

2 Real Sector

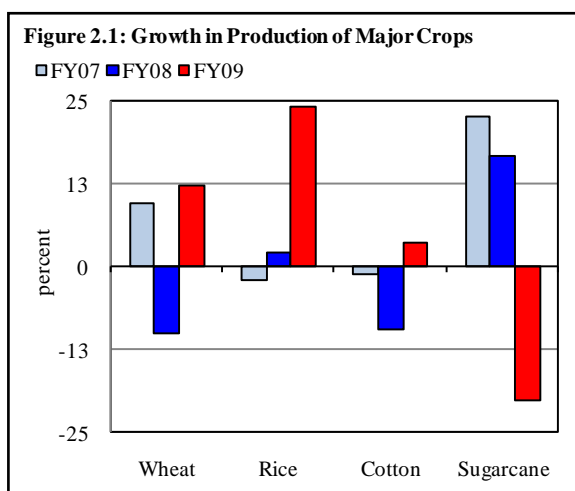
2.1 Agriculture Sector Performance

Robust growth in major crops, despite lower water availability and decline in fertilizer off-take, is principally a reflection of anticipated higher prices, and good luck in terms of favorable weather (see **Figure 2.1**). The good performance by major crops appears to be more impressive given a substantial decline in sugarcane harvest during FY09.

Similarly, growth in production of some pulses, oilseeds and horticulture crops indicates a better performance by minor crops during FY09. More importantly, growth in livestock benefited from higher supply of fodder, following the extended monsoon and winter rains as well as absence of any major incident of diseases during FY09.

All these developments suggest that agriculture growth would be reasonably good during FY09. And it could have been even better if sufficient inputs - irrigation water, fertilizers and certified seeds – would have been used. Less than required irrigation water, concerns over high prices and timely availability of fertilizers, as well as plantation of sub-standard seeds restricted possible gains. Further, the gains from high production in key crops in FY09 could not be fully transmitted to farmers as prices realized by the farmers were below their expectations. For example, following a drop in international rice prices and weaker exports, farmers did not get prices as high as anticipated earlier. In addition, farmers also faced late start of sugarcane crushing and delayed payments, despite domestic shortages of sugar.

Farmers' ability to increase investment in quality inputs may be reflected partially by slower than anticipated growth in agri-credit. The trends so far suggest that the annual target of Rs 250 billion would not be achieved, for the first time since FY05. This would be due to both demand and supply factors. However, for the



next season, credit disbursement is expected to improve. For example, relatively stable fertilizer prices would help restore demand for agri-credit for inputs. Similarly, an ease in monetary policy and SBP measures to address liquidity shortages in the banking system would help improve supply of agri-credit in the months ahead. A substantial increase in fertilizer off-take and agri-credit disbursement recorded during March 2009 would support prospects for continued improvement in agri-growth.

Crops

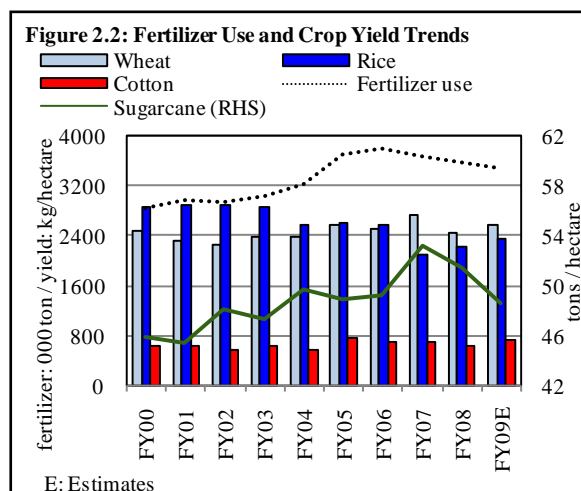
Major crops

Growth in major crops saw recovery during FY09, owing to record production of wheat, rice and maize, despite decline in fertilizer off-take (see **Figure 2.2**). In addition, a substantial growth in gram and a moderate increase in cotton output (despite decline in area) more than offset the drag by relatively disappointing sugarcane crop. The decline in sugarcane harvest was not a surprise, as area under this crop fell during FY09 as the farmers could not realize the anticipated

prices besides disputes between farmers and sugar mills over payments. Growers substituted this area with wheat and rice crops owing to attractive prices for these crops. Despite less than required irrigation water, rice cultivation increased. The crop was supported by monsoon rains later on. Wheat sowing area increased mainly due to higher wheat support prices, announced before sowing time. Rains at sowing times also helped increase non-irrigated area under wheat during FY09.

Wheat

Despite adversities such as lower fertilizer off-take, higher energy prices, decline in irrigation water availability, FY09 wheat harvest provisionally estimated to have reached record high of 23,302 thousand tons,¹ slightly higher than 23,295 thousand tons achieved in FY07. This increase seems more impressive given



¹ Likely to be revised upward.

losses at maturing stage due to rains and hailstorms in upper Punjab. An improvement in wheat output is largely attributed to timely announcement of support price for wheat at Rs 950/40kg with commitment of 6.5 million tons procurement, with effective campaign to grow more wheat. Moreover, front, provincial governments aggressive procurement operations help stabilize wheat prices in open market. In response of a bumper wheat crop and to supplement the government's efforts, SBP has also abolished the margin requirement on wheat financing.² In addition, despite slowdown in availability of necessary yield boosting inputs, wheat yield also improved due to supportive weather conditions during sowing and most of the growth period.

Wheat crop performance in FY09 may have improved further, if (1) recommended balanced use of fertilizers was followed, (2) more certified seeds were used, and (3) irrigation water for 4-5 spells were made possible from the canal system.

In recent years, despite substantial wheat harvests that were above domestic consumption, wheat shortages resulted in repeated crisis mainly due to illegal cross boarder movement of the grain or speculative hoarding. However, since domestic wheat prices are now significantly higher than the international prices, it is likely that both of these motives will be absent and wheat prices would remain stable. The only risk to this conclusion is misuse of wheat flour supplied at subsidized rates to provide cheaper bread (nan) to masses. While these types of schemes are necessary, they need strict monitoring. Ideally these should be carefully targeted to the poor.

Rice

Area under rice cultivation registered a healthy growth of 17.7 percent, mainly in response to high prices realized in FY08. Farmers' efficient use of inputs and supportive weather during growth phase resulted in 6.2 percent rise in yield during FY09. Consequently, rice harvest reached to a record 7.0 million tons, up by 25.0 percent over the preceding year.

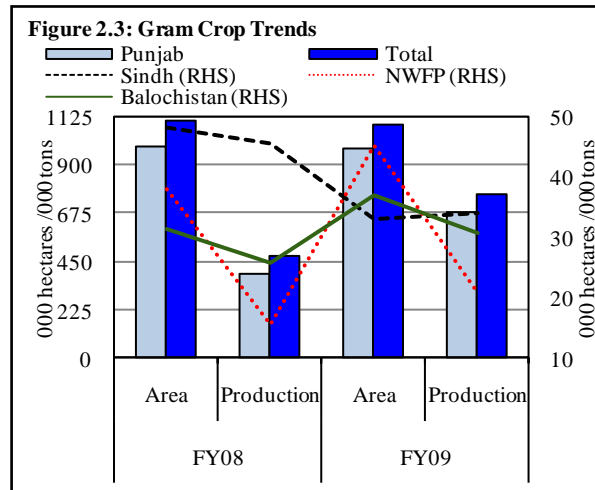
However, benefits of this bumper crop did not translate into an equally strong rise in nominal income of farmers, as a fall in international rice prices led to the adoption of a cautious strategy by the domestic traders. Although, TCP buying operation helped domestic rice prices to stabilize and protect farmers, there were complains that TCP intervention was too little and too late. Encouragingly, despite some fall, FY09 prices have, so far, remained substantially higher than the preceding year. Moreover, recently some rice exporting countries

² SMEFD Circular Letter No. 05 dated April 23, 2009.

imposed/extended restrictions on rice export, as a result rice prices started to inch up again. Nonetheless, despite some gains in prices, it seems difficult to achieve size of the FY09 rice harvest in FY10.

Gram

Gram cultivation is largely concentrated in non-irrigated areas of Punjab (88.7 percent of total production) followed by Sindh, NWFP and Balochistan (see **Figure 2.3**). This crop is mostly planted on marginal lands; hence negligible inputs are being used. The production, of this weather sensitive crop, largely depends on flooding around major rivers in summer and winter rains, which usually contributes for increase in its cultivation. These factors resulted in volatile production performance of gram.

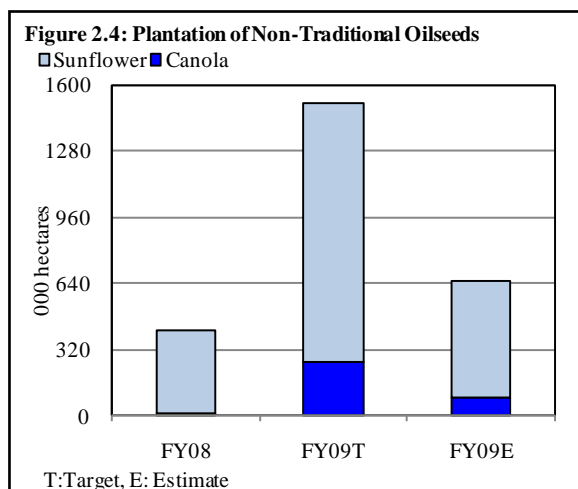


During FY09, following kind weather, gram production is estimated to have significantly increased by 60 percent, this was entirely due to a 62.2 percent rise in yield, as the area under gram cultivation dropped by 1.4 percent. This jump in yield is attributed to favorable weather in terms of timely winter rains. A sustained rise in gram yield is possible with better water management and modern farming techniques.

Minor crops

Minor crops exhibited a mixed performance during FY09. While, a number of minor crops showed decline in production, some crops witnessed strong growth during the year under review. The aggregate performance of minor crops is expected to show a reasonable growth during FY09. This expectation is based on (1) stable prices of most of the minor crops during dominating period of the current fiscal year, as well as, (2) extended monsoon and winter rains. In particular, one of the positive sign regarding oilseed crops is the rise in cultivated area in recent years.

Canola and sunflower crops registered a strong 59.6 percent expansion in their combined planted area during FY09 over the preceding year, (see **Figure 2.4**) principally responding to prevailing higher prices. However, growth in canola output is more pronounced than sunflower. Cultivation of oilseeds needs policy support to meet growing domestic demand for edible oil. It would also help improve trade balance of the country. However, oilseed crops need heavy investment and crop failure may result in unbearable losses to farmers, therefore effective coverage of crop insurance scheme could incentivize risk averse farmers to cultivate these crops.



Similarly, crop failure is common in all other minor crops as they are sensitive to weather and disease incidents.

Importantly, market price signals largely influence the acreage of minor crops. Farmers' collective decision to sow a specific minor crop due to high prevailing prices leads to excess supply, consequently prices of this crop fall. Due to this disappointment, farmers avoid that crop in subsequent period, which results in supply shortages and higher prices. For example, a substantial decline in production of chillies and mung pulse during FY09 is a reflection of large variability (see **Table 2.1**). Small investment in food processing/packaging units may reduce variability in prices of most of the minor crops and may help ensure smooth supply.

