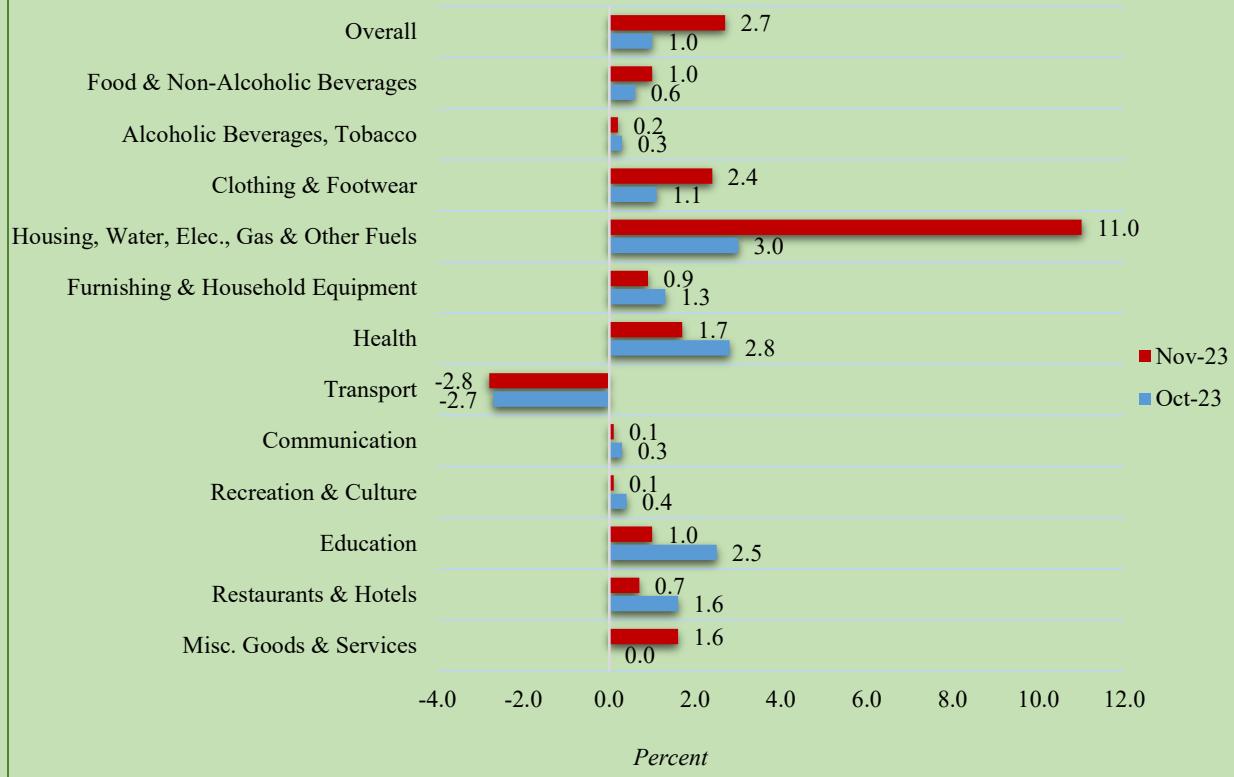




## Inflation Monitor

November 2023

### CPI Inflation (MoM)



Data Services and Innovations Department

State Bank of Pakistan State Bank of Pakistan State Bank of Pakistan

State Bank of Pakistan, I.I. Chundrigar Road, Karachi.

ISSN 1992-8335 (online)



The analysis in this document is based on data:

- provided by Pakistan Bureau of Statistics (PBS) for domestic inflation analysis
- retrieved from Bloomberg, Trading Economics and World Bank websites for global inflation analysis

For feedback and queries: [feedback.statistics@sbp.org.pk](mailto:feedback.statistics@sbp.org.pk)

## Table of Contents

<b>1. Inflation in Brief.....</b>	<b>6</b>
<b>2. CPI Inflation Heat Maps .....</b>	<b>8</b>
<b>3. Inflation Trends.....</b>	<b>12</b>
<b>4. Movements in Price Indices (Moving Averages).....</b>	<b>13</b>
<b>5. Movements in Price Indices (MoM).....</b>	<b>14</b>
<b>6. Consumer Price Indices and Inflation .....</b>	<b>16</b>
<b>7. Weighted Contribution .....</b>	<b>19</b>
<b>8. Inflation Diffusion Index.....</b>	<b>21</b>
<b>9. Domestic Food Commodity Prices (Growth) .....</b>	<b>22</b>
<b>10. Inflation in Global Context.....</b>	<b>23</b>
<b>11. Global Commodity Inflation.....</b>	<b>24</b>
<b>12. Seasonal Adjustment in CPI.....</b>	<b>25</b>
<b>List of Illustrations (Tables and Figures).....</b>	<b>29</b>
<b>Tables.....</b>	<b>29</b>
<b>Table A1: Inflation – Summary .....</b>	<b>29</b>
<b>Table A2: National CPI Inflation by Groups (YoY and MoM in percent) .....</b>	<b>30</b>
<b>Table A3: Urban CPI Inflation by Groups (YoY and MoM in percent) .....</b>	<b>30</b>
<b>Table A4: Rural CPI Inflation by Groups (YoY and MoM in percent) .....</b>	<b>31</b>
<b>Table A5: National CPI Inflation by Groups.....</b>	<b>32</b>
<b>Table A6: Urban CPI Inflation by Groups.....</b>	<b>33</b>
<b>Table A7: Rural CPI Inflation by Groups .....</b>	<b>34</b>
<b>Table A8: Top Ten Contributors to Urban CPI Inflation (YoY).....</b>	<b>35</b>
<b>Table A9: Top Ten Contributors to Urban CPI Inflation (MoM) .....</b>	<b>36</b>
<b>Table A10: Top and Bottom Fifteen Contributors to Urban CPI Inflation (YoY).....</b>	<b>37</b>
<b>Table A12: Top and Bottom Fifteen Contributors to MoM Urban CPI Food Inflation .....</b>	<b>39</b>
<b>Table A13: Top and Bottom Fifteen Contributors to MoM Urban CPI Non-Food Inflation.....</b>	<b>40</b>
<b>Table A14: Top Ten Contributors to Rural CPI Inflation (YoY).....</b>	<b>41</b>
<b>Table A15: Top Ten Contributors to Rural CPI Inflation (MoM) .....</b>	<b>42</b>
<b>Table A16: Top and Bottom Fifteen Contributors to Rural CPI Inflation (YoY).....</b>	<b>43</b>
<b>Table A17: Top and Bottom Fifteen Contributors to Rural CPI Inflation (MoM) .....</b>	<b>44</b>
<b>Table A18: Top and Bottom Fifteen Contributors to Rural CPI Food Inflation (MoM).....</b>	<b>45</b>
<b>Table A19: Top and Bottom Fifteen Contributors to MoM Rural CPI Non-Food Inflation.....</b>	<b>46</b>
<b>Table A20: Distribution of Price Changes (YoY) - Selected Urban CPI Item .....</b>	<b>47</b>
<b>Table A21: Distribution of Price Changes (YoY) - Selected Rural CPI Items.....</b>	<b>48</b>
<b>Table A22: Distribution of Price Changes (YoY) - WPI Items .....</b>	<b>49</b>
<b>Table A23: International Commodity Prices/Indices.....</b>	<b>50</b>
<b>Table A24: National CPI Data Series - Original and Seasonally Adjusted .....</b>	<b>51</b>
<b>Table A25: Urban CPI Data Series - Original and Seasonally Adjusted .....</b>	<b>52</b>
<b>Table A26: Rural CPI Data Series - Original and Seasonally Adjusted.....</b>	<b>53</b>

---

<b>Table A27: National CPI Monthly &amp; Average Seasonal Factors.....</b>	54
<b>Table A28: Urban CPI Monthly &amp; Average Seasonal Factors .....</b>	54
<b>Table A29: Rural CPI Monthly &amp; Average Seasonal Factors.....</b>	55
<b>Table A30: National CPI MoM - Original and Seasonally Adjusted.....</b>	56
<b>Table A31: Urban CPI MoM - Original and Seasonally Adjusted .....</b>	57
<b>Table A32: Rural CPI MoM - Original and Seasonally Adjusted .....</b>	58
<b>Figures .....</b>	59
<b>Figure A1: National CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent).....</b>	59
<b>Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent) .....</b>	60
<b>Figure A3: Rural CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent) .....</b>	61
<b>Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY) .....</b>	62
<b>Figure A5: Frequency Distribution of Price Changes of Rural CPI Items (YoY) .....</b>	63
<b>Figure A6: Frequency Distribution of Price Changes of Urban CPI Items (MoM) .....</b>	64
<b>Figure A7: Frequency Distribution of Price Changes of Rural CPI Items (MoM) .....</b>	65
<b>Figure A8: Frequency Distribution of Price Changes of WPI Commodities (YoY).....</b>	66
<b>Technical Notes .....</b>	67
<b>Methodology for Estimating Inflation Diffusion Index for Pakistan .....</b>	69
<b>List of Abbreviations .....</b>	69

### **The Team**

Humaira Kiran

Assistant Director

Sohail Haider

Deputy Director

### **Publication Reviewer**

Shahid Hussain Javaid

Joint Director

### **Publication Manager**

Salman Ahmed

Senior Joint Director

### **Data Support**

Pakistan Bureau of Statistics (PBS)

## 1. Inflation in Brief

Key developments are presented in the table below:

**Table S-1. Inflation Summary**

<b>Inflation</b>	<b>YoY</b>			<b>MoM</b>		
	<b>Nov-23</b>	<b>Oct-23</b>	<b>Nov-22</b>	<b>Nov-23</b>	<b>Oct-23</b>	<b>Nov-22</b>
<b>CPI Inflation</b>						
National	29.2	26.8	23.8	2.7	1.0	0.8
Urban	30.4	25.5	21.6	4.3	1.1	0.4
Rural	27.5	28.7	27.2	0.4	0.9	1.3
<b>Core Inflation</b>						
Urban (NFNE)	18.6	18.5	14.6	0.9	1.2	0.8
Rural (NFNE)	25.9	26.7	18.5	1.4	1.0	2.1
Urban (Trimmed)	22.9	24.6	19.8	0.1	0.6	0.5
Rural (Trimmed)	27.9	30.4	25.4	0.5	0.7	1.8
WPI Inflation	26.4	24.6	27.7	1.4	-1.9	0.0
SPI Inflation	34.7	35.4	29.7	4.4	-0.3	4.9

- I. National CPI Inflation (YoY) increased to 29.2 percent in November 2023 from 26.8 percent in the previous month. It stood at 23.8 percent in November 2022. On MoM basis, it increased to 2.7 percent in November 2023 from 1.0 percent in the previous month. It was recorded at 0.8 percent in the corresponding month of the previous year.
- II. Urban CPI Inflation (YoY) increased to 30.4 percent in November 2023 from 25.5 percent in the previous month. It stood at 21.6 percent in November 2022. On MoM basis, it increased to 4.3 percent in November 2023 from 1.1 percent in the previous month. It was recorded at 0.4 percent in the corresponding month of the previous year. Seasonally adjusted Urban CPI (MoM) showed an inflation of 4.5 percent in November 2023 compared to 0.9 percent in the previous month (**Table A31**).
- III. Rural CPI Inflation (YoY) decreased to 27.5 percent in November 2023 from 28.7 percent in the previous month. It was recorded at 27.2 percent in November 2022. On MoM basis, it decreased to 0.4 percent in November 2023 from 0.9 percent in the previous month. It was recorded at 1.3 percent in the corresponding month of the previous year. Seasonally adjusted Rural CPI (MoM) showed an inflation of 0.5 percent in November 2023 as compared to 0.2 percent in the previous month (**Table A32**).
- IV. Urban Core (NFNE) Inflation (YoY) increased to 18.6 percent in November 2023 from 18.5 percent in the previous month. It stood at 14.6 percent in the corresponding month of the previous year. On MoM basis, it decreased to 0.9 percent in November 2023 from 1.2 percent in the previous month. It stood at 0.8 percent in the corresponding month of the previous year.
- V. Rural Core (NFNE) Inflation (YoY) decreased to 25.9 percent in November 2023 from 26.7 percent in the previous month. It stood at 18.5 percent in November 2022. On MoM basis, it increased to 1.4 percent in November 2023 from 1.0 percent in the previous month. It was recorded at 2.1 percent in the corresponding month of the previous year.
- VI. Urban Core (trimmed) Inflation (YoY) decreased to 22.9 percent in November 2023 from 24.6 percent in the previous month. It stood at 19.8 percent in the corresponding month of the previous

year. On MoM basis, it decreased to 0.1 percent in November 2023 from 0.6 percent in the previous month. It stood at 0.5 percent in the corresponding month of the previous year.

- VII. Rural Core (trimmed) Inflation (YoY) decreased to 27.9 percent in November 2023 from 30.4 percent in the previous month. It was recorded at 25.4 percent in the corresponding month of the previous year. On MoM basis, it decreased to 0.5 percent in November 2023 from 0.7 percent in the previous month. It stood at 1.8 percent in the corresponding month of the previous year.
- VIII. WPI Inflation (YoY) increased to 26.4 percent in November 2023 from 24.6 percent in the previous month. It stood at 27.7 percent in the corresponding month of the previous year. On MoM basis, it increased to 1.4 percent in November 2023 compared to a deflation of 1.9 percent in the previous month. A deflation of 0.02 percent was recorded during the corresponding month of the previous year.
- IX. SPI (combined) Inflation (YoY) decreased to 34.7 percent in November 2023 from 35.4 percent in the previous month. It stood at 29.7 percent in the corresponding month of the previous year. On MoM basis, it increased to 4.4 percent in November 2023 compared to a deflation of 0.3 percent in the previous month. It stood at 4.9 percent in the corresponding month of the previous year.

## 2. CPI Inflation Heat Maps

A Heat map is a type of data visualization that displays aggregated information in a visually appealing way. The heat maps use a warm-to-cool schema for their visual representation, i.e. red (warmer color) shows higher activity while blues (cooler color) represents lower activity<sup>1</sup>.

Heat maps for National, Urban and Rural CPI inflation (YoY and MoM) and their important sub-indices for the last thirteen months are presented here. Green areas indicate low inflation pressures whereas red areas indicate higher inflationary pressures. The observed inflation is compared with inflation target of 21.0 percent for FY24.<sup>2</sup>

National, Urban and Rural CPI Inflation (YoY)															
		Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	
Headline	National	23.8	24.5	27.6	31.5	35.4	36.4	38.0	29.4	28.3	27.4	31.4	26.8	29.2	
	Urban	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3	26.3	25.0	29.7	25.5	30.4	
	Rural	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.7	27.5	
Food	Urban	29.7	32.7	39.0	41.9	47.1	46.8	48.1	40.8	40.2	38.8	33.9	28.9	29.8	
	Rural	33.5	37.9	45.2	47.0	50.2	52.2	52.4	41.5	41.3	40.6	35.4	28.6	29.2	
Core	Urban	14.6	14.7	15.4	17.1	18.6	19.5	20.0	18.5	18.4	18.4	18.6	18.5	18.6	
	Rural	18.5	19.0	19.4	21.5	23.1	24.9	26.9	25.2	24.6	25.9	27.3	26.7	25.9	
Key															

Urban CPI Inflation (YoY)	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
General	100.00	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3	26.3	25.0	29.7	25.5	30.4
Food & Non-Alcoholic Beverages	30.42	28.9	32.6	39.5	42.1	45.5	45.1	45.8	38.6	38.7	37.2	32.2	27.0	28.4
Alcoholic Beverages, Tobacco	0.85	37.2	37.3	37.3	54.9	140.8	133.7	124.5	107.6	102.6	96.5	84.8	82.7	79.8
Clothing & Footwear	8.01	19.6	17.0	16.8	16.8	22.4	21.5	21.3	19.1	18.6	16.0	17.6	17.5	18.3
Housing, Water, Elec., Gas & Other Fuels	27.03	7.3	4.1	5.0	11.2	15.0	14.5	18.0	10.2	9.6	5.3	28.3	19.2	40.2
Furnishing & Household Equipment Maintenance	4.09	29.0	29.7	30.0	34.1	39.6	40.8	42.1	40.6	41.1	41.4	37.7	34.4	31.9
Health	2.31	14.1	13.5	16.7	18.5	17.9	19.1	19.4	18.5	21.9	22.5	26.9	28.1	27.5
Transport	6.14	42.1	39.2	38.0	49.9	54.6	55.9	51.4	20.0	13.6	20.7	27.4	26.6	23.5
Communication	2.35	1.8	1.8	1.8	4.6	8.5	8.6	9.0	8.8	9.0	8.9	9.4	9.2	9.3
Recreation & Culture	1.73	22.3	38.0	43.6	48.4	51.4	68.5	71.6	67.3	65.8	61.7	58.9	56.5	54.7
Education	4.88	11.1	10.8	10.4	10.4	5.8	6.0	5.7	5.9	5.6	8.7	9.1	11.4	12.6
Restaurants & Hotels	7.41	29.5	28.6	32.4	35.2	39.8	40.4	46.1	38.8	35.8	35.4	34.2	32.5	31.0
Misc. Goods & Services	4.77	23.8	25.9	28.8	33.3	34.3	39.1	43.0	39.5	39.1	39.3	34.7	32.7	32.4

Rural CPI Inflation (YoY)	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
		General	Food & Non-Alcoholic Beverages	Alcoholic Beverages, Tobacco	Clothing & Footwear	Housing, Water, Elec., Gas & Other Fuels	Furnishing & Household Equipment Maintenance	Health	Transport	Communication	Recreation & Culture	Education	Restaurants & Hotels	Misc. Goods & Services
General	100.00	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.7	27.5
Food & Non-Alcoholic Beverages	40.87	33.7	38.7	46.8	48.3	49.0	51.4	51.9	40.4	40.5	39.9	34.1	26.6	27.5
Alcoholic Beverages, Tobacco	1.28	34.4	35.0	35.2	42.7	139.1	133.3	123.3	111.8	101.5	98.6	90.5	86.9	86.4
Clothing & Footwear	9.48	17.4	17.2	16.7	17.2	21.3	21.8	23.9	23.3	22.5	21.5	24.2	24.6	24.1
Housing, Water, Elec., Gas & Other Fuels	18.49	15.6	13.2	14.0	18.6	22.9	22.2	26.0	14.8	13.5	8.3	32.7	23.3	18.2
Furnishing & Household Equipment Maintenance	4.10	29.2	28.6	29.8	33.9	38.1	40.2	45.5	43.1	42.6	42.2	41.7	41.2	38.3
Health	3.51	20.2	21.4	20.7	19.1	19.0	18.4	19.3	19.7	21.2	22.6	23.7	22.4	22.3
Transport	5.56	47.9	44.6	41.0	51.4	55.5	58.4	55.5	20.9	13.6	26.8	37.7	35.8	31.7
Communication	1.99	1.4	1.4	1.2	1.9	3.2	3.2	3.2	3.0	2.8	3.4	3.6	4.0	3.9
Recreation & Culture	1.38	31.3	39.4	45.1	47.4	49.2	68.9	73.2	69.2	65.9	60.9	58.5	56.1	51.7
Education	2.13	11.1	11.3	11.2	12.2	12.5	18.0	18.8	18.8	17.1	17.1	18.7	18.2	17.2
Restaurants & Hotels	6.19	26.4	25.2	26.0	33.4	36.1	36.6	35.9	32.1	33.0	31.6	34.6	34.1	32.2
Misc. Goods & Services	5.02	21.9	25.6	28.5	33.3	34.6	38.5	43.8	40.9	39.5	43.0	38.9	38.9	36.9

National CPI Inflation (MoM)														
	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
General	100.00	0.8	0.5	2.9	4.3	3.7	2.4	1.6	-0.3	3.5	1.7	2.0	1.0	2.7
Food & Non-Alcoholic Beverages	34.58	0.1	-0.1	5.0	4.1	3.7	4.4	1.3	-1.0	4.1	0.6	1.6	0.6	1.0
Alcoholic Beverages, Tobacco	1.02	1.1	0.5	0.2	9.7	60.9	0.3	0.6	0.1	0.4	0.4	0.5	0.3	0.2
Clothing & Footwear	8.60	2.2	0.7	0.5	1.2	5.3	1.9	1.4	1.1	0.6	1.2	2.1	1.1	2.4
Housing, Water, Elec., Gas & Other Fuels	23.63	0.6	0.0	1.8	3.7	1.1	-1.1	0.7	-0.2	8.0	1.1	0.5	3.0	11.0
Furnishing & Household Equipment Maintenance	4.10	2.8	2.4	1.6	5.0	5.1	2.7	3.9	1.6	1.7	2.3	1.7	1.3	0.9
Health	2.79	1.9	1.9	1.8	2.1	0.3	1.1	0.9	1.1	2.2	2.0	4.5	2.8	1.7
Transport	5.91	-0.1	-0.8	-0.5	12.0	3.3	1.6	0.2	-2.1	-0.2	7.9	9.1	-2.7	-2.8
Communication	2.21	0.0	0.1	0.0	2.1	2.9	0.1	0.4	0.1	0.4	0.3	0.4	0.3	0.1
Recreation & Culture	1.59	2.0	10.9	4.5	3.3	3.1	12.4	5.0	0.7	0.3	3.5	0.4	0.4	0.1
Education	3.79	0.4	0.3	0.1	0.5	1.3	1.9	1.0	0.4	0.0	3.4	0.6	2.5	1.0
Restaurants & Hotels	6.92	1.9	1.3	3.1	5.1	3.8	0.6	4.2	1.4	1.7	1.8	2.4	1.6	0.7
Misc. Goods & Services	4.87	2.3	3.0	3.2	4.7	2.5	4.1	4.5	1.0	1.0	3.9	0.6	0.0	1.6

Urban CPI Inflation (MoM)														
	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
General	100.00	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1	3.6	1.6	1.7	1.1	4.3
Food & Non-Alcoholic Beverages	30.42	-0.3	-0.3	4.1	4.2	4.5	4.0	1.4	-0.2	4.3	0.4	1.6	0.7	0.8
Alcoholic Beverages, Tobacco	0.85	1.6	0.2	0.1	13.0	55.6	0.3	0.5	0.0	0.4	0.3	0.4	0.1	0.0
Clothing & Footwear	8.01	1.3	0.7	0.6	1.3	5.8	1.1	0.4	1.1	0.6	1.2	1.5	0.9	2.0
Housing, Water, Elec., Gas & Other Fuels	27.03	-0.1	-0.5	1.4	4.3	1.1	-1.1	0.7	-0.1	8.0	1.1	0.2	3.0	17.6
Furnishing & Household Equipment Maintenance	4.09	2.6	2.3	1.1	5.3	5.2	2.5	2.9	1.6	1.8	2.4	1.4	0.9	0.7
Health	2.31	1.6	1.1	3.4	3.2	0.4	1.9	0.6	0.7	2.9	2.1	4.7	2.7	1.1
Transport	6.14	-0.1	-0.7	-0.4	12.3	3.6	1.4	0.0	-2.2	0.0	6.1	7.8	-2.8	-2.6
Communication	2.35	0.0	0.1	0.0	2.8	3.7	0.2	0.6	0.1	0.6	0.0	0.5	0.3	0.1
Recreation & Culture	1.73	1.1	13.4	4.3	3.6	3.0	11.5	4.9	0.5	0.4	3.6	0.2	0.1	0.0
Education	4.88	0.2	0.2	0.1	0.1	1.3	0.8	0.8	0.2	0.0	3.6	0.4	3.2	1.3
Restaurants & Hotels	7.41	1.8	1.6	3.6	4.2	4.2	0.6	4.7	1.3	1.1	2.0	1.8	1.7	0.6
Misc. Goods & Services	4.77	1.7	2.4	3.1	4.7	2.6	4.2	3.9	1.2	1.1	3.5	0.4	-0.1	1.5

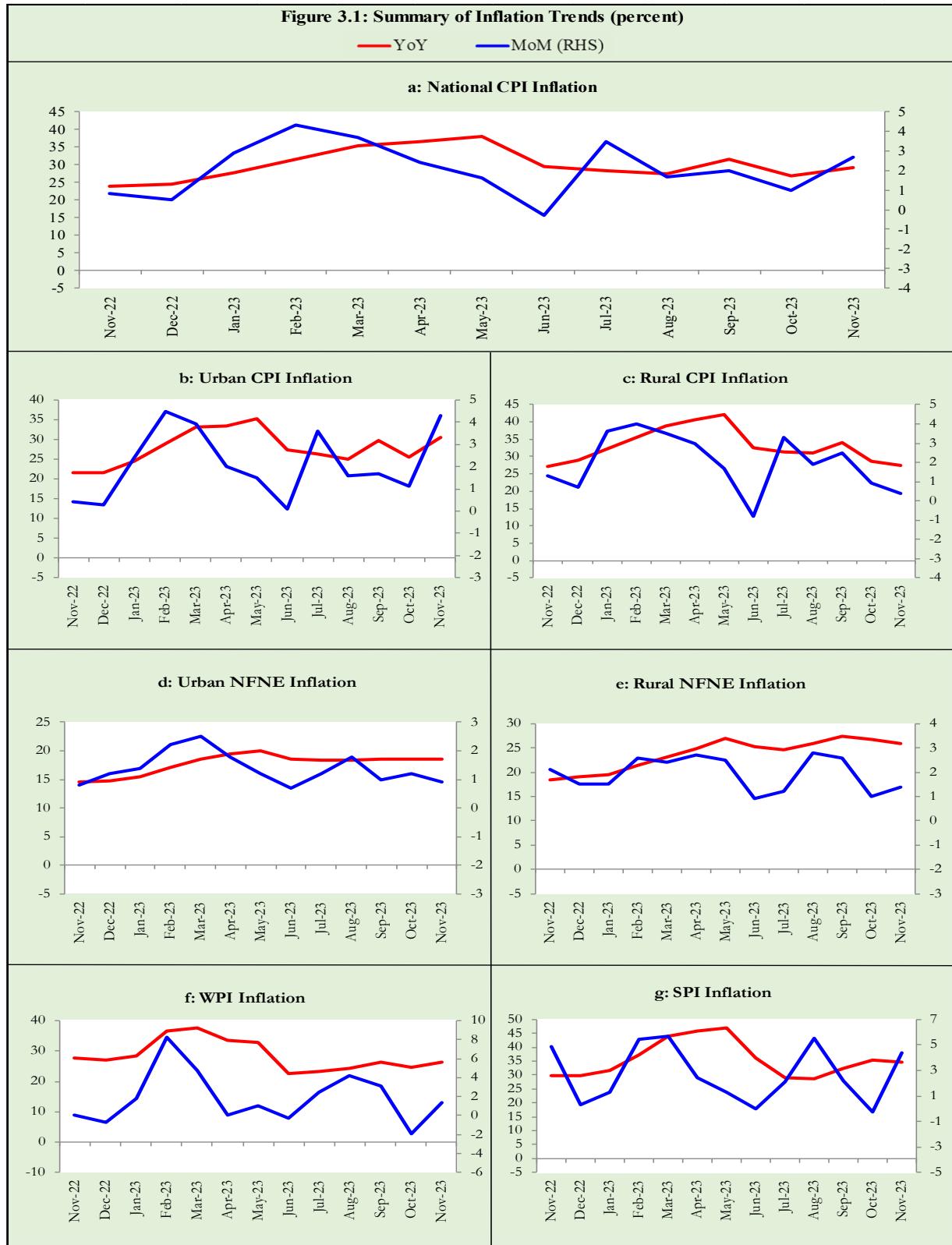
Rural CPI Inflation (YoY)														
	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
Rural	100.00	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.7	27.5
Food	45.95	33.5	37.9	45.2	47.0	50.2	52.2	52.4	41.5	41.3	40.6	35.4	28.6	29.2
Non-perishable	40.16	31.8	35.7	44.4	47.6	48.2	54.8	54.4	43.0	43.3	43.9	39.7	33.2	31.3
Perishable	5.79	43.8	59.5	64.3	53.1	54.5	31.9	35.3	24.0	22.2	15.2	3.8	-3.7	8.2
Non Food	54.05	21.4	20.7	20.9	25.3	28.5	29.9	32.5	23.8	22.0	22.0	32.3	28.8	25.9
Energy	11.41	30.7	26.2	25.7	37.5	46.6	47.3	52.6	19.8	14.9	12.0	48.6	34.8	25.7
NFNE (Core)	42.64	18.5	19.0	19.4	21.5	23.1	24.9	26.9	25.2	24.6	25.9	27.3	26.7	25.9
HRI	8.61	5.9	5.9	6.9	6.9	6.9	7.1	7.1	7.1	7.5	7.5	7.5	7.8	7.8
Core Excl HRI	34.03	21.5	22.1	22.4	24.9	26.9	29.0	31.4	29.2	28.5	29.9	31.6	30.8	29.7

