

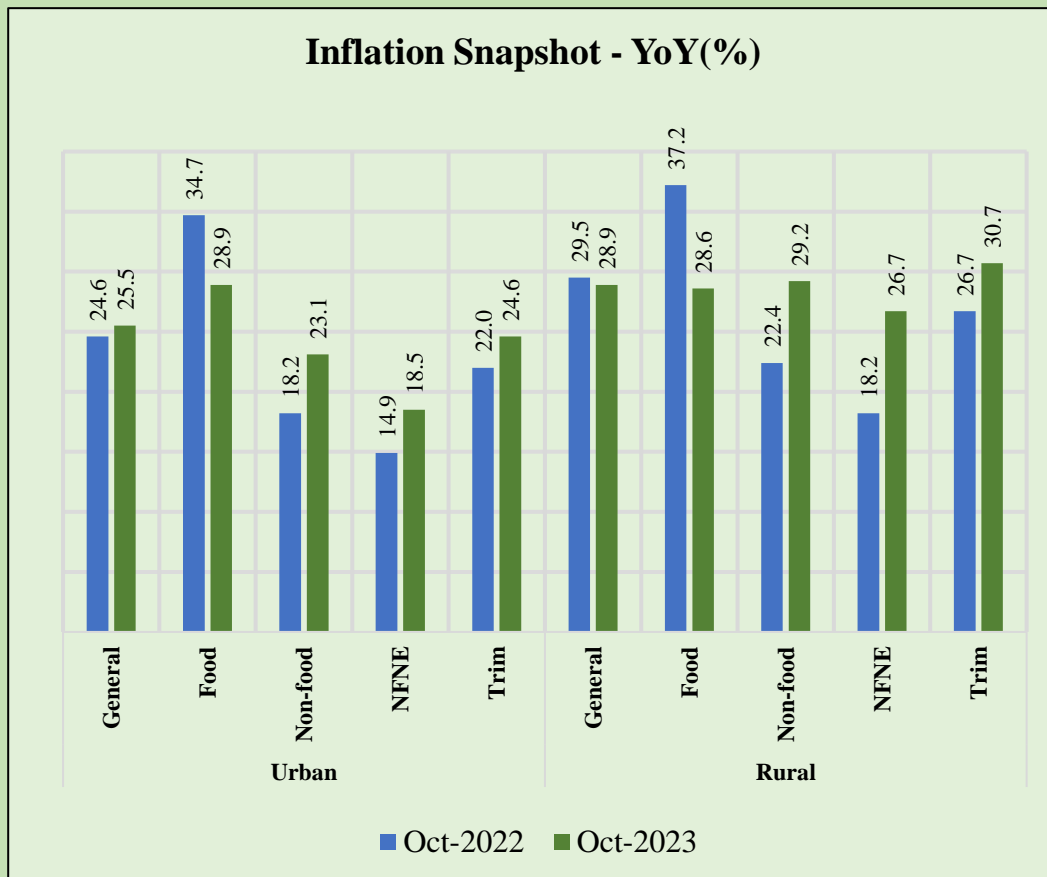


State Bank of Pakistan

بینک دولت پاکستان

# Inflation Monitor

October 2023



Data Services and Innovations Department



State Bank of Pakistan



State Bank of Pakistan



State Bank of Pakistan

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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, IMF and World Bank websites for global inflation analysis

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## 1. Inflation in Brief

Key developments are presented in the table below:

Inflation	YoY			MoM		
	Oct-23	Sep-23	Oct-22	Oct-23	Sep-23	Oct-22
CPI Inflation						
National	26.9	31.4	26.6	1.1	2.0	4.7
Urban	25.5	29.7	24.6	1.1	1.7	4.5
Rural	28.9	33.9	29.5	1.1	2.5	5.0
Core Inflation						
Urban Core (NFNE)	18.5	18.6	14.9	1.2	1.0	1.3
Rural Core (NFNE)	26.7	27.3	18.2	1.0	2.6	1.5
Urban Core Trimmed	24.6	25.0	22.0	0.6	1.1	1.9
Rural Core Trimmed	30.7	33.3	26.7	0.8	1.7	2.7
WPI Inflation	24.6	26.4	32.6	-1.9	3.1	-0.5
SPI Inflation	35.4	32.4	28.6	-0.3	2.2	-2.4

- I. National CPI Inflation (YoY) decreased to 26.9 percent in October 2023 from 31.4 percent in previous month. It was recorded at 26.6 percent in the corresponding month of last year. On MoM basis, it decreased to 1.1 percent in October 2023 from 2.0 percent in previous month. An inflation of 4.7 percent was recorded during the corresponding month of last year.
- II. Urban CPI Inflation (YoY) decreased to 25.5 percent in October 2023 from 29.7 percent in previous month. It stood at 24.6 percent during the corresponding month of last year. On MoM basis, it decreased to 1.1 percent in October 2023 from 1.7 percent in previous month. An inflation of 4.5 percent was recorded during the corresponding month of last year. Seasonally adjusted Urban CPI (MoM) showed an inflation of 0.9 percent in October 2023 compared to 1.5 percent in previous month (**Table A31**).
- III. Rural CPI Inflation (YoY) decreased to 28.9 percent in October 2023 from 33.9 percent in previous month. It was recorded at 29.5 percent during the corresponding month of last year. On MoM basis, it decreased to 1.1 percent in October 2023 from 2.5 percent in previous month. It stood at 5.0 percent during the corresponding month of last year. Seasonally adjusted Rural CPI (MoM) showed an inflation of 0.6 percent in October 2023 as compared to 1.7 percent in previous month (**Table A32**).
- IV. Urban Core (NFNE) Inflation (YoY) decreased to 18.5 percent in October 2023 from 18.6 percent in previous month. It stood at 14.9 percent during the corresponding month of last year. On MoM basis, it increased to 1.2 percent in October 2023 from 1.0 percent in previous month. It stood at 1.3 percent during the corresponding month of last year.
- V. Rural Core (NFNE) Inflation (YoY) decreased to 26.7 percent in October 2023 from 27.3 percent in previous month. It stood at 18.2 percent during the corresponding month of last year. On MoM basis, it decreased to 1.0 percent in October 2023 from 2.6 percent in previous month. It was recorded at 1.5 percent during the corresponding month of last year.
- VI. Urban Core (trimmed) Inflation (YoY) decreased to 24.6 percent in October 2023 from 25.0 percent in previous month. It stood at 22.0 percent during the corresponding month of last year. On MoM


basis, it decreased to 0.6 percent in October 2023 from 1.1 percent in previous month. It stood at 1.9 percent during the corresponding month of last year.

- VII. Rural Core (trimmed) Inflation (YoY) decreased to 30.7 percent in October 2023 from 33.3 percent in previous month. It was recorded at 26.7 percent during the corresponding month of last year. On MoM basis, it decreased to 0.8 percent in October 2023 from 1.7 percent in previous month. It stood at 2.7 percent during the corresponding month of last year.
- VIII. WPI Inflation (YoY) decreased to 24.6 percent in October 2023 from 26.4 percent in previous month. It stood at 32.6 percent during the corresponding month of last year. On MoM basis, a deflation of 1.9 percent was observed in October 2023 compared to an inflation of 3.1 percent in previous month. A deflation of 0.5 percent was recorded during the corresponding month of last year.
- IX. SPI (combined) Inflation (YoY) increased to 35.4 percent in October 2023 from 32.4 percent in previous month. It stood at 28.6 percent during the corresponding month of last year. On MoM basis, a deflation of 0.3 percent was observed in October 2023 compared to an inflation of 2.2 percent in previous month. A deflation of 2.4 percent was recorded during the corresponding month of last year.


## 2. CPI Inflation Heat Maps

Heat map is a data visualization technique that represents the magnitude of individual values against benchmark values. A heat map for National, Urban and Rural CPI inflation (YoY and MoM) and their important sub-indices for the last thirteen months is presented here. The observed inflation is compared with inflation target of 21.0 percent for FY24<sup>1</sup>.


National, Urban and Rural CPI Inflation (YoY)														
		Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
Headline	National	26.6	23.8	24.5	27.6	31.5	35.4	36.4	38.0	29.4	28.3	27.4	31.4	26.9
	Urban	24.6	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3	26.3	25.0	29.7	25.5
	Rural	29.5	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.9
Food	Urban	34.7	29.7	32.7	39.0	41.9	47.1	46.8	48.1	40.8	40.2	38.8	33.9	28.9
	Rural	37.2	33.5	37.9	45.2	47.0	50.2	52.2	52.4	41.5	41.3	40.6	35.4	28.6
Core	Urban	14.9	14.6	14.7	15.4	17.1	18.6	19.5	20.0	18.5	18.4	18.4	18.6	18.5
	Rural	18.2	18.5	19.0	19.4	21.5	23.1	24.9	26.9	25.2	24.6	25.9	27.3	26.7

Key 

National, Urban and Rural CPI Inflation (MoM)														
		Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
Headline	National	4.7	0.8	0.5	2.9	4.3	3.7	2.4	1.6	-0.3	3.5	1.7	2.0	1.1
	Urban	4.5	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1	3.6	1.6	1.7	1.1
	Rural	5.0	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8	3.3	1.9	2.5	1.1
Food	Urban	4.6	0.0	0.0	3.9	4.3	5.6	3.4	1.9	0.1	3.7	0.6	1.5	0.6
	Rural	6.1	0.5	0.1	5.7	3.9	4.5	4.2	1.4	-1.6	3.5	0.8	1.8	0.7
Core	Urban	1.3	0.8	1.2	1.4	2.2	2.5	1.8	1.2	0.7	1.2	1.8	1.0	1.2
	Rural	1.5	2.1	1.5	1.5	2.6	2.4	2.7	2.5	0.9	1.2	2.8	2.6	1.0

Key 

National CPI Inflation (YoY)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	26.6	23.8	24.5	27.6	31.5	35.4	36.4	38.0	29.4	28.3	27.4	31.4	26.9
Food and Non-Alcoholic Beverages	34.58	36.2	31.2	35.5	42.9	45.1	47.2	48.1	48.7	39.5	39.5	38.5	33.1	26.8
Alcoholic Beverages, Tobacco	1.02	34.6	35.9	36.2	36.3	49.2	140.0	133.5	124.0	109.5	102.1	97.5	87.5	84.6
Clothing and Footwear	8.60	18.3	18.6	17.1	16.8	17.0	21.9	21.6	22.5	21.0	20.4	18.5	20.6	20.6
Housing, Water, Elec., Gas and Other Fuels	23.63	11.9	9.9	7.0	7.8	13.6	17.5	16.9	20.5	11.6	10.8	6.3	29.7	20.5
Furnishing and Household Equipment Maintenance	4.10	27.6	29.1	29.2	29.9	34.0	39.0	40.5	43.5	41.6	41.7	41.7	39.3	37.1
Health	2.79	16.2	17.1	17.5	18.7	18.8	18.5	18.8	19.3	19.1	21.5	22.6	25.3	25.2
Transport	5.91	53.4	44.2	41.2	39.1	50.5	54.9	56.8	52.9	20.3	13.6	23.0	31.3	31.3
Communication	2.21	1.6	1.6	1.7	1.6	3.7	6.6	6.7	7.0	6.8	6.8	7.0	7.4	7.4
Recreation and Culture	1.59	23.7	25.6	38.5	44.2	48.1	50.6	68.6	72.2	68.0	65.9	61.4	58.8	56.3
Education	3.79	10.9	11.1	10.9	10.6	10.8	7.2	8.5	8.4	8.6	8.0	10.5	11.1	12.8
Restaurants and Hotels	6.92	30.4	28.4	27.4	30.1	34.5	38.5	39.0	42.3	36.4	34.7	34.1	34.3	33.1
Misc. Goods and Services	4.87	22.4	23.0	25.8	28.7	33.3	34.4	38.8	43.3	40.1	39.3	40.8	36.4	35.2

Key 

<sup>1</sup> As per Annual Plan 2023-24 published by Planning Commission of Pakistan



Urban CPI Inflation (YoY)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	24.6	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3	26.3	25.0	29.7	25.5
Food and Non-Alcoholic Beverages	30.42	34.8	28.9	32.6	39.5	42.1	45.5	45.1	45.8	38.6	38.7	37.2	32.2	27.0
Alcoholic Beverages, Tobacco	0.85	35.4	37.2	37.3	37.3	54.9	140.8	133.7	124.5	107.6	102.6	96.5	84.8	82.7
Clothing and Footwear	8.01	19.5	19.6	17.0	16.8	16.8	22.4	21.5	21.3	19.1	18.6	16.0	17.6	17.5
Housing, Water, Elec., Gas and Other Fuels	27.03	9.5	7.3	4.1	5.0	11.2	15.0	14.5	18.0	10.2	9.6	5.3	28.3	19.2
Furnishing and Household Equipment Maintenance	4.09	27.6	29.0	29.7	30.0	34.1	39.6	40.8	42.1	40.6	41.1	41.4	37.7	34.4
Health	2.31	13.6	14.1	13.5	16.7	18.5	17.9	19.1	19.4	18.5	21.9	22.5	26.9	28.1
Transport	6.14	51.7	42.1	39.2	38.0	49.9	54.6	55.9	51.4	20.0	13.6	20.7	27.4	26.6
Communication	2.35	1.7	1.8	1.8	1.8	4.6	8.5	8.6	9.0	8.8	9.0	8.9	9.4	9.2
Recreation and Culture	1.73	21.4	22.3	38.0	43.6	48.4	51.4	68.5	71.6	67.3	65.8	61.7	58.9	56.5
Education	4.88	11.1	11.1	10.8	10.4	10.4	5.8	6.0	5.7	5.9	5.6	8.7	9.1	11.4
Restaurants and Hotels	7.41	31.8	29.5	28.6	32.4	35.2	39.8	40.4	46.1	38.8	35.8	35.4	34.2	32.5
Misc. Goods and Services	4.77	23.7	23.8	25.9	28.8	33.3	34.3	39.1	43.0	39.5	39.1	39.3	34.7	32.7

Rural CPI Inflation (YoY)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	29.5	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.9
Food and Non-Alcoholic Beverages	40.87	37.9	33.7	38.7	46.8	48.3	49.0	51.4	51.9	40.4	40.5	39.9	34.1	26.6
Alcoholic Beverages, Tobacco	1.28	33.7	34.4	35.0	35.2	42.7	139.1	133.3	123.3	111.8	101.5	98.6	90.5	86.9
Clothing and Footwear	9.48	16.8	17.4	17.2	16.7	17.2	21.3	21.8	23.9	23.3	22.5	21.5	24.2	24.6
Housing, Water, Elec., Gas and Other Fuels	18.49	17.3	15.6	13.2	14.0	18.6	22.9	22.2	26.0	14.8	13.5	8.3	32.7	23.3
Furnishing and Household Equipment Maintenance	4.10	27.7	29.2	28.6	29.8	33.9	38.1	40.2	45.5	43.1	42.6	42.2	41.7	41.2
Health	3.51	18.9	20.2	21.4	20.7	19.1	19.0	18.4	19.3	19.7	21.2	22.6	23.7	22.4
Transport	5.56	56.4	47.9	44.6	41.0	51.4	55.5	58.4	55.5	20.9	13.6	26.8	37.7	39.1
Communication	1.99	1.3	1.4	1.4	1.2	1.9	3.2	3.2	3.2	3.0	2.8	3.4	3.6	4.0
Recreation and Culture	1.38	27.7	31.3	39.4	45.1	47.4	49.2	68.9	73.2	69.2	65.9	60.9	58.5	56.1
Education	2.13	10.2	11.1	11.3	11.2	12.2	12.5	18.0	18.8	18.8	17.1	17.1	18.7	18.2
Restaurants and Hotels	6.19	27.9	26.4	25.2	26.0	33.4	36.1	36.6	35.9	32.1	33.0	31.6	34.6	34.1
Misc. Goods and Services	5.02	20.5	21.9	25.6	28.5	33.3	34.6	38.5	43.8	40.9	39.5	43.0	38.9	38.9

