnes)	(000 Acres)	Seed (000 Tonnes)	Oil (000 Tonnes)
Cottonseed	7,579	3,450	414	7,685	2,966	356
Rapeseed/ Mustard	533	210	67	539	202	65
Sunflower	349	182	69	214	92	35
Canola	37	17	6	36	16	6
Total	8,498	3,859	556	8,474	3,276	462

Source: Pakistan Oilseed Development Board (PODB), Pakistan Bureau of Statistics

P: Provisional

II. Farm Inputs

i) Fertilizers

Fertilizer is the most important and costly input contributing 30 to 50 percent towards increase in crop yield. Most of our soils are deficient in three basic essential plant nutrients (nitrogen, phosphorus and potash) required by the plants in large quantities for normal growth and development. In addition to these, deficiency of micronutrients is also becoming more wide spread. Soil fertility is continuously depleting due to mining of the essential plant nutrients from the soils under intensive cultivation and with the introduction of high yielding hybrid crop varieties.

The domestic production of fertilizers during 2015-16 (July-March) increased significantly by 14.4 percent over the same period of previous fiscal year. The addition of Liquefied Natural Gas (LNG) as source of feed to three plants of Pak Arab Fertilizer Company since March 2015 has considerably increased the fertilizer production. The imported supplies of fertilizer decreased by 3.9 percent. However, the total availability of fertilizer surged by 9.7 percent during current

fiscal year. Total offtake of fertilizer nutrients witnessed decrease by 10.1 percent. Nitrogen offtake decreased by 14 percent while phosphate increased by 2.9 percent. Potash offtake recorded a significant decrease of 35.9 percent during 2015-16 (July-March). Prices of all phosphatic fertilizers decreased during current fiscal year as a result of announcement of subsidy by the government from 15th October, 2015 at the rate of Rs.500 per bag of Diammonium Phosphate.

Total availability of urea during Kharif 2015 was 3194 thousand tonnes comprising of 214 thousand tonnes of opening inventory, 294 thousand tonnes of imported supplies and 2686 thousand tonnes of domestic production (Table 2.13). Urea offtake was about 2425 thousand tonnes, leaving inventory of 771 thousand tonnes for Rabi 2015-16. Availability of DAP was 936 thousand tonnes comprising 139 thousand tonnes of opening inventory, 376 thousand tonnes of imported supplies and 421 thousand tonnes of local production. DAP offtake was 414 thousand tonnes leaving an inventory of 523 thousand tonnes for upcoming Rabi 2015-16.

Rabi 2015-16 started with an opening balance of

Pakistan Economic Survey 2015-16

771 thousand tonnes of urea (Table 2.13). Domestic production during Rabi 2015-16 was around 2817 thousand tonnes. Urea offtake during current Rabi 2015-16 was about 2434 thousand tonnes, against 3638 thousand tonnes of total availability, leaving a closing balance of 1201 thousand tonnes for next season. DAP availability in current season of Rabi 2015-16 was around 1725 thousand tonnes, which includes 523 thousand tonnes of opening inventory, 833 thousand tonnes of imported supplies and domestic production of 369 thousand tonnes.

Offtake of DAP during Rabi season was about 1439 thousand tonnes, leaving a balance of 286 thousand tonnes for next season.

Total availability of urea during Kharif 2016 will be about 3902 thousand tonnes comprising of 1202 thousand tonnes of opening balance and 2700 thousand tonnes of domestic production (Table 2.13). Urea offtake is expected to be around 2900 thousand tonnes, reflecting a closing balance of 1002 thousand tonnes. Total availability of DAP will be 686 thousand tonnes against expected offtake of 520 thousand tonnes.

Description	Kharif (Apr-Sep) 2015		Rabi (Oct-Mar) 2015-16		Kharif (Apr-Sep) 2016*	
	Urea	DAP	Urea	DAP	Urea	DAP
Opening stock	214	139	771	523	1,202	286
Imported supplies	294	376	50	833	0	0
Domestic production	2,686	421	2,817	369	2,700	400
Total availability	3,194	936	3,638	1,725	3,902	686
Offtake/Demand	2,425	414	2,434	1,439	2,900	520
Write on/off	2	1	-2	0	0	0
Closing stock	771	523	1,202	286	1,002	166

Source: National Fertilizer Development Center
*: Outlook

ii) Improved Seed

Seed is a key input in crop production and its quality is of great significance to improve quality as well as quantity of crops. Improving availability of certified seed provides sound base to bridge gap existing in average crop yields for sustainable agricultural production and national food security. Federal Seed Certification & Registration Department (FSC&RD) has taken following policy measures/steps during, 2015-16 (July-March):

1. Achievements

a) Registration of Seed Companies:

- i. During 2015-16 (July-March), proposals of 64 new seed companies were examined, out of 64 a total of 32 seed companies were provisionally approved for one year to do seed business, while rest of 32 seed companies were deferred by the Working Group of the Ministry in its 55th meeting held on 20-10-2015.
- ii. A total of 16 Seed Companies (already

inducted) have been granted one year extension in permission (2015-2016) to do seed business by the Working Group of the Ministry in its 55th meeting held on 20-10-2015.

- iii. A total of 55 seed companies have been de-registered/cancelled in the 55th meeting of the Working Group held on 20-10-2015 by the Working Group of the Ministry in its 55th meeting held on 20-10-2015.
- iv. A total of 58 Seed Companies who have been evaluated and reported by the Five Committees for Evaluation of Private Seed Companies constituted as per decision of the Joint Action Group on cotton seed dated 28th October, 2014 were discussed in the 55th meeting wherein it was decided to serve One Month's Show Cause Notices to these 58 Seed companies for clarification/justification for continuation of seed business.
- v. Drafted initial requirements for registration/renewal of seed companies to do seed business as per clause 22(B) of the Seed (Amendment) Act, 2015.

b) Registration of Plant Varieties: Sixteen (16) new crop varieties of Wheat, Cotton, Okra, Mung, Rapeseed, Apple, Citrus and Peach were approved for distribution and multiplication, while 25 new candidate varieties have been studied for Distinctness, Uniformity and Stability (DUS) trails.

c) Field Crop Inspection: A total of 268.299 thousand acres of different crops, offered by the various seed agencies were inspected for certification purposes.

d) Seed Sampling & Testing: A total quantity of 402.607 thousand m. tons seed of various crops was sampled and tested for purity, germination and seed health purposes.

e) Seed Quality Control in the Markets: Under the provision of Seed Act Enforcement, a total number of 81 cases with a quantity of 17.43 m. tons seed of different crops were filed in different Courts of Law against the seed dealers found selling substandard seeds.

f) Imported seed consignments: A total quantity of 52.444 thousand m.tons of imported seed of various crops/hybrids (maize, paddy, sunflower, canola, fodders, potato, vegetables etc.) was tested under Seed (Truth in Labeling) Rules, 1991 at the port of entries i.e. Lahore and Karachi.

g) Seed Health Testing: A total number of 1,055 seed samples of various crops/vegetables and fruits were tested at the Central Seed Health Testing Laboratory, Islamabad for detection of fungal and viral diseases using latest diagnosis techniques and protocols.

2. Seed Regulatory Framework

a) Seed (Amendment) Act, 2015

The Seed Amendment Bill, 2015 was passed by the National Assembly on 16th March, 2015 and by the Senate on 7th July, 2015. The Seed Amendment Bill, 2015 after being approved by both the houses of the parliament was signed by the President of the Islamic Republic of Pakistan on 23rd July, 2015 which was subsequently published in the Gazette of Pakistan, Extraordinary, Part-I as an Act No. VII of 2015 on 29th July, 2015.

Since, penalties have been enhanced from Rs.1,000 to Rs.200,000 and Rs.600,000 and

imprisonment of upto 3 months and 6 months in the Seed (Amendment) Act, 2015. Therefore, it is hoped that it would serve as effective deterrence against sale of fake and substandard seeds. Similarly, private seed sector has been allowed to produce basic seed as well as to establish their own accredited seed testing laboratories. This would attract more investment and focus by the private sector to seed industry. In the Seed (Amendment) Act, 2015, certain fees have been proposed for various types of registrations and permissions, which would add to government revenue collections. However, it is pertinent to mention that all these new provisions of the Seed (Amendment) Act, 2015 would become effective after Seed Rules are notified which are under final phase of approval.

c) Plant Breeders Rights Bill, 2016

Pakistan being a member of World Trade Organization (WTO) has the obligation to provide rights to the breeders of new plant varieties under Article 27.3(b) of Trade Related Aspects for Intellectual Property Rights (TRIP's) Agreement. According to Article 27.3b of TRIP's Agreement each member country has to "Provide protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof".

The Plant Breeders' Rights Bill, 2016 has in principle been approved by the National Assembly Standing Committee on Cabinet Secretariat in its meeting held on 06-01-2016. However, discussions are being made on the matter of setting up PBR registry under IPO Pakistan or at Ministry of National Food Security and Research. The passage of this bill and its implementation would attract investment in seed research and development in Pakistan at one hand and on the other it would give protection of rights to the developers and breeders of new technologies and crop varieties.

3. National Seed Policy

National Seed Policy is in the process of finalization. Draft was prepared at Ministry level and consultation was made by the department in collaboration with Food and Agriculture Organization (FAO). For incorporation of the input of the stakeholders, a working group was constituted comprising representatives from

public and private seed sectors. The draft has been finalized by the working group and ready for final approval.

4. Fruit Plant Certification

- i. FSC&RD has registered six (6) new fruit plant nurseries (Gilgit, Chakwal, Abbottabad, Haripur) to promote production and dissemination of disease free and true-to-type nursery fruit plants.
- ii. Registration cases of two fruit plant nurseries are in progress.
- iii. The number of fruit plants certified in the above mentioned tenure is 12,400.
- iv. Arrangements are under way to carry out sampling and virus indexing of the fruit plan Germplasm Units (GPUs).
- v. Minimum Fruit Plant Certification Standards for citrus, mango and guava are drafted and submitted to National Seed Council for approval.
- vi. Minimum Fruit Plant Certification Standards for grapes, olive and palm are being drafted.