Table 2.1: Production of Minor Crops

thousand tons

Crops	FY08	FY09 ^T	FY09 ^E
Potatoes	2,539.0	2,458.3	2,542.7
Onions	2,015.0	2,058.9	1,825.7
Chillies	116.0	104.5	104.6
Mung	177.7	140.4	148.0
Mash	17.3	16.9	16.0
Lentil (Masoor)	14.6	21.2	15.2
Canola	10.3	134.4	89.1
Sunflower	397.0	755.0	560.9

T: Targets, E: Estimates

Among minor crops, herbal crops have a great demand with strong potential to raise farmers' incomes. Traditionally Pakistan depends on imported herbs, thus

small investments in this area may yield favorable results for both, farmers and the national economy. MINFA has worked out a cost and income plan for some selected herbs and recommended commercial cultivation of these crops in potential parts of the country, especially Balochistan, South Punjab etc. Expansion in production will help to meet domestic requirements, reduces prices as well as provides exportable surplus. In addition, this will also create employment opportunities and develop value added products (see **Table 2.2**).

Table 2.2: Estimated Economic Benefits of Herbal Crops
per acre

Herbs	Yield (Kg)	Income (Rs)	Production cost (Rs)	Net income (Rs)
Nigella sativa (kolangi)	350-400	21,000	2,040	18,960
Plantago ovata (Ispagol)	300-400	24,000	2,120	21,880
Matricaria chamomilla (Gul-e-banoona)	150-200	30,000	3,800	26,200
Lallementia royleana (Thkhan-e-Balangoo)	300-400	24,000	2,120	21,880
Carum copticum (Ajwain-desi)	350-450	14,000	1,960	12,040

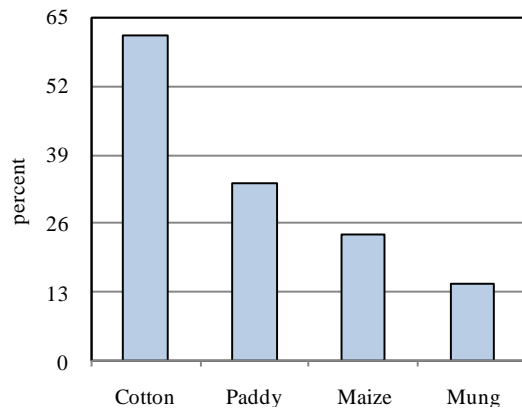
Source: MINFA

Agriculture Inputs

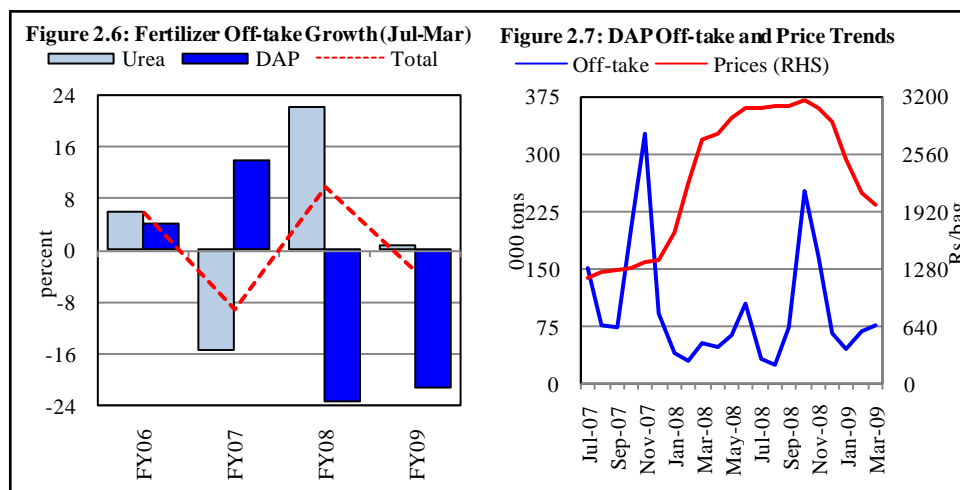
Improved Seeds

Crop seeds have vital role in crop cultivation and good quality seed plays a decisive role in yield maximization. Improved seeds help increasing production levels through maximizing yields and resistance against disease incidence. Current availability of improved seeds for almost all major and minor crops is inadequate to meet the requirements (see **Figure 2.5**). In particular, availability of improved seeds is low in case of minor crops, such as pulses.

Figure 2.5: Improved Seed Availability as Percent of Requirement for FY10 Kharif Crops



In addition, genetically modified seeds also reduce cost of production with higher yield. Encouragingly, cotton yield is likely to increase FY10 onwards due to larger cultivation of genetically modified variety (Bt Cotton).



Fertilizer

In contrast to extended cultivation reflected in increased planted area of most of the crops, fertilizer off-take declined by 3.4 percent during Jul-Mar FY09³ (see **Figure 2.6**) mainly due to non-availability of urea at controlled prices and uncertainty over DAP prices during *rabi* FY09 season (see **Figure 2.7**).

The decline in fertilizer off-take is also a reflection of delayed receipts of rice⁴ and sugarcane crops. However, fertilizer off-take increased during Jan-Mar FY09, the crucial wheat growth period.

Table 2.3: Fertilizer Off-take
million tons

	FY07	FY08	FY09
<u>Urea</u>			
Jul-Sep	1.14	1.37	1.33
Oct-Dec	1.50	1.51	1.46
Jan-Mar	0.87	1.40	1.54
Oct-Mar (Rabi)	2.37	2.85	3.00
<u>DAP</u>			
Jul-Sep	0.17	0.30	0.13
Oct-Dec	0.98	0.62	0.48
Jan-Mar	0.18	0.09	0.19
Oct-Mar (Rabi)	1.16	0.69	0.67
<u>Total (urea and DAP)</u>			
Jul-Mar	4.84	5.31	5.13
Oct-Mar (Rabi)	3.53	3.54	3.67

³ Fertilizer off-take dropped initially by 10.1 percent in Jul-Jan FY09, then recovered somewhat Feb onwards.

⁴ Rice prices realized by the farmers were below their expectations.

While, growth in urea off-take also decelerated, it was substantial decline in DAP consumption that principally contributed to a lower fertilizer off-take during Jul-Mar FY09. A decline of 23.3 percent in DAP off-take during Jul-Mar FY08 was attributed to its rising prices. Ironically, in FY09 sharp downward movement in the prices of DAP led farmers to postpone their purchases of the nutrient, in anticipation of even lower prices, which resulted in further decline in DAP off-take by 21.2 percent during the first nine months of FY09 (see **Table 2.3**).

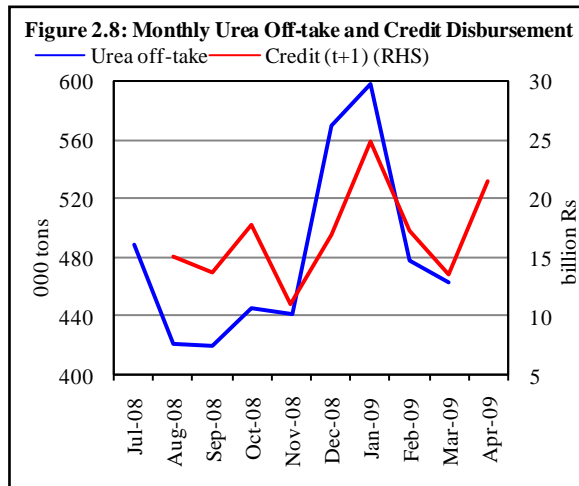
It is important to note that the surge in commodity prices in FY08 underscored the need to increase the production of agriculture commodities. Global demand for

Table 2.4: Mid-term Global Fertilizer Supply Demand Projections FY13

Items	Units	FY08			FY13		
		Supply	Demand	Balance	Supply	Demand	Balance
Nitrogen	Mt N	134.4	131.4	3.0	156.2	146.7	9.5
Phosphoric acid	Mt P ₂ O ₅	38.7	38.1	0.6	46.4	43.4	3.0
Potash	Mt K ₂ O	35.5	33.3	2.2	43.7	36.6	7.1

Source: IFA, June 2008, mid-term outlook FY13

fertilizer is therefore projected⁵ to grow steadily by 3.1 percent annually up to FY13 (see **Table 2.4**), with dominating share in rising demand from Asian countries, including Pakistan. Pakistan may import large quantum of fertilizer due to inadequate domestic production. However, in medium term, country would be able to produce exportable surplus of urea as at least two urea plants are being installed.



⁵ Medium-term Outlook for Global Fertilizer Demand, Supply and Trade: 2008-2013 - International Fertilizer Association (IFA).

Agriculture Credit Disbursement

Growth in agriculture credit disbursement slowed down to 9.6 percent during Jul-Mar FY09, 15.0 percentage points lower than in FY08 (see **Table 2.5**). This was mainly due to the combined impact of lower investment in farm inputs, as well as, risk averse behavior of the banks due to liquidity concerns. Nonetheless, the impact of the former seems more pronounced.

This view is also supported by a correlation between monthly urea off-take and preceding month's credit disbursement (see **Figure 2.8**).⁶ This is also in conformity with the fact that disbursement for production related loans dropped and strong growth in development loans has been observed during this period (see **Figure 2.9**).

Figure 2.9: Purpose-wise Agri-Credit Disbursement Growth (Jul-Mar)

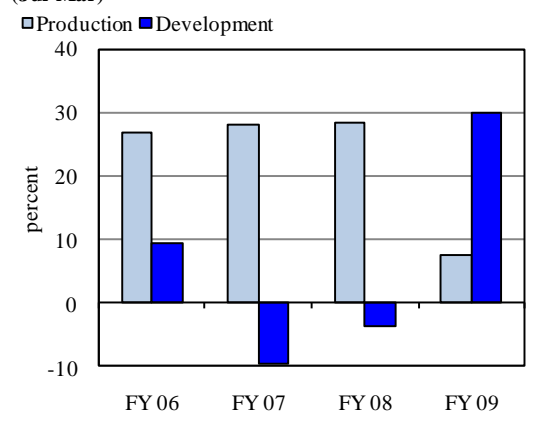


Table 2.5: Agriculture Credit Trends (Jul-Mar)

billion Rupees

Banks	Disbursement			Recoveries			Net credit			Outstanding		
	FY07	FY08	FY09	FY07	FY08	FY09	FY07	FY08	FY09	FY07	FY08	FY09
All CBs	65.0	95.1	102.9	59.7	90.7	104.4	5.3	4.4	-1.5	68.3	77.7	84.3
5- large CBs	49.0	65.1	74.4	46.9	65.8	74.8	2.1	-0.7	-0.5	52.1	54.1	58.8
DBPs	16.1	30.0	28.6	12.8	24.8	29.6	3.3	5.1	-1.0	16.2	23.6	25.5
Specialized banks	46.2	43.5	48.9	39.4	40.0	45.9	6.8	3.4	3.0	74.7	81.1	90.6
ZTBL	40.9	39.6	45.4	35.3	35.9	41.4	5.6	3.6	4.0	66.2	72.5	80.8
PPCBL	5.3	3.9	3.5	4.1	4.1	4.6	1.1	-0.2	-1.0	8.4	8.6	9.8
Total	111.2	138.6	151.9	99.1	130.7	150.4	12.1	7.9	1.5	142.9	158.8	174.9

The rise in development loans is a positive sign as the impact of these disbursements would materialize in future. More importantly, not only these disbursements were made for conventional tractor financing, but also new areas

⁶ Accordingly, a substantial increase in credit disbursement in March-09 indicates a rise in urea off-take in April-09.

such as orchard farming, storage facilities, seed processing, as well as, development of infrastructure for livestock and poultry.

