2 Real Sector

2.1 Agriculture

While it is still too early to make a robust assessment, a relative improvement in water availability and ample availability of agri-credit bodes well for the *rabi* FY06 crops. In particular, the wheat crop, which contributes the greater part of the value-addition by *rabi* crops, is expected to be a significant beneficiary, with better water availability offsetting the impact of delayed sowing in some key wheat growing districts. This is likely to be complemented by higher credit disbursements, enabling farmers to increase the use of quality inputs to increase productivity. Thus, with a little luck, wheat yields could surpass the record (2586kg/hectare) set last year. On the same lines, in aggregate, minor crops could also do significantly better than targeted during *rabi* FY06. However, even if this happens, the overall growth of the crops sub-sector may remain below target due to the considerable underperformance by two major *kharif* FY06 crops, i.e. cotton and sugarcane (see **Table 2.1**).

Table 2.1: Performance of Major Crops

Crops	FY05	FY06^{T}	FY06^{E}	% change in FY06 over FY05
Area under cultivation; 000 hectares				
Cotton	3,229	3,247	3,120	-3.4
Sugarcane	967	955	900	-6.9
Rice	2,520	2,533	2,575	2.2
Wheat	8,358	8,415	8,310	-0.6
Gram	1,109	1,113	-	-
Maize	945	971	1,001	5.9
Production; 000 tons; cotton in 000 bales of 170kg each				
Cotton	14,600	15,000	13,000	-11.0
Sugarcane	47,224	50,095	41,225	-12.7
Rice	5,025	5,000	5,422	7.9
Wheat	21,612	22,000	-	-
Gram	766	853	-	-
Maize	2,520	2,905	3,277	30.0
Yield; Kg/hectare				
Cotton	770	785	709	-7.9
Sugarcane	49,000	52,500	45,806	-6.5
Rice	1,994	1,974	2,106	5.6
Wheat	2,586	2,614	-	-
Gram	769	771	-	-
Maize	2,667	2,992	3,273	22.7

T: Target; E: Estimates
Source***:*** MINFAL

The overall performance of the agricultural sector could yet receive a significant boost, however, if growth in the livestock sector proves to be significantly above the 3.5 percent FY06 target. While there is little hard data to support this hope, anecdotal evidence suggests that above-target growth could be achieved. Specifically, the dairy

industry seems poised to deliver significant production increases in FY06 on the back of sustained government and private sector efforts in recent years.

Crops

With the cotton picking season all but over, the latest cotton crop estimate confirms fears of a significant decline in the FY06 harvest. The weak performance by both cotton and sugarcane crops offset the gains from a bumper rice crop to ensure that, in real terms, value addition by three major *kharif* crops[1] will be about 9.0 percent lower than the target for FY06. Therefore, as mentioned earlier, the fortunes of the crop sub-sector in FY06 will now depend crucially on the performance of the wheat harvest and minor crops

Wheat

Initial estimates show a 0.6 percent YoY decline in the area under wheat, which is consistent with the extended cotton picking season and delayed sugarcane crushing (due to price disputes between farmers and sugar mills). However, the impact of this could be offset by the increased use of quality inputs as a result of better water prospects and the increase in the support price for wheat announced ahead of the sowing season. Notwithstanding these positive dynamics, it should be recognized that wheat yield have to rise by almost 2.5 percent, compared to the all-time high recorded in *rabi* FY05, if the 22 million tons production target is to be met.

As with most crops, timely sowing is vital to maximizing yields, and the delayed sowing during *rabi* FY06 means that a good harvest will require continued use of quality inputs and, more importantly, favorable weather. The crop could also benefit from the impartment of the floods around the Indus River areas of the Punjab and Sindh, which increased soil moisture and fertility in these areas. Indeed the germination of standing wheat crop in these areas is reported to be satisfactory. Thus, while it is too early to make a reliable forecast about the size of the crop, field reports on the standing crop and higher input off-take coupled with timely rains in late February-early March support hopes that wheat production may be close to the target of FY06. If so, Pakistan would harvest a bumper wheat crop for the second successive year. A reasonably good wheat harvest, together with the carryover stocks of 4.66 million tons from the FY05 crops (and imports of 1.0 million tons), would be

[1] Cotton, sugarcane and rice.

sufficient to meet the estimated domestic consumption requirements of 20.30 million tons during FY06 (see **Table 2.2**).