5. FSC&RD Development Initiatives

The project, “Strengthening of Seed Certification Services for Food Security in Gilgit Baltistan” was approved by the DDWP during 2013. However, due to lack of finances, the project could not be implemented. Efforts are being made to get the fund released and start implementation of this project at the earliest.

It is also informed that 16th meeting of the Standing Committee on National Food Security and Research in principal cleared the following developmental schemes of the department:

- a) Strengthening of seed testing laboratory of FSC&RD, Karachi.

- b) Up-gradation of seed certification services in Balochistan.

Activities of a Bio-tech Lab. at FSC&RD, Islamabad for plant varietal characterization at chemical, bio-chemical and molecular level is in progress.

6. International Collaboration

For seed sector development in Pakistan, FSC&RD is in the process of collaboration through different cooperation proposals with China, Turkey, OIC, Kazakhstan, Brazil, Kyrgyzstan, Belarus, Afghanistan, Australia, Argentine, Russia, Turkmenistan, USA, Malaysia, and Nigeria. Cooperation with ECO, D-8 Seed Bank, SAARC Seed Bank and FAO is also in progress.

Technical Cooperation Programme (TCP) with Food and Agriculture Organization (FAO) of the United Nations

On the request of the department, the Ministry of National Food Security and Research has arranged for Technical Cooperation Programme (TCP) between the Food and Agriculture Organization (FAO) of the United Nations and FSC&RD. FAO recently has hired an International Consultant to prepare a TCP for the improvement of the seed sector. The FAO consultant has submitted his report to FAO and discussions are going on by the department with FAO for finalization of the TCP.

During, 2015-16 (July-March), the department carried out field inspection of 268.3 thousand acres and seed availability remained 455.0 thousand tonnes comprising 402.6 thousand tonnes of local and 52.4 thousand tonnes of imported seeds of various crops. The detail is given in Table 2.14.

Table 2.14: Area Inspected and Seed Availability*

Crop	Area Inspected (Acres)	Seed Availability (Metric Tonnes)		
		Local	Imported	Total
Wheat	62328	315020.12	-	315020.12
Cotton	117175	34520.82	-	34520.82
Paddy	61205	48230.61	1940.70	50171.31
Maize	21677	3171.30	15904.60	19075.90
Pulses	3056	1425.41	-	1425.41
Oilseeds	1704	93.00	1661.53	1754.53
Vegetables	1131	118.42	5196.34	5314.76
Fodders	14	27.25	27741.00	27768.25
Total	268290	402606.93	52444.19	455051.10

Source: Federal Seed Certification & Registration Department,

* : Provisional 2015-16 (July-March)

iii) Mechanization

During 2015-16 (July-March) a total number of 21,229 tractors were locally manufactured compared to the production of 31,963 during same period last year showing a decrease of 33.6

percent as the provincial governments did not initiate their tractor schemes and delay of the tractor subsidy schemes by provincial governments. The production and price of locally manufactured tractors are given in Table 2.15.

Table 2.15: Prices and Production of Locally Manufactured Tractors 2015-16 (July-March)

Tractors Model – Horse Power (HP)	Price/Unit Excluding GST (Rs)	Price/Unit Including GST (Rs)	Production (in Nos.)	Actual Sale (in Nos.)
M/s Al-Ghazi Tractors				
NH 480-S (55 HP)	653,000	718,300	2,525	2,498
NH 480-S-W.P (55 HP)	660,000	726,000	1,052	1,104
NH-Ghazi (65 HP)	740,000	814,000	2,324	2,436
NH 640 (75 HP)	950,000	1,045,000	739	740
NH 640 WDB (75 HP)	955,000	1,050,500	78	78
NH 640-S (85 HP)	999,000	1,098,000	32	31
NH 640-S WDB (85 HP)	1,014,000	1,115,400	30	28
NH-Ghazi WDB(65 HP)	747,000	821,700	1,008	1,008
NH 70-56 (85 HP)	1,500,000	1,650,000	21	24
M/s Millat Tractors				
MF-240 (50 HP)	659,500	725,450	6,378	6,358
MF-350 Plus (50 HP)	699,500	769,450	26	39
MF-260 (60 HP)	759,500	835,450	2,589	2,604
MF-360 (60 HP)	775,000	852,500	233	254
MF-375-S (75 HP)	999,500	1,099,450	8,607	902
MF-385 (85 HP)	1,055,000	1,160,500	3,222	3,203
MF-385 4WD (85 HP)	1,600,000	1,760,000	112	124
Total			21,229	21,431

Source: Tractor Manufacturer Association, Federal Water Management Cell

Note: GST @ 10 percent

iv) Irrigation

During the monsoon season (July-September) 2015, the normal average rainfall was 140.9 mm, while the actual rainfall received was 178.1 mm, remained 26.4 percent above normal rainfall. During the post-monsoon season (October-December) 2015, the normal average rainfall was 26.4 mm, while the actual rainfall received was

35.1 mm, remained 33.0 percent above the normal rainfall. During winter season (January-March) 2016, normal average rainfall was 74.3 mm and the actual rainfall received was 72.1 mm, remained 3.0 percent below the normal rainfall average. Rainfall recorded during the monsoon, post monsoon and winter season is given in Table 2.16.

Table 2.16: Rainfall* Recorded During 2015-16 (in Millimeters)

	Monsoon Rainfall (Jul-Sep) 2015	Post Monsoon Rainfall (Oct-Dec) 2015	Winter Rainfall (Jan-Mar) 2016
Normal**	140.9	26.4	74.3 mm
Actual	178.1	35.1	72.1 mm
Shortage (-)/excess (+)	+ 37.2	+8.7	-2.2 mm
% Shortage (-)/excess (+)	+26.4 %	+33.0 %	- 3.0 %

Source: Pakistan Meteorological Department

*: Area Weighted **: Long Period Average (1961-2010)

Weather outlook for the Season 2016 (April-June)

A strong El Niño prevails in the eastern Pacific Ocean, which is known to alter the temperature and precipitation patterns all over the globe, South Asian countries including Pakistan. El Niño is expected to affect temperature and precipitation patterns across the country during the upcoming months. It has started weakening. Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean. A transition to ENSO-neutral is likely during late Northern Hemisphere spring or early summer 2016, with close to a 50 percent chance for La Niña conditions to develop by the fall. Pakistan Meteorological Department (PMD) predictions show that slightly (20-25%) above normal precipitation is expected in NE and

Central Punjab, Upper KP and Kashmir. 15-20 percent above normal in G.B while 10-15 percent above normal rain is expected over SE Sindh. Balochistan and adjoining Sindh areas would be normal. Slightly above normal 10-15 percent rainfall is also expected over South Punjab (cotton region). The forecast indicates that the positive temperature anomalies will prevail over the country during the season from April-June 2016.

During Kharif (April-September) 2015, canal head withdrawals stood at 65.5 million acre feet (MAF) showing a decrease of 5 percent as compared to 69.3 MAF during same period last year. During Rabi (October-March) 2015-16, the canal head withdrawals decreased by 1.0 percent and stood at 32.9 MAF, compared to 33.1 MAF during same period last year. The province-wise detail is shown in Table 2.17.

Provinces	Kharif (Apr-Sep) 2014	Kharif (Apr-Sep) 2015	% Change in Kharif 2015 over 2014	Rabi (Oct-Mar) 2014-15	Rabi (Oct-Mar) 2015-16	% Change in Rabi 2015-16 Over 2014-15
Punjab	35.15	32.53	-7	17.08	16.87	-1
Sindh	31.31	30.55	-2	14.50	14.57	1
Khyber Pakhtunkhwa	0.92	0.76	-18	0.49	0.48	-3
Balochistan	1.89	1.62	-14	1.03	0.98	-5
Total	69.27	65.47	-5	33.10	32.90	-1

Source: Indus River System Authority

Water Sector’s short term strategies/policies for FY 2016 are being implemented based on the goals planned/implemented in the Vision 2025 and 11th Five Year Plan. Every year billion of rupees are expended in the water sector both by federal and provincial governments to overcome the issues being faced in this sector. The strategies adopted for the FY 2016 are as under:

- a) Augmentation measures by construction of water storage small/medium dams and rain water Harvesting and Hill Torrents Management.
- b) Conservation measures (lining of irrigation channels, modernization/rehabilitation of existing irrigation system) and efficiency enhancement by rehabilitation & better

operation of existing system.

- c) Protection of Agriculture land, abides and infrastructure from onslaught of floods and water logging & Salinity.
- d) Effective implementation monitoring system and comprehensive set of measures for the development and efficient management of water resources.

An amount of Rs.30.120 billion financial resources have been allocated for the above mentioned water sector’s development projects/programmes during the FY 2016, out of which more than Rs.25.00 billion are expected to be utilized by the end of June, 2016. The major water sector projects under implementation are shown in Table 2.18.

Table 2.18: Major Water Sector Projects under Implementation

Projects	Location	App. cost (Rs. in million)	Live Storage	Irrigated Area (Acres)	Status
Gomal Zam Dam	Khyber Pakhtunkhwa	20,626	0.892 MAF	1,63,100	Substantially completed.
Rainee Canal	Sindh	17,643	-	4,12,400 (Phases-I)	Physically completed.(Phase-I)
Kachhi Canal	Balochistan	57,562	-	713,000 (Phases-I)	About 87% Physically completed.
Darawat Dam	Sindh	9,300	89,192 (Ac.Ft)	25,000 (0.45 MW Power Gen.)	Physically completed.
Nai Gaj Dam	Sindh	26,236	160,000 (Ac.Ft)	28,800 (4.2 MW Power Gen.)	46 % Physical work completed
Kurram Tangi Dam	Khyber Pakhtunkhwa	12,662	0.90 MAF	84,380 New 277,500 Existing	Works of Phase-I at initial stage
Naulong Dam	Balochistan	18,027	0.20 MAF	47,000 (4.4 MW Power Gen.)	Work at initial stage.
Mohmand Dam (Munda)	Khyber Pakhtunkhwa	937.00	0.676 MAF	16,737 Acres	Detailed Engg. Design in progress
Right Bank Outfall Drain (RBOD)					
RBOD-I	Sindh	14,707	-	542,500	90% Physically Completed.
RBOD-II	Sindh	29,014	-	3,000,000	80% Physically Completed.
RBOD-III	Balochistan	6,535	-	694,796	85 % Physically Completed.

