

# **Inflation Monitor**

**June 2009**



**State Bank of Pakistan**

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## Overview

Headline CPI inflation (YoY) fell to 13.1 percent during June 2009 compared to 21.5 percent in the corresponding month last year and 14.4 percent in the preceding month. The inflation was more contained in the last six months of FY09 as compared to the first six months (Jul 08 to Dec 08): the average CPI inflation (YoY) during the first half of the year was 24.4 percent which declined to 17.6 percent in the second half primarily due to fall in food inflation. Unlike overall CPI and food inflation (YoY), non-food inflation (YoY) increased during June 2009 compared to the same month last year; however it was 0.9 percentage points less than the previous month.

Opposite to YoY inflation, CPI inflation (MoM) increased during June 2009 to reach 1.0 percent compared to 0.2 percent in May 2009. Both CPI food and non-food groups also showed acceleration in inflation (MoM) during June 2009 (see **Table 1.1**).

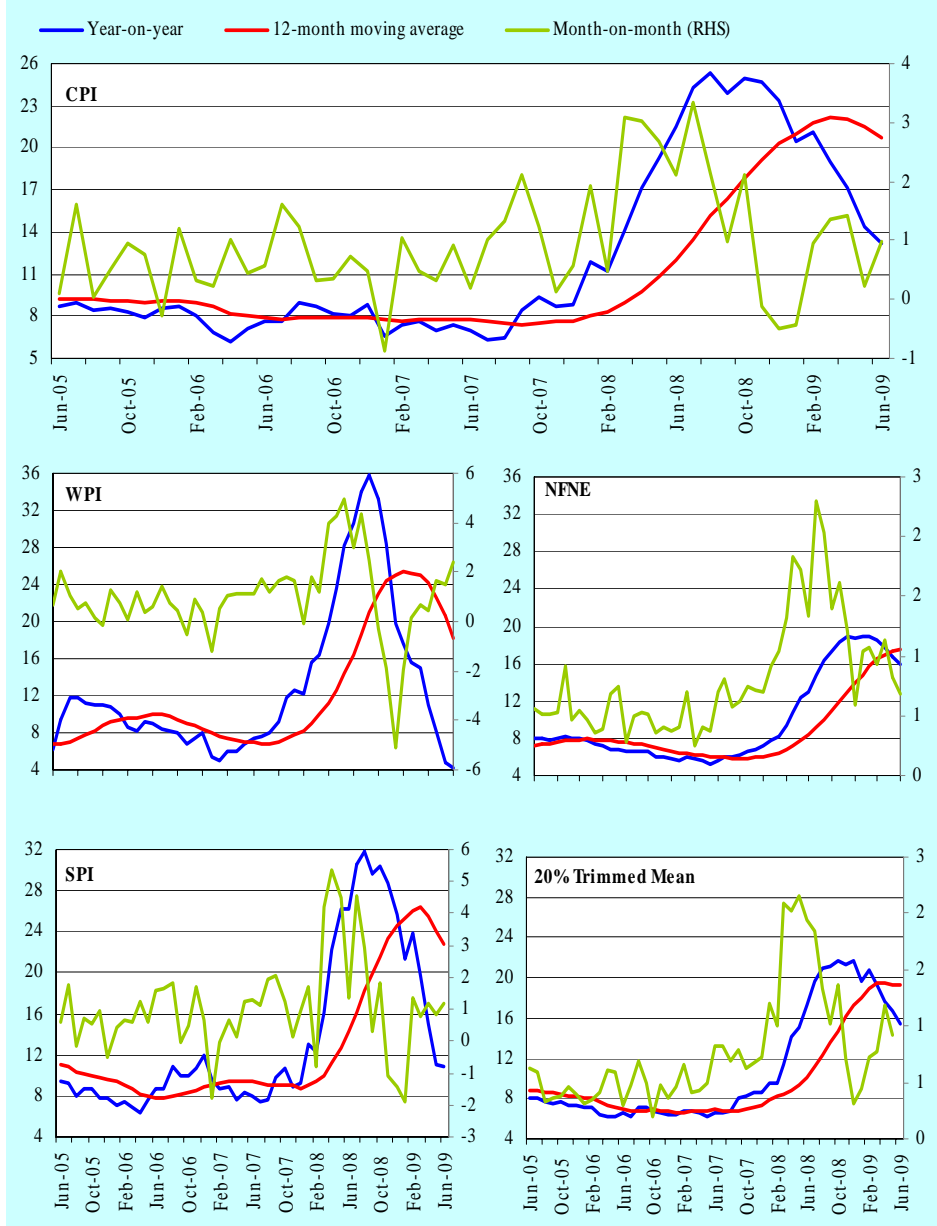
Core inflation (YoY) measured by NFNE and 20% trimmed mean continued on declining trend in the second half of FY09. As core inflation excludes administered and volatile prices and generally represents demand pull inflation, this decline can be attributed to demand management policies adopted during FY09. NFNE inflation (YoY) showed deceleration during June 2009 compared to the preceding month but was higher compared to June 2008. However core inflation (YoY) measured by 20% trimmed mean showed decline compared to both the corresponding month last year and May 2009. On MoM basis both measures of core inflation recorded decline during June 2009 (see **Table 1.1**).

The long run trend in inflation measured by 12-month moving average shows a declining path by all three price indices (that CPI, WPI and SPI). CPI inflation (12mma) reached 20.8 percent during June 2009 compared to its peak level of 22.1 percent in March 2009. WPI and SPI inflation (12mma) decelerated to 18.2 percent and 22.7 percent in June 2009 compared to 20.5 percent and 24.1 percent in the preceding month.

WPI inflation (YoY) declined and was recorded at 4.1 percent during the month under review compared to 30.6 percent in June 2008 and 4.7 percent in May 2009. Inflation (YoY) measured by sensitive price indicator (SPI) also followed the trend in CPI and WPI. SPI inflation (YoY) showed deceleration during June 2009 and was recorded at 10.8 percent compared to 26.3 percent in June 2008 and 11.0 percent in May 2009 (see **Figure 1.1**).

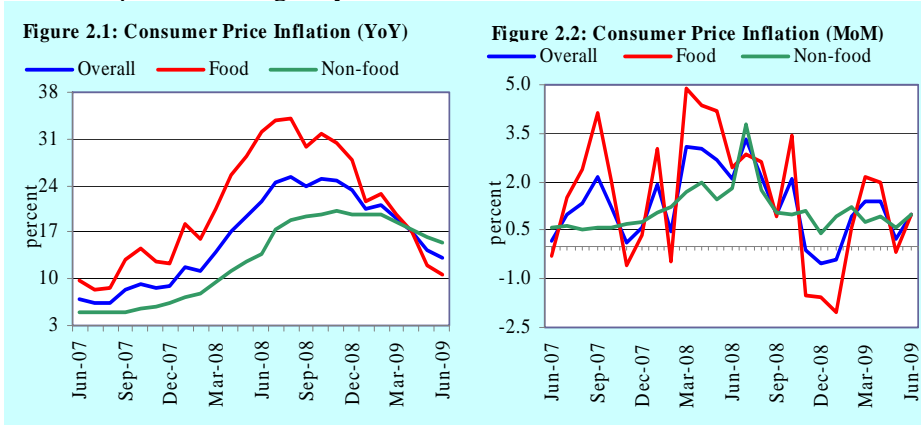
<b>Table 1.1: Different Dimensions of Inflation (percent)</b>					
	<b>Jun-07</b>	<b>Jun-08</b>	<b>May-09</b>	<b>Jun-09</b>	<b>5-year average#</b>
<i>Year-on-year (June over June)</i>					
<b>Overall CPI</b>	<b>7.0</b>	<b>21.5</b>	<b>14.4</b>	<b>13.1</b>	<b>10.7</b>
Food group	9.7	32.0	12.1	10.5	14.4
Non-food group	5.1	13.8	16.3	15.4	8.0
<b>WPI</b>	<b>7.3</b>	<b>30.6</b>	<b>4.7</b>	<b>4.1</b>	<b>13.2</b>
<b>SPI</b>	<b>8.0</b>	<b>26.3</b>	<b>11.0</b>	<b>10.8</b>	<b>12.8</b>
<b>Core Inflation</b>					
NFNE*	5.7	13.0	16.6	15.9	7.7
Trimmed	6.5	17.2	16.7	15.5	9.0
<i>Period average (July over June)</i>					
<b>Overall CPI</b>	<b>7.8</b>	<b>12.0</b>	<b>21.6</b>	<b>20.8</b>	<b>8.3</b>
Food group	10.3	17.6	25.1	23.7	10.7
Non-food group	6.0	7.9	18.7	18.4	6.6
<b>WPI</b>	<b>6.9</b>	<b>16.4</b>	<b>19.7</b>	<b>18.2</b>	<b>9.6</b>
<b>SPI</b>	<b>9.4</b>	<b>14.2</b>	<b>24.0</b>	<b>22.7</b>	<b>9.7</b>
<b>Core Inflation</b>					
NFNE*	5.9	8.4	17.7	17.6	6.6
Trimmed	6.9	10.2	19.6	19.2	7.4
<i>12-month moving average</i>					
<b>Overall CPI</b>	<b>7.8</b>	<b>12.0</b>	<b>21.5</b>	<b>20.8</b>	<b>8.3</b>
Food group	10.3	17.6	25.6	23.7	10.7
Non-food group	6.0	7.9	18.4	18.4	6.6
<b>WPI</b>	<b>6.9</b>	<b>16.4</b>	<b>20.5</b>	<b>18.2</b>	<b>9.6</b>
<b>SPI</b>	<b>9.4</b>	<b>14.2</b>	<b>24.1</b>	<b>22.7</b>	<b>9.7</b>
<b>Core Inflation</b>					
NFNE*	5.9	8.4	17.4	17.6	6.6
Trimmed	6.9	10.2	19.3	19.2	7.4
<i>Monthly</i>					
<b>Overall CPI</b>	<b>0.2</b>	<b>2.1</b>	<b>0.2</b>	<b>1.0</b>	<b>0.8</b>
Food group	-0.3	2.5	-0.2	1.0	0.9
Non-food group	0.6	1.8	0.6	1.0	0.8
<b>WPI</b>	<b>1.1</b>	<b>3.0</b>	<b>1.5</b>	<b>2.4</b>	<b>1.2</b>
<b>SPI</b>	<b>1.3</b>	<b>1.4</b>	<b>0.8</b>	<b>1.2</b>	<b>1.2</b>
<b>Core Inflation</b>					
NFNE*	0.7	1.3	0.8	0.7	0.7
Trimmed	0.8	1.9	0.9	0.8	0.9
* NFNE is Non-food non-energy inflation					
# 5-year average for the month of June in the previous years					

Figure 1.1: Movements in Price Indices (percent change)



## 2. Consumer Price Index

The declining trend in CPI inflation that started from February 2009 continued till the end of FY09. In June 2009 CPI inflation (YoY) was 13.1 percent compared to 21.5 percent during the corresponding month last year and 14.4 percent during May 2009.



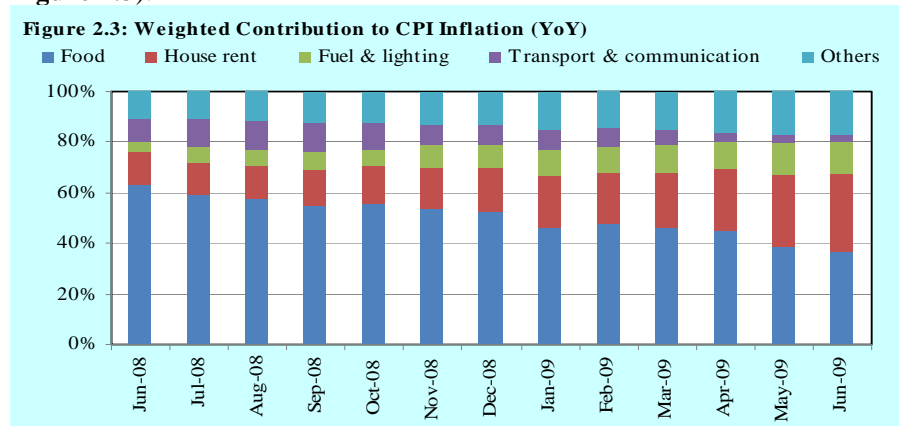
As in the previous month, this decline came mainly due to decline in food inflation dropping to 10.5 percent during June 2009 compared to 32.0 percent during the same month last year and 12.1 percent in the previous month. However, non-food inflation (YoY) remained high during June 2009 compared to the same month last year but showed decline compared to the preceding month. The decline in CPI YoY inflation came due to a decrease in prices of some major food commodities, and decrease in prices of some components of fuel & lighting and transport & communication groups despite the fact that Federal Bureau of Statistics incorporated the current (higher) prices of three items, kerosene oil, petrol and diesel in June 2009 which were effective from 1<sup>st</sup> July 2009.