Rural CPI Inflation (MoM)														
	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
Rural	100.00	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8	3.3	1.9	2.5	0.9	0.4
Food	45.95	0.5	0.1	5.7	3.9	4.5	4.2	1.4	-1.6	3.5	0.8	1.8	0.7	1.0
Non-perishable	40.16	1.7	2.6	7.4	3.6	3.2	5.1	2.6	-1.7	3.7	1.1	1.1	-1.1	0.3
Perishable	5.79	-5.5	-13.2	-2.2	5.5	1.5	2.5	-8.4	-3.6	4.5	-2.0	6.8	13.4	6.2
Non Food	54.05	2.1	1.4	1.5	4.1	2.4	1.6	2.0	0.1	3.0	3.1	3.2	1.1	-0.2
Energy	11.41	2.2	0.8	1.5	8.4	2.4	-1.4	0.7	-2.4	8.8	3.7	4.8	1.4	-4.8
NFNE (Core)	42.64	2.1	1.5	1.5	2.6	2.4	2.7	2.5	0.9	1.2	2.8	2.6	1.0	1.4
HRI	8.61	0.0	0.0	3.1	0.0	0.0	1.2	0.0	0.0	1.7	0.0	0.0	1.7	0.0
Core Excl HRI	34.03	2.5	1.8	1.2	3.2	2.9	3.0	3.0	1.1	1.1	3.4	3.1	0.9	1.7

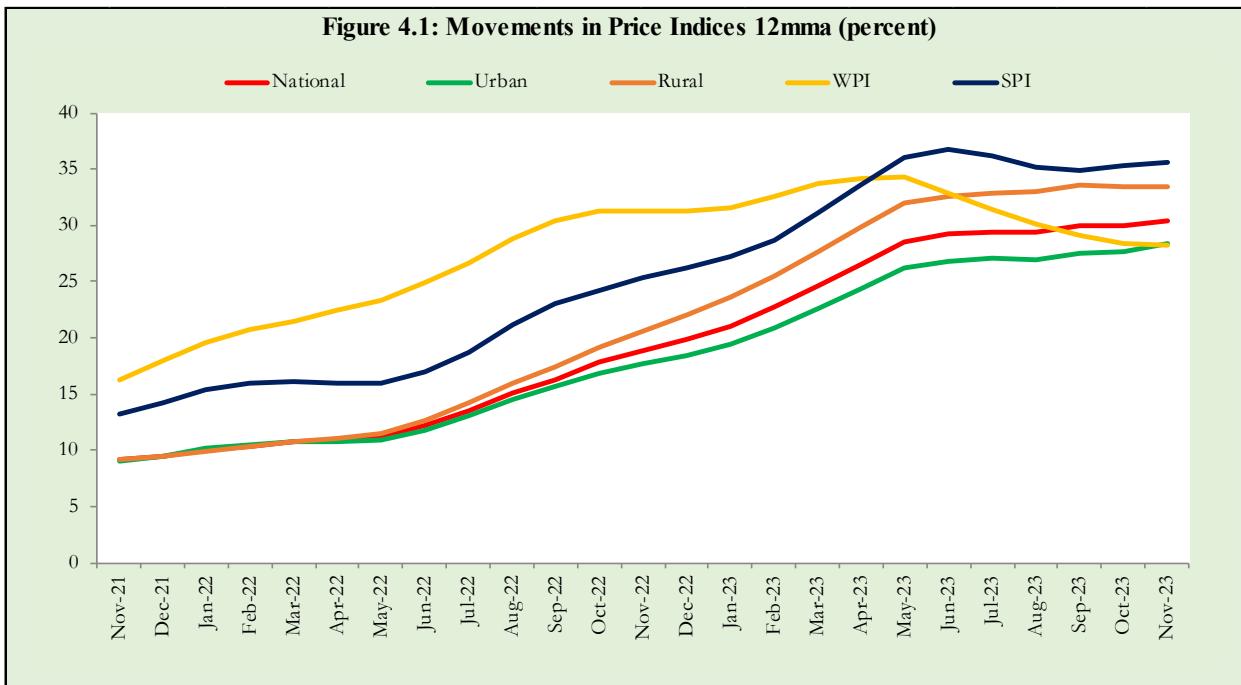
Urban CPI Inflation (MoM)														
	Weights	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
<b>Urban</b>	100.00	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1	3.6	1.6	1.7	1.1	4.3
<b>Food</b>	36.80	0.0	0.0	3.9	4.3	5.6	3.4	1.9	0.1	3.7	0.6	1.5	0.6	0.8
Non-perishable	32.34	0.7	2.2	5.0	4.4	4.6	4.3	2.7	-0.2	4.0	1.8	0.7	-1.1	0.0
Perishable	4.46	-4.4	-12.0	-1.4	2.9	3.5	2.5	-7.0	0.1	6.5	-8.9	8.1	12.7	6.2
<b>Non Food</b>	63.20	0.6	0.6	1.2	4.7	2.7	1.0	1.2	0.1	3.5	2.4	1.8	1.4	7.0
Energy	9.47	-0.2	-1.9	0.4	15.2	3.1	-2.2	1.1	-2.1	12.7	4.3	4.5	1.9	27.5
NFNE (Core)	53.73	0.8	1.2	1.4	2.2	2.5	1.8	1.2	0.7	1.2	1.8	1.0	1.2	0.9
HRI	19.26	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0	1.4	0.0	0.0	1.5	0.0
Core Excl HRI	34.47	1.2	1.7	1.3	3.3	3.7	2.1	1.7	1.0	1.1	2.6	1.5	1.1	1.3



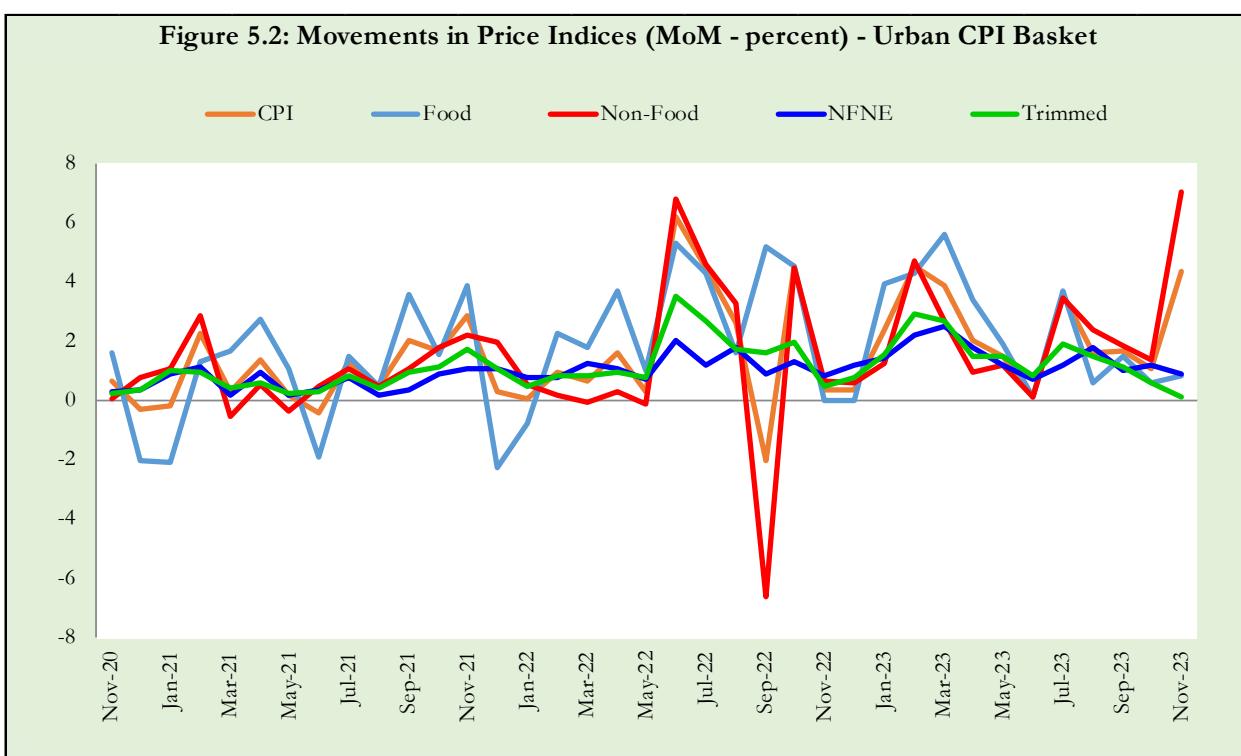
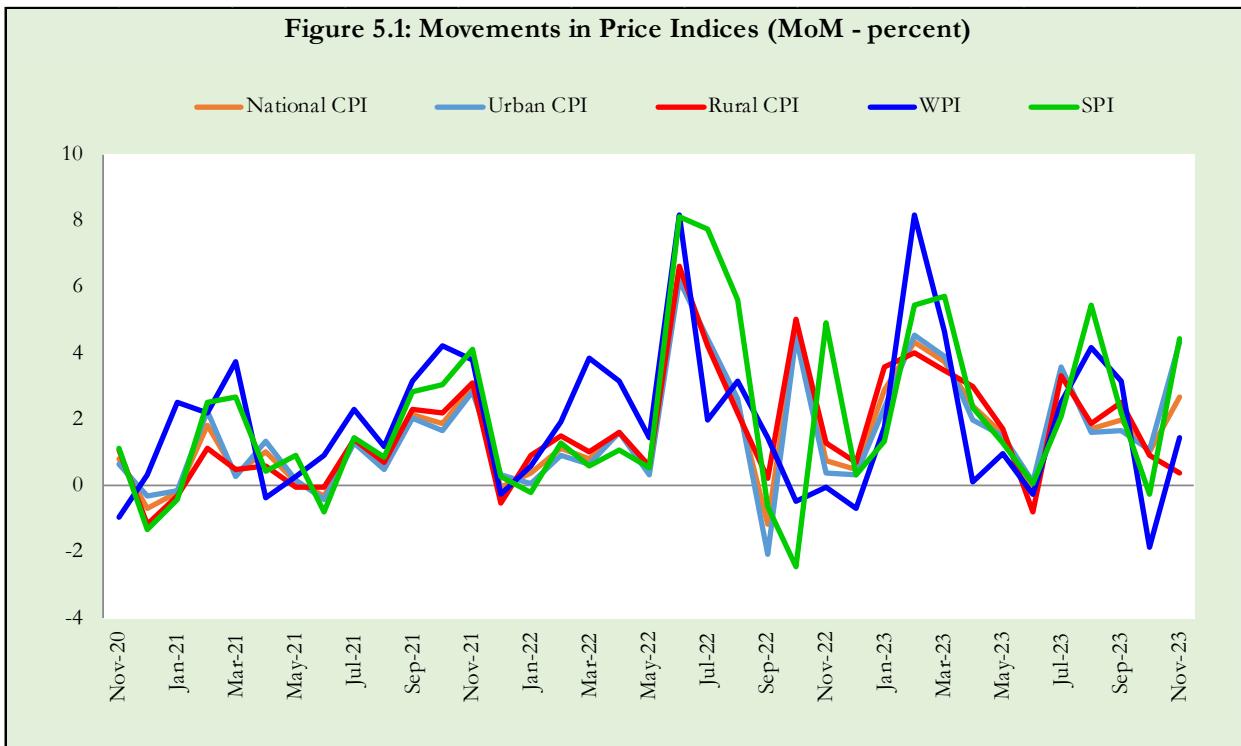
### 3. Inflation Trends

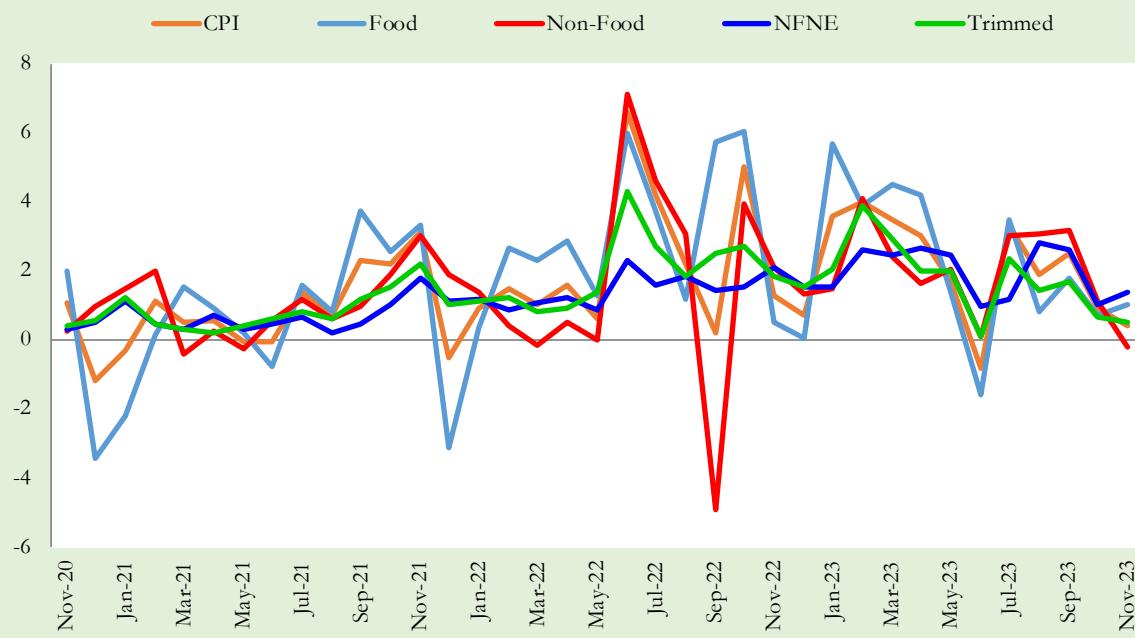


#### 4. Movements in Price Indices (Moving Averages)



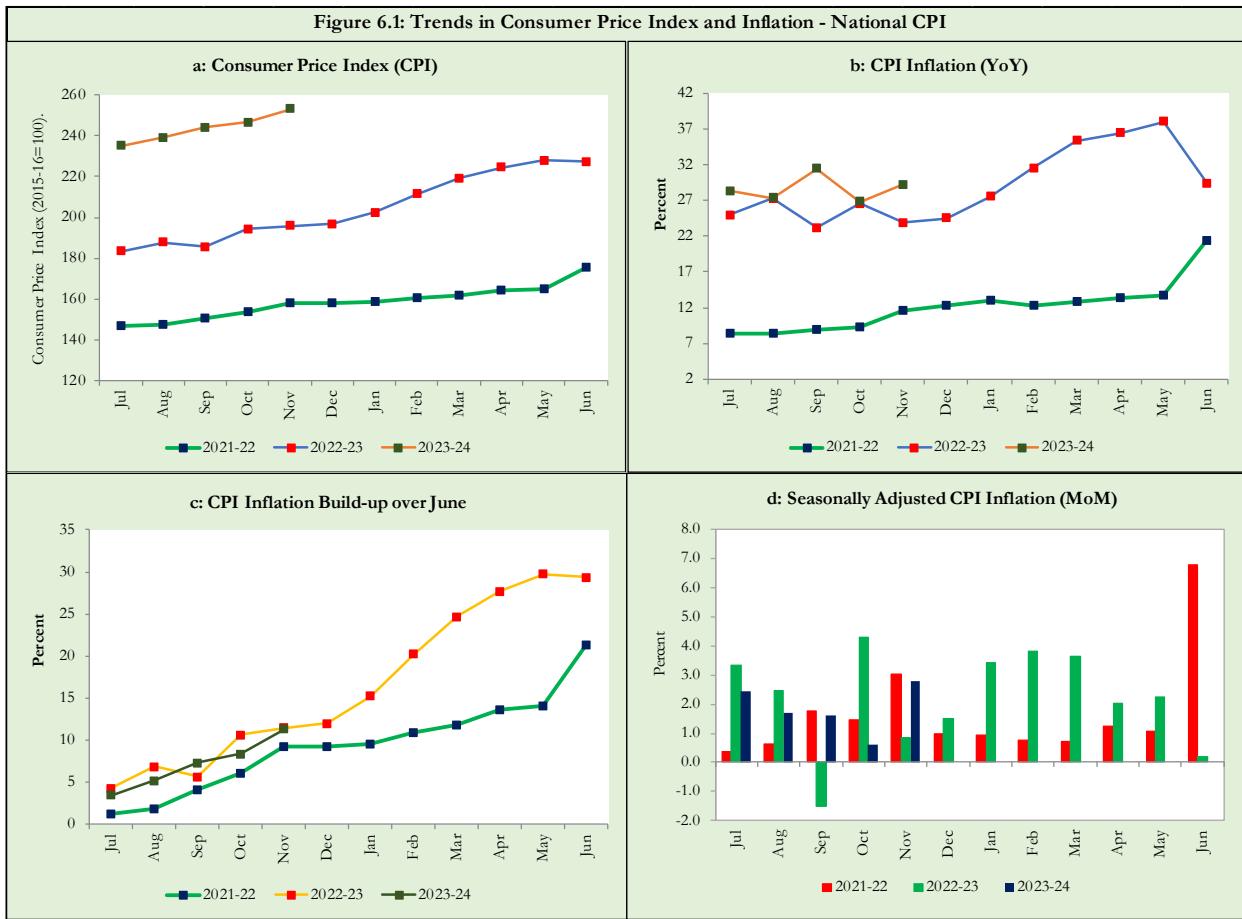
## 5. Movements in Price Indices (MoM)

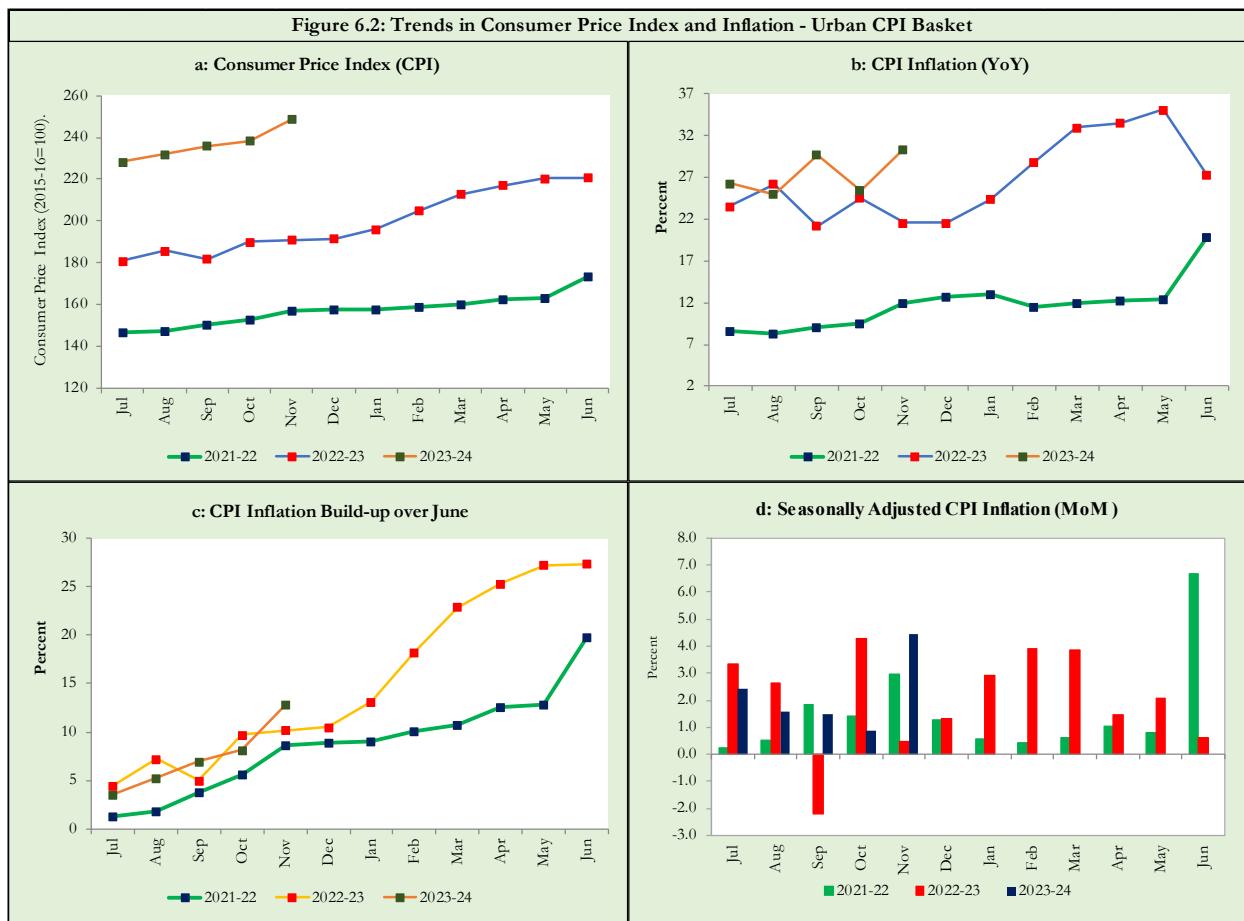


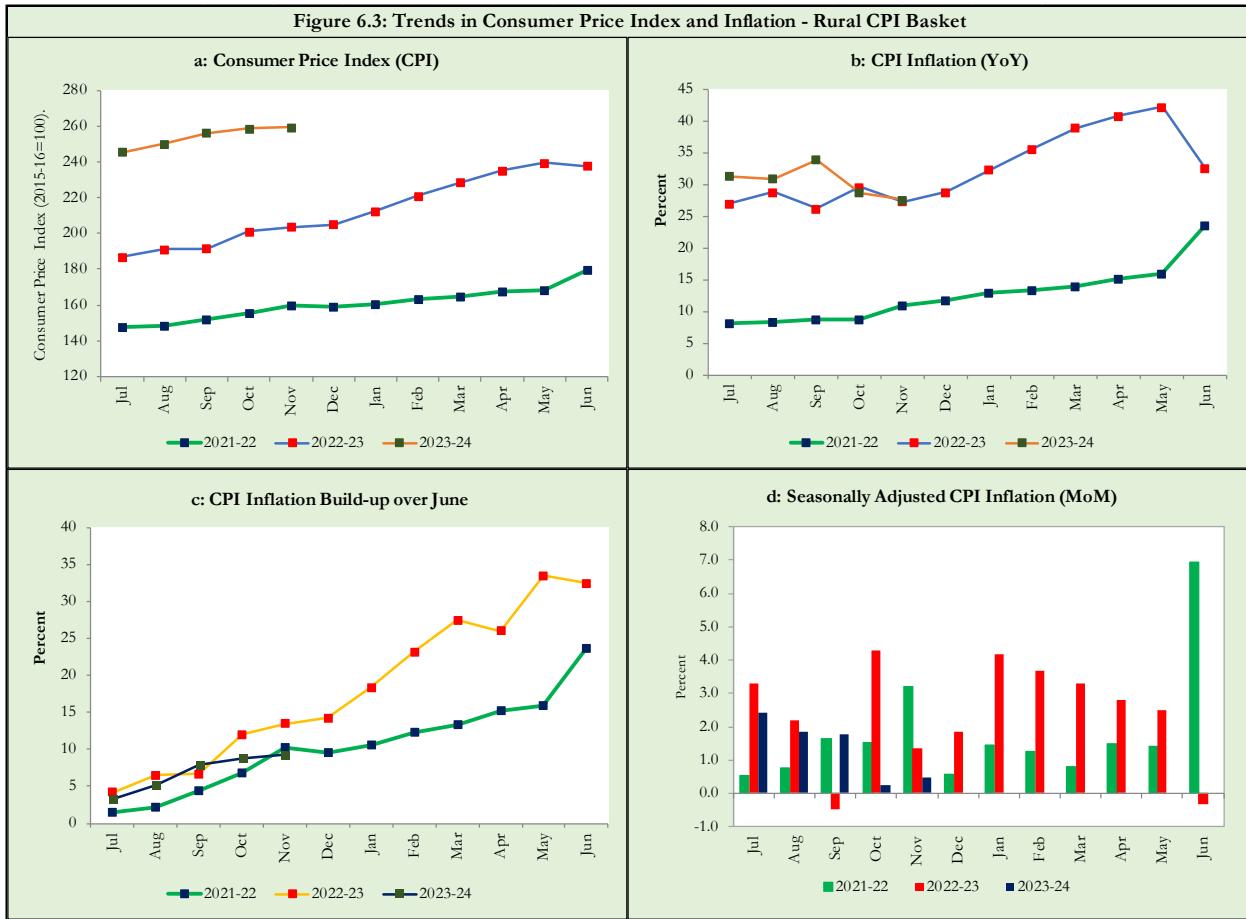
**Figure 5.3: Movements in Price Indices (MoM - percent) - Rural CPI Basket**

## 6. Consumer Price Indices and Inflation

Monthly CPI, Inflation (YoY) and seasonally adjusted CPI (MoM) are summarized in the following graphs (Figure 6.1 to 6.3).