Other Crops

The production of maize recorded a growth of 30.0 percent in FY06 over the final estimates of last year. This was the result of both, a rise in area under the crop (up 5.9 percent YoY) and a 22.7 percent YoY increase in per hectare yield, which has pushed the harvest to a record 3.28 million tons.

Table 2.2: Wheat Supply and Use in World and in Pakistan

million tons

Description		World		Pakistan	
		FY05	FY06[P]	FY05	FY06[P]
Supply	Beginning stock	132.1	149.6	1.6	4.7
	Production	626.8	616.8	21.6	21.7
	Imports	109.8	106.6	1.4	0.8
	Overall supply	868.7	873	24.6	27.1
Use	Feed	106.8	113.66	0.4	0.4
	Consumption	609.2	623.77	19.5	20.3
	Exports	110.8	110.36	0.1	0.1
	Ending stock	149.63	142.62	4.66	2.8*

P: Projections
* As on 1st March 06

Sources: 1. MINFAL
2. USDA

Reports suggest that growth of minor crops will be higher in FY06 as compared to the estimates of last year. Available data shows that area under *jowar* and *mash* is estimated to be higher by 8.2 percent and 0.8 percent (to 0.33 million hectares and 0.04 million hectares) respectively in FY06 over last year. On the other hand, the area under *mung* crop is reported to be lower by 1.6 percent, to 0.22 million hectares, during the period under review.

Inputs

The supply of irrigation water and off-take of major inputs like fertilizers and certified seeds were reported higher during HI-FY06 as compared to the same period last year.

Fertilizers

The growth in fertilizer consumption slowed in FY06; the total nutrient off-take rose by only 4.7 percent YoY during Jul-Jan FY06, as compared to a 6.3

Table 2.3: Fertilizers Off-take

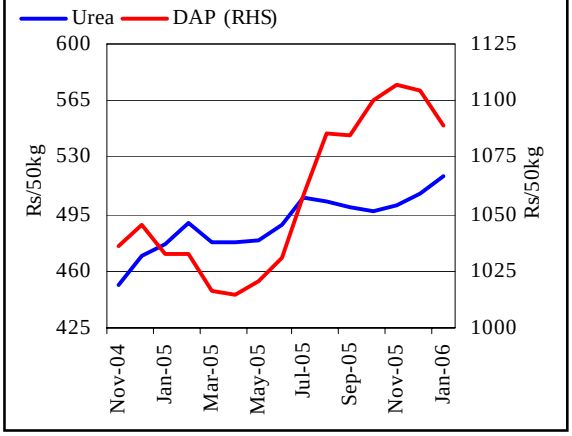
000 tons

Years	Urea	DAP
FY04	3,074	922
FY05	3,069	996
FY06	3,380	1,056
	Growth (percent)	
FY05	*-0.2*	*8.0*
FY06	*10.1*	*6.0*

percent YoY rise in FY05. As seen in (see **Table 2.3),** the deceleration is entirely due to slower rise in DAP demand. The relatively slow growth in DAP sales during July-Jan FY06 appears to reflect both a high-base effect as well as a sharp increase in DAP prices (see **Figure 2.1**) as a result of higher international prices.

Domestic urea prices, on the other hand, rose by a much smaller margin, and consequently the demand for the commodity remained strong. Indeed, a part of the higher urea demand could simply reflect farmers increased usage of urea to partially compensate for the lower use of expensive DAP.