Unlike CPI YoY inflation, CPI inflation MoM increased during June 2009 reaching 1.0 percent compared to 0.2 percent in May 2009. This increase in CPI inflation (MoM) was primarily due to increase in food inflation (MoM). Non-food inflation also increased on MoM basis during the month under review compared to May 2009 (see **Figure 2.1 & 2.2**).

Weighted contribution of food group in overall inflation dropped to 36.7 percent during June 2009, lowest level since June 2006. Weighted contribution of non-food group increased compared with June 2008 and May 2009. Among the components of non-food group weighted contribution, house

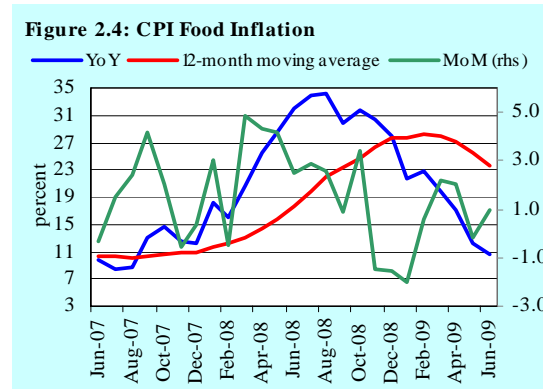


rent index recorded an increase of 2.0 percentage points compared with May 2009 and 17.3 percentage points compared with the same month last year (see **Figure 2.3**).



### 2.1 Food Inflation

The declining trend in CPI food inflation (YoY) continued in June 2009, and was recorded at 10.5 percent (lowest since September 2007) compared to 32.0 percent in the same month last year and 12.1 percent in the preceding month. (see **Figure 2.4**).



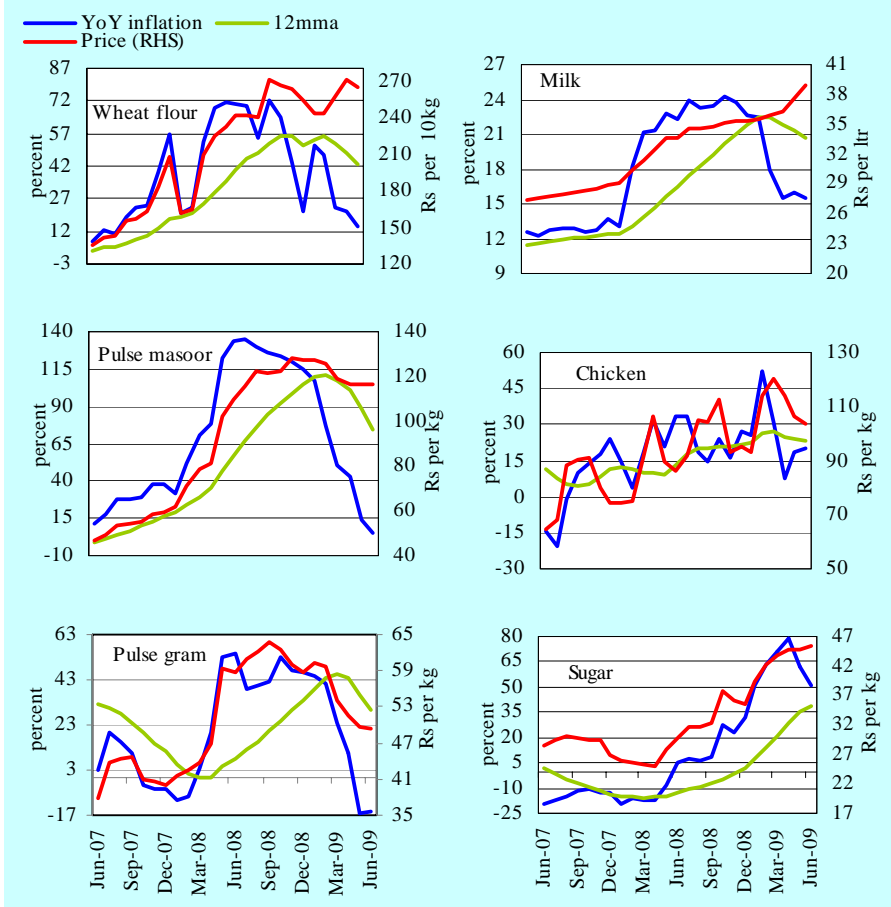
Six out of top ten contributions to CPI inflation during June 2009 were from food group,

i.e., fresh milk, wheat flour, sugar, vegetables, meat, and readymade food. Total weighted contribution of these six food items in the overall CPI basket was 32.0 percent (see **Table A3** in the annexure). Within food group, just four items, i.e., wheat flour, fresh milk, sugar and vegetables contributed 68.6 percent to YoY food inflation. For the year FY09, six out of top ten contributions to overall CPI inflation (YoY) were wheat flour, fresh milk, rice, meat, sugar, and readymade food with total weighted contribution of 29.8 percent.

A detailed look at price movements of individual items in the CPI food group shows that prices of some key food items declined or showed subdued inflation including different types of rice, vegetable ghee, pulses, eggs, milk powder, cooking oil. This

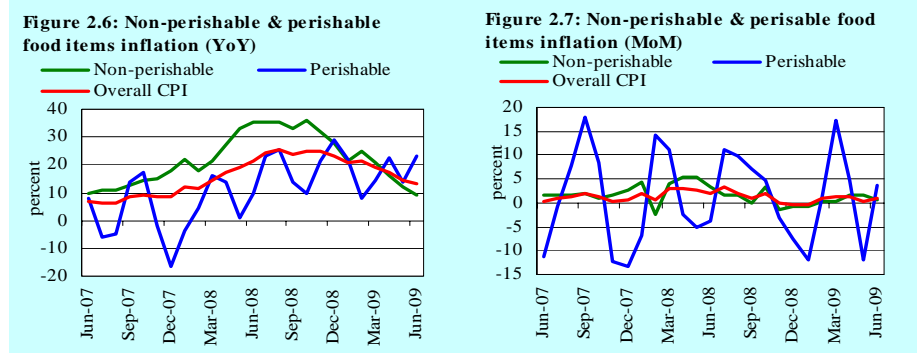
declining trend was, however, offset by high growth in prices of sugar, tomatoes, coffee, some fruits and vegetables, etc. There are number of other commodities that despite showing moderate inflation contributed significantly to food inflation (YoY) due to their high weights in CPI basket like, fresh milk, wheat flour, chicken and tea. Out of 110 reported commodities, 71 commodities exhibited price changes (YoY) between 10 to 92 percent during June 2009. Only two commodities of food group witnessed more than 100 percent price change (YoY), including coffee (108.0 percent) and tomatoes (149.0 percent). On the other hand 18 commodities showed moderate price changes (YoY) and remaining 19 commodities witnessed either decline or no change in their prices during the month under review (see **Figure 2.5** and **Table A2** in **Annexure A**).

**Figure 2.5: Price Trends in Key Food Items**



CPI food inflation (MoM) showed decline during June 2009 compared to the same month last year but witnessed significant increase compared to the preceding month. CPI food inflation (MoM) reached 1.0 percent during the month under review compared to 2.5 percent in June 2008 and (-) 0.2 percent during May 2009. Item-wise analysis of CPI food basket on MoM basis showed that 6 items including potatoes, tomatoes, garlic, cucumber, bringle and ginger showed double digit price change during June 2009, whereas prices of 28 items including onion, rice, wheat, chicken, eggs, fish, etc. declined.

Within food group, further disaggregation (of 40 composite food items in the CPI basket) can be made on the basis of perishable<sup>1</sup> and non-perishable<sup>2</sup> commodities. Inflation (YoY) in the perishable group witnessed increase and was recorded at 22.8 percent during June 2009 compared to 9.7 percent in June 2008 and 14.0 percent during the preceding month. Prices of perishable commodities are often volatile and this is reflected in the inflation (MoM) which reached 3.6 percent during June 2009 compared to (-) 3.9 percent in the same month last year and (-) 11.9 percent during May 2009. Inflation (YoY) in non-perishable group declined during the month under review and reached 9.0 percent compared to 35.4 percent during the corresponding month last year and 11.9 percent in May 2009. On MoM basis inflation in non-perishable group was recorded at 0.7 percent in June 2009 compared to 3.3 percent in June 2008 and 1.6 percent during May 2009 (see **Figure 2.6 & 2.7**).



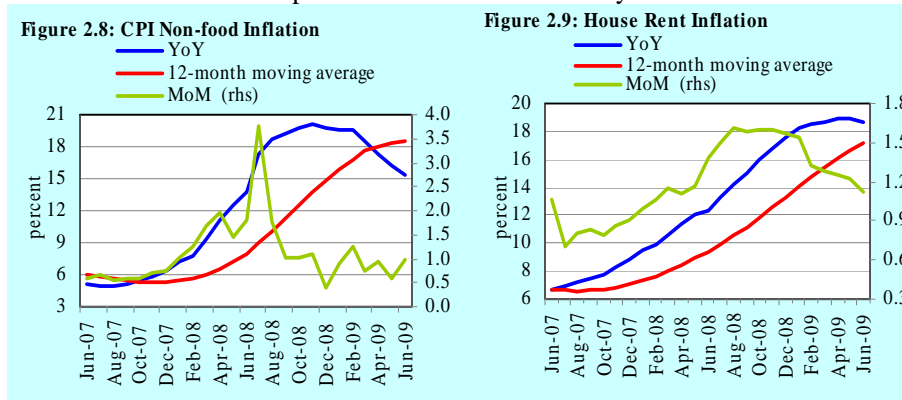
## 2.2 Non-food Inflation

Unlike the overall CPI and CPI food, CPI non-food inflation (YoY) during June 2009, was high compared to the same month last year but declined compared to the previous month. CPI non-food inflation (YoY) was 15.4 percent during the

<sup>1</sup> Only five of these composite items, potatoes, onions, tomatoes, vegetables and fresh fruits, are included in perishable group with a total weight of 5.14 percent in overall CPI basket.

<sup>2</sup> The remaining 35 composite items, have a weight of 35.0 percent, in the non-perishable group

month under review compared to 13.8 percent in June 2008 and 16.3 percent in May 2009 (see **Figure 2.8**). During June 2009 inflation (YoY) in all sub-groups of non-food group showed a decline compared to the previous month (see **Figure A1** in Annexure). However, only four sub-groups, *transport & communication, cleaning, laundry & personal appearance, recreation & entertainment, and medicare* decelerated compared to the same month last year.



During June 2009, inflation (YoY) in *house rent index* (HRI) showed decline compared to the previous month but was still higher compared to June 2008. Inflation (YoY) in this sub-group in June 2009 was 18.6 percent compared to 12.4 percent during June 2008. On MoM basis, HRI inflation reached 1.1 percent compared to 1.2 percent in the preceding month and 1.4 percent compared with the same month last year (see **Figure 2.9**).

A frequency distribution of price changes during June 2009, shows that of the 250 non-food commodities included in the CPI basket, 132 commodities witnessed double digit price change (YoY) which includes train fares, text books, electronic goods, petrol, diesel, firewood, gold. There are 61 commodities that showed moderate inflation in the range of 5 to 10 percent, all other commodities witnessed price change (YoY) either less than 5 percent, no change or declined. Only two commodities showed significant rise in prices, i.e., over 100 percent including English Book for class IX and X (132.1 percent); UMS charges (102.9 percent) (see **Table A2 & A4** in the Annexure). Price changes on MoM basis revealed that prices of 11 items recorded a decline, 150 items exhibited no change in their prices, 56 items recorded price change from 0 to 0.5 percent, prices of 18 items ranged between 0.5 to 1.0 percent, and remaining 15 items showed more than 1 percent change in their prices. However two commodities including petrol (10.2 percent) and diesel (12.3 percent) showed double digit price change.