Institution-wise break up suggests that the growth in development loans extended by the commercial banks (CBs) improved from negative 17.7 percent in Jul-Mar FY08 to 35.2 percent during Jul-Mar FY09.⁷ Among specialized banks, disbursement for development purposes by ZTBL also increased by 33.1 percent during July-March FY09. Domestic private banks (DPBs) had rapidly increased their share in agri-credit market since their entry in FY02. However, their share declined during Jul-Mar FY09 for the first time in seven years, probably due to severe liquidity crunch as well as rising NPLs, which restricted DPBs to maintain their rapid growth in agri-credit. Consequently, agri-credit disbursement by DPBs exhibited a fall of 4.7 percent in Jul-Mar FY09, as against a healthy rise of 86.3 percent in the same period last year (see **Figure 2.10**).

Figure 2.10: Share in Agri-Credit Disbusment (Jul-Mar)

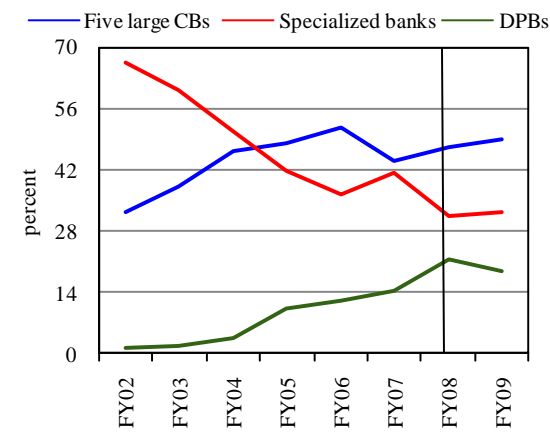
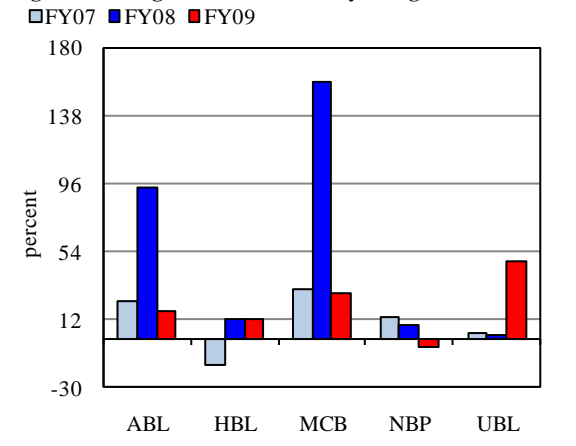


Figure 2.11: Agri -Credit Growth by 5-large CBs



Similarly, agri-credit growth by five large CBs⁸ decelerated to 14.2 percent during Jul-Mar FY09 from 32.9 percent in the corresponding period of FY08. Agri-credit

⁷ In particular, MCB and Faysal Bank made aggressive lending.

⁸ ABL, HBL, MCB, NBP, and UBL.

disbursement decelerated for all these banks, except for UBL which registered a 47.3 percent increase (see **Figure 2.11**).

The major drag was from a decline in the disbursement by NBP, which recorded a fall of 5.4 percent in agri-credit disbursement during Jul-Mar FY09 despite relatively better liquidity position and large branch network. This decline is probably due to delay in disbursement amid introduction of new policies. Encouragingly, credit extended by ZTBL witnessed a sharp increase in this period, which more than offset the impact of lower disbursement by PPCBL and helped improve share of specialized banks in agri-credit market.

Sector-wise Disbursement

Farm sector credit disbursement increased by 4.5 percent to Rs 106.3 billion during Jul-Mar FY09. While, small and medium farmers availed higher agri-credit during Jul-Mar FY09, disbursement to large farmers dropped (see **Table 2.6**). This trend suggests that probably large farmers were more aware about falling input prices during FY09 and deferred purchases. Though, a substantial growth was seen in disbursement to corporate farmers, limited amount was disbursed to a few corporate clients. There is a need to encourage corporate farming in the country given its positive externalities.

Table 2.6: Holding-wise Agri-Credit Disbursement (Jul-Mar)
billion Rupees

Category	FY08	FY09	Growth in FY09
Farm	101.7	106.3	4.5
<u>Economic classification</u>			
Subsistence	60.6	67.1	10.7
Economic	23.2	25.0	7.8
Above economic	17.8	14.2	-20.2
Corporate	0.2	2.0	900.0
Non-farm	36.9	45.6	23.6
Small	6.5	8.8	35.4
Large	30.4	36.7	20.7

Note: Growth rates may not tally due to separate rounding off.

Table 2.7: Non-Farm Credit Disbursement (Jul-Mar)

Purpose	FY08	FY09	Growth in FY09
<u>Number of borrowers</u>			
Livestock, dairy & meat	47,508	54,553	14.8
Poultry	1,156	1,436	24.2
<u>Credit disbursement (billion Rupees)</u>			
Livestock, dairy & meat	11.1	15.9	43.2
Poultry	23.4	28.3	20.9

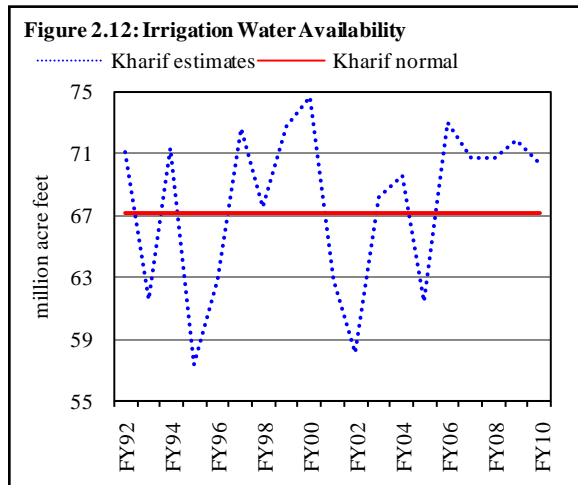
Table 2.8: Province-wise Agri-Credit Disbursement (Jul-Mar)
billion Rupees

Province	FY07	FY08	FY09	Growth in FY09
Punjab	92.8	116.7	127.0	8.8
Sindh	11.7	15.0	18.2	21.3
NWFP	6.1	6.1	5.8	-4.9
Balochistan	0.3	0.3	0.3	0.0
Azad Kashmir	0.2	0.3	0.4	33.3
Northern Areas	0.1	0.2	0.2	0.0
All Pakistan	111.2	138.6	151.9	9.6

Note: Growth rates may not tally due to separate rounding off

Similarly, growth in disbursement to small borrowers is stronger in the non-farm sector (see **Table 2.7**). Further break-up reveals that major impetus to this strong growth came from credit to livestock, dairy & meat sub-sectors with a substantial increase in number of borrowers during Jul-Mar FY09.

Investment in livestock sub-sector is a welcome development as it would not only help improve supply of dairy products, it would also help lower poverty amongst landless farmers.

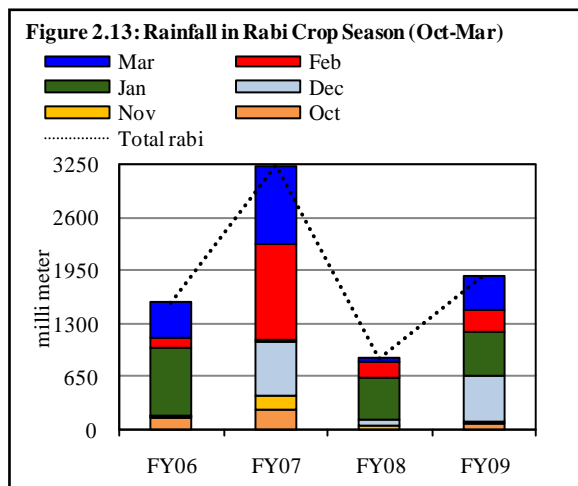


Province wise Disbursement

The slowdown in agri-credit disbursement is seen in all provinces (see **Table 2.8**). The impact of deceleration in agri-credit is, however, more pronounced in NWFP and Punjab. As a result, their respective shares in agri-credit

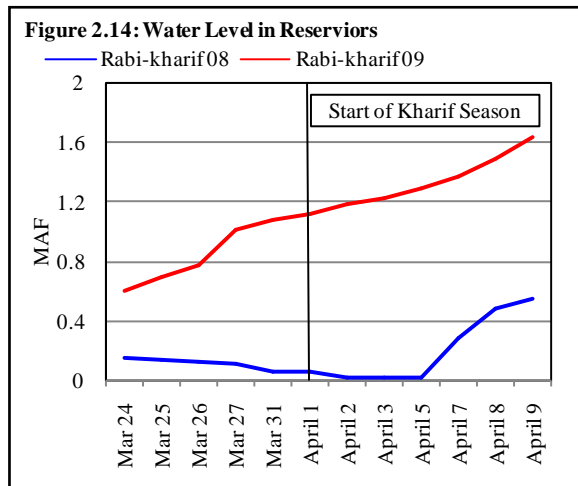
disbursement dropped during Jul-Mar FY09 compared with the same period last year. It is important to note that there is a huge potential of expansion in agri-credit market in small provinces. Provincial governments have to address the problem of non-availability of passbooks, a basic document for collateral. Inability to access institutional credit leads farmers to seek assistance from informal sector. Informal

credit is not only expensive, most of the time stringent conditions (e.g., to sell produce to money lender at specific price) are also attached with it. Therefore, it appears that access to institutional credit could increase returns to farmers and help increase productivity.



Agri-credit Recovery

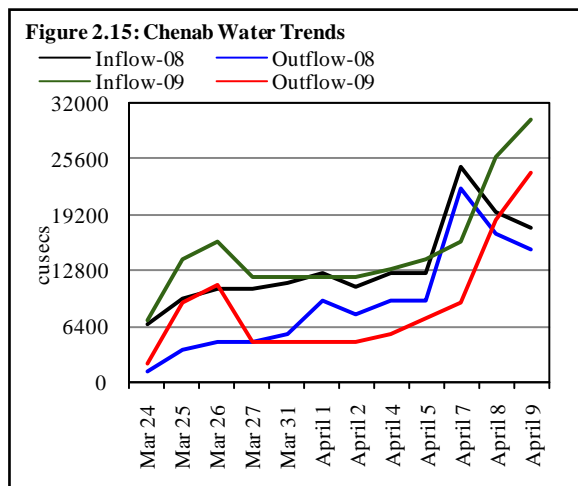
A significant improvement was witnessed in recovery ratios (recovery as percent of disbursement) during July-Mar FY09 compared with the corresponding period of FY08. This is primarily attributed to the increased focus of the banks on recoveries. Under a portfolio clean-up drive, banks recruited additional staff to accelerate recovery process. In particular, lending operations of ZTBL are entirely based on recoveries due to absence of fresh credit lines. In addition, improved cash flow of farmers amid strong growth in crops also helped increase recovery ratio during FY09.



Irrigation Water Availability

Initially, the canal head water shortages were projected at up to 39.0 percent for *rabi* FY09 season. Actual shortfall during *rabi* FY09 season was lower at 33.8 percent, with a decline of 13.7 percent from the corresponding season of FY08. Area under wheat cultivation was low during initial wheat sowing period due to water shortages; however, timely arrival of westerly rain bearing systems encouraged farmers and aggregate area under wheat cultivation thereafter increased by 6.0 percent (see **Figure 2.12**).

