# **Inflation Monitor**

**March 2007** 



# **State Bank of Pakistan**

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### Overview

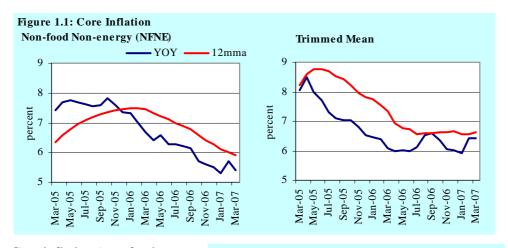
Headline CPI inflation increased to 7.7 percent in March 2007 on year-on-year (YoY) basis from 6.9 percent as registered in the same month of last year. In March 2007 food inflation rose to 10.7 percent from 5.4 percent in corresponding month of last year, while non-food inflation declined to 5.5 percent from 8 percent of last year. (see **Table 1.1**).

Nine-month period average inflation showed a decline in overall inflation during July-March FY07 compared with the same period last year. However, similar to YoY trend in March 2007, period average indicated a rise in food inflation and a fall in non-food inflation.

		CPI		Core I	nflation	WPI	SPI**
	General	Food	Non-food	NFNE *	Trimmed	**11	511
Mar-06	6.9	5.4	8.0	6.7	6.1	8.5	6.9
Apr-06	6.2	3.6	8.0	6.4	6.0	8.1	6.4
May-06	7.1	5.6	8.2	6.6	6.0	9.1	7.7
Jun-06	7.6	7.8	7.5	6.3	6.0	9.0	8.7
Jul-06	7.6	7.4	7.8	6.3	6.1	8.4	8.6
Aug-06	8.9	11.1	7.4	6.2	6.5	8.2	10.8
Sep-06	8.7	11.3	7.0	6.2	6.6	8.0	10.0
Oct-06	8.1	10.5	6.4	5.7	6.4	6.7	9.9
Nov-06	8.1	10.6	6.3	5.6	6.1	7.5	10.7
Dec-06	8.9	12.7	6.2	5.5	6.0	8.0	12.0
Jan-07	6.6	8.7	5.2	5.3	5.9	5.4	9.5
Feb-07	7.4	10.0	5.6	5.7	6.4	5.1	8.8
Mar-07	7.7	10.7	5.5	5.4	6.4	6.1	8.9

When compared with the rate in February 2007 year-on-year CPI inflation rate in March 2007 shows an upward movement in overall inflation and food inflation, however non-food inflation shows a decline.

Overall CPI increased by 0.5 percent, which is less than the five-year average of monthly increase in March 2007. The extent of one-month increase in food and non-food inflation is also less than the five-year February-March increase (see **Table 1.2**).



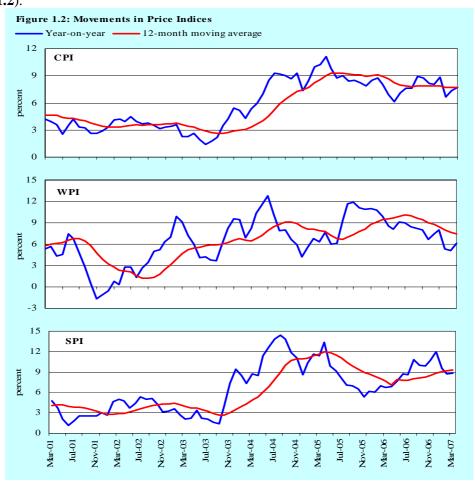
Core inflation (non-food nonenergy) also declined to 5.4 percent in March 2007 from 6.7 percent in March 2006 on YoY basis, where as core inflation based on 20% trimmed-mean CPI shows an increase from 6.1 percent in March 2006 to 6.4 percent in March 2007. The declining trend in both measures of core inflation is clearly visible in terms of nine-month annualized period average rates as well as twelvemonth moving average rates (see Figure 1.1).

The wholesale price inflation (WPI) declined to 6.1 percent in March 2007 on YoY basis from 8.5 percent in the corresponding month last year. This significant decline in WPI was due to a sharp deceleration in non-food inflation during March 2007 compared to the corresponding month of last year. In contrast

Table 1.2: Different	Table 1.2: Different Dimensions of Inflation (percent)									
				5-year						
	Mar-05	Mar-06	Mar-07	average						
Yea	Year-on-year (Mar over Mar)									
Overall CPI	10.2	6.9	7.7	6.5						
Food group	13.3	5.4	10.7	7.5						
Non-food group	8.2	8.0	5.5	5.8						
Core Inflation										
NFNE	7.4	6.7	5.4	5.3						
Trimmed	8.0	6.1	6.4	6.3						
Period a	verage (Jul-	Mar over J	ul-Mar)							
Overall CPI	9.1	8.2	8.0	6.5						
Food group	12.5	7.4	10.3	7.6						
Non-food group	6.8	8.9	6.4	5.7						
Core Inflation										
NFNE	6.8	7.4	5.7	5.1						
Trimmed	8.7	6.9	6.6	6.4						
12	-month mo	ving averag	ge							
Overall CPI	8.6	8.6	7.8	6.4						
Food group	12.0	8.6	9.2	7.4						
Non-food group	6.4	8.7	6.7	5.7						
Core Inflation										
NFNE	6.3	7.4	5.9	5.7						
Trimmed	8.2	7.3	5.9	6.3						
N	Ionthly (Ma	r over Feb	)							
Overall CPI	1.3	0.2	0.5	0.6						
Food group	2.2	0.2	0.9	1.0						
Non-food group	0.7	0.3	0.2	0.3						
Core Inflation										
NFNE	0.7	0.4	0.1	0.4						
Trimmed	0.5	0.4	0.3	0.5						

with CPI and WPI, sensitive price indicator (SPI) increased to 8.9 percent in March 2007 on YoY basis from 7.7 percent in March 2006.

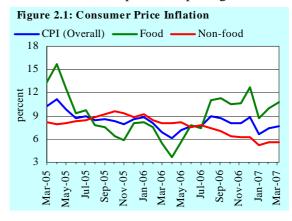
In March 2007, trend rates of inflation moved in different directions, with YoY inflation depicting an upward trend whereas nine-month period average and 12 month moving average showing a declining trend. Food inflation in all three categories of inflation showed an upward trend, while non-food inflation depicted a declining trend. Trend rate in CPI declined to 7.8 percent in March 2007 from 8.6 percent a year earlier. Trend rate in food inflation shows an increase to 9.2 percent from 8.6 percent in the same period, while the extent of decline in trend rate of non-food inflation was 6.7 per cent in March 2007 from 8.7 percent in March 2006 (see **Table 1.2**). The WPI inflation that remained on a rising trend during FY06, started to decline from the beginning of FY07. This decelerating trend has continued over the subsequent months of current fiscal year (see **Figure 1.2**).



#### 2. Consumer Price Inflation

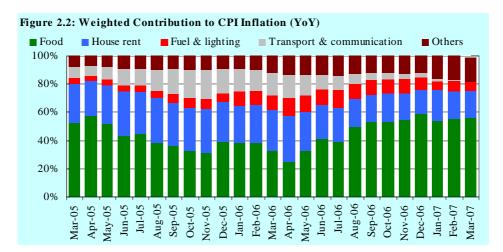
In March 2007, CPI YoY inflation was recorded at 7.7 percent depicting a rise of

0.8 percentage points than that of the corresponding month last year. An increase of 0.3 percentage points is recorded in March 2007 as compare to February 2007. The main contributing factor for rise in overall CPI inflation is due to food inflation which was 5.3 percentage points more than that of the same month of last year and 0.7 percentage points as compare to pervious month.



Non-food inflation declined and was recorded at 5.5 percent in March 2007 (see **Figure 2.1**).

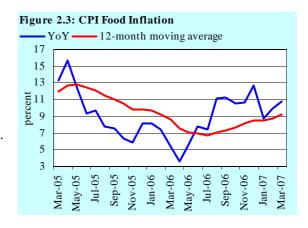
The contribution of food group in overall inflation was 57.4 percent in March 2007 which was significantly higher than 32.6 percent contribution of food during the corresponding month last year. The contribution of house rent index (the single largest item of the CPI basket) declined from 29.4 percent during the corresponding month of last year to 19.8 percent (see **Figure 2.2**) in March 2007.



#### 2.1 Food Inflation

Food inflation (YoY) increased from 10 percent in February 2007 to 10.7 percent (YoY) in March 2007, driven mainly by an increase in prices of eggs, rice, fresh fruits, milk powder and chicken. The weight of these items is about 11 percent of the total weight of food group.