## 7. Weighted Contribution

In overall Urban CPI Inflation, the weighted contribution of:

- Food group decreased to 40.6 percent during November 2023 from 47.1 percent in previous month.  
It was 53.5 percent during the corresponding month of the previous year.
- Non-food group increased to 59.4 percent in November 2023 from 52.9 percent in previous month.  
It was 46.6 percent during the corresponding month of the previous year (**Table 7.1**).

Table 7.1. Weighted Contributions (percent) to Urban CPI Inflation (YoY)									
Period	CPI	Food Group			Non-food Group				NFNE excl HRI
		Overall	Perishable	Non- Perishable	Overall	Energy	Core Inflation (NFNE)	HRI	
		a=(b+e)	b=(c+d)	c	d	e=(f+g)	f	g=(h+i)	h
Nov-22	100.0	53.5	9.2	44.2	46.6	12.8	33.8	4.3	29.5
Dec-22	100.0	57.3	10.0	47.3	42.7	8.5	34.2	4.2	30.0
Jan-23	100.0	60.0	9.4	50.6	40.0	7.9	32.1	3.9	28.1
Feb-23	100.0	55.2	6.6	48.6	44.8	14.8	30.0	3.3	26.7
Mar-23	100.0	54.9	6.5	48.4	45.0	16.3	28.7	2.9	25.9
Apr-23	100.0	54.7	4.1	50.6	45.3	15.8	29.4	2.8	26.7
May-23	100.0	54.2	4.2	50.0	45.8	16.9	28.9	2.6	26.3
Jun-23	100.0	58.5	4.3	54.2	41.5	8.5	33.0	3.2	29.8
Jul-23	100.0	59.7	4.4	55.3	40.3	7.1	33.1	3.1	30.0
Aug-23	100.0	60.0	2.0	58.0	40.0	5.4	34.6	3.2	31.4
Sep-23	100.0	47.3	0.9	46.4	52.7	22.6	30.1	2.8	27.4
Oct-23	100.0	47.1	-0.1	47.1	52.9	19.0	33.9	3.4	30.6
Nov-23	100.0	40.6	2.1	38.5	59.4	30.7	28.7	2.8	25.9

Note: The weighted contribution of sub-indices may not exactly tally with the weighted contribution of overall CPI index due to rounding off

In overall Rural CPI Inflation, the weighted contribution of:

- Food group increased to 53.6 percent during November 2023 from 50.9 percent in previous month.  
It was 59.4 percent during the corresponding month of the previous year.
- Non-food group decreased to 46.4 percent in November 2023 from 49.2 percent in previous month.  
It was 40.6 percent during the corresponding month of the previous year (**Table 7.2**).

<b>Table 7.2. Weighted Contributions (percent) to Rural CPI Inflation (YoY)</b>									
Period	CPI	Food Group			Non-food Group				
		Overall	Perishable	Non-Perishable	Overall	Energy	Core Inflation (NFNE)	HRI	
		a=(b+c)	b=(c+d)	c	d	e=(f+g)	f	g=(h+i)	h
Nov-22	<b>100.0</b>	<b>59.4</b>	10.8	48.6	<b>40.6</b>	13.7	26.9	1.6	25.3
Dec-22	<b>100.0</b>	<b>61.9</b>	10.9	50.9	<b>38.1</b>	11.6	26.5	1.6	25.0
Jan-23	<b>100.0</b>	<b>65.5</b>	9.9	55.6	<b>34.5</b>	10.3	24.2	1.7	22.6
Feb-23	<b>100.0</b>	<b>62.5</b>	8.3	54.3	<b>37.5</b>	13.3	24.2	1.5	22.7
Mar-23	<b>100.0</b>	<b>61.8</b>	7.7	54.1	<b>38.2</b>	14.3	23.9	1.3	22.5
Apr-23	<b>100.0</b>	<b>62.1</b>	5.1	57.0	<b>37.8</b>	13.4	24.4	1.3	23.1
May-23	<b>100.0</b>	<b>60.6</b>	4.8	55.7	<b>39.4</b>	13.9	25.5	1.3	24.3
Jun-23	<b>100.0</b>	<b>62.2</b>	4.2	57.9	<b>37.9</b>	8.0	29.9	1.5	28.3
Jul-23	<b>100.0</b>	<b>63.7</b>	4.1	59.6	<b>36.3</b>	6.8	29.5	1.6	27.9
Aug-23	<b>100.0</b>	<b>62.9</b>	2.9	60.0	<b>37.1</b>	5.7	31.3	1.6	29.7
Sep-23	<b>100.0</b>	<b>52.8</b>	0.8	52.0	<b>47.3</b>	16.7	30.5	1.5	29.1
Oct-23	<b>100.0</b>	<b>50.9</b>	-1.0	51.9	<b>49.2</b>	15.1	34.1	1.8	32.3
Nov-23	<b>100.0</b>	<b>53.6</b>	2.3	51.4	<b>46.4</b>	11.7	34.7	1.8	32.9

Note: The weighted contribution of sub-indices may not exactly tally with the weighted contribution of overall CPI index due to rounding off

## 8. Inflation Diffusion Index

Inflation Diffusion Index (IDI) is the difference between the share of items with increasing prices (i.e. depicting MoM inflation) and falling prices (i.e. depicting MoM deflation) in CPI basket. IDI for Urban and Rural CPI baskets is presented in **Table 8.1 (a & b)**.

**Table 8.1 (a): Inflation Diffusion Index of Urban CPI Basket (MoM)**

Group	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
General	54.5	56.7	68.8	78.9	73.6	64.9	65.2	55.9	64.0	72.2	66.0	61.0	39.3
Food & Non-Alcoholic Beverages	18.9	26.7	55.6	68.9	66.7	50.0	44.4	24.4	55.6	41.1	51.1	20.0	-2.2
Alcoholic Beverages & Tobacco	100.0	100.0	33.3	100.0	100.0	100.0	100.0	33.3	66.7	100.0	66.7	66.7	-33.3
Clothing & Footwear	75.0	77.5	77.5	67.5	72.5	70.0	70.0	72.5	72.5	80.0	72.5	80.0	65.0
Housing, Water, Elec, Gas & other Fuels	24.1	10.3	58.6	75.9	48.3	10.3	44.8	51.7	65.5	75.9	41.4	58.6	17.2
Furnishing & Household Equip. Maintenance etc.	100.0	95.2	100.0	100.0	100.0	100.0	100.0	95.2	100.0	100.0	95.2	92.9	66.7
Health	83.9	71.0	80.6	87.1	77.4	67.7	74.2	67.7	74.2	87.1	100.0	96.8	77.4
Transport	34.4	25.0	34.4	90.6	81.3	59.4	37.5	46.9	43.8	62.5	65.6	46.9	25.0
Communication	20.0	40.0	20.0	40.0	40.0	20.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
Recreation & Culture	24.0	72.0	84.0	80.0	56.0	72.0	64.0	32.0	32.0	76.0	20.0	36.0	24.0
Education	50.0	56.3	31.3	31.3	62.5	56.3	62.5	56.3	12.5	68.8	62.5	87.5	25.0
Restaurant & Hotels	100.0	100.0	85.7	92.9	92.9	92.9	100.0	92.9	85.7	92.9	92.9	100.0	92.9
Miscellaneous	100.0	96.6	100.0	100.0	86.2	100.0	100.0	82.8	86.2	100.0	82.8	86.2	93.1
NFNE	71.5	72.3	76.6	82.6	77.0	75.7	74.5	68.9	67.2	83.8	74.5	76.2	56.6

See Annexure B (Technical Notes) for the methodology of Inflation Diffusion Index.

**Table 8.1 (b): Inflation Diffusion Index of Rural CPI Basket (MoM)**

Group	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
General	54.5	48.8	67.6	77.9	72.5	63.1	63.1	54.1	62.3	68.4	67.6	53.3	41.4
Food & Non-Alcoholic Beverages	13.9	12.7	57.0	62.0	53.2	39.2	43.0	19.0	43.0	35.4	49.4	22.8	13.9
Alcoholic Beverages & Tobacco	100.0	80.0	80.0	100.0	100.0	100.0	40.0	40.0	60.0	80.0	80.0	40.0	40.0
Clothing & Footwear	96.3	85.2	81.5	96.3	92.6	92.6	92.6	92.6	85.2	85.2	92.6	81.5	85.2
Housing, Water, Elec, Gas & other Fuels	34.8	0.0	82.6	56.5	69.6	21.7	47.8	65.2	73.9	95.7	52.2	73.9	8.7
Furnishing & Household Equip. Maintenance etc	100.0	96.2	96.2	100.0	100.0	88.5	92.3	92.3	96.2	100.0	92.3	80.8	84.6
Health	100.0	78.6	35.7	85.7	64.3	71.4	64.3	64.3	57.1	57.1	92.9	92.9	85.7
Transport	18.8	25.0	12.5	81.3	81.3	62.5	37.5	37.5	62.5	75.0	56.3	37.5	6.3
Communication	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	40.0	20.0	20.0	0.0
Recreation & Culture	46.2	84.6	76.9	92.3	69.2	84.6	84.6	38.5	38.5	69.2	46.2	46.2	46.2
Education	80.0	80.0	80.0	80.0	80.0	100.0	80.0	60.0	0.0	100.0	80.0	20.0	0.0
Restaurants & Hotels	85.7	71.4	85.7	85.7	85.7	78.6	71.4	85.7	85.7	78.6	92.9	71.4	50.0
Miscellaneous	100.0	94.1	94.1	100.0	88.2	100.0	100.0	88.2	82.4	100.0	88.2	76.5	88.2
NFNE	80.9	74.3	72.8	86.8	80.9	81.6	77.2	74.3	69.9	83.8	79.4	67.6	64.0

See Annexure B (Technical Notes) for the methodology of Inflation Diffusion Index.

## 9. Domestic Food Commodity Prices (Growth)

Growth in domestic food commodity prices for selected essential food items covering both urban and rural CPI baskets is given in **Table 9.1**.

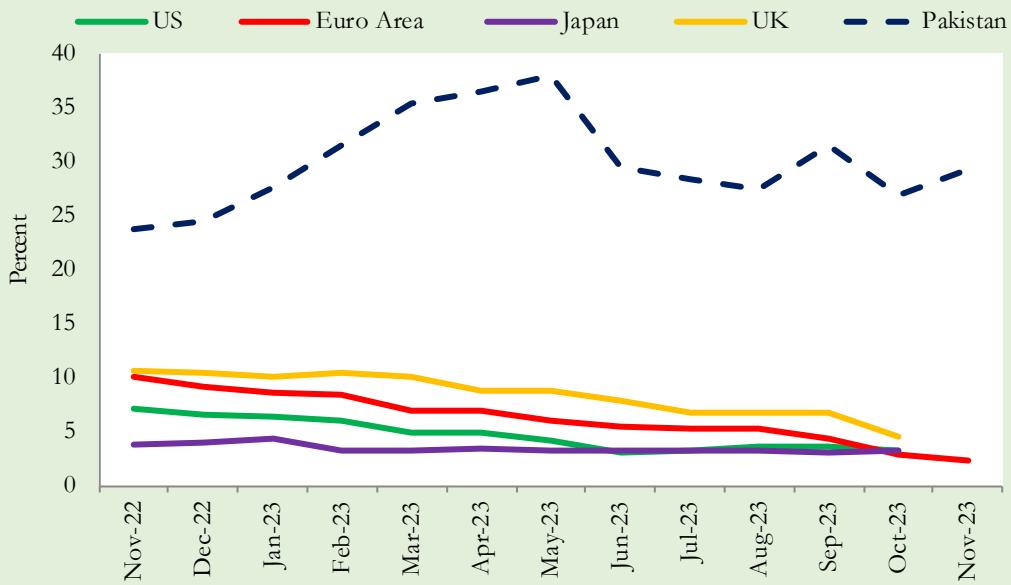
S. No	Item	Unit	Urban CPI		Rural CPI	
			YoY	MoM	YoY	MoM
1	Wheat	10 Kg	38.2	-0.2	39.6	2.4
2	Wheat Flour Bag	20 Kg	78.8	-0.7	68.5	1.6
3	Rice Basmati Broken (Superior/Average Quality)*	1 Kg	28.6	-2.9	74.4	-0.5
4	Beef With Bone (Average Quality)	1 Kg	17.4	0.5	21.2	0.4
5	Mutton (Average Quality)	1 Kg	17.5	0.2	23.6	0.9
6	Chicken Farm Broiler (Live)	1 Kg	28.8	-2.6	24.6	-4.1
7	Milk Fresh (Un-Boiled)	1 Liter	23.4	0.2	24.6	0.6
8	Eggs Farm	Dozen	32.8	7.2	33.1	8.9
9	Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch	Each	-1.4	-3.4	-5.2	-2.0
10	Pulse Masoor (Washed)	1 Kg	22.9	-3.8	15.9	-1.7
11	Pulse Moong (Washed)	1 Kg	10.9	-1.3	11.2	-0.7
12	Pulse Mash (Washed)	1 Kg	41.7	-2.9	40.0	-3.7
13	Pulse Gram	1 Kg	-2.0	-4.1	-2.3	-3.1
14	Potatoes	1 Kg	42.2	15.3	46.0	12.7
15	Onions	1 Kg	-30.8	12.3	-32.5	12.8
16	Tomatoes	1 Kg	-3.5	60.4	-17.2	57.7
17	Sugar Refined	1 Kg	49.9	-8.5	54.7	-8.1
18	Garlic (Lehsun)	1 Kg	52.8	0.1	55.9	7.4
19	Ginger (Adrak)	500 Gm	71.5	-48.2	82.8	-48.3
20	Tea Lipton Yellow Label 190 Gm Packet	Each	52.4	12.9	52.2	6.1

\* Superior Quality for Urban CPI Basket and Average Quality for Rural CPI Basket

## 10. Inflation in Global Context

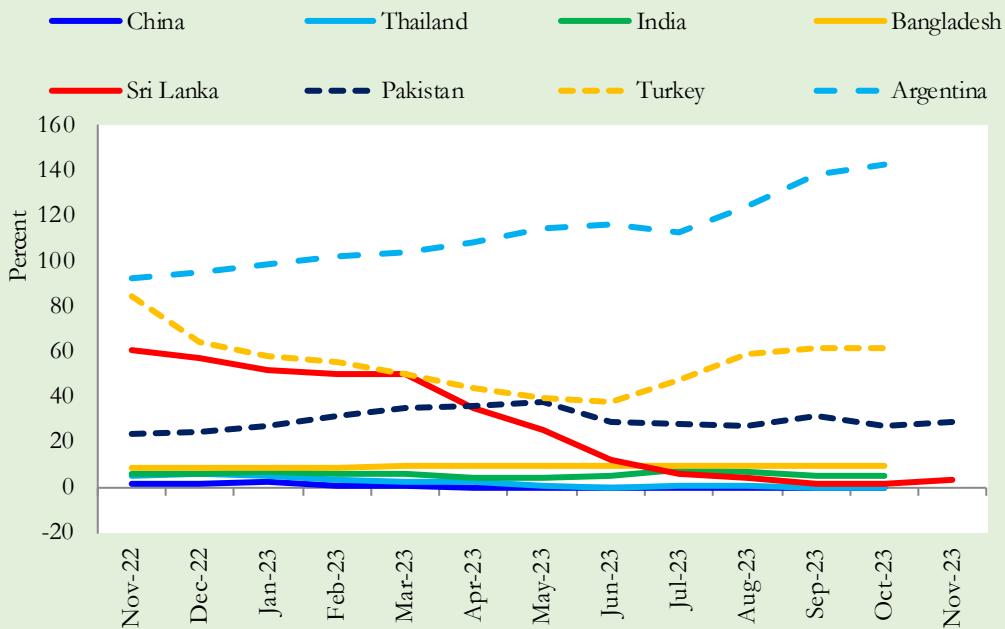
Inflation trends in selected developed and emerging economies is given in **Figures 10.1 & 10.2.**

**Figure 10.1: Pakistan Inflation in comparison with Developed Economies**



Sources: Bloomberg, Havor Analytics, Trading Economics

**Figure 10.2: Pakistan Inflation in comparison with Inflation in Emerging Economies**



Sources: Bloomberg, Havor Analytics, Trading Economics

## 11. Global Commodity Inflation

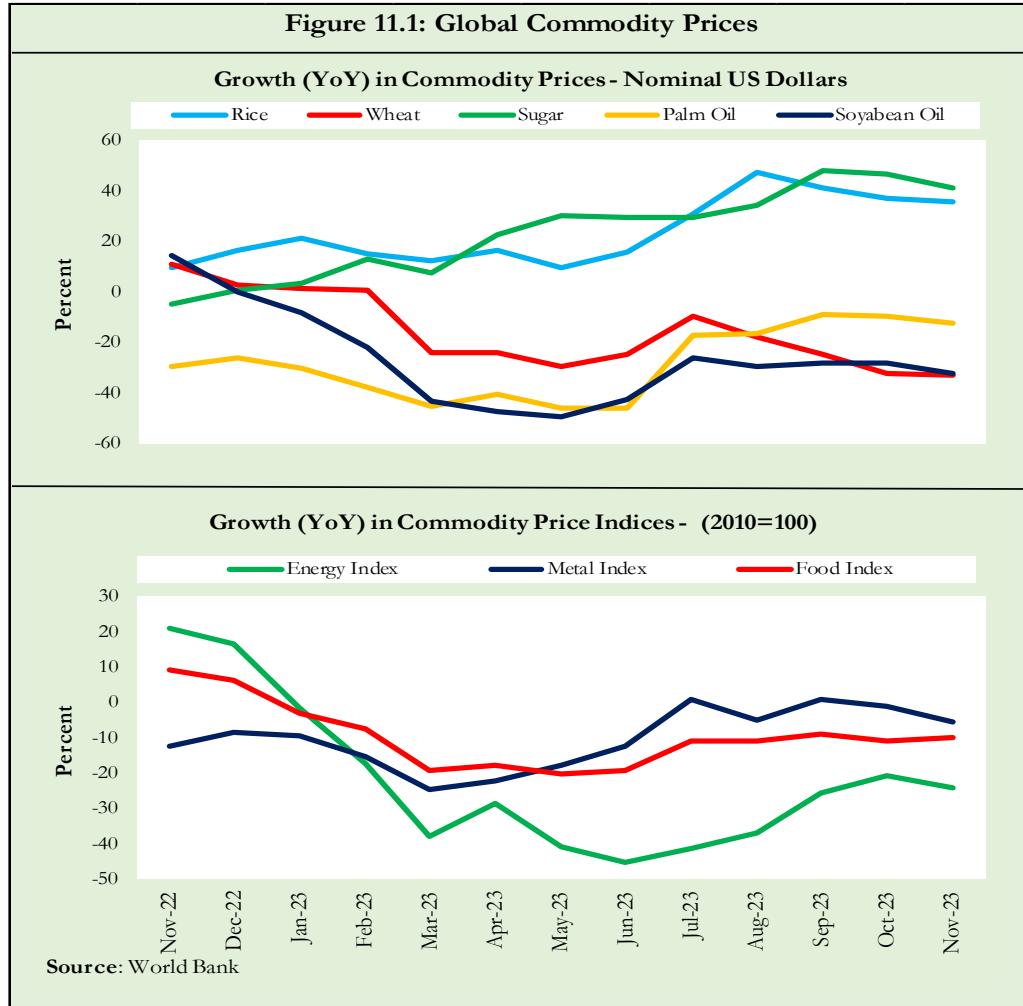
Global commodity prices may influence domestic inflation. In this context, changes in major global commodity prices and indices along with price trends are given in **Table 11.1** and **Figure 11.1**.

**Table 11.1: Changes in Major Global Indices (percent)**

Item/Group	Nov-23		Oct-23		Nov-22	
	YoY	MoM	YoY	MoM	YoY	MoM
Food	-10.1	0.9	-11.0	-1.5	9.2	-0.1
Metals	-5.2	1.4	-1.2	-2.9	-12.5	5.6
Energy	-23.9	-8.2	-20.9	-1.7	21.2	-4.6
Agricultural	-5.0	1.6	-6.9	-2.1	2.5	-0.4
Cotton	-10.4	-5.3	-4.2	-2.5	-20.2	1.3

**Data Source:** World Bank

**Figure 11.1: Global Commodity Prices**

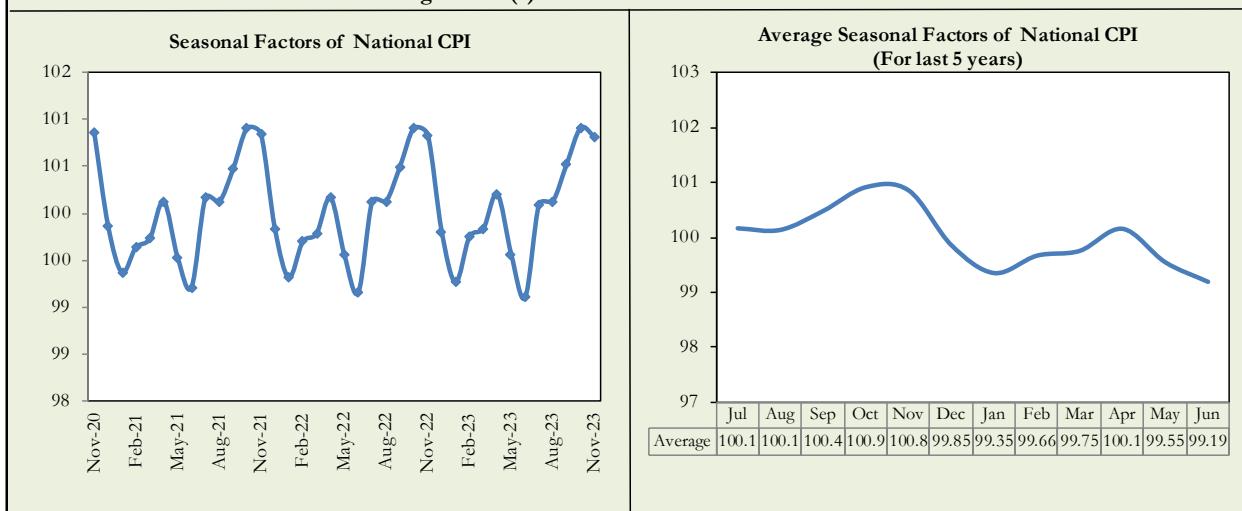
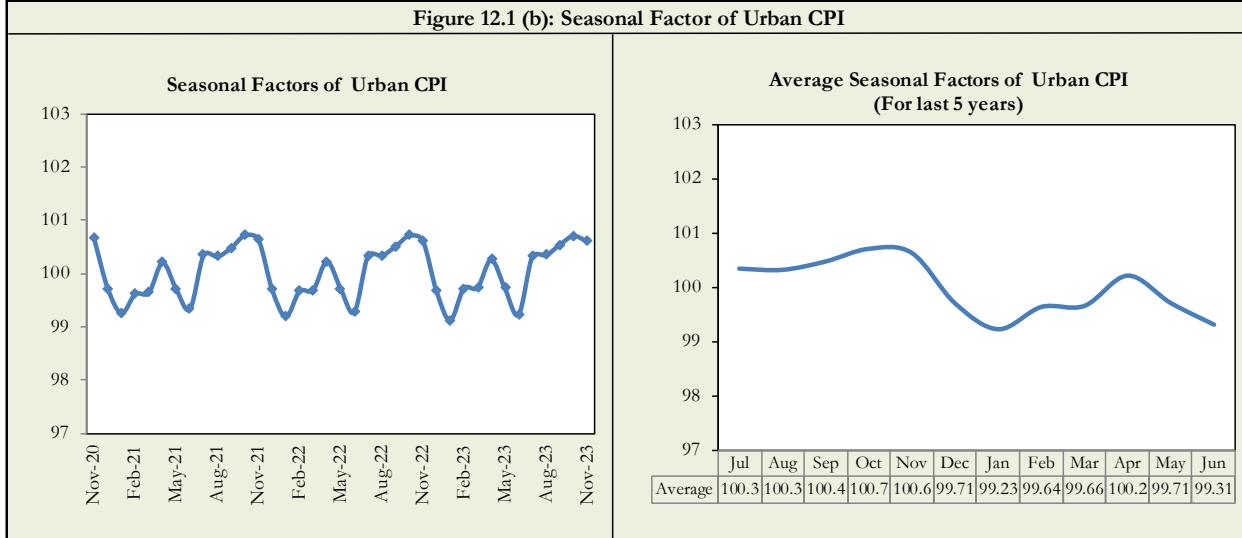
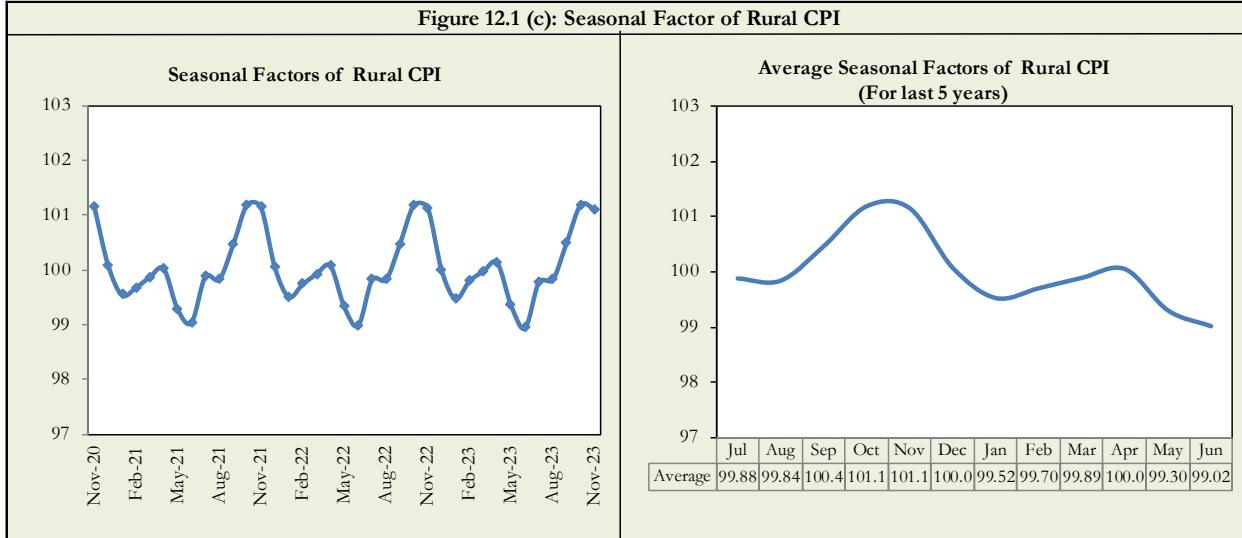


## 12. Seasonal Adjustment in CPI

Seasonal adjustment is the process of removing seasonality effects in a time series data through decomposing it into seasonal, trend, cycle and irregular components. The purpose is to get clear picture of price movements. Various statistical methods are available to decompose a time series into its constituent components. The State Bank of Pakistan uses X-12-ARIMA Seasonal Adjustment Method for this purpose.