### 2.3 City-wise Inflation

As overall inflation declined during June 2009, city-wise inflation (YoY) in all major cities except Islamabad, also declined compared to both the previous month and the same month last year. It is

	percent					
	Jun-08		May-09		Jun-09	
	MoM	YoY	MoM	YoY	MoM	YoY
<b>Overall CPI</b>	<b>2.1</b>	<b>21.5</b>	<b>0.2</b>	<b>14.4</b>	<b>1.0</b>	<b>13.1</b>
Islamabad	1.4	17.7	0.3	12.8	1.4	12.9
Lahore	1.0	18.0	0.6	13.2	0.8	12.9
Karachi	2.6	21.1	-0.5	12.9	1.4	11.6
Quetta	2.4	25.3	-0.2	12.5	1.7	11.7
Peshawar	0.9	22.3	0.3	14.1	-0.2	12.8

important to note that inflation (YoY) in all major cities is lower than the average inflation during June 2009. However, on MoM basis, inflation was higher than the average CPI inflation in three out of five major cities (see **Table 2.1**).

Table 2.2: City-wise Inflation in CPI (YoY) June 2009

	High inflation cities				Low inflation cities		
	General	Food	Non-food		General	Food	Non-food
D.G. Khan	16.8	15.5	18.0	Lahore	12.9	10.7	15.0
Shahdadpur	16.5	14.3	18.3	Hyderabad	12.9	9.2	16.0
Nawabshah	15.6	13.5	17.3	Islamabad	12.9	12.4	13.2
Vehari	15.3	14.7	15.9	Peshawar	12.8	9.1	16.0
Rawalpindi	15.1	14.7	15.4	Sargodha	12.7	10.2	14.7
Okara	15.1	11.5	18.1	Mianwali	12.6	11.7	13.4
Faisalabad	14.5	12.8	16.1	Jhelum	12.5	10.3	14.4
Attock	14.5	13.8	15.0	Jhang	12.5	11.0	13.6
Abbottabad	14.3	10.2	17.9	D.I.Khan	12.4	10.0	14.5
Bahawalnagar	14.1	13.4	14.7	Samundari	12.3	10.2	14.1
Multan	14.0	13.3	14.6	Mardan	12.1	8.2	15.4
Kunri	13.7	9.6	17.2	Gujranwala	12.1	9.6	14.2
Mirpur Khas	13.6	9.3	17.1	Quetta	11.7	7.4	15.5
Sialkot	13.5	11.7	15.1	Karachi	11.6	7.1	15.3
Sukkur	13.3	9.7	16.3	Bahawalpur	11.0	8.5	13.3
Khuzdar	13.1	9.5	16.2	Turbat	11.0	9.4	12.2
				Larkana	10.9	7.3	14.0
				Loralai	10.6	8.1	12.7
				Bannu	9.3	6.2	12.0

Note: High inflation refers to above average inflation, and low inflation refers to below average inflation

City-wise inflation data collected from 35 cities revealed that 16 cities were in the category of high inflation cities, while remaining 19 cities were categorized as low inflation cities during June 2009. The highest inflation (YoY) was recorded in D G Khan followed by Shahdadpur, whereas the lowest inflation (YoY) was recorded in Bannu. Among 35 cities D G Khan and Bannu were the highest and lowest in

food inflation (YoY) respectively. Shahdadpur and Bannu were the highest and lowest in non-food inflation (YoY) during June 2009 respectively (see **Table 2.2**).

City-wise data revealed that out of 35 cities, 18 cities had higher and remaining 17 cities had lower than the overall CPI inflation (MoM). The highest inflation (MoM) of 2.6 percent was recorded in Sialkot during June 2009 as against the deflation of 0.9 percent (MoM) in Bannu.

#### **2.4 Income Group-wise Inflation**

Middle income group, having income range of Rs 5001 – 12000 (per month per household), experienced the highest inflation during June 2009. All other income groups witnessed lower inflation than overall CPI inflation (YoY). On MoM basis only the highest income group had more than overall CPI inflation (MoM) (see **Table 2.3**).

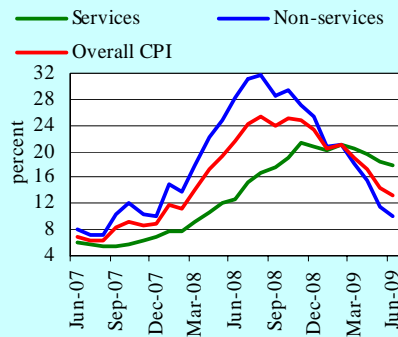
	<b>Table 2.3: Income Group-wise CPI Inflation</b>								percent
	<b>Upto 3000</b>		<b>Rs.3001-5000</b>		<b>Rs.5001-12000</b>		<b>Above Rs.12000</b>		
	Jun-08	Jun-09	Jun-08	Jun-09	Jun-08	Jun-09	Jun-08	Jun-09	
	<i>Yeas-on-yeas (June over June)</i>								
General	25.3	12.8	24.8	13.0	22.6	13.6	19.8	12.6	
CPI Food	34.7	11.6	34.8	10.7	33.0	10.5	29.8	10.3	
CPI Non-food	18.6	13.9	17.8	14.8	14.9	16.2	12.4	14.6	
	<i>Month-on-Month (June over May)</i>								
General	2.3	0.9	2.3	0.9	2.1	0.9	2.0	1.1	
CPI Food	2.8	1.1	2.9	1.0	2.7	1.1	1.9	0.9	
CPI Non-food	1.8	0.8	1.8	0.7	1.6	0.7	2.1	1.3	

City and income group wise data, collected from 17 cities during June 2009, revealed that Rawalpindi recorded the highest inflation for all income groups except for the highest income group of above Rs 12000 and Faisalabad the highest inflation (YoY) in this income group, Bannu experienced the lowest inflation for all income groups. On MoM basis inflation in Kuzdar was the highest for income group up to Rs. 3000. For all other groups Sialkot recorded the highest inflation (MoM). Bannu had the lowest inflation (MoM) for all income groups (see **Table A5** in Annexure A).

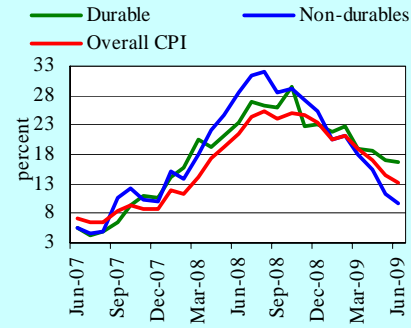
### 2.5 Services and Non-services Inflation

Inflation (YoY) in services<sup>3</sup> and non-services sectors showed decline during June 2009, compared to the preceding month. Services sector registered increase and non-services sector recorded decline compared to June 2008. Inflation (YoY) in services sector was 18.0 percent compared to 12.6 percent during June 2008 and 18.5 percent in May 2009. Inflation on MoM basis in services sector showed no change (0.7 percent in both June and May 2009) compared to the previous month, whereas in non-services sector a significant increase was recorded (1.2 percent in June 2009 and (-) 0.1 percent in May 2009) (see **Figure 2.10**).

**Figure 2.10: Services & Non-services Inflation**



**Figure 2.11: Durables and Non-durables Inflation**



Within the non-services sector, inflation (YoY) in durable<sup>4</sup> items dropped to 16.8 percent in June 2009 as compared to 23.3 percent in June 2008 and 17.1 percent in May 2009. Inflation in non-durable items also declined and was recorded at 9.8 percent during the review month compared to 28.4 percent in June 2008 and 11.4 percent in May 2009. On MoM basis inflation in both durable and non-durable items showed acceleration during June 2009 compared to May 2009 (see **Figure 2.11**).

<sup>3</sup> Services group of the CPI basket includes items like house rent index, electricity charges, marriage halls, household servants, transport fare, communication, recreation, tuition fees, laundry charges, hair cut & beauty parlor charges, doctor's fee, tailoring charges.

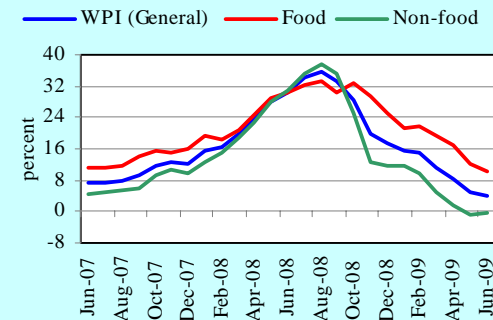
<sup>4</sup> Durable items include suitcase, furniture, electric iron, fans, washing machines, sewing machines, clocks, needles, refrigerators, air conditioners, vehicles, computer & allied products, watches and jewelry.

### 3. Wholesale Price Index

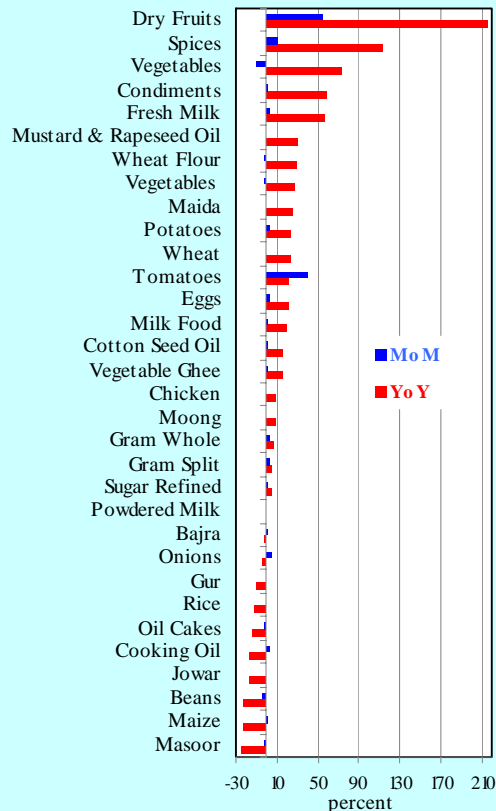
Wholesale price index (WPI) inflation (YoY) declined during June 2009 to 4.1 percent. This is more than 8 times lesser than it was in August 2008 when it had reached to its record level of 35.7 percent. Both food and non-food groups of WPI have been contributing in declining overall WPI inflation. In particular WPI non-food inflation (YoY) showed sharper deceleration and recorded a negative growth of 0.3 percent in June 2009 as compared to a positive 31.0 percent growth in June 2008. Similarly, WPI food inflation YoY also declined and reached 10.2 percent in June 2009, the lowest since May 2007 (see **Figure 3.1**).

A detailed analysis of WPI basket for June 2009 shows that among the food items, significant increases (YoY) was registered by dry fruits (216.6 percent), spices (112.8 percent), vegetables (72.7 percent), condiments (58.9 percent), and fresh milk (56.0 percent) (see **Figure 3.2 & Table A7**). Conversely, prices of 11 food items in WPI basket showed negative growth during the month under review including masoor (-) 24.0 percent, maize (-) 23.3 percent, beans (-) 23.2 percent, jowar (-)

**Figure 3.1: Wholesale Price Inflation**



**Figure 3.2: Changes in Wholesale Prices of Selected Food Items (June 2009)**



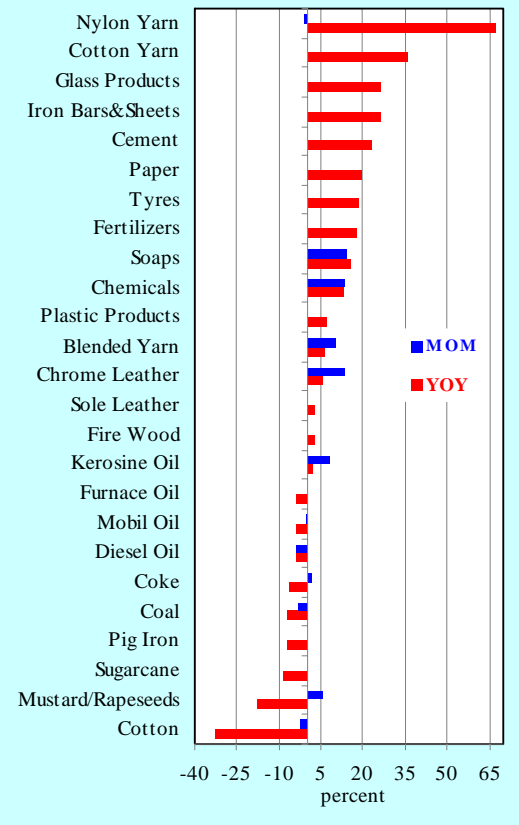


17.6 percent, cooking oil (-) 17.5 percent, oil cakes (-) 13.2 percent, rice (-) 12.1 percent and gur (-) 10.3 percent.