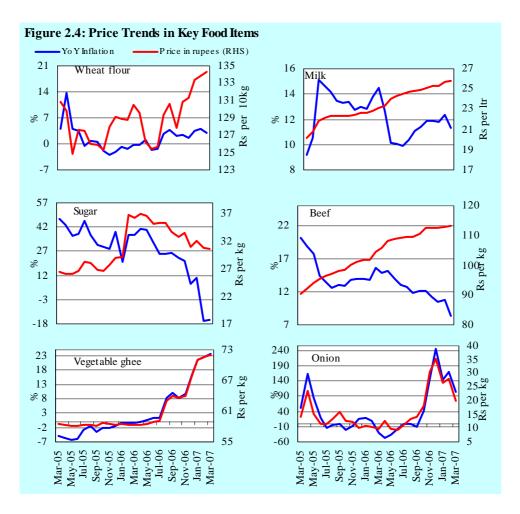
Of the total 124 commodities included in the food group, 47 commodities including eggs, some fruits, some pulses, different types of rice, chicken and some vegetables exhibited inflation (YoY) in the range of 10 to 90 percent in March 2007. The combined weight of commodities with double digit inflation is about 46 percent of the food group. Only three commodities of food group



have crossed the 100 percent inflation (YoY), these items include kinnu (159 percent), Malta (107 percent) and onion (103 percent). On the other hand inflation (YoY) of 11 commodities like tomatoes, potatoes, green chilies, sugar, ginger, and peas either declined or remained same during the month. Rest of the items having a weight of 37 percent in the food group exhibited subdued or moderate inflation (see **Table A2** in Annexure A).

As compared to February 2007, during March 2007 there is marginal increase in average price of food items like wheat flour, fresh milk, vegetable ghee and beef, whereas prices of sugar and onion showed a decline (see **Figure 2.4**). However, there is a significant increase in the prices of green chillies by 41 percent, eggs by 18.6 percent, fresh fruits by 11.3 percent during the month of March 2007 as compared to the previous month.

In terms of percent contribution to overall inflation (YoY), fresh fruits and fresh milk were the second and third highest contributors (house rent index of non-food group being the first) with 12.2 percent and 10.2 percent share in overall CPI inflation (see **Table A3** in the annexure). The high contribution of fresh fruits was due to exceptionally high growth in its prices specifically kinnu malta and apple, though its weight in the CPI basket is just 1.62 percent. On the other hand, high contribution of fresh milk was primarily due to its high weight (6.5 percent) while increase in its price was also higher than overall food inflation.



# 2.2 Non-food Inflation

Non-food inflation decreased from 5.6 percent in February 2007 to 5.5 percent in the month of March 2007 (see **Figure 2.5**). This marginal decline in non-inflation is primarily due to decrease in transport & communication, household furniture & equipment, education and recreation & entertainment groups of non-food group. On the other hand other groups including fuel & lighting, apparel, textile & footwear, house rent, cleaning and laundry & personal appearance and medicare recorded an increase in YoY inflation during March 2007.

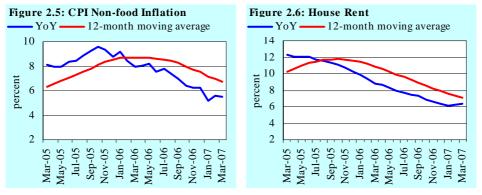
Fuel & lighting sub-group witnessed a price increase (YoY) of 7 percent in March 2007 as compared to 6.5 percent in February 2007. The price of CNG cylinder has increased appreciably as compared to the corresponding month of last year.

The inflation in transport & communication sub-group significantly decreased to -1.4 percent in February 2007 from 0.9 percent in the preceding month. This change is due to significant reduction in the outside city telephone charges.

Inflation (YoY) in apparel, textile & footwear sub-group was recorded at 7.3 percent in March 2007 as compared to 6.2 percent in February 2007. This is mainly because of an increase in the prices of footware.

The house rent index (HRI) slightly increased in the month of March 2007 and was recorded at 6.4 percent as compared to 6.3 percent as of February 2007 (see **Figure 2.6**).

Other indices of non-food group also exhibited an increase in inflation during the month which included medicare and cleaning, laundry & personal appearance. The medicare sub-group index registered an increase of 10.8 percent in the month under review as compared to that of 9.3 percent growth in the previous month (see Figure A1 in annexure).



Of the 250 non-food commodities included in the CPI basket, 30 commodities witnessed double digit inflation which included items like firewood, train fares economy, air fare economy class, primary school fee (English medium), gold tezabi, silver tezabi and doctor clinic fee, etc. There were 57 commodities that showed moderate inflation in the range of 5 to 10 percent; all other commodities witnessed either YoY deflation or inflation of less than 5 percent ( see **Table A2** in the annexure). The commodities showing deflation include petrol super, a number of durable goods like telephone charges, computers, video cassette

players, refrigerators, sewing machines, etc. A significant YoY deflation is recorded in outside city telephone charges (-33.9 percent) in March 2007 ( see **Table A4** in the annexure).

## 2.3 City-wise Inflation

City wise inflation indicates that 24 cities out of 35 were found in the category of high inflation cities with Gujranwala maintaining its position at the top with the same 10.9 percent as in the last month. Loaralai also maintained its status of

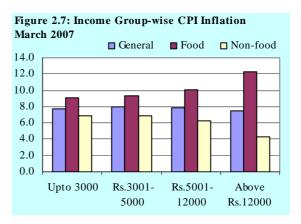
Table 2.1: City wi		ı inflatio		,	Low	inflation	n cities
	General	Food	Non-food		General	Food	Non-food
Gujranwala	10.9	14.9	8.2	Quetta	7.5	11.9	4.6
Okara	10.7	15.2	7.5	Sialkot	7.4	12.8	3.6
Mianwali	9.9	13.5	7.5	Turbat	7.4	6.6	7.9
Multan	9.9	11.8	8.6	Karachi	7.2	10.0	5.2
D.G. Khan	9.9	13.9	7.1	Sukkur	7.1	7.8	6.6
Bahawalnagar	9.9	13.4	7.5	D.I.Khan	6.9	9.2	5.3
Jhelum	9.5	13.0	7.1	Abbotabad	6.5	8.7	4.9
Jhang	9.5	14.3	6.2	Faisalabad	6.4	11.4	3.0
Vehari	9.4	10.1	8.9	Mardan	6.1	6.5	5.9
Islamabad	9.0	11.8	7.2	Peshawar	5.9	6.6	5.5
Sargodha	9.0	14.2	5.4	Loralai	5.5	6.3	4.9
Nawabshah	8.8	10.8	7.5				
Bahawalpur	8.5	12.1	6.0				
Samundari	8.5	13.2	5.3				
Kunri	8.3	10.2	7.0				
Bannu	8.3	6.9	9.2				
Rawalpindi	8.2	10.4	6.6				
Khuzdar	8.1	11.2	5.9				
Larkana	8.0	10.8	6.1				
Hyderabad	8.0	9.9	6.7				
Shahdadpur	8.0	8.8	7.5				
Mirpur Khas	7.9	9.8	6.6				
Lahore	7.9	12.0	5.0				
Attock	7.8	9.9	6.4				

Note: High inflation refers to above average inflation, and low inflation refers to below average inflation experiencing the lowest CPI inflation though the recorded CPI inflation of the city for the current month was higher than the last month in all three categories viz, general, food & non-food. For the current month Karachi was found in its conventional category of low inflation cities after remaining in high inflation cities

for the last three months. Moreover in contrast to overall inflation trend, Karachi depicted a decline in CPI inflation in all the three categories. Hyderabad and Kunri got shifted to high inflation cities with the CPI (YoY) inflation of 8 and 8.3 percent respectively which is higher than the last month inflation of 7 and 7.1 percent. However the capital city Islamabad dropped its position to  $10^{th}$  rank from  $6^{th}$  by depicting a declining trend in inflation; 9 percent CPI inflation (YoY) in March 2007 as compared to 9.6 percent in February 2007.

### 2.4 Income Group-wise Inflation

The income group wise data reveals that following the conventional trend all income groups except for the highest income group had experienced the CPI inflation higher than the overall CPI inflation. However the highest CPI inflation was recorded for the income group of Rs. 3001-5000 instead of the conventional lowest income group. Moreover the inflation



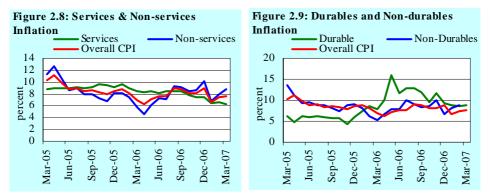
recorded for all income groups except for the lowest income group depicted a rising trend as compared to their respective inflation of last months.