The changes in consumer prices are normally reported in terms of YoY and MoM basis. Seasonal adjustment is particularly useful for analyzing MoM changes. The monthly data series of CPI from July 2008 to November 2023 has been used for this analysis.

**Figures 12.1(a to c)** show that the seasonality in all CPI series has been increasing over the period. Average seasonal factors reveal strong seasonality during the calendar year. There is an upward seasonality during Jul-Dec while downward seasonality in the remaining months.

**Figure 12.1 (a): Seasonal Factor of National CPI****Figure 12.1 (b): Seasonal Factor of Urban CPI****Figure 12.1 (c): Seasonal Factor of Rural CPI**

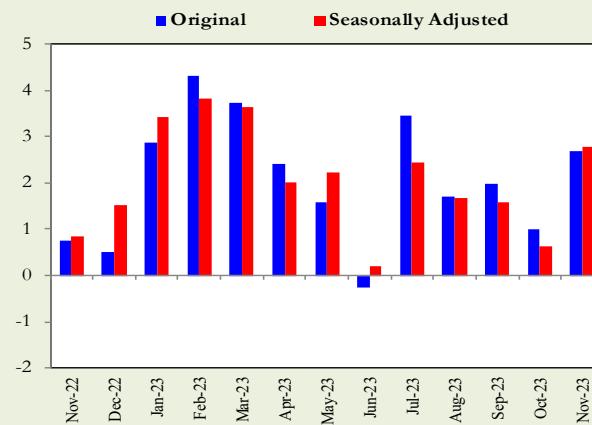
**Figures 12.2(a to c)** show seasonally adjusted series. The trend follows the long-term movement in original series.



### Seasonally adjusted Index of

- National CPI for November 2023 stood at 251.12 against 253.15 in original series showing a decrease of 2.03.
- Urban CPI for November 2023 stood at 247.36 against 248.87 in original series showing a decrease of 1.51.
- Rural CPI for November 2023 stood at 256.79 against 259.61 in original series showing a decrease of 2.82.

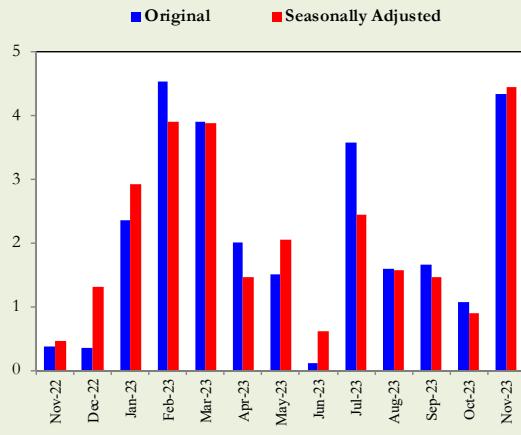
**Figure 12.3 (a): MoM Changes in National CPI**



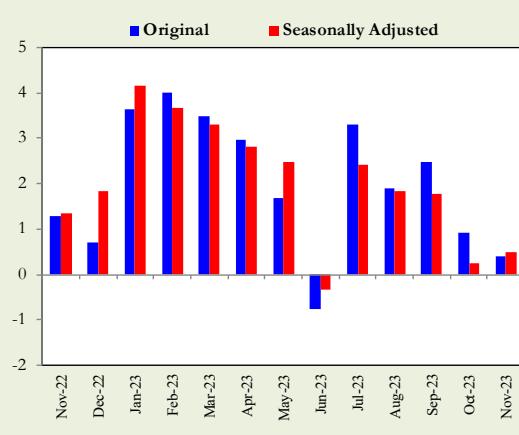
### Month-on-month change of seasonally adjusted

- National CPI series showed an inflation of 2.80 percent during November 2023 over previous month against an inflation of 0.62 percent in original series.
- Urban CPI series showed an inflation of 4.45 percent during November 2023 over previous month against an inflation of 0.90 percent in original series.
- Rural CPI series showed an inflation of 0.48 percent during November 2023 over previous month against an inflation of 0.24 percent in original series.

**Figure 12.3 (b): MoM % Changes in Urban CPI**



**Figure 12.3 (c): MoM % Changes in Rural CPI**



## List of Illustrations (Tables and Figures)

### Tables

**Table A1: Inflation – Summary**

Period	CPI							WPI			SPI**	Core Inflation				
	General			Food		Non-food		General	Food	Non-food		NFNE*		Trimmed		
	National	Urban	Rural	Urban	Rural	Urban	Rural					Urban	Rural	Urban	Rural	
<b>Annual Average</b>																
FY21	8.9	8.1	10.0	12.4	13.1	5.7	7.4	9.4	14.5	6.6	11.2	6.0	7.6	7.6	9.6	
FY22	12.2	11.8	12.7	13.4	13.0	10.8	12.3	24.9	13.1	32.0	16.9	8.1	9.0	10.4	11.2	
FY23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7	
<b>Year-on-Year</b>																
Nov-22	23.8	21.6	27.2	29.7	33.5	16.4	21.4	27.7	27.7	27.7	29.7	14.6	18.5	19.8	25.4	
Dec-22	24.5	21.6	28.8	32.7	37.9	14.8	20.7	27.1	31.0	25.2	29.7	14.7	19.0	19.4	26.4	
Jan-23	27.6	24.4	32.3	39.0	45.2	15.6	20.9	28.5	35.6	24.9	31.7	15.4	19.4	20.9	27.8	
Feb-23	31.5	28.8	35.6	41.9	47.0	20.8	25.3	36.4	40.7	34.3	37.1	17.1	21.5	25.1	31.6	
Mar-23	35.4	33.0	38.9	47.1	50.2	24.1	28.5	37.5	45.2	33.7	44.0	18.6	23.1	28.7	35.0	
Apr-23	36.4	33.5	40.7	46.8	52.2	24.9	29.9	33.4	44.4	28.0	45.9	19.5	24.9	28.6	37.3	
May-23	38.0	35.1	42.2	48.1	52.4	26.6	32.5	32.8	47.7	25.6	47.0	20.0	26.9	30.5	38.8	
Jun-23	29.4	27.3	32.4	40.8	41.5	18.7	23.8	22.4	37.5	15.2	36.0	18.5	25.2	22.9	29.9	
Jul-23	28.3	26.3	31.3	40.2	41.3	17.3	22.0	23.1	38.0	15.9	29.0	18.4	24.6	21.7	28.7	
Aug-23	27.4	25.0	30.9	38.8	40.6	16.3	22.0	24.3	36.6	18.5	28.7	18.4	25.9	23.0	30.5	
Sep-23	31.4	29.7	33.9	33.9	35.4	26.8	32.3	26.4	33.1	23.1	32.4	18.6	27.3	25.0	33.3	
Oct-23	26.8	25.5	28.7	28.9	28.6	23.1	28.8	24.6	27.1	23.3	35.4	18.5	26.7	24.6	30.4	
Nov-23	29.2	30.4	27.5	29.8	29.2	30.9	25.9	26.4	27.5	25.9	34.7	18.6	25.9	22.9	27.9	
<b>12-Month Moving Average</b>																
Nov-22	18.9	17.7	20.6	22.0	23.5	15.1	18.0	31.3	20.5	37.4	25.3	11.1	13.3	16.4	18.2	
Dec-22	19.9	18.4	22.0	23.7	25.9	15.2	18.5	31.3	22.2	36.3	26.2	11.7	14.2	17.3	19.6	
Jan-23	21.1	19.4	23.7	25.9	28.7	15.4	19.1	31.5	24.1	35.7	27.2	12.3	15.0	17.7	21.1	
Feb-23	22.7	20.8	25.5	28.2	31.4	16.3	20.2	32.6	26.4	35.9	28.7	13.1	16.0	19.0	23.0	
Mar-23	24.6	22.6	27.6	30.9	34.3	17.5	21.6	33.7	29.0	36.2	31.1	13.9	17.1	20.6	25.0	
Apr-23	26.6	24.4	29.8	33.5	37.3	18.7	23.0	34.1	31.5	35.5	33.6	14.7	18.3	22.3	27.4	
May-23	28.6	26.3	32.0	36.3	40.0	20.0	24.6	34.3	34.3	34.3	36.1	15.6	19.6	24.4	30.0	
Jun-23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7	
Jul-23	29.4	27.0	32.9	38.6	42.0	19.8	24.6	31.4	36.6	28.8	36.2	16.7	21.4	24.8	30.8	
Aug-23	29.4	26.9	33.1	39.4	42.7	19.1	24.1	30.1	37.3	26.4	35.1	17.1	22.2	23.7	30.6	
Sep-23	30.0	27.6	33.6	39.5	42.8	20.0	25.2	29.1	37.5	24.9	34.8	17.4	23.0	24.4	31.1	
Oct-23	30.0	27.6	33.5	38.8	41.7	20.4	25.7	28.4	36.9	24.2	35.3	17.7	23.7	24.9	31.0	
Nov-23	30.4	28.3	33.4	38.6	41.1	21.7	26.0	28.3	36.7	24.1	35.7	18.1	24.3	24.8	30.8	
<b>Period Average (Since July)</b>																
Nov-22	25.1	23.4	27.7	30.3	32.7	19.1	23.1	35.6	28.0	39.7	33.7	13.9	17.1	21.9	25.1	
Dec-22	25.0	23.1	27.9	30.7	33.6	18.4	22.7	34.1	28.5	37.1	33.0	14.1	17.4	21.6	25.4	
Jan-23	25.4	23.3	28.5	31.9	35.3	17.9	22.4	33.3	29.5	35.2	32.8	14.3	17.7	21.7	26.5	
Feb-23	26.2	24.0	29.5	33.2	36.8	18.3	22.8	33.7	31.0	35.1	33.4	14.6	18.2	22.1	27.3	
Mar-23	27.3	25.0	30.6	34.8	38.4	19.0	23.5	34.1	32.6	34.9	34.6	15.1	18.8	23.0	28.5	
Apr-23	28.2	25.9	31.6	36.1	39.9	19.6	24.1	34.1	33.9	34.2	35.8	15.5	19.4	23.9	29.6	
May-23	29.2	26.8	32.7	37.3	41.1	20.3	24.9	33.9	35.2	33.3	36.9	16.0	20.1	24.8	30.7	
Jun-23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7	
Jul-23	28.3	26.3	31.3	40.2	41.3	17.3	22.0	23.1	38.0	15.9	29.0	18.4	24.6	21.7	28.7	
Aug-23	27.8	25.6	31.1	39.5	40.9	16.8	22.0	23.7	37.3	17.2	28.8	18.4	25.3	22.7	29.7	
Sep-23	29.0	27.0	32.0	37.5	39.0	20.0	25.3	24.6	35.8	19.2	30.1	18.5	26.0	20.6	30.7	
Oct-23	28.5	26.6	31.2	35.2	36.2	20.8	26.2	24.6	33.5	20.2	31.4	18.5	26.2	20.7	30.5	
Nov-23	28.6	27.4	30.4	34.1	34.7	22.8	26.1	25.0	32.3	21.3	32.1	18.5	26.1	23.3	29.6	
<b>Month-on-Month</b>																
Nov-22	0.8	0.4	1.3	0.0	0.5	0.6	2.1	0.0	-1.4	0.7	4.9	0.8	2.1	0.5	1.8	
Dec-22	0.5	0.3	0.7	0.0	0.1	0.6	1.4	-0.7	1.5	-1.8	0.3	1.2	1.5	0.8	1.5	
Jan-23	2.9	2.4	3.6	3.9	5.7	1.2	1.5	1.8	4.0	0.6	1.3	1.4	1.5	1.5	2.1	
Feb-23	4.3	4.5	4.0	4.3	3.9	4.7	4.1	8.2	5.3	9.8	5.4	2.2	2.6	2.9	3.9	
Mar-23	3.7	3.9	3.5	5.6	4.5	2.7	2.4	4.7	6.3	3.8	5.7	2.5	2.4	2.7	2.9	
Apr-23	2.4	2.0	3.0	3.4	4.2	1.0	1.6	0.1	2.2	-1.0	2.4	1.8	2.7	1.5	2.0	
May-23	1.6	1.5	1.7	1.9	1.4	1.2	2.0	1.0	2.4	0.2	1.3	1.2	2.5	1.5	2.0	
Jun-23	-0.3	0.1	-0.8	0.1	-1.6	0.1	0.1	-0.3	0.2	-0.5	0.0	0.7	0.9	0.8	0.1	
Jul-23	3.5	3.6	3.3	3.7	3.5	3.5	3.0	2.5	2.1	2.8	2.1	1.2	1.2	1.9	2.4	
Aug-23	1.7	1.6	1.9	0.6	0.8	2.4	3.1	4.2	1.1	5.9	5.5	1.8	2.8	1.5	1.4	
Sep-23	2.0	1.7	2.5	1.5	1.8	1.8	3.2	3.1	2.3	3.6	2.2	1.0	2.6	1.1	1.7	
Oct-23	1.0	1.1	0.9	0.6	0.7	1.4	1.1	-1.9	-1.3	-2.2	-0.3	1.2	1.0	0.6	0.7	
Nov-23	2.7	4.3	0.4	0.8	1.0	7.0	-0.2	1.4	-1.1	2.8	4.4	0.9	1.4	0.1	0.5	

\* Non-Food Non-Energy, \*\* SPI for all expenditure groups combined

**Table A2: National CPI Inflation by Groups (YoY and MoM in percent)**

Groups	Weights	MoM Change			YoY Change		
		Nov-22	Oct-23	Nov-23	Nov-22	Oct-23	Nov-23
Food and Non-Alcoholic Beverages	34.6	0.1	0.6	1.0	31.2	26.8	28.0
Alcoholic Beverages, Tobacco	1.0	1.1	0.3	0.2	35.9	84.6	82.8
Clothing and Footwear	8.6	2.2	1.1	2.4	18.6	20.6	20.9
Housing, Water, Elec., Gas and Other Fuels	23.6	0.6	3.0	11.0	9.9	20.5	33.0
Furnishing and Household Equip. Maintenance	4.1	2.8	1.3	0.9	29.1	37.1	34.5
Health	2.8	1.9	2.8	1.7	17.1	25.2	24.9
Transport	5.9	-0.1	-2.7	-2.8	44.2	30.1	26.5
Communication	2.2	0.0	0.3	0.1	1.6	7.4	7.4
Recreation and Culture	1.6	2.0	0.4	0.1	25.6	56.3	53.6
Education	3.8	0.4	2.5	1.0	11.1	12.8	13.6
Restaurants and Hotels	6.9	1.9	1.6	0.7	28.4	33.1	31.5
Miscellaneous	4.9	2.3	0.0	1.6	23.0	35.2	34.3
<b>National CPI</b>	<b>100.0</b>	<b>0.8</b>	<b>1.0</b>	<b>2.7</b>	<b>23.8</b>	<b>26.8</b>	<b>29.2</b>

**Table A3: Urban CPI Inflation by Groups (YoY and MoM in percent)**

Groups	Weights	MoM Change			YoY Change		
		Nov-22	Oct-23	Nov-23	Nov-22	Oct-23	Nov-23
<b>I. Food Group</b>	<b>36.8</b>	<b>0.0</b>	<b>0.6</b>	<b>0.8</b>	<b>29.7</b>	<b>28.9</b>	<b>29.8</b>
Food and Non-Alcoholic Beverages	30.4	-0.3	0.7	0.8	28.9	27.0	28.4
Alcoholic Beverages, Tobacco	0.9	1.6	0.1	0.0	37.2	82.7	79.8
Restaurants and Hotels (Food Component)	5.5	1.4	0.7	0.5	33.2	31.2	30.1
<b>II. Non-Food Group</b>	<b>63.2</b>	<b>0.6</b>	<b>1.4</b>	<b>7.0</b>	<b>16.4</b>	<b>23.1</b>	<b>30.9</b>
Clothing and Footwear	8.0	1.3	0.9	2.0	19.6	17.5	18.3
Housing, Water, Elec., Gas and Other Fuels	27.0	-0.1	3.0	17.6	7.3	19.2	40.2
Furnishing and Household Equip. Maintenance	4.1	2.6	0.9	0.7	29.0	34.4	31.9
Health	2.3	1.6	2.7	1.1	14.1	28.1	27.5
Transport	6.1	-0.1	-2.8	-2.6	42.1	26.6	23.5
Communication	2.4	0.0	0.3	0.1	1.8	9.2	9.3
Recreation and Culture	1.7	1.1	0.1	0.0	22.3	56.5	54.7
Education	4.9	0.2	3.2	1.3	11.1	11.4	12.6
Restaurants and Hotels (Non-Food Component)	1.9	3.0	5.4	1.0	18.1	36.9	34.2
Miscellaneous	4.8	1.7	-0.1	1.5	23.8	32.7	32.4
<b>Urban CPI</b>	<b>100.0</b>	<b>0.4</b>	<b>1.1</b>	<b>4.3</b>	<b>21.6</b>	<b>25.5</b>	<b>30.4</b>

**Table A4: Rural CPI Inflation by Groups (YoY and MoM in percent)**

Groups	Weights	MoM Change			YoY Change		
		Nov-22	Oct-23	Nov-23	Nov-22	Oct-23	Nov-23
<b>I. Food Group</b>	<b>45.9</b>	<b>0.5</b>	<b>0.7</b>	<b>1.0</b>	<b>33.5</b>	<b>28.6</b>	<b>29.2</b>
Food and Non-Alcoholic Beverages	40.9	0.4	0.6	1.1	33.7	26.6	27.5
Alcoholic Beverages, Tobacco	1.3	0.6	0.6	0.4	34.4	86.9	86.4
Restaurants and Hotels (Food Component)	3.8	1.8	1.9	0.3	31.4	34.0	32.0
<b>II. Non-Food Group</b>	<b>54.1</b>	<b>2.1</b>	<b>1.1</b>	<b>-0.2</b>	<b>21.4</b>	<b>28.8</b>	<b>25.9</b>
Clothing and Footwear	9.5	3.2	1.3	2.8	17.4	24.6	24.1
Housing, Water, Elec., Gas and Other Fuels	18.5	1.8	3.0	-2.4	15.6	23.3	18.2
Furnishing and Household Equip. Maintenance	4.1	3.2	1.8	1.1	29.2	41.2	38.3
Health	3.5	2.3	2.8	2.2	20.2	22.4	22.3
Transport	5.6	0.0	-2.7	-3.0	47.9	35.8	31.7
Communication	2.0	0.1	0.4	0.0	1.4	4.0	3.9
Recreation and Culture	1.4	3.4	0.9	0.4	31.3	56.1	51.7
Education	2.1	0.8	0.1	0.0	11.1	18.2	17.2
Restaurants and Hotels (Non-Food Component)	2.4	3.3	0.2	2.0	16.9	34.4	32.7
Miscellaneous	5.0	3.2	0.1	1.7	21.9	38.9	36.9
<b>Rural CPI</b>	<b>100.0</b>	<b>1.3</b>	<b>0.9</b>	<b>0.4</b>	<b>27.2</b>	<b>28.7</b>	<b>27.5</b>

Table A5: National CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Non-Perishable Food Items	Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Health	Furnishing and Household Environment	Housing, Water, Elec., Gas and Other Fuels	Transport	Communication	Education	Recreation and Culture	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>															
Nov-22	23.8	31.2	29.3	41.1	35.9	18.6	9.9	29.1	17.1	44.2	1.6	25.6	11.1	28.4	23.0
Dec-22	24.5	35.5	32.5	55.9	36.2	17.1	7.0	29.2	17.5	41.2	1.7	38.5	10.9	27.4	25.8
Jan-23	27.6	42.9	40.3	61.6	36.3	16.8	7.8	29.9	18.7	39.1	1.6	44.2	10.6	30.1	28.7
Feb-23	31.5	45.1	44.7	47.6	49.2	17.0	13.6	34.0	18.8	50.5	3.7	48.1	10.8	34.5	33.3
Mar-23	35.4	47.2	46.4	51.8	140.0	21.9	17.5	39.0	18.5	54.9	6.6	50.6	7.2	38.5	34.4
Apr-23	36.4	48.1	51.5	29.2	133.5	21.6	16.9	40.5	18.8	56.8	6.7	68.6	8.5	39.0	38.8
May-23	38.0	48.7	51.0	33.7	124.0	22.5	20.5	43.5	19.3	52.9	7.0	72.2	8.4	42.3	43.3
Jun-23	29.4	39.5	41.8	24.8	109.5	21.0	11.6	41.6	19.1	20.3	6.8	68.0	8.6	36.4	40.1
Jul-23	28.3	39.5	42.1	23.5	102.1	20.4	10.8	41.7	21.5	13.6	6.8	65.9	8.0	34.7	39.3
Aug-23	27.4	38.5	42.8	12.7	97.5	18.5	6.3	41.7	22.6	23.0	7.0	61.4	10.5	34.1	40.8
Sep-23	31.4	33.1	38.4	4.4	87.5	20.6	29.7	39.3	25.3	31.3	7.4	58.8	11.1	34.3	36.4
Oct-23	26.8	26.8	33.0	-1.9	84.6	20.6	20.5	37.1	25.2	30.1	7.4	56.3	12.8	33.1	35.2
Nov-23	29.2	28.0	31.7	9.6	82.8	20.9	33.0	34.5	24.9	26.5	7.4	53.6	13.6	31.5	34.3
<b>12-Month Moving Average</b>															
Nov-22	18.9	22.9	21.4	32.2	16.1	13.8	12.5	18.9	11.8	43.0	1.9	15.0	8.1	20.7	16.0
Dec-22	19.9	25.0	23.0	38.3	18.9	14.3	11.7	20.4	12.5	44.3	1.8	17.7	8.8	22.0	17.3
Jan-23	21.1	27.5	25.2	42.6	21.8	14.7	11.0	21.8	13.3	45.4	1.7	20.7	9.4	23.4	18.9
Feb-23	22.7	30.0	27.9	43.5	25.7	15.3	11.4	23.5	14.0	47.5	1.8	24.1	10.0	25.1	20.8
Mar-23	24.6	32.7	30.8	45.2	37.3	16.3	12.2	25.7	14.8	49.8	2.2	27.6	9.9	27.2	22.7
Apr-23	26.6	35.3	33.8	44.8	48.3	17.3	13.0	27.9	15.5	52.0	2.6	32.6	9.9	29.2	24.9
May-23	28.6	37.9	36.8	45.1	58.2	18.2	14.2	30.2	16.2	53.5	3.0	37.7	9.8	31.4	27.4
Jun-23	29.2	39.0	38.2	43.8	66.4	18.8	14.0	32.1	16.8	49.2	3.4	42.2	9.7	32.6	29.5
Jul-23	29.4	39.8	39.3	42.6	73.3	19.3	13.1	34.0	17.7	44.2	3.9	46.5	9.5	33.4	31.3
Aug-23	29.4	40.4	40.4	40.4	79.4	19.3	11.3	35.6	18.6	40.6	4.4	49.8	9.6	33.9	33.1
Sep-23	30.0	40.4	41.1	35.7	83.7	19.6	13.4	36.7	19.5	38.1	4.9	52.7	9.7	34.3	34.2
Oct-23	30.0	39.3	41.1	28.5	87.5	19.7	14.1	37.5	20.3	36.3	5.4	55.3	9.9	34.5	35.1
Nov-23	30.4	38.8	41.1	25.4	90.7	19.9	16.1	37.8	21.0	34.9	5.9	57.4	10.1	34.6	36.0
<b>Period Average (Since September)</b>															
Nov-22	25.1	31.5	29.1	46.0	30.3	17.4	14.8	24.7	14.1	57.6	1.4	21.9	10.4	28.0	21.1
Dec-22	25.0	32.2	29.7	47.6	31.3	17.3	13.4	25.5	14.7	54.6	1.4	24.7	10.4	27.9	21.9
Jan-23	25.4	33.8	31.3	49.4	32.0	17.2	12.6	26.2	15.3	52.2	1.5	27.5	10.5	28.2	22.9
Feb-23	26.2	35.2	33.0	49.2	34.2	17.2	12.7	27.2	15.7	52.0	1.7	30.2	10.5	29.1	24.3
Mar-23	27.3	36.6	34.6	49.5	46.0	17.8	13.2	28.6	16.0	52.3	2.3	32.5	10.1	30.2	25.4
Apr-23	28.2	37.9	36.4	47.0	55.1	18.2	13.6	29.9	16.3	52.8	2.7	36.2	9.9	31.1	26.8
May-23	29.2	38.9	37.8	45.7	61.8	18.6	14.2	31.2	16.6	52.8	3.1	39.7	9.8	32.2	28.4
Jun-23	29.2	39.0	38.2	43.8	66.4	18.8	14.0	32.1	16.8	49.2	3.4	42.2	9.7	32.6	29.5
Jul-23	28.3	39.5	42.1	23.5	102.1	20.4	10.8	41.7	21.5	13.6	6.8	65.9	8.0	34.7	39.3
Aug-23	27.8	39.0	42.5	18.0	99.8	19.4	8.5	41.7	22.0	18.3	6.9	63.6	9.2	34.4	40.1
Sep-23	29.0	37.0	41.1	13.0	95.5	19.8	14.8	40.9	23.1	22.7	7.1	61.9	9.9	34.4	38.8
Oct-23	28.5	34.3	39.0	8.4	92.6	20.0	16.2	39.9	23.7	24.5	7.2	60.5	10.6	34.0	37.9
Nov-23	28.6	32.9	37.4	8.7	90.6	20.2	19.5	38.8	23.9	24.9	7.2	59.0	11.2	33.5	37.1
<b>Month-on-Month</b>															
Nov-22	0.8	0.1	1.2	-5.0	1.1	2.2	0.6	2.8	1.9	-0.1	0.0	2.0	0.4	1.9	2.3
Dec-22	0.5	-0.1	2.4	-12.6	0.5	0.7	0.0	2.4	1.9	-0.8	0.1	10.9	0.3	1.3	3.0
Jan-23	2.9	5.0	6.2	-1.8	0.2	0.5	1.8	1.6	1.8	-0.5	0.0	4.5	0.1	3.1	3.2
Feb-23	4.3	4.1	4.0	4.1	9.7	1.2	3.7	5.0	2.1	12.0	2.1	3.3	0.5	5.1	4.7
Mar-23	3.7	3.7	3.9	2.5	60.9	5.3	1.1	5.1	0.3	3.3	2.9	3.1	1.3	3.8	2.5
Apr-23	2.4	4.4	4.7	2.5	0.3	1.9	-1.1	2.7	1.1	1.6	0.1	12.4	1.9	0.6	4.1
May-23	1.6	1.3	2.6	-7.7	0.6	1.4	0.7	3.9	0.9	0.2	0.4	5.0	1.0	4.2	4.5
Jun-23	-0.3	-1.0	-0.9	-1.6	0.1	1.1	-0.2	1.6	1.1	-2.1	0.1	0.7	0.4	1.4	1.0
Jul-23	3.5	4.1	3.9	5.6	0.4	0.6	8.0	1.7	2.2	-0.2	0.4	0.3	0.0	1.7	1.0
Aug-23	1.7	0.6	1.5	-5.8	0.4	1.2	1.1	2.3	2.0	7.9	0.3	3.5	3.4	1.8	3.9
Sep-23	2.0	1.6	0.9	7.5	0.5	2.1	0.5	1.7	4.5	9.1	0.4	0.4	0.6	2.4	0.6
Oct-23	1.0	0.6	-1.1	13.0	0.3	1.1	3.0	1.3	2.8	-2.7	0.3	0.4	2.5	1.6	0.0
Nov-23	2.7	1.0	0.1	6.2	0.2	2.4	11.0	0.9	1.7	-2.8	0.1	0.1	1.0	0.7	1.6
<b>3-Year Average (in current month during FY22-FY24)</b>															
YoY	21.5	23.2	24.9	15.7	40.2	16.4	19.2	24.7	16.8	31.7	3.8	28.9	9.0	23.6	22.4
MoM	2.1	1.7	1.1	5.4	0.5	2.1	4.6	1.8	1.6	1.2	0.0	0.8	0.5	2.1	1.9