Source: Ministry of Planning, Development and Reforms

Achievements during 2015-16

- ▶ Substantial completion (phase-I) of Kachhi Canal in Balochistan & Rainee Canal Sindh for irrigating 2.864 million acres.
- ▶ Completion of Gomal Zam Dam Project in Tribal/Khyber Pakhtunkhwa area for irrigation of 163,100 acres of agriculture land and 17.4MW power generations.
- ▶ Completion of Darwat Dam (near Hyderabad Sindh) for irrigating 25,000 acres of agriculture land and Power Generation of 0.45 MW.
- ▶ Substantial completion of Nai Gaj dam (near Dadu Sindh) to irrigate 28,800 acres of land and Power Generation of 4.20 MW.
- ▶ To overcome water scarcity, utilization of Rs.400 million for lining of irrigation channels in Punjab and Sindh during the FY 2016.
- ▶ For the rehabilitation of existing irrigation canals in Punjab, Sindh and Khyber

Pakhtunkhwa, an amount of Rs.600 million are expected to be utilized during the FY 2016.

- ▶ Rs 5.600 billion is allocated and expected to be utilized on construction of new medium dam in all over Pakistan (Gomal Zam, Darwat, Nai Gaj, Kurram Tangi & Naulong dams).
- ▶ In Balochistan, Sindh, Punjab and Khyber Pakhtunkhwa about Rs 5.490 billion are expected to be utilized on construction of new small/delay action dams and recharge dams.

a) Punjab	Rs. 1,683 million (Mujhid, Mora Sher & Ghabir dam)
b) Sindh	Rs. 650 million (Kohistan & Nagarparkar areas of Sindh)
c) Khyber Pakhtunkhwa	Rs. 1,000 million (Kundal & Sanam dam & 20 small dams)
d) Balochistan	Rs. 3,233 million (Shadi Kaur, Bathozai, Const. of 100 small dams (Package-II & III), Basol dam, Mangi dam & Others)

Pakistan Economic Survey 2015-16

In drainage sector a sum of Rs. 3.30 billion has been allocated for the implementation of RBOD-I, II & III projects to protect and reclaim 4.90 million acres of irrigated land.

iv) Agricultural Credit:

In line with government's priority for promotion of agriculture sector, State Bank of Pakistan (SBP) has allocated the provisional indicative agricultural credit disbursement targets of Rs 600 billion for FY 2016 to 36 participating institutions including 20 Commercial banks, two specialized Banks, five Islamic Banks and nine Microfinance Banks which are engaged in provision of agriculture credit facility to farming community.

This current year agriculture credit target of Rs 600 billion is 20 percent higher than the last year's target of Rs 500 billion and 16.3 percent higher than the actual disbursement of Rs 515.9 billion for FY 2015. Out of the total target, Rs 305.7 billion have been allocated to five major banks, Rs 102 billion to ZTBL, Rs 131.8 billion to 15 Domestic Private Banks, Rs 12.5 billion to Punjab Provincial Cooperative Bank Limited (PPCBL), Rs 40.1 billion to nine Microfinance Banks and Rs 7.9 billion to five Islamic Banks.

Agricultural Credit Disbursements Recent Trends

During FY 2016 (July-March), the banks have disbursed Rs 385.5 billion which is 64.3 percent of the overall annual target of Rs 600 billion and 18.3 percent higher than disbursement of Rs 326.0

billion made during the corresponding period last year. The overall performance of banks remained encouraging despite various demand and supply sides challenges inter alia, low price of major crops and productivity issues, metrological changes and recovery drive of nonperforming loans. The outstanding portfolio of agriculture loans has also been increased to Rs 361.1 billion with 15.5 percent growth at end March FY 2016 as compared to same period last year.

While reviewing the performance of FY 2016 (July-March), the five major banks as a group disbursed Rs 198.8 billion and witnessed 18.7 percent growth as compared with same period last year. Under the specialized banks category, ZTBL disbursed Rs 55.3 billion or 54.2 percent against its target of Rs 102.0 billion while PPCBL could disburse only Rs 6.1 billion i.e. 48.8 percent against its annual target of Rs 12.5 billion during the period under review.

Further, fifteen Domestic Private Banks collectively disbursed Rs 84.8 billion and showed a positive trend with growth of 17.7 percent as compared with corresponding period last year. Microfinance banks as a group disbursed Rs 34.5 billion against their annual target of Rs 40.1 billion with 86.0 percent growth while Islamic Banks collectively disbursed Rs 6.0 billion against their targets of Rs 7.9 billion to agriculture borrowers. The actual disbursements of banks against the annual indicative targets FY 2016 (July-March) is given in the Table 2.19 below.

Banks	Target 2014-15	2014-15 (July-March)			Target 2015-16	2015-16 (July-March)		
		Disbursed	Target Achieved (%)	% Share in Total Disbursed		Disbursed	Target Achieved (%)	% Share in Total Disbursed
5 Major Commercial Banks	252.5	167.4	66.3	51.4	305.7	198.8	65.0	51.6
ZTBL	90.0	56.2	62.4	17.2	102.0	55.3	54.2	14.3
DPBs (15)	115.5	72.1	62.4	22.1	131.8	84.8	64.4	22.0
PPCBL	11.5	5.8	50.9	1.8	12.5	6.1	48.8	1.6
MFBS (9)	28.2	20.7	73.6	6.4	40.1	34.5	86.0	8.9
Islamic Banks (5)	2.3	3.8	134.7	1.2	7.9	6.0	75.9	1.6
Total	500.0	326.0	65.2	100	600.0	385.5	64.3	100.0

Source: State Bank of Pakistan

Box 2: Credit Disbursement to Farm and Non-Farm Sector

While analyzing the sector wise agriculture disbursement in depth, out of the total disbursement of Rs 385.5 billion, the farm sector has received Rs 188.1 billion while non farm sector absorbed Rs 197.4 billion during FY 2016 (July-March). Under farm credit sector disbursement, Rs 99.5 billion was disbursed to subsistence holding, Rs 41.2 billion to economic holding while Rs 47.4 billion to above economic holding category. However, in non-farm credit sector disbursement, Rs 127.7 billion was disbursed to large farms while Rs 69.7 billion to small farm category. The share of non farm credit is gradually increasing mainly due to more financing avenues and credit availability especially for Livestock/Dairy and Poultry sectors. The sector-wise comparative details of credit disbursements are provided in Table 2.20.

Sector		2014-15 (July-March)		2015-16 (July-March)	
		Disbursement	% Share in Total	Disbursement	% Share in Total
A	Farm Credit	170.0	52.1	188.1	48.8
1	Subsistence	94.1	28.9	99.5	25.8
2	Economic Holding	41.0	12.6	41.2	10.7
3	Above Economic Holding	34.9	10.7	47.4	12.3
B	Non-Farm Credit	156.0	47.9	197.4	51.2
1	Small Farms	53.9	16.5	69.7	18.1
2	Large Farms	102.2	31.3	127.7	33.1
Total (A+B)		326.0	100.0	385.5	100.0

Source: State Bank of Pakistan

SBP's Initiatives for the Promotion of Agriculture Financing:

SBP, in collaboration with banks, federal & provincial governments, farming community and other stakeholders has been encouraging banks to adopt agriculture lending as a viable business line. Recently, a number of policy and regulatory initiatives have been taken to remove the bottlenecks and enhance access to financial services for the farmers, especially smaller ones. Some of the major initiatives are as under;

- 1. Credit Guarantee Scheme for Small and Marginalized Farmers:** SBP has developed a credit guarantee scheme, funded by the federal government for small and marginalized farmers which would facilitate flow of credit to small and marginalized segment of farming community. Under this scheme the government will share 50 percent credit risk of banks and government has already allocated Rs 1.0 billion. For implementation of the scheme SBP has assigned lending targets to banks and around 200,000 farmers would be benefited from it annually.
- 2. Framework for Warehouse Receipt Financing:** In accordance with the objectives

of improving the performance of the agriculture sector and to develop commodities' physical trade and marketing system, SBP issued draft Framework for Warehouse Receipt Financing. The framework facilitates banks in development of specialized products for providing financing to farmers, traders, processors and other players in the value chain. SBP has been facilitating two pilot projects (Sindh and Punjab) to test the feasibility of warehouse receipt financing in the country. These projects were launched in collaboration with banks, MFBS, warehouse operators and collateral management company.

- 3. Guidelines for Value Chain Financing:** To develop linkages between banks and small farmers through cross guarantee by the input suppliers and traders/processor, SBP issued financing guidelines for Value Chain Contract Farming. These guidelines are aimed at facilitating banks in development of specialized products and also help small farmers in getting quality inputs, marketing of agriculture produce and timely payments by the traders/processors. SBP recently rolled out a project by assigning disbursement targets to bank for financing to selected value chains in the country during 2015-16.

III. Livestock and Poultry

a) Livestock

Livestock is an important sector of agriculture. Its role is pivotal towards rural socio economic development. Nearly 8 million families involved in livestock raising deriving more than 35 percent income from livestock production activities. It is central to the livelihood of the rural poor in the country. It is a source of cash income, providing a vital and often the only source of income for the rural and most marginal people. It can play an important role in poverty alleviation and foreign

exchange earnings for the country.

Livestock contributed approximately 58.6 percent to the agriculture value added and 11.6 percent to the overall GDP during 2015-16 compared to 56.4 percent and 11.7 percent during the corresponding period last year, respectively. Gross value addition of livestock at constant cost factor of 2005-06 has increased from Rs. 1247 billion (2014-15) to Rs. 1292 billion (2015-16), showing an increase of 3.63 percent over the same period last year. The livestock population for the last three years is given in Table 2.21.

Species	2013-14 ¹	2014-15 ¹	2015-16 ¹
Cattle	39.7	41.2	42.8
Buffalo	34.6	35.6	36.6
Sheep	29.1	29.4	29.8
Goat	66.6	68.4	70.3
Camels	1.0	1.0	1.0
Horses	0.4	0.4	0.4
Asses	4.9	5.0	5.1
Mules	0.2	0.2	0.2

Source: Ministry of National Food Security & Research

¹: Estimated Figure based on inter census growth rate of Livestock Census 1996 & 2006

The major products of livestock are milk and meat which for the last three years are given in Table 2.22.