City wise data shows that Gujranwala and Khuzdar maintained their positions of being at the highest and the lowest level respectively for all income groups. (see **Table A5** in annexure A)

### 2.5 Services and Non-services Inflation

Inflation in the services<sup>1</sup> sector showed a marginal decline in March 2007 with the non-services sector showing a significant increase. During the current month inflation (YoY) in services was recorded at 6.3 percent as compared to 6.6 percent in the previous month and 8.5 percent in the corresponding month last year. The inflation of non-services sector was 8.7 percent in March 2007 as compared to 8 percent in the previous month and 5.7 percent in the corresponding month last year (see **Figure 2.8**).

<sup>&</sup>lt;sup>1</sup> The services group of CPI basket includes items like house rent index, electricity charges, marriage hall, house hold servant, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges etc.



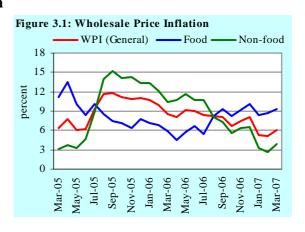
Within the non-services sector, inflation in durable<sup>2</sup> items slightly increased to 8.8 percent in March 2007 as compared to 8.5 percent that of February 2007 (see **Figure 2.9**). The non-durable goods inflation also increased to 8.7 percent in March 2007 from 8 percent of February 2007 and 6.3 percent during the corresponding month last year. The items that caused increase in non-durable inflation are almost the same that contributed to an increase in overall CPI inflation, i.e. rice, eggs, chicken, footwear, milk powder, fresh fruits etc.

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 $<sup>^2</sup>$  Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerator, air conditioners, vehicles, computer & allied products, watches and jewellery, etc.

### 3. Wholesale Price Inflation

In tandem with CPI inflation, average WPI inflation (YoY) accelerated in March 2007 compared to the previous month and rose to 6.1 percent from 5.1 percent; however it remains lower than 8.5 percent (YoY) inflation witnessed in the same month last year. The long-run trend of WPI inflation measured by 12-month moving average continued its decelerating trend that

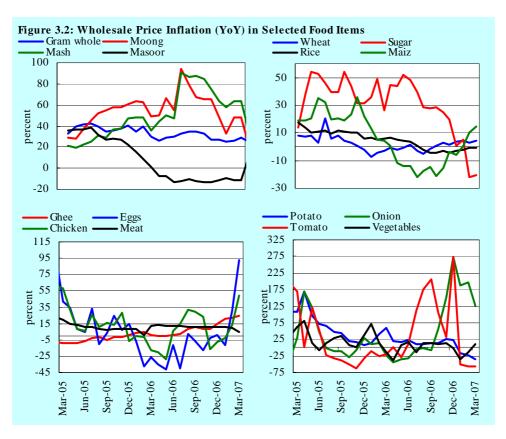


commenced at the start of FY07 on account of a generally continuously declining (YoY) growth in WPI since March 2006.

Both the food as well as non-food group contributed to the rise in average WPI inflation. The rate of change in wholesale prices of food group increased from 8.7 percent (YoY) in February 2006 to 9.3 percent in March 2007. Similarly the non-food group WPI inflation also witnessed a (YoY) increase and stood at 3.9 percent as compared to 2.6 percent in February 2007 (see **Figure 3.1**). Apart from building material, all sub groups of non-food group in WPI showed higher (YoY) inflation in March 2007 as compared to the previous month and thus contributed in the acceleration of non-food inflation.

A disaggregated analysis of WPI inflation shows that onion, fruits, poultry items, cotton seeds, wires & cables etc. showed an increase of varying magnitude in their prices. The wholesale prices of more than 50 percent items declined, remained stable or exhibited lower growth than that of overall WPI.

A distribution of price change suggests that 18 out of 43 food items witnessed a rise of more than 10 percent in inflation during the month under review. While 8 items recorded moderate inflation of 5 to 10 percent, other 10 items showed subdued inflation of up to 5 percent. The wholesale prices of remaining 7 food items declined or remained stable. In case of the non-food group, prices of 21 items revealed a positive change of up to 5 percent, 16 items showed a decrease or no change, 16 items demonstrated double digit rise of above 10 percent and the remaining 10 items displayed a moderate inflation, i.e. 5 to 10 percent (see **Table A7** in Annexure A).

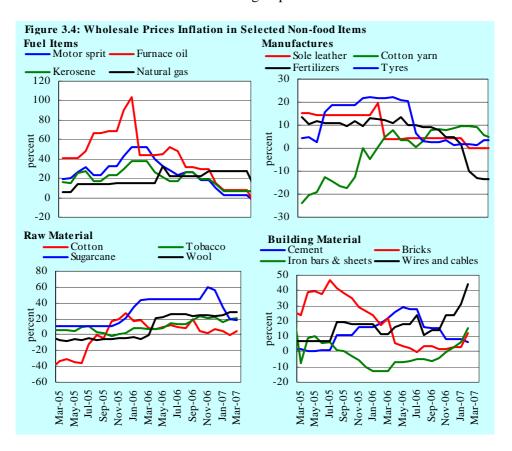


Further classification of non-food group revealed that except from building materials all subgroups, i.e. raw materials, fuel, lighting & lubricants, and manufactures accelerated during March 2007 (see **Figure 3.3**). The rate of increase in raw materials was recorded at 15.3 percent (YoY): higher as compared to 13.1 of the previous month. By analyzing the individual commodities



amongst the raw material sub group, it was observed that all the items included in the raw material subgroup showed a positive (YoY) growth. The wholesale price of pig iron, skins and cotton accelerated significantly as compared to the previous month. On the other hand tobacco showed a significant decline in (YoY) inflation.

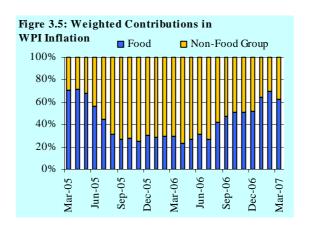
Growth in fuel, lightning & lubricants sub group witnessed a turnaround and became positive in March 2007 as compared to the negative growth in the previous month. This was mainly due to double digit (YoY) growth witnessed in 5 of the total 11 items included in the sub group.



After decelerating for five consecutive months, the manufactures sub-group accelerated in March 2007 and recorded a higher inflation of 2.7 percent in March 2007 as compared to 1.6 percent during the last month. This was mainly due to the fact that more than 65 percent items included in the group recorded positive (YoY) growth with some of the items like chemicals and footwear showing double digit inflation.

The building material sub-group depicted a lower (YoY) growth of 10.8 percent in March 2007 as compared to the 11.6 percent of last month. This was mainly due to cement whose (YoY) inflation became negative in March 2007 and was recorded -6.4 percent as compared to 6.1 percent growth in the previous month. In general the prices of all items, except cement, reported in this group exhibited positive growth during the month under review; particularly wholesale prices of iron bars & sheets, wires & cables and timber rose sharply (see **Figure 3.4**).

After showing a continuous increase since August 2006, the weighted contribution of food group in WPI inflation decreased in March 2007 to 62.7 percent in March 2007 from 69.9 percent in the previous month. On the other hand contribution of non-food group increased slightly to 37.3 percent in March 2007 from 30.1 percent in February 2007: however it is still much lower



as compared to 73 percent contribution recorded in July 2006. The slight increase in weighted contribution of non-food inflation in WPI during March 2007 as compared to the previous month is mainly because of higher growth registered in fuel, lighting & lubricants and manufactures sub-groups (see **Figure 3.5**).

Within non-food group, the contributions of its sub-groups showed mixed trends. The contributions of raw materials and building materials came down whereas the manufactures and fuel, lighting & lubricant group's

Table 3.1: Contribution of Sub-Indices to WPI Non-food inflation in FY 07							
	Jul	Feb	Mar				
Raw materials	12.9	62.3	48.3				
Fuel, lighting & lubricants	68.5	-22.0	2.9				
Manufactures	15.1	22.9	25.8				
Building materials	3.5	36.5	23.1				

contribution increased in March 2007. The most peculiar change was observed in the fuel, lighting & lubricant group whose contribution in non-food group came back into the positive zone and was recorded at 2.9 percent in March 2007 as compared to -22.0 percent during February 2007: however it is still lower as compared to 68.5 percent at the start of FY07 (see **Table 3.1**).