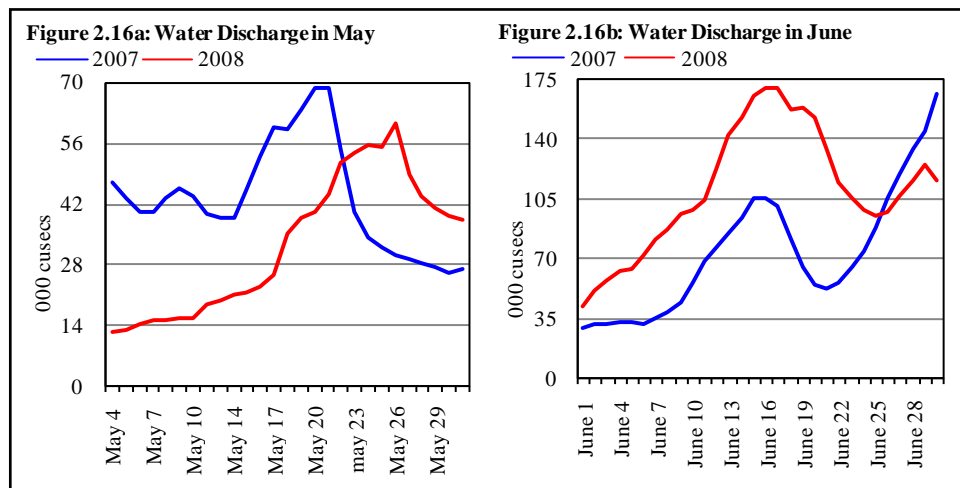
In contrast to preceding year, with extended winter rains (see **Figure 2.13**) and heavy snowfall in the northern areas, water availability for the upcoming sowing of cotton and rice is expected to be good. In particular, during *rabi* (Oct-Mar) FY09 season rainfall significantly increased by 116.0 percent over the same



period last year. Consequently, reservoir situation in the current *kharif* season (see **Figure 2.14**) reflects a carry forward of 1.12 million acre feet (MAF) of water from the concluding *rabi* FY09 season as against less than one MAF collective reservoir water availability in the corresponding period in FY08.

A similar situation is reported in Chenab where the inflows have improved (see **Figure 2.15**) thus putting less pressure on Mangla reservoir for supplementing Chenab and Ravi river operations. Accordingly, IRSA forecasts of average 70 MAF for the current *kharif* is close to last year's estimate of 70-71 MAF, which makes short-term scenario positive for the key cotton and rice crops. However, realization of this expectation will largely be depending on weather conditions during May and June; especially in the glacial belt zones. In case the temperatures remain steady; the water inflows from the melt would be consistent; otherwise in case of premature monsoon and early cloud cover in the two months melting can be slow (see **Figure 2.16a**). Relevant data shows that in case of early monsoon cloud cover in June 2007 (*kharif* FY08), the glacial water resources fell with temperatures (see **Figure 2.16b**).

It is also important to mention here that agriculture sector will benefit from increased capacity of Mangla dam by one MAF during FY10. The additional



capacity appears more important, given forecast of low monsoon rains.⁹ A moderate-high monsoon is crucial for agri-sector, which not only adds up in running canals, also helps to fill up the reservoirs for future use. In addition, it also leaves sufficient moisture for raising fodder (livestock feed) as well as improving underground water resources. The country may face acute water shortages in future given rising demand for irrigation water, construction of new dams by India and climate changes. Thus, it is inevitable to build new reservoirs urgently in the country. Further, effective resources management (land leveling, drip irrigation, reduce water losses between canal head to farm gate etc.) is needed for efficient use of water.

Table 2.9: Area and Production of Major Crops

	FY08 ^P	FY09 ^E	FY10 ^T
Area Under Cultivation (000 hectares)			
Cotton	3,055	2,850	3,200
Sugarcane	1,241	1,029	1,105
Rice	2,516	2,962	2,678
Maize	1,037	1,078	1,062
Production (000 tons cotton in 000 bales of 170.09 kg each)			
Cotton	11,655	12,060	13,360
Sugarcane	63,920	50,045	56,527
Rice	5,561	6,954	5,949
Maize	3,109	3,579	3,414

P: provisional; E: Estimate T: Target

Source: MINFA

Outlook for *Kharif* (April-September) FY10

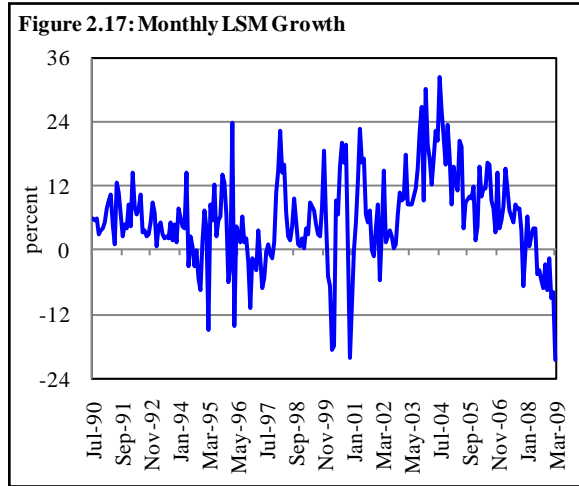
The overall prospects for *kharif* FY10 are positive, as prevailing higher prices of sugarcane will encourage farmers to increase area under sugarcane, which is likely to have a strong recovery in production during FY10. FY10 targets by MINFA also reflect this optimism regarding sugarcane crop. Similarly, cotton production is likely to benefit from (1) better prevailing prices, (2) supportive weather so far, as well as, (3) increasing use of Bt cotton variety, which may also help boost cotton yield, contrary to MINFA forecast of a decline in yield (see **Table 2.9**).

Similarly, a better than MINFA projected maize harvest is expected in FY10 by on the back of substantial gains in yields in recent years as well as farmers' enthusiasm due to better prices. In contrast, it will be difficult to maintain rice harvest at FY09 level, principally due to farmers' disappointment after a sharp unanticipated fall in rice prices at the time of harvest. This would lead farmers to substitute land from rice to sugarcane.

⁹ A recent climate modeling study found that monsoon - critical to agriculture in Bangladesh, India, Nepal and Pakistan - could be weakened and delayed due to rising temperatures in the future, climate change could influence monsoon dynamics and cause less summer precipitation, a delay in the start of monsoon season and longer breaks between the rainy periods-Study by Purdue University research group, Indiana, USA. (<http://www.sciencedaily.com/releases/2009/02/090227112307.htm>).

2.2 Large Scale Manufacturing

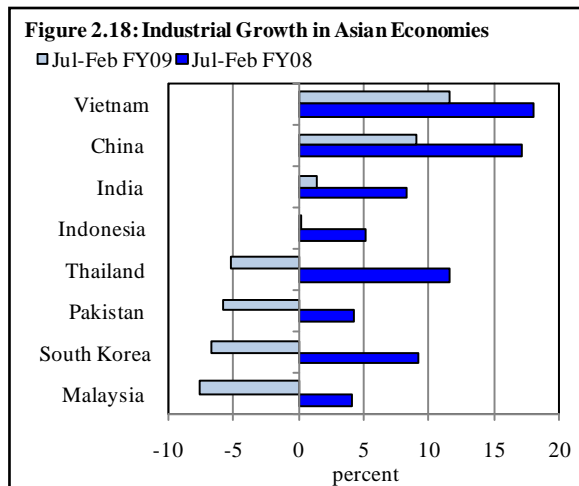
Large Scale Manufacturing (LSM) registered negative growth for the tenth consecutive month in March 2009, the longest period in which production continued to shrink.¹⁰ Moreover, 20.7 percent YoY decline in the month of March 2009 (see **Figure 2.17**) is the highest ever fall in LSM production. Resultantly, LSM growth dropped to 7.7 percent during Jul-Mar FY09 compared with a 5.0 percent rise in the corresponding period of FY08.



The persistent disappointing performance is a reflection of various adverse domestic and external developments. While, industrial growth slowed in most of the other regional economies primarily due to global recession, domestic factors had dominant impact on Pakistan's manufacturing sector growth in FY09.

In particular, weakness in domestic demand, worsening power shortages, structural problems (see **Box 2.3 & 2.4**) and deterioration in law & order situation are some important factors responsible for the decline in LSM production. Similarly, decline in external demand and lower fund flows towards emerging economies amidst global recession probably contributed to slowdown in domestic manufacturing activities.

Despite all these problems, it is noteworthy that almost all of the



¹⁰ Since Jul-1990, LSM production showed a declining trend for the five consecutive months only during Oct-Feb FY97.

negative growth is attributable to industries catering to domestic consumer demand (see **Figure 2.18**). Excluding consumer durables and sugar, LSM production during Jul-Mar FY09 remained flat relative to the previous year (see **Table 2.10**). In particular, automobiles

industry witnessed sharp slide mainly due to high cost of consumer financing continued upward prices of cars, tight liquidity position of the banks as well as risk averse behavior after facing substantial NPLs in consumer finance. Further, slow income growth and high inflation impaired consumers' ability to spare funds for purchasing durables. While higher cost of consumer financing was an important reason for softer demand for household electronics, weaker demand for transformers and electric meters by the power distribution companies resulted in a poor performance by this industry.

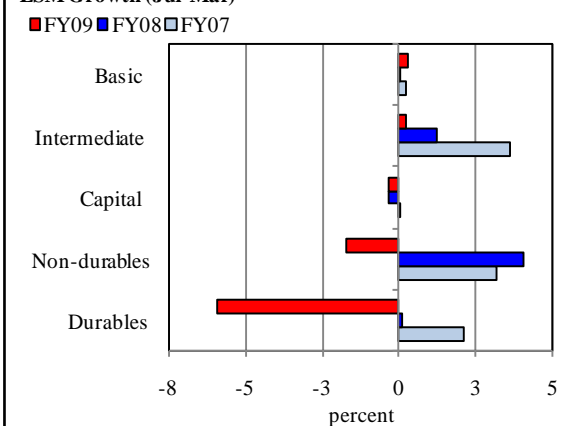
Table 2.10: LSM Growth with Selected Exclusions

percent	Weight in LSM	Growth
LSM		-7.7
Excl. consumer durables	6.1	-1.80
Excl. consumer durables & sugar	11.6	0.16
Excl. durable, sugar & ghee	17.3	0.70

On policy front, realizing the need to contain inflation (as it effects aggregate demand and consequently production (see **Figure 2.19**), SBP raised its policy discount rate four times during CY2008. The tight monetary policy was necessary to offset the inflationary pressures of expansionary fiscal policy and monetization of fiscal deficit during this period. Unfortunately, this policy scenario coincided with the on-going global recession and has

hurt the domestic industry. In this backdrop and an expected ease in inflation from Q4-FY09 onwards, the central bank lowered its policy rate by 100 bps in April 2009. However even if monetary policy eases substantially, it should be kept in mind that commercial banks willingness to extend aggressive lending for consumer financing in the face of substantial NPLs, will be a major determinant of growth in the consumer durable industries.

Figure 2.19: Contribution of Different Commodity Groups in LSM Growth (Jul-Mar)

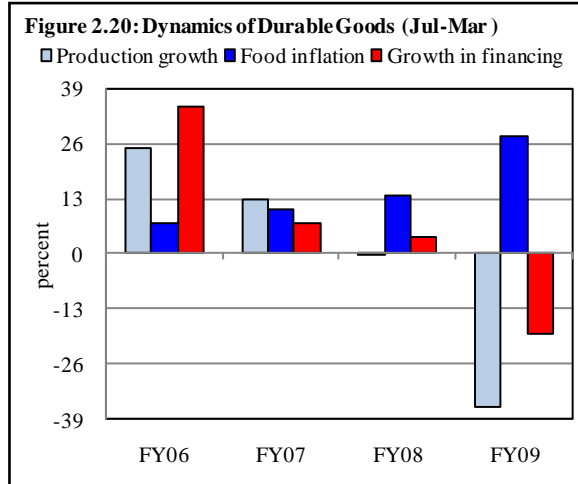


Consumer Durable Industry

Consumer durables industry witnessed decline in production during Jul-Mar FY09.