National CPI Inflation (MoM)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	4.7	0.8	0.5	2.9	4.3	3.7	2.4	1.6	-0.3	3.5	1.7	2.0	1.1
Food and Non-Alcoholic Beverages	34.58	5.6	0.1	-0.1	5.0	4.1	3.7	4.4	1.3	-1.0	4.1	0.6	1.6	0.6
Alcoholic Beverages, Tobacco	1.02	1.8	1.1	0.5	0.2	9.7	60.9	0.3	0.6	0.1	0.4	0.4	0.5	0.3
Clothing and Footwear	8.60	1.0	2.2	0.7	0.5	1.2	5.3	1.9	1.4	1.1	0.6	1.2	2.1	1.1
Housing, Water, Elec., Gas and Other Fuels	23.63	10.9	0.6	0.0	1.8	3.7	1.1	-1.1	0.7	-0.2	8.0	1.1	0.5	3.0
Furnishing and Household Equipment Maintenance	4.10	2.9	2.8	2.4	1.6	5.0	5.1	2.7	3.9	1.6	1.7	2.3	1.7	1.3
Health	2.79	2.8	1.9	1.9	1.8	2.1	0.3	1.1	0.9	1.1	2.2	2.0	4.5	2.8
Transport	5.91	-1.8	-0.1	-0.8	-0.5	12.0	3.3	1.6	0.2	-2.1	-0.2	7.9	9.1	-1.8
Communication	2.21	0.4	0.0	0.1	0.0	2.1	2.9	0.1	0.4	0.1	0.4	0.3	0.4	0.3
Recreation and Culture	1.59	1.9	2.0	10.9	4.5	3.3	3.1	12.4	5.0	0.7	0.3	3.5	0.4	0.4
Education	3.79	1.0	0.4	0.3	0.1	0.5	1.3	1.9	1.0	0.4	0.0	3.4	0.6	2.5
Restaurants and Hotels	6.92	2.5	1.9	1.3	3.1	5.1	3.8	0.6	4.2	1.4	1.7	1.8	2.4	1.6
Misc. Goods and Services	4.87	0.9	2.3	3.0	3.2	4.7	2.5	4.1	4.5	1.0	1.0	3.9	0.6	0.0

Urban CPI Inflation (MoM)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	4.5	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1	3.6	1.6	1.7	1.1
Food and Non-Alcoholic Beverages	30.42	4.8	-0.3	-0.3	4.1	4.2	4.5	4.0	1.4	-0.2	4.3	0.4	1.6	0.7
Alcoholic Beverages, Tobacco	0.85	1.3	1.6	0.2	0.1	13.0	55.6	0.3	0.5	0.0	0.4	0.3	0.4	0.1
Clothing and Footwear	8.01	1.0	1.3	0.7	0.6	1.3	5.8	1.1	0.4	1.1	0.6	1.2	1.5	0.9
Housing, Water, Elec., Gas and Other Fuels	27.03	10.9	-0.1	-0.5	1.4	4.3	1.1	-1.1	0.7	-0.1	8.0	1.1	0.2	3.0
Furnishing and Household Equipment Maintenance	4.09	3.3	2.6	2.3	1.1	5.3	5.2	2.5	2.9	1.6	1.8	2.4	1.4	0.9
Health	2.31	1.7	1.6	1.1	3.4	3.2	0.4	1.9	0.6	0.7	2.9	2.1	4.7	2.7
Transport	6.14	-2.2	-0.1	-0.7	-0.4	12.3	3.6	1.4	0.0	-2.2	0.0	6.1	7.8	-2.8
Communication	2.35	0.6	0.0	0.1	0.0	2.8	3.7	0.2	0.6	0.1	0.6	0.0	0.5	0.3
Recreation and Culture	1.73	1.7	1.1	13.4	4.3	3.6	3.0	11.5	4.9	0.5	0.4	3.6	0.2	0.1
Education	4.88	1.1	0.2	0.2	0.1	0.1	1.3	0.8	0.8	0.2	0.0	3.6	0.4	3.2
Restaurants and Hotels	7.41	3.0	1.8	1.6	3.6	4.2	4.2	0.6	4.7	1.3	1.1	2.0	1.8	1.7
Misc. Goods and Services	4.77	1.4	1.7	2.4	3.1	4.7	2.6	4.2	3.9	1.2	1.1	3.5	0.4	-0.1

Rural CPI Inflation (MoM)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	100.00	5.0	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8	3.3	1.9	2.5	1.1
Food and Non-Alcoholic Beverages	40.87	6.6	0.4	0.0	6.0	3.9	2.9	4.7	1.1	-1.9	3.8	0.8	1.7	0.6
Alcoholic Beverages, Tobacco	1.28	2.5	0.6	0.9	0.4	5.9	67.5	0.3	0.8	0.2	0.4	0.5	0.5	0.6
Clothing and Footwear	9.48	1.0	3.2	0.8	0.4	1.0	4.7	2.8	2.6	1.1	0.6	1.2	2.7	1.3
Housing, Water, Elec., Gas and Other Fuels	18.49	10.9	1.8	1.1	2.6	2.6	1.2	-1.3	0.6	-0.6	8.1	1.1	1.1	3.0
Furnishing and Household Equipment Maintenance	4.10	2.2	3.2	2.6	2.3	4.5	4.9	3.1	5.4	1.6	1.6	2.2	2.0	1.8
Health	3.51	3.9	2.3	2.8	0.4	1.1	0.2	0.4	1.3	1.5	1.5	2.0	4.3	2.8
Transport	5.56	-1.3	0.0	-0.9	-0.5	11.6	2.7	2.0	0.6	-2.1	-0.6	11.0	11.3	-0.2
Communication	1.99	0.0	0.1	0.0	0.1	0.7	1.3	0.1	0.0	0.0	0.1	0.8	0.3	0.4
Recreation and Culture	1.38	2.4	3.4	6.8	4.9	2.7	3.3	14.1	5.2	1.0	0.2	3.2	0.7	0.9
Education	2.13	0.5	0.8	0.4	0.2	1.7	1.4	5.9	1.5	0.8	0.0	2.8	1.4	0.1
Restaurants and Hotels	6.19	1.7	2.3	0.7	2.3	6.9	3.3	0.7	3.4	1.5	2.8	1.3	3.5	1.3
Misc. Goods and Services	5.02	0.2	3.2	3.9	3.3	4.6	2.4	3.9	5.2	0.8	0.9	4.4	0.7	0.1

<0.0                      0.8                      >1.5

Rural CPI Inflation (YoY)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
<b>Rural</b>	100.00	29.5	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4	31.3	30.9	33.9	28.9
<b>Food</b>	45.95	37.2	33.5	37.9	45.2	47.0	50.2	52.2	52.4	41.5	41.3	40.6	35.4	28.6
Non-perishable	40.16	31.9	31.8	35.7	44.4	47.6	48.2	54.8	54.4	43.0	43.3	43.9	39.7	33.2
Perishable	5.79	74.2	43.8	59.5	64.3	53.1	54.5	31.9	35.3	24.0	22.2	15.2	3.8	-3.7
<b>Non Food</b>	54.05	22.4	21.4	20.7	20.9	25.3	28.5	29.9	32.5	23.8	22.0	22.0	32.3	29.2
Energy	11.41	36.9	30.7	26.2	25.7	37.5	46.6	47.3	52.6	19.8	14.9	12.0	48.6	36.7
NFNE (Core)	42.64	18.2	18.5	19.0	19.4	21.5	23.1	24.9	26.9	25.2	24.6	25.9	27.3	26.7
HRI	8.61	5.9	5.9	5.9	6.9	6.9	7.1	7.1	7.1	7.1	7.5	7.5	7.5	7.8
Core Excl HRI	34.03	21.2	21.5	22.1	22.4	24.9	26.9	29.0	31.4	29.2	28.5	29.9	31.6	30.8

<15.0                      21.0                      >27.0

Urban CPI Inflation (YoY)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
<b>Urban</b>	100.00	24.6	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3	26.3	25.0	29.7	25.5
<b>Food</b>	36.80	34.7	29.7	32.7	39.0	41.9	47.1	46.8	48.1	40.8	40.2	38.8	33.9	28.9
Non-perishable	32.34	29.4	27.1	29.6	36.7	42.0	44.9	48.5	47.9	40.7	41.1	41.8	37.3	32.9
Perishable	4.46	67.0	38.6	52.9	59.3	42.9	49.4	26.9	32.3	25.6	24.7	10.6	4.9	-0.2
<b>Non Food</b>	63.20	18.2	16.4	14.8	15.6	20.8	24.1	24.9	26.6	18.7	17.3	16.3	26.8	23.1
Energy	9.47	34.1	24.5	15.4	16.3	37.1	50.3	52.1	61.2	19.4	13.7	9.4	66.1	41.7
NFNE (Core)	53.73	14.9	14.6	14.7	15.4	17.1	18.6	19.5	20.0	18.5	18.4	18.4	18.6	18.5
HRI	19.26	5.3	5.3	5.3	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.6
Core Excl HRI	34.47	20.1	19.6	19.7	20.8	23.3	25.4	26.8	27.5	25.0	25.0	24.8	24.9	24.6

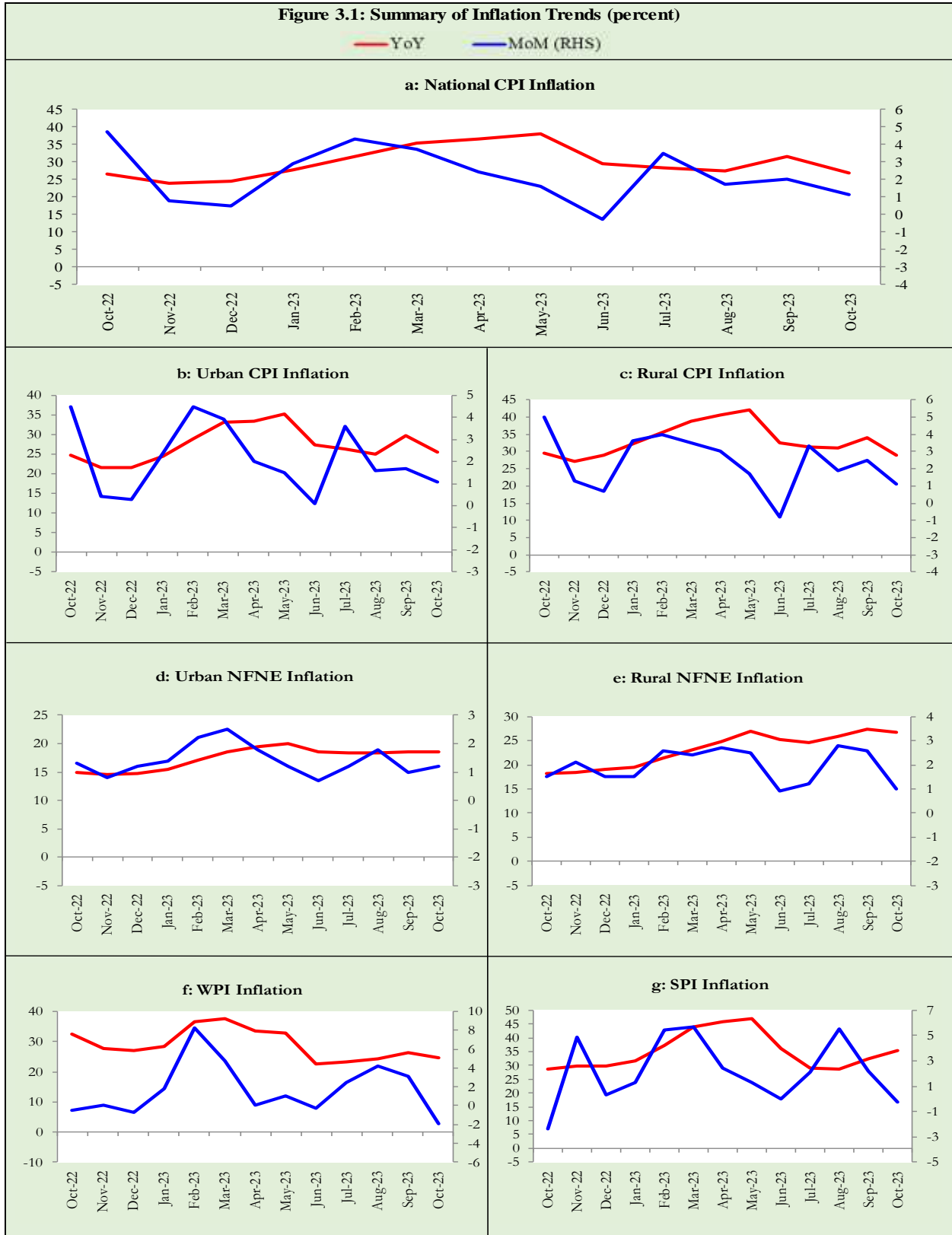
<15.0                      21.0                      >27.0

Rural CPI Inflation (MoM)														
	Weights	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
<b>Rural</b>	100.00	5.0	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8	3.3	1.9	2.5	1.1
<b>Food</b>	45.95	6.1	0.5	0.1	5.7	3.9	4.5	4.2	1.4	-1.6	3.5	0.8	1.8	0.7
Non-perishable	40.16	3.7	1.7	2.6	7.4	3.6	3.2	5.1	2.6	-1.7	3.7	1.1	1.1	-1.1
Perishable	5.79	22.2	-5.5	-13.2	-2.2	5.5	1.5	2.5	-8.4	-3.6	4.5	-2.0	6.8	13.4
<b>Non Food</b>	54.05	3.9	2.1	1.4	1.5	4.1	2.4	1.6	2.0	0.1	3.0	3.1	3.2	1.5
Energy	11.41	11.8	2.2	0.8	1.5	8.4	2.4	-1.4	0.7	-2.4	8.8	3.7	4.8	2.8
NFNE (Core)	42.64	1.5	2.1	1.5	1.5	2.6	2.4	2.7	2.5	0.9	1.2	2.8	2.6	1.0
HRI	8.61	1.3	0.0	0.0	3.1	0.0	0.0	1.2	0.0	0.0	1.7	0.0	0.0	1.7
Core Excl HRI	34.03	1.6	2.5	1.8	1.2	3.2	2.9	3.0	3.0	1.1	1.1	3.4	3.1	0.9

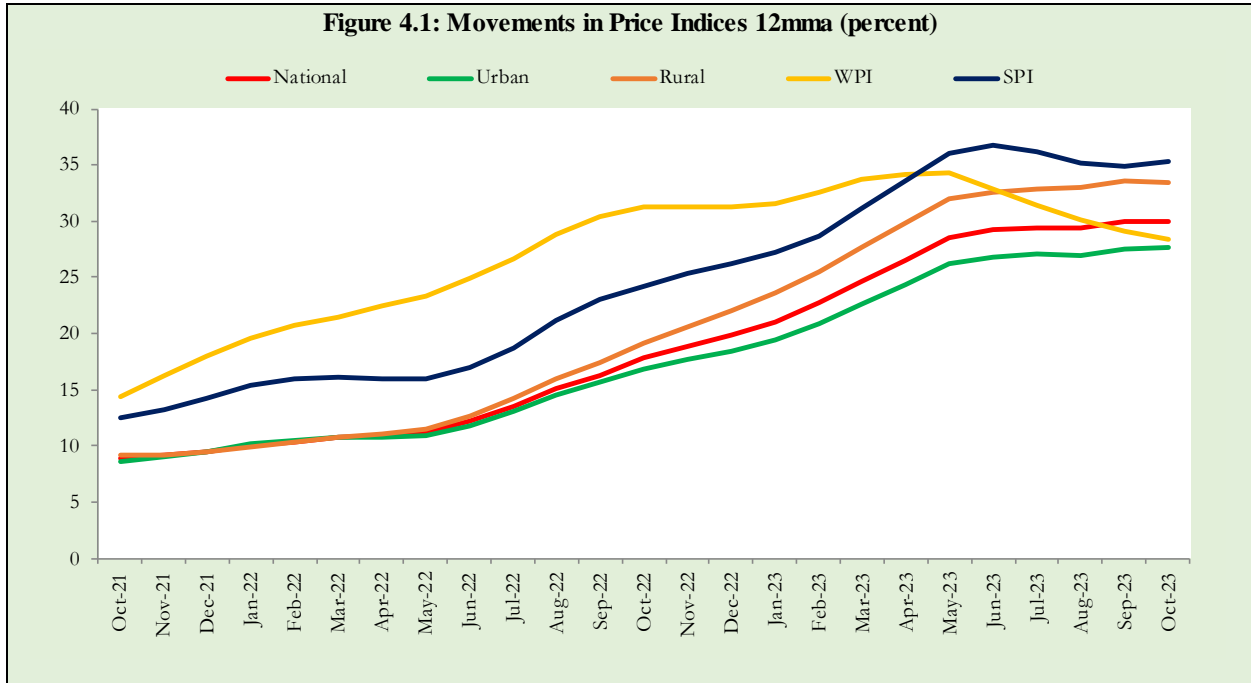
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### 3. Inflation Trends