# 4. Global Commodity Prices

In international markets the prices of selected items firmed up in March 2007 led by energy, food and other commodity groups except for sugar and wheat (see **Table 4.1**). Energy prices represented by the IMF and the World Bank energy indices along with the crude oil and coal prices continued on an upward trend which started in February 2007. Food prices also registered an increase in the international market except for sugar and wheat prices. In the non-food non-energy group, a surge in prices was led by fertilizer and metal prices.

	Aug 06	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07
Energy	1145 00	Бер оо	000	1101 00	20000	our or	1000.	1/2412 07
Crude Oil (US\$								
per barrel)	71.8	62.0	58.0	58.1	61.0	53.4	57.6	60.6
IMF Energy								
Index	386.7	336.2	317.3	320.2	333.3	295.4	317.3	332.0
WB Energy Index	313.5	271.5	253.1	254.1	266.6	233.9	251.6	264.9
Coal Food	54.6	50.7	47.2	49.3	53.3	55.0	56.7	59.2
	212.4	212.0	200.6	200.6	200.2	212.5	2161	2262
Rice	313.4	312.9	309.6	300.6	309.3	313.5	316.1	326.2
Wheat	189.9	196.0	212.1	205.8	204.3	196.1	200.0	199.1
Sugar	13.0	12.3	11.5	11.7	11.7	10.9	10.6	10.4
Palm Oil	434.5	416.9	422.3	476.7	528.2	550.8	553.8	566.4
Soybean Oil	562.5	534.3	559.7	623.6	628.6	635.6	664.9	679.5
Sunflower Oil	673.0	673.0	673.0	673.0	673.0	673.0	673.0	673.0
Non-Food Non-En	ergy							
Cotton Outlook								
'A' Index	59.9	58.8	57.0	57.4	59.4	59.1	57.9	58.4
WB Steel								
Products Index	135.8	135.8	133.7	131.5	131.0	131.4	132.0	132.5
DAP	260.9	258.8	255.6	253.5	253.5	267.6	345.4	420.5
Urea	213.7	215.3	211.8	235.6	254.7	269.8	304.3	318.0

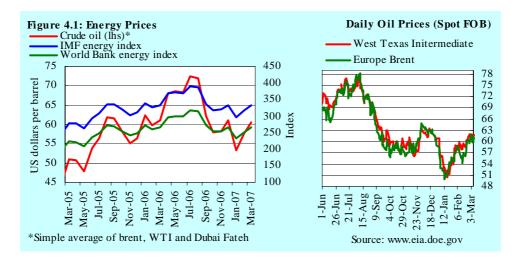
Note: Prices for all commodities are in US\$ per metric tonne except for crude oil.

During March 2007, in the energy group, oil prices increased and stood at US\$ 60.6 per barrel. This rise in price was, in part, due to the capture of 15 British sailors by Iran<sup>3</sup>. However the monthly growth of 5.2 percent in March was lower than 7.8 percent of February 2007. Compared on YoY basis, crude oil prices declined by 0.5 percent, slightly higher than the decline of 3.6 percent in February 2007. The average monthly price of crude oil in the international market remained between the minimum range of US \$58.3 per barrel and the maximum range of US\$ 67.2 per barrel. The volatility in international crude oil prices – measured by

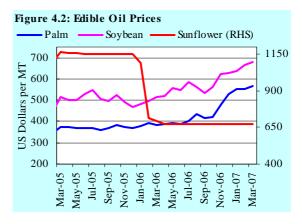
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<sup>&</sup>lt;sup>3</sup> Source: World Bank Commodity Market Review

the standard deviation –increased considerably during the month under review reflecting volatile prices. The fluctuation around average price during the month of March 2007 was 2.5 as compared to 1.5 of the preceding month. In accordance with the international oil prices, the IMF and the World Bank energy indices<sup>4</sup> for March 2007 exhibited an increase over the preceding month, but the rate of growth in March 2007 was lower than that of the previous month (see **Figure 4.1**).



Like previous months, in March 2007, the wholesale prices of palm oil in international market showed growth as compared to the corresponding month of last year and the previous month mainly because of strong global demand and weak exports from Malaysia<sup>5</sup>. The (YoY) growth in palm oil was recorded at 47.7 percent-highest in the current fiscal year. On the other hand the (YoY) growth of soybean



oil decreased from 33.6 percent in February 2007 to 31.7 percent in the month under review. Similarly monthly growth in soybean decreased from 4.6 percent in

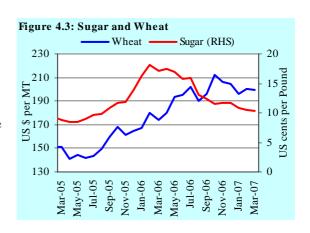
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<sup>&</sup>lt;sup>4</sup> Average of West Texas Intermediate (WTI) and Europe Brent daily crude oil price

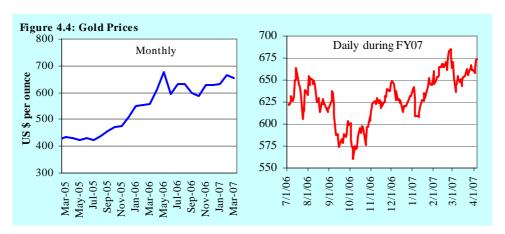
Source: World Bank Commodity Market Review

February 2007 to 2.2 percent in March 2007. Whereas the sunflower price has not exhibited any change since April 2006 (see **Figure 4.2**).

Wheat prices declined in March 2007 showing a monthly inflation of -0.4 percent. However (YoY) growth was recorded at 14.1 percent, slightly higher as compared to 11.2 of the previous month. The average monthly sugar prices continued to decline for the forth consecutive month. Thus both monthly and (YoY) inflation recorded negative growth of 1.94 and 39.3 respectively (see **Figure 4.3**).



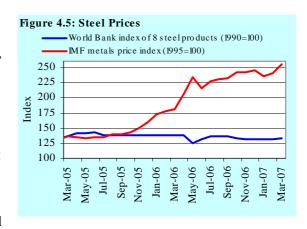
Average monthly gold price showed a slight decrease over the previous month while it increased sharply as compared to the same month of last year. During March 2007 daily gold price in the international market remained higher and



fluctuated between a wider range of US\$ 637 per ounce and US\$ 670 per ounce. The variation in gold prices declined during the month showing a standard deviation (SD) of 8.5 around mean of US\$ 655 per ounce as compared to the SD of 10.6 around mean of US\$ 664 per ounce a month earlier (see **Figure 4.4**).

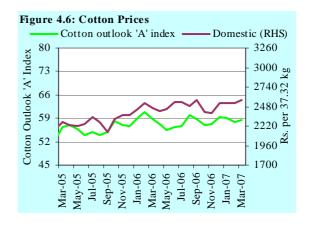
The prices of major metals showed mixed trends as compared to the previous

month. Barring aluminum and zinc, the prices of all other metals including nickel, copper, tin, lead, nickel, etc., increased sharply in March 2007 as compared to the same month last year. This is also reflected by the IMF metal price index that rose by 41.2 percent during March 2007 as compared to the corresponding month last year. The steel prices – measured by the World Bank Index of 8 steel



products<sup>6</sup> – declined by 4.41 percent. Nickel was the star performer in the metal group whose prices exhibited a steep rise of 211 percent in March 2007 as compared to the same month last year (see **Figure 4.5**).

In the international markets, cotton prices – represented by cotton outlook 'A' index<sup>7</sup> – dropped by 0.3 percent in March 2007 as compared to the corresponding month last year. However cotton prices grew by 0.9 percent than that of February 2007. In the domestic cotton market, cotton prices continued to rise for the forth consecutive month and showed a (YoY) increase of 1.5 percent



in March 2007 as compared to 0.1 percent in February 2007 (see **Figure 4.6**).

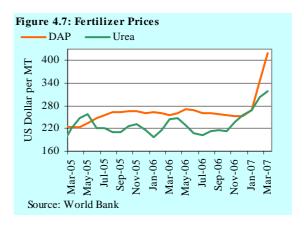
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<sup>&</sup>lt;sup>6</sup> The eight products are as follow: rebar (concrete reinforcing bars), merchant bars, wire rod, section (H-shape), plate (medium), hot rolled coil/sheet, cold rolled coil/sheet and galvanized iron sheet.