**Table A6: Urban CPI Inflation by Groups**

Period	General	Food and Non-Alcoholic Beverages	Food Items	Non-Perishable Food Items	Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Furnishing and Household Equipment	Housing, Water, Elec., Gas and Other Fuels	Health	Transport	Communication	Recreation and Culture	Education	Hotels	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>																	
Nov-22	21.6	28.9	27.1	38.6	37.2	19.6	7.3	29.0	14.1	42.1	1.8	22.3	11.1	29.5	23.8		
Dec-22	21.6	32.6	29.6	52.9	37.3	17.0	4.1	29.7	13.5	39.2	1.8	38.0	10.8	28.6	25.9		
Jan-23	24.4	39.5	36.7	59.3	37.3	16.8	5.0	30.0	16.7	38.0	1.8	43.6	10.4	32.4	28.8		
Feb-23	28.8	42.1	42.0	42.9	54.9	16.8	11.2	34.1	18.5	49.9	4.6	48.4	10.4	35.2	33.3		
Mar-23	33.0	45.5	44.9	49.4	140.8	22.4	15.0	39.6	17.9	54.6	8.5	51.4	5.8	39.8	34.3		
Apr-23	33.5	45.1	48.5	26.9	133.7	21.5	14.5	40.8	19.1	55.9	8.6	68.5	6.0	40.4	39.1		
May-23	35.1	45.8	47.9	32.3	124.5	21.3	18.0	42.1	19.4	51.4	9.0	71.6	5.7	46.1	43.0		
Jun-23	27.3	38.6	40.7	25.6	107.6	19.1	10.2	40.6	18.5	20.0	8.8	67.3	5.9	38.8	39.5		
Jul-23	26.3	38.7	41.1	24.7	102.6	18.6	9.6	41.1	21.9	13.6	9.0	65.8	5.6	35.8	39.1		
Aug-23	25.0	37.2	41.8	10.6	96.5	16.0	5.3	41.4	22.5	20.7	8.9	61.7	8.7	35.4	39.3		
Sep-23	29.7	32.2	37.3	4.9	84.8	17.6	28.3	37.7	26.9	27.4	9.4	58.9	9.1	34.2	34.7		
Oct-23	25.5	27.0	32.9	-0.2	82.7	17.5	19.2	34.4	28.1	26.6	9.2	56.5	11.4	32.5	32.7		
Nov-23	30.4	28.4	32.0	10.9	79.8	18.3	40.2	31.9	27.5	23.5	9.3	54.7	12.6	31.0	32.4		
<b>12- Month Moving Average</b>																	
Nov-22	17.7	22.1	20.8	30.2	16.2	14.3	10.6	18.0	11.2	42.5	2.3	13.9	8.4	20.9	15.9		
Dec-22	18.4	23.9	22.0	35.8	19.2	14.7	9.6	19.5	11.5	43.5	2.1	16.5	9.1	22.2	17.2		
Jan-23	19.4	26.0	23.9	39.8	22.1	15.1	8.9	21.0	12.1	44.6	2.0	19.5	9.7	23.8	18.8		
Feb-23	20.8	28.3	26.4	40.5	26.5	15.7	9.1	22.9	12.8	46.6	2.1	23.0	10.3	25.5	20.8		
Mar-23	22.6	30.9	29.1	42.1	38.2	16.8	9.8	25.2	13.5	48.9	2.5	26.6	10.0	27.7	22.7		
Apr-23	24.4	33.3	32.0	41.9	49.2	17.7	10.5	27.5	14.2	51.0	3.1	31.6	9.7	29.9	24.9		
May-23	26.3	35.8	34.7	42.6	59.2	18.5	11.6	29.8	15.0	52.3	3.7	36.6	9.3	32.5	27.5		
Jun-23	26.9	36.9	36.2	41.8	67.1	18.9	11.5	31.7	15.6	48.1	4.2	41.2	8.9	33.9	29.6		
Jul-23	27.0	37.8	37.3	40.8	74.2	19.2	10.7	33.6	16.5	43.2	4.8	45.6	8.5	34.8	31.5		
Aug-23	26.9	38.4	38.4	38.4	80.1	18.9	9.1	35.3	17.4	39.5	5.5	49.0	8.4	35.4	33.0		
Sep-23	27.6	38.4	39.1	34.1	84.1	18.8	11.3	36.4	18.7	36.8	6.2	52.1	8.3	35.7	34.0		
Oct-23	27.6	37.5	39.2	27.5	87.6	18.7	12.1	36.9	19.9	34.8	6.8	54.9	8.4	35.7	34.6		
Nov-23	28.3	37.3	39.4	24.8	90.5	18.6	14.9	37.0	21.0	33.2	7.4	57.4	8.5	35.7	35.2		
<b>Period Average (Since July)</b>																	
Nov-22	23.4	30.3	27.9	44.1	30.8	18.4	12.2	23.9	12.5	56.2	1.4	19.8	10.6	28.5	21.5		
Dec-22	23.1	30.7	28.2	45.5	31.9	18.1	10.8	24.9	12.7	53.1	1.5	22.9	10.6	28.6	22.3		
Jan-23	23.3	31.9	29.5	47.3	32.7	17.9	9.9	25.7	13.3	50.8	1.5	25.9	10.6	29.1	23.2		
Feb-23	24.0	33.2	31.1	46.7	35.5	17.8	10.1	26.8	14.0	50.7	1.9	28.8	10.6	29.9	24.5		
Mar-23	25.0	34.7	32.7	47.0	47.3	18.3	10.7	28.3	14.4	51.2	2.6	31.4	10.0	31.1	25.7		
Apr-23	25.9	35.8	34.4	44.6	56.2	18.7	11.0	29.6	14.9	51.7	3.2	35.2	9.6	32.1	27.1		
May-23	26.8	36.8	35.7	43.4	62.9	18.9	11.7	30.8	15.3	51.6	3.8	38.6	9.2	33.4	28.6		
Jun-23	26.9	36.9	36.2	41.8	67.1	18.9	11.5	31.7	15.6	48.1	4.2	41.2	8.9	33.9	29.6		
Jul-23	26.3	38.7	41.1	24.7	102.6	18.6	9.6	41.1	21.9	13.6	9.0	65.8	5.6	35.8	39.1		
Aug-23	25.6	38.0	41.4	17.5	99.5	17.3	7.4	41.2	22.2	17.1	9.0	63.7	7.1	35.6	39.2		
Sep-23	27.0	36.0	40.0	12.9	94.4	17.4	13.6	40.0	23.8	20.6	9.1	62.1	7.8	35.1	37.6		
Oct-23	26.6	33.6	38.1	8.9	91.3	17.4	15.0	38.5	24.9	22.1	9.1	60.6	8.7	34.4	36.4		
Nov-23	27.4	32.5	36.9	9.4	88.9	17.6	20.0	37.1	25.4	22.4	9.2	59.4	9.5	33.7	35.5		
<b>Month-on-Month</b>																	
Nov-22	0.4	-0.3	0.7	-4.4	1.6	1.3	-0.1	2.6	1.6	-0.1	0.0	1.1	0.2	1.8	1.7		
Dec-22	0.3	-0.3	2.2	-12.0	0.2	0.7	-0.5	2.3	1.1	-0.7	0.1	13.4	0.2	1.6	2.4		
Jan-23	2.4	4.1	5.0	-1.4	0.1	0.6	1.4	1.1	3.4	-0.4	0.0	4.3	0.1	3.6	3.1		
Feb-23	4.5	4.2	4.4	2.9	13.0	1.3	4.3	5.3	3.2	12.3	2.8	3.6	0.1	4.2	4.7		
Mar-23	3.9	4.5	4.6	3.5	55.6	5.8	1.1	5.2	0.4	3.6	3.7	3.0	1.3	4.2	2.6		
Apr-23	2.0	4.0	4.3	2.5	0.3	1.1	-1.1	2.5	1.9	1.4	0.2	11.5	0.8	0.6	4.2		
May-23	1.5	1.4	2.7	-7.0	0.5	0.4	0.7	2.9	0.6	0.0	0.6	4.9	0.8	4.7	3.9		
Jun-23	0.1	-0.2	-0.2	0.1	0.0	1.1	-0.1	1.6	0.7	-2.2	0.1	0.5	0.2	1.3	1.2		
Jul-23	3.6	4.3	4.0	6.5	0.4	0.6	8.0	1.8	2.9	0.0	0.6	0.4	0.0	1.1	1.1		
Aug-23	1.6	0.4	1.8	-8.9	0.3	1.2	1.1	2.4	2.1	6.1	0.0	3.6	3.6	2.0	3.5		
Sep-23	1.7	1.6	0.7	8.1	0.4	1.5	0.2	1.4	4.7	7.8	0.5	0.2	0.4	1.8	0.4		
Oct-23	1.1	0.7	-1.1	12.7	0.1	0.9	3.0	0.9	2.7	-2.8	0.3	0.1	3.2	1.7	-0.1		
Nov-23	4.3	0.8	0.0	6.2	0.0	2.0	17.6	0.7	1.1	-2.6	0.1	0.0	1.3	0.6	1.5		
<b>3-Years Average (in current month during FY22-FY24)</b>																	
YoY	21.3	23.2	24.8	15.9	39.6	15.8	20.4	23.6	17.0	30.4	4.8	28.2	8.6	24.0	22.1		
MoM	2.5	1.6	1.0	5.6	0.6	1.5	6.5	1.5	1.3	1.3	0.1	0.5	0.6	2.0	1.6		

Table A7: Rural CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Perishable Food Items	Non-Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Furnishing and Household Environment	Housing, Water, Elec., Gas and Other Fuels	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>															
Nov-22	27.2	33.7	31.8	43.8	34.4	17.4	15.6	29.2	20.2	47.9	1.4	31.3	11.1	26.4	21.9
Dec-22	28.8	38.7	35.7	59.5	35.0	17.2	13.2	28.6	21.4	44.6	1.4	39.4	11.3	25.2	25.6
Jan-23	32.3	46.8	44.4	64.3	35.2	16.7	14.0	29.8	20.7	41.0	1.2	45.1	11.2	26.0	28.5
Feb-23	35.6	48.3	47.6	53.1	42.7	17.2	18.6	33.9	19.1	51.4	1.9	47.4	12.2	33.4	33.3
Mar-23	38.9	49.0	48.2	54.5	139.1	21.3	22.9	38.1	19.0	55.5	3.2	49.2	12.5	36.1	34.6
Apr-23	40.7	51.4	54.8	31.9	133.3	21.8	22.2	40.2	18.4	58.4	3.2	68.9	18.0	36.6	38.5
May-23	42.2	51.9	54.4	35.3	123.3	23.9	26.0	45.5	19.3	55.5	3.2	73.2	18.8	35.9	43.8
Jun-23	32.4	40.4	43.0	24.0	111.8	23.3	14.8	43.1	19.7	20.9	3.0	69.2	18.8	32.1	40.9
Jul-23	31.3	40.5	43.3	22.2	101.5	22.5	13.5	42.6	21.2	13.6	2.8	65.9	17.1	33.0	39.5
Aug-23	30.9	39.9	43.9	15.2	98.6	21.5	8.3	42.2	22.6	26.8	3.4	60.9	17.1	31.6	43.0
Sep-23	33.9	34.1	39.7	3.8	90.5	24.2	32.7	41.7	23.7	37.7	3.6	58.5	18.7	34.6	38.9
Oct-23	28.7	26.6	33.2	-3.7	86.9	24.6	23.3	41.2	22.4	35.8	4.0	56.1	18.2	34.1	38.9
Nov-23	27.5	27.5	31.3	8.2	86.4	24.1	18.2	38.3	22.3	31.7	3.9	51.7	17.2	32.2	36.9
<b>12-Month Moving Average</b>															
Nov-22	20.6	23.7	22.1	34.6	15.9	13.1	16.7	20.4	12.4	43.9	1.1	16.9	6.9	20.4	16.2
Dec-22	22.0	26.3	24.0	41.3	18.7	13.7	16.2	21.6	13.5	45.6	1.2	19.7	7.6	21.6	17.5
Jan-23	23.7	29.2	26.7	45.8	21.5	14.3	15.9	22.9	14.5	46.9	1.2	22.9	8.2	22.7	19.0
Feb-23	25.5	32.0	29.7	47.1	24.8	14.9	16.4	24.5	15.3	49.0	1.3	26.1	8.8	24.4	20.9
Mar-23	27.6	34.7	32.6	48.8	36.4	15.8	17.4	26.4	16.1	51.4	1.4	29.4	9.4	26.2	22.8
Apr-23	29.8	37.5	35.9	48.1	47.3	16.7	18.4	28.5	16.7	53.7	1.6	34.3	10.5	28.0	24.8
May-23	32.0	40.3	39.1	47.9	57.1	17.8	19.7	30.9	17.4	55.5	1.8	39.5	11.6	29.5	27.3
Jun-23	32.6	41.2	40.5	46.1	65.5	18.6	19.4	32.8	18.0	51.1	2.0	44.0	12.6	30.2	29.3
Jul-23	32.9	42.0	41.6	44.8	72.3	19.3	18.2	34.5	18.8	45.8	2.1	48.0	13.5	30.9	31.2
Aug-23	33.1	42.7	42.7	42.6	78.5	19.8	16.1	36.0	19.7	42.5	2.3	51.1	14.1	31.2	33.1
Sep-23	33.6	42.5	43.3	37.6	83.3	20.4	18.0	37.2	20.4	40.5	2.5	53.7	14.8	31.7	34.4
Oct-23	33.5	41.3	43.2	29.7	87.3	21.1	18.5	38.3	20.7	39.0	2.7	55.9	15.5	32.2	35.9
Nov-23	33.4	40.5	42.9	26.0	91.1	21.6	18.7	39.0	20.9	37.7	2.9	57.3	16.0	32.6	37.1
<b>Period Average (Since July)</b>															
Nov-22	27.7	33.0	30.5	48.2	29.7	16.1	20.4	25.9	15.6	59.9	1.3	25.5	9.6	27.1	20.5
Dec-22	27.9	33.9	31.4	49.9	30.6	16.3	19.1	26.3	16.6	57.2	1.4	27.8	9.9	26.7	21.4
Jan-23	28.5	35.8	33.3	51.8	31.3	16.4	18.4	26.9	17.2	54.7	1.3	30.4	10.1	26.6	22.4
Feb-23	29.5	37.4	35.2	52.0	32.7	16.5	18.4	27.8	17.5	54.2	1.4	32.6	10.3	27.5	23.8
Mar-23	30.6	38.8	36.7	52.3	44.7	17.1	18.9	29.0	17.7	54.4	1.6	34.5	10.6	28.5	25.1
Apr-23	31.6	40.2	38.6	49.8	53.8	17.6	19.2	30.2	17.7	54.8	1.8	38.1	11.3	29.4	26.5
May-23	32.7	41.3	40.2	48.4	60.7	18.2	19.8	31.7	17.9	54.9	1.9	41.5	12.0	30.0	28.2
Jun-23	32.6	41.2	40.5	46.1	65.5	18.6	19.4	32.8	18.0	51.1	2.0	44.0	12.6	30.2	29.3
Jul-23	31.3	40.5	43.3	22.2	101.5	22.5	13.5	42.6	21.2	13.6	2.8	65.9	17.1	33.0	39.5
Aug-23	31.1	40.2	43.6	18.6	100.1	22.0	10.8	42.4	21.9	20.2	3.1	63.3	17.1	32.3	41.3
Sep-23	32.0	38.1	42.3	13.0	96.8	22.7	17.4	42.2	22.5	26.1	3.3	61.7	17.6	33.1	40.5
Oct-23	31.2	35.0	39.9	7.8	94.2	23.2	18.8	41.9	22.5	28.5	3.5	60.2	17.7	33.3	40.1
Nov-23	30.4	33.4	38.1	7.9	92.6	23.4	18.7	41.2	22.5	29.2	3.5	58.4	17.6	33.1	39.4
<b>Month-on-Month</b>															
Nov-22	1.3	0.4	1.7	-5.5	0.6	3.2	1.8	3.2	2.3	0.0	0.1	3.4	0.8	2.3	3.2
Dec-22	0.7	0.0	2.6	-13.2	0.9	0.8	1.1	2.6	2.8	-0.9	0.0	6.8	0.4	0.7	3.9
Jan-23	3.6	6.0	7.4	-2.2	0.4	0.4	2.6	2.3	0.4	-0.5	0.1	4.9	0.2	2.3	3.3
Feb-23	4.0	3.9	3.6	5.5	5.9	1.0	2.6	4.5	1.1	11.6	0.7	2.7	1.7	6.9	4.6
Mar-23	3.5	2.9	3.2	1.5	67.5	4.7	1.2	4.9	0.2	2.7	1.3	3.3	1.4	3.3	2.4
Apr-23	3.0	4.7	5.1	2.5	0.3	2.8	-1.3	3.1	0.4	2.0	0.1	14.1	5.9	0.7	3.9
May-23	1.7	1.1	2.6	-8.4	0.8	2.6	0.6	5.4	1.3	0.6	0.0	5.2	1.5	3.4	5.2
Jun-23	-0.8	-1.9	-1.7	-3.6	0.2	1.1	-0.6	1.6	1.5	-2.1	0.0	1.0	0.8	1.5	0.8
Jul-23	3.3	3.8	3.7	4.5	0.4	0.6	8.1	1.6	1.5	-0.6	0.1	0.2	0.0	2.8	0.9
Aug-23	1.9	0.8	1.1	-2.0	0.5	1.2	1.1	2.2	2.0	11.0	0.8	3.2	2.8	1.3	4.4
Sep-23	2.5	1.7	1.1	6.8	0.5	2.7	1.1	2.0	4.3	11.3	0.3	0.7	1.4	3.5	0.7
Oct-23	0.9	0.6	-1.1	13.4	0.6	1.3	3.0	1.8	2.8	-2.7	0.4	0.9	0.1	1.3	0.1
Nov-23	0.4	1.1	0.3	6.2	0.4	2.8	-2.4	1.1	2.2	-3.0	0.0	0.4	0.0	0.8	1.7
<b>3-Years Average (in current month during FY22-FY24)</b>															
YoY	21.9	23.3	24.9	15.5	40.9	17.2	17.1	26.2	16.8	34.0	2.0	30.2	10.5	23.0	22.8
MoM	1.6	1.7	1.3	5.0	0.4	2.9	0.9	2.1	1.9	0.9	0.0	1.4	0.3	2.2	2.3

**Table A8: Top Ten Contributors to Urban CPI Inflation (YoY)**

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Nov-22	Nov-23	
<b>A. Ranked by Weighted Contribution</b>					
1	Gas Charges	1.08	0.00	519.61	20.98
2	Wheat Flour	3.01	35.56	63.52	7.15
3	Readymade Food	5.52	33.22	30.09	5.86
4	Milk Fresh	7.11	27.64	23.60	5.51
5	Electricity Charges	4.56	14.97	34.95	5.28
6	Motor Fuel	2.91	52.02	23.22	3.58
7	Appliances/Articles/Products For Personal	2.98	24.34	34.76	3.32
8	Condiments And Spices	1.33	-9.78	67.64	2.91
9	House Rent	19.26	5.27	5.64	2.80
10	Rice	1.18	39.75	58.32	2.50
<b>Total</b>		<b>48.94</b>			<b>59.89</b>
<b>B. Ranked by Percentage Change</b>					
1	Gas Charges	1.08	0.00	519.61	20.98
2	Cigarettes	0.72	37.31	98.25	2.35
3	Text Books	0.67	20.49	94.71	1.75
4	Condiments And Spices	1.33	-9.78	67.64	2.91
5	Wheat Flour	3.01	35.56	63.52	7.15
6	Rice	1.18	39.75	58.32	2.50
7	Beans	0.04	20.26	54.99	0.08
8	Tea	0.84	62.18	52.43	1.88
9	Gur	0.04	-3.64	50.00	0.05
10	Sugar	1.11	-9.90	49.91	1.40
<b>Total</b>		<b>10.02</b>			<b>41.05</b>
<b>C. Ranked by Weights</b>					
1	House Rent	19.26	5.27	5.64	2.80
2	Milk Fresh	7.11	27.64	23.60	5.51
3	Readymade Food	5.52	33.22	30.09	5.86
4	Education	4.88	11.07	12.58	1.75
5	Electricity Charges	4.56	14.97	34.95	5.28
6	Wheat Flour	3.01	35.56	63.52	7.15
7	Appliances/Articles/Products For Personal	2.98	24.34	34.76	3.32
8	Motor Fuel	2.91	52.02	23.22	3.58
9	Cotton Cloth	2.22	22.24	29.56	2.14
10	Meat	2.04	22.51	17.46	1.40
<b>Total</b>		<b>54.49</b>			<b>38.79</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 Urban CPI, which is 30.4 percent in November-2023.

**Table A9: Top Ten Contributors to Urban CPI Inflation (MoM)**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Oct-23	Nov-23	
<b>A. Ranked by Weighted Contribution</b>					
1	Gas Charges	1.08	0.00	280.55	103.37
2	Tomatoes	0.35	-3.11	60.42	5.22
3	Tea	0.84	-1.67	12.95	3.52
4	Potatoes	0.45	3.72	14.92	2.49
5	Onions	0.59	38.71	12.32	1.89
6	Transport Services	1.75	-1.56	5.11	1.87
7	Cotton Cloth	2.22	1.13	3.46	1.76
8	Fresh Vegetables	1.53	17.74	4.47	1.69
9	Eggs	0.51	6.05	7.15	1.26
10	Personal Effects N.E.C.	0.94	-3.75	4.17	1.23
<b>Total</b>		<b>10.26</b>			<b>124.30</b>
<b>B. Ranked by Percentage Change</b>					
1	Gas Charges	1.08	0.00	280.55	103.37
2	Tomatoes	0.35	-3.11	60.42	5.22
3	Potatoes	0.45	3.72	14.92	2.49
4	Tea	0.84	-1.67	12.95	3.52
5	Onions	0.59	38.71	12.32	1.89
6	Woolen Readymade Garments	0.43	2.36	8.16	0.65
7	Dry Fruits	0.33	0.98	7.91	0.60
8	Fish	0.39	3.00	7.75	0.45
9	Eggs	0.51	6.05	7.15	1.26
10	Dental Services	0.02	0.56	5.19	0.01
<b>Total</b>		<b>4.99</b>			<b>119.46</b>
<b>C. Ranked by Weights</b>					
1	House Rent	19.26	1.46	0.00	0.00
2	Milk Fresh	7.11	-1.73	0.16	0.26
3	Readymade Food	5.52	0.70	0.53	0.75
4	Education	4.88	3.23	1.31	1.14
5	Electricity Charges	4.56	8.29	-10.71	-13.72
6	Wheat Flour	3.01	-1.87	-0.94	-0.98
7	Appliances/Articles/Products For Personal	2.98	1.14	0.51	0.36
8	Motor Fuel	2.91	-4.02	-5.80	-6.56
9	Cotton Cloth	2.22	1.13	3.46	1.76
10	Meat	2.04	0.84	0.36	0.19
<b>Total</b>		<b>54.49</b>			<b>-16.80</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 Urban CPI, which is 4.3 percent in November-2023.