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



### 5. Movements in Price Indices (MoM)

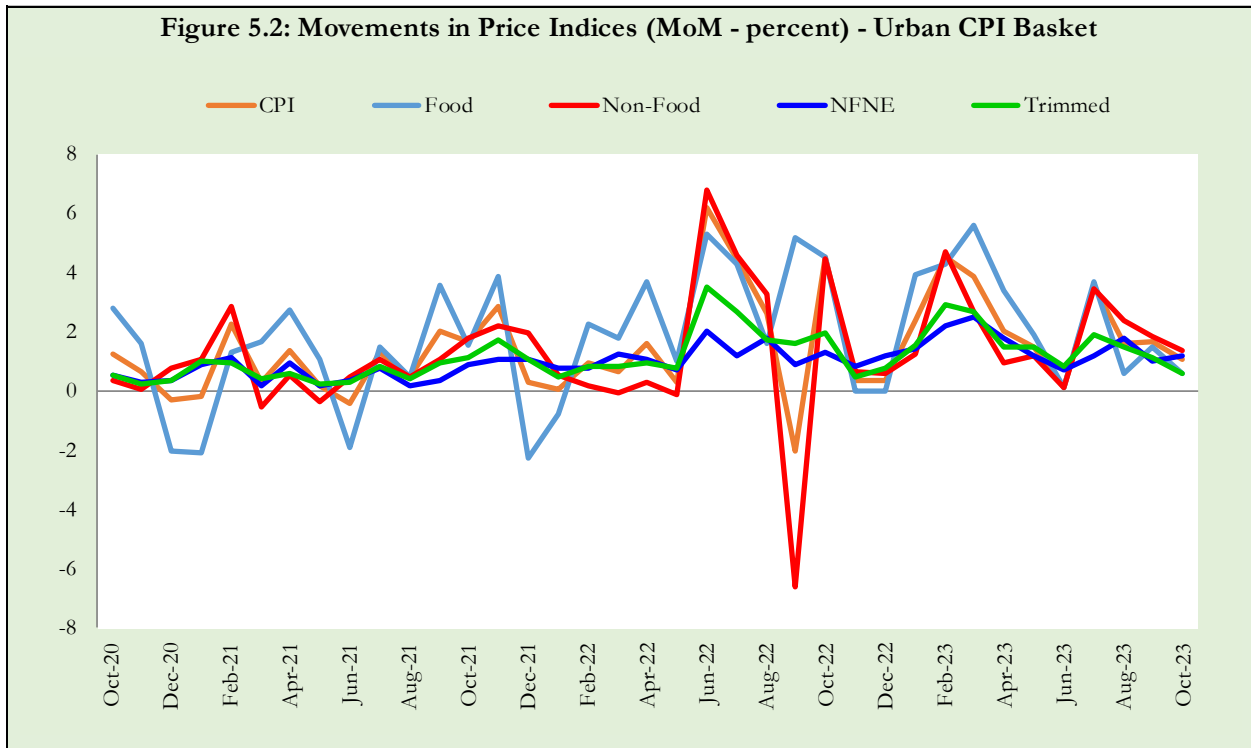
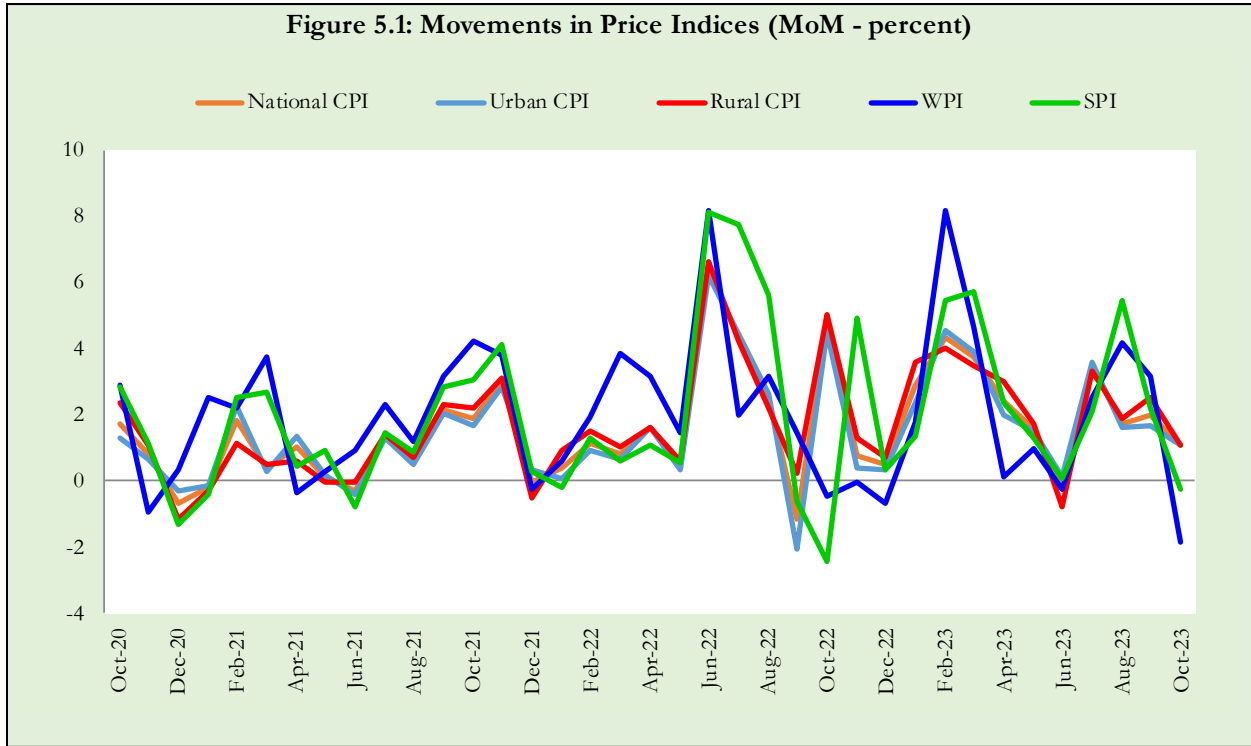
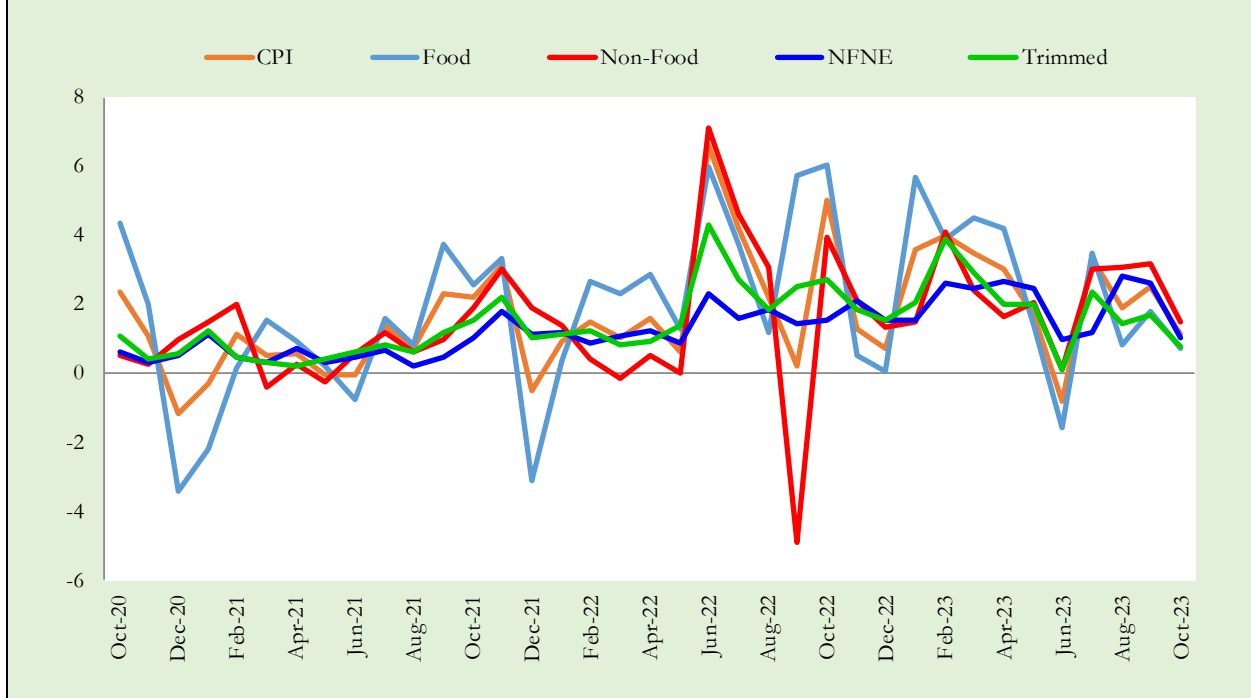