<sup>&</sup>lt;sup>7</sup> Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, average of cheapest 5 of 15 styles traded in Northern Europe, c.i.f.

Fertilizer prices in the international market increased significantly during the month of March 2007. The prices of DAP<sup>8</sup> showed considerable growth in the

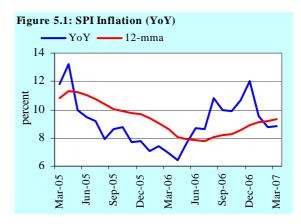
month under review. The (YoY) increase in DAP was recorded as high as 63.9 percent as compared to 32.7 percent in the last month mainly due to increased demand stemming from projected increases in grain crop areas<sup>9</sup>. Similarly the growth in DAP price as compared to the last month was also high at 21.8 percent although it was less as compared to the monthly



growth of 29.1 percent in the previous month. On the other hand the price level of urea also increased but the rate of growth in price level was less on (YoY) basis; 30.3 in March 2007 as compared to 41 percent in February 2007 (see **Figure 4.7**).

## 5. Sensitive Price Indicator

The inflation under sensitive price indicator (SPI) remained high and recorded a significantly higher inflation of 8.9 percent compared to the corresponding month of last year's inflation of 6.9 percent. In March 2007, the long run trend indicated by 12-month moving average showed a slight increase in inflation. This rise in inflation was due to continuously high SPI inflation



existing in the current fiscal year (see Figure 5.1).

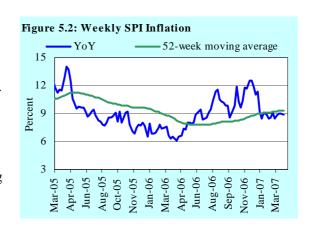
The major items contributing to the SPI inflation were gas, electricity charges, eggs, chicken, onion and pulses. Specifically, gas and electricity charges exhibited

<sup>&</sup>lt;sup>8</sup> DAP: Diammonium Phosphate

<sup>&</sup>lt;sup>9</sup> Source: World Bank Commodity Market Review

a growth of more than 100 percent in March 2007. Of the total 53 essential items included in the SPI basket, 29 items recorded YoY inflation of more than the average level of 8.9 percent during March 2007, whereas 18 items recorded YoY inflation less than the average level of 8.8 percent. The prices of petrol, sugar, potatoes and tomatoes declined in March 2007.

Weekly SPI witnessed a relatively stable inflation and fluctuated between a narrow range of 8.5 percent to 9.0 percent during the month under review. Thus after recording a slight increase in the first two weeks of February, weekly YoY SPI inflation has shown a slight decrease in the remaining two weeks. The long run trend indicated by 52-week moving average showed a slight



increase in inflation since August 2006 (see Figure 5.2).

Compared with the prices of previous month, almost 23 items included in the SPI basket either witnessed a decrease or no change in their price level. On the other hand three items have shown double digit growth in inflation compared with the previous month (see **Table A8** in Annexure A).

Like previous month, the incidence of inflation was the highest in the lowest income group. However, income group wise SPI inflation reveals that the inflation continued to decline for all income groups except for the highest income group. The SPI inflation recorded under the lowest income group came down to single digit for the first time since July 2006. On the other end

	: Income G	Froup-wise	SPI Inflation	on (YoY)	
percent	Up to Rs. 3000	Rs. 3001- 5000	Rs. 5000- 12000	Above Rs. 12000	All income groups
Jul-06	8.9	8.6	8.8	10.0	8.6
Aug-06	11.0	10.7	11.1	12.0	10.8
Sep-06	11.2	10.8	10.8	10.6	10.0
Oct-06	11.8	11.3	11.2	9.8	9.9
Nov-06	13.4	12.5	12.2	10.1	10.7
Dec-06	14.5	14.0	13.5	11.2	12.0
Jan-07	12.1	11.3	10.7	8.5	9.5
Feb-07	10.6	10.0	9.7	7.8	8.8
Mar-07	9.7	9.5	9.4	8.0	8.9

the least affected group was the highest income group with the YoY inflation maintaining single digit growth for the third consecutive month in March 2007 (see **Table 5.1**). This is because most of the items showing high inflation are from the food group and are thus more significant for the lowest income group as compared to other income groups.

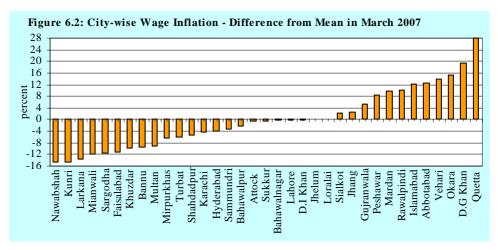
## 6. Wage Inflation in Construction Sector

Wage inflation of construction workers continued to accelerate for the second cosecutive month in March 2007 reflecting the picking up of construction activities at the start of the spring season. Wage inflation (YoY) in March 2007 was recorded higher at 14.6 percent as compared to the 13.7 percent during February 2007. The trend rate of wage inflation (measured by 12-month moving



average) started showing signs of stability, after continuously moving in the downward direction since September 2006. This was mainly due to the acceleration in construction sector wage inflation in the last couple of months (see **Figure 6.1**). Both skilled and unskilled workers registered a comparatively higher (YoY) growth of 14.3 and 17.3 percent respectively in their wages during the month under review compared to 13.3 and 17.1 percent of the preceding month. Further break-up exhibited that the wage inflation (YoY) of all types of labor picked up during the month under review as compared to the previous month (see **Table 6.1**).

Table 6.1: W	age Inflatio	on (YoY)						
	Aug- 06	Sep- 06	Oct- 06	Nov- 06	Dec- 06	Jan- 07	Feb- 07	Mar- 07
Overall	15.9	14.8	13.0	13.0	13.3	12.9	13.7	14.6
Skilled:	15.7	14.6	12.6	12.5	12.9	12.5	13.3	14.3
Carpenter	13.4	13.3	11.8	11.9	12.1	12.4	12.8	14.6
Mason	17.8	15.2	12.6	12.5	12.6	12.1	13.9	15.2
Plumber	13.2	12.1	10.7	10.8	11.7	10.6	11.3	11.7
Electrician	18.6	17.8	15.1	14.8	15.0	14.9	15.1	15.6
Unskilled:	16.9	16.4	16.2	16.6	16.8	16.3	17.1	17.3
Laborer	16.9	16.4	16.2	16.6	16.8	16.3	17.1	17.3



The month wise average wages of all types of workers increased by 14.6 percent during March 2007 over the corresponding month of last year and remained within the range of Rs 221.9 rupees per day for Kunri and Rs 443.8 rupee per day for Islamabad (see **Table A9** in Annexure 'A'). Figure 6.2 presents the picture of city wise deviation in wages from mean during the month of March 2007. Out of 35 cities, 14 recorded higher than average wage inflation and 21 cities witnessed lower than average inflation. The highest wage inflation was observed in Quetta followed by D.G Khan and Okara whereas Larkana, Nawabshah, Kunri, etc., showed the lowest changes in wages.

# Annexure A

Table A1: CPI Inflation (YoY) by Groups							
	Weights	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	
I. Food Group	40.3	0.5	7.6	13.3	5.4	10.7	
II. Non-Food Group	59.7	3.4	3.9	8.2	8.0	5.5	
Apparel, textile, etc.	6.1	4.1	2.0	3.4	4.2	7.3	
House rent	23.4	0.5	6.2	12.3	8.7	6.4	
Fuel & lighting	7.3	5.1	3.0	6.0	9.5	7.0	
Household furniture & equipt	3.3	3.3	4.3	5.7	4.6	7.4	
Transport & com.	7.3	8.4	1.4	10.6	14.3	-1.4	
Recreation & entert.	0.8	0.9	-1.5	0.1	-0.2	-0.2	
Education	3.5	4.8	3.9	2.5	7.0	7.9	
Cleaning, laundry, etc.	5.9	5.5	2.7	4.8	2.9	4.8	
Medicines	2.1	2.6	1.4	1.0	3.1	10.8	
Headline	100	2.2	5.3	10.2	6.9	7.7	

Table A2: Distribution of Price	Changes of	CPI Basket	, March 200'	7 (YoY)				
			No. of	No. of Items in each Inflation Range				
Groups	% Changes	Total Number of Items	Decrease or no change	Subdued increase	Moderate increase	Double digit increase		
			(0 % or less)	(0 to 5%)	(5 to 10%)	(over 10%)		
I. Food Group	10.7	107	11	20	26	50		
II. Non-Food Group	5.5	250	61	102	57	30		
Apparel, textile, etc.	7.3	42	2	19	17	4		
House rent	6.4	1			1			
Fuel & lighting	7.0	15	3	4	2	6		
Household furniture & equipt	7.4	44	2	21	19	2		
Transport & com.	-1.4	43	16	13	6	8		
Recreation & entert.	-0.2	16	13	1	1	1		
Education	7.9	24	5	13	2	4		
Cleaning, laundry, etc.	4.8	36	2	22	8	4		
Medicines	10.8	29	18	9	1	1		
Overall	7.7	357	72	122	83	80		
Note: Prices of 17 seasonal items	were not repo	orted during	the month.					