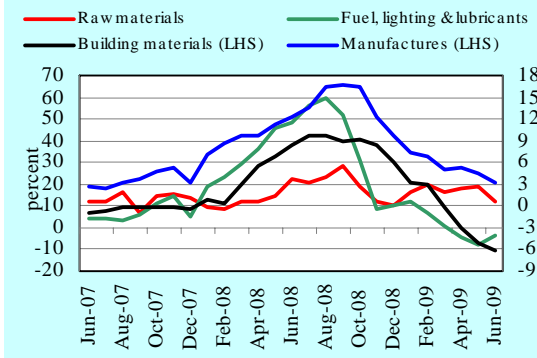
On the other hand, the non-food group of WPI basket (see **Figure 3.3 & Table A7**) shows that items like cement, iron bars & sheets, glass products, cotton yarn, and nylon yarn recorded more than 20 percent rise in prices during June 2009; while prices of nine items in the category witnessed a decline during the period under review.

Further analysis of WPI non-food group indicates that all sub-indices inflation (YoY) declined in June 2009 as compared to the same month last year. However, *fuel lighting & lubricants* sub-index witnessed increase in inflation compared with May 2009 (see **Figure 3.4**). Within *fuel lighting & lubricants* sub index, mobil oil, electricity industrial supply, and natural gas recorded more than 20 percent rise (YoY) in their prices. A detailed analysis of YoY price changes of items included in the WPI sub-indices non-food group is presented in **Table A7**.

**Figure 3.3: Changes in Wholesale Prices of Selected Non-food Items (June 2009)**



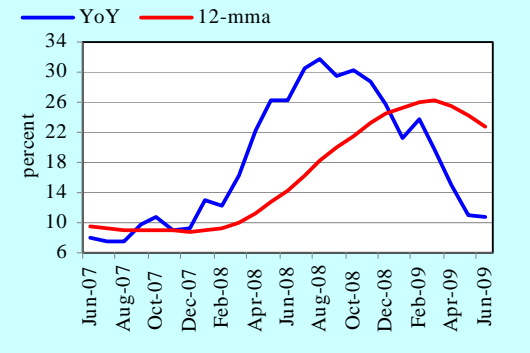
**Figure 3.4: WPI Non-food Inflation -YoY**



#### 4. Sensitive Price Indicator

SPI inflation (YoY) declined to 10.8 percent in June 2009; a drop of 15.5 percentage points compared to the same month last year. Similarly, SPI inflation measured on the basis of 12-month moving average declined to 22.7 percent in June 2009 from 24.1 percent in May 2009; however it is still higher than 14.2 percent recorded in June 2008. SPI inflation (YoY) has been declining since February 2009, whereas SPI inflation (12-month moving average) has been on declining trend since March 2009 (see **Figure 4.1**)

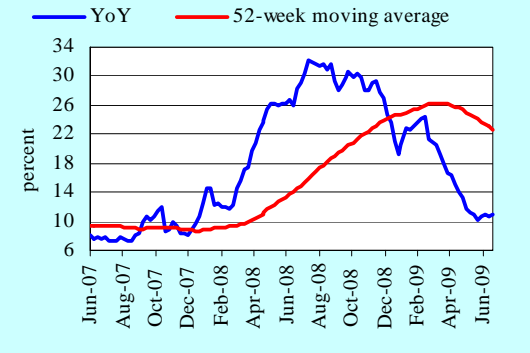
**Figure 4.1: SPI Inflation (YoY)**



Three items tomatoes (96.9 percent), gur (88.5 percent), and sugar (52.3 percent) in the SPI basket showed a significant YoY price hike during the month under review. On the other hand, prices of 11 items in the SPI basket declined on YoY basis including red chilies, rice, petrol, vegetable ghee, gram pulse, bananas, moong pulse vegetable ghee, mustard oil, and cooking oil (see **Table A8**).

SPI inflation (MoM) increased to 1.2 percent in June 2009, as compared to 0.8 percent during the previous month; however, it was lower than last year's SPI inflation (MoM) of 1.4 percent during the same month. Major items contributing to the rise in MoM inflation were garlic (20.8 percent), potatoes (35.8 percent), and tomatoes (37.7 percent) (see **Table A8**).

**Figure 4.2: Weekly SPI Inflation**



Weekly SPI inflation on YoY basis, which had been declining since March 2009, started rising from the first week of June 2009 and after fluctuations, it reached 10.8 percent in the last week of June 2009 (see **Figure 4.2**). On the other hand, long run trend of SPI inflation calculated on the basis of 52-week moving average, after reaching a peak in the second week of March 2009 has been declining since then and reached 22.7 percent during the last week of June 2009.

Income group-wise SPI inflation on YoY basis is shown in **Table 4.1**. It can be seen from the table that the middle income group of monthly income of Rs 5000-12000 has been most severely affected since December 2008. It may be noted that the highest

**Table 4.1: Income Group-wise SPI Inflation (YoY)**

	percent			
	Jun-08	Dec-08	May-09	Jun-09
Up to Rs. 3000	30.0	25.8	11.2	10.8
Rs. 3001-5000	29.2	26.3	11.6	11.3
Rs. 5000-12000	27.0	26.9	13.1	12.8
Above Rs. 12000	23.5	25.0	11.5	11.2
<b>All income groups</b>	26.3	25.7	11.0	10.8

income group that experienced lower inflation than combined inflation for all income groups since October 2008 has shown higher inflation since May 2009 implying the incidence of inflation is rising for the highest income group.

### 5 Global Commodity Prices

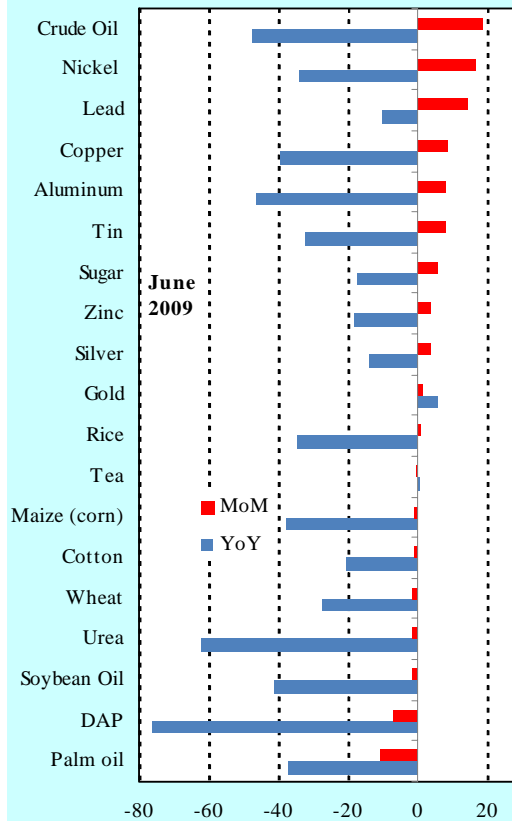
International commodity prices showed mixed trend during June 2009 on MoM basis, however on YoY basis prices have decreased in June 2009.

Crude oil was the leading commodity in price increase during June 2009 on MoM basis. Crude oil prices rose on recovery of global demand and supplies shrinkage. Prices of industrial metals rose during June 2009 on MoM basis as a result of increased demand after manufacturing expanded in China, the biggest user of the metals. Gold prices increased during June 2009 on MoM basis as weaker dollar boosted demand for the precious metals as a store of value and alternative investment.

Prices of other commodities including grains, edible oils, cotton, and fertilizers decreased during the month of June 2009 on MoM basis.

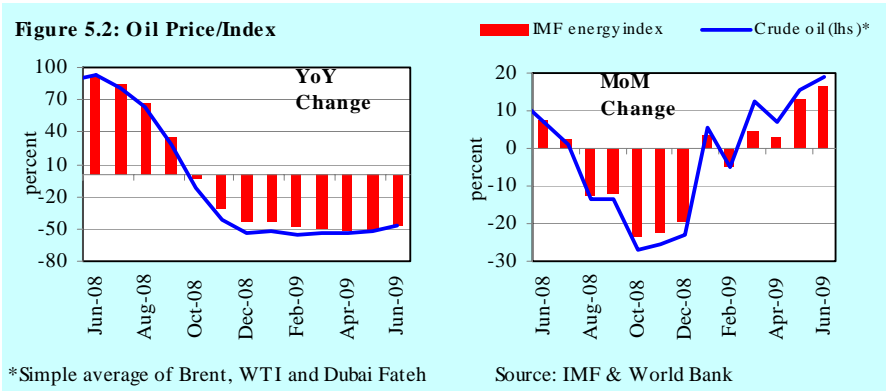
Edible oil prices decreased due to weak exports, while grain prices fell due to higher production of wheat and corn worldwide and slower demand of US grains. Sugar prices increased during the month on MoM basis due to lower production, and rice prices increased on greater exports. Fertilizer prices declined due to declining fertilizer demand (see **Figure 5.1**).

**Figure 5.1: Percent Change in Price**



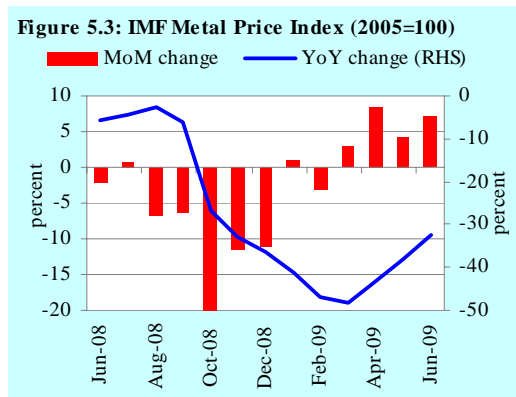
Source: IMF and World Bank

Looking at the detailed picture, crude oil remained on top in price gains with a 19 percent increase in prices on MoM basis in June 2009, while IMF energy index increased by 16.6 percent on MoM basis. Crude oil prices increase during the month mainly due to (a) OPEC and International Energy Agency's (IEA) prediction that oil demand is recovering, and (b) a drop in US crude stockpiles (see **Figure 5.2**).

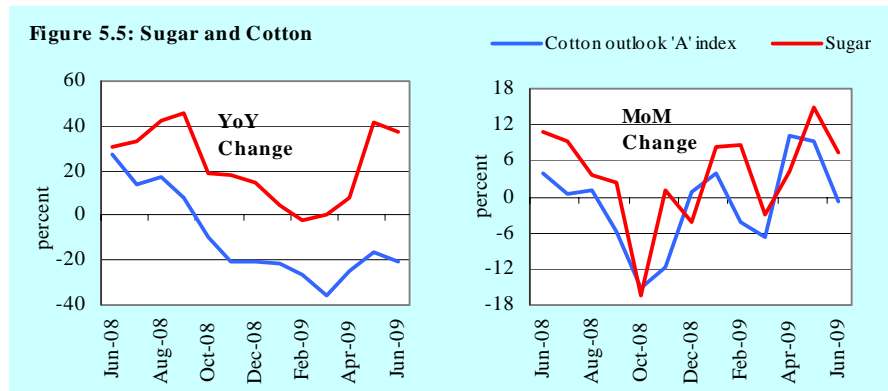
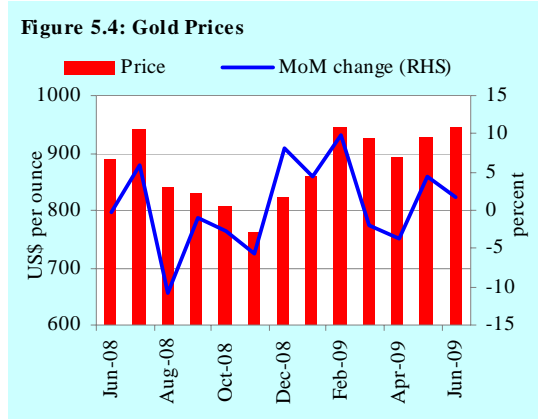


Industrial metals prices increased during June 2009 on MoM basis as demand increased after manufacturing expanded in China, the biggest user of the metals. Earlier National Bureau of Statistics (NBS) reported that China's industrial output expanded 8.9 percent in May 2009 from a year earlier, signaling that it is recovering from the recession (see **Figure 5.3**).