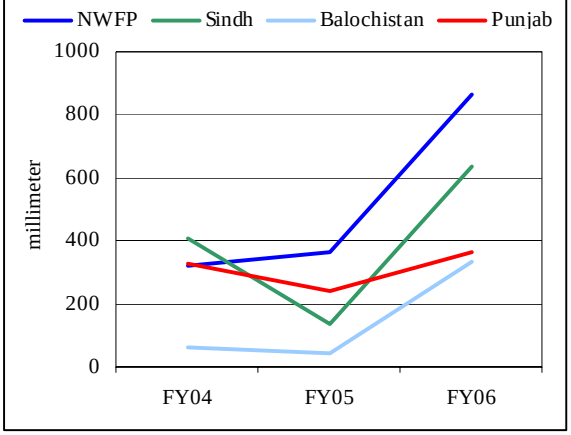
Figure 2.1: Average Domestic Prices of Fertilizer



Water Availability

The weather, rains and snowfall were reported to be satisfactory during Jul-Jan FY06 compared to the preceding year. As a result, water availability for *rabi* FY06 was reported to be higher by 32.8 percent YoY (see **Figure 2.2**). While this availability is still 5.8 percent lower than normal *rabi* levels, this is not expected to be a major hindrance in achieving the FY06 *rabi* crop targets, as farmers appear to have significantly improved on efficiency of water usage in recent years (e.g. through greater use of laser land leveling). Indeed, the bumper wheat harvest in *rabi* FY05 was achieved in the face of even lower water availability than envisaged for FY06.

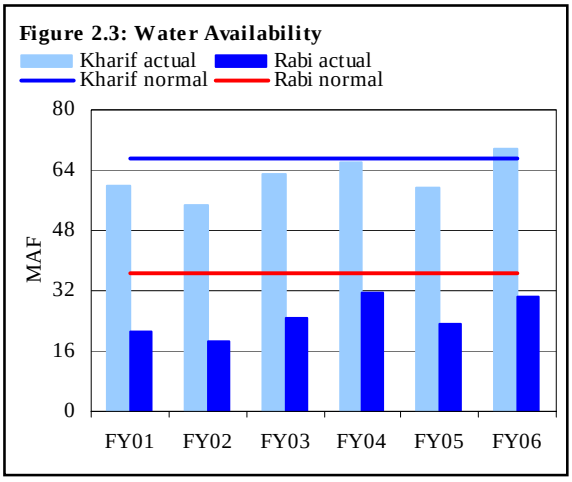
Figure 2.2: Province-wise Rainfall



Provisional estimates on water

utilization by the provinces suggests 20.32 MAF[2] consumption from 1st October, 2005 - 31st January, 2006 compared to 14.96 MAF in the same period last year, showing 35.8 percent higher water utilization (see **Figure 2.3**).

Figure 2.3: Water Availability



Improved Seed

The usage of quality seed increases yield from 20-40[3] percent over the traditional seeds used by the farmers. To attain the production target of major crops, in recent years, emphasis on the production of quality seed and distribution systems has been reinforced. Research institutes have given high priority to the development of new crop varieties and hybrid seeds.[4] Moreover, eleven new seed testing laboratories are being established, in addition to the seventeen already in operation. Not surprisingly, the usage of certified seed increased for many important crops during FY06; this is particularly evident for wheat (see **Table 2.4**). Similarly, for the enhancement of the domestic supply of cotton through higher yield, the Government had allowed cultivation of virus resistance trans-genic Bt cotton[5] for the cotton crop FY07.