		YoY c	hange	Weighted	
Items	weights	Mar-06	Mar-07	Contribution	
A. Ranked by Weighted Contribution					
1 House Rent Index	23.43	8.75	6.42	19.80	
2 Fresh Fruits	1.62	(4.93)	60.39	12.16	
3 Milk Fresh	6.66	14.43	11.36	10.22	
4 Onions	0.64	(29.08)	102.63	6.25	
5 Vegetable Ghee	2.67	(0.33)	18.13	6.17	
6 Electricity	4.37	-	10.07	4.69	
7 Meat	2.70	13.89	8.62	4.49	
8 Chicken Farm	0.92	(15.16)	51.10	4.46	
9 Rice	1.34	0.71	27.23	4.43	
0 Eggs	0.41	(27.39)	87.08	3.20	
Total	44.74			75.86	
Ranked by Percentage Change					
1 Onions	0.64	(29.08)	102.63	6.25	
2 Eggs	0.41	(27.39)	87.08	3.20	
3 Fresh Fruits	1.62	(4.93)	60.39	12.16	
4 Chicken Farm	0.92	(15.16)	51.10	4.46	
5 Air Fare	0.10	(9.43)	39.97	0.60	
6 Besan	0.13	(3.65)	38.61	0.55	
7 Pulse Gram	0.43	(4.42)	34.11	1.55	
8 Pulse Mash	0.20	38.18	33.06	0.77	
9 Rice	1.34	0.71	27.23	4.43	
0 Mustard Oil	0.05	0.75	23.29	0.12	
Total	5.82			34.09	
. Ranked by Weights					
1 House Rent Index	23.43	8.75	6.42	19.80	
2 Milk Fresh	6.66	14.43	11.36	10.22	
Wheat Flour	5.11	(0.41)	2.87	1.95	
4 Electricity	4.37	- 2.71	10.07	4.69	
5 Bakery & Confectionary	2.98	3.71	2.67	0.90	
6 Meat	2.70 2.67	13.89	8.62 18.13	4.49	
7 Vegetable Ghee 8 Tution Fees	2.67	(0.33) 7.03	9.84	6.17 2.93	
9 Transport Fare/Charges	2.36	18.80	9.84 2.74	2.93 0.95	
9 Hansport Pare/Charges 10 Natural Gas	2.12	19.18	2.74	1.15	
Total	54.45	17.10	2.07	53.24	

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in CPI, which is 7.7 percent in March 2007.

	Decrease or no	Subdued increase	Moderate increase	Increase of over
Groups	change	(upto 5%)	(5 to 10%)	10%
			D CW'A D	Milk Fresh
			Beef With Bone Av.Olty., Mutton	(Unboiled) Vegetable Ghee
		Wheat Flour Bag	Av.Qity., Mutton Av.Qity., Tea Loose	(Loose)
F 16	Sugar Refined	Wheat Flour	Kenya Av.Qlty 250G	Vegetable Ghee Tin
Food Group	Cabbage	Fine/Superior.	Milk Powder	Chicken Farm
	Potatoes	Toffee (Hilal)	Loose/Packed	Broiler (Live)
	Tomatoes	Wheat	Bread Plain Medium	Cooking Oil (Dalda)
	Chillies Green Ginger	Pulse Masoor (Washed)	Size, Cigarettes Gold Leaf 20'S	Onion, Rice Basmati Broken Av.Qlty
	Giliger	(Washed)	Lear 200	Nylon Jogger 27 Size
. 10			Tailoring Suit Female	2-5, Child Shoe
Apparel & Textile	Ladies Sandal Bata	Lawn Av.Qlty.	Tailoring Shirt	Power Lite Bata
rexuie	Gents Shoes Paul	Long Cloth Av.Qlty.	Tailoring Awami-Suit	Gents Spoung
	Bata	Shirting Av.Qlty.	(Male)	Chappal Bata
House Rent Index			**	
Index		C Ch 67420	House rent index	
	Tube Light Philips	Gas Chrg 6.7438 - 10.1157Mmb		Elect.Charges 01 -
Fuel &	40 Watts	Gas Chrg Upto		100 Unit
Lighting	Match Box Small	3.3719 Mmbtu		Firewood Whole
	Elect.Charges Upto	Gas Chrg10.1157 -	Bulb Philips 100-Watts	Gas Cylinder Stand.
	50 Units	13.4876Mmb	Kerosene Oil	Size
H/hold	Carrina	Quilt (Lihaf) 3 Kg. Cotton	Bedsheet Single Bed Sup.Qlty, Celing Fan	Sofaset Wooden
	Sewing Machine(Singer)	Tea Set Pak.	48" Super Olty,	With Foam Sea
Furniture	Refg. Dawlence 10	Chinaware 21 Pc	Washing Machine	Household Servant
	Cft. D.Doo	Blanket (90" X 54")	Singer	Female P/T
	Petrol Super			Train Fare Eco. >
Transport &	Tel Charges Out Side City	Car Service Charges	Tyre Car With Tube	500 Km., Taxi 4 Seater Fare, Air Fare
Comm.	Telephone Charges	Auto Rickshaw Fares	General, Cng Filling	Economy Class.
Commi	Local Call	Minibus Fare	Charges, Bus Fare Max	Aerogram For Saudi
	Internet Charges	Max.With In Cit	(Within Cit	Arabia
	Tape Recorder			
	Cassette Blan,			
Recreation	Radio With C.Player National			
	Monthly, Naunehal	Cinema A/C. Highest	Cinema Non-A/C High	Dry Cell 1.5
	Digest"	Class	Class	Volt(Local)
		Paper Fullscape		School Fee 2Nd-Ry
	Govt. College Fee	(27"X17"),		Eng.Med.
Education	Ist. Year, Govt. College Fee 4Th.	Exercise.Book Lined 80/100 P	Ball Pen (Local)	School Fee Primary Eng.Med.
	Year, English Book	Urdu Book Class	Maths Book Calss V	Eng. Book Ist.Yr
	Class V1	Ix/X(T.B.B)	(T.B.B)	Complete Se
Cleaning &		Washing Soap Nyl	**	
	Blade 7-O-Clock	(135-160Gms)	Haircut Charges For	Gold Tezabi 24 Ct
Laundry	Stain. 5'S Hair-Colour Begin	Washing Powder 1000 Grm	Men, Dry Cleaning Suit Coat Pant, Artificial	Robin Blue (35 Grams)
	(6 Gms)	Washing Ch. Shirt	Jewellary Set	Silver Tezabi 24 Ct
	Renitec Tab. 5 Mg.	Amoxil Capsole	,	
Medicare	Betnesol Eye Drops	250 Mg.S		
	Hydryllin Syrup	Thermometer China	G 1	Doctor (Mbbs) Clinic
	120 Ml.	Ventolin Tab. 2Mg.	Galxos-D (450 Grms)	Fee

Tab	Table A5: City-wise Inflation (YoY) by Income Groups, March 2007								
			Upto Rs:300	0	Rs 3001-5000				
		General	Food	Non-Food	General	Food	Non-Food		
1	Lahore	8.9	12.7	6.3	8.4	11.2	6.6		
2	Faisalabad	6.5	10.5	3.7	6.6	9.2	4.9		
3	Rawalpindi	8.4	10.5	6.9	8.2	9.7	7.1		
4	Multan	9.6	9.7	9.5	9.7	10.4	9.2		
5	Gujranwala	10.0	14.3	7.1	10.8	14.1	8.6		
6	Islamabad	9.2	11.5	7.7	9.3	11.8	7.7		
7	Sargodha	8.6	12.7	5.8	8.7	12.5	6.1		
8	Sialkot	8.0	11.9	5.4	7.7	10.9	5.5		
9	Bahawalpur	7.6	8.5	6.9	8.3	9.7	7.4		
10	Karachi	6.3	8.0	5.2	7.0	9.0	5.6		
11	Hyderabad	8.0	8.7	7.5	8.1	9.5	7.2		
12	Sukkur	7.5	8.1	7.1	7.4	7.9	7.1		
13	Larkana	7.7	9.9	6.1	7.5	9.1	6.4		
14	Peshawar	6.5	6.3	6.6	5.8	4.6	6.6		
15	Bannu	6.2	4.0	7.7	7.7	5.1	9.5		
16	Quetta	7.3	8.3	6.6	7.4	10.1	5.6		
17	Khuzdar	4.7	5.0	4.5	5.7	6.1	5.4		