Figure 5.3: Movements in Price Indices (MoM - percent) - Rural CPI Basket



## 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).

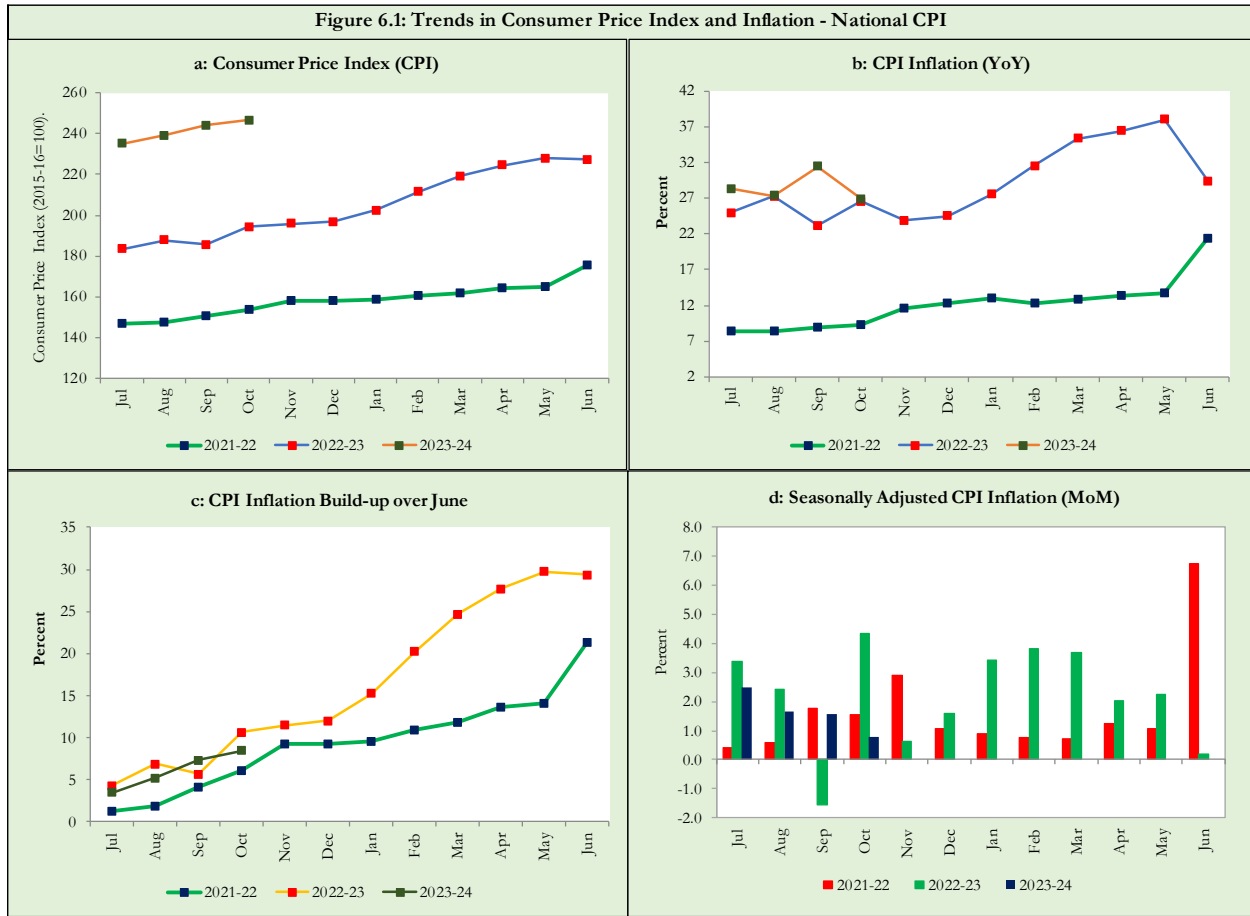




Figure 6.2: Trends in Consumer Price Index and Inflation - Urban CPI Basket

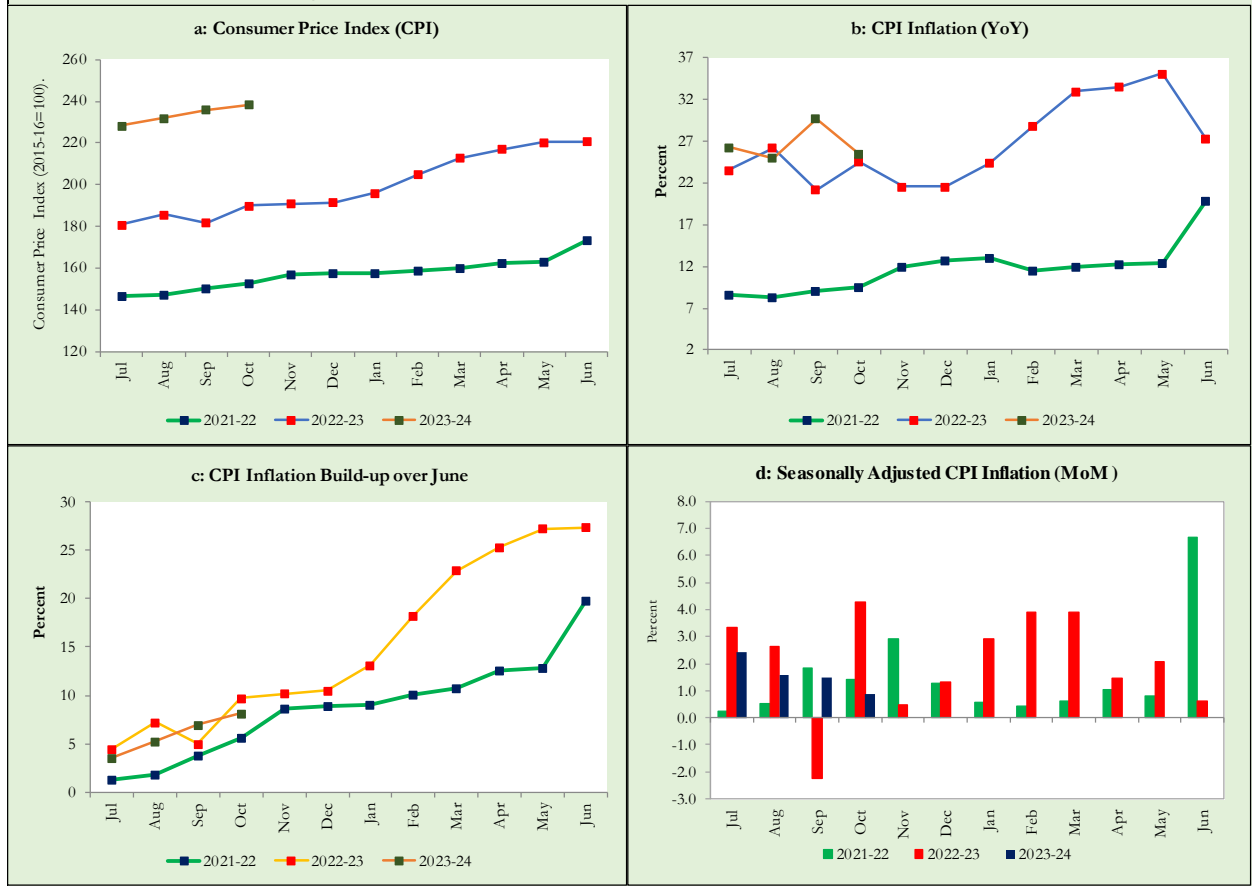
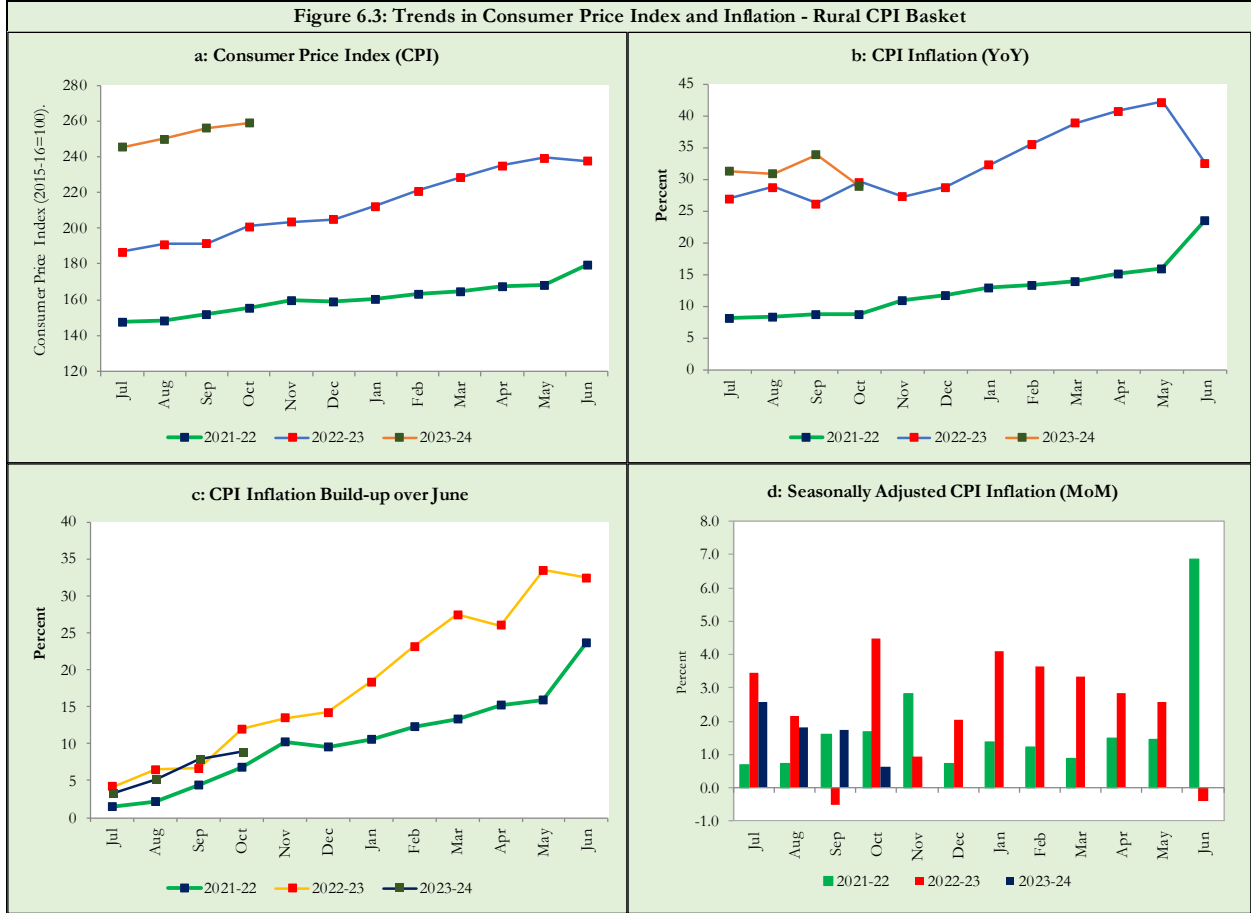


Figure 6.3: Trends in Consumer Price Index and Inflation - Rural CPI Basket



## 7. Weighted Contribution

In overall Urban CPI Inflation, the weighted contribution of:

- Food group decreased to 47.1 percent during October 2023 from 47.3 percent in previous month. It was 54.3 percent during the corresponding month of last year.
- Non-food group increased to 52.9 percent in October 2023 from 52.7 percent in previous month. It was 45.7 percent during the corresponding month of last year (**Table 7.1**).

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)	
Oct-22	100.0	54.3	12.6	41.7	45.7	15.0	30.7	3.8	26.9
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

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 decreased to 50.4 percent during October 2023 from 52.8 percent in previous month. It was 60.7 percent during the corresponding month of last year.
- Non-food group increased to 49.6 percent in October 2023 from 47.3 percent in previous month. It was 39.3 percent during the corresponding month of last year (**Table 7.2**).

**Table 7.2. Weighted Contributions (percent) to Rural 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	i
Oct-22	100.0	60.7	15.2	45.5	39.3	14.6	24.7	1.6	23.1
Nov-22	100.0	59.4	10.8	48.6	40.6	13.7	26.9	1.6	25.3
Dec-22	100.0	61.9	10.9	50.9	38.1	11.6	26.5	1.6	25.0
Jan-23	100.0	65.5	9.9	55.6	34.5	10.3	24.2	1.7	22.6
Feb-23	100.0	62.5	8.3	54.3	37.5	13.3	24.2	1.5	22.7
Mar-23	100.0	61.8	7.7	54.1	38.2	14.3	23.9	1.3	22.5
Apr-23	100.0	62.1	5.1	57.0	37.8	13.4	24.4	1.3	23.1
May-23	100.0	60.6	4.8	55.7	39.4	13.9	25.5	1.3	24.3
Jun-23	100.0	62.2	4.2	57.9	37.9	8.0	29.9	1.5	28.3
Jul-23	100.0	63.7	4.1	59.6	36.3	6.8	29.5	1.6	27.9
Aug-23	100.0	62.9	2.9	60.0	37.1	5.7	31.3	1.6	29.7
Sep-23	100.0	52.8	0.8	52.0	47.3	16.7	30.5	1.5	29.1
Oct-23	100.0	50.4	-1.0	51.5	49.6	15.7	33.8	1.7	32.1

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	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	66.3	54.5	56.7	68.8	78.9	73.6	64.9	65.2	55.9	64.0	72.2	66.0	61.0
Food & Non-Alcoholic Beverages	43.3	18.9	26.7	55.6	68.9	66.7	50.0	44.4	24.4	55.6	41.1	51.1	20.0
Alcoholic Beverages & Tobacco	100.0	100.0	100.0	33.3	100.0	100.0	100.0	100.0	33.3	66.7	100.0	66.7	66.7
Clothing & Footwear	72.5	75.0	77.5	77.5	67.5	72.5	70.0	70.0	72.5	72.5	80.0	72.5	80.0
Housing, Water, Elec, Gas & other Fuels	51.7	24.1	10.3	58.6	75.9	48.3	10.3	44.8	51.7	65.5	75.9	41.4	58.6
Furnishing & Household Equip. Maintenance etc.	100.0	100.0	95.2	100.0	100.0	100.0	100.0	100.0	95.2	100.0	100.0	95.2	92.9
Health	80.6	83.9	71.0	80.6	87.1	77.4	67.7	74.2	67.7	74.2	87.1	100.0	96.8
Transport	46.9	34.4	25.0	34.4	90.6	81.3	59.4	37.5	46.9	43.8	62.5	65.6	46.9
Communication	40.0	20.0	40.0	20.0	40.0	40.0	20.0	40.0	40.0	40.0	40.0	40.0	40.0
Recreation & Culture	80.0	24.0	72.0	84.0	80.0	56.0	72.0	64.0	32.0	32.0	76.0	20.0	36.0
Education	37.5	50.0	56.3	31.3	31.3	62.5	56.3	62.5	56.3	12.5	68.8	62.5	87.5
Restaurant & Hotels	100.0	100.0	100.0	85.7	92.9	92.9	92.9	100.0	92.9	85.7	92.9	92.9	100.0
Miscellaneous	89.7	100.0	96.6	100.0	100.0	86.2	100.0	100.0	82.8	86.2	100.0	82.8	86.2
NFNE	76.6	71.5	72.3	76.6	82.6	77.0	75.7	74.5	68.9	67.2	83.8	74.5	76.2

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	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
General	68.0	54.5	48.8	67.6	77.9	72.5	63.1	63.1	54.1	62.3	68.4	67.6	53.3
Food & Non-Alcoholic Beverages	55.7	13.9	12.7	57.0	62.0	53.2	39.2	43.0	19.0	43.0	35.4	49.4	22.8
Alcoholic Beverages & Tobacco	60.0	100.0	80.0	80.0	100.0	100.0	100.0	40.0	40.0	60.0	80.0	80.0	40.0
Clothing & Footwear	81.5	96.3	85.2	81.5	96.3	92.6	92.6	92.6	92.6	85.2	85.2	92.6	81.5
Housing, Water, Elec, Gas & other Fuels	56.5	34.8	0.0	82.6	56.5	69.6	21.7	47.8	65.2	73.9	95.7	52.2	73.9
Furnishing & Household Equip. Maintenance etc.	100.0	100.0	96.2	96.2	100.0	100.0	88.5	92.3	92.3	96.2	100.0	92.3	80.8
Health	64.3	100.0	78.6	35.7	85.7	64.3	71.4	64.3	64.3	57.1	57.1	92.9	92.9
Transport	31.3	18.8	25.0	12.5	81.3	81.3	62.5	37.5	37.5	62.5	75.0	56.3	37.5
Communication	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	40.0	20.0	20.0
Recreation & Culture	84.6	46.2	84.6	76.9	92.3	69.2	84.6	84.6	38.5	38.5	69.2	46.2	46.2
Education	100.0	80.0	80.0	80.0	80.0	80.0	100.0	80.0	60.0	0.0	100.0	80.0	20.0
Restaurants & Hotels	85.7	85.7	71.4	85.7	85.7	85.7	78.6	71.4	85.7	85.7	78.6	92.9	71.4
Miscellaneous	88.2	100.0	94.1	94.1	100.0	88.2	100.0	100.0	88.2	82.4	100.0	88.2	76.5
NFNE	76.5	80.9	74.3	72.8	86.8	80.9	81.6	77.2	74.3	69.9	83.8	79.4	67.6

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

## 9. Domestic Food Commodity Prices (Growth)

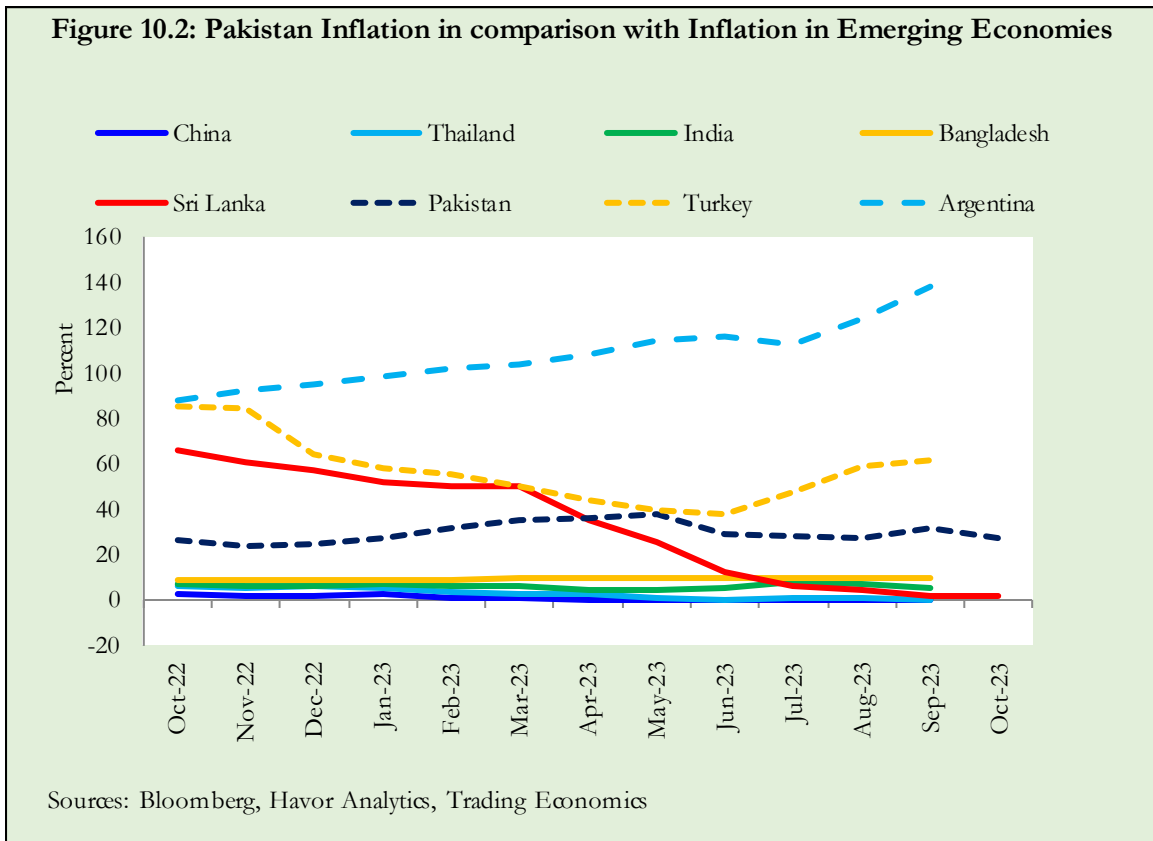
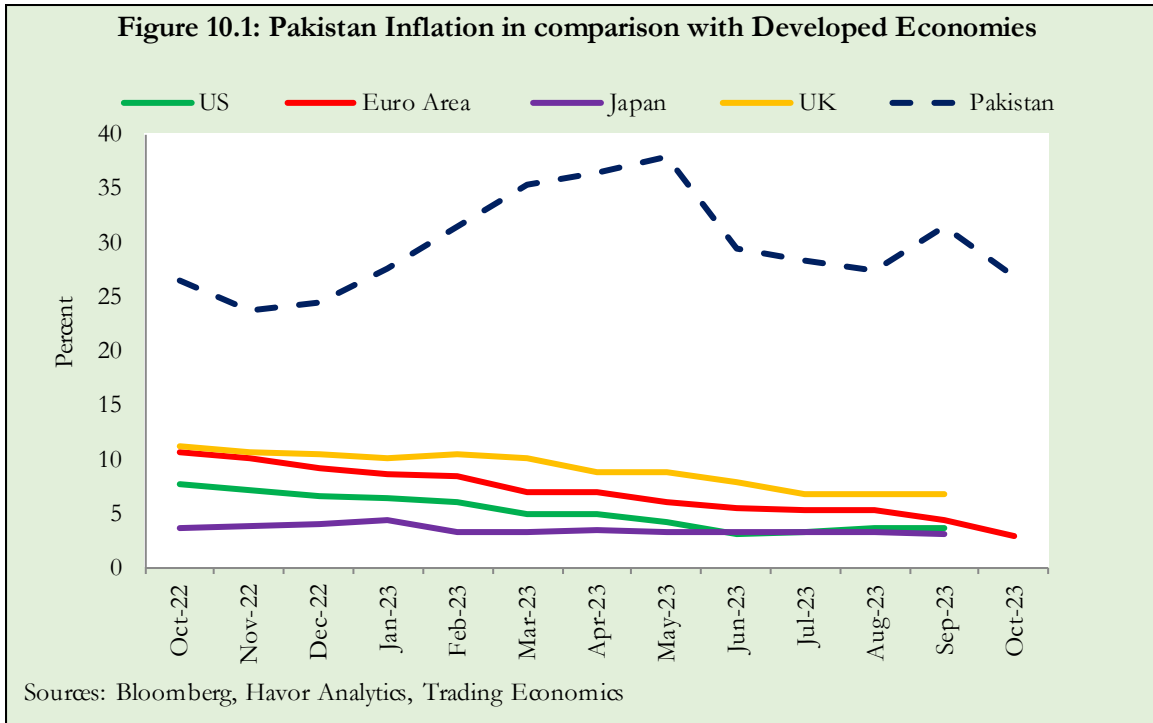
Growth in domestic food commodity prices for selected essential food items covering both urban and rural CPI baskets is given in **Table 9.1**.