Table 2.4: Certified Seed Distribution
000 tons

Crops	FY05	FY06	Percent change
Wheat	171.2	266.9	55.9
Cotton	24.5	29.3	19.6
Rice	6.8	7.6	11.8
Maize	5.3	6.8	28.3

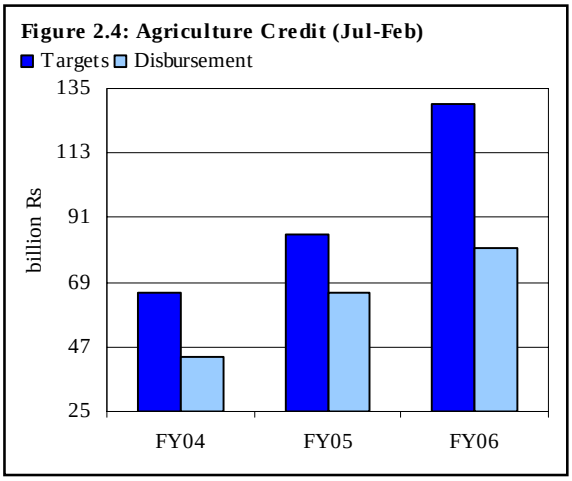
Source: Federal Seed Certification & Registration Department

[2] Million Acre Feet
[3] Estimated by Pakistan Agricultural Research Council (PARC).
[4] For example, a Foundation Seed Cell has been setup in each research institute to produce sufficient quantity seed to meet the needs of farmers.
[5] Genetically enhanced varieties of cotton led to yield gains of between 30 and 35 percent. A type of cotton, disease resisting which carries a special gene derived from soil born bacterium "Baccillus thuringiensis".

Agriculture Credit

The growth of agricultural credit disbursement during Jul-Feb FY06 was healthy 24.1 percent YoY, but was significantly weaker compared with a robust 50.8 percent YoY during Jul-Feb FY05 (see **Figure 2.4**). The relative slowdown appears to reflect (1) a high base as well as (2) rising interest rates.

Figure 2.4: Agriculture Credit (Jul-Feb)



Encouragingly for the sustainability of the agri-credit market, the recovery of agri-loans has seen a broad improvement in FY06, as only two large institutions have seen the recovery-to-loan ratio decreased during July-Feb FY06, relative to the corresponding period last year.

Table 2.5: Market Share (percent) in Agri-credit

Banks	FY04	FY05	FY06
CBs *	44.7	47.7	52.1
ZTBL	41.1	34.8	31.7
PPCBL	10.9	8.2	4.9
DPBs	3.4	9.3	11.2

*: ABL, HBL, MCB, NBP and UBL

A disaggregation of the credit disbursement (see **Table 2.5**) shows that commercial banks have continued to raise their market share in this fast growing market segment, as have the smaller domestic private banks (DPBs), at the expense of the specialized banks, ZTBL and PPBCL. While most of the DPBs have aggressively increased their exposure in agri-disbursements in recent years, most of the rise in their market share is captured by just three of the 14 banks in this group, which jointly accounted for 80 percent of the total agri-credit disbursed during Jul-Feb FY06.

It is interesting to note that the share of development loans in total agri-credit disbursements has stayed around 18-20 percent in recent years, although the overall disbursements have increased significantly in absolute terms. Out of total Rs 80.99

billion agri-credit disbursements in Jul-Feb FY06, 5.3 percent has been utilized for tractor purchase, 27.4 percent for fertilizer purchases and 67.3 percent was disbursed for the other agriculture related activities.

Table 2.6: Tractors Financing by Banks

Banks	H1-FY05 Tractors financed (Nos)	H1-FY05 Amount disbursed (m/Rs)	H1-FY06 Tractors financed (Nos)	H1-FY06 Amount disbursed (m/Rs)
CBs *	3843	1220	4880	1671
ZTBL	4589	1140	4643	1256
PPCBL	686	235	255	91
DPBs	1200	404	703	247
Total	**10318**	**2999**	**10481**	**3265**

*: ABL, HBL, MCB, NBP and UBL

The tractors financing increased by 8.9 percent YoY during H1-FY06 (see **Table 2.6**), with the 5 CBs and ZTBL jointly accounting for approximately 90.0 percent of the total tractor purchases financed during the period.