		Rs 5001-12000			a	bove Rs 12	000
		General	Food	Non-Food	General	Food	Non-Food
1	Lahore	7.9	11.4	5.6	7.7	12.8	4.3
2	Faisalabad	6.5	10.0	4.2	6.3	13.2	1.7
3	Rawalpindi	8.0	9.7	6.9	8.3	11.3	6.2
4	Multan	9.7	11.5	8.5	10.3	13.4	8.2
5	Gujranwala	10.9	14.7	8.4	11.0	16.0	7.6
6	Islamabad	8.8	10.6	7.6	9.1	12.1	7.1
7	Sargodha	9.0	13.2	6.2	9.2	17.6	3.5
8	Sialkot	7.7	12.1	4.7	7.2	13.5	3.0
9	Bahawalpur	8.9	12.1	6.7	8.4	15.6	3.6
10	Karachi	7.2	9.6	5.5	7.2	10.7	4.8
11	Hyderabad	8.0	9.5	7.0	7.9	11.2	5.8
12	Sukkur	7.0	7.7	6.6	6.9	7.9	6.2
13	Larkana	8.0	10.5	6.3	8.5	12.9	5.5
14	Peshawar	5.8	5.6	6.0	6.0	8.3	4.5
15	Bannu	8.3	6.3	9.7	8.8	9.9	8.2
16	Quetta	7.3	10.8	4.9	7.8	13.6	3.9
17	Khuzdar	6.0	7.2	5.3	6.2	8.1	4.9

Table A6 : Income C	Table A6 : Income Group-wise Inflation (YoY)								
	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	
<u>Up to Rs. 3000</u>									
General	9.3	9.4	8.8	9.3	10.1	7.6	7.9	7.8	
Food	11.0	11.5	11.0	12.2	14.1	9.4	9.6	9.1	
Non-food	8.1	8.0	7.3	7.2	7.4	6.3	6.7	6.8	
Rs. 3001-5000									
General	9.2	9.3	8.7	9.0	10.0	7.3	7.8	7.9	
Food	10.9	11.3	10.8	11.7	13.7	9.0	9.4	9.3	
Non-food	8.1	7.9	7.3	7.1	7.4	6.1	6.7	6.9	
Rs. 5000-12000									
General	9.0	9.0	8.4	8.4	9.3	6.9	7.5	7.8	
Food	11.0	11.2	10.6	10.9	13.0	8.7	9.6	10.1	
Non-food	7.7	7.5	6.8	6.6	6.8	5.6	6.0	6.2	
Above Rs. 12000									
General	8.7	8.3	7.7	7.4	8.1	6.3	7.2	7.5	
Food	11.3	11.3	10.3	9.7	11.9	8.7	10.7	12.2	
Non-food	7.0	6.3	5.8	5.8	5.5	4.6	4.7	4.3	
All income groups									
General	8.9	8.7	8.1	8.1	8.9	6.6	7.4	7.7	
Food	11.1	11.3	10.5	10.6	12.7	8.7	10.0	10.7	
Non-food	7.4	7.0	6.4	6.3	6.2	5.2	5.6	5.5	

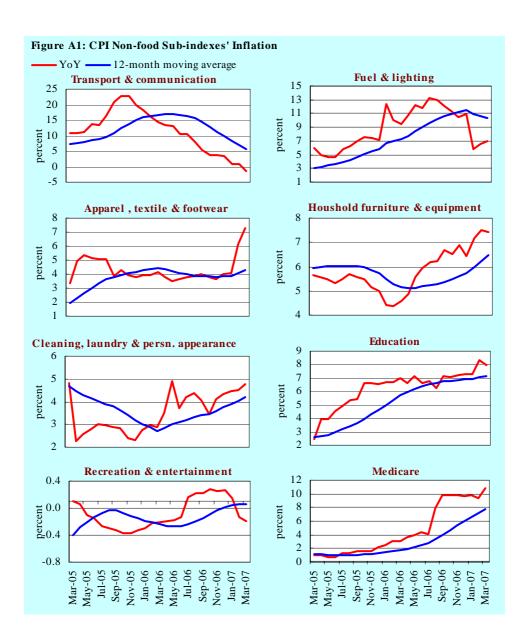
Table A7: Distribution of Price Change (YoY)WPI Items: March 2007							
Groups	Decrease or no change	Subdued increase (upto 5%)	Moderate increase (5 to 10%)	More than 10% increase			
Food	Tomatoes Potatoes Bajra Sugar Refined Jowar Fish Gur	Sugar Confectionary Maida Mineral Water Beverages Wheat Flour Condiments Meat Wheat Gram Whole Powdered Milk	Salt Dry Fruits Masoor Fresh Milk Milk Food Spices Tea Vegetables	Moong Vegetables Prepared/Preserved Cooking Oil, Maize Fruit Prepared/Preserved Beans, Gram Split Cotton Seed Oil Vegetable Ghee, Rice Oil Cakes, Besan Mash, Mustard & Rapessed Oil Fresh Fruits, Chicken Eggs, Onions			
Raw material		Tobacco Skins Cotton		Hides Sugar Cane Pig Iron Mustard/Rapeseeds Wool Cotton Seeds			
Fuel & lighting	Furnace Oil Motor Sprit Natural Gas Coal	Diesel Oil	Kerosine Oil	Coke Mobil Oil Fire Wood Electricity Ind. Supply Tariff-B Elec. Agriculture Tariff-D			
Manufactures	Fertilizers Blended Yarn Woolen Textiles Glass Products Cosmetics Cotton Yarn Drugs & Medicines Sole Leather Chrome Leather Audio-Visual Instruments Matches	Other Electrical Goods, Ready Made Garments Transports Tubes Utensils Mattresses Paper Dying Materials Plastic Products Nylon Yarn Cotton Textiles Silk & Reyon Textiles Machinery	Tyres Jute Manufactures Cigarettes Hosiery Soaps Pesticides & Insecticised	Chemicals Foot Wear			
Building material	Cement	Paints & Varnishes Sanitary Wares Glass Sheets Cement Blocks	Tiles Pipe Fittings Bricks	Timber Iron Bars & Sheets Wires And Cables			

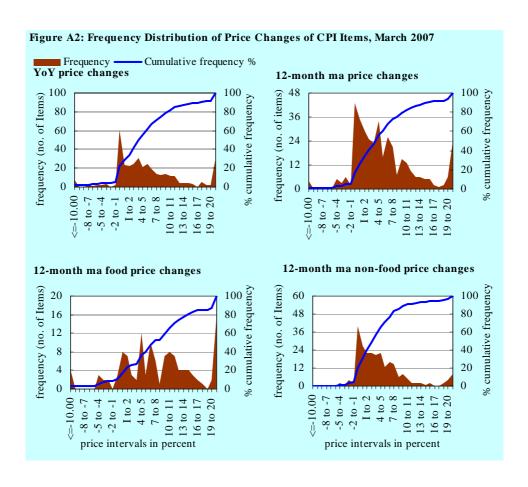
			Price	Percentag	e change over
S.No	Items	Unit	Mar -07	Mar -06	Feb-07
1	Wheat	Kg.	12.5	5.1	0.0
2	Wheat flour a.qlt.	Kg.	14.0	5.5	0.4
3	Rice basmti. broken	Kg.	25.5	26.1	11.5
4	Rice irri-6	Kg.	19.1	19.0	9.7
5	Masur pulse washed	Kg.	46.4	5.3	-1.6
6	Moong pulse washed	Kg.	56.4	14.6	-1.7
7	Mash pulse washed	Kg.	72.1	33.0	1.4
8	Gram pulse washed	Kg.	42.1	33.4	-10.1
9	Beef	Kg.	119.0	7.9	0.5
10	Mutton	Kg.	226.0	8.6	0.9
11	Egg hen (farm)	Doz.	43.7	82.5	9.7
12	Bread plain m.s.	Each	15.5	7.4	0.0
13	Sugar	Kg.	30.6	-14.0	-1.2
14	Gur	Kg.	36.3	4.5	-2.3
15	Milk fresh	Litr	27.0	12.5	1.4
16	Milk powdered Nido	400g	131.9	21.6	9.9
17	Curd	Kg.	31.5	10.8	1.2
18	Veg.ghee tin	2.5k	230.8	13.4	1.4
19	Veg.ghee loose	Kg.	72.8	23.0	0.9
20	Mustard oil	Kg.	82.5	23.0	2.4
21	Cooking oil	2.51	231.2	13.1	1.6
22	Potatoes	Kg.	11.7	-32.9	-3.1
23	Onions	Kg.	20.3	90.0	-27.3
24	Tomatoes	Kg.	13.3	-51.5	12.1
25	Bananas	Doz.	34.1	24.4	3.8
26	Salt powdered	Kg.	4.7	18.2	0.4
27	Red chilies (powd)	Kg.	101.8	49.0	1.0
28	Garlic	Kg.	66.7	14.1	-2.4
29	Tea packet	250g	70.0	13.1	0.0
30	Tea (prepared)	Cup	6.4	6.8	0.0
		•			continued