Domestic consumer industry largely produces for the local market and is relatively less competitive than the regional competitors. Therefore, in a shallow market with elastic demand, the industry is sensitive to a number of factors such as income growth, availability of institutional financing, inflation and trade restrictions etc. (see **Figure 2.20**).

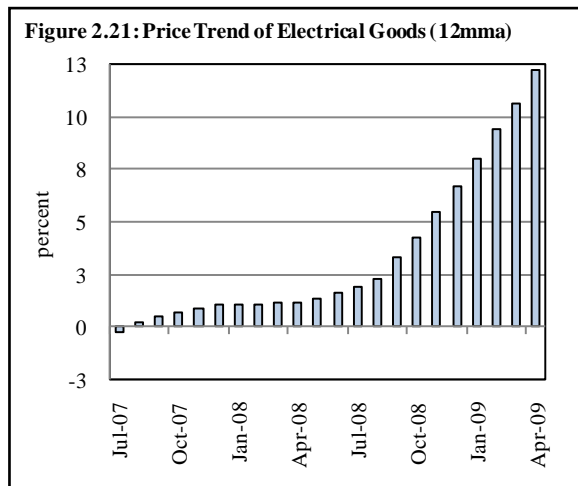
The impact of these was further compounded by a substantial rise in the domestic prices of consumer durables. The increase in the prices was partly justified due to increase in input cost during FY08, depreciation of rupee in most of 2008 and upward wage pressures. A similar downward adjustment in the prices of these items in tandem with the plunge in international prices of input (which is not visible so far) may support demand for these items going forward.



Electronics

Electronics sector is not only going through weak demand created by financing gap and increased prices of products (see **Figure 2.21**), but also due to frequent power outages. People are forced to spend on alternate power supply equipment (UPS and generators) to streamline electricity supply, which do not support a number of household electronic appliances.

Moreover, anecdotal evidence suggests that this industry also faces stiff competition from continued influx of cheaper and better quality products from abroad both through legal and illegal means.



Automobile Industry

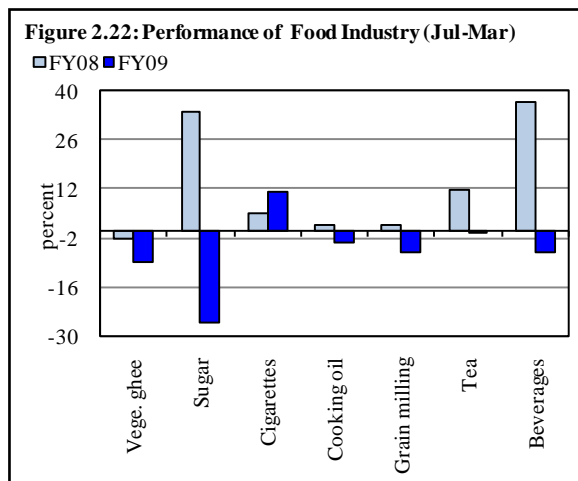
Similarly automobiles industry is facing significant contraction in demand (except for tractors where domestic production is low). In particular, jeeps & cars sub-sector is the worst hit by the sluggish demand due to (1) continued increase in prices, (2) rise in cost of financing, as well as (3) lower availability of institutional financing given risk averse policy of banking sector amid increasing NPLs and liquidity problems with the banks. On the other hand, motorcycle industry suffered from increased prices of petrol (in early months of FY09) and less than expected prices of major crops dampened the demand for two wheelers in rural areas. Demand for motorcycles is likely to recover following a bumper wheat harvest and substantially higher prices of the crop. Whereas overall contraction of economy and slack government buying led to decline in the demand for LCVs, busses and trucks during Jul-Mar FY09.

Consumer Non-durable Industry

Non-durable consumer goods producing industry is also going through a difficult phase as production in food sub-sector declined by 10.5 percent during Jul-Mar FY09 as against a healthy growth of 11.5 percent last year.

Food industry

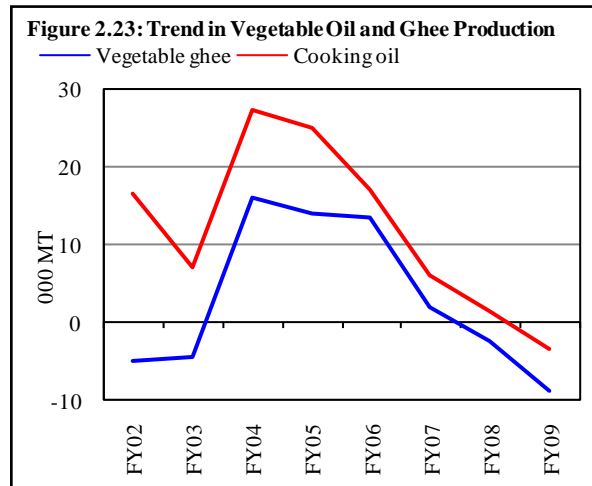
The decline in production of food industry is attributed to domestic market structure issues, uncertain prices of key inputs as well as shortages of inputs due to crop failure during FY09. While the former reasons impacted growth in ghee & cooking oil industry, the latter was responsible for a drag in sugar production (see **Figure 2.22**).



Production in cooking oil & ghee manufacturing – together having the largest weight in food – declined by 8.2 percent and 3.5 percent respectively during Jul-Mar FY09 (see **Figure 2.23**). On face value, decline in ghee & cooking oil production appears to be surprising as input cost has dropped significantly during FY09. The anomaly is probably due to the fact that while informal cooking oil and ghee manufacturers substantially declined prices of their products in response to reduced input cost, price adjustment in the formal sector is rather slow. As a result, it becomes difficult for

the formal manufacturers that figure in LSM statistics to compete, at least in the domestic market, without compromising on profit margins.

Similarly, sugar production declined by 26.3 percent in July-Mar FY09 compared with 34 percent rise in the same period of FY08, mainly due to a 20.3 percent fall in sugarcane harvest in the current season. It is important to note that the boom-bust cycle in sugarcane harvest was due to a continued dispute between growers and sugar mills; thus impacting the domestic sugar industry. In the current season, there was huge demand for sugarcane and



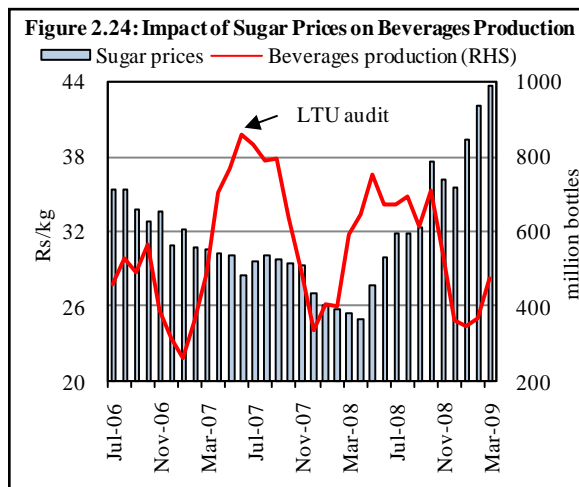
there were no significant problems reported by farmers for prices and payments. In response to higher prevailing prices, initial reports suggest that area under sugarcane is likely to increase for the FY10 cropping season. In case of a substantial rise in the size of sugarcane crop, delay in crushing season, lower sugarcane prices and delayed payments to farmers by the mills will again set a pace for the shortfall in FY11 crop.

In the short-term, this problem may be resolved by effective regulations and their implementation. For example, the Punjab government raised sugarcane purchase price floor to Rs.100 per 40kg, a 25 percent increase over the last crushing season to protect sugarcane growers and to encourage next season's crop. However, there is a need to ensure that farmers will get this price in time, which would keep them motivated for the next seasons as well.

However, an efficient and long-term solution can be provided only by the market. Establishment of effective futures market with appropriate infrastructure (contract enforcement, crop insurance, etc.) may help to maximize returns to farmers, sugar mills and consumers. In FY09 sugarcane shortages badly hit sugar mills and production temporarily came to a halt in many factories. The resulting supply shortages of sugar translated into higher prices, which are adversely impacting consumers.

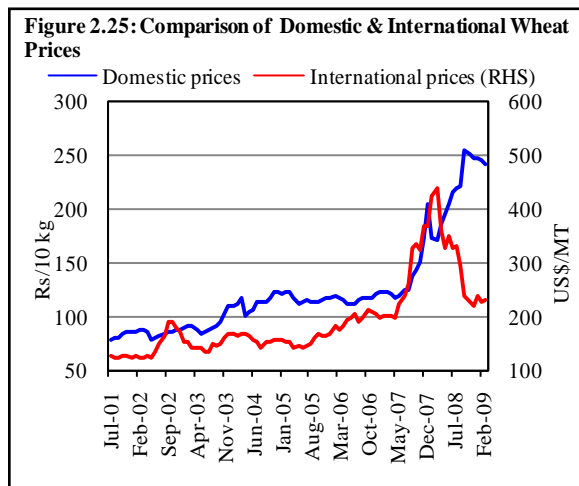
Importantly, higher sugar prices are also hitting consumers and other industries as well. Beverage production dropped by 3.7 percent in July-Mar FY09 as the prices of sugar, one of the key inputs in beverages, sharply rose in recent months (see **Figure 2.24**).

Consequently, prices of beverages were revised upward and demand declined. The impact of this was also augmented as a major bottle manufacturing plant, remained closed for BMR during mid-FY09.



At glance, despite a substantial improvement in domestic supply of wheat (domestic harvest and continued import), decline in wheat & grain milling activity during July-Mar FY09 also seems puzzling. In fact, part of this movement can be attributed to surge in smuggling of wheat to Afghanistan in the last few years as international wheat prices were either in line with or higher than the domestic prices (see **Figure 2.25**).

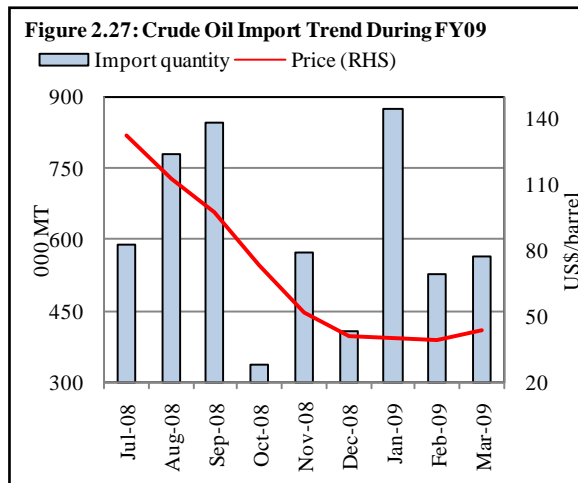
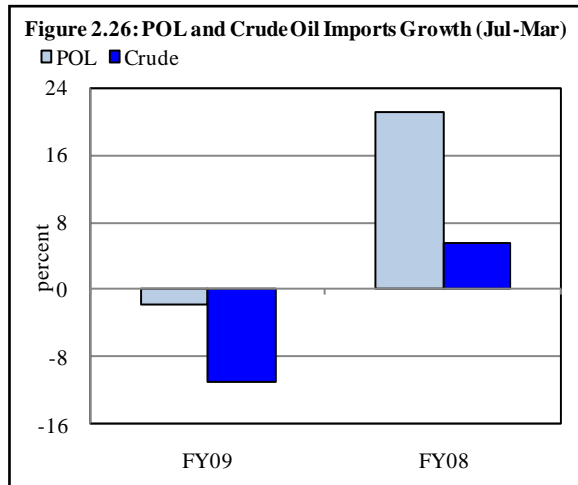
However, international wheat prices have been declining since July 2008, while domestic prices remained high. This price differential served as a disincentive for smuggling, and consequently, output declined in this sector. In addition, frequent load-shedding also affected milling activity to some extent.