During Jul-Dec FY06 the land holding-wise share of credit disbursements stood at 68.3 percent for *subsistence* holdings, 22.4 percent for *economic* holdings and 9.3 percent for *above economic* holdings. Non-farm sector disbursements were shared by *small farmers* (53 percent) and *large farms* (47 percent) in Jul-Dec FY06. The total number of borrowers served both for farm and non-farm sectors fell by 11.4 percent to 488,241 during Jul-Dec FY06.

Approximately 93.1 percent of the agricultural credit disbursed during H1-FY06 was provided to the farm sector and 6.9 percent to the non-farm sector.

2.2 Large-scale Manufacturing (LSM)

Trends in large-scale manufacturing cannot be clearly established due to non-availability of data from Federal Bureau of Statistics (the last complete data set on LSM production is available for September 2005). However, there is some evidence that LSM growth has decelerated in Jul-Jan FY06 relative to the corresponding period of FY05 (see **Box 2.1)**.

An attempt has been made here to cover developments in specific industrial groups, where data is available from sources other than the FBS. Due to this shift in coverage, methodology, etc, the analysis may therefore not be consistent with the trends reported in the preceding SBP reports.

Table 2.7: Production of Selected Textiles Items (Jul-Jan)

Items	Units	Weight	FY04	FY05	FY06
Cotton yarn	000 tons	13.1	1132.7	1332.8	1491.8
Cotton cloth	million sq.m.	7.5	386.3	535.4	551.3
Jute goods	000 tons	0.2	61.4	60.0	57.9

Table 2.8: Total Cotton Availability in Pakistan
million bales

	FY05	FY06
Carryover stock	2.0	4.3
Production	14.6	13.0
Imports	2.3	2.3[1]
Exports	0.6	0.3[1]
Total availability	18.3	19.3
Consumption	14.0	15.0[2]
End period stock	4.3	3.0

[1] Upto Jul-Feb FY06
[2] Based on the estimation of United States Department of Agriculture (USDA) for FY06

Available information suggests that despite a high base set in the preceding year and higher prices of cotton, *textile* industry witnessed a satisfactory growth of 7.7 percent YoY during the first seven months of FY06, though lower than the 26.4 percent YoY in the corresponding period of FY05. The main contributor for this relatively smaller growth was a moderate rise of 3.0 percent in the production of *cotton cloth* during the first seven months of FY06 as compared with 38.6 percent remarkable growth during the same period of previous year. During Jul-Jan FY06, *cotton yarn* industry saw 11.9 percent growth on the back of 21.3 percent rise in exports of *cotton yarn* in this period (see **Table 2.7**).

Contrary to common perception that the slowdown in *textiles* is attributable to lower cotton production, it is evident from **Table 2.8** that low cotton production is not an

Table 2.9: Automobile Industry (Jul-Jan)
numbers

	Production			Sale		
	FY04	FY05	FY06	FY04	FY05	FY06
Cars 1300cc and above	21,510	27,053	49,627	21,131	27,095	36,403
Cars less than 1000cc	40,519	37,329	49,849	31,610	39,154	63,235
Jeeps & vans	3,049	8,846	6,798	3,103	4,261	6,925
LCVs	4,222	8,293	14,995	4,197	8,241	14,739
Trucks	1,140	1,637	2,453	1,051	1,693	2,343
Buses	791	1,978	385	779	878	528
Tractors	20,131	23,884	37,424	19,989	32,987	28,028
Motorcycles	165,080	228,439	299,989	163,964	227,516	298,673

immediate source of concern for the *textile* sector. The performance of *textile* industry depends on the total availability of cotton in the country, which is estimated at 19.3 million bales for FY06, up 3.8 percent than the last year, on the back of strong carryover stock, and a relatively small rise in domestic consumption of cotton.