S. No	Item	Unit	Urban CPI		Rural CPI	
			YoY	MoM	YoY	MoM
1	Wheat	10 Kg	37.7	-1.7	36.8	-1.3
2	Wheat Flour Bag	20 Kg	77.4	-2.1	63.7	-2.0
3	Rice Basmati Broken (Superior/Average Quality)*	1 Kg	34.1	-0.5	78.2	-0.6
4	Beef With Bone (Average Quality)	1 Kg	17.0	0.6	21.2	1.9
5	Mutton (Average Quality)	1 Kg	17.9	1.1	23.4	2.0
6	Chicken Farm Broiler (Live)	1 Kg	25.5	-0.1	26.4	-2.6
7	Milk Fresh (Un-Boiled)	1 Liter	24.1	-2.1	29.0	0.7
8	Eggs Farm	Dozen	30.5	6.0	25.7	2.8
9	Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch	Each	-0.5	-2.1	-4.9	-4.6
10	Pulse Masoor (Washed)	1 Kg	13.5	-1.6	3.4	0.6
11	Pulse Moong (Washed)	1 Kg	8.9	-2.1	10.3	-2.2
12	Pulse Mash (Washed)	1 Kg	39.7	-0.4	38.4	0.3
13	Pulse Gram	1 Kg	-3.4	-3.7	-2.4	-3.0
14	Potatoes	1 Kg	42.1	3.8	37.1	4.3
15	Onions	1 Kg	-17.9	38.7	-22.7	34.0
16	Tomatoes	1 Kg	-45.4	-3.1	-52.5	-3.3
17	Sugar Refined	1 Kg	69.9	-10.2	74.7	-9.5
18	Garlic (Lehsun)	1 Kg	53.6	13.4	43.2	4.7
19	Ginger (Adrak)	500 Gm	235.1	11.0	244.4	14.0
20	Tea Lipton Yellow Label 190 Gm Packet	Each	54.9	-1.7	58.4	-1.0

\* 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**.

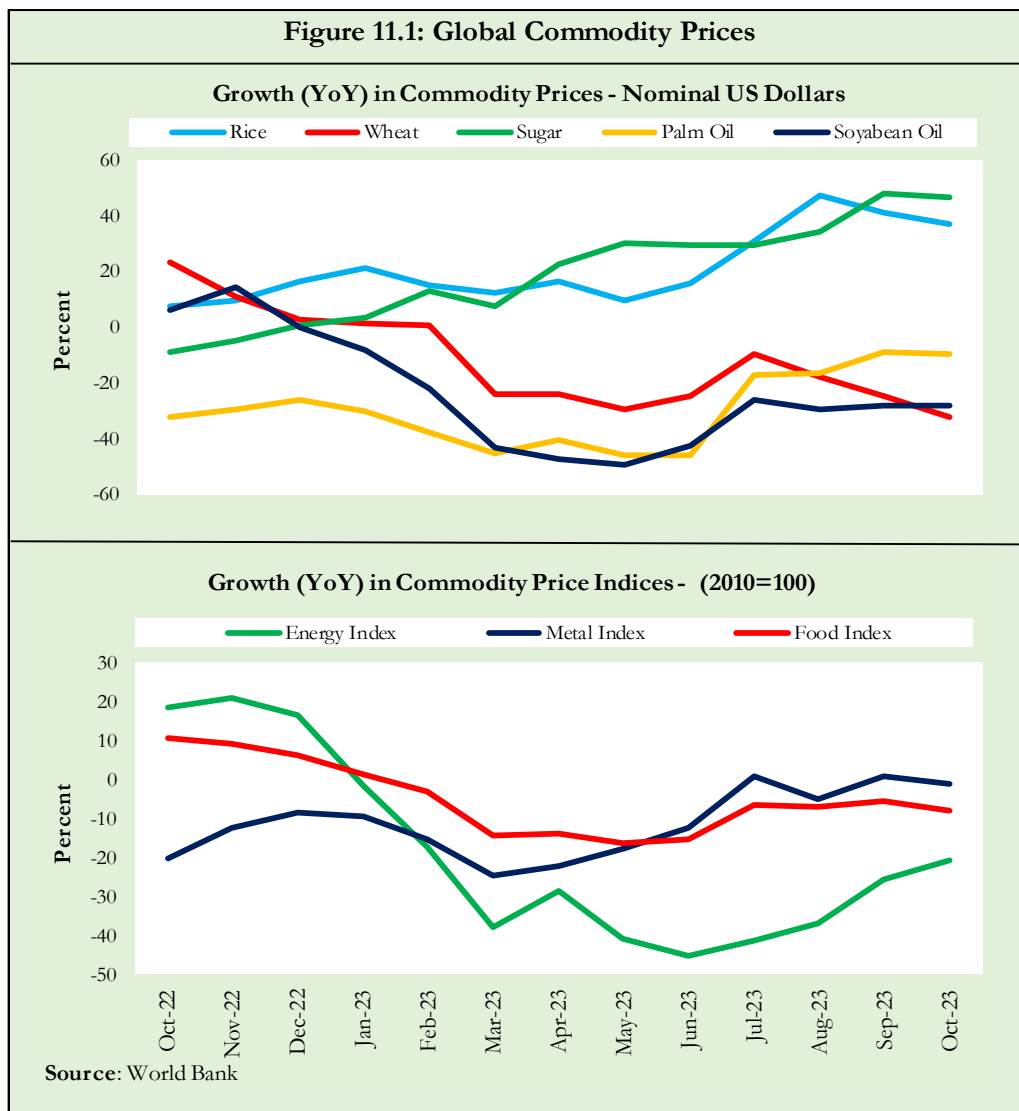


### 11. Global Commodity Prices and Indices (Growth)

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**.

Item/Group	Oct-23		Sep-23		Oct-22	
	YoY	MoM	YoY	MoM	YoY	MoM
Food	-7.7	-1.7	-5.4	2.0	11.0	0.8
Metals	-1.2	-2.9	0.8	0.1	-20.3	-0.9
Energy	-20.9	-1.8	-25.6	8.3	18.5	-7.6
Agricultural	-4.5	-1.5	-3.7	0.8	4.3	-0.6
Cotton	-4.2	-2.5	-16.7	2.1	-15.1	-15.2

Data Source: World Bank





## 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 October 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

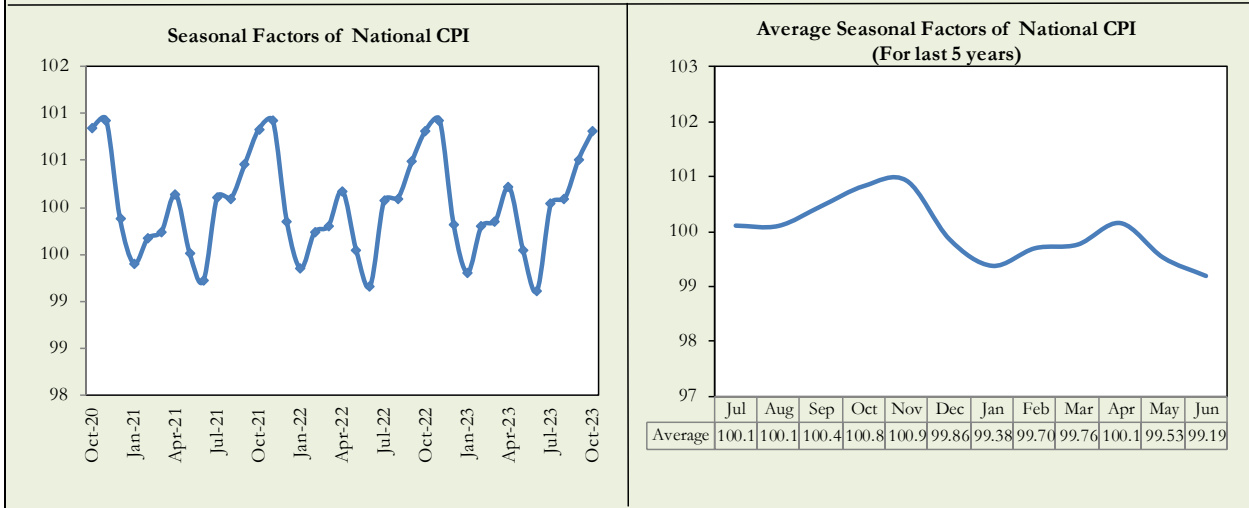


Figure 12.1 (b): Seasonal Factor of Urban CPI

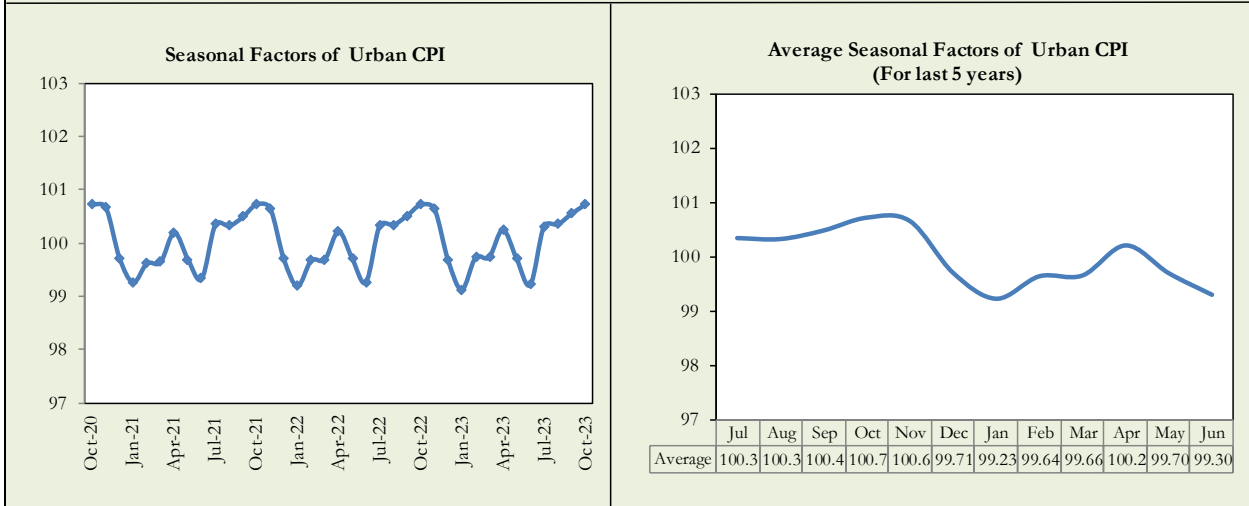
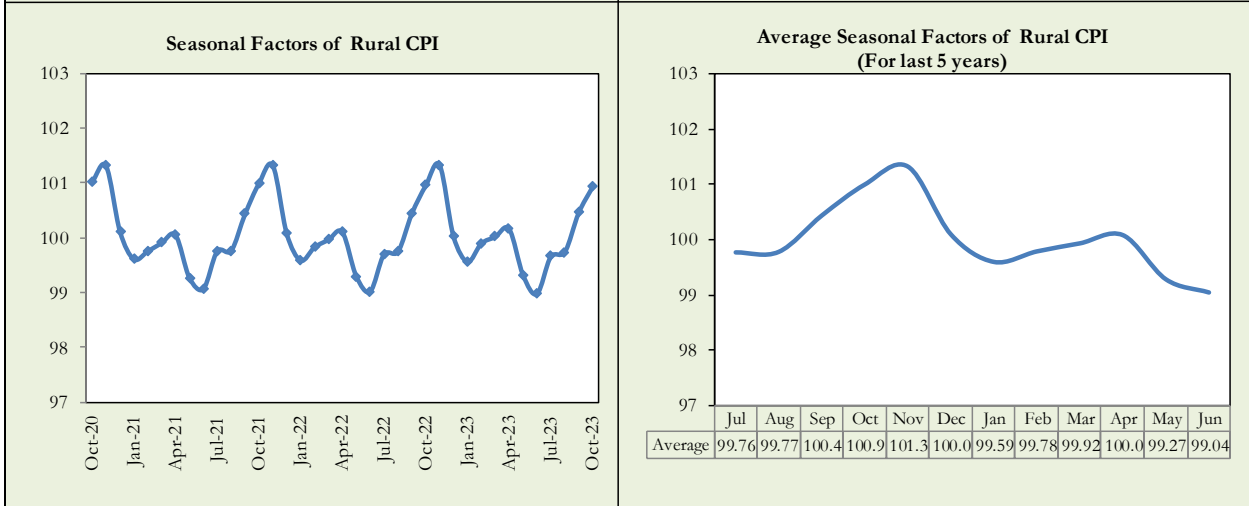
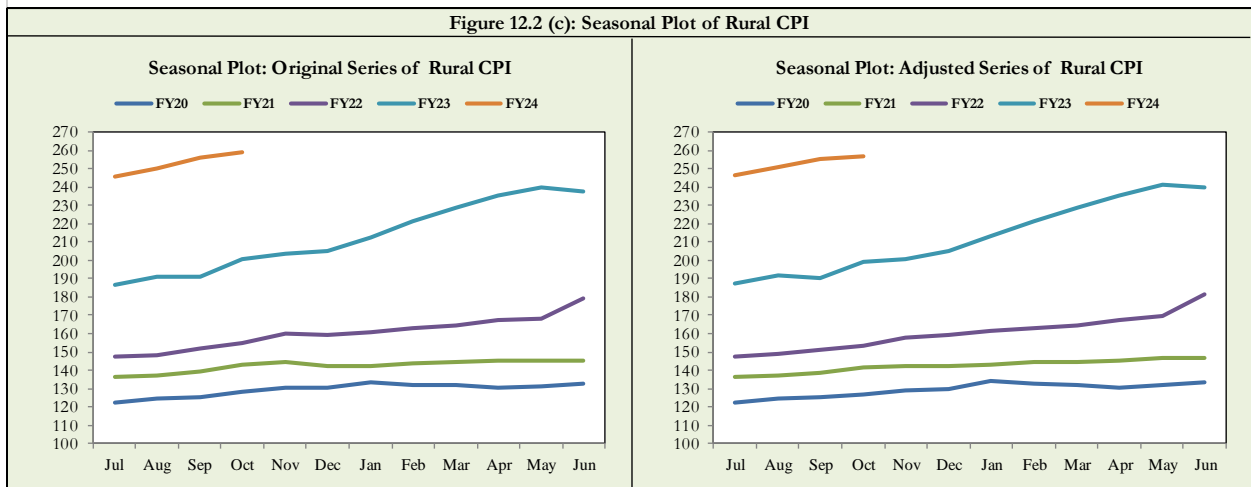
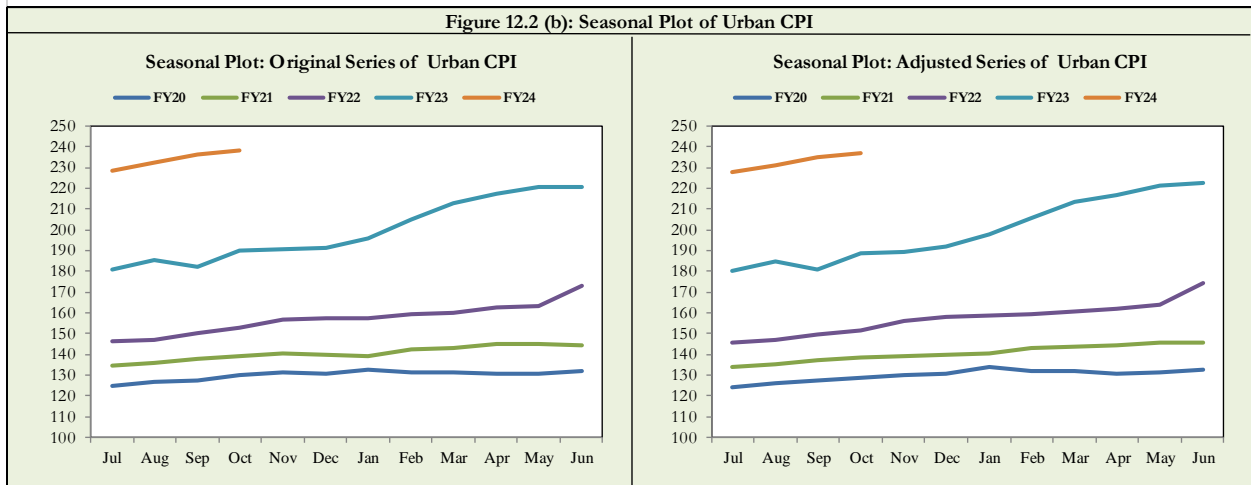
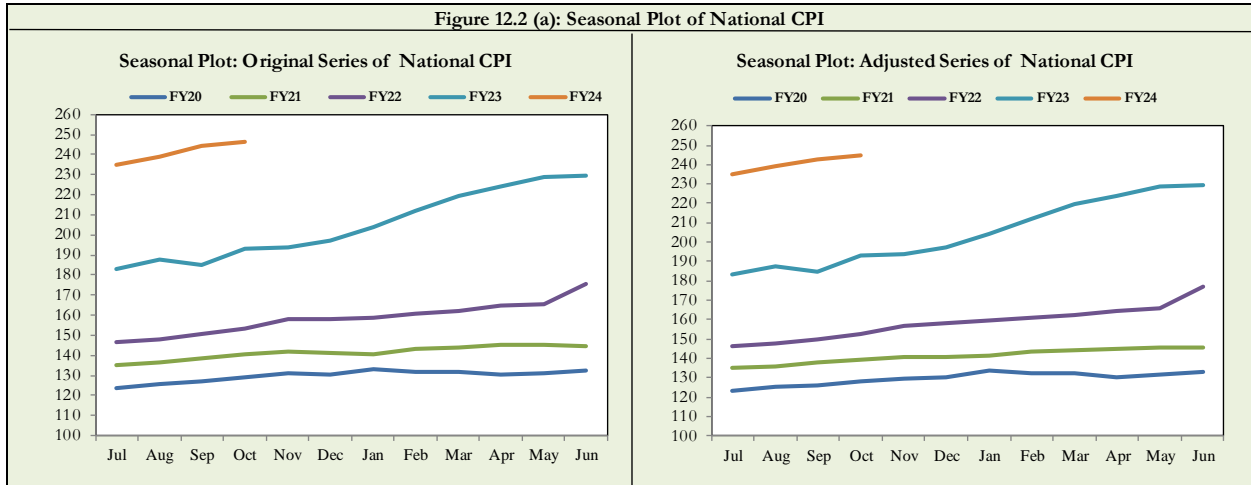