Species	2013-14 ¹	2014-15 ¹	2015-16 ¹
Milk (Gross Production)	50,990	52,632	54,328
Cow	18,027	18,706	19,412
Buffalo	31,252	32,180	33,137
Sheep ²	38	38	39
Goat	822	845	867
Camel ²	851	862	873
Milk (Human Consumption)³	41,133	42,454	43,818
Cow	14,421	14,965	15,529
Buffalo	25,001	25,744	26,510
Sheep	38	38	39
Goat	822	845	867
Camel	851	862	873
Meat⁴	3,531	3,696	3,873
Beef	1,887	1,951	2,017
Mutton	657	671	686
Poultry meat	987	1,074	1,170

Source: Ministry of National Food Security & Research

1: The figures for milk and meat production for the indicated years are calculated by applying milk production parameters to the projected population of respective years based on the inter census growth rate of Livestock Census 1996 & 2006.

2: The figures for the milk production for the indicated years are calculated after adding the production of milk from camel and sheep to the figures reported in the Livestock Census 2006.

3: Milk for human consumption is derived by subtracting 20% (15% wastage in transportation and 5% in calving) of the gross milk production of cows and buffalo.

4: The figures for meat production are of red meat and do not include the edible offal's.

The estimated production of other livestock products for the last three years is given in Table 2.23.

Table: 2.23 Estimated Livestock Products Production				
Species	Units	2013-14¹	2014-15¹	2015-16¹
Eggs	Million Nos.	14,556	15,346	16,188
Hides	000 Nos.	14,868	15,368	15,886
Cattle	000 Nos.	7,532	7,816	8,111
Buffalo	000 Nos.	7,232	7,447	7,669
Camels	000 Nos.	104	105	106
Skins	000 Nos.	51,872	53,060	54,278
Sheep Skin	000 Nos.	11,001	11,132	11,264
Goat Skin	000 Nos.	25,664	26,359	27,073
<u>Fancy Skin</u>	000 Nos.	15,207	15,569	15,941
Lamb skin	000 Nos.	3,268	3,306	3,345
Kid skin	000 Nos.	11,939	12,263	12,595
Wool	000 Tonnes	44.1	44.6	45.1
Hair	000 Tonnes	25.1	25.8	26.5
Edible Offal's	000 Tonnes	373	383	394
Blood	000 Tonnes	62.8	64.4	66.1
Guts	000 Nos.	52,403	53,603	54,833
Casings	000 Nos.	15,817	16,347	16,895
Horns & Hooves	000 Tonnes	54.0	55.5	57.2
Bones	000 Tonnes	802.9	827.2	852.3
Fats	000 Tonnes	255.8	263.3	271.0
Dung	000 Tonnes	1,136	1,171	1,207
Urine	000 Tonnes	348	358	368
Head & Trotters	000 Tonnes	232.3	238.8	245.6
Ducks, Drakes & Ducklings	Million Nos.	0.5	0.5	0.5

Source: Ministry of National Food Security & Research
¹: The figures for livestock product for the indicated years were calculated by applying production parameters to the projected population of respective years.

The population growth, urbanization, changed eating patterns, increases in per capita income and export opportunities are fueling the demand of livestock and livestock products in the country. The overall livestock development strategy revolves to foster "private sector-led development with public sector providing enabling environment through policy interventions and play capacity building role to improve livestock husbandry practices". The regulatory measures taken are focused around the said policy. They are aimed at improving per unit animal productivity by improving health coverage, management practices, animal breeding practices, artificial insemination services, use of balanced ration for animal feeding, and controlling livestock diseases of trade and economic importance. The objective is to exploit the livestock sector and its potential for economic growth, food security and rural socioeconomic uplift.

b) Poultry

Poultry sector is one of the vibrant segments of livestock sector in Pakistan. This sector provides employment (direct /indirect) to over 1.5 million people. The current investment in Poultry Industry is more than Rs. 200.00 billion. Pakistan has become the 11th largest poultry producer in the world with the production of 1.02 billion broilers annually. Poultry today has been a balancing force to keep check on the prices of mutton and beef, but also serving as backbone of agriculture sector, as it consumes over 7 million metric tons of agro residues. Poultry meat contributes 30 percent of the total meat production in the country. Poultry sector has shown a growth @ 8-10 percent annually which reflects its inherent potential. The poultry has contributed 1.4 percent in GDP during 2015-16 while its contribution in agriculture and livestock value added stood at 6.9 percent and 11.7 percent respectively. The poultry value added

Pakistan Economic Survey 2015-16

at current factor cost has increased from Rs. 140.5 billion (2014-15) to Rs.151.2 billion (2015-16) showing an increase of 7.6 percent compared to

the same period last year. The production of commercial and rural poultry and poultry products for the last three years is given in Table 2.24.

Table 2.24: Domestic/Rural & Commercial Poultry

Type	Units	2013-14 ¹	2014-15 ¹	2015-16 ¹
Domestic Poultry	Million Nos.	82.08	83.32	84.58
Cocks	Million Nos.	10.66	10.95	11.24
Hens	Million Nos.	39.47	40.18	40.90
Chicken	Million Nos.	31.95	32.19	32.43
Eggs ²	Million Nos.	3,947	4,018	4,090
Meat	000 Tonnes	110.79	112.99	115.24
Duck, Drake & Duckling	Million Nos.	0.50	0.48	0.46
Eggs ²	Million Nos.	22.17	21.25	20.36
Meat	000 Tonnes	0.67	0.65	0.62
Commercial Poultry	Million Nos.	50.1	53.4	56.9
Layers	Million Nos.	39.86	42.65	45.64
Broilers	Million Nos.	722.39	794.63	874.09
Breeding Stock	Million Nos.	10.19	10.70	11.24
Day Old Chicks	Million Nos.	754.54	829.99	912.99
Eggs ²	Million Nos.	10,586	11,307	12,077
Meat	000 Tonnes	875.24	960.65	1,054.46
Total Poultry				
Day Old Chicks	Million Nos.	786	862	945
Poultry Birds	Million Nos.	855	932	1,016
Eggs	Million Nos.	14,556	15,346	16,188
Poultry Meat	000 Tonnes	987	1,074	1,170

Source: Ministry of National Food Security & Research

1 : The figures for the indicated years are statistically calculated using the figures of 2005-06.

2 : The figures for Eggs (Farming) and Eggs (Desi) is calculated using the poultry parameters for egg production.

Poultry Development Policy (2007) envisions sustainable supply of wholesome poultry meat; eggs and value added products to the local and international markets. It is aimed at facilitating private sector-led development for sustainable poultry production. The strategy revolves around supporting private sector through regulatory measures.

Government Policy Measure

Livestock Wing (Ministry of National Food Security & Research) with its redefined role under 18th Constitutional amendment continued regulatory measures that included allowing import of high yielding animals, semen and embryos for the genetic improvement of indigenous dairy animals, allowing import of high quality feed stuff/micro ingredients for improving the nutritional quality of animal & poultry feed and allowing import of veterinary, dairy and livestock machinery / equipment at reduced duty rates in

order to encourage establishment of value added industry in the country. Livestock insurance scheme for farmers having 10 animals or more, introduced last year i.e. 2014-15 promoted cooperative dairy farming in the country. Zero rating on processed valued added chicken products has been withdrawn.

Livestock Wing also provided facilitation for export of red meat. A total of 46.242 thousand tons of red meat was exported from 2015-16 (July-March). The export of meat fetched US \$ 144.864 million. This meat was exported from 31 private sector slaughterhouses. During 2015-16 (July-March), export facilitation was also provided for livestock by-products like animal casing, bones, horns & hooves and gelatin. The case of market access has been taken up with the concerned authorities of Russia, China, South Africa, Egypt, Hong Kong and Indonesia through diplomatic channel for export of our meat and meat products.

Livestock Wing regulated import of superior quality semen and high yielding exotic dairy cattle of Holstein-Friesian & Jersey breeds for genetic improvement of indigenous dairy animals. During 2015-16 (July-March), 150.68 thousand doses of semen and 5,205 exotic dairy cows were imported. The exotic dairy cows added approximately 39,688 tons of milk per annum in the commercial milk chain/system.

In order to facilitate dairy farmer, duty free import of calf milk replacer & cattle feed premix was allowed. During 2015-16 (July-March), 324.495 metric tons of calf milk replacer & 311.530 metric tons of cattle feed premix was imported. Similarly, to promote and encourage value added livestock processing industry in the country, duty free import of machinery for milk, beef, mutton & poultry processing was allowed.

During 2015-16 (July-March), the Animal Quarantine Department (AQD) provided quarantine services and issued 29,297 Health Certificates for the export of live animals, mutton, beef, eggs and other livestock products having value of US\$ 303.468 million. The AQD generated non-tax revenue of Rs. 117.216 million during 2015-16 (July-March) as certificate / laboratory examination fee of animal and animal products exported during the year.

The National Veterinary Laboratory (NVL), Islamabad is a national institution for service and regulatory support to national livestock wealth with mission to promote greater productivity and profitability from the livestock industries in Pakistan. The NVL conducted surveillance and diagnostic on highly contagious diseases of animals. It also carried out activities on National and Regional Projects regarding prevention and control of Transboundary Animal Diseases in Pakistan. During July - February 2015-16, 8,651 samples were analyzed for disease diagnosis, veterinary vaccines and residue testing. These samples were submitted from provincial livestock departments, development projects, ICT, AJK and FATA besides animal product exporters.