Copper prices rose on MoM basis on global stockpiles decline. According to London Metal Exchange stockpiles of the metal remained on declining trend the whole month since the start of second week of June 2009. Prices of other industrial metals including lead, nickel and zinc gained on MoM basis after a report showed that the first-quarter decline in the US economy was smaller than first estimated increasing hopes that US is getting out of the recession.



In the international commodity markets gold prices increased during June 2009. Gold prices increased by 1.8 percent on MoM basis and reached US\$ 945.7 per ounce (see **Figure 5.4**). Gold prices rose as sales of gold bullion coins of US Mint's during June 2009 showed increases both on MoM basis and YoY basis. Earlier US Mint announced to lift the rationing program which was restricting the bullion purchasers in the total number of coins that they could order. This announcement increased the demand and drove the gold prices higher.

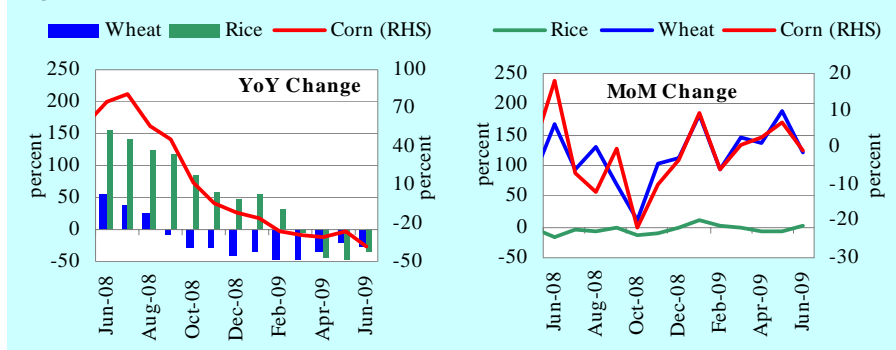


Cotton outlook 'A' index declined for the month of June 2009 by -0.9 percent on MoM basis (see **Figure 5.5**). Cotton prices declined on speculations that China, the world's largest cotton consumer, will curb purchases from the US and to meet the growing domestic demand, China's leading economic planning body, National Development and Reform Commission (NDRC) decided to sell 1.25 million tones of state reserved cotton in domestic market. China is the world's biggest cotton producer also.

Moreover, cotton prices also gained after news that Ugandan cotton exports may double in the 12 months through June 2009 because of increased production in the country. In addition bright prospects for cotton crop on the back of favorable weather forecast in West Texas, the biggest cotton producing region in US also put downward pressure on cotton prices.

Sugar prices rose 7.2 percent during June 2009 on MoM basis. Sugar prices reached the highest level since May 2006 on forecasts for a global production deficit. According to the Indian Sugar Mills Association, sugar production in India will decline for the second consecutive year by 45 percent. Sugar production in India this year will be 14.22 million tons against last year production of 25.65 million tons. Moreover Australia’s Bureau of Agricultural and Resource Economics reported that the country’s production this year will be lower than earlier projected. Australia is the world’s third-largest exporter after Brazil and Thailand.

**Figure 5.6: Prices of Grains**

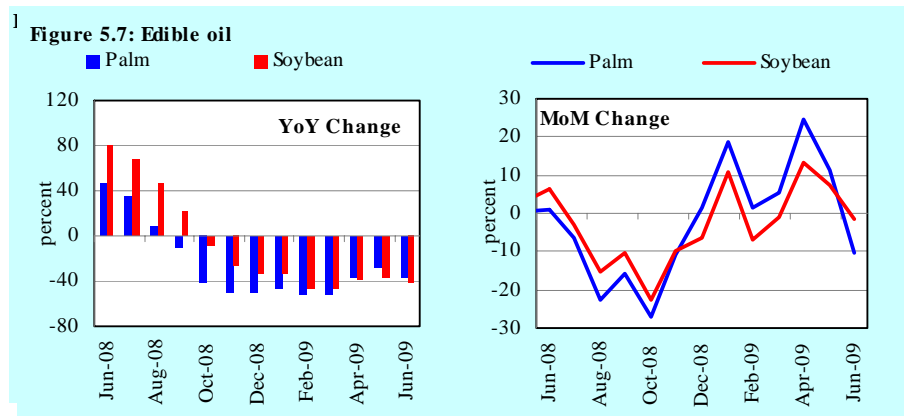


Among grains, prices of wheat and corn declined, while rice prices increased during June 2009 on MoM basis. Wheat prices decreased by 1.3 percent on MoM basis, corn prices decreased by 0.8 percent on MoM basis while rice prices increased by 1.5 percent on MoM basis (see **Figure 5.6**).

Wheat prices decreased mainly because of rising global supplies and slowing demand for the grain from US, the world’s biggest exporter. Favorable weather in US improved prospects for the winter crop, following this US farmers expanded harvest of the winter crop, adding to commodity supplies. Moreover wheat production in Australia and Canada is expected to be higher than estimated earlier. According to the USDA, Canada will be the world’s third biggest wheat exporter after US and Russia this year.

Corn prices decreased during June 2009 in the international markets after US Meteorological Department forecasted warmer weather and ample rainfall in the US Midwest, boosting the prospects for biggest corn crop. Moreover South Africa, the largest producer of the grain in Africa which competes with the US corn for export markets in the continent will produce more corn than earlier expected, as reported by the Crop Estimates Committee of South Africa.

On the other hand rice prices rose 1.5 percent during June 2009 on MoM basis. Rice prices increased as a result of; (a) strong international demand and (b) lower than expected rice production in US, India and Australia due to adverse weather and climatic conditions<sup>5</sup>.



Edible oil prices decreased during June 2009 on MoM basis relative to the previous month. Palm oil price declined by 10.6 percent on MoM basis; while soybean prices came down by 1.6 percent on MoM basis during the month under review (see **Figure 5.7**). Decline in palm oil prices is mainly attributed to lower exports<sup>6</sup>.

Soybean prices fell as the USDA reported that US farmers will sow 3.7 percent more soybean this year than earlier estimated. Due to cold and wet weather in April and May 2009, US farmers switched to soybean crop, and ample rainfall in soybean growing regions during June helped crop growth. Moreover a report by Credit Suisse revealed that India, the second-largest vegetable oil importer after China, has at least 1.7 million tonnes of edible oil reserves, compared with the normal level of 1.1 million tonnes.

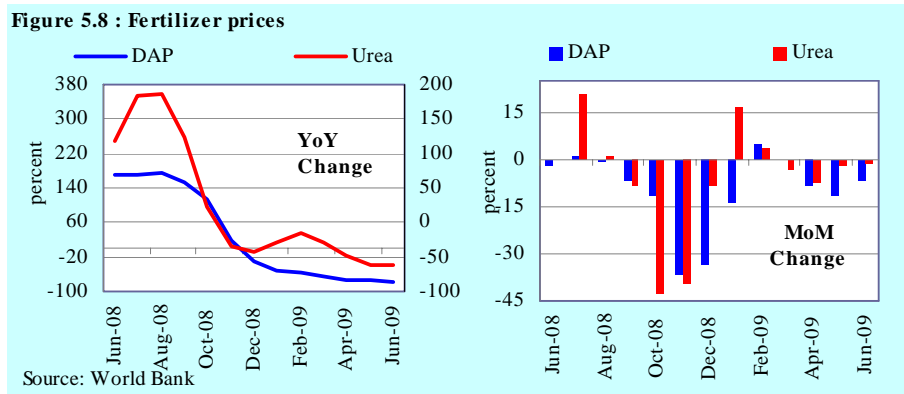
Fertilizer prices in the international markets continued on the declining trend during June 2009 on MoM basis. However fertilizer prices in the domestic market

<sup>5</sup> As reported by Meteorological Department of Japan, Australia and US National Oceanic and Atmospheric Administration.

<sup>6</sup> According to Intertek Testing Services exports of Malaysian palm oil products for June 1-15 fell 10.2 percent to 560,416 tonnes from 624,052 tonnes shipped between May 1 and 15.



increased during June 2009 on MoM basis. World Bank's fertilizer index decreased by 4.4 percent on MoM basis during June 2009 (see **Figure 5.8**).



Prices of fertilizers decreased during June 2009 in the international commodity markets as farmers are still not buying the fertilizer due to expectations of further fall in fertilizer prices. Moreover according to the International Fertilizer Industry Association (IFA), aggregate world fertilizer demand in 2008-09 is likely to be down by 5.1 percent compared with the previous year.

**Annexure A**

**Table A1: CPI Inflation by Groups**

	Weights	MoM change			YoY change		
		Jun-08	May-09	Jun-09	Jun-08	May-09	Jun-09
		<b>I. Food Group</b>	<b>40.3</b>	<b>2.5</b>	<b>-0.2</b>	<b>1.0</b>	<b>32.0</b>
<b>II. Non-Food Group</b>	<b>59.7</b>	<b>1.8</b>	<b>0.6</b>	<b>1.0</b>	<b>13.8</b>	<b>16.3</b>	<b>15.4</b>
Apparel, textile, etc.	6.1	0.8	0.4	0.3	9.7	11.5	10.9
House rent	23.4	1.4	1.2	1.1	12.4	18.9	18.6
Fuel & lighting	7.3	1.7	-0.1	0.2	11.4	25.7	23.8
Household furniture & equipment	3.3	0.9	0.5	0.2	10.4	11.5	10.8
Transport & communication	7.3	4.9	-0.6	3.1	24.9	6.8	5.0
Recreation & entertainment	0.8	0.2	0.1	0.1	9.9	4.7	4.5
Education	3.5	1.6	1.4	0.2	9.2	20.9	19.2
Cleaning, laundry, etc.	5.9	1.5	0.5	0.6	17.7	15.2	14.3
Medicare	2.1	0.2	0.2	0.0	14.2	6.5	6.3
<b>Headline</b>	<b>100</b>	<b>2.1</b>	<b>0.2</b>	<b>1.0</b>	<b>21.5</b>	<b>14.4</b>	<b>13.1</b>

**Table A2: Distribution of Price Changes of CPI Basket (YoY)**

Groups	% Changes		Total Number of Items	No. of Items in each Inflation Range							
				Decrease or no change		Subdued increase		Moderate increase		Double digit increase	
				(0 % or less)		(0 to 5%)		(5 to 10%)		(over 10%)	
				Jun-08	Jun-09	Jun-08	Jun-09	Jun-08	Jun-09	Jun-08	Jun-09
<b>I. Food Group</b>	<b>32.0</b>	<b>10.5</b>	<b>110</b>	<b>9</b>	<b>17</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>15</b>	<b>86</b>	<b>73</b>
<b>II. Non-Food Group</b>	<b>13.8</b>	<b>15.4</b>	<b>250</b>	<b>43</b>	<b>9</b>	<b>30</b>	<b>45</b>	<b>62</b>	<b>61</b>	<b>115</b>	<b>132</b>
Apparel, textile, etc.	9.7	10.9	42	4	1	6		20	24	12	16
House rent	12.4	18.6	1	0		0		0		1	1
Fuel & lighting	11.4	23.8	15	1	2	0		8	2	6	9
Household furniture & equipt	10.4	10.8	44	0		2	2	11	16	31	26
Transport & communication	24.9	5.0	43	9	1	1	6	1	4	32	32
Recreation & entertainment	9.9	4.5	16	4	0	4	12	2	1	6	3
Education	9.2	19.2	24	7	2	5	4	6	1	6	17
Cleaning, laundry, etc.	17.7	14.3	36	2	1	5	4	13	11	16	20
Medicines	14.2	6.3	29	16	2	7	17	1	2	5	8
<b>Overall</b>	<b>21.5</b>	<b>13.1</b>	<b>360</b>								

Note: Prices of 14 seasonal items were not reported during the month.