Figure 12.1 (c): Seasonal Factor of Rural CPI

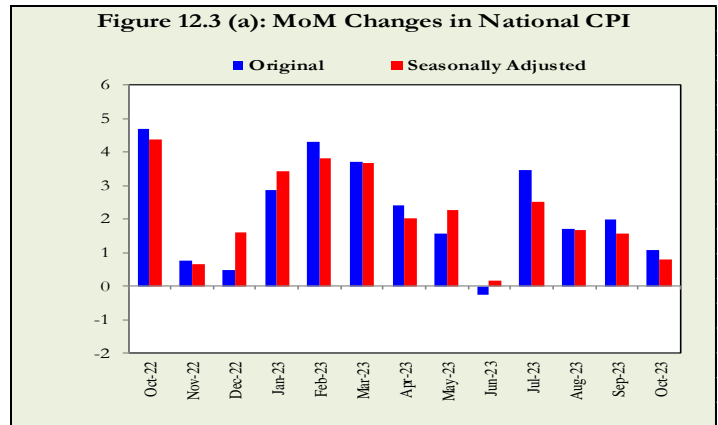


Figures 12.2(a to c) show seasonally adjusted series. The trend follows the long-term movement in original series.



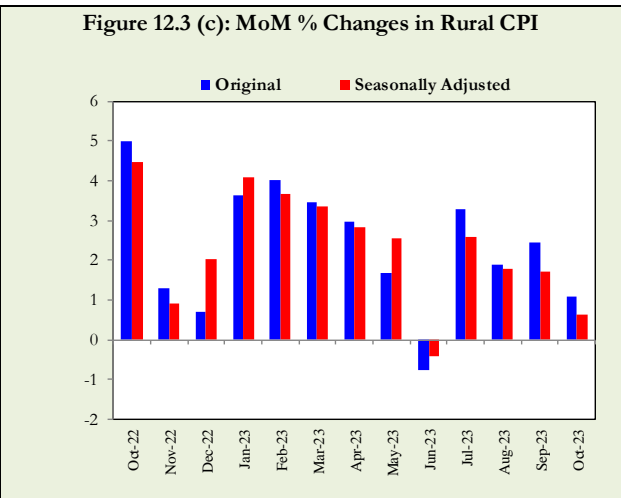
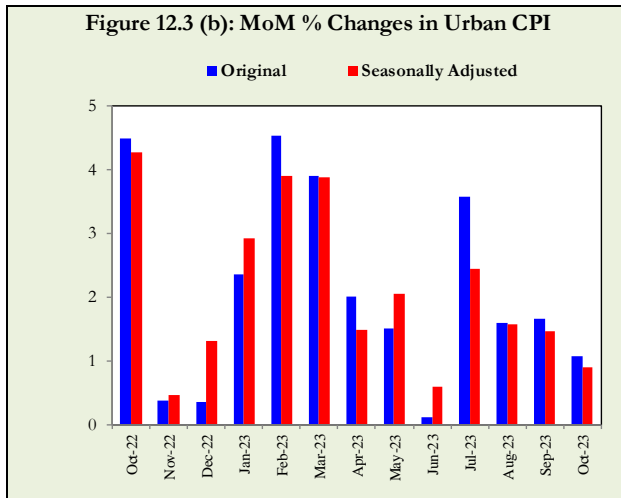
Seasonally adjusted Index of

- National CPI for October 2023 stood at 244.72 against 246.69 in original series showing a decrease of 1.97.
- Urban CPI for October 2023 stood at 236.81 against 238.51 in original series showing a decrease of 1.70.
- Rural CPI for October 2023 stood at 256.65 against 259.03 in original series showing a decrease of 2.38.



Month-on-month change of seasonally adjusted

- National CPI series showed an inflation of 0.78 percent during October 2023 over previous month against an inflation of 1.57 percent in original series.
- Urban CPI series showed an inflation of 0.90 percent during October 2023 over previous month against an inflation of 1.47 percent in original series.
- Rural CPI series showed an inflation of 0.62 percent during October 2023 over previous month against an inflation of 1.72 percent in original series.



## List of Illustrations Tables

### Table A1: Inflation – Summary

Period	CPI							WPI			SPT**	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>															
Oct-22	26.6	24.6	29.5	34.7	37.2	18.2	22.4	32.6	32.0	32.9	28.6	14.9	18.2	22.0	26.7
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	26.9	25.5	28.9	28.9	28.6	23.1	29.2	24.6	27.1	23.3	35.4	18.5	26.7	24.6	30.7
<b>12- Month Moving Average</b>															
Oct-22	17.8	16.9	19.2	20.4	21.3	14.7	17.3	31.3	19.1	38.3	24.2	10.6	12.4	15.2	17.0
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	31.1
<b>Period Average (Since July)</b>															
Oct-22	25.5	23.9	27.9	30.5	32.5	19.8	23.6	37.7	28.1	43.1	34.8	13.8	16.7	21.9	25.0
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	26.3	24.6	33.5	20.2	31.4	18.5	26.2	20.7	30.6
<b>Month-on-Month</b>															
Oct-22	4.7	4.5	5.0	4.5	6.1	4.5	3.9	-0.5	3.4	-2.4	-2.4	1.3	1.5	1.9	2.7
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	1.1	1.1	1.1	0.6	0.7	1.4	1.5	-1.9	-1.3	-2.2	-0.3	1.2	1.0	0.6	0.8

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

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

Groups	Weights	MoM Change			YoY Change		
		Oct-22	Sep-23	Oct-23	Oct-22	Sep-23	Oct-23
Food and Non-Alcoholic Beverages	34.6	5.6	1.6	0.6	36.2	33.1	26.8
Alcoholic Beverages, Tobacco	1.0	1.8	0.5	0.3	34.6	87.5	84.6
Clothing and Footwear	8.6	1.0	2.1	1.1	18.3	20.6	20.6
Housing, Water, Elec., Gas and Other Fuels	23.6	10.9	0.5	3.0	11.9	29.7	20.5
Furnishing and Household Equip. Maintenance	4.1	2.9	1.7	1.3	27.6	39.3	37.1
Health	2.8	2.8	4.5	2.8	16.2	25.3	25.2
Transport	5.9	-1.8	9.1	-1.8	53.4	31.3	31.3
Communication	2.2	0.4	0.4	0.3	1.6	7.4	7.4
Recreation and Culture	1.6	1.9	0.4	0.4	23.7	58.8	56.3
Education	3.8	1.0	0.6	2.5	10.9	11.1	12.8
Restaurants and Hotels	6.9	2.5	2.4	1.6	30.4	34.3	33.1
Miscellaneous	4.9	0.9	0.6	0.0	22.4	36.4	35.2
<b>National CPI</b>	<b>100.0</b>	<b>4.7</b>	<b>2.0</b>	<b>1.1</b>	<b>26.6</b>	<b>31.4</b>	<b>26.9</b>

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

Groups	Weights	MoM Change			YoY Change		
		Oct-22	Sep-23	Oct-23	Oct-22	Sep-23	Oct-23
<b>I. Food Group</b>	<b>36.8</b>	<b>4.5</b>	<b>1.5</b>	<b>0.6</b>	<b>34.7</b>	<b>33.9</b>	<b>28.9</b>
Food and Non-Alcoholic Beverages	30.4	4.8	1.6	0.7	34.8	32.2	27.0
Alcoholic Beverages, Tobacco	0.9	1.3	0.4	0.1	35.4	84.8	82.7
Restaurants and Hotels (Food Component)	5.5	3.8	1.3	0.7	34.4	35.3	31.2
<b>II. Non-Food Group</b>	<b>63.2</b>	<b>4.5</b>	<b>1.8</b>	<b>1.4</b>	<b>18.2</b>	<b>26.8</b>	<b>23.1</b>
Clothing and Footwear	8.0	1.0	1.5	0.9	19.5	17.6	17.5
Housing, Water, Elec., Gas and Other Fuels	27.0	10.9	0.2	3.0	9.5	28.3	19.2
Furnishing and Household Equip. Maintenance	4.1	3.3	1.4	0.9	27.6	37.7	34.4
Health	2.3	1.7	4.7	2.7	13.6	26.9	28.1
Transport	6.1	-2.2	7.8	-2.8	51.7	27.4	26.6
Communication	2.4	0.6	0.5	0.3	1.7	9.4	9.2
Recreation and Culture	1.7	1.7	0.2	0.1	21.4	58.9	56.5
Education	4.9	1.1	0.4	3.2	11.1	9.1	11.4
Restaurants and Hotels (Non-Food Component)	1.9	0.3	3.7	5.4	23.4	30.3	36.9
Miscellaneous	4.8	1.4	0.4	-0.1	23.7	34.7	32.7
<b>Urban CPI</b>	<b>100.0</b>	<b>4.5</b>	<b>1.7</b>	<b>1.1</b>	<b>24.6</b>	<b>29.7</b>	<b>25.5</b>

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

Groups	Weights	MoM Change			YoY Change		
		Oct-22	Sep-23	Oct-23	Oct-22	Sep-23	Oct-23
<b>I. Food Group</b>	<b>45.9</b>	<b>6.1</b>	<b>1.8</b>	<b>0.7</b>	<b>37.2</b>	<b>35.4</b>	<b>28.6</b>
Food and Non-Alcoholic Beverages	40.9	6.6	1.7	0.6	37.9	34.1	26.6
Alcoholic Beverages, Tobacco	1.3	2.5	0.5	0.6	33.7	90.5	86.9
Restaurants and Hotels (Food Component)	3.8	1.4	3.0	1.9	31.1	33.4	34.0
<b>II. Non-Food Group</b>	<b>54.1</b>	<b>3.9</b>	<b>3.2</b>	<b>1.5</b>	<b>22.4</b>	<b>32.4</b>	<b>29.2</b>
Clothing and Footwear	9.5	1.0	2.7	1.3	16.8	24.2	24.6
Housing, Water, Elec., Gas and Other Fuels	18.5	10.9	1.1	3.0	17.3	32.7	23.3
Furnishing and Household Equip. Maintenance	4.1	2.2	2.0	1.8	27.7	41.7	41.2
Health	3.5	3.9	4.3	2.8	18.9	23.7	22.4
Transport	5.6	-1.3	11.3	-0.2	56.4	37.7	39.1
Communication	2.0	0.0	0.3	0.4	1.3	3.6	4.0
Recreation and Culture	1.4	2.4	0.7	0.9	27.7	58.5	56.1
Education	2.1	0.5	1.4	0.1	10.2	18.7	18.2
Restaurants and Hotels (Non-Food Component)	2.4	2.3	4.8	0.2	21.6	37.3	34.4
Miscellaneous	5.0	0.2	0.7	0.1	20.5	38.9	38.9
<b>Rural CPI</b>	<b>100.0</b>	<b>5.0</b>	<b>2.5</b>	<b>1.1</b>	<b>29.5</b>	<b>33.9</b>	<b>28.9</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	Housing, Water, Elec., Gas and Other Fuels	Furnishing and Household Equipment	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>															
Oct-22	26.6	36.2	30.6	70.4	34.6	18.3	11.9	27.6	16.2	53.4	1.6	23.7	10.9	30.4	22.4
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	26.9	26.8	33.0	-1.9	84.6	20.6	20.5	37.1	25.2	31.3	7.4	56.3	12.8	33.1	35.2
<b>12-Month Moving Average</b>															
Oct-22	17.8	21.1	20.1	27.3	13.2	13.0	12.9	17.4	11.1	41.4	1.9	13.5	7.4	19.3	14.9
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	36.5	5.4	55.3	9.9	34.5	35.1
<b>Period Average (Since September)</b>															
Oct-22	25.5	31.6	29.1	47.5	28.9	17.1	16.1	23.6	13.3	61.3	1.3	20.9	10.2	27.9	20.6
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	24.8	7.2	60.5	10.6	34.0	37.9
<b>Month-on-Month</b>															
Oct-22	4.7	5.6	2.9	20.3	1.8	1.0	10.9	2.9	2.8	-1.8	0.4	1.9	1.0	2.5	0.9
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	1.1	0.6	-1.1	13.0	0.3	1.1	3.0	1.3	2.8	-1.8	0.3	0.4	2.5	1.6	0.0
<b>3-Year Average (in current month during FY22-FY24)</b>															
YoY	20.9	23.8	25.3	19.3	40.4	16.1	14.8	24.6	16.5	33.1	3.9	29.2	8.6	23.9	22.1
MoM	2.6	2.8	1.1	13.1	0.8	0.8	5.4	1.6	2.1	0.6	0.3	1.2	1.2	1.8	0.8