Livestock Wing also collaborated with international (Office International des Epizooties OIE, Food and Agriculture Organization FAO) and regional organizations (South Asian

Association for Regional Cooperation SAARC, Economic Cooperation Organization ECO, Animal Production & Health Commission for Asia APHCA, European Union EU) for Human Resource Department (HRD) and capacity building of national and provincial livestock institutions for diagnosis and control of animal diseases. Inter Provincial Coordination is being done by the Livestock Wing to implement the National Programme to Control Foot & Mouth Disease and Peste des Petitis Ruminants (PPR) disease in Pakistan. Pakistan has been progressing on OIE FMD freedom pathway and moved to stage 02 of the 06 stage pathway. A National Foot and Mouth Disease (FMD) Control Programme has been through from National Assembly Standing Committee on Ministry of National Food Security & Research to sustain and continue project activities during the subsequent years. This will help in improving animal health status of the country regarding Transboundary animal diseases. Moreover, Ministry has filed an application in 2015 in World Animal Health Organisation (OIE), France to declare Pakistan free from Mad Cow disease (BSE). The said dossier is currently in the process of assessment / evaluation stage in OIE.

Ministry of National Food Security & Research made concerted efforts in order to lift ban on export of poultry and poultry products by Saudi Arabia. This was imposed on account of bird flu diseases in the country. Saudi Technical Delegation visited the country to inspect the processing facilities of some of the companies dealing with hatching eggs and day old chicks. The Saudi Delegation, after inspection, allowed 11 Pakistani Companies for the export of hatching eggs and day old chicks to Saudi Arabia. Efforts are on a way that UAE may also lift ban on import of poultry and poultry products from Pakistan.

Future Plans

The Future Plans include Inter-Provincial Coordination for development of livestock sector, Coordination with private sector to promote value addition livestock industry and diversification of livestock products, Controlling Trans-boundary Animal Diseases (FMD, PPR, Zoonotic diseases) of trade and economic importance through provincial participation & exploring new markets

for export of beef & mutton and poultry meat with focus Global Halal Food Trade Market.

IV. Fisheries

Fishery and fishing are important means of food in Pakistan's economy and is considered to be a source of livelihood for the coastal areas. A part from marine fisheries, inland fisheries (based in rivers, lakes, ponds, dams etc.) is also very important activity throughout the country. Fisheries share in GDP although very little but it adds substantially to the national income through export earnings.

During 2015-16 (July-March), total marine and inland fish production was estimated 501,000 m. tons out of which 368,000 m. tons was marine production and the remaining catch came from inland waters. Whereas the production for the period 2014-15 (July-March), was estimated to be 499,000 m. tons in which 365,000 m. tons was marine and the remaining was produced by inland fishery sector.

A total of 91,965 m. tons of fish and fish preparations was exported during 2015-16 (July-March). Pakistan's major buyers are China, Thailand, Malaysia, Middle East, Sri Lanka, Japan, etc. Pakistan earned US \$ 240.108 million. Whereas the export of fish and fish preparations for 2014-15 (July-March) was 99,203 m. tons amounting US \$ 253.497 million. The exports of fish and fish preparations have been decreased by 7.30 percent in quantity and in value have been decreased by 5.28 percent during 2015-16 (July-March).

Government of Pakistan is taking a number of steps to improve fisheries sector. Further number of initiative are being taken by MFD and provincial fisheries department which includes *inter alia* strengthening of extension services, introduction of new fishing methodologies, development of value added products, enhancement of per capita consumption of fish, up-gradation of socio-economic conditions of the fishermen's community.

i) Biological and Hydrological Research

During 2015-16 (July-March), samples of seawater collected from coastal areas were analyzed to determine parameters which affect

fish distribution. During 2015-16 (July-March), fish samples of different species were examined for study of length-weight relationship, sex ratio, maturity, food and feeding habit and fecundity etc. Monitoring for fish landing to determine stock position was also carried out at Karachi Fish Harbour.

ii) Quality Control Services

Marine Fisheries Department is responsible to regulate quality and promote export of fish and fishery products and to prevent export of substandard quality of seafood products and for matters connected therewith and ancillary thereto. In this connection, during 2015-16 (July-March) , the Quality Control Section of MFD has issued 11,623 certificates of Quality & Origin and health for seafood commodities exported from Pakistan.

iii) Export of Fish and Fishery Products to the European Union (EU) Countries

With the efforts of Ministry of Ports and Shipping the exports of Fish & Fishery products from two processing plants to the EU countries has been resumed after six years of its suspension (i.e. after April 12th , 2007). Since resumption of export to the EU countries total 126 consignments of cuttle fish, shrimps and fish sent from one company to the EU and have been successfully cleared after 100 percent laboratory analysis at EU border.

Hopefully, some other fish processing establishment will also be enlisted by the EU in near future. In order to meet the requirement of EU and other importing countries, two (02) laboratories of MFD (i.e. Microbiology & Chemical) were got accredited from Pakistan National Accreditation Council upto 2015.

iv) Renovation of other Landing Sites / Auction Halls

The administration of Gwadar Fish Harbour, and Karachi Fish Harbour Karachi, has been approached by MFD to renovate the Harbour facility as per requisite hygienic standards.

v) Turtle Excluder Device (TED) and Trials of TED by Local Fishermen

Two members of inspection team visited MFD from USA on 16-18 February, 2016 to verify the installation of TED in the shrimp trawler in

Pakistan and found satisfactory. 2523 fishermen/fisheries personnel were trained on different aspects of Hygiene, Deckhand, Navigational Electronic equipments, HACCP and modern fishing techniques etc.

MFD, Government of Pakistan, whereas around 88 fishermen, including representatives of the other organizations participated in the training for fishermen for using TED. The primary purpose of TED is to reduce the mortality of sea turtles in fishing nets, while safeguarding the livelihood of the local fishermen.

The TED is mandatory in the World Trade Organization's environmental clauses. Pakistan is also a signatory to the FAO's Code of Conduct for responsible fishing. The federal and provincial governments have assigned the task to the Maritime Security Agency for ensuring compliance with the TED on all the fishing boats in the sea.

vi) Modernized the Fishing Fleets

The traditional fishing fleet will be modernized by

providing high-power engines, navigational and communication equipment and improvement of deck facilities, in order to enhance their capability to fish in relatively deeper waters as per requirements of EU continue. As a result of introduction of modular boats by MFD, the boat owners have started modification of their boats on their own expenses. This is a success story which shows that the fishermen community has accepted the technology of lining of fish holds with fibreglass coating. 1178 fishing boats including Trawler, Gillnetters and (TLH with winch); Horas and Doondas are modified and upgraded.

Conclusion

Agriculture sector growth declined by 0.19 percent, primarily on account of decline in cotton crop production by 27.8 percent. To reap maximum potential of cotton crop in future on sustainable basis a comprehensive road map for achieving higher cotton production is being devised by taking short and medium terms measures. In addition the Kissan Package will also help farmers against the unprecedented climate behaviour going forward.



AGRICULTURE

TABLE 2.1 A

INDEX OF AGRICULTURAL PRODUCTION

Fiscal Year	1999-2000 Base				2005-06 Base				
	All major crops	Food crops	Fibre crops	Other crops	Food crops			Cash crop	Fibre crop
					Wheat	Maize	Rice	Sugarcane	Cotton
2000-01	93.0	91.2	95.0	94.0	-	-	-	-	-
2001-02	97.0	85.2	94.4	103.6	-	-	-	-	-
2002-03	104.0	91.8	90.8	112.1	-	-	-	-	-
2003-04	107.0	94.9	89.4	115.1	-	-	-	-	-
2004-05	104.0	106.4	126.9	101.9	-	-	-	-	-
2005-06	101.0	107.0	116.0	95.6	100.0	100.0	100.0	100.0	100.0
2006-07	117.0	115.0	114.0	118.0	109.5	99.3	98.0	122.6	98.7
2007-08	126.0	108.0	104.0	138.0	98.5	115.9	100.3	143.1	89.5
2008-09	114.0	124.0	105.0	108.0	113.0	115.5	125.3	112.0	90.8
2009-10	111.0	119.0	115.0	106.0	109.6	104.9	124.1	110.5	99.2
2010-11	119.0	120.0	102.0	119.0	118.5	119.2	87.0	123.8	88.0
2011-12	123.0	120.0	121.0	125.0	110.3	139.5	111.1	130.7	104.4
2012-13	-	-	-	-	113.8	135.7	99.8	142.7	100.1
2013-14	-	-	-	-	122.1	159.0	122.6	151.0	98.1
2014-15	-	-	-	-	117.9	158.7	126.2	140.7	107.2
2015-16 P	-	-	-	-	119.8	158.2	122.8	146.6	77.4

P: Provisional (Jul-Mar)

Source: Pakistan Bureau of Statistics

TABLE 2.1 B

BASIC DATA ON AGRICULTURE

Fiscal Year	Cropped Area (million hectares)	Improved Seed distribution (000 Tonnes)	Water* Availability (MAF)	Fertilizer Offtake (000 N/T)	Credit disbursed (Rs million)	Tube wells Public & Private (Number in 000)
2000-01	22.04	193.80	134.77	2,964.00	44,790	659.3
2001-02	22.12	191.57	134.63	2,929.00	52,314	707.3
2002-03	21.85	172.02	134.48	3,020.00	58,915	769.0
2003-04	22.94	178.77	134.78	3,222.00	73,446	950.1
2004-05	22.78	218.12	135.68	3,694.04	108,733	984.3
2005-06	23.13	226.07	137.98	3,804.00	137,474	999.6
2006-07	23.56	218.60	137.80	3,672.00	168,830	1,025.8
2007-08	23.85	264.67	137.80	3,581.00	211,561	1,016.1
2008-09	24.12	314.63	131.51	3,711.00	233,010	1,070.0
2009-10	23.87	312.63	133.70	4,360.00	248,120	1,088.0
2010-11	22.72	331.02	137.16	3,933.00	263,022	1,103.4
2011-12	22.50	346.38	135.86	3,861.00	293,850	997.7
2012-13	22.56	327.08	137.51	3,621.00	336,247	1,049.4
2013-14	22.73	359.18	137.51	4,089.00	391,353	1,026.5
2014-15	22.67	446.19	138.59	4,316.00	515,875	1,049.6
2015-16 P	22.67	455.05	133.00	3,035.00	385,537	1,086.2 **

P: Provisional (Jul-Mar) *: At farm gate **: Jul-Dec (Contd.)