Petroleum Industry

POL with production decline of 9.2 percent during the Jul-Mar FY09 was the third largest contributor to lackluster performance of LSM. According to OCAC data,

POL production decline may primarily be attributed to weak demand due to sluggish economic activities. This is also visible from lower quantum of imports for POL during Jul-Mar FY09 (see **Figure 2.26**) in comparison to last year. However, it is important to mention here that a number of developments also adversely affected the POL production including (1) a reduction in deemed duty from 10 percent to 7.5 percent in July 2008 led to lower margins and sales revenues,¹¹ (2) import of crude oil postponed due to declining international prices, particularly in Q2-FY09 (see **Figure 2.27**), (3) below capacity operation of IPPs due to circular debt problem resulted in lower demand for furnace oil, as well as, (4) liquidity crunch and circular debt issue led to create obstacles in confirmation of LCs for the import of crude oil during FY09. After the partial resolution of circular debt issue and resumption of production by Attock Refinery, POL production is expected to improve going forward. Moreover, recently announced Petroleum Policy (see **Box 2.1**) offers incentives that would probably attract more investment and help sustained growth in this sector.



¹¹ Government is considering various proposals including increase in deemed duty.

Box 2.1: Petroleum Exploration and Production Policy 2009

The government of Pakistan has announced a comprehensive policy to promote exploration and production (E&P) in the petroleum sector. The policy adopts an integrated approach towards exploitation of domestic petroleum reservoirs while ensuring environmental sustainability.

Pakistan's current crude oil production meets only 18 percent of its demand, while the remaining requirement is met through imports, adding to the trade deficit and, in turn, has adverse consequences for forex reserves and exchange rate. Under this consideration, the government introduced the first national petroleum policy in 1991. This was followed by subsequent policies in 1993, 1994, 1997, 2001, and 2007. Petroleum policies need frequent revisions as technology, legal practices, tax laws, price-setting and environmental standards continue to evolve around the globe. The 2009 policy redefines the previous policies to accommodate new market conditions, particularly the steep rise in international energy prices.

The 2009 policy provides procedural and price incentives for exploitation of natural petroleum resources. It envisions the development of local firms and human resource augmented with increased foreign investment. The policy proposes competitive terms-of-investment for foreign firms and incentives to encourage participation of local oil and gas companies.

For both, on-shore and off-shore operations, royalty will be payable to the federal government. However, royalty will be waived for the first two years of off-shore production. Companies incorporated in Pakistan can have 100 percent ownership of on-shore exploration sites. For off-shore sites, the government will enter into a sliding-scale production sharing agreement. Corporate income tax will be payable according to the Income Tax Ordinance 2001.

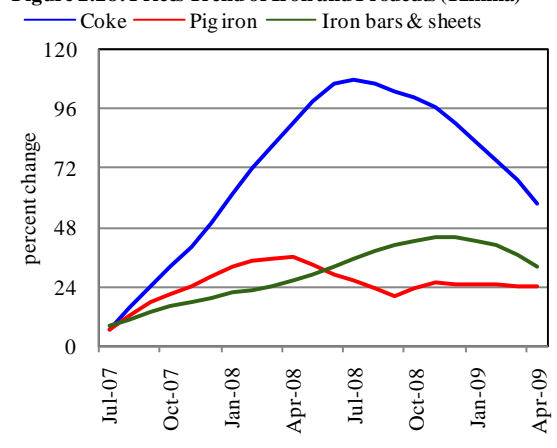
To secure domestic supply, E&P firms will be subject to 'domestic supply obligations', whereby the export volumes will be monitored. Moreover, a levy will be applicable on all export licenses. Once these requirements are met, foreign firms will be allowed to export their share of production and to retain sale proceeds abroad.

The program will provide employment opportunities and an extensive training program is proposed for capacity building of local professionals. The policy also focuses on sound regulations and proactive resource-management. Social-welfare funds will be pledged by all companies benefiting from the policy. To keep an eye on environment, operational, geological and geophysical information will be provided to the Directorate General of Petroleum Concessions on a regular basis.

Metal Industry

As with POL, metals industry witnessed decrease in production in the beginning of FY09 due to surge in international metal price, which

Figure 2.28: Prices Trend of Iron and Prodcuts (12mma)



resulted in accumulation of inventories with Pakistan Steel. Therefore, a reduction in production was necessary to clear inventories. However, later, with the decline in international prices, a comeback in production was hindered by a sharp cut in both PSDP and private construction activities.

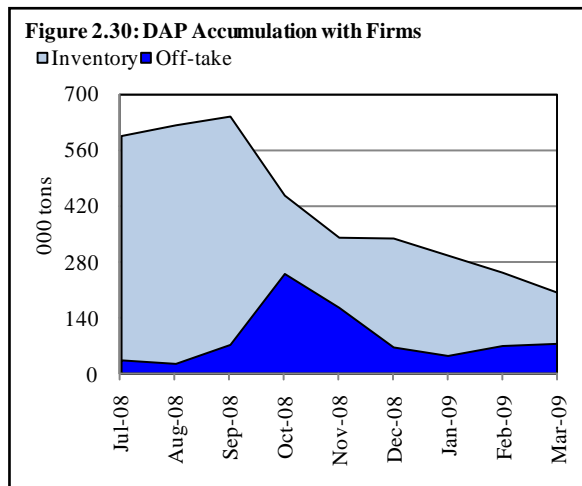
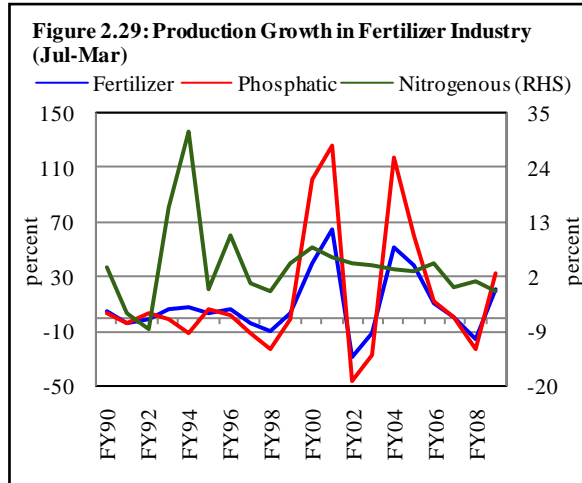
However, as domestic prices of iron and its products have eased in recent months (see **Figure 2.28**), demand is expected to strengthen.

Fertilizer Industry

In contrast to a declining trend in overall manufacturing activity, fertilizer production posted a significant growth of 20.7 percent in Jul-Mar FY09 after a dismal performance during the preceding two years. This reversal in production conforms to the historical trend that since FY85 production declines in fertilizer have not generally been more than two years longer (see **Figure 2.29**).

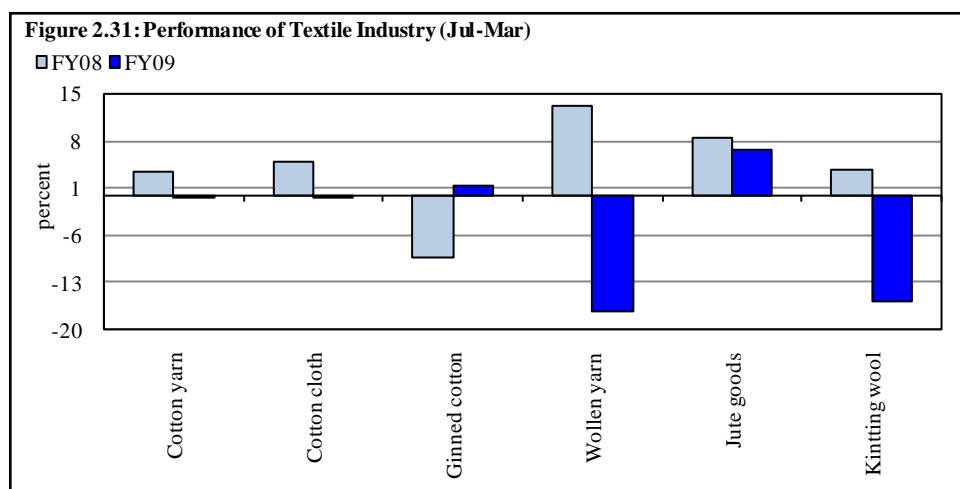
Production increase in FY09 is partially due to base effect as Pakistan's only phosphatic fertilizer plant remained close for BMR during last year. This year production was halted in January due to accumulation of high inventories of costly DAP

(see **Figure 2.30**). In addition, a slower pace of decline in international prices of phosphatic rock (major input for DAP) squeezed the margins of the firm. While, current production of both phosphatic and nitrogenous fertilizer are insufficient to meet local demand, with the completion of plants by Fatima Fertilizer and Engro, shortage of urea is expected to turn into a surplus during FY11. However, DAP shortage will continue due to lack of raw material in the country and large investment required to setup a new plant.



Textile Industry

The impact of global recession on domestic LSM is most visible in the textile industry. Growth in textile industry fell by 0.1 percent in July-Mar FY09 over the same period last year. Textile sector was badly hit by power shortages and weak external demand. Both cotton yarn and cloth industries, which have the largest shares in the textile sector, posted negative growth of 0.27 percent and 0.33 percent respectively during Jul-Mar FY09 (see **Figure 2.31**).



However, on the back of relatively better FY09 cotton crop, ginning showed slight improvement of 3.4 percent in this period compared to a decline in the last three consecutive years. In contrast, among the smaller sub-sectors of textile industry, jute goods industry showed a reasonable 6.6 percent growth during July-Mar FY09, well supported by strong demand emanated from record rice and wheat harvests this year. It is also important to note that while a large number of textile units, particularly operating in small or informal sector, are facing problems, H1-FY09 results of some listed textile units are encouraging (see **Box 2.2**).

As global textile demand declined, quantum of yarn exports shrank by 7.8 percent in July-Mar FY09 over the same period last year, and the average export unit value of yarn fell by 8.7 percent. Similarly, export unit value of cotton fabric dropped by 1.0 percent in this period. The combined impacts of domestic and external factors has resulted in closure of about 20 percent spinning mills in the country.¹² Reports also suggest that the US - importer of over 30 percent of

¹² Pakistan Textile Journal, Feb. 2009.

Pakistani textile exports - is expected to cut back its cotton textile imports further in 2009 for the third consecutive year.¹³

Box 2.2: Profitability of Textiles in First Half FY09

Textile sector net profits posted a vigorous 23 percent growth in the first half of FY09 over the same period last fiscal year. Demand for textiles is apparently regaining ground as textile composite and weaving sector registered 26 percent increase in net sales while spinning sector sales were up by 13 percent.

Independent power supply arrangements by almost all large textile firms are resulting in efficient cost management during countrywide power supply shortages. Out of the country's five largest textile companies, Nishat Mills and Azgard Nine Limited earned 10 percent return on equity (ROE) in Oct-Dec 2008, while Gul Ahmed Textiles and Colony Mills, earned two and four percent ROE respectively. Only Kohinoor Mills' were doing badly in this period, with all their spinning, weaving, and composite units registering losses, despite having an independent power plant facility.