Table A6: Urban CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Non-Perishable Food Items	Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Housing, Water, Elec., Gas and Other Fuels	Furnishing and Household Equipment	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>															
Oct-22	24.6	34.8	29.4	67.0	35.4	19.5	9.5	27.6	13.6	51.7	1.7	21.4	11.1	31.8	23.7
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
<b>12- Month Moving Average</b>															
Oct-22	16.9	20.7	19.8	25.9	13.3	13.5	11.1	16.4	10.8	41.2	2.4	12.7	7.7	19.4	14.7
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
<b>Period Average (Since July)</b>															
Oct-22	23.9	30.6	28.1	45.8	29.2	18.1	13.5	22.6	12.1	60.2	1.3	19.2	10.4	28.3	20.9
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
<b>Month-on-Month</b>															
Oct-22	4.5	4.8	2.2	18.5	1.3	1.0	10.9	3.3	1.7	-2.2	0.6	1.7	1.1	3.0	1.4
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
<b>3-Years Average (in current month during FY22-FY24)</b>															
YoY	19.9	23.7	25.2	19.3	40.1	15.7	13.2	23.7	16.7	31.1	4.9	28.5	8.1	24.3	21.9
MoM	2.4	2.3	0.7	12.1	0.5	0.8	5.4	1.6	1.7	0.1	0.3	1.1	1.5	1.9	0.8

Table A7: Rural CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Non-Perishable Food Items	Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Housing, Water, Elec., Gas and Other Fuels	Furnishing and Household Equipment	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
<b>Year-on-Year</b>															
Oct-22	29.5	37.9	31.9	74.2	33.7	16.8	17.3	27.7	18.9	56.4	1.3	27.7	10.2	27.9	20.5
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	28.9	26.6	33.2	-3.7	86.9	24.6	23.3	41.2	22.4	39.1	4.0	56.1	18.2	34.1	38.9
<b>12- Month Moving Average</b>															
Oct-22	19.2	21.5	20.4	29.0	13.2	12.5	16.9	18.9	11.3	41.8	1.1	14.9	6.2	19.1	15.2
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	39.3	2.7	55.9	15.5	32.2	35.9
<b>Period Average (Since July)</b>															
Oct-22	27.9	32.8	30.2	49.5	28.5	15.8	21.7	25.0	14.5	63.3	1.3	24.0	9.2	27.3	20.1
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	29.4	3.5	60.2	17.7	33.3	40.1
<b>Month-on-Month</b>															
Oct-22	5.0	6.6	3.7	22.2	2.5	1.0	10.9	2.2	3.9	-1.3	0.0	2.4	0.5	1.7	0.2
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	1.1	0.6	-1.1	13.4	0.6	1.3	3.0	1.8	2.8	-0.2	0.4	0.9	0.1	1.3	0.1
<b>3-Years Average (in current month during FY22-FY24)</b>															
YoY	22.4	23.9	25.4	19.3	40.7	16.5	18.2	26.0	16.3	36.3	2.1	30.4	10.5	23.2	22.4
MoM	2.8	3.3	1.5	14.2	1.2	0.9	5.5	1.7	2.5	1.3	0.2	1.3	0.2	1.6	0.7

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

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Oct-22	Oct-23	
<b><u>A. Ranked by Weighted Contribution</u></b>					
1	Electricity Charges	4.56	24.95	50.63	9.21
2	Wheat Flour	3.01	37.38	63.36	8.65
3	Readymade Food	5.52	34.35	31.21	7.19
4	Milk Fresh	7.11	29.61	24.35	6.77
5	Motor Fuel	2.91	64.81	30.80	5.69
6	Condiments And Spices	1.33	-10.97	84.54	4.31
7	Appliances/Articles/Products For Personal	2.98	23.82	35.45	4.02
8	House Rent	19.26	5.27	5.64	3.36
9	Rice	1.18	40.76	62.27	3.17
10	Gas Charges	1.08	0.00	62.82	3.04
<b>Total</b>		<b>48.94</b>			<b>55.41</b>
<b><u>B. Ranked by Percentage Change</u></b>					
1	Cigarettes	0.72	37.07	98.65	2.82
2	Text Books	0.67	20.61	95.09	2.11
3	Condiments And Spices	1.33	-10.97	84.54	4.31
4	Sugar	1.11	-11.84	69.90	2.27
5	Gur	0.04	0.39	64.79	0.08
6	Wheat Flour	3.01	37.38	63.36	8.65
7	Gas Charges	1.08	0.00	62.82	3.04
8	Rice	1.18	40.76	62.27	3.17
9	Beans	0.04	19.42	56.82	0.10
10	Tea	0.84	41.89	54.92	2.06
<b>Total</b>		<b>10.02</b>			<b>28.61</b>
<b><u>C. Ranked by Weights</u></b>					
1	House Rent	19.26	5.27	5.64	3.36
2	Milk Fresh	7.11	29.61	24.35	6.77
3	Readymade Food	5.52	34.35	31.21	7.19
4	Education	4.88	11.07	11.37	1.90
5	Electricity Charges	4.56	24.95	50.63	9.21
6	Wheat Flour	3.01	37.38	63.36	8.65
7	Appliances/Articles/Products For Personal	2.98	23.82	35.45	4.02
8	Motor Fuel	2.91	64.81	30.80	5.69
9	Cotton Cloth	2.22	24.16	26.55	2.28
10	Meat	2.04	25.34	17.39	1.67
<b>Total</b>		<b>54.49</b>			<b>50.74</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 25.5 percent in October-2023.

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>A. Ranked by Weighted Contribution</b>					
1	Electricity Charges	4.56	-0.36	8.29	40.30
2	Fresh Vegetables	1.53	11.77	17.74	23.48
3	Onions	0.59	39.32	38.71	17.61
4	House Rent	19.26	0.00	1.46	17.42
5	Education	4.88	0.37	3.23	11.16
6	Marriage Hall Charges	1.75	3.93	5.43	8.45
7	Fresh Fruits	1.44	4.46	6.49	6.55
8	Condiments And Spices	1.33	6.30	2.87	5.04
9	Eggs	0.51	1.42	6.05	4.14
10	Readymade Food	5.52	1.28	0.70	4.01
<b>Total</b>		<b>41.37</b>			<b>138.16</b>
<b>B. Ranked by Percentage Change</b>					
1	Onions	0.59	39.32	38.71	17.61
2	Fresh Vegetables	1.53	11.77	17.74	23.48
3	Electricity Charges	4.56	-0.36	8.29	40.30
4	Fresh Fruits	1.44	4.46	6.49	6.55
5	Eggs	0.51	1.42	6.05	4.14
6	Marriage Hall Charges	1.75	3.93	5.43	8.45
7	Accommodation Services	0.13	0.12	4.50	0.37
8	Liquefied Hydrocarbons	0.51	9.23	3.87	2.49
9	Drugs And Medicines	1.07	8.08	3.72	3.80
10	Potatoes	0.45	-1.07	3.72	2.46
<b>Total</b>		<b>12.54</b>			<b>109.65</b>
<b>C. Ranked by Weights</b>					
1	House Rent	19.26	0.00	1.46	17.42
2	Milk Fresh	7.11	2.03	-1.73	-11.70
3	Readymade Food	5.52	1.28	0.70	4.01
4	Education	4.88	0.37	3.23	11.16
5	Electricity Charges	4.56	-0.36	8.29	40.30
6	Wheat Flour	3.01	-0.40	-1.87	-8.16
7	Appliances/Articles/Products For Personal	2.98	0.83	1.14	3.31
8	Motor Fuel	2.91	11.30	-4.02	-19.44
9	Cotton Cloth	2.22	3.89	1.13	2.34
10	Meat	2.04	0.78	0.84	1.81
<b>Total</b>		<b>54.49</b>			<b>41.05</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 1.1 percent in October-2023.

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

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Oct-22	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Electricity Charges	4.56	24.95	50.63	9.21
2	Wheat Flour	3.01	37.38	63.36	8.65
3	Readymade Food	5.52	34.35	31.21	7.19
4	Milk Fresh	7.11	29.61	24.35	6.77
5	Motor Fuel	2.91	64.81	30.80	5.69
6	Condiments And Spices	1.33	-10.97	84.54	4.31
7	Appliances/Articles/Products For Personal	2.98	23.82	35.45	4.02
8	House Rent	19.26	5.27	5.64	3.36
9	Rice	1.18	40.76	62.27	3.17
10	Gas Charges	1.08	0.00	62.82	3.04
11	Washing Soap/Detergents/Match Box	1.41	41.49	48.44	3.00
12	Cigarettes	0.72	37.07	98.65	2.82
13	Marriage Hall Charges	1.75	24.52	37.16	2.31
14	Cotton Cloth	2.22	24.16	26.55	2.28
15	Sugar	1.11	-11.84	69.90	2.27
<b>Total</b>		<b>56.15</b>			<b>68.09</b>
<b>Bottom 15 Contributors</b>					
1	Tomatoes	0.35	220.67	-45.62	-1.55
2	Fresh Vegetables	1.53	58.79	-10.55	-0.96
3	Onions	0.59	163.49	-17.20	-0.68
4	Pulse Gram	0.17	65.08	-3.43	-0.02
5	Mustard Oil	0.01	61.14	-0.21	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	6.72	15.79	0.00
9	Besan	0.08	62.25	1.54	0.01
10	Dental Services	0.02	12.93	13.42	0.01
11	Major Tools & Equipment's	0.01	24.44	24.94	0.01
12	Postal Services	0.02	13.79	10.65	0.01
13	Carpets	0.03	13.40	12.97	0.01
14	Honey	0.10	19.12	4.14	0.01
15	Vegetable Ghee	1.03	52.50	0.22	0.02
<b>Total</b>		<b>5.88</b>			<b>-3.13</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Electricity Charges	4.56	-0.36	8.29	40.30
2	Fresh Vegetables	1.53	11.77	17.74	23.48
3	Onions	0.59	39.32	38.71	17.61
4	House Rent	19.26	0.00	1.46	17.42
5	Education	4.88	0.37	3.23	11.16
6	Marriage Hall Charges	1.75	3.93	5.43	8.45
7	Fresh Fruits	1.44	4.46	6.49	6.55
8	Condiments And Spices	1.33	6.30	2.87	5.04
9	Eggs	0.51	1.42	6.05	4.14
10	Readymade Food	5.52	1.28	0.70	4.01
11	Drugs And Medicines	1.07	8.08	3.72	3.80
12	Appliances/Articles/Products For Personal	2.98	0.83	1.14	3.31
13	Liquefied Hydrocarbons	0.51	9.23	3.87	2.49
14	Potatoes	0.45	-1.07	3.72	2.46
15	Cotton Cloth	2.22	3.89	1.13	2.34
<b>Total</b>		<b>48.60</b>			<b>152.56</b>
<b>Bottom 15 Contributors</b>					
1	Motor Fuel	2.91	11.30	-4.02	-19.44
2	Sugar	1.11	10.28	-10.23	-12.10
3	Milk Fresh	7.11	2.03	-1.73	-11.70
4	Wheat Flour	3.01	-0.40	-1.87	-8.16
5	Personal Effects N.E.C.	0.94	-0.77	-3.75	-4.71
6	Transport Services	1.75	4.29	-1.56	-2.39
7	Cooking Oil	1.10	-1.52	-1.54	-2.27
8	Vegetable Ghee	1.03	-0.79	-1.61	-2.18
9	Tea	0.84	-0.73	-1.67	-1.90
10	Wheat	0.61	-0.95	-1.66	-1.46
11	Tomatoes	0.35	-13.80	-3.11	-1.14
12	Pulse Gram	0.17	2.90	-3.71	-0.50
13	Construction Input Items	0.38	1.37	-0.97	-0.38
14	Pulse Moong	0.17	5.51	-2.05	-0.25
15	Pulse Masoor	0.16	19.80	-1.59	-0.23
<b>Total</b>		<b>21.64</b>			<b>-68.81</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Fresh vegetables	1.53	11.77	17.74	23.48
2	Onions	0.59	39.32	38.71	17.61
3	Fresh fruits	1.44	4.46	6.49	6.55
4	Condiments and Spices	1.33	6.30	2.87	5.04
5	Eggs	0.51	1.42	6.05	4.14
6	Readymade food	5.52	1.28	0.70	4.01
7	Potatoes	0.45	-1.07	3.72	2.46
8	Meat	2.04	0.78	0.84	1.81
9	Beverages	0.89	1.61	0.97	0.79
10	Fish	0.39	0.14	3.00	0.70
11	Bakery and confectionary	0.48	2.41	0.87	0.43
12	Dry fruits	0.33	0.75	0.98	0.30
13	Milk products	0.64	2.17	0.33	0.20
14	Nimco	0.12	2.84	1.38	0.18
15	Sweetmeat	0.35	2.85	0.43	0.17
<b>Total</b>		<b>16.62</b>			<b>67.87</b>
<b>Bottom 15 Contributors</b>					
1	Sugar	1.11	10.28	-10.23	-12.10
2	Milk fresh	7.11	2.03	-1.73	-11.70
3	Wheat flour	3.01	-0.40	-1.87	-8.16
4	Cooking oil	1.10	-1.52	-1.54	-2.27
5	Vegetable ghee	1.03	-0.79	-1.61	-2.18
6	Tea	0.84	-0.73	-1.67	-1.90
7	Wheat	0.61	-0.95	-1.66	-1.46
8	Tomatoes	0.35	-13.80	-3.11	-1.14
9	Pulse gram	0.17	2.90	-3.71	-0.50
10	Pulse moong	0.17	5.51	-2.05	-0.25
11	Pulse masoor	0.16	19.80	-1.59	-0.23
12	Chicken	1.36	-11.82	-0.13	-0.18
13	Besan	0.08	1.94	-1.60	-0.11
14	Wheat products	0.09	0.43	-0.79	-0.10
15	Gram whole	0.09	0.88	-0.88	-0.09
<b>Total</b>		<b>17.29</b>			<b>-42.38</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Electricity charges	4.56	-0.36	8.29	40.30
2	House rent	19.26	0.00	1.46	17.42
3	Education	4.88	0.37	3.23	11.16
4	Marriage Hall Charges	1.75	3.93	5.43	8.45
5	Drugs and medicines	1.07	8.08	3.72	3.80
6	Appliances/Articles/Products for Personal	2.98	0.83	1.14	3.31
7	Liquefied Hydrocarbons	0.51	9.23	3.87	2.49
8	Cotton cloth	2.22	3.89	1.13	2.34
9	Doctor (MBBS) clinic fee	0.40	0.74	3.02	1.34
10	Washing soap/detergents/match Box	1.41	1.53	0.74	1.30
11	Woolen cloth	0.84	0.19	1.89	1.26
12	Personal Grooming Services	0.80	1.01	1.56	1.10
13	Furniture and furnishing	0.48	1.29	1.96	0.81
14	Household equipments	1.00	0.98	0.78	0.76
15	Woolen readymade garments	0.43	0.00	2.36	0.75
<b>Total</b>		<b>42.59</b>			<b>96.59</b>
<b>Bottom 15 Contributors</b>					
1	Motor fuel	2.91	11.30	-4.02	-19.44
2	Personal Effects n.e.c.	0.94	-0.77	-3.75	-4.71
3	Transport services	1.75	4.29	-1.56	-2.39
4	Construction input items	0.38	1.37	-0.97	-0.38
5	Text books	0.67	-0.03	0.00	0.00
6	Communication Services	1.88	0.00	0.00	0.00
7	Motor vehicle tax	0.05	0.00	0.00	0.00
8	Gas charges	1.08	0.00	0.00	0.00
9	Carpets	0.03	0.55	0.08	0.00
10	Motor vehicles	0.81	0.05	0.00	0.00
11	Dental services	0.02	2.51	0.56	0.01
12	Therapeutic Appliances and Equipment	0.01	1.23	2.33	0.01
13	Major tools & equipments	0.01	1.47	1.57	0.01
14	stationery	0.35	0.77	0.03	0.01
15	Plastic products	0.05	3.24	0.56	0.02
<b>Total</b>		<b>10.92</b>			<b>-26.85</b>



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

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Oct-22	Oct-23	
<b><u>A. Ranked by Weighted Contribution</u></b>					
1	Milk Fresh	10.38	26.23	29.02	9.29
2	Wheat Flour	3.43	36.21	59.29	7.95
3	Electricity Charges	3.44	24.95	50.63	5.80
4	Wheat	3.47	50.05	36.85	5.72
5	Motor Fuels	2.49	67.22	39.51	5.20
6	Readymade Food	3.80	31.09	34.02	4.74
7	Rice	1.55	38.70	65.71	4.63
8	Sugar	2.03	-16.70	74.67	3.69
9	Solid Fuel	4.48	26.86	26.25	3.69
10	Cigarettes	1.24	33.45	89.73	3.45
<b>Total</b>		<b>36.31</b>			<b>54.16</b>
<b><u>B. Ranked by Percentage Change</u></b>					
1	Text Books	0.50	25.96	106.80	1.47
2	Cigarettes	1.24	33.45	89.73	3.45
3	Sugar	2.03	-16.70	74.67	3.69
4	Rice	1.55	38.70	65.71	4.63
5	Wheat Flour	3.43	36.21	59.29	7.95
6	Tea	1.26	44.24	58.42	2.64
7	Gur	0.15	-1.75	57.31	0.24
8	Dry Fruits	0.25	18.04	54.64	0.44
9	Washing Soaps, Detergents And Match Box	1.70	35.95	52.40	3.00
10	Condiments And Spices	1.49	21.36	51.65	2.66
<b>Total</b>		<b>13.60</b>			<b>30.17</b>
<b><u>C. Ranked by Weights</u></b>					
1	Milk Fresh	10.38	26.23	29.02	9.29
2	House Rent	8.61	5.86	7.83	1.75
3	Solid Fuel	4.48	26.86	26.25	3.69
4	Readymade Food	3.80	31.09	34.02	4.74
5	Wheat	3.47	50.05	36.85	5.72
6	Electricity Charges	3.44	24.95	50.63	5.80
7	Wheat Flour	3.43	36.21	59.29	7.95
8	Cotton Cloth	2.84	16.65	23.48	2.28
9	Motor Fuels	2.49	67.22	39.51	5.20
10	Vegetable Ghee	2.38	54.73	-3.76	-0.55
<b>Total</b>		<b>45.32</b>			<b>45.87</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 28.9 percent in October-2023.