**Table A3: Top Ten Contribution to YoY CPI Inflation in June 2009**

Items	Weights	YoY change		Weighted Contribution
		Jun-08	Jun-09	
<b>A. Ranked by Weighted Contribution</b>				
1 House Rent Index	23.43	12.39	18.60	30.79
2 Milk Fresh	6.66	22.65	15.38	8.8
3 Wheat Flour	5.11	74.94	13.25	7.14
4 Electricity	4.37	6.44	25.58	6.13
5 Natural Gas	2.05	8.64	25.72	5.05
6 Sugar	1.95	4.88	51.33	4.69
7 Vegetables	1.84	9.77	38.24	4.51
8 Meat	2.70	9.78	15.43	4.30
9 Transport Fare/Charges	2.12	22.63	20.04	3.86
10 Readymade Food	1.68	25.19	18.13	2.58
<b>Total</b>	<b>51.91</b>			<b>77.87</b>
<b>B. Ranked by Percentage Change</b>				
1 Tomatoes	0.48	-65.48	148.98	2.23
2 Gur	0.07	-10.45	91.48	0.35
3 Sugar	1.95	4.88	51.33	4.69
4 Condiments	0.34	38.13	46.26	1.12
5 Text Books	0.69	8.17	44.43	1.79
6 Vegetables	1.84	9.77	38.24	4.51
7 Onions	0.62	33.69	37.89	1.54
8 Train Fare	0.15	11.66	33.40	0.41
9 Honey	0.04	9.85	32.74	0.07
10 Bulb & Tube	0.13	7.83	26.75	0.14
<b>Total</b>	<b>6.31</b>			<b>16.85</b>
<b>C. Ranked by Weights</b>				
1 House Rent Index	23.43	12.39	18.60	30.79
2 Milk Fresh	6.66	22.65	15.38	8.83
3 Wheat Flour	5.11	74.94	13.25	7.14
4 Electricity	4.37	6.44	25.58	6.13
5 Bakery & Confectionary	2.98	14.26	7.73	1.34
6 Meat	2.70	9.78	15.43	4.30
7 Vegetable Ghee	2.67	54.24	-15.44	-4.94
8 Tutition Fees	2.36	8.51	12.71	2.02
9 Transport Fare/Charges	2.12	22.63	20.04	3.86
10 Natural Gas	2.05	8.64	25.72	5.05
<b>Total</b>	<b>54.45</b>			<b>64.51</b>

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 13.1 percent in June 2009.

Table A4: Distribution of Price Changes (YoY)- Selected CPI Items, June 2009				
Groups	Decrease or no change	Subdued increase (up to 5%)	Moderate increase (5 to 10%)	Increase of over 10%
<b>Food Group</b>	Vegetable Ghee, Vegetable Ghee Tin, Pulse Moong ,Apple, Rice Basmati Broken, Pulse Gram, Bananas, Rice Basmati 385/386, Rice Basmati Sup. Qlty.	Toffee (Hilal), Chowkelate Candy, (Small Size), Eggs Farm,Biscuits-Packed, Cardamom Large Loose Av.Qlty	Bread Tandoori St. Size,Pulse Masoor, Ginger, Betel Leaves, Gram Whole Yellow, Rooh Afza, Squash-Mitchelles, Pepper Black National, Milk Powder Loose/Packed	Milk Fresh, Wheat Flour Bag, Sugar Refined, Beef With Bone, Wheat Flour Fine/Superior, Mutton ,Chicken Farm Broiler, Onion, Potatoes
<b>Apparel &amp; Textile</b>	Gents Sandal Bata	Gents Shoe, Art 1109 Service	Lawn Av.Qlty. Long Cloth Av.Qlty. Shirting Av.Qlty.	Ladies Sandal Bata, Tailoring Shirt, Tailoring Awami-Suit (Male)
<b>House Rent Index</b>				House Rent Index
<b>Fuel &amp; Lighting</b>	Firewood Whole, Gas Cylinder Stand. Size, Kerosene Oil		Bulb Philips 100-Watts, Elect.Charges 101 - 300 Units	Elect.Charges Above 1000 Units, Elect.Charges 301 - 1000 Units, Gas Chrg 6.7438 - 10.1157Mmb, Gas Chrg 10.1157 - 13.4876Mmb
<b>Household Furniture &amp; Equipment</b>		Carpet Plain Av. Qlty, Aircooler Super Asia	Household Servant Female P/T,Quilt (Liha),. Cotton Blanket (90" X 54")	Tea Set Pak. Chinaware 21 Pc, Bedsheet Single Bed, Sup.Qlty, Ceiling Fan 48" Super Qlty
<b>Transport &amp; Communication.</b>	Petrol Super, Car Tax For 800cc To 1300cc, Air Fare Economy Class., Plateform Ticket	Telephone Charges Local Call	Tel Charges Out Side City, Internet Charges Train Fare Eco. > 500 Km., Train Fare Eco. 1-100 Km.	A/C Bus Fare Outside City, Bus Fare Outside City Train Fare A/C Slp. 1-100Km., U.M.S. Reg Charges Min.
<b>Recreation &amp; Entertainment</b>	Tv.Licence ,Feedomestic, Daily "Jang", Daily "Nawa-e-Waqt"	Video Game Sega 16 Byte, Cinema A/C. Highest Class Vid. Cassette Blk. Tdk/Sony	Radio With C.Player National	T.V. 20" Colored With R/Control, Dry Cell 1.5 Volt( Local) ,Monthly "Naunehal Digest"
<b>Education</b>	Govt. College Fee Ist. Year, Govt. College Fee 4Th. Year, Govt. University Fee MSc.	Govt. Engg. Coll. Fee Ist Year, Comp. With Printer & Speaker	Ball Pen (Local)	Fountain Pen Youth China, School Fee Secondry Eng.Med. Govt. Med. College Fee MBBS
<b>Cleaning &amp; Laundry</b>	Toothpaste Macleans 70 grams, Toothpowder Dentonic 90 grams Silver Tezabi 24 Ct	Lipstick S.Miss/Medora Talc Powder Vice Roay,B,Cat	Haircut Charges For Men, Dry Cleaning Suit Coat Pant Nail Polish, S.Miss/Medora, Beauty Porl Hair Styl Charge	Washing Soap Nyl (135-160Gms),Toilet Soap Lux 95 Grams, Shampoo Plain Medora 200 ML., Surf (Medium) 160 Grm
<b>Medicare</b>	Gripe-Water Woodward, Dettol (Medium), Jouhar Joshanda	O.R.S. (Nimcol) Daonil Tab. 5 Mg. Panadol Tab. Extra/Plain	Brufen Tabs 200-Mg. Doctor (MBBS) Clinic Fee	Cotton Bandage 2" - 4", Cac. 1000 Tab Galxos-D (450 Grms)

Table A5: City-wise Inflation by Income Groups, June 2009

		Upto Rs:3000						Rs 3001-5000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	0.8	12.5	0.9	11.8	0.8	13.1	0.8	13.0	1.0	11.2	0.7	14.5
2	Faisalabad	0.9	14.4	1.0	13.6	0.8	15.1	0.7	14.6	0.7	13.1	0.7	15.9
3	Rawalpindi	0.7	15.7	0.7	17.3	0.8	14.5	0.7	15.8	0.8	16.1	0.7	15.5
4	Multan	0.6	13.7	0.6	13.7	0.6	13.7	0.7	13.8	0.8	13.1	0.6	14.4
5	Gujranwala	1.8	10.7	3.0	9.8	0.9	11.5	1.7	11.6	2.8	9.6	0.8	13.2
6	Islamabad	0.8	13.9	1.1	13.1	0.6	14.5	0.9	14.2	1.2	13.7	0.7	14.6
7	Sargodha	0.9	13.1	-0.2	11.3	1.8	14.6	0.8	13.2	0.1	11.2	1.5	14.8
8	Sialkot	2.6	11.7	4.3	10.7	1.3	12.6	3.0	13.4	5.2	11.9	1.1	14.7
9	Bahawalpur	1.0	10.6	1.3	9.8	0.8	11.3	1.2	11.2	1.6	9.6	0.8	12.5
10	Karachi	1.4	10.0	1.8	7.4	1.1	12.2	1.4	10.4	2.0	6.3	1.0	13.7
11	Hyderabad	1.3	12.5	1.9	10.4	0.9	14.3	1.2	12.3	1.8	9.7	0.8	14.5
12	Sukkur	1.4	14.4	1.8	12.5	1.1	15.9	1.2	12.7	1.6	10.1	1.0	14.9
13	Larkana	1.3	11.7	1.6	9.5	1.2	13.6	1.5	10.9	2.0	8.1	1.0	13.2
14	Peshawar	-0.2	11.8	-0.8	10.2	0.3	13.0	-0.5	11.5	-1.3	8.7	0.1	13.6
15	Bannu	-0.4	9.7	-0.7	8.1	-0.1	10.9	-0.7	9.2	-1.3	6.6	-0.2	11.3
16	Quetta	1.9	15.1	2.6	15.5	1.2	14.7	1.8	10.0	2.8	6.5	0.9	13.2
17	Khuzdar	2.8	10.3	4.2	9.3	1.7	11.2	0.8	10.4	0.9	8.2	0.7	12.2
		Rs 5001-12000						above Rs 12000					
		General		Food		Non-Food		General		Food		Non-Food	
		MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	YoY
1	Lahore	0.7	13.7	0.8	10.9	0.7	16.1	0.9	12.2	0.4	10.3	1.3	13.9
2	Faisalabad	0.8	15.0	0.8	12.7	0.7	16.9	1.3	14.2	1.5	12.7	1.1	15.4
3	Rawalpindi	0.8	16.2	0.8	15.1	0.7	17.1	1.2	14.0	0.8	13.8	1.6	14.1
4	Multan	0.8	14.6	1.0	13.4	0.7	15.6	1.2	13.2	1.2	13.0	1.2	13.3
5	Gujranwala	1.6	12.3	2.8	9.4	0.8	14.7	1.7	12.1	3.0	9.9	0.7	13.9
6	Islamabad	1.1	14.9	2.0	13.0	0.5	16.4	1.4	12.5	1.7	12.2	1.2	12.8
7	Sargodha	0.7	13.4	0.2	10.8	1.0	15.5	0.8	10.8	-0.1	8.0	1.5	13.3
8	Sialkot	2.8	13.9	4.9	11.6	1.0	15.9	2.5	13.2	4.7	11.7	0.6	14.6
9	Bahawalpur	1.5	11.6	2.2	8.7	0.9	14.2	1.6	10.4	2.3	6.9	1.1	13.5
10	Karachi	1.4	11.5	1.8	6.8	1.0	15.3	1.4	11.7	1.2	7.5	1.5	15.2
11	Hyderabad	1.1	13.1	1.5	9.3	0.8	16.3	1.2	12.4	1.3	8.6	1.1	15.7
12	Sukkur	1.2	13.4	1.4	9.7	0.9	16.5	1.3	13.1	1.7	9.1	1.1	16.4
13	Larkana	1.1	11.2	1.4	7.6	0.9	14.2	0.7	10.0	0.5	5.5	0.9	14.0
14	Peshawar	-0.3	13.0	-1.3	8.8	0.4	16.7	0.1	12.9	-1.9	9.6	1.7	15.7
15	Bannu	-0.9	9.4	-1.7	6.4	-0.2	12.0	-1.1	9.3	-2.4	5.4	-0.1	12.6
16	Quetta	1.6	11.9	2.5	6.9	0.9	16.4	1.7	11.7	2.1	8.2	1.4	14.8
17	Khuzdar	0.1	11.0	-0.5	7.3	0.7	14.3	0.6	13.9	0.0	11.3	1.0	16.2