TABLE 2.1 B (Continued)

BASIC DATA ON AGRICULTURE

Fiscal Year	Production of Tractors (Nos)	Production of meat (000 Tonnes)	Milk (000 Tonnes)	Fish Production (000 Tonnes)	Total Forest Production (000 cu.mtr.)
2000-01	32,553	2,015	26,284	629.6	472
2001-02	24,311	2,072	27,031	637.8	487
2002-03	27,101	2,132	27,811	566.2	266
2003-04	36,059	2,188	28,624	573.5	313
2004-05	44,095	2,271	29,438	580.6	282
2005-06	49,642	2,515	31,970	604.9	265
2006-07	54,431	2,618	32,986	640.0	373
2007-08	53,598	2,728	34,064	885.0	363
2008-09	60,561	2,843	35,160	914.1	347
2009-10	71,607	2,965	36,299	925.8	356
2010-11	71,550	3,094	37,475	699.9	352
2011-12	48,120	3,232	38,617	724.8	354
2012-13	48,871	3,379	39,855	728.8	354
2013-14	34,650	3,531	41,133	735.0	-
2014-15	31,963	3,696	42,454	765.0	-
2015-16 P	21,229	3,873	43,818	501.0	-

P : Provisional (Jul-Mar)

- : Not available

Source: Pakistan Bureau of Statistics

Ministry of National Food Security and Research

TABLE 2.2

LAND UTILIZATION

Fiscal Year	Total Area	Reported Area	Forest Area	Not Avail-able for Cultivation	Culturable Waste	Cultivated Area			Area Sown more than once	Total Cropped Area (7+9)
						Current Fallow	Net Area Sown	Total Area Cultivated (6+7)		
						1	2	3		
2000-01	79.61	59.44	3.77	24.37	9.17	6.73	15.40	22.13	6.64	22.04
2001-02	79.61	59.33	3.80	24.31	8.95	6.60	15.67	22.27	6.45	22.12
2002-03	79.61	59.45	4.04	24.25	8.95	6.61	15.60	22.21	6.25	21.85
2003-04	79.61	59.46	4.01	24.23	9.10	6.23	15.89	22.12	7.05	22.94
2004-05	79.61	59.48	4.02	24.39	8.94	6.86	15.27	22.13	7.51	22.78
2005-06	79.61	57.22	4.03	22.87	8.21	6.72	15.39	22.11	7.74	23.13
2006-07	79.61	57.05	4.19	22.70	8.30	5.72	16.16	21.87	7.40	23.56
2007-08	79.61	57.08	4.21	23.41	8.19	4.93	16.34	21.17	7.51	23.85
2008-09	79.61	57.21	4.21	23.47	8.15	5.04	16.34	21.38	7.78	24.12
2009-10	79.61	57.21	4.23	23.49	8.09	5.20	16.20	21.40	7.67	23.87
2010-11	79.61	57.64	4.26	23.37	7.98	6.38	15.65	22.03	7.07	22.72
2011-12	79.61	57.73	4.26	23.25	8.19	7.05	14.98	22.03	7.52	22.50
2012-13	79.61	57.79	4.26	23.06	8.21	7.04	15.22	22.26	7.34	22.56
2013-14	79.61	57.91	4.55	23.01	8.27	6.68	15.40	22.08	7.33	22.73
2014-15 P	79.61	57.99	4.55	23.01	8.25	6.75	15.35	22.10	7.33	22.67
2015-16 R	79.61	57.99	4.55	23.01	8.25	6.75	15.35	22.10	7.33	22.67

P: Provisional

R: Repeated

Source: Pakistan Bureau of Statistics

Ministry of National Food Security & Research

Note:

1. Total Area Reported is the total physical area of the villages/deh, tehsils or districts etc.
3. Forest Area is the area of any land administered as forest under any legal enactment dealing with forests. Any cultivated area which may exist within such forest is shown under heading "cultivated area".
4. Area Not Available for Cultivation is that uncultivated area of the farm which is under farm home-steads, farm roads and other connected purposes and not available for cultivation.
5. Culturable Waste is that uncultivated farm area which is fit for cultivation but was not cropped during the year under reference nor in the year before that.
6. Current Fallow (ploughed but uncropped) is that area which is vacant during the year under reference but was sown at least once during the previous year
Cultivated Area is that area which was sown at least during the year under reference or during the previous year.
Cultivated Area = Net Area sown + Current Fallow.
7. Net Area Sown is that area which is sown at least once during (Kharif & Rabi) the year under reference.
9. Area Sown more than once is the difference between the total cropped area and the net area sown.
10. Total Cropped Area means the aggregate area of crops raised in a farm during the year under reference including the area under fruit trees.

TABLE 2.3

AREA UNDER IMPORTANT CROPS

Fiscal Year	(000 Hectares)												
	Wheat	Rice	Bajra	Jowar	Maize	Barley	Total Food Grains	Gram	Sugar-cane	Rapeseed and Mustard	Sesamum	Cotton	Tobacco
2000-01	8,181	2,377	390	354	944	113	12,359	905	961	273	101	2,927	46
2001-02	8,058	2,114	417	358	942	111	12,000	934	1,000	269	136	3,116	49
2002-03	8,034	2,225	349	338	935	108	11,989	963	1,100	256	88	2,794	47
2003-04	8,216	2,461	539	392	947	102	12,657	982	1,074	259	60	2,989	46
2004-05	8,358	2,520	343	308	982	93	12,603	1,094	966	243	66	3,193	50
2005-06	8,448	2,621	441	254	1,042	90	12,896	1,029	907	217	82	3,103	56
2006-07	8,578	2,581	504	292	1,017	94	13,066	1,052	1,029	256	71	3,075	51
2007-08	8,550	2,515	531	281	1,052	91	13,020	1,107	1,241	224	76	3,054	51
2008-09	9,046	2,963	470	263	1,052	86	13,880	1,081	1,029	233	91	2,820	50
2009-10	9,132	2,883	476	248	935	84	13,758	1,067	943	178	80	3,106	56
2010-11	8,901	2,365	548	229	974	77	13,094	1,054	988	212	78	2,689	51
2011-12	8,650	2,571	458	214	1,087	72	13,052	1,008	1,058	201	76	2,835	46
2012-13	8,660	2,309	461	198	1,060	73	12,761	992	1,129	224	71	2,879	50
2013-14	9,199	2,789	475	198	1,168	71	13,900	950	1,173	220	82	2,806	49
2014-15	9,204	2,891	462	195	1,142	68	13,962	943	1,141	214	83	2,961	54
2015-16 P	9,260	2,748	486	274	1,144	66	13,978	945	1,132	211	80	2,917	54

P: Provisional (Jul-Mar)

Source: Pakistan Bureau of Statistics

Note: 1 ha = 2.47 acres

TABLE 2.4

PRODUCTION OF IMPORTANT CROPS

Fiscal Year	Wheat	Rice	Bajra	Jowar	Maize	Barley	Total Food Grains	Gram	Sugar-cane	Rapeseed and Mustard	Sesamum	(000 Tonnes)		Tobacco
												Cotton (000 tonnes)	Cotton (000 Bales)	
2000-01	19,024	4,803	199	218	1,643	99	25,987	397	43,606	230	50.7	1,826	10,732	85
2001-02	18,226	3,882	216	222	1,664	100	24,311	362	48,042	221	69.6	1,805	10,613	94
2002-03	19,183	4,478	189	203	1,737	100	25,889	675	52,056	215	19.3	1,737	10,211	88
2003-04	19,500	4,848	274	238	1,897	98	26,855	611	53,419	221	25.0	1,709	10,048	86
2004-05	21,612	5,025	193	186	2,797	92	29,905	868	47,244	203	30.0	2,426	14,265	101
2005-06	21,277	5,547	221	153	3,110	88	30,396	480	44,666	172	35.0	2,215	13,019	113
2006-07	23,295	5,438	238	180	3,088	93	32,337	838	54,742	212	30.0	2,187	12,856	103
2007-08	20,959	5,563	305	170	3,605	87	31,198	475	63,920	176	32.8	1,982	11,655	108
2008-09	24,033	6,952	296	165	3,593	82	35,121	741	50,045	188	41.0	2,010	11,819	105
2009-10	23,311	6,883	293	154	3,261	71	33,973	562	49,373	151	33.4	2,196	12,914	119
2010-11	25,214	4,823	346	141	3,707	71	34,302	496	55,309	188	31.0	1,949	11,460	103
2011-12	23,473	6,160	304	137	4,338	66	34,478	284	58,397	164	30.2	2,310	13,595	98
2012-13	24,211	5,536	311	123	4,220	67	34,468	751	63,750	205	29.2	2,214	13,031	108
2013-14	25,979	6,798	301	119	4,944	67	38,208	399	67,460	203	32.4	2,170	12,769	130
2014-15	25,086	7,003	295	115	4,937	63	37,499	379	62,826	196	33.1	2,372	13,960	120
2015-16 P	25,482	6,811	299	161	4,920	61	37,734	312	65,475	194	32.4	1,712	10,074	120

P: Provisional (Jul-Mar)

Source: Pakistan Bureau of Statistics

TABLE 2.5

YIELD PER HECTARE OF MAJOR AGRICULTURAL CROPS

Fiscal Year	(Kg/Hectare)					
	Wheat	Rice	Sugarcane	Maize	Gram	Cotton
2000-01	2,325	2,021	45,376	1,741	439	624
2001-02	2,262	1,836	48,042	1,766	388	579
2002-03	2,388	2,013	47,324	1,858	701	622
2003-04	2,375	1,970	49,738	2,003	622	572
2004-05	2,568	1,995	48,906	2,848	793	760
2005-06	2,519	2,116	49,246	2,985	467	714
2006-07	2,716	2,107	53,199	3,036	797	711
2007-08	2,451	2,212	51,507	3,427	429	649
2008-09	2,657	2,346	48,634	3,415	685	713
2009-10	2,553	2,387	52,357	3,487	527	707
2010-11	2,833	2,039	55,981	3,806	471	725
2011-12	2,714	2,396	55,196	3,991	282	815
2012-13	2,796	2,398	56,466	3,981	757	769
2013-14	2,824	2,437	57,511	4,233	420	774
2014-15	2,726	2,422	55,062	4,323	402	802
2015-16 P	2,752	2,479	57,840	4,301	330	587