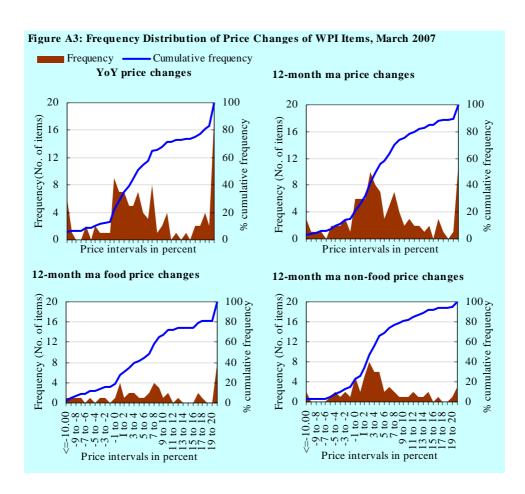
			Price	Percentage change over	
S.No	Items	Unit	Mar -07	Mar -06	Feb-07
31	Cooked beef plate	Each	30.3	16.4	0.2
32	Cooked dal plate	Each	18.1	15.4	0.5
33	Cigarettes k-2	10's	8.0	12.8	0.0
34	Coarse latha	Mtr.	35.0	1.5	0.3
35	Lawn (avg.+s.qlty)	Mtr.	78.0	4.8	0.5
36	Voil printed	Mtr.	37.5	4.1	1.1
37	Shirting	Mtr.	65.4	4.2	0.0
38	Sandel gents bata	Pair	459.0	15.0	15.0
39	Sandel ladies bata	Pair	299.0	0.0	0.0
40	Chappal spng. Bata	Pair	95.0	6.7	6.7
41	Kerosene	Litr	39.1	7.0	0.0
42	Firewood	40kg	199.6	12.3	1.5
43	Elec. Bulb 60-wats	Each	12.1	6.4	-0.4
44	Match box	Each	0.8	22.6	2.7
45	Washing soap	Cake	8.1	3.9	0.0
46	Bath soap lifebuoy	Cake	14.1	0.8	0.3
47	Chicken (farm)	Kg.	77.2	51.7	6.8
48	Gas chrg. All clb. Comb	D.mmbt	232.3	149.4	-4.7
49	L.p.g .(cylinder 11kg.)	Each	584.8	23.3	-7.1
50	Elec.chrg.all slabs com	Bd. Unit	5.0	108.7	7.9
51	Petrol	Litr	53.8	-4.6	0.0
52	Diesel	Litr	37.9	1.5	0.0
53	Telephone local	Call	2.3	0.0	0.0
Max:				149.4	15.0
Median				12.5	0.4
Min:				-51.5	-27.3

Table A9: Daily Labor Wages (Rs. per day)Average of 35 Cities										
	Carpenter	Mason	Laborer	Plumber	Electrician	Average				
	Annual Averages									
FY03	218	225.4	107.7	219.8	216.4	197.4				
FY04	224.5	237.4	114.5	225	221.9	204.6				
FY05	245.8	261.4	129.5	245.5	240.3	224.5				
FY06	283.2	306.0	154.7	283.2	270.1	259.4				
			Monthly aver	ages						
Mar-06	286.5	312.1	157.7	287.8	269.6	262.8				
Apr-06	290.9	313.9	159.4	291.0	274.3	265.9				
May-06	293.4	319.9	163.6	292.7	297.7	273.5				
Jun-06	299.2	329.4	165.6	297.8	302.0	278.8				
Jul-06	303.9	332.7	168.9	301.7	302.0	281.8				
Aug-06	306.0	334.5	170.4	305.7	303.6	284.0				
Sep-06	312.4	338.2	173.7	310.1	303.7	287.6				
Oct-06	313.9	340.3	176.9	310.4	303.7	289.0				
Nov-06	315.0	342.2	178.4	311.8	304.8	290.4				
Dec-06	318.1	347.6	180.7	315.5	306.9	293.8				
Jan-07	320.2	349.0	181.5	316.3	307.9	295.0				
Feb-07	324.1	354.7	182.9	319.8	308.3	298.0				
Mar-07	328.4	359.7	184.9	321.5	311.7	301.2				

Source: Federal Bureau of Statistics







#### Annexure B

## **Technical Notes**

1. All the three measures of inflation, viz. CPI, WPI and SPI are computed by the following Laspeyres Index formula:

$$I_t = \sum_j w_0^j \left( \frac{P_t^j}{P_0^j} \right)$$

where  $I_t$  is price index,  $w_0^j$  is weight of commodity j in the overall basket,  $P_t^j$  is price of commodity j in period t and  $P_0^j$  is its price in the base year.

- 2. Base year for all the indices is the year 2000-01.
- 3. CPI basket contains 374 consumers' goods; WPI basket contains 425 commodities; SPI contains 53 commodities, list of which is given in Table A3.
- 4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

$$\pi_{t} = (\frac{I_{t}}{I_{t-12}} - 1) \times 100$$

5. Period average inflation is the percent change of the average index during the period from July to the given month of a fiscal year over the average index during the corresponding period of the last year. It is computed as follows:

$$\overline{\pi}_{t} = \left(\frac{\sum_{i=0}^{t-\nu} I_{t-i}}{\sum_{i=0}^{t-12-\nu} I_{t-12-i}} - 1\right) \times 100$$

where v is the serial number of the month of July of current fiscal year in a given time series.

6. Monthly inflation is the percent change of an index in a given month over the index in the preceding month. It is computed as follows:

$$\pi_{t} = (\frac{I_{t}}{I_{t-1}} - 1) \times 100$$

7. 12-month moving average inflation (Long-run trend inflation) is the percent change of 12-month moving average of a price index; it is computed as follows:

$$\widetilde{\pi}_{t} = \left(\frac{\sum_{i=0}^{11} I_{t-i}}{\sum_{i=0}^{11} I_{t-12-i}} - 1\right) \times 100$$

- 8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods:
  - a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.
  - b) 20% trimmed-mean inflation; it is computed through the following steps:
    - i. All CPI items are arranged in ascending order according to YoY/12-month moving average/monthly/period average changes in their prices in a given month.
    - ii. 20 percent of the items showing extreme changes are excluded with 10 percent of the items at the top of the list (corresponding to cumulative weight of 90% or more) and 10 percent of the items at the bottom of the list (corresponding to cumulative weight of 10 percent or less).
    - iii. The weighted mean of the price changes of the rest of the items is core inflation.
- 9. Weighted contribution of different items (or sub-groups) to total inflation is worked out as below:

Let the overall index  $(I_t)$  is the weighted average of price indexes of individual items or sub-groups  $(I_{it})$ , i.e.

$$I_{t} = \sum_{i} w_{i} \cdot I_{it}$$

The weighted contribution of a single item (or a sub-group) to overall inflation is defined as below:

$$C_{it} = \alpha_{it-12} \cdot w_i \cdot \left(\frac{\pi_{it}}{\pi_t}\right)$$

Where  $C_{ii}$ : Contribution of  $i^{th}$  item to the overall inflation

$$\alpha_{it-12} = \frac{I_{it-12}}{I_{t-12}}$$
; i.e. ratio of item's index to overall index in

the reference month

 $w_i$ : Weights of i<sup>th</sup> item

 $\pi_{it}$ : Inflation of i<sup>th</sup> item

 $\pi_t$ : Overall inflation