The earnings before interest and tax (EBIT) margin of the textile sector in H1-FY09 was 13.0 percent compared to 9.5 percent in H1-FY08, indicating higher earnings per unit of sale. On this scale, textile composite sector was the best performer with 15.6 percent EBIT margin while weaving and spinning reported a margin of around 7.8 percent.

These results seem more impressive given a 100 percent rise in financial costs during H1-FY09 over the same period last year. While textile composite and weaving sectors have managed to still come up with 61 and 43 percent increase in net profits, respectively, the spinning sector has taken a blow, with the losses of 31 spinning mills amounting to Rs 783 million against Rs 343 million profits earned last year.

It may be noted here that this data is only representative of large registered companies. While big companies have apparently found ways to get through the power crisis and are now dealing with their financial costs, the problems of small textile mills, which constitute a significant part of textile industry, are entirely different.

Production in small industries is still vulnerable to power outages and tariff hikes, and these units continue to bear losses on this account or are forced to closure. However, SBP provided support to spinning units for restructuring their loans and by reducing mark-up on export refinance scheme. Similarly, government is also taking steps to resolve problems of textile industry.

Table 2.11: Textile Exports Value and Production Growth (Jul-Mar)

	FY07	FY08	FY09
Exports value (million US Dollar)	8,017	7,784	7,194
Growth (percent)	6.9	-2.9	-7.6
Exports value (million Rupees)	499,840	477,399	485,995
Growth (percent)	4.7	-1.8	8.4
Growth in production (percent)	9.81	2.90	-0.11

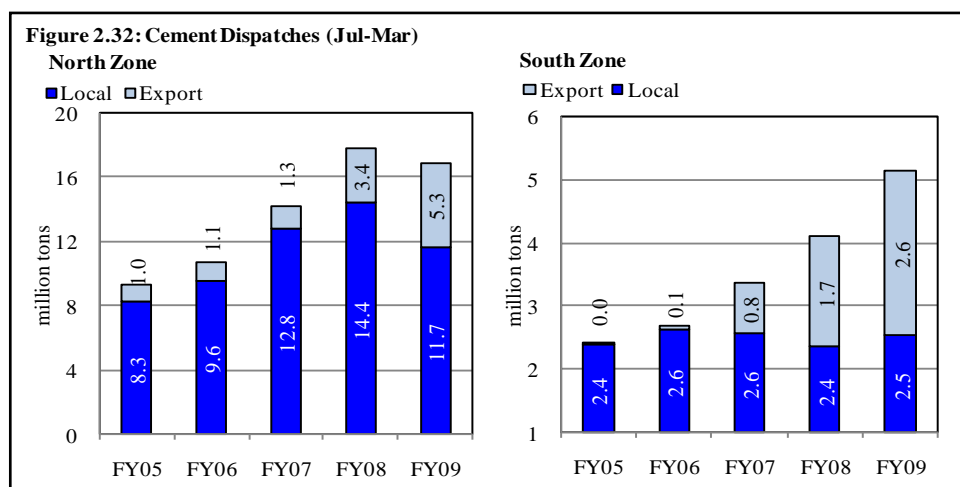
While, a sharp recovery in textiles will be challenging, a bullish trend in domestic cotton market during April 2009 indicates some improvement in textile output in the months ahead. One driving factor is probably lifting the anti-dumping duty by

¹³ National Cotton Council of America: <http://www.cotton.org/econ/reports/outlook.cfm>

EU on bed linen imports from Pakistan that has been in effect since March 2004. This bodes well for textile production as Pakistani exporters will seek to re-capture the EU market. Adding to the profitability of textile industries is the depreciation of rupee against the greenback: textile exports earned 16.8 percent more revenue in Jul-Mar this year, over the same period last year, even though dollar earnings were low (see **Table 2.11**).

Cement Industry

Growth in cement production though helped contain free fall of LSM growth, weakened in recent months. Cement production rose by 4.7 percent during Jul-Mar FY09,¹⁴ the lowest growth in the last six years. A sustained double digit growth in cement production was achieved by addition in production capacity and exploitation of export markets.



It was the reason that the north zone, with higher capacities, started with greater volume of exports than the south zone. However, due to close proximity of ports, south zone is now producing almost equal amounts for local and export markets. North zone is mainly catering to the needs of domestic market with advantage of exports to Afghanistan and Central Asia as well (see **Figure 2.32**). Cement production are expected to improve further with increased production capacity and improvement in margins with decline in prices of coal. Prices of cement have already started to decline in domestic market which will likely bolster demand in

¹⁴ Cement production declined by 6.5 percent YoY during March 2009.

the months ahead. In addition, complimentary effect of lower metal prices would also help increase domestic cement demand.

Box 2.3: Relative Ease of Doing Business in Pakistan (2009)

Measured specifically, pertaining to the regulations and red tape issues¹⁵ in running businesses, relative ease of doing business ranking of Pakistan (among 181 countries ranked by World Bank) goes three places down to 77 in 2009 from 74¹⁶ in 2008. Similarly, among Asian economies this ranking slipped down by three places to 20 from 17 as Central Asian states of Azerbaijan, Kyrgyz Republic and Kazakhstan outpaced Pakistan in reforming their business regulations. A detailed analysis of data reveals that this down grading is mainly due to improvement in business governing regulations of other economies as these regulations remained unchanged in case of Pakistan (see **Table 2.3.1**).

Table 2.3.1: Ranking of Asian Competitors and their Reforms during 2008/09

	Thailand	Malaysia	Pakistan	China	Vietnam	Sri Lanka	Bangladesh	India	Indonesia	Philippines
Rankings										
2008	13	20	77	83	92	102	110	122	129	140
2009	19	25	74	90	87	103	104	120	127	136
Indicators										
Starting a business		↑					↑		↓	
Dealing with construction permits										
Employing workers				↓						
Registering property	↑						↑			
Getting credit				↑	↑	↑			↑	
Protecting investors	↑									
Paying taxes	↑	↑		↑						
Trading across borders	↑							↑		↑
Enforcing contracts				↑						
Closing a business										
↑ reforms making it easier to do business; ↓ reforms making it more difficult to do business										

Performance on ten indicators used to reach at overall rankings (see **Table 2.3.2**) reveals that Pakistan's ranking improved on three of them (getting credit, paying taxes and trading across borders) due to improvement in at least one of the sub-indicators. The rankings remained same for two indicators (dealing with construction permits and enforcing contracts) irrespective of the fact that at least one of sub-indicators worsened or improved (implying that both movements were not relatively significant enough). On the contrary rankings on five indicators (starting a business,

¹⁵ It does not, for example, measure security, macroeconomic stability, corruption, and the labor skills of the population, the underlying strength of institutions or the quality of infrastructure.

¹⁶ After inclusion of three new economies in the sample as of 2008 ranking was 76.

Table 2.3.2: Pakistan's Performance on Different Measures of Ease in Doing Business

	2009	2008		2009	2008
Starting a business (rank)	77	59	Protecting investors	24	19
Procedures (number)	11	11	Extent of disclosure index (0-10)	6	6
Time (days)	24	24	Extent of director liability index (0-10)	6	6
Cost (% of income per capita)	12.6	14	Ease of shareholder suits index (0-10)	7	7
Minimum capital (% of income per capita)	0	0	Strength of investor protection index (0-10)	6.3	6.3
Dealing with construction permits (rank)	93	93	Paying taxes	124	146
Procedures (number)	12	12	Payment (number per year)	47	47
Time (days)	223	223	Time (hours per year)	560	560
Cost (% of income per capita)	734	869.5	total tax rate (% of profit)	28.9	40.7
Employing workers (rank)	136	132	Trading across borders (rank)	71	94
Difficulty of hiring index (0-100)	78	78	Documents to export (number)	9	9
Rigidity of hours index (0-100)	20	20	Time to export (days)	24	24
Difficulty of firing index (0-100)	30	30	Cost to export (US Dollar per container)	611	515
Rigidity of employment index (0-100)	43	43	Documents to import (number)	8	8
Firing cost weeks of salary	90	90	Time to import (days)	18	19
Registering property (rank)	97	88	Cost to import (US Dollar per container)	680	1336
Procedures (number)	6	6	Enforcing contracts	154	154
Time (days)	50	50	Procedures (number)	47	47
Cost (% of property value)	5.3	5.3	Time (days)	976	880
Getting credit (rank)	59	68	Cost (% of claim)	23.8	23.8
Strength of legal rights index (0-10)	6	4	Closing a business	53	51
Depth of credit information index (0-6)	4	4	Time (years)	2.8	2.8
Public registry coverage (% of adults)	4.9	4.6	Cost (% of estate)	4	4
Private bureau coverage (% of adults)	1.5	1.4	Recovery rate (cents on the Dollar)	39.2	39.1

employing workers, registering property, protecting investors and closing business) worsened that resulted in overall slide of ranking. The decline in ranking here is mainly due to improvement of other economies in these areas.

However, the slide in ranking by only three points should not be taken lightly because,

- (1) These rankings do not cover all aspects of business environment there are other indicators like political uncertainty, law & order situation and country perception which weigh much more and where we are lacking.
- (2) This slide highlights the fact that reforms are a continuous process and we have to keep an eye on our competitors to keep existing businesses viable and for attracting more investment.
- (3) Competition is increasing with the passage of time so we are required to spend on not only chalking out state of the art industrial and trade policies to improve business environment but also on R&D in technical expertise for increasing manufacturing value addition.

Box 2.4: Lessons for Developing Economies from Industrial Development Report 2009¹⁷

- Industrialization is essential for growth and development of a country as the direction of change runs from manufacturing growth to economy wide growth and not the other way round.
- UNIDO's research shows that difference in level of development among countries is principally determined by total factor productivity (efficient utilization of resources).
- Labor intensive industrialization in developing countries will help alleviate poverty and promote gender equality as labor intensive manufacturing is usually found to be gender neutral. Environmental issues do not necessarily mean slackening on industrialization it may actually make it inevitable.
- Alternatives to development other than manufacturing development like agriculture¹⁸ and natural resource extraction have limited scope or even problematic in latter's case as it has the potential of undermining rest of the economic activity.
- New evidence confirms that diversifying and moving up the ladder of sophistication are important drivers of development because diversification creates more opportunities in international markets and it helps to create more productive firms through freer entry and exit in industry.
- A new concept of task based specialization among countries for manufacturing the same product is found effective as it does not contribute to greater specialization by poor countries in less sophisticated goods.
- Reliance on natural resource richness hinders overall productivity of economies due to problems like Dutch disease, construction boom which pushes up the price level and actual achievement like kilometers of road built decreases and full standardization of extractive production processes is not possible.
- Location of manufacturing activity matters as geographical concentration of one type of manufacturing activity creates positive externalities and it is important for developing economies as well but concentration of all industrial activity in some geographical location is questionable.

¹⁷ Industrial Development Report is a publication of United Nations Industrial Development Organization (UNIDO).

¹⁸ For a country like Pakistan agriculture sector cannot be looked over to achieve manufacturing growth as more than 60 percent of manufacturing value addition is based on agriculture sector.