P: Provisional

Source: Pakistan Bureau of Statistics

TABLE 2.6

PRODUCTION AND EXPORT OF FRUIT

Fiscal Year	Production of Important Fruit (000 tonnes)								Export	
	Citrus	Mango	Apple	Banana	Apricot	Almonds	Grapes	Guava	(000 tonnes)	Value (Mln. Rs)
2000-01	1,898	990	439	139	126	33	51	526	260	4,575
2001-02	1,830	1,037	367	150	125	26	53	539	290	5,084
2002-03	1,702	1,035	315	143	130	24	52	532	263	4,815
2003-04	1,760	1,056	334	175	211	24	51	550	354	5,913
2004-05	1,944	1,671	352	148	205	23	49	571	281	5,408
2005-06	2,458	1,754	351	164	197	23	49	552	455	7,508
2006-07	1,472	1,719	348	151	177	23	47	555	343	6,894
2007-08	2,294	1,754	442	158	240	27	75	539	411	9,085
2008-09	2,132	1,728	441	157	238	26	76	512	469	12,519
2009-10	2,150	1,846	366	155	194	22	65	509	687	20,094
2010-11	1,982	1,889	526	139	190	22	64	547	669	25,017
2011-12	2,147	1,700	599	97	189	21	64	495	737	32,068
2012-13	2,002	1,680	556	116	179	22	64	500	718	38,085
2013-14	2,168	1,659	606	119	178	22	66	496	784	45,196
2014-15	2,395	1,717	617	118	171	22	66	488	682	44,375
2015-16 P	2,395	1,636	616	128	169	22	66	495	593	37,254

P: Provisional (Jul-Mar)

Source: Pakistan Bureau of Statistics

TABLE 2.7**CROP WISE COMPOSITION OF OUTPUT OF IMPORTANT AGRICULTURAL CROPS
(AT CONSTANT BASIC PRICES BASE 2005-06)**

Fiscal Year/ Crops	(% Share)								
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2103-14	2014-15	2015-16 P
Important Crops	100	100	100	100	100	100	100	100	100
Food Crops	57.94	62.82	60.43	61.92	58.94	58.79	61.21	59.95	64.88
Wheat	38.08	41.75	40.14	44.07	38.92	40.21	40.29	38.63	42.17
Maize	7.51	7.08	6.47	7.50	8.32	8.09	8.88	8.83	9.45
Rice	12.35	13.99	13.83	10.34	11.69	10.49	12.04	12.49	13.06
Cash Crop	14.62	10.77	10.66	12.03	11.83	13.15	13.09	12.11	13.61
Sugarcane	14.62	10.77	10.66	12.03	11.83	13.15	13.09	12.11	13.61
Fibre Crop	27.44	26.40	28.91	26.05	29.23	28.06	25.70	27.95	21.72
Cotton	27.44	26.40	28.91	26.05	29.23	28.06	25.70	27.95	21.72

P: Provisional

Source: Pakistan Bureau of Statistics

TABLE 2.8

CREDIT DISBURSED BY AGENCIES

(Rs. in Million)							
Fiscal Year	ZTBL	Domestic Private Banks	PPCBL	Commercial Banks	MFBs	Islamic Banks*	Total
2000-01	27,610	-	5,124	12,056	-	-	44,790
2001-02	29,108	593	5,128	17,486	-	-	52,314
2002-03	29,270	1,421	5,485	22,739	-	-	58,915
2003-04	29,933	2,702	7,564	33,247	-	-	73,446
2004-05	37,409	12,407	7,607	51,310	-	-	108,733
2005-06	47,594	16,023	5,889	67,967	-	-	137,474
2006-07	56,473	23,976	7,988	80,393	-	-	168,830
2007-08	66,939	43,941	5,931	94,749	-	-	211,561
2008-09	75,139	41,626	5,579	110,666	-	-	233,010
2009-10	79,012	43,777	5,722	119,609	-	-	248,120
2010-11	65,361	50,187	7,162	140,312	-	-	263,022
2011-12	66,068	60,876	8,520	146,271	12,115	-	293,850
2012-13	67,068	69,271	8,304	172,833	18,770	-	336,247
2013-14	77,920	84,813	8,809	195,488	22,796	1,527	391,353
2014-15	95,827	108,708	10,486	262,912	32,951	4,991	515,875
2015-16 P	55,300	84,837	6,102	198,811	34,487	5,999	385,537

P: Provisional (Jul-Mar) - : Not available

Source: State Bank of Pakistan

ZTBL: Zarai Taraqiati Bank Limited

PPCBL: Punjab Provincial Corporative Bank Limited

Commercial Banks: Include ABL, HBL, MCB, NBP & UBL

MFBs: 9 Micro Finance Banks

*: 5 Islamic Banks

TABLE 2.9

FERTILIZER OFFTAKE AND IMPORTS OF FERTILIZERS & PESTICIDES

Fiscal Year	Fertilizer Offtake (000 N/Tonnes)				Import of Fertilizers 000 N/Tonnes	Import of Insecticides	
	Nitrogen	Phosphorus	Potash	Total		Quantity (Tonnes)	Value (Mln Rs.)
2000-01	2,264	677	23	2,966	580	21,255	3,477
2001-02	2,285	625	19	2,929	626	31,783	5,320
2002-03	2,349	650	20	3,020	766	22,242	3,441
2003-04	2,527	674	22	3,222	764	41,406	7,157
2004-05	2,796	864	33	3,694	784	41,561	8,281
2005-06	2,926	851	27	3,804	1,268	33,954	6,804
2006-07	2,650	979	43	3,672	796	29,089	5,848
2007-08	2,925	630	27	3,582	876	27,814	6,330
2008-09	3,034	651	25	3,710	568	28,839	8,981
2009-10	3,476	860	24	4,360	1,444	38,227	13,473
2010-11	3,134	767	32	3,933	645	36,183	13,178
2011-12	3,207	633	21	3,861	1,177	32,152	12,255
2012-13	2,853	747	21	3,621	735	17,882	8,507
2013-14	3,185	881	24	4,089	1,148	23,546	12,572
2014-15	3,309	975	33	4,316	984	23,157	14,058
2015-16 P	2,192	828	16	3,035	797	15,540	12,089

P: Provisional, (Jul-Mar)

Source: Pakistan Bureau of Statistics
National Fertilizer Development Centre

TABLE 2.10

AVERAGE RETAIL SALE PRICES OF FERTILIZERS

Fiscal Year	(Rs. per bag of 50 Kgs)							
	Urea (46% N)	AN/CAN (26% N)	AS (21% N)	NP (23:23)	SSP(G) (18%)	DAP (18:46)	SOP (50% K)	NPK (10:20:20)
2000-01	363.0	233.0	300.0	468.0	253.0	670.0	682.0	-
2001-02	394.0	268.0	308.0	519.0	280.0	710.0	765.0	-
2002-03	411.0	282.0	344.0	539.0	287.0	765.0	780.0	-
2003-04	420.0	208.0	373.0	622.0	329.0	913.0	809.0	-
2004-05	468.0	353.0	405.0	704.0	373.0	1,001.0	996.0	-
2005-06	509.0	395.0	744.0	710.0	407.0	1,079.0	1,170.0	-
2006-07	527.0	396.0	779.0	670.0	334.0	993.0	985.0	-
2007-08	581.0	471.0	867.0	1,267.0	572.0	1,934.0	1,497.0	-
2008-09	751.0	704.0	1,330.0	1,700.0	874.0	2,578.0	2,091.0	-
2009-10	799.0	701.0	1,223.0	1,452.0	726.0	2,267.0	2,370.0	-
2010-11	1,035.0	843.0	1,124.0	2,108.0	896.0	3,236.0	2,807.0	-
2011-12	1,719.0	1,392.0	-	2,691.0	1,260.0	4,054.0	3,797.0	-
2012-13	1,799.0	1,443.0	-	2,524.0	1,172.0	3,902.0	3,945.0	-
2013-14	1,827.0	1,566.0	-	2,513.0	1,050.0	3,640.0	4,233.0	-
2014-15	1,883.0	1,606.0	-	2,584.0	1,012.0	3,677.0	4,904.0	-
2015-16 P	1,893.0	1,591.0	-	2,456.0	996.0	3,531.0	5,248.0	-

P: Provisional (Jul-Mar)

- Not available

Source: Pakistan Bureau of Statistics

AN/CAN: Ammonium Nitrate/Calcium Ammonium Nitrate

National Fertilizer Development Centre

ASN: Ammonium Super Nitrate

AS: Ammonium Sulphate

DAP: Diammonium Phosphate

NP: Nitrophosphate

SOP: Sulphate of Potash

SSP: Single Super Phosphate

NPK: Nitrogen Phosphate and Potash

TABLE 2.11**AREA IRRIGATED BY DIFFERENT SOURCES**

Fiscal Year	Canals	Wells	Canal Wells	Tube wells	(Million hectares)		Total
					Canal Tube wells	Others	
2000-01	6.98	0.16	0.10	3.19	7.22	0.17	17.82
2001-02	6.81	0.20	0.16	3.45	7.24	0.18	18.04
2002-03	7.06	0.21	0.17	3.42	7.17	0.20	18.22
2003-04	7.22	0.22	0.15	3.49	7.47	0.21	18.76
2004-05	7.00	0.25	0.19	3.46	7.70	0.24	18.84
2005-06	7.06	0.28	0.20	3.58	7.78	0.22	19.12
2006-07	6.78	0.67	0.22	3.89	7.78	0.25	19.59
2007-08	6.91	0.31	0.17	3.83	7.79	0.28	19.29
2008-09	6.81	0.31	0.20	3.82	7.94	0.24	19.39
2009-10	6.78	0.31	0.26	3.88	7.07	0.28	20.06
2010-11	6.39	0.36	0.25	3.92	7.60	0.72	19.24
2011-12	6.30	0.35	0.19	4.03	7.86	0.72	19.45
2012-13	5.65	0.30	0.19	3.81	7.86	0.19	18.00
2013-14	5.96	0.38	0.27	3.71	8.15	0.17	18.64
2014-15	5.96	0.38	0.27	3.71	8.15	0.17	18.64
2015-16	-	-	-	-	-	-	-