**Table A10: Top and Bottom Fifteen Contributors to Urban CPI Inflation (YoY)**

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)			
			Nov-22	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Gas Charges	1.08	0.00	519.61	20.98			
2	Wheat Flour	3.01	35.56	63.52	7.15			
3	Readymade Food	5.52	33.22	30.09	5.86			
4	Milk Fresh	7.11	27.64	23.60	5.51			
5	Electricity Charges	4.56	14.97	34.95	5.28			
6	Motor Fuel	2.91	52.02	23.22	3.58			
7	Appliances/Articles/Products For Personal	2.98	24.34	34.76	3.32			
8	Condiments And Spices	1.33	-9.78	67.64	2.91			
9	House Rent	19.26	5.27	5.64	2.80			
10	Rice	1.18	39.75	58.32	2.50			
11	Cigarettes	0.72	37.31	98.25	2.35			
12	Washing Soap/Detergents/Match Box	1.41	43.42	43.88	2.35			
13	Cotton Cloth	2.22	22.24	29.56	2.14			
14	Tea	0.84	62.18	52.43	1.88			
15	Marriage Hall Charges	1.75	18.77	34.41	1.84			
<b>Total</b>		<b>55.88</b>			<b>70.45</b>			
<b>Bottom 15 Contributors</b>								
1	Onions	0.59	284.87	-30.82	-1.37			
2	Tomatoes	0.35	25.20	-3.54	-0.09			
3	Vegetable Ghee	1.03	35.15	-0.50	-0.03			
4	Pulse Gram	0.17	56.19	-1.97	-0.01			
5	Mustard Oil	0.01	44.69	-3.65	0.00			
6	Communication Services	1.88	0.52	0.00	0.00			
7	Motor Vehicle Tax	0.05	8.92	0.00	0.00			
8	Therapeutic Appliances And Equipment	0.01	7.23	15.61	0.00			
9	Besan	0.08	56.10	1.61	0.00			
10	Major Tools & Equipment	0.01	24.53	25.18	0.01			
11	Postal Services	0.02	13.79	11.53	0.01			
12	Dental Services	0.02	13.35	18.40	0.01			
13	Carpets	0.03	11.47	11.34	0.01			
14	Electrical Appliances For Personal	0.05	18.97	12.30	0.01			
15	Honey	0.10	12.69	4.94	0.01			
<b>Total</b>		<b>4.40</b>			<b>-1.44</b>			

**Table A11: Top and Bottom Fifteen Contributors to Urban CPI Inflation (MoM)**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Gas Charges	1.08	0.00	280.55	103.37			
2	Tomatoes	0.35	-3.11	60.42	5.22			
3	Tea	0.84	-1.67	12.95	3.52			
4	Potatoes	0.45	3.72	14.92	2.49			
5	Onions	0.59	38.71	12.32	1.89			
6	Transport Services	1.75	-1.56	5.11	1.87			
7	Cotton Cloth	2.22	1.13	3.46	1.76			
8	Fresh Vegetables	1.53	17.74	4.47	1.69			
9	Eggs	0.51	6.05	7.15	1.26			
10	Personal Effects N.E.C.	0.94	-3.75	4.17	1.23			
11	Education	4.88	3.23	1.31	1.14			
12	Readymade Food	5.52	0.70	0.53	0.75			
13	Woolen Readymade Garments	0.43	2.36	8.16	0.65			
14	Dry Fruits	0.33	0.98	7.91	0.60			
15	Woolen Cloth	0.84	1.89	3.33	0.55			
<b>Total</b>		<b>22.26</b>			<b>127.99</b>			
<b>Bottom 15 Contributors</b>								
1	Electricity Charges	4.56	8.29	-10.71	-13.72			
2	Motor Fuel	2.91	-4.02	-5.80	-6.56			
3	Condiments And Spices	1.33	2.87	-7.93	-3.49			
4	Sugar	1.11	-10.23	-8.53	-2.20			
5	Cooking Oil	1.10	-1.54	-3.70	-1.31			
6	Wheat Flour	3.01	-1.87	-0.94	-0.98			
7	Chicken	1.36	-0.13	-2.58	-0.87			
8	Vegetable Ghee	1.03	-1.61	-2.44	-0.79			
9	Rice	1.18	0.05	-1.46	-0.56			
10	Liquefied Hydrocarbons	0.51	3.87	-3.14	-0.51			
11	Motor Vehicles	0.81	0.00	-0.75	-0.15			
12	Pulse Masoor	0.16	-1.59	-3.85	-0.14			
13	Pulse Gram	0.17	-3.71	-4.09	-0.13			
14	Gram Whole	0.09	-0.88	-4.32	-0.10			
15	Gur	0.04	-1.88	-10.44	-0.10			
<b>Total</b>		<b>19.37</b>			<b>-31.61</b>			

**Table A12: Top and Bottom Fifteen Contributors to MoM Urban CPI Food Inflation**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Tomatoes	0.35	-3.11	60.42	5.22			
2	Tea	0.84	-1.67	12.95	3.52			
3	Potatoes	0.45	3.72	14.92	2.49			
4	Onions	0.59	38.71	12.32	1.89			
5	Fresh vegetables	1.53	17.74	4.47	1.69			
6	Eggs	0.51	6.05	7.15	1.26			
7	Readymade food	5.52	0.70	0.53	0.75			
8	Dry fruits	0.33	0.98	7.91	0.60			
9	Fish	0.39	3.00	7.75	0.45			
10	Milk fresh	7.11	-1.73	0.16	0.26			
11	Meat	2.04	0.84	0.36	0.19			
12	Beverages	0.89	0.97	0.83	0.17			
13	Sweetmeat	0.35	0.43	0.28	0.03			
14	Bakery and confectionary	0.48	0.87	0.21	0.03			
15	Milk powder	0.31	0.23	0.16	0.01			
<b>Total</b>		<b>21.69</b>			<b>18.56</b>			
<b>Bottom 15 Contributors</b>								
1	Condiments and Spices	1.33	2.87	-7.93	-3.49			
2	Sugar	1.11	-10.23	-8.53	-2.20			
3	Cooking oil	1.10	-1.54	-3.70	-1.31			
4	Wheat flour	3.01	-1.87	-0.94	-0.98			
5	Chicken	1.36	-0.13	-2.58	-0.87			
6	Vegetable ghee	1.03	-1.61	-2.44	-0.79			
7	Rice	1.18	0.05	-1.46	-0.56			
8	Pulse masoor	0.16	-1.59	-3.85	-0.14			
9	Pulse gram	0.17	-3.71	-4.09	-0.13			
10	Gram whole	0.09	-0.88	-4.32	-0.10			
11	Gur	0.04	-1.88	-10.44	-0.10			
12	Fresh fruits	1.44	6.49	-0.30	-0.08			
13	Pulse mash	0.12	-0.37	-2.92	-0.08			
14	Besan	0.08	-1.60	-3.44	-0.06			
15	Wheat	0.61	-1.66	-0.24	-0.05			
<b>Total</b>		<b>12.84</b>			<b>-10.93</b>			

**Table A13: Top and Bottom Fifteen Contributors to MoM Urban CPI Non-Food Inflation**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Gas charges	1.08	0.00	280.55	103.37			
2	Transport services	1.75	-1.56	5.11	1.87			
3	Cotton cloth	2.22	1.13	3.46	1.76			
4	Personal Effects n.e.c.	0.94	-3.75	4.17	1.23			
5	Education	4.88	3.23	1.31	1.14			
6	Woolen readymade garments	0.43	2.36	8.16	0.65			
7	Woolen cloth	0.84	1.89	3.33	0.55			
8	Marriage Hall Charges	1.75	5.43	1.04	0.42			
9	Appliances/Articles/Products for Personal	2.98	1.14	0.51	0.36			
10	Solid Fuel	0.42	0.34	3.52	0.27			
11	Doctor (MBBS) clinic fee	0.40	3.02	2.29	0.25			
12	Personal Grooming Services	0.80	1.56	1.24	0.22			
13	Washing soap/detergents/match Box	1.41	0.74	0.44	0.19			
14	Household servant	0.77	0.19	1.22	0.17			
15	Hospitals services	0.57	0.60	1.64	0.16			
<b>Total</b>		<b>21.26</b>			<b>112.60</b>			
<b>Bottom 15 Contributors</b>								
1	Electricity charges	4.56	8.29	-10.71	-13.72			
2	Motor fuel	2.91	-4.02	-5.80	-6.56			
3	Liquefied Hydrocarbons	0.51	3.87	-3.14	-0.51			
4	Motor vehicles	0.81	0.00	-0.75	-0.15			
5	Motor vehicle accessories	0.19	0.46	-0.86	-0.04			
6	stationery	0.35	0.03	-0.20	-0.02			
7	Text books	0.67	0.00	0.00	0.00			
8	Communication Services	1.88	0.00	0.00	0.00			
9	Motor vehicle tax	0.05	0.00	0.00	0.00			
10	Newspapers	0.07	1.04	0.00	0.00			
11	House rent	19.26	1.46	0.00	0.00			
12	Accommodation Services	0.13	4.50	0.02	0.00			
13	Construction wage rates	0.20	0.92	0.02	0.00			
14	Major tools & equipment	0.01	1.57	0.64	0.00			
15	Therapeutic Appliances and Equipment	0.01	2.33	1.62	0.00			
<b>Total</b>		<b>31.59</b>			<b>-20.99</b>			

**Table A14: Top Ten Contributors to Rural CPI Inflation (YoY)**

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Nov-22	Nov-23	
<b>A. Ranked by Weighted Contribution</b>					
1	Wheat Flour	3.43	33.45	64.67	8.82
2	Milk Fresh	10.38	30.03	24.58	8.49
3	Wheat	3.47	47.16	39.61	6.40
4	Readymade Food	3.80	31.35	32.03	4.71
5	Rice	1.55	40.02	60.79	4.51
6	Electricity Charges	3.44	14.97	34.95	4.14
7	Cigarettes	1.24	34.15	89.48	3.59
8	Transport Services	1.80	59.86	51.25	3.49
9	Motor Fuels	2.49	53.70	25.26	3.44
10	Washing Soaps, Detergents And Match Box	1.70	38.12	48.21	2.97
<b>Total</b>		<b>33.30</b>			<b>50.56</b>
<b>B. Ranked by Percentage Change</b>					
1	Text Books	0.50	25.68	106.80	1.52
2	Cigarettes	1.24	34.15	89.48	3.59
3	Wheat Flour	3.43	33.45	64.67	8.82
4	Rice	1.55	40.02	60.79	4.51
5	Sugar	2.03	-14.06	54.70	2.91
6	Dessert Preparation	0.01	31.14	53.58	0.02
7	Tea	1.26	54.07	52.17	2.70
8	Transport Services	1.80	59.86	51.25	3.49
9	Gur	0.15	-3.96	49.11	0.21
10	Washing Soaps, Detergents And Match Box	1.70	38.12	48.21	2.97
<b>Total</b>		<b>13.67</b>			<b>30.74</b>
<b>C. Ranked by Weights</b>					
1	Milk Fresh	10.38	30.03	24.58	8.49
2	House Rent	8.61	5.86	7.83	1.81
3	Solid Fuel	4.48	32.71	18.93	2.96
4	Readymade Food	3.80	31.35	32.03	4.71
5	Wheat	3.47	47.16	39.61	6.40
6	Electricity Charges	3.44	14.97	34.95	4.14
7	Wheat Flour	3.43	33.45	64.67	8.82
8	Cotton Cloth	2.84	16.06	22.71	2.32
9	Motor Fuels	2.49	53.70	25.26	3.44
10	Vegetable Ghee	2.38	42.38	-4.04	-0.60
<b>Total</b>		<b>45.32</b>			<b>42.49</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 Urban CPI, which is 27.5 percent in November-2023.

**Table A15: Top Ten Contributors to Rural CPI Inflation (MoM)**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Oct-23	Nov-23	
<b>A. Ranked by Weighted Contribution</b>					
1	Tomatoes	0.51	-3.28	57.67	65.40
2	Potatoes	0.74	4.23	12.53	37.46
3	Wheat	3.47	-1.26	2.38	28.26
4	Onions	0.90	33.96	12.83	27.06
5	Tea	1.26	-1.00	6.06	24.24
6	Woolen Readymade Garments	0.54	1.53	22.02	22.50
7	Fresh Fruits	1.45	3.40	7.52	19.80
8	Wheat Flour	3.43	-2.15	1.46	17.41
9	Eggs	0.57	2.84	8.87	16.38
10	Footwear	1.92	3.69	4.18	15.31
<b>Total</b>		<b>14.79</b>			<b>273.82</b>
<b>B. Ranked by Percentage Change</b>					
1	Tomatoes	0.51	-3.28	57.67	65.40
2	Woolen Readymade Garments	0.54	1.53	22.02	22.50
3	Onions	0.90	33.96	12.83	27.06
4	Potatoes	0.74	4.23	12.53	37.46
5	Eggs	0.57	2.84	8.87	16.38
6	Fresh Fruits	1.45	3.40	7.52	19.80
7	Tea	1.26	-1.00	6.06	24.24
8	Dry Fruits	0.25	2.34	5.95	4.13
9	Household Textiles	0.44	1.46	5.94	4.96
10	Woolen Cloth	1.10	1.02	4.55	10.52
<b>Total</b>		<b>7.76</b>			<b>232.45</b>
<b>C. Ranked by Weights</b>					
1	Milk Fresh	10.38	0.75	0.57	13.17
2	House Rent	8.61	1.65	0.00	0.00
3	Solid Fuel	4.48	1.04	1.37	13.56
4	Readymade Food	3.80	1.85	0.29	3.03
5	Wheat	3.47	-1.26	2.38	28.26
6	Electricity Charges	3.44	8.29	-10.71	-103.26
7	Wheat Flour	3.43	-2.15	1.46	17.41
8	Cotton Cloth	2.84	0.52	0.75	5.05
9	Motor Fuels	2.49	-4.32	-6.17	-60.44
10	Vegetable Ghee	2.38	-4.31	-1.43	-11.15
<b>Total</b>		<b>45.32</b>			<b>-94.37</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 Urban CPI, which is 0.4 percent in November-2023.

**Table A16: Top and Bottom Fifteen Contributors to Rural CPI Inflation (YoY)**

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)			
			Nov-22	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Wheat Flour	3.43	33.45	64.67	8.82			
2	Milk Fresh	10.38	30.03	24.58	8.49			
3	Wheat	3.47	47.16	39.61	6.40			
4	Readymade Food	3.80	31.35	32.03	4.71			
5	Rice	1.55	40.02	60.79	4.51			
6	Electricity Charges	3.44	14.97	34.95	4.14			
7	Cigarettes	1.24	34.15	89.48	3.59			
8	Transport Services	1.80	59.86	51.25	3.49			
9	Motor Fuels	2.49	53.70	25.26	3.44			
10	Washing Soaps, Detergents And Match Box	1.70	38.12	48.21	2.97			
11	Solid Fuel	4.48	32.71	18.93	2.96			
12	Appliances/Articles/Products For Personal Care	2.27	16.12	44.94	2.93			
13	Sugar	2.03	-14.06	54.70	2.91			
14	Tea	1.26	54.07	52.17	2.70			
15	Cotton Cloth	2.84	16.06	22.71	2.32			
<b>Total</b>		<b>46.18</b>			<b>64.38</b>			
<b>Bottom 15 Contributors</b>								
1	Onions	0.90	286.55	-32.49	-2.12			
2	Tomatoes	0.51	35.95	-17.15	-0.69			
3	Vegetable Ghee	2.38	42.38	-4.04	-0.60			
4	Cooking Oil	0.60	42.39	-2.33	-0.09			
5	Pulse Gram	0.28	62.58	-2.33	-0.02			
6	Mustard Oil	0.01	46.86	-0.23	0.00			
7	Communication Services	1.65	0.16	0.00	0.00			
8	Motor Vehicle Tax	0.02	24.88	0.00	0.00			
9	Besan	0.07	59.74	1.00	0.00			
10	Garbage Collection	0.01	9.60	11.74	0.00			
11	Postal Services	0.01	0.00	20.00	0.00			
12	Honey	0.03	12.43	5.83	0.01			
13	Dental Services	0.02	22.24	12.70	0.01			
14	Accommodation Services	0.14	7.08	3.05	0.01			
15	Cleaning And Laundering	0.02	25.42	26.75	0.02			
<b>Total</b>		<b>6.65</b>			<b>-3.47</b>			

**Table A17: Top and Bottom Fifteen Contributors to Rural CPI Inflation (MoM)**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Tomatoes	0.51	-3.28	57.67	65.40			
2	Potatoes	0.74	4.23	12.53	37.46			
3	Wheat	3.47	-1.26	2.38	28.26			
4	Onions	0.90	33.96	12.83	27.06			
5	Tea	1.26	-1.00	6.06	24.24			
6	Woolen Readymade Garments	0.54	1.53	22.02	22.50			
7	Fresh Fruits	1.45	3.40	7.52	19.80			
8	Wheat Flour	3.43	-2.15	1.46	17.41			
9	Eggs	0.57	2.84	8.87	16.38			
10	Footwear	1.92	3.69	4.18	15.31			
11	Personal Effects N.E.C.	1.21	-2.70	3.57	13.74			
12	Solid Fuel	4.48	1.04	1.37	13.56			
13	Milk Fresh	10.38	0.75	0.57	13.17			
14	Woolen Cloth	1.10	1.02	4.55	10.52			
15	Marriage Hall Charges	2.25	0.16	2.03	9.53			
<b>Total</b>		<b>34.21</b>			<b>334.34</b>			
<b>Bottom 15 Contributors</b>								
1	Electricity Charges	3.44	8.29	-10.71	-103.26			
2	Motor Fuels	2.49	-4.32	-6.17	-60.44			
3	Sugar	2.03	-9.47	-8.11	-39.11			
4	Condiments And Spices	1.49	3.65	-8.06	-35.19			
5	Fresh Vegetables	2.09	21.76	-3.37	-18.59			
6	Chicken	1.46	-2.64	-4.13	-15.51			
7	Vegetable Ghee	2.38	-4.31	-1.43	-11.15			
8	Rice	1.55	-0.69	-1.44	-9.40			
9	Liquefied Hydrocarbons	1.00	1.62	-1.10	-3.23			
10	Gur	0.15	-5.72	-7.61	-2.80			
11	Cooking Oil	0.60	-3.83	-1.39	-2.74			
12	Pulse Gram	0.28	-2.98	-3.10	-1.69			
13	Pulse Mash	0.15	0.29	-3.67	-1.22			
14	Gram Whole	0.11	-1.44	-2.82	-0.84			
15	Pulse Masoor	0.21	0.56	-1.70	-0.79			
<b>Total</b>		<b>19.43</b>			<b>-305.96</b>			

**Table A18: Top and Bottom Fifteen Contributors to Rural CPI Food Inflation (MoM)**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Tomatoes	0.51	-3.28	57.67	65.40			
2	Potatoes	0.74	4.23	12.53	37.46			
3	Wheat	3.47	-1.26	2.38	28.26			
4	Onions	0.90	33.96	12.83	27.06			
5	Tea	1.26	-1.00	6.06	24.24			
6	Fresh fruits	1.45	3.40	7.52	19.80			
7	Wheat Flour	3.43	-2.15	1.46	17.41			
8	Eggs	0.57	2.84	8.87	16.38			
9	Milk fresh	10.38	0.75	0.57	13.17			
10	Dry fruits	0.25	2.34	5.95	4.13			
11	Readymade Food	3.80	1.85	0.29	3.03			
12	Meat	1.71	1.93	0.53	2.39			
13	Cigarettes	1.24	0.57	0.40	1.64			
14	Fish	0.26	3.63	3.52	1.62			
15	Milk products	0.96	0.48	0.46	0.97			
<b>Total</b>		<b>30.93</b>			<b>262.97</b>			
<b>Bottom 15 Contributors</b>								
1	Sugar	2.03	-9.47	-8.11	-39.11			
2	Condiments and Spices	1.49	3.65	-8.06	-35.19			
3	Fresh Vegetables	2.09	21.76	-3.37	-18.59			
4	Chicken	1.46	-2.64	-4.13	-15.51			
5	Vegetable ghee	2.38	-4.31	-1.43	-11.15			
6	Rice	1.55	-0.69	-1.44	-9.40			
7	Gur	0.15	-5.72	-7.61	-2.80			
8	Cooking oil	0.60	-3.83	-1.39	-2.74			
9	Pulse Gram	0.28	-2.98	-3.10	-1.69			
10	Pulse Mash	0.15	0.29	-3.67	-1.22			
11	Gram Whole	0.11	-1.44	-2.82	-0.84			
12	Pulse Masoor	0.21	0.56	-1.70	-0.79			
13	Besan	0.07	-0.99	-2.67	-0.42			
14	Pulse Moong	0.25	-2.21	-0.74	-0.33			
15	Mustard oil	0.01	-1.17	-2.08	-0.09			
<b>Total</b>		<b>12.84</b>			<b>-139.87</b>			

**Table A19: Top and Bottom Fifteen Contributors to MoM Rural CPI Non-Food Inflation**

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)			
			Oct-23	Nov-23				
<b>Ranked by Weighted Contribution</b>								
<b>Top 15 Contributors</b>								
1	Woolen Readymade Garments	0.54	1.53	22.02	22.50			
2	Footwear	1.92	3.69	4.18	15.31			
3	Personal Effects n.e.c.	1.21	-2.70	3.57	13.74			
4	Solid Fuel	4.48	1.04	1.37	13.56			
5	Woolen Cloth	1.10	1.02	4.55	10.52			
6	Marriage Hall Charges	2.25	0.16	2.03	9.53			
7	Drugs and Medicines	1.58	3.00	1.90	7.52			
8	Transport Services	1.80	-0.84	1.28	7.03			
9	Hospitals Services	1.01	0.82	3.83	5.95			
10	Appliances/Articles/Products for Personal Care	2.27	1.84	1.04	5.27			
11	Cotton Cloth	2.84	0.52	0.75	5.05			
12	Household Textiles	0.44	1.46	5.94	4.96			
13	Washing Soaps, Detergents and Match Box	1.70	2.59	0.94	4.57			
14	Doctor Clinic Fee	0.51	4.37	2.53	3.40			
15	Personal Grooming Services	1.54	0.81	0.72	2.94			
<b>Total</b>		<b>25.17</b>			<b>131.84</b>			
<b>Bottom 15 Contributors</b>								
1	Electricity Charges	3.44	8.29	-10.71	-103.26			
2	Motor Fuels	2.49	-4.32	-6.17	-60.44			
3	Liquefied Hydrocarbons	1.00	1.62	-1.10	-3.23			
4	Text Books	0.50	0.00	0.00	0.00			
5	Newspapers	0.02	0.00	0.00	0.00			
6	Communication Services	1.65	0.00	0.00	0.00			
7	Motor Vehicle Tax	0.02	0.00	0.00	0.00			
8	Postal Services	0.01	0.00	0.00	0.00			
9	Garbage Collection	0.01	0.00	0.00	0.00			
10	Water Supply	0.06	0.00	0.00	0.00			
11	Accommodation Services	0.14	0.00	0.00	0.00			
12	Mechanical Services	0.36	0.00	0.00	0.00			
13	Cleaning and Laundering	0.02	1.05	0.00	0.00			
14	Education	2.13	0.06	0.00	0.00			
15	Motor Vehicles Accessories	0.16	0.91	0.00	0.00			
<b>Total</b>		<b>12.02</b>			<b>-166.92</b>			

**Table A20: Distribution of Price Changes (YoY) - Selected Urban CPI Item**

<b>Groups</b>	<b>Decrease or no change</b>	<b>Subdued increase (Greater than 0% but less than 5%)</b>	<b>Moderate increase (5% but less than 10%)</b>	<b>Double digit increase (10% or more)</b>
Food & Non-Alcoholic Beverages	Chilies (Green), Onions, Lemon, Mustard Oil (Average Quality), Tomatoes, Pulse Gram, Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch,	Vegetable Ghee Dalda/Habib 2.5 Kg Tin, Besan, Cooking Oil Dalda Or Other Similar Brand (Sn), 5 Litre Tin, Gram Whole Black (Average Quality), Honey	Bananas (Kela) Local,	Pulse Moong (Washed), Cardamom Small (Average Quality), Turai, Butter Local Packed 50 Gm, Ice Cream Walls Cup (Large Size), Gram Whole Yellow (Average
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetel Nuts), Cigarettes Capstan 20'S Packet, Cigarettes Gold Leaf 20'S Packet
Clothing & Footwear	Cheetah 50 Size 3-5 Servis, Gents Shoes Servis, Children Shoes Power Lite Bata, Ladies Sandal Bata, Ladies Sponge Chappal Bata, Gents Shoes Paul Bata,		Dopatta Geolette (Average Quality), Women Shalwar Kameez (Average Quality),	Awami Suit Gents Wash & Wear (Average Quality), Pant Cloth Wash & Wear (Average Quality), Gents Sandal Bata, Chaddar (Wash-N-Wear) (2X2.5 Meter), Socks Nylon Local (Average Quality), Pullover Gents (Average Quality), Tailoring Charges Simple Suit (Female), Tailoring Charges Awami Suit
Housing, Water, Elec, Gas & other Fuels			Electricity Charges Upto 50 Units, House Rent Combined, Electricity Charges 51-100 Units, Cement Blocks (6"X8"X12"),	Mason Wage Rate, Bajri, Painter Wage Rate, Unskilled Labor Wage Rate, Plumber Wage Rate, Electrician Charges, Cement (Local) 50 Kg Bag, Charges For Refuse/Waste Collection, Bricks New 1St Class, Water Charges Per
Furnishing & Household Equip. Maintenance etc			Blanket Single (Sn), Bed Sheet Double With Two Pillow Covers (Superior Quality),	Towel Medium Size (3' X 2'), Plain Carpet, Bed Sheet Single (Superior Quality), Household Servant Female Part Time, Air Cooler Super Asia Ecm-4000/Jc-1000, Geyser Super Asia Large Size 30 Gallons (Gas), Dinner Set Plastic 72 Pieces Super
Health		Ventolin Tablets 2 Mg.	Physiotherapist Fee Per Visit, Betnovate-N Ointment 10 Gm Tube, Sugar Test (Random/Fasting) Charges Of Both,	Glucometer, Egg Charges, Cac 1000 Tablets Sandoz Bottle, Dental Surgeon Fee Per Visit, Urine Test (Dr) Charges, Amoxil Capsule 250 Mg, X-Ray (Chest) Charges, Calpol Syrup 100 Ml Bottle, Entox Tablets, Electronic Bp Checking Apparatus,
Transport	Car Suzuki 800 Cc Without Ac, Car Tax 800 Cc To 1500 Cc,	Car Toyota 1300 Cc Xli, Cng,	Mini Bus Fare Minimum Within City,	Car Service Charges, Suzuki Fare Minimum Within City, Motorcycle Service Charges, Bus Fare Minimum Within City, Mobil Oil (Havoline 20W-50), Bicycle, Auto Rickshaw Fare, Suzuki Fare Maximum Within
Communication	Mobile Call Charges, Telephone Call Charges, Internet Charges (Dsl) 1 Mb (Unlimited),			Courier Charges Minimum Within Zone Outside City (Tes), Mobile Set With Rear Camera And Without
Recreation & Culture	Newspaper Daily Dawn,		Cable Charges, Akhbar-E-Jehan Weekly, Recreational Park Charges (Minimum Playland Ticket),	Urdu Book Ba/B.Sc, Mag The Weekly (Magazine), Photostat Paper 70 Gm, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Lead Pencil Goldfish, Laptop Dell/Hp/Acer Core I5, Display (14'-15'), Ballpoint Pen
Education		Government University Fee M.S.C / M.A.,	Tuition Fee Private University M.Sc./M.A, Government Medical College/University Tuition Fee For Mbbs (1St Year), Private School Fee	Private School Fee English Medium Average Standard (Class I), Coaching Fee For Class Xi/Xii Science Group, Private School Fee English Medium Average Standard
Restaurant & Hotels				Pizza Chicken Medium Size (Average Quality), Private Hostel Accommodation Fee For Intermediate College Per Student, Cooked Daal At Average Hotel, Cooked Beef At Average Hotel,
Miscellaneous				Purse Ladies Medium Size (Average Quality), Electric Hair Straightener (Philips), Hair Oil (Kala Kola Hair Tonic), Toilet Soap Lux 75 Gm, Lipstick Swiss Miss/Medora (Medium), Perfume Medium Size Broche/Medora, Hair Cut Charges