- Fast growth requires more sophistication in exports with the condition that production and export structures move in the same direction.
- New entrants to export market are required to compete with OECD countries as well as China and fast growing middle income countries which enjoys economies of scale. But developing economies can benefit from concentration of industrial activity, trade in tasks and supportive policies from developed economies as well as China.
- Business climate though necessary for attracting investment is not sufficient for dynamic industrial growth. What matters a lot are infrastructure facilities, traded logistics for export, efficient public institutions and competence and competition of firms and special economic zones (SEZ) can help to cater the last of these.
- Infrastructure development needs change in public spending pattern towards infrastructure investment, improving the quality of investment and convincing development partners about the relevance of this all for growth and poverty reduction. On the other hand industrial cluster development should be facilitated through investing heavily in generating industry relevant knowledge and putting in place liberalized regulatory framework for entry and exit of firms.

2.3 Services

Key indicators of the services sector presents a mixed performance of the sector, with a below target growth during FY09. However, growth outlook of the services sector remains better than the commodity producing sector. The indication of below target growth in services sector comes from the overall economic slowdown, which is suggested by a decline in LSM output, lower imports and shortfall in tax receipts during the year.

On the other hand, a notable (expected) growth in agriculture would also provide some support to trade and *transportation & communication* sub-sectors. In addition, *public administration & defense* is also likely to contribute reasonable growth in services sector during FY09.

Wholesale & retail trade sub-sector is the largest component of value addition in services sector.¹⁹ Recent data illustrates a strong positive correlation of value addition among trading activities, domestic commodity production and imports (see **Figure 2.33a** and **2.33b**). Positive growth by major crops in FY09 indicates increased value addition in trading, while decline in other constituents i.e. LSM and imports may drag growth in trade. Positive outlook for gram harvest, relatively better wheat production as well as import and prospects of increased trading in sugar and rice in Q4-FY09 bode well for trading in FY09. However, slowdown in manufacturing, imminent as a consequence of decline in LSM in FY09, may significantly drag value addition in trading activities.

Figure 2.33a: Trading Activities in FY09 are Mired by Decline in Both LSM and Imports (Jul-Mar)

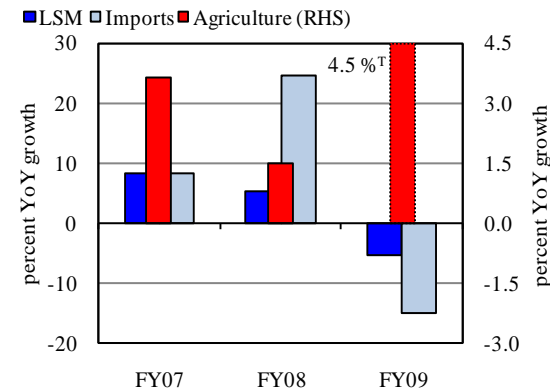
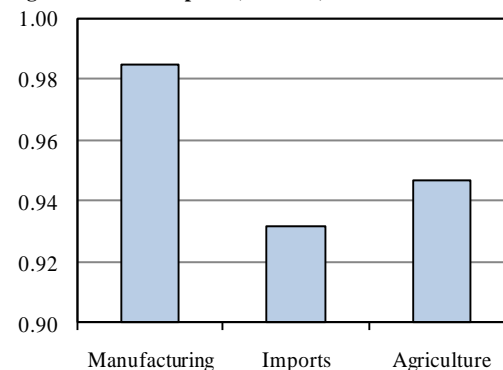


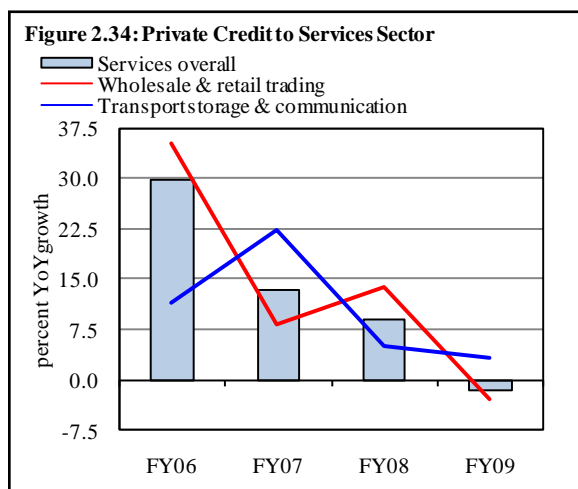
Figure 2.33b: High Degree of Correlation Exists Among Growth in Trading activities and Manufacturing, Agriculture and Imports (FY00-08)



¹⁹ Wholesale and retail trade constituted 32.1 percent of total value addition in services in FY08.

Also relevant is the sharp decline in domestic demand in the form of declining imports (see **Table 2.12**). Slowdown in trading can also be gauged by a decline in credit, as well as fall in FDI in trading (see **Figure 2.34**). As a consequence, FY09 growth in trading activities is anticipated to be lackluster and achieving annual growth target of 5.4 percent seems difficult.

Finance & insurance sub-sector also presents a mixed performance. In fact, commercial banks constitute about 90 percent of total assets of the financial sector; weaker growth in banks impacts the overall growth of *finance & insurance* sub-sector. The profits of commercial banks dropped substantially during the first three quarters of FY09. In contrast, SBP profits witnessed a substantial increase during this period.



Other financial institutions; including, mutual funds, modarba companies and foreign exchange companies - whose earnings contain higher risk premia and are prone to fluctuation in rupee parity - were negatively impacted by capital market instability in H1-FY09 as well as high NSS returns. Financial statements of banks and DFIs, particularly those of modarbas, mutual funds and insurance companies indicated decline in gross earnings due to losses in capital market investment. Relative stability in capital market and decline in NSS rates in Q3-FY09 are expected to positively impact value addition from these financial intermediaries in H2-FY09.

Impetus to growth in transportation in FY09 stems from the decline in global petroleum prices, the impact of decreased input cost is expected to be shared amongst air, land and water transportation in FY09. In air transportation, annual financial statements of the national flag carrier i.e. PIA²⁰ for CY08 indicate that although the corporation posted loss for the CY08 owing to unprecedented hike in oil prices, total revenue of PIA increased (see **Table 2.11**). A relative stability in

²⁰ Pakistan International Airlines (PIA) accounts for almost 50 percent of domestic passenger traffic (source: PIA Annual Report 2008).

rupee value²¹ as well as reduction in fuel cost going forward are factors that may improve value addition in Air transportation in particular and transportation in general. Growth in private credit off take and overall easing of petroleum prices, resultantly road transportation, like air transportation, is expected to grow reasonably well in FY09.²² Prospect of improvement in value addition from road transportation is expected to benefit overall value addition in transportation in FY09; as road transportation constitutes about 75 percent of VA in transportation.

Table 2.11: Selected Performance Indicators of PIA
percent growth (YoY) or mentioned otherwise

	CY08			
	Q1	Q2	Q3	Q4
Operating revenue	0.8	14.7	33.0	56.3
Operating cost	5.6	18.2	45.5	167.9
Fuel cost (million Rs)	8,649	10,976	13,991	12,239
Fuel cost as percent of operating cost	43.7	48.8	51.4	44.9
Profit/Loss (billion Rs)	-5.5	-12.6	-20.4	2.6
Fuel price (Rs/US gallon)	174.5	241.2	274.0	216.0
Growth jet fuel price	52.7	92.9	103.7	34.3

Source: PIA Annual and Quarterly reports

Composition of VA in communication is centered on cellular, land lines, wireless local loop (WLL) services and broadband internet. Communication sub-sector shows signs of consolidation during FY09. For instance, WLL subscriber base grew by only 7.6 percent in Jul-Mar FY09 as against 27.3 percent in the comparable period last year. Beyond FY09, decline in FDI and slowdown in telecom imports may impede expansion going forward. Positive growth outlook in storage is supported by a bumper wheat, rice and gram harvests during FY09. In addition, inventory and stock buildup of fertilizer, iron and steel, rice and sugar²³ in FY09 so far, is also expected to contribute towards increase in value addition in storage this year. *Transport storage & communications* sector thus depicts positive overall outlook for FY09.

Public expenditure on administration and defense has exhibited sharp increase in FY09 on account of military campaign in the northern areas. In addition, expenditure on public safety nets and economic affairs increase by 17.5 and 46.2 percent respectively in H1-FY09. *Public administration & defense* sub-sector is, therefore, expected to outperform target annual growth of 4 percent in FY09.

Services sector performance though mired by drop in domestic commodity production and imminent decrease in demand is still expected to remain

²¹ Rupee instability and exposure to foreign exchange risk constituted 67.5 percent of total loss of PIA in CY08.

²² Domestic petroleum prices were eased in Nov-2008.

²³ Total stock of sugar stood at 2,547,566 tons as on 31-03-2009, Pakistan Sugar Mills Association.

reasonable in FY09. Factors supporting growth in *transport storage & communication*, *financial* sector and *public administration* point towards resilience of services sector in FY09.

Table 2.12: Services Sector Performance Indicators
percent growth or mentioned otherwise

	FY06	FY07	FY08	Jul-Mar		
				FY07	FY08	FY09
Wholesale & retail trade	-2.4	5.4	6.4			
Credit to wholesale and retail trade	31.8	9.0	20.1	8.3	13.7	-3.0
FDI in trade	126.4	46.0	1.3	56.9	15.1	-5.2
Imports	38.8	6.9	30.9	8.4	24.7	-6.5
Trade volume (imports & exports)	28.7	5.5	24.2	6.4	18.9	-4.2
Transport storage & communication	4.0	6.5	4.4			
Credit to transportation storage and comm.	23.5	28.3	17.0	22.2	5.0	3.1
Petroleum crude imports	76.6	-4.9	44.8	-6.8	32.2	-7.9
Commercial vehicles production	13.5	7.9	2.0	-3.7 ^a	-1.3 ^a	5.7 ^a
Tele density (percentage of population)	26.3	44.1	59.7	-	56.7	60.3
Cellular density (percentage of population)	22.2	39.9	54.7	-	52.2	56.5
Telecomm imports	-	15.2	4.0	19.4	0.8	-52.2
Total cargo handling at KPT	11.9	-5.6	22.4	-9.4	21.9	0.1
Transport group imports	-	9.2	-6.4	15.4	-16.2	-40.0
FDI in transport storage & comm.	267.8	-0.5	-11.0	35.0	-29.3	-15.5
Finance & insurance	42.9	15.0	17.0			
Home remittances	10.5	19.7	17.4	22.3	20.1	19.7
SBP profit	119.6	59.5	51.6	905.1 ^c	20.7 ^c	52.0 ^c
Profit of commercial banks	-	-	-	24.0 ^b	-1.8 ^b	-23.4 ^b
FDI in financial business	22.2	182.6	72.4	162.2	-2.1	-1.3
Ownership of dwellings	3.5	3.5	3.5			
Credit to construction	33.9	30.9	45.0	24.6	27.3	-8.6
Cement production	13.5	22.5	17.6	21.1	17.7	-8.7
Metal production	5.3	10.7	-12.7	12.0	-11.7	-33.1
Public administration & defense	10.1	9.1	10.9			
Defense expenditure	14.3	3.3	14.1	-3.4 ^c	14.7 ^c	12.1 ^c
Public order and safety services	32.8	8.8	17.8	18.4 ^c	8.7 ^c	17.5 ^c
Economic affairs expenditure	-7.7	46.9	226.1	-24.5 ^c	173.3 ^c	46.2 ^c
Community, social & personal services	9.9	8.8	9.4			
FDI in social and personal services	162.5	23.8	16.3	39.1	12.2	0.6
Total FDI in services sector	181.5	27.4	13.5	59.5	-19.0	-7.5

a: Including light commercial vehicles, buses, trucks and tractors. Growth rates computed by using relative weights in LSM.

b: data pertains to calendar year.

c: data pertains to H1 of fiscal year.