- : Not available

Source: Pakistan Bureau of Statistics
Ministry of National Food Security & Research

TABLE 2.12

PROCUREMENT/SUPPORT PRICES OF AGRICULTURAL COMMODITIES

Fiscal Year	Wheat	Rice		Paddy			Sugarcane (at factory gate)			
		Basmati	Irri-6	Basmati	Basmati	Irri-6	Khyber	Punjab	Sindh	Baloch-
		385	(F.A.Q)	385	Super/2000		Pakhtunkhwa			istan
2000-01	300.0	-	-	385.0	460.0	205.0	35.0	35.0	36.0	36.0
2001-02	300.0	-	-	385.0	460.0	205.0	42.0	42.0 **	43.0	43.0
2002-03	300.0	-	-	385.0	460.0	205.0	42.0	42.0	43.0	43.0
2003-04	350.0	-	-	400.0	485.0	215.0	42.0	42.0	43.0	43.0
2004-05	400.0	-	-	415.0	510.0	230.0	42.0	42.0	43.0	43.0
2005-06	415.0	-	-	460.0	560.0	300.0	48.0	45.0	60.0	-
2006-07	425.0	-	-	-	-	306.0	65.0	65.0	67.0	-
2007-08	625.0	-	-	-	-	-	65.0 **	65.0 **	63.0	-
2008-09	950.0	2,500.0	1,400.0	1,250.0 *	1,500.0	700.0	80.0	80.0	81.0	-
2009-10	950.0	-	-	1,000.0 *	1,250.0	600.0	100.0	100.0	102.0	-
2010-11	950.0	-	-	-	-	-	125.0	125.0	125.0	-
2011-12	1,050.0	-	-	-	-	-	150.0	150.0	154.0	-
2012-13	1,200.0	-	-	-	-	-	170.0	170.0	172.0	-
2013-14	1,200.0	-	-	-	-	-	170.0	170.0	172.0	-
2014-15	1,300.0	-	-	-	-	-	180.0	180.0	182.0	-
2015-16	1,300.0	-	-	-	-	-	180.0	180.0	172.0	-

F.A.Q : Fair Average Quality - : Not available

*: Price of Basmati Super (Paddy) Rs. 1500/40kg for 2008-09 and Rs. 1250 for 2009-10

** : Sugarcane prices are fixed by the respective Provincial Government

(Contd.)

TABLE 2.12 (Continued)

PROCUREMENT/SUPPORT PRICES OF AGRICULTURAL COMMODITIES

Fiscal Year	Cotton Lint				Seed Cotton (Phutti)				Potato	Onion
	Desi	AC-134, NT	B-557 149-F	Sarmast Qallandri Delta-pine MS-39-40	Desi	AC-134, NT	B-557 F-149 Niab-78	Sarmast Qallandri Delta-pine MS-39-40		
2000-01	-	-	-	-	-	-	725.0 *	-	145.0	-
2001-02	-	-	-	-	-	-	780.0 **	-	-	-
2002-03	-	-	-	-	-	-	800.0 **	-	-	-
2003-04	-	-	-	-	-	-	850.0 **	-	-	-
2004-05	-	-	-	-	-	-	925.0 **	-	-	-
2005-06	-	-	-	-	-	-	975.0 **	-	-	-
2006-07	-	-	-	-	-	-	1025.0	-	-	-
2007-08	-	-	-	-	-	-	1025.0	-	-	-
2008-09	-	-	-	-	-	-	1465.0	-	-	-
2009-10	-	-	-	-	-	-	-	-	-	-
2010-11	-	-	-	-	-	-	-	-	-	-
2011-12	-	-	-	-	-	-	-	-	-	-
2012-13	-	-	-	-	-	-	-	-	-	-
2013-14	-	-	-	-	-	-	-	-	-	-
2014-15	-	-	-	-	-	-	3000.0	-	-	-
2015-16	-	-	-	-	-	-	3000.0 **	-	-	-

- : Not available

*: Niab-78, CIM

** : As recommended by API

Source: Ministry of National Food Security & Research

TABLE 2.13

PROCUREMENT, RELEASES AND STOCKS OF WHEAT AND RICE

Fiscal Year	(000 tonnes)						
	Wheat (May-April)			Rice Procured		Stocks Balance (as on 1st July)	
	Procurement	Releases	Stocks As on 1st May	Basmati	Others	Basmati	Others
2000-01	8,582.0	5,537.0	3,552.0	-	-	-	-
2001-02	4,081.0	3,376.0	3,683.0	-	-	-	-
2002-03	4,045.0	5,130.0	992.0	-	-	-	-
2003-04	3,514.0	4,104.0	161.0	-	-	-	-
2004-05	3,939.0	4,500.0	350.0	-	-	-	-
2005-06	4,514.0	2,088.4	2,107.4	-	-	-	-
2006-07	4,422.0	6,003.0	501.0	-	-	-	-
2007-08	3,918.0	6,320.0	136.0	-	-	-	-
2008-09	9,200.0	5,784.4	821.9	-	-	-	-
2009-10	6,715.0	5,985.0	4,223.0	-	-	-	-
2010-11	6,150.0	6,404.0	3,186.0	-	-	-	-
2011-12	5,792.0	5,820.0	3,506.0	-	-	-	-
2012-13	7,910.0	6,363.0	1,681.0	-	-	-	-
2013-14	5,948.0	6,452.0	1,177.0	-	-	-	-
2014-15	6,131.0	3,957.0	3,351.0	-	-	-	-
2015-16	7,050.0 P	4,468.1	5,016.0	-	-	-	-

P: Provisional

- : Not available

Source: Ministry of National Food Security & Research

As of revised procurement target (May 2016)

TABLE 2.14

LIVESTOCK POPULATION

(Million Numbers)

Fiscal Year	Buffalo	Cattle	Goat	Sheep	Poultry	Camels	Asses	Horses	Mules
2000-01	23.3	22.4	49.1	24.2	292.4	0.8	3.9	0.3	0.2
2001-02	24.0	22.8	50.9	24.4	330.0	0.8	3.9	0.3	0.2
2002-03	24.8	23.3	52.8	24.6	346.1	0.8	4.1	0.3	0.2
2003-04	25.5	23.8	54.7	24.7	352.6	0.7	4.1	0.3	0.2
2004-05	26.3	24.2	56.7	24.9	372.0	0.7	4.2	0.3	0.3
2005-06*	27.3	29.6	53.8	26.5	433.8	0.9	4.3	0.3	0.2
2006-07	28.2	30.7	55.2	26.8	477.0	0.9	4.3	0.3	0.2
2007-08	29.0	31.8	56.7	27.1	518.0	1.0	4.4	0.3	0.2
2008-09	29.9	33.0	58.3	27.4	562.0	1.0	4.5	0.4	0.2
2009-10	30.8	34.3	59.9	27.8	610.0	1.0	4.6	0.4	0.2
2010-11	31.7	35.6	61.5	28.1	663.0	1.0	4.7	0.4	0.2
2011-12	32.7	36.9	63.1	28.4	721.0	1.0	4.8	0.4	0.2
2012-13	33.7	38.3	64.9	28.8	785.0	1.0	4.9	0.4	0.2
2013-14	34.6	39.7	66.6	29.1	855.0	1.0	4.9	0.4	0.2
2014-15	35.6	41.2	68.4	29.4	932.0	1.0	5.0	0.4	0.2
2015-16	36.6	42.8	70.3	29.8	1016.0	1.0	5.1	0.4	0.2

*: Actual figures of Livestock Census 2006

Source: Ministry of National Food Security & Research

Note: From 2006-07 onward figures estimates are based on Inter census growth rate of Livestock Census 1996 & 2006

TABLE 2.15

LIVESTOCK PRODUCTS

Fiscal Year	Milk*	Beef	Mutton	Poultry Meat	Wool	Hair	Bones	Fats	Blood	(000 Tonnes)		
										Eggs (Mln.Nos.)	Hides (Mln.Nos.)	Skins (Mln.Nos.)
2000-01	26,284	1,010	666	339	39.2	18.6	331.4	123.5	41.8	7,505	7.8	38.2
2001-02	27,031	1,034	683	355	39.4	19.3	339.4	126.5	42.9	7,679	7.9	39.2
2002-03	27,811	1,060	702	370	39.7	19.9	347.6	129.7	44.0	7,860	8.2	40.3
2003-04	28,624	1,087	720	378	39.9	20.7	356.2	132.9	45.2	8,102	8.4	42.4
2004-05	29,438	1,115	739	384	40.0	20.7	365.1	136.3	45.2	8,529	8.6	42.6
2005-06**	31,970	1,449	554	512	40.1	20.3	633.5	203.3	51.4	9,712	11.4	43.3
2006-07	32,996	1,498	566	554	40.6	20.8	652.5	209.2	52.7	10,197	11.8	44.3
2007-08	34,064	1,549	578	601	41.0	21.4	672.2	215.3	54.1	10,711	12.2	45.3
2008-09	35,160	1,601	590	652	41.5	22.0	692.4	221.6	55.4	11,258	12.6	46.3
2009-10	36,299	1,655	603	707	42.0	22.6	713.4	228.1	56.8	11,839	13.0	47.4
2010-11	37,475	1,711	616	767	42.5	23.2	735.1	234.8	58.3	12,857	13.5	48.5
2011-12	38,617	1,769	629	834	43.0	23.8	757.5	241.7	59.8	13,114	13.9	49.6
2012-13	39,855	1,829	643	907	43.6	24.4	780.5	248.8	61.3	13,813	14.4	50.7
2013-14	41,133	1,887	657	987	44.1	25.1	802.9	255.8	62.8	14,556	14.9	51.9
2014-15	42,454	1,951	671	1074	44.6	25.8	827.2	263.3	64.4	15,346	15.4	53.1
2015-16	43,818	2,017	686	1170	45.1	26.5	852.3	271.0	66.1	16,188	15.9	54.3

*: Human Consumption

Source: Ministry of National Food Security & Research

**: Actual figures of Livestock Census 2006

Note: From 2006-07 onward figures estimates are based on Inter census growth rate of Livestock Census 1996 & 2006