<b>Table A6 : Income Group-wise Inflation</b>							percent
	<b>MoM</b>			<b>YoY</b>			
	<b>Jun-08</b>	<b>May-09</b>	<b>Jun-09</b>	<b>Jun-08</b>	<b>May-09</b>	<b>Jun-09</b>	
<u>Up to Rs. 3000</u>							
General	2.3	0.6	0.9	25.3	14.4	12.8	
Food	2.8	0.6	1.1	34.7	13.5	11.6	
Non-food	1.8	0.6	0.8	18.6	15.1	13.9	
<u>Rs. 3001-5000</u>							
General	2.3	0.5	0.9	24.8	14.5	13.0	
Food	2.9	0.4	1.0	34.8	12.7	10.7	
Non-food	1.8	0.6	0.7	17.8	16.0	14.8	
<u>Rs. 5000-12000</u>							
General	2.1	0.3	0.9	22.6	15.0	13.6	
Food	2.7	0.0	1.1	33.0	12.3	10.5	
Non-food	1.6	0.6	0.7	14.9	17.2	16.2	
<u>Above Rs. 12000</u>							
General	2.0	0.0	1.1	19.8	13.6	12.6	
Food	1.9	-0.8	0.9	29.8	11.5	10.3	
Non-food	2.1	0.7	1.3	12.4	15.5	14.6	
<u>All income groups</u>							
General	2.1	0.2	1.0	21.5	14.4	13.1	
Food	2.5	-0.2	1.0	32.0	12.1	10.5	
Non-food	1.8	0.6	1.0	13.8	16.3	15.4	

Table A7: Distribution of Price Change (YoY) - WPI Items: June 2009

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

S.No	Items	Unit	Price June 09	Percentage change	
				YoY	MoM
1	Wheat	Kg.	23.8	17.7	-1.9
2	Wheat flour average qlt.	Kg.	26.8	18.5	-0.9
3	Rice basmti.broken	Kg.	43.2	-20.1	2.9
4	Rice irri-6	Kg.	34.5	-29.5	-0.2
5	Masur pulse washed	Kg.	116.4	4.3	1.2
6	Moong pulse washed	Kg.	49.2	-10.6	3.9
7	Mash pulse washed	Kg.	88.3	21.6	5.1
8	Gram pulse washed	Kg.	49.1	-17.0	1.2
9	Beef	Kg.	155.9	18.7	1.2
10	Mutton	Kg.	282.1	14.5	1.3
11	Egg hen (farm)	Doz.	49.6	3.4	0.5
12	Bread plain	Each	25.6	17.6	0.2
13	Sugar	Kg.	45.2	52.3	0.7
14	Gur	Kg.	60.0	88.5	7.2
15	Milk fresh	Litr	40.3	18.2	2.6
16	Milk powdered nido	400g	180.0	13.3	5.9
17	Curd	Kg.	47.1	17.7	2.3
18	Veg.ghee tin	2.5k	348.3	-10.1	2.9
19	Veg.ghee loose	Kg.	110.5	-17.5	0.3
20	Mustard oil	Kg.	131.3	-9.6	-1.8
21	Cooking oil	2.5l	360.5	-8.3	1.6
22	Potatoes	Kg.	22.1	16.8	35.8
23	Onions	Kg.	21.4	37.8	-4.6
24	Tomatoes	Kg.	24.9	96.9	37.7
25	Bananas	Doz.	43.4	-15.8	3.7
26	Salt powdered	Kg.	6.6	20.6	0.8
27	Red chillies(powd)	Kg.	129.1	-34.2	-0.2
28	Garlic	Kg.	43.4	24.4	20.8
29	Tea packet	250g	100.6	26.9	0.6
30	Tea (prepared)	Cup	8.9	18.1	0.8
31	Cooked beef plate	Each	41.8	14.3	-0.7
32	Cooked dal plate	Each	26.6	12.9	-0.1
33	Cigarettes k-2	10's	9.6	14.3	0.9
34	Coarse latha	Mtr.	44.9	6.3	0.5
35	Lawn (avg.+s.qlty)	Mtr.	94.3	4.1	0.0
36	Voil printed	Mtr.	47.6	6.3	0.3
37	Shirting	Mtr.	79.6	7.3	0.0
38	Sandel gents bata	Pair	499.0	0.0	0.0
39	Sandel ladies bata	Pair	379.0	26.8	0.0
40	Chappal spng. Bata	Pair	129.0	18.3	0.0
41	Kerosene	Litr	62.9	15.5	-0.8
42	Firewood	40kg	276.0	16.0	0.7
43	Elec. Bulb 60-wats	Each	17.5	33.6	0.3
44	Match box	Each	1.0	0.0	0.0
45	Washing soap	Cake	12.6	11.8	0.0
46	Bath soap lifebuoy	Cake	22.0	10.5	0.0
47	Chicken (farm)	Kg.	103.1	23.2	-1.3
48	Gas chrg. All clb. Comb	D.mmbt	292.1	22.0	0.0
49	L.P.G.(cylinder 11kg.)	Each	712.5	4.3	-2.2
50	Elec.chrg.all slabs comb	Bd. Unit	6.8	23.1	0.0
51	Petrol	Litr	57.0	-17.5	-1.7
52	Diesel	Litr	56.3	12.1	-1.8
53	Telephone local	Call	2.4	4.8	0.0
<b>Maximum</b>				<b>96.9</b>	<b>37.7</b>
<b>Median</b>				<b>14.3</b>	<b>0.3</b>
<b>Minimum</b>				<b>-34.2</b>	<b>-4.6</b>



Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities

Item and Specification	Weights	Index		
		Jun-08	May-09	Jun-09
<b>GENERAL</b>	<b>100.0010</b>	<b>168.34</b>	<b>197.74</b>	<b>199.69</b>
<b>FOOD &amp; BEVERAGES.</b>	<b>40.3416</b>	<b>188.37</b>	<b>220.04</b>	<b>222.23</b>
1 WHEAT	0.4830	216.79	286.44	279.65
2 WHEAT FLOUR	5.1122	217.48	283.78	277.08
3 MAIDA	0.1059	206.04	275.07	271.20
4 BESAN	0.1320	163.94	188.33	187.88
5 RICE	1.3369	256.29	273.67	275.04
6 PULSE MASOOR	0.2214	224.62	322.04	320.96
7 PULSE MOONG	0.2230	170.63	159.69	164.71
8 PULSE MASH	0.2017	156.52	183.39	189.59
9 PULSE GRAM	0.4272	161.24	171.82	170.74
10 GRAM WHOLE	0.1491	146.81	173.24	176.93
11 MUSTARD OIL	0.0456	253.07	244.30	240.79
12 COOKING OIL	0.6858	240.58	220.56	226.76
13 VEGETABLE GHEE	2.6672	260.67	229.43	235.57
14 SUGAR	1.9467	91.02	163.09	164.65
15 GUR	0.0735	109.66	214.29	232.11
16 TEA	1.2559	117.84	160.38	162.82
17 MILK FRESH	6.6615	186.86	223.60	230.80
18 MILK POWDER	0.1105	178.46	204.34	208.42
19 MILK PRODUCTS	0.5607	170.13	206.15	212.52
20 HONEY	0.0358	137.99	187.71	190.22
21 CEREALS	0.0878	171.64	233.14	233.14
22 JAM,TOMATO,PICKLES & VINEGAR	0.2472	144.26	170.59	171.20
23 BEVERAGES	0.7286	146.76	170.61	174.46
24 CONDIMENTS	0.3392	162.23	242.07	241.98
25 SPICES	0.6008	169.16	204.48	201.45
26 DRY FRUIT	0.2760	253.37	319.09	320.29
27 BAKERY & CONFECTIONARY	2.9837	128.98	145.22	145.18
28 CIGARETTES	0.9527	159.14	187.28	187.41
29 BETEL LEAVES & NUTS	0.1851	153.48	172.18	170.77
30 READYMADE FOOD	1.6833	185.56	228.47	231.31
31 SWEETMEAT & NIMCO	0.3846	190.74	230.60	231.33
32 FISH	0.2703	152.68	183.54	179.99
33 MEAT	2.6981	229.44	273.61	276.36
34 CHICKEN FARM	0.9158	202.44	201.73	197.43
35 EGGS	0.4119	191.99	188.10	179.78
36 POTATOES	0.5806	129.97	171.91	237.51
37 ONIONS	0.6237	105.63	225.07	208.00
38 TOMATOES	0.4833	155.92	104.30	178.77
39 VEGETABLES	1.8377	197.82	201.27	205.93
40 FRESH FRUITS	1.6156	236.03	232.87	209.69
<b>APPAREL, TEXTILE &amp; FOOTWEAR.</b>	<b>6.0977</b>	<b>138.44</b>	<b>156.09</b>	<b>156.49</b>
41 COTTON CLOTH	1.6197	143.01	158.86	159.41
42 SILK,LINEN,WOOLEN/CLOTH	0.5766	137.89	154.06	154.53
43 TAILORING CHARGES	0.8636	140.03	163.88	164.32
44 HOSIERY	0.1528	146.07	167.80	169.44
45 READYMADE GARMENTS	1.2038	129.32	142.56	143.10
46 WOOLEN READYMADE GARMENTS	0.1485	155.69	177.85	177.78
47 FOOTWEAR	1.5327	137.66	156.87	156.89
<b>HOUSE RENT.</b>	<b>23.4298</b>	<b>159.79</b>	<b>192.23</b>	<b>194.38</b>
48 HOUSE RENT INDEX (Combined)	23.4298	159.79	192.23	194.38

(continued)

(continued)