**Table A21: Distribution of Price Changes (YoY) - Selected Rural CPI Items**

<b>Groups</b>	<b>Decrease or no change</b>	<b>Subdued increase (Greater than 0% but less than 5%)</b>	<b>Moderate increase (5% but less than 10%)</b>	<b>Double digit increase (10% or more)</b>
Food & Non-Alcoholic Beverages	Chilies (Green), Onions, Tomatoes, Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch, Vegetable Ghee Dalda/Habib 2.5 Kg Tin, Pulse Gram, Cooking Oil (Pouch),	Besan, Turai, Gram Whole Black (Average Quality),	Peas (Matar), Honey Marhaba Bottle 500 Gm,	Chilies Powder Loose, Pulse Moong (Washed), Tinda, Bananas (Kela) Local, Pulse Masoor (Washed), Carrot (Gajar), Gram Whole Yellow (Average Quality), Apple (Average Quality), Beef With Bone (Average Quality),
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle Nuts), Chewing Tobacco (Niswar), Tobacco Hukka Twisted, Cigarettes Capstan 20'S Packet, Cigarettes Gold
Housing, Water, Elec, Gas & other Fuels				Socks Nylon Local (Average Quality), Full Pant Boy Length 24"/26", Shirt Boy Length 24"/26", Chaddar (Wash-N-Wear) (2X2.5 Meter), Tailoring Charges Simple Suit (Female), Lawn Printed (Average Quality), Footware Gents (Average Quality), Tailoring
Furnishing & Household Equip. Maintenance etc			Electricity Charges Upto 50 Units, House Rent Combined, Bajri, Electricity Charges 51-100 Units,	Charges For Refuse/Waste Collection, Carpenter Wage Rate, Bricks New 1St Class, Mason Wage Rate, Painter Wage Rate, Unskilled Labor Wage Rate, Coal, Cement
Health				Towel Medium Size (2' X 3'), Readymade Quilt (3 Kg), Dinner Set Plastic 72 Pieces Super Quality, Blanket Single (Sn), Bucket (Balti) Plastic Medium Size, Water Pump
Transport	Car Suzuki 800 Cc Without Ac, Car Tax 800 Cc To 1500 Cc,			Cost Of Surgery (C-Section), Dental Surgeon Fee Per Visit, Amoxil Capsule 250 Mg, Cac 1000 Tablets Sandoz Bottle, Physiotherapist Fee Per Visit, Plastic Bag (General)
Communication	Mobile Call Charges, Telephone Call Charges, Internet Charges (Dsl) 1 Mb (Unlimited),			Mobile Set With Rear Camera And Without Touch Screen, Postal Registration Charges,
Recreation & Culture		Vocational Training Basic Computer Short Course Fee (3 Months),		Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Cable Charges, Pets Feed, Led Sony/Samsung 32" Colored, Exercise Book (With Lines) 80 To 100 Pages, Lead Pencil Goldfish Newspaper
Education				Coaching Fee For Class Ix/X Science Group, Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class V), Private School Fee English Medium
Restaurant & Hotels	Government Hostel Accommodation Fee For Intermediate College Per Student,			Private Hostel Accommodation Fee For Intermediate College Per Student, Pizza Chicken Medium Size (Average Quality), Cooked Chicken At Average Hotel, Marriage Hall
Miscellaneous				Tooth Brush (Shield), Hair Color (Kala Kola), Toilet Soap Lux 75 Gm, Artificial Jewelry (Locket Set) (Average Quality), Shaving Charges, Trunk Medium Size (Average Quality), Purse Ladies Medium Size (Average Quality), Tooth Paste

**Table A22: Distribution of Price Changes (YoY) - WPI Items**

<b>Groups</b>	<b>Decrease or no change</b>	<b>Subdued increase (Greater than 0% but less than 5%)</b>	<b>Moderate increase (5% but less than 10%)</b>	<b>Double digit increase (10% or more)</b>
Agriculture Forestry & Fisher Product	Other Oil Seeds, Maize,		Fiber Crops, Vegetables,	Cotton Seeds, Fish Live Fresh or Chilled, Fresh Fruits, Hides, Skins & Fur Skins, Raw, Fuel Wood in Logs, Sorghum / Jowar, Millet / Bajra, Pulses, Raw Milk from Bovine Animals, Raw Animal Materials / Wool, Sugar Crops, Eggs, Poultry,
Ores/Minerals, Elec, Gas & Water				Electrical Energy, Coal not Agglomerated, Salt & Pure Sodium Chloride, Natural Gas Liquified,
Food, Beverages, Tobacco, Textile, Apparel and Leather Product	Vegetable Ghee, Nylon Yarn, Cotton Yarn, Blended Yarn,		Vegetable Oils Refined, Other Leather N.E.C, Footwear, Blankets, Other Cereal Flour,	Towels, Synthetic Carpets, Hosiery Products, Sugar Confectionary, Bed Sheets, Oil Cakes, Woolen Carpets, Ice Cream, Other Fabrics, Readymade Garments, Meat of Animals, Quilts, Chocolate,
Other Transportable Goods except Metal Products, Machinery and Equipments			Kerosene Oil,	Diesel Oil, Chemicals, Mobil Oil, Bricks, Blocks & Tiles, Timber, Cement, Pesticides, Fertilizers, Bed Foam, Motor Spirit, Ceramics & Sanitary Fixture, Medicines, Other Glass Articles,
Metal Product, Machinery & Equipment	Vacuum Pumps,			Lighting Equipments, Concrete Mixture, Motor Vehicles, Engines & Motors, Steel Bar & Sheets, Lathe Machines, Bicycles, Motorcycles, Electric Wires, Chuff Cutter, Fridge, WashM, SewM, Fans, Iron, Tractors, Pipe Fittings,

**Table A23: International Commodity Prices/Indices**

Items	Jun-23	Nov-22	Oct-23	Nov-23
<b>Energy</b>				
Crude Oil (US\$ per barrel)	73.3	87.4	89.1	81.4
WB Energy Index (2010 = 100)	95.2	139.4	115.7	106.2
<b>Food</b>				
Rice (\$/MT)	514.0	440.0	590.0	598.0
Wheat (\$/MT)	345.5	422.7	298.1	283.6
Sugar (US cent/ pound)^	0.5	0.4	0.6	0.6
Palm Oil (\$/MT)	817.0	945.7	804.3	830.5
Soybean Oil (\$/MT)	1,007.1	1,651.6	1,133.9	1,118.4
<b>Non-Food Non-Energy</b>				
Cotton Outlook 'A' Index (\$/KG) #	2.0	2.2	2.1	2.0
Metal Price Index (2010 = 100)	106.7	109.5	102.4	103.8
Copper (\$/MT)	8,396.5	8,049.9	7,937.2	8,189.6
Aluminum (\$/MT)	2,184.8	2,350.7	2,192.2	2,202.3
Iron Ore (\$ cents/dry MT)	113.5	93.3	119.0	131.1
Tin (\$/MT)	27,216.7	21,249.5	24,536.1	24,167.9
Nickle (\$/MT)	21,233.3	25,562.7	18,281.2	17,027.4
Zinc (\$/MT)	2,375.5	2,938.9	2,448.6	2,543.6
Lead (\$/MT)	2,122.9	2,100.0	2,133.7	2,188.5
Uranium (\$/MT)	56.1	49.9	74.4	81.3
DAP (\$/MT)	454.6	665.6	534.8	535.6
Urea (\$/MT)	287.5	588.8	411.4	385.5

Source: World Bank for all variables / indices except Uranium which is taken from Cameco (World Largest Uranium Producer)

\$/MT = US\$ per metric tonne.

\* Crude Oil (Petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai fateh

# Middling 1-3/32 inch staple, Liverpool Index "A", average of the cheapest Cts/lb five of fourteen styles, CIF Liverpool (Cotton Outlook, Liverpool). From January 1968 to May 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16.2/

DAP: Diammonium Phosphate

**Table A24: National CPI Data Series - Original and Seasonally Adjusted**

<b>Original Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	123.86	135.38	146.76	183.34	235.23
Aug	125.89	136.23	147.61	187.84	239.27
Sep	126.86	138.32	150.74	185.68	244.05
Oct	129.16	140.67	153.61	194.42	246.50
Nov	130.90	141.83	158.18	195.89	253.15
Dec	130.45	140.86	158.16	196.86	
Jan	133.04	140.56	158.78	202.53	
Feb	131.64	143.09	160.61	211.28	
Mar	131.69	143.61	161.88	219.14	
Apr	130.59	145.09	164.50	224.41	
May	131.01	145.24	165.23	227.96	
Jun	132.08	144.82	175.71	227.37	
<b>Seasonally Adjusted Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	123.58	135.13	146.52	183.12	235.01
Aug	125.71	136.05	147.43	187.60	238.97
Sep	126.31	137.70	150.03	184.77	242.78
Oct	128.01	139.41	152.23	192.68	244.29
Nov	129.77	140.61	156.86	194.28	251.12
Dec	130.59	141.05	158.41	197.24	
Jan	133.79	141.45	159.87	204.02	
Feb	132.21	143.61	161.10	211.80	
Mar	132.14	144.00	162.23	219.50	
Apr	130.47	144.90	164.22	223.95	
May	131.64	145.92	165.96	228.95	
Jun	133.02	145.97	177.20	229.42	

**Table A25: Urban CPI Data Series - Original and Seasonally Adjusted**

Month	Original Series				
	FY20	FY21	FY22	FY23	FY24
Jul	124.95	134.73	146.41	180.95	228.47
Aug	126.77	135.82	147.12	185.72	232.12
Sep	127.72	137.53	150.08	181.90	235.99
Oct	129.75	139.27	152.59	190.08	238.51
Nov	131.05	140.16	156.96	190.80	248.87
Dec	130.57	139.67	157.46	191.46	
Jan	132.77	139.45	157.56	195.97	
Feb	131.32	142.61	159.03	204.87	
Mar	131.49	142.99	160.07	212.85	
Apr	130.60	144.91	162.63	217.11	
May	130.99	145.19	163.13	220.37	
Jun	131.89	144.55	173.23	220.59	
Seasonally Adjusted Series					
Jul	124.47	134.25	145.89	180.37	227.74
Aug	126.37	135.39	146.65	185.09	231.31
Sep	127.18	136.91	149.36	180.98	234.72
Oct	128.81	138.27	151.50	188.73	236.82
Nov	130.18	139.24	155.96	189.61	247.36
Dec	130.92	140.07	157.93	192.08	
Jan	133.66	140.49	158.85	197.71	
Feb	131.91	143.16	159.56	205.44	
Mar	132.06	143.50	160.56	213.41	
Apr	130.36	144.61	162.25	216.54	
May	131.39	145.62	163.59	220.98	
Jun	132.67	145.52	174.50	222.31	

**Table A26: Rural CPI Data Series - Original and Seasonally Adjusted**

<b>Month</b>	<b>Original Series</b>				
	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	122.22	136.36	147.28	186.94	245.44
Aug	124.56	136.84	148.34	191.04	250.06
Sep	125.55	139.51	151.74	191.38	256.21
Oct	128.28	142.79	155.15	200.96	258.57
Nov	130.67	144.34	160.03	203.57	259.61
Dec	130.28	142.65	159.21	205.00	
Jan	133.44	142.23	160.62	212.43	
Feb	132.13	143.82	162.99	220.95	
Mar	132.00	144.55	164.62	228.63	
Apr	130.58	145.37	167.31	235.43	
May	131.03	145.32	168.39	239.42	
Jun	132.36	145.24	179.45	237.61	
<b>Seasonally Adjusted Series</b>					
	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	122.24	136.47	147.46	187.27	245.99
Aug	124.71	137.05	148.61	191.39	250.51
Sep	125.01	138.90	151.06	190.49	254.95
Oct	126.80	141.12	153.34	198.63	255.56
Nov	129.15	142.69	158.23	201.32	256.79
Dec	130.10	142.52	159.14	205.02	
Jan	133.99	142.89	161.42	213.56	
Feb	132.66	144.29	163.42	221.41	
Mar	132.27	144.75	164.75	228.70	
Apr	130.62	145.34	167.20	235.14	
May	132.03	146.37	169.54	240.99	
Jun	133.55	146.65	181.29	240.16	

**Table A27: National CPI Monthly & Average Seasonal Factors**

<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>	<b>Average</b>
Jul	100.22	100.18	100.17	100.13	100.09	100.16
Aug	100.15	100.13	100.12	100.13	100.13	100.13
Sep	100.43	100.45	100.47	100.49	100.52	100.47
Oct	100.90	100.90	100.90	100.90	100.90	100.90
Nov	100.87	100.86	100.84	100.83	100.81	100.84
Dec	99.89	99.87	99.84	99.81		99.85
Jan	99.44	99.37	99.32	99.27		99.35
Feb	99.57	99.64	99.70	99.75		99.66
Mar	99.66	99.73	99.78	99.83		99.75
Apr	100.10	100.13	100.17	100.21		100.15
May	99.52	99.53	99.56	99.57		99.55
Jun	99.29	99.21	99.16	99.10		99.19

**Table A28: Urban CPI Monthly & Average Seasonal Factors**

<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>	<b>Average</b>
Jul	100.39	100.36	100.35	100.34	100.32	100.35
Aug	100.32	100.32	100.32	100.34	100.35	100.33
Sep	100.43	100.46	100.48	100.51	100.54	100.48
Oct	100.73	100.72	100.72	100.71	100.71	100.72
Nov	100.67	100.66	100.64	100.63		100.65
Dec	99.73	99.72	99.70	99.68		99.71
Jan	99.34	99.26	99.19	99.12		99.23
Feb	99.55	99.62	99.67	99.72		99.64
Mar	99.57	99.64	99.69	99.74		99.66
Apr	100.18	100.21	100.23	100.26		100.22
May	99.70	99.70	99.72	99.73		99.71
Jun	99.41	99.33	99.27	99.23		99.31

**Table A29: Rural CPI Monthly & Average Seasonal Factors**

<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>	<b>Average</b>
Jul	99.98	99.92	99.88	99.82	99.78	99.88
Aug	99.88	99.84	99.82	99.82	99.82	99.84
Sep	100.43	100.44	100.45	100.47	100.49	100.46
Oct	101.17	101.18	101.18	101.17	101.18	101.18
Nov	101.18	101.16	101.14	101.12	101.10	101.14
Dec	100.14	100.09	100.04	99.99		100.06
Jan	99.58	99.54	99.51	99.47		99.52
Feb	99.60	99.67	99.74	99.79		99.70
Mar	99.80	99.86	99.92	99.97		99.89
Apr	99.97	100.02	100.07	100.13		100.04
May	99.24	99.28	99.32	99.35		99.30
Jun	99.11	99.04	98.99	98.94		99.02

**Table A30: National CPI MoM - Original and Seasonally Adjusted**

<b>Original Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	1.83	2.50	1.34	4.34	3.46
Aug	1.64	0.63	0.58	2.45	1.72
Sep	0.77	1.53	2.12	-1.15	2.00
Oct	1.81	1.70	1.90	4.71	1.00
Nov	1.35	0.82	2.98	0.76	2.70
Dec	-0.34	-0.68	-0.01	0.50	
Jan	1.99	-0.21	0.39	2.88	
Feb	-1.05	1.80	1.15	4.32	
Mar	0.04	0.36	0.79	3.72	
Apr	-0.84	1.03	1.62	2.40	
May	0.32	0.10	0.44	1.58	
Jun	0.82	-0.29	6.34	-0.26	
<b>Seasonally Adjusted Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	0.95	1.58	0.38	3.34	2.44
Aug	1.72	0.68	0.62	2.45	1.68
Sep	0.48	1.21	1.77	-1.51	1.60
Oct	1.34	1.24	1.47	4.28	0.62
Nov	1.37	0.87	3.04	0.83	2.80
Dec	0.64	0.31	0.99	1.52	
Jan	2.45	0.28	0.92	3.44	
Feb	-1.18	1.53	0.77	3.81	
Mar	-0.05	0.27	0.70	3.64	
Apr	-1.27	0.63	1.23	2.03	
May	0.90	0.70	1.06	2.23	
Jun	1.05	0.03	6.77	0.21	

**Table A31: Urban CPI MoM - Original and Seasonally Adjusted**

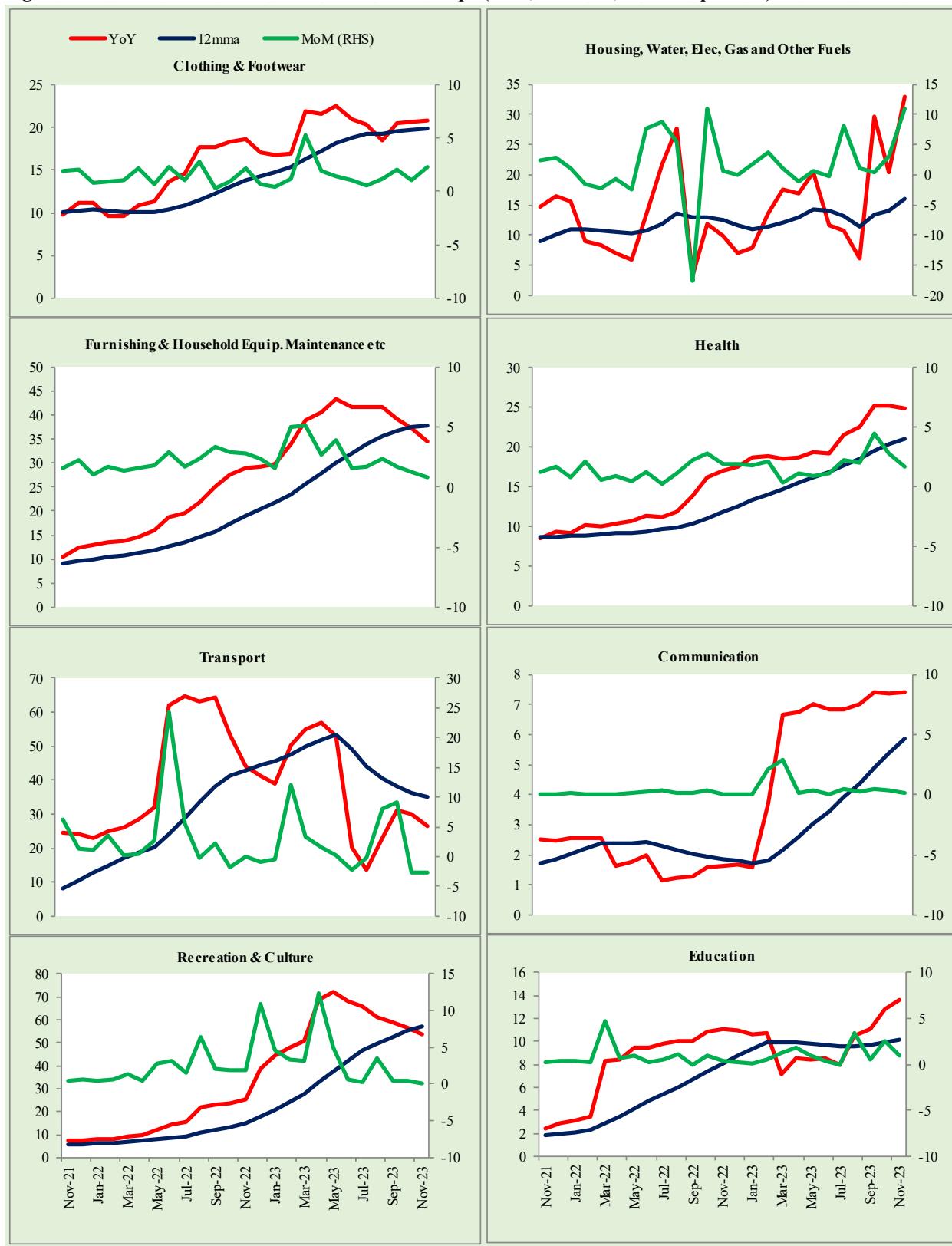
<b>Original Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	1.98	2.15	1.29	4.46	3.57
Aug	1.46	0.81	0.48	2.64	1.60
Sep	0.75	1.26	2.01	-2.06	1.67
Oct	1.59	1.27	1.67	4.50	1.07
Nov	1.00	0.64	2.86	0.38	4.34
Dec	-0.37	-0.35	0.32	0.35	
Jan	1.68	-0.16	0.06	2.36	
Feb	-1.09	2.27	0.93	4.54	
Mar	0.13	0.27	0.65	3.90	
Apr	-0.68	1.34	1.60	2.00	
May	0.30	0.19	0.31	1.50	
Jun	0.69	-0.44	6.19	0.10	
<b>Seasonally Adjusted Series</b>					
<b>Month</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	1.05	1.18	0.26	3.36	2.44
Aug	1.53	0.85	0.52	2.62	1.57
Sep	0.64	1.12	1.85	-2.22	1.47
Oct	1.29	1.00	1.43	4.28	0.90
Nov	1.06	0.70	2.94	0.47	4.45
Dec	0.57	0.59	1.27	1.30	
Jan	2.09	0.30	0.58	2.93	
Feb	-1.31	1.90	0.45	3.91	
Mar	0.11	0.24	0.63	3.88	
Apr	-1.29	0.77	1.05	1.46	
May	0.79	0.70	0.82	2.05	
Jun	0.98	-0.07	6.67	0.60	

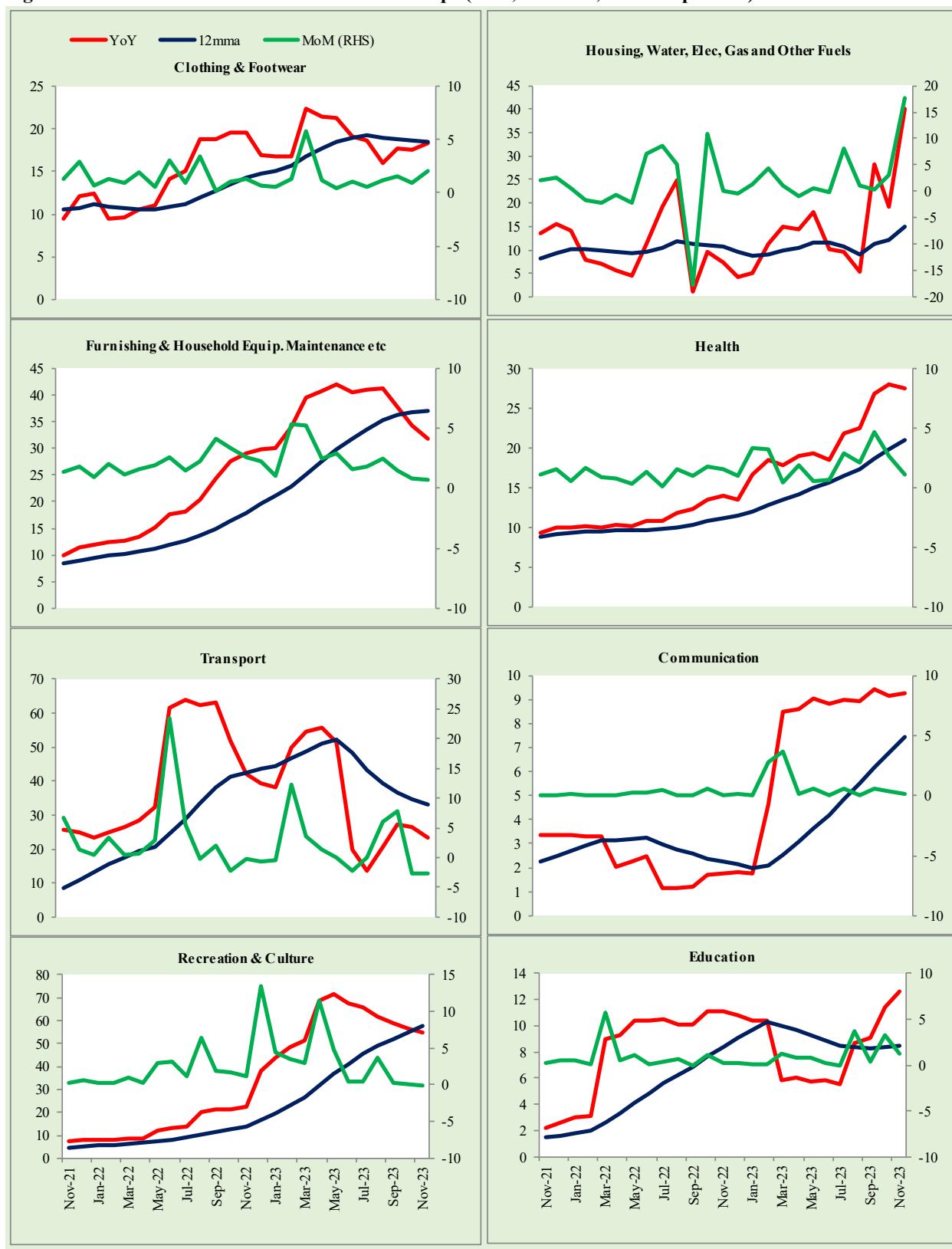
**Table A32: Rural CPI MoM - Original and Seasonally Adjusted**