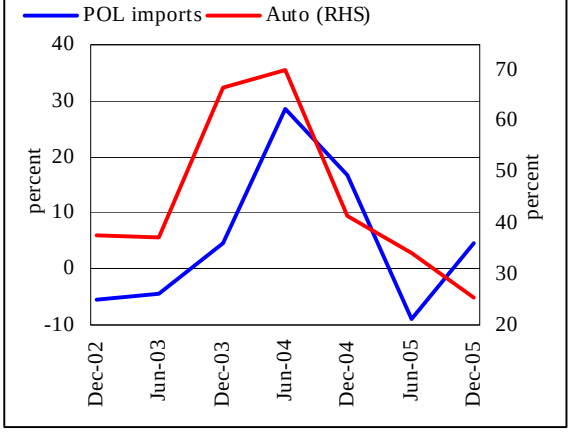
In contrast to *textile*, the *automobiles* industry saw an acceleration in production during the first seven months of the current fiscal year; the sub-group witnessed 28.2 percent growth in output as compared with a marginally lower 27.9 percent growth in the same period of the preceding year. Continued strong domestic demand on the back of credit availability as well as rising incomes was probably the major contributory factors to the extraordinary performance of the sector. All automobiles sub-groups except *buses* registered positive growth in output (see **Table 2.9**).

Within the *automobile*s industry, the *cars & jeeps* sub-sector recorded 45.1 percent growth during the first seven months of FY06 in contrast to the 12.5 percent growth recorded for the same period of the preceding year. In recent years the growth in the production of high capacity engine (1300cc and above) *cars* has been higher than that for the low capacity engine (below 1000cc) *cars*.[6] Similarly, the production of *trucks* registered a noteworthy growth of 49.8 percent in Jul-Jan FY06 in contrast with 43.6 percent growth during Jul-Jan FY05. This performance was due to the initiation of production of Dongfeng trucks by Sindh Engineering (Pvt) Limited.

[6] During Jul-Jan FY06, high capacity engine recorded 83.4 percent growth in production as compared with 25.8 percent growth in corresponding period of previous year.

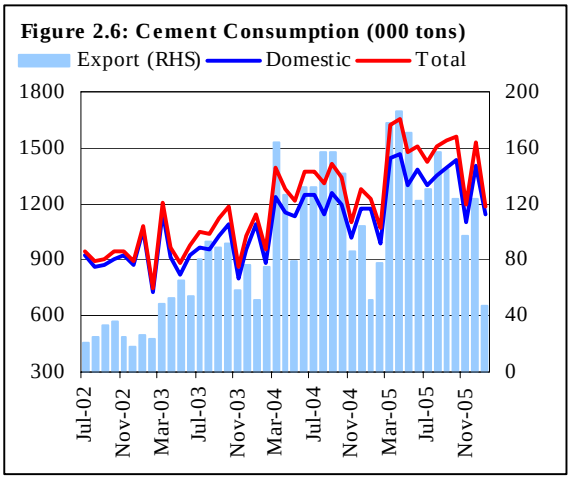
However, output growth of *motorcycles & auto rickshaws* sub-group slowed to 31.3 percent in Jul-Jan FY06 as against the 38.4 percent rise in output during the first seven months of FY05. The production growth of *light commercial vehicles* (*LCVs*) was still very impressive 80.8 percent YoY compared with the 96.4 percent YoY growth seen in the same period of FY05. This sustained exceptional rise in the production of *LCVs* reflects both strong demand (with increasing economic activity and availability of institutional credit) as well as supply improvements following (1) the entry of two new producers; and, (2) capacity expansions by established manufacturers.

Figure 2.5: Growth in Autos and POL Imports



Despite a sustained rise in production, the domestic *automobile* industry is unable to meet the rising demand of *automobiles* in the economy, and therefore imports of *road motor vehicles* rose by 66.7 percent during H1-FY06 as against the 28.6 increase in imports during the corresponding period of the previous year. Not only are the heavy imports of road motor vehicles adding pressures on the trade account directly, the rising demand of *automobile*s has also led to rise in fuel consumption, which is meet largely through imports. **Figure 2.5** shows that there is a direct relationship between growth in *automobile*s industry and imports of *petroleum* products.