**Table A9: Consumer Price Index Numbers by Major Groups and Selected Commodities**

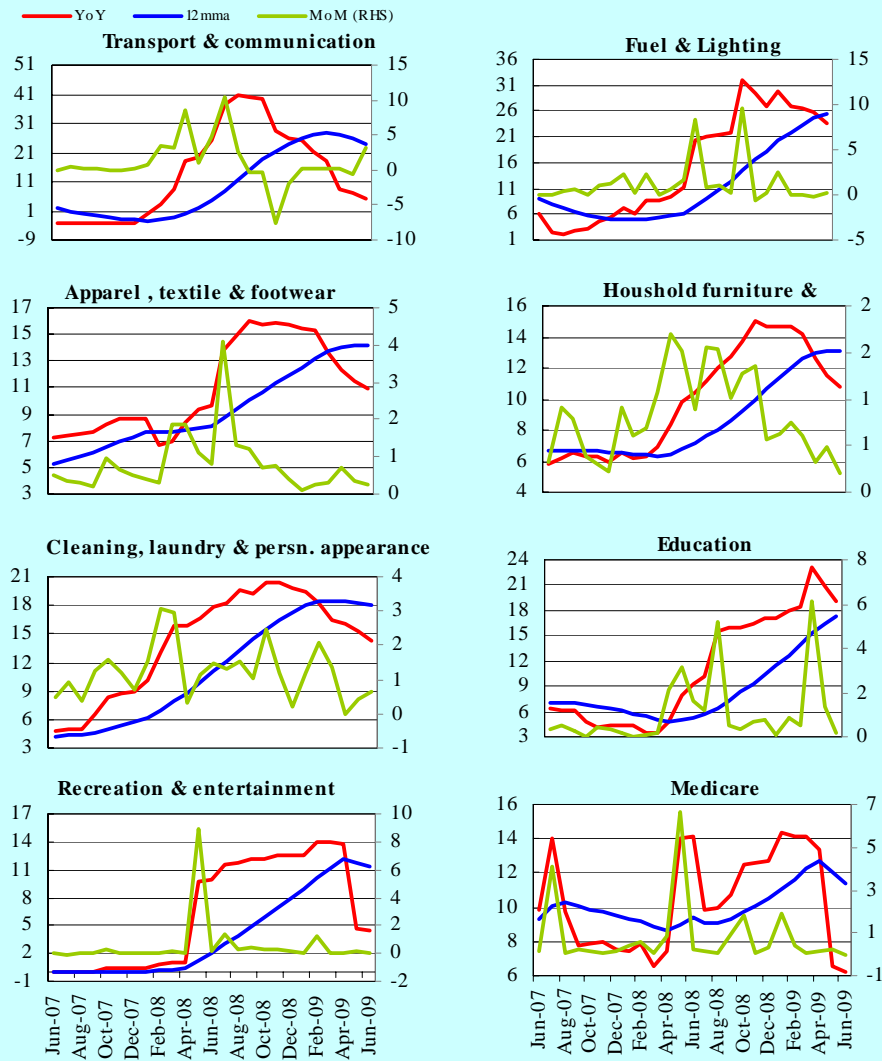
Item and Specification	Weights	Index		
		Jun-08	May-09	Jun-09
<b>FUEL AND LIGHTING.</b>	<b>7.2912</b>	<b>164.27</b>	<b>207.85</b>	<b>208.26</b>
49 KEROSENE	0.1366	293.19	386.75	432.14
50 FIREWOOD	0.4778	260.42	309.17	310.46
51 MATCH BOX	0.1301	100.00	200.00	200.00
52 BULB & TUBE	0.1311	93.52	118.54	118.54
53 ELECTRICITY	4.3698	127.23	159.77	159.77
54 NATURAL GAS	2.0458	220.95	281.16	280.12
<b>H.HOLD.FURNITURE &amp; EQUIPMENT ETC.</b>	<b>3.2862</b>	<b>145.33</b>	<b>164.49</b>	<b>164.82</b>
55 UTENSILS	0.3690	130.92	151.79	152.44
56 PLASTIC PRODUCTS	0.1055	157.25	193.27	193.93
57 SUITCASE	0.0470	133.83	157.23	157.45
58 HOUSE HOLD EQUIPMENTS	0.0953	131.16	150.47	150.79
59 FURNITURE (Ready Made)	0.3054	152.78	175.80	176.36
60 FURNISHING	0.6362	139.89	156.85	157.07
61 ELECT. IRON FANS & WASHING MACHINE	0.1889	137.00	165.96	166.17
62 SEWING MACHINE,CLOCK AND NEEDLES	0.1270	121.57	141.89	142.60
63 REFRIGERATOR & AIRCONDITIONER	0.1756	106.04	131.26	131.72
64 MARRIAGE HALL	0.0445	162.92	192.36	193.03
65 HOUSE HOLD SERVANT	1.1918	160.29	174.49	174.64
<b>TRANSPORT &amp; COMMUNICATION.</b>	<b>7.3222</b>	<b>171.59</b>	<b>185.24</b>	<b>190.98</b>
66 PETROL	1.7253	225.06	185.50	204.79
67 DIESEL	0.2070	317.00	354.40	397.92
68 CNG. FILLING CHARGES	0.1649	160.76	205.28	205.28
69 SERVICE CHARGES	0.3835	143.65	168.16	168.21
70 VEHICLES	0.2596	106.51	134.71	134.78
71 TYRE & TUBE	0.2831	130.84	159.03	159.41
72 TRANSPORT FARE/CHARGES	2.1236	205.16	252.73	252.77
73 TRAIN FARE	0.1514	170.01	253.24	253.24
74 AIR FARE	0.0983	280.47	342.93	342.93
75 COMMUNICATION	1.9255	86.85	91.36	91.37
<b>RECREATION &amp; ENTERTAINMENT.</b>	<b>0.8259</b>	<b>106.60</b>	<b>121.53</b>	<b>121.62</b>
76 RECREATION	0.3399	101.91	131.89	131.89
77 ENTERTAINMENT	0.4860	109.88	114.28	114.44
<b>EDUCATION.</b>	<b>3.4548</b>	<b>142.87</b>	<b>178.21</b>	<b>178.50</b>
78 TUTION FEES	2.3629	149.56	175.49	175.82
79 STATIONERY	0.3500	136.60	175.60	176.29
80 TEXT BOOKS	0.6894	127.75	196.01	196.01
81 COMPUTER & ALLIED PRODUCTS	0.0525	81.71	84.38	84.38
<b>CLEANING LAUNDRY &amp; PER.APPEARANCE.</b>	<b>5.8788</b>	<b>146.15</b>	<b>170.35</b>	<b>171.41</b>
82 WASHING SOAP & DETERGENT	1.5535	136.81	163.66	163.80
83 TOILET SOAP	0.7436	161.07	186.50	186.50
84 TOOTH PASTE	0.4036	110.80	113.97	113.97
85 SHAVING ARTICLES	0.3480	128.59	149.43	149.43
86 COSMETICS	1.4272	130.95	156.01	157.25
87 WATCHES	0.0552	129.17	138.95	138.95
88 JEWELLERY	0.3936	272.79	326.73	336.28
89 LAUNDRY CHARGES	0.2207	159.81	179.47	179.47
90 HAIR CUT & BEAUTY PARLOUR CHARGES	0.7334	137.37	152.74	153.31
<b>MEDICARE.</b>	<b>2.0728</b>	<b>132.57</b>	<b>150.63</b>	<b>150.63</b>
91 DRUGS & MEDICARES	1.0752	108.60	118.70	118.71
92 DOCTOR'S FEE	0.9976	158.40	185.03	185.03

**Table A10: Price Indices - Base 2000-01=100**

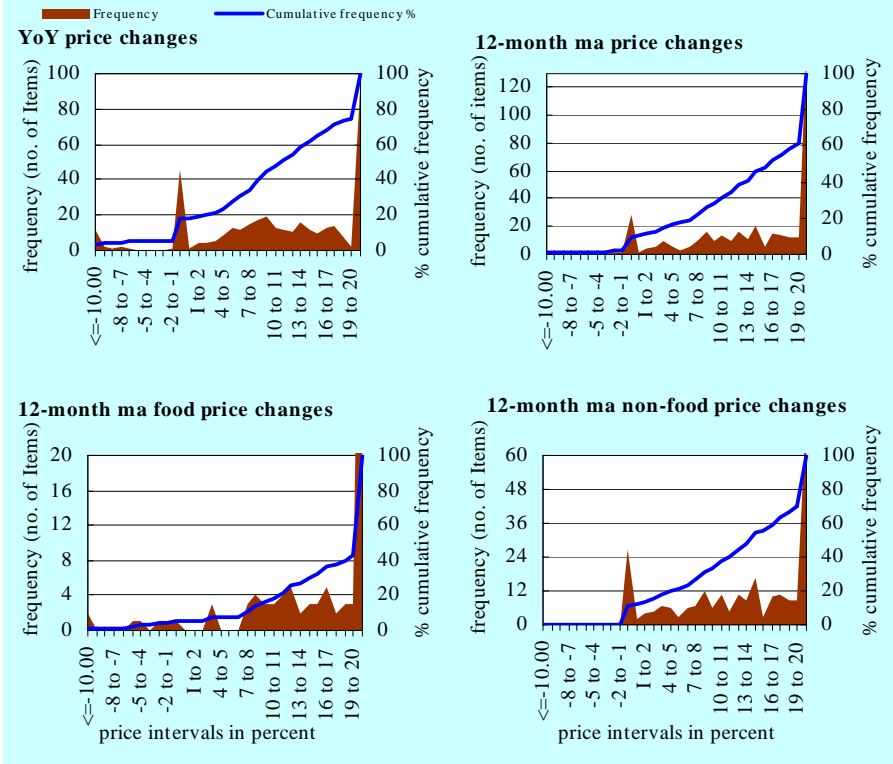
Period	CPI			WPI			SPI *
	Overall	Food	Non-food	Overall	Food	Non-food	
2004-05	121.98	125.69	119.47	124.14	125.03	123.50	126.52
2005-06	131.64	134.39	129.78	136.68	133.78	138.78	136.43
2006-07	141.87	148.21	137.59	146.18	145.67	146.53	149.29
2007-08	158.90	174.36	148.44	170.15	173.27	167.88	170.55
2008-09	191.90	215.69	175.82	201.10	213.54	192.04	209.29
2007 Jun.	145.23	152.31	140.44	151.52	153.17	150.32	153.70
Jul.	146.70	154.58	141.37	154.10	155.72	152.92	155.42
Aug.	148.64	158.26	142.13	155.90	158.78	153.80	158.45
Sep.	151.80	164.83	142.99	158.42	163.56	154.68	161.67
Oct.	153.66	168.18	143.84	161.30	165.61	158.16	163.71
Nov.	153.87	167.22	144.84	163.93	167.14	161.59	163.89
Dec.	154.77	167.85	145.93	163.83	168.26	160.61	165.41
2008 Jan.	157.73	172.96	147.43	166.75	172.50	162.57	168.24
Feb.	158.50	172.16	149.26	168.81	172.40	166.20	166.94
Mar.	163.38	180.52	151.79	175.55	177.57	174.08	173.96
Apr.	168.34	188.37	154.80	183.09	184.07	182.38	183.29
May.	172.87	196.28	157.04	192.19	194.26	190.68	191.49
Jun.	176.50	201.12	159.85	197.92	199.39	196.85	194.10
Jul.	182.39	206.85	165.85	206.53	206.37	206.65	202.94
Aug.	186.29	212.21	168.76	211.60	211.91	211.37	208.85
Sep.	188.10	214.13	170.50	211.02	213.63	209.12	209.52
Oct.	192.08	221.44	172.23	207.08	219.58	197.98	213.37
Nov.	191.85	218.12	174.09	196.50	215.97	182.33	211.03
Dec.	190.90	214.71	174.80	192.62	210.77	179.41	207.99
2009 Jan.	190.09	210.33	176.40	192.91	208.80	181.35	204.02
Feb.	191.90	211.58	178.59	194.19	210.31	182.46	206.78
Mar.	194.53	216.13	179.92	195.00	212.16	182.51	208.40
Apr.	197.28	220.46	181.61	198.28	215.69	185.61	210.85
May.	197.74	220.04	182.66	201.29	217.50	189.49	212.62
Jun.	199.69	222.23	184.45	206.13	219.81	196.17	215.09

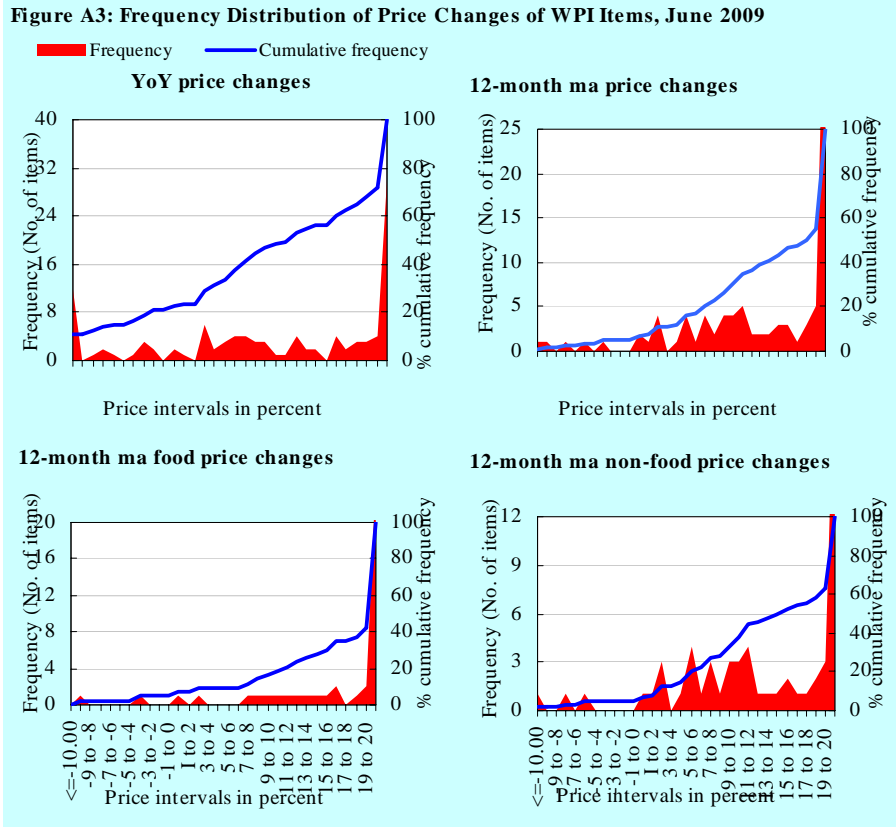
\*: all groups combined

**Figure A1: CPI Non-food Inflation (percent)**



**Figure A2: Frequency Distribution of Price Changes of CPI Items, June 2009**





## Annexure B

### Technical Notes

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

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.
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:

$$\pi_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

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:

$$\bar{\pi}_t = \left( \frac{\sum_{i=0}^{t-v} I_{t-i}}{\sum_{i=0}^{t-12-v} I_{t-12-i}} - 1 \right) \times 100$$

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:

$$\pi_t = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

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:

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

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 price indices 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 changes in price indices 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  $C_{it}$  : Contribution of  $i^{\text{th}}$  item to the overall inflation

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

the reference month

$w_i$  : Weights of  $i^{\text{th}}$  item

$\pi_{it}$  : Inflation of  $i^{\text{th}}$  item

$\pi_t$  : Overall inflation