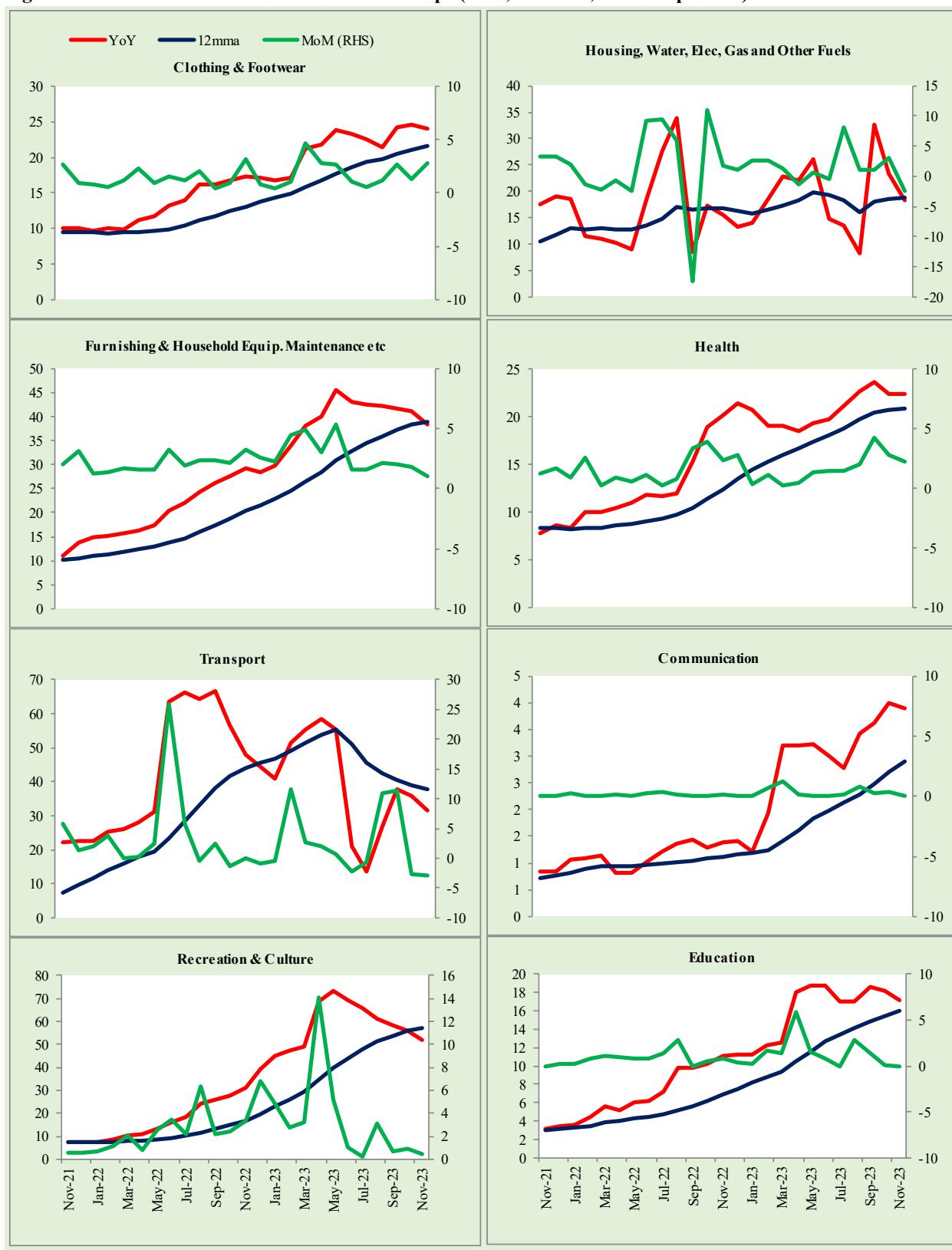
<b>Month</b>	<b>Original Series</b>				
	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	1.60	3.02	1.40	4.17	3.30
Aug	1.91	0.35	0.72	2.19	1.88
Sep	0.79	1.95	2.29	0.18	2.46
Oct	2.17	2.35	2.25	5.01	0.92
Nov	1.86	1.09	3.15	1.30	0.40
Dec	-0.30	-1.17	-0.51	0.70	
Jan	2.43	-0.29	0.89	3.62	
Feb	-0.98	1.12	1.48	4.01	
Mar	-0.10	0.51	1.00	3.48	
Apr	-1.08	0.57	1.63	2.97	
May	0.34	-0.03	0.65	1.69	
Jun	1.02	-0.06	6.57	-0.76	
	<b>Seasonally Adjusted Series</b>				
	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24</b>
Jul	0.78	2.19	0.55	3.30	2.43
Aug	2.01	0.43	0.78	2.20	1.84
Sep	0.24	1.35	1.65	-0.47	1.77
Oct	1.43	1.60	1.51	4.28	0.24
Nov	1.86	1.11	3.19	1.35	0.48
Dec	0.74	-0.11	0.58	1.84	
Jan	2.99	0.25	1.43	4.16	
Feb	-0.99	0.98	1.24	3.67	
Mar	-0.30	0.32	0.82	3.29	
Apr	-1.25	0.41	1.48	2.81	
May	1.08	0.71	1.40	2.49	
Jun	1.15	0.19	6.93	-0.34	

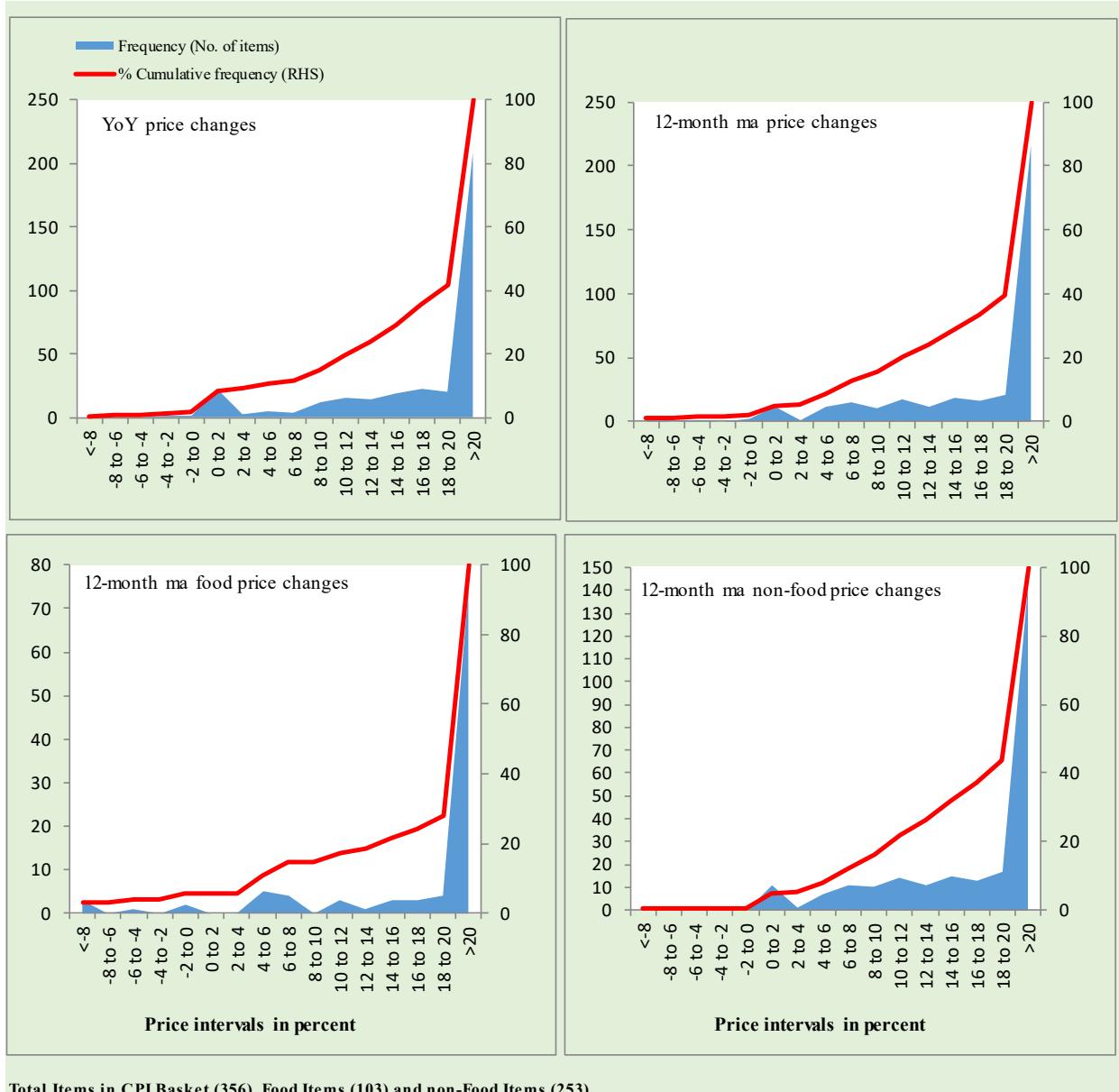
## Figures

**Figure A1: National CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)**

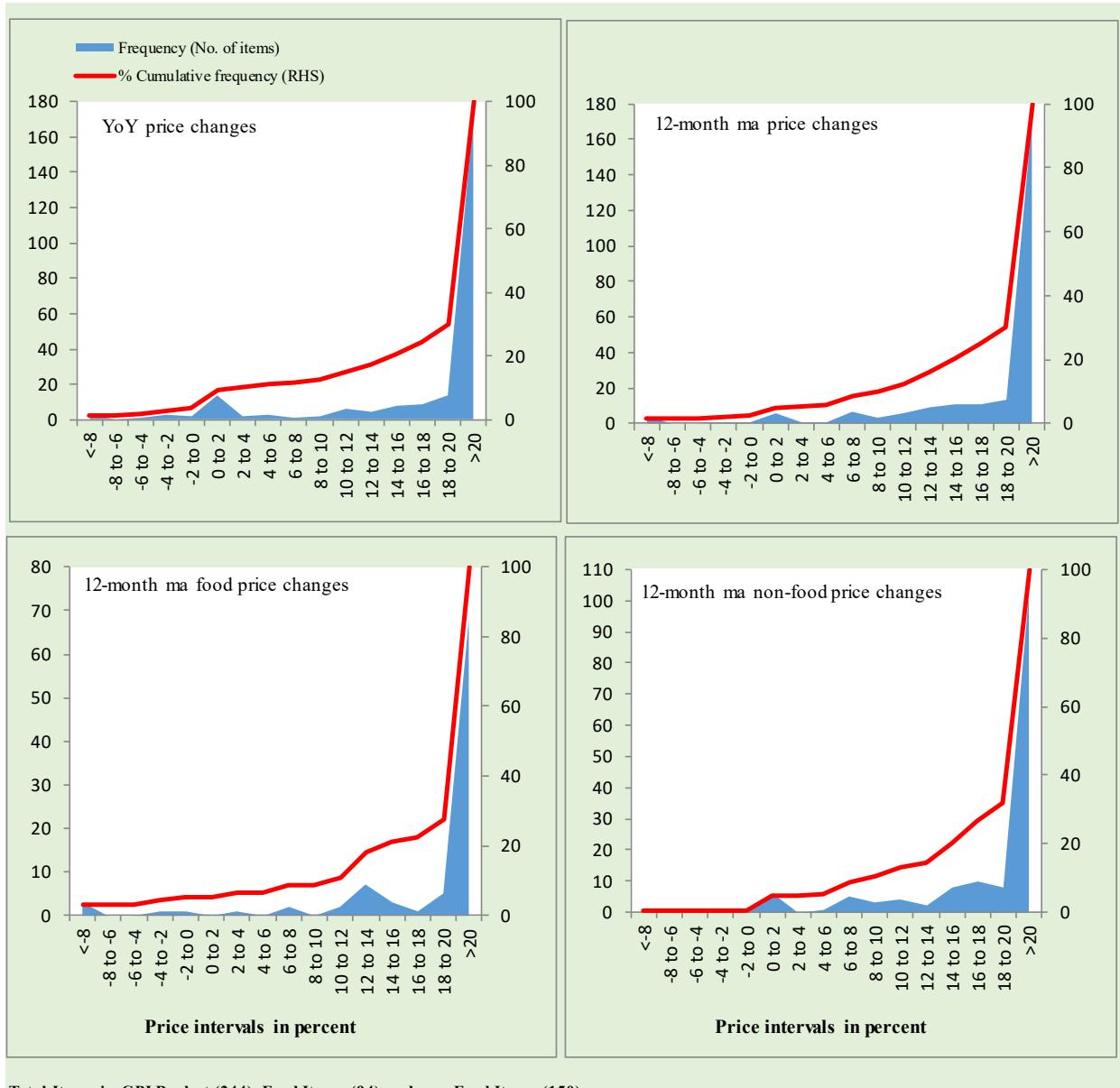


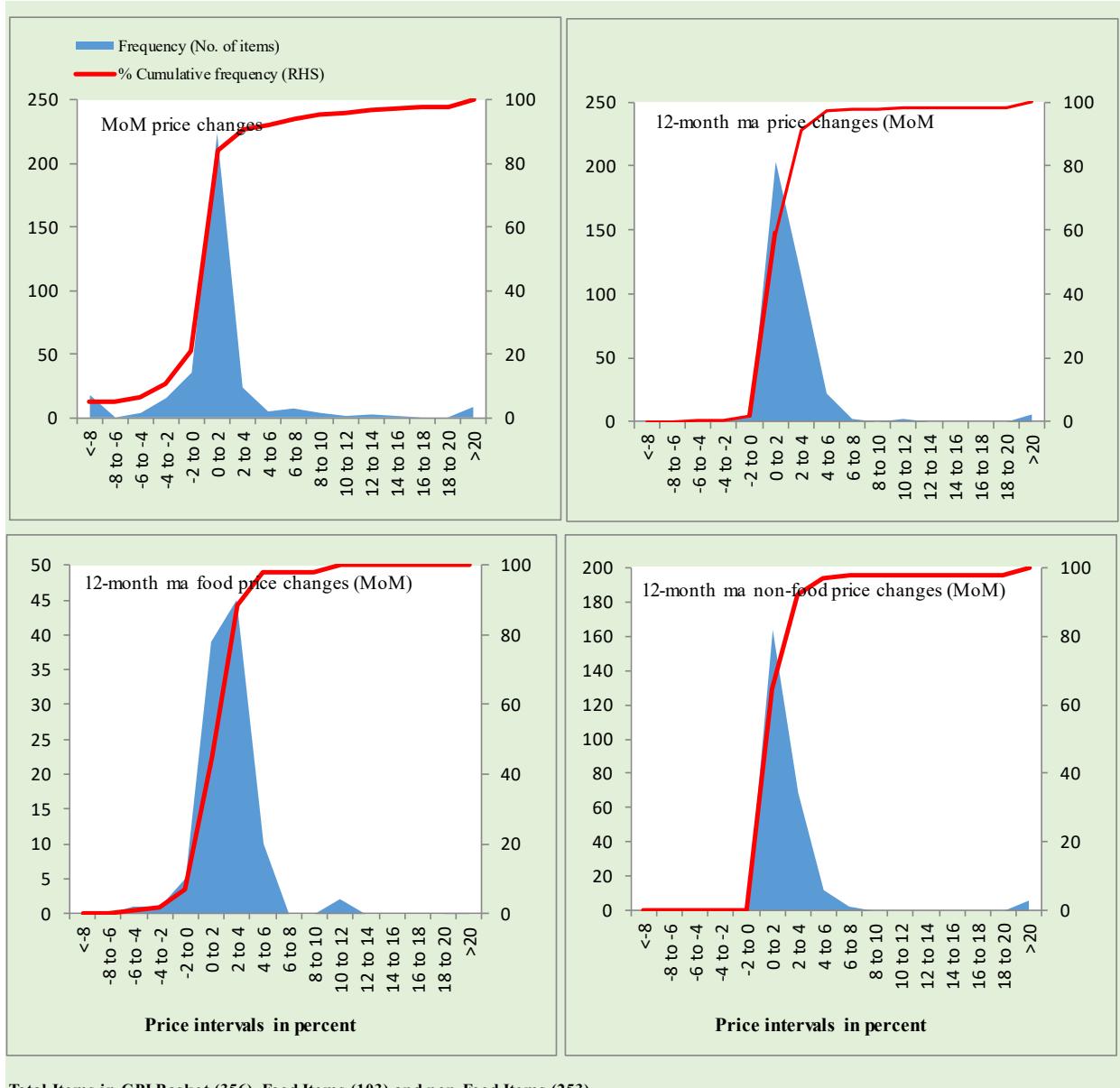
**Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)**

**Figure A3: Rural CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)**

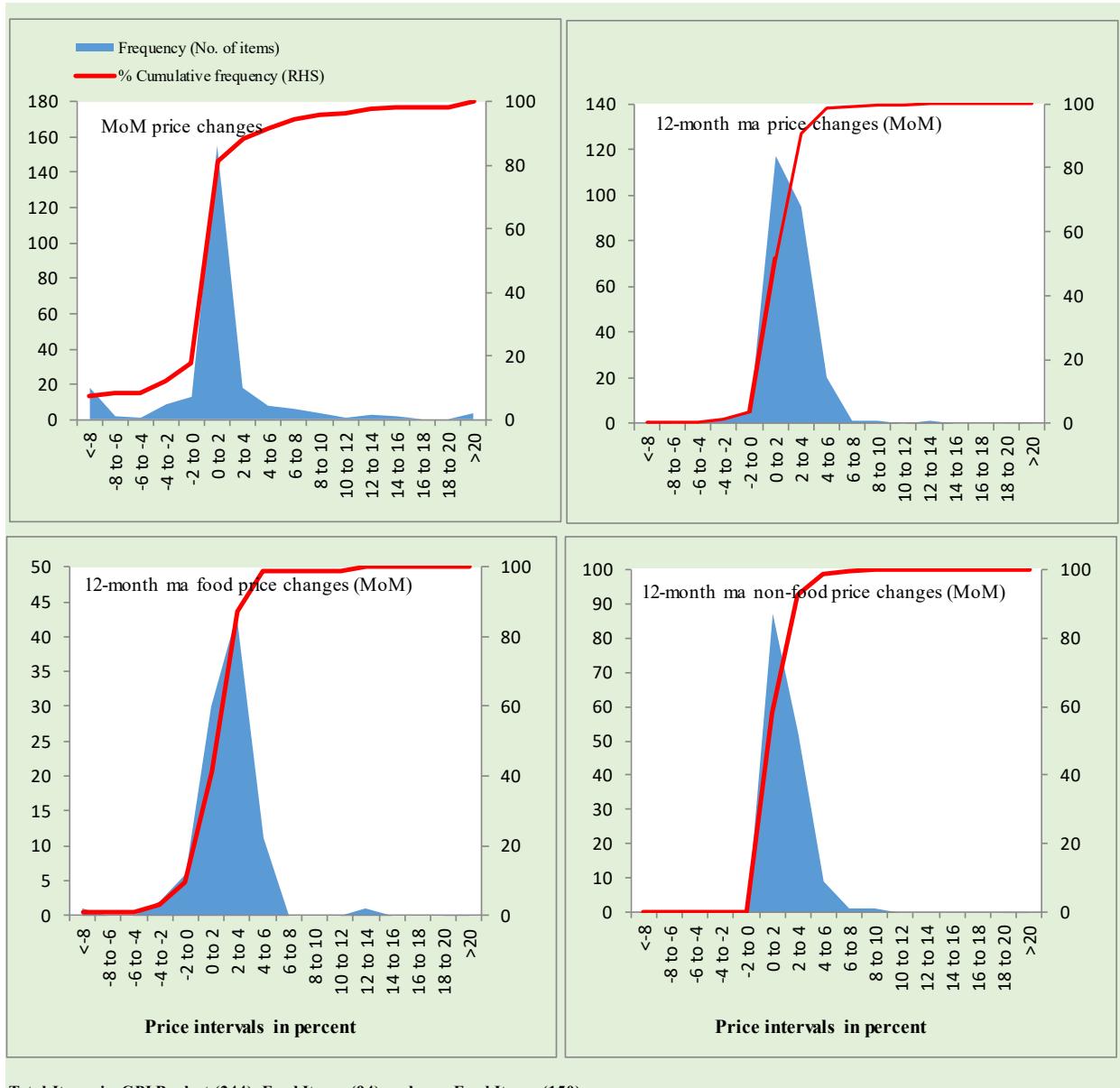
**Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY)**

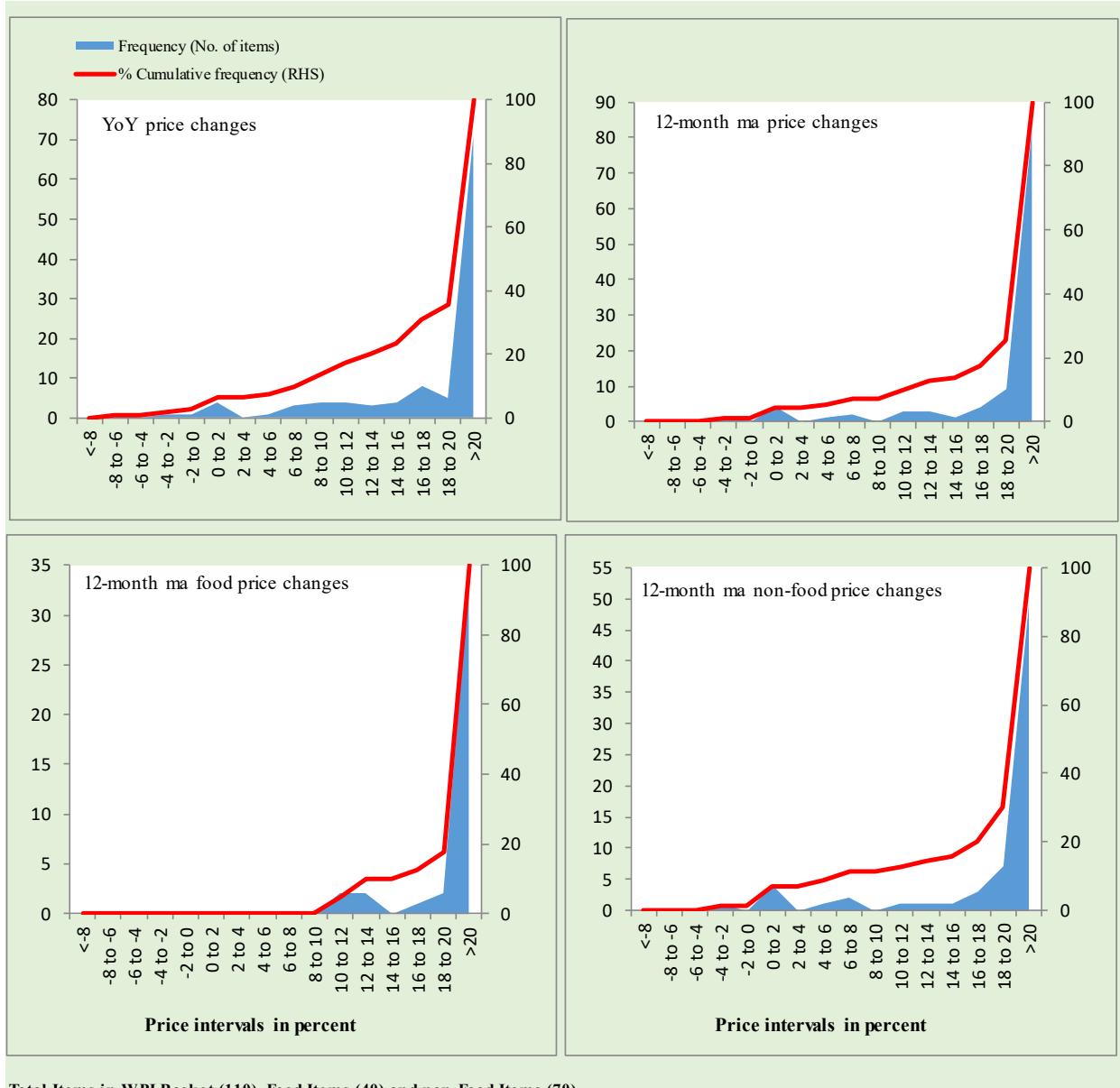
**Figure A5: Frequency Distribution of Price Changes of Rural CPI Items (YoY)**



**Figure A6: Frequency Distribution of Price Changes of Urban CPI Items (MoM)**

**Figure A7: Frequency Distribution of Price Changes of Rural CPI Items (MoM)**



**Figure A8: Frequency Distribution of Price Changes of WPI Commodities (YoY)**

## Technical Notes

1. All the three measures of inflation, viz. CPI (National, Urban and Rural), 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 2015-16.
3. CPI baskets for urban and rural areas contains 356 and 244 consumers' items respectively; WPI basket contains 419 items; SPI contains 51 items.
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 December 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 December 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 i.e. NFNE inflation and trimmed inflation:

- 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 indices 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

## Methodology for Estimating Inflation Diffusion Index for Pakistan

We constructed an index to measure the spread of inflation in the 356 and 244 items of CPI urban and rural baskets respectively. It is based on month-on-month (MoM) change in the prices of these items and can be obtained by estimating what is known as an ‘inflation diffusion index’ (IDI) as below:

$$IDI = \frac{\text{No. of items with positive MoM change in price} - \text{No. of items with negative MoM change in price}}{\text{No. of items for which prices are reported}} * 100$$

Thus, it is the difference between the share of items with increasing prices (i.e. depicting inflation) and the share of items with falling prices (i.e. depicting deflation) in CPI amongst the items for which prices have altered or remained constant.

## List of Abbreviations

Abbreviation	Stands for
ARIMA	Autoregressive Integrated Moving Average
CIF	Cost, Insurance, and Freight
CNG	Compressed Natural Gas
CPI	Consumer Price Index
DAP	Diammonium Phosphate
FY	Fiscal year
HRI	House Rent Index
IDI	Inflation Diffusion Index
ISSN	International Standard Serial Number
KG	Kilogram
MT	Metric Tonne
NFNE	Non-food, Non-energy
PBS	Pakistan Bureau of Statistics
SPI	Sensitive Price Indicator
WPI	Wholesale Price Index
12MMA	12 Month Moving Average