Figure 2.6: Cement Consumption (000 tons)



As with the *automobile* industry, the *paper & board* sub-sector also observed an acceleration

with 11.7 percent growth in the production during Jul-Jan FY06 as compared with 4.5 percent during the corresponding period of FY05. An expansion in production capacity by some major players of industry were the main reasons for speeding up in *paper & board* output. To meet the robust domestic demand the imports of *paper & board* products increased by 18.7 percent YoY in Jul-Jan FY06 as against a 5.9 percent YoY rise in imports during the same period of the previous fiscal year.

Despite rising construction activities, growth in *non-metal* production decelerated to 8.5 percent YoY during Jul-Jan FY06 substantially lower than 22.0 percent growth of Jul-Jan FY05. The bulk of this slowdown reflected a deceleration in growth of the cement industry, where production growth fell to 8.8 percent in Jul-Jan FY06, compared to robust 22.2 percent growth during the same period of FY05 (see **Figure 2.6**).

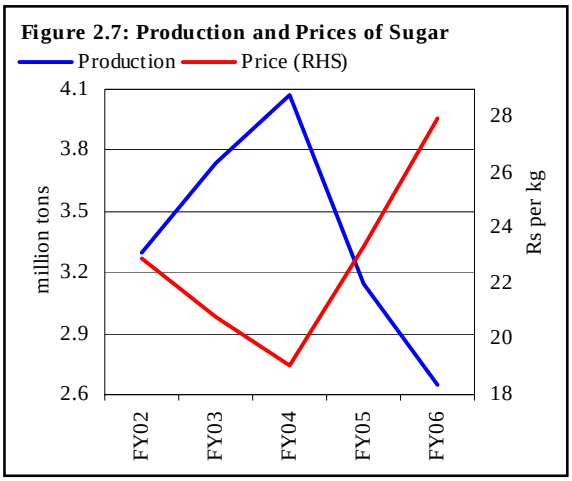
The local *cement* dispatches reached 9.1 million tons during the first seven months of FY06, from 8.2 million tons in Jul-Jan FY05, but external demand marginally declined by 0.8 percent during the first seven months of the current fiscal year from a robust 53.2 percent rise in Jul-Jan FY05.[7] However, the prospects of the cement industry look good, as an expected surge in reconstruction activities following the earthquake in the northern areas, and the continuation of infrastructure development programs, disbursement of consumer loans for housing and rising construction activities in various housing schemes, are all likely to strengthen *cement* demand in months ahead. In the longer run, demand would also be augmented by the government's decision to build a number of large water reservoirs.

The *chemical* industry also recorded deceleration with growth falling to 4.4 percent during Jul-Jan FY06, which is significantly lower than 12.2 percent growth seen in Jul-Jan FY05. This deceleration was mainly due to capacity constraints. Specifically, capacity utilization reached above 130 percent in *caustic soda* industry, where 4.2 percent deceleration was witnessed in Jul-Jan FY06 in contrast to 13.2 percent growth during the first seven months of FY05. Within the *chemicals* industry, *soda ash* recorded 6.0 percent YoY production growth during Jul-Jan FY06 as compared with 3.0 percent growth in Jul-Jan FY05.

[7] This is the first ever cumulative decline in cement exports since the country started cement exports.

The *Fertilizer* industry is also facing capacity constraints. During the first seven month of FY06, the *fertilizer* industry witnessed 16.4 percent growth YoY, which is significantly lower than 42.7 percent growth in the same period during last year. *Fertilizer* demand has been fundamentally strong on account of improved farm income, improved water availability and more credit availability to growers. In order to fill the supply demand gap, around 1.6 million metric tons of fertilizer was imported during Jul-Jan FY06, up 56.7 percent YoY. Given that no major capacity additions are currently underway, and that fertilizer plants have long gestation periods, demand growth in the next few years will be significantly met through imports, and possibly lead to higher prices (or greater government subsidies).

Figure 2.7: Production and Prices of Sugar



The positive growth contribution of the above mentioned industries were partially offset by fall in the production of three industries - *food*, *metal* and *rubber*. In Jul-Jan FY06, the output of *food* group registered a fall on account of deceleration in *cigarette* production and fall in the production of sugar. Specifically, *sugar* industry witnessed a 29.1 percent fall in the production during Jul-Jan FY06 as against a decline of 1.4 percent in Jul-Jan FY05. The fall in sugar production is mainly a function of (1) a 13.3 percent decline YoY in the production of sugarcane, and (2) an unwarranted delay in crushing season. These factors forced growers to shift to making other products such as "*gur*" (dehydrated sugar) which adversely affected the production of crystal sugar. The fall in the production of sugar, together with delays in imports, fostered perceptions of the shortage of sugar, which was further augmented by speculation, driving sugar price[8] up sharply, by 39.5 percent YoY, during H1-FY06 (see **Figure 2.7**).

[8] In retail market, the price reached to Rs. 42.0 per Kg.

As with the sugar industry, the *metal* industries also witnessed a decline in output. During Jul-Jan FY06, the production of *iron & steel* fell by 62.3 percent YoY as compared with only 1.5 percent YoY decrease seen in the first seven months of FY05. The fall in the production of *iron & steel* sector was mainly caused by the technical problems in Pakistan Steel.[9] Thus the demand from the growing *automobile* industry, rise in *construction* activities (including the demand from reconstruction activities in earthquake affected northern areas) was met through imports for yet another year; imports of *iron & steel* recorded a 46.3 percent YoY rise during Jul-Jan FY06 compared to 40.0 percent YoY increase in the same period of FY05.[10] Interestingly, foreign direct investment in the construction, *cement* and *metal* industries rose to US$ 86.5 million in Jul-Feb FY06, up from US$ 20.1 million during Jul-Feb FY05, indicating enhanced capacity that would allow accelerated growth in these sectors in years ahead.

[9] Two Coke oven batteries of Pakistan Steel (PS) are out of order since April 2005.The PS has given tender for their repairing work in the first week of January 2006, in which 18 months are mentioned for the completion of task. This means that PS will start working at full capacity by the end of 2007.

[10] The Ministry of Commerce has allowed the import of corrugated galvanized iron sheets from India for a period of one month commencing from December 14, 2005 to January 13, 2006 for exclusive use in rehabilitation of earthquake victims, subject to the verification and recommendation of the Federal Relief Commission.

Box 2.1: Need for Revision in LSM Data Compilation Methodology

It is a little puzzling that the LSM growth rates are trending downward while all other associated indicators are showing an improvement in the sector. First, country has imported huge amount of capital and raw material for capital goods during last three years. Similarly, a substantial amount of raw material was also imported to augment the requirements of the consumer product industries (see **Table B2.1**). Institutional credit and investment (including FDI) has also seen a significant rise during last three years.

Table B2.1: Imports of Different Economic Categories

million US$

Economic category	FY03	FY04	FY05	Jul-Oct FY06
Consumer goods	1234	1439	2064	968
Raw material for consumer goods	6499	7670	9388	4290
Raw material for capital goods	705	995	1713	702
Capital goods	3782	5488	7433	2917
Total imports	**12,220**	**15,592**	**20,598**	**8,866**

Though, capacity constraints appear to be hitting LSM growth since FY05, it is possible that improved coverage of the industries may present a different picture. Similarly, weights of the existing industry are probably no longer representative; the current weights are based on FY01 data, and the industrial sector has undergone significant changes and new industries have been added (such as tetra milk, fruit juices, mineral water, value added textile products etc) the coverage of which is weak, and there has been massive growth in others (e.g. cars, consumer durables, etc. see **Box 2.3** in the ***Third Quarterly Report of FY05***, p-29).

The present data set of 100 industries compiles by FBS captures only 75.1 percent weight in LSM on the basis of old survey. There is a need to re-allocate the weights and inclusion of some of the important large-scale manufacturing industries in the new survey based on their true contribution in the economy.