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b><u>A. Ranked by Weighted Contribution</u></b>					
1	Fresh Vegetables	2.09	12.66	21.76	36.38
2	Electricity Charges	3.44	-0.36	8.29	27.22
3	Onions	0.90	45.16	33.96	19.72
4	House Rent	8.61	0.00	1.65	8.03
5	Readymade Food	3.80	2.96	1.85	6.98
6	Milk Fresh	10.38	0.31	0.75	6.33
7	Condiments And Spices	1.49	4.45	3.65	5.67
8	Footware	1.92	1.26	3.69	4.80
9	Washing Soaps, Detergents And Match Box	1.70	1.34	2.59	4.54
10	Potatoes	0.74	-1.22	4.23	4.48
<b>Total</b>		<b>35.07</b>			<b>124.15</b>
<b><u>B. Ranked by Percentage Change</u></b>					
1	Onions	0.90	45.16	33.96	19.72
2	Fresh Vegetables	2.09	12.66	21.76	36.38
3	Electricity Charges	3.44	-0.36	8.29	27.22
4	Beans	0.09	4.99	5.14	0.53
5	Doctor Clinic Fee	0.51	1.93	4.37	2.08
6	Potatoes	0.74	-1.22	4.23	4.48
7	Footware	1.92	1.26	3.69	4.80
8	Condiments And Spices	1.49	4.45	3.65	5.67
9	Fish	0.26	1.43	3.63	0.59
10	Fresh Fruits	1.45	0.74	3.40	3.19
<b>Total</b>		<b>12.89</b>			<b>104.66</b>
<b><u>C. Ranked by Weights</u></b>					
1	Milk Fresh	10.38	0.31	0.75	6.33
2	House Rent	8.61	0.00	1.65	8.03
3	Solid Fuel	4.48	0.72	1.04	3.76
4	Readymade Food	3.80	2.96	1.85	6.98
5	Wheat	3.47	-0.29	-1.26	-5.59
6	Electricity Charges	3.44	-0.36	8.29	27.22
7	Wheat Flour	3.43	0.79	-2.15	-9.68
8	Cotton Cloth	2.84	3.78	0.52	1.28
9	Motor Fuels	2.49	12.02	0.03	0.12
10	Vegetable Ghee	2.38	-0.59	-4.31	-12.96
<b>Total</b>		<b>45.32</b>			<b>25.49</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 1.1 percent in October-2023.

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

Sr. No.	Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
			Oct-22	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Milk Fresh	10.38	26.23	29.02	9.29
2	Wheat Flour	3.43	36.21	59.29	7.95
3	Electricity Charges	3.44	24.95	50.63	5.80
4	Wheat	3.47	50.05	36.85	5.72
5	Motor Fuels	2.49	67.22	39.51	5.20
6	Readymade Food	3.80	31.09	34.02	4.74
7	Rice	1.55	38.70	65.71	4.63
8	Sugar	2.03	-16.70	74.67	3.69
9	Solid Fuel	4.48	26.86	26.25	3.69
10	Cigarettes	1.24	33.45	89.73	3.45
11	Transport Services	1.80	66.52	47.85	3.17
12	Washing Soaps, Detergents And Match Box	1.70	35.95	52.40	3.00
13	Appliances/Articles/Products For Personal Care	2.27	14.90	45.96	2.85
14	Condiments And Spices	1.49	21.36	51.65	2.66
15	Tea	1.26	44.24	58.42	2.64
<b>Total</b>		<b>44.83</b>			<b>68.48</b>
<b>Bottom 15 Contributors</b>					
1	Tomatoes	0.51	276.96	-52.48	-2.24
2	Onions	0.90	166.05	-22.68	-1.11
3	Fresh Vegetables	2.09	56.98	-7.29	-0.78
4	Vegetable Ghee	2.38	54.73	-3.76	-0.55
5	Cooking Oil	0.60	54.42	-2.26	-0.08
6	Pulse Gram	0.28	67.18	-2.40	-0.02
7	Communication Services	1.65	0.16	0.00	0.00
8	Motor Vehicle Tax	0.02	24.88	0.00	0.00
9	Mustard Oil	0.01	57.00	2.20	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	14.65	6.40	0.01
13	Dental Services	0.02	22.57	13.51	0.01
14	Accommodation Services	0.14	7.08	3.05	0.01
15	Besan	0.07	60.43	4.41	0.01
<b>Total</b>		<b>8.72</b>			<b>-4.74</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Fresh Vegetables	2.09	12.66	21.76	36.38
2	Electricity Charges	3.44	-0.36	8.29	27.22
3	Onions	0.90	45.16	33.96	19.72
4	House Rent	8.61	0.00	1.65	8.03
5	Readymade Food	3.80	2.96	1.85	6.98
6	Milk Fresh	10.38	0.31	0.75	6.33
7	Condiments And Spices	1.49	4.45	3.65	5.67
8	Footwear	1.92	1.26	3.69	4.80
9	Washing Soaps, Detergents And Match Box	1.70	1.34	2.59	4.54
10	Potatoes	0.74	-1.22	4.23	4.48
11	Drugs And Medicines	1.58	5.19	3.00	4.25
12	Solid Fuel	4.48	0.72	1.04	3.76
13	Appliances/Articles/Products For Personal Care	2.27	2.15	1.84	3.36
14	Fresh Fruits	1.45	0.74	3.40	3.19
15	Meat	1.71	2.24	1.93	3.17
<b>Total</b>		<b>46.56</b>			<b>141.88</b>
<b>Bottom 15 Contributors</b>					
1	Sugar	2.03	12.49	-9.47	-18.60
2	Vegetable Ghee	2.38	-0.59	-4.31	-12.96
3	Wheat Flour	3.43	0.79	-2.15	-9.68
4	Wheat	3.47	-0.29	-1.26	-5.59
5	Personal Effects N.E.C.	1.21	-0.82	-2.70	-3.93
6	Chicken	1.46	-9.43	-2.64	-3.76
7	Cooking Oil	0.60	-1.58	-3.83	-2.89
8	Transport Services	1.80	15.72	-0.84	-1.72
9	Rice	1.55	2.74	-0.69	-1.67
10	Tea	1.26	-0.51	-1.00	-1.49
11	Tomatoes	0.51	-16.09	-3.28	-1.42
12	Gur	0.15	6.70	-5.72	-0.82
13	Pulse Gram	0.28	3.52	-2.98	-0.62
14	Pulse Moong	0.25	4.90	-2.21	-0.37
15	Gram Whole	0.11	1.65	-1.44	-0.16
<b>Total</b>		<b>20.49</b>			<b>-65.68</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Fresh Vegetables	2.09	12.66	21.76	36.38
2	Onions	0.90	45.16	33.96	19.72
3	Readymade Food	3.80	2.96	1.85	6.98
4	Milk fresh	10.38	0.31	0.75	6.33
5	Condiments and Spices	1.49	4.45	3.65	5.67
6	Potatoes	0.74	-1.22	4.23	4.48
7	Fresh fruits	1.45	0.74	3.40	3.19
8	Meat	1.71	2.24	1.93	3.17
9	Eggs	0.57	2.44	2.84	1.88
10	Sweetmeat	0.40	3.70	3.37	1.22
11	Cigarettes	1.24	0.39	0.57	0.85
12	Butter	0.33	5.23	2.23	0.62
13	Bakery and Confectionary	0.37	4.41	1.56	0.60
14	Fish	0.26	1.43	3.63	0.59
15	Dry fruits	0.25	2.33	2.34	0.58
<b>Total</b>		<b>25.99</b>			<b>92.27</b>
<b>Bottom 15 Contributors</b>					
1	Sugar	2.03	12.49	-9.47	-18.60
2	Vegetable ghee	2.38	-0.59	-4.31	-12.96
3	Wheat Flour	3.43	0.79	-2.15	-9.68
4	Wheat	3.47	-0.29	-1.26	-5.59
5	Chicken	1.46	-9.43	-2.64	-3.76
6	Cooking oil	0.60	-1.58	-3.83	-2.89
7	Rice	1.55	2.74	-0.69	-1.67
8	Tea	1.26	-0.51	-1.00	-1.49
9	Tomatoes	0.51	-16.09	-3.28	-1.42
10	Gur	0.15	6.70	-5.72	-0.82
11	Pulse Gram	0.28	3.52	-2.98	-0.62
12	Pulse Moong	0.25	4.90	-2.21	-0.37
13	Gram Whole	0.11	1.65	-1.44	-0.16
14	Besan	0.07	0.51	-0.99	-0.06
15	Wheat Products	0.11	3.05	-0.18	-0.02
<b>Total</b>		<b>17.66</b>			<b>-60.12</b>

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

Sr. No.	Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
			Sep-23	Oct-23	
<b>Ranked by Weighted Contribution</b>					
<b>Top 15 Contributors</b>					
1	Electricity Charges	3.44	-0.36	8.29	27.22
2	House Rent	8.61	0.00	1.65	8.03
3	Footware	1.92	1.26	3.69	4.80
4	Washing Soaps, Detergents and Match Box	1.70	1.34	2.59	4.54
5	Drugs and Medicines	1.58	5.19	3.00	4.25
6	Solid Fuel	4.48	0.72	1.04	3.76
7	Appliances/Articles/Products for Personal Care	2.27	2.15	1.84	3.36
8	Doctor Clinic Fee	0.51	1.93	4.37	2.08
9	Liquefied Hydrocarbons	1.00	12.40	1.62	1.73
10	Furniture and Furnishing	0.58	4.91	3.00	1.44
11	Cotton Cloth	2.84	3.78	0.52	1.28
12	Tailoring	1.30	2.44	1.26	1.27
13	Personal Grooming Services	1.54	0.47	0.81	1.21
14	Medical Tests	0.40	5.00	3.39	0.97
15	Woolen Cloth	1.10	3.80	1.02	0.86
<b>Total</b>		<b>33.26</b>			<b>66.80</b>
<b>Bottom 15 Contributors</b>					
1	Personal Effects n.e.c.	1.21	-0.82	-2.70	-3.93
2	Transport Services	1.80	15.72	-0.84	-1.72
3	Text Books	0.50	-0.02	0.00	0.00
4	Newspapers	0.02	0.00	0.00	0.00
5	Communication Services	1.65	0.00	0.00	0.00
6	Motor Vehicle Tax	0.02	0.00	0.00	0.00
7	Postal Services	0.01	0.00	0.00	0.00
8	Garbage Collection	0.01	6.65	0.00	0.00
9	Water Supply	0.06	2.47	0.00	0.00
10	Accommodation Services	0.14	3.05	0.00	0.00
11	Mechanical Services	0.36	0.86	0.00	0.00
12	Motor Vehicles	0.73	0.09	0.01	0.01
13	Cleaning and Laundering	0.02	0.56	1.05	0.02
14	Dental Services	0.02	0.00	1.59	0.02
15	Major Tools and Equipments	0.03	0.96	1.53	0.04
<b>Total</b>		<b>6.58</b>			<b>-5.57</b>

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

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Food & Non-Alcoholic Beverages	Chilies (Green), Tomatoes, Turai, Cauliflower (Phool Gobhi), Onions, Lemon, Lady Finger (Bhindi), Tinda, Spinach (Paalak), Bottlegourd (Loki), Radish	Vegetable Ghee Dalda/Habib 2.5 Kg Tin, Besan, Cardamom Small (Average Quality), Honey Marhaba Bottle 500 Gm,	Cooking Oil Dalda Or Other Similar Brand (Sn), 5 Litre Tin, Gram Whole Black (Average Quality), Pulse Moong (Washed),	Turnip (Shalgham), Guava (Amrood) (Average Quality), Pulse Masoor (Washed), Apple (Average Quality), Fish Rahu (Medium Size), Ice Cream Walls Cup (Large Size),
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle 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,		Pant Cloth Wash & Wear (Average Quality), Women Shalwar Kameez (Average Quality), Awami Suit Gents Wash & Wear (Average Quality),	Dopatta Georgette (Average Quality), Linen, Ladies (Average Quality), Gents Sandal Bata, Chaddar (Wash-N-Wear) (2X2.5 Meter), Socks Nylon Local (Average Quality), Tailoring Charges Awami Suit (Male), Tailoring Charges Simple Suit (Female), Gents Sponge Chappal Bata, Tailoring Charges
Housing, Water, Elec, Gas & other Fuels			House Rent Combined,	Bricks New 1St Class, Mason Wage Rate, Plumber Wage Rate, Unskilled Labor Wage Rate, Painter Wage Rate, Charges For Refuse/Waste Collection, Electrician Charges, Cement Blocks (6"X8"X12"), Water Charges Per House, Bajri, Cement
Furnishing & Household Equip. Maintenance etc				Bed Sheet Double With Two Pillow Covers (Superior Quality), Bed Sheet Single (Superior Quality), Household Servant Female Part Time, Towel Medium Size (3' X 2'), Plain Carpet, Air Cooler Super Asia Ecm-4000/Jc-1000, Readymade
Health		Ventolin Tablets 2 Mg,	Physiotherapist Fee Per Visit, Gynecologist Fee Per Visit, Sugar Test (Random/Fasting) Charges Of Both,	Dental Surgeon Fee Per Visit, Betnovate-N Ointment 10 Gm Tube, Ecg Charges, Glucometer, Urine Test (Dr) Charges, Dental Extraction Fee, Electronic Bp Checking Apparatus, Calpol Syrup 100 MI Bottle, Cac 1000 Tablets Sandoz
Transport	Air Fare Economy Class Per Kilometer (National Average), Car Suzuki 800 Cc Without Ac, Car Tax 800 Cc To 1500 Cc,	Cng, Car Toyota 1300 Cc Xli,	Mini Bus Fare Minimum Within City,	Bus Fare Minimum Within City, Car Service Charges, Motorcycle Service Charges, Mobil Oil (Havoline 20W-50), Train Fare Economy Per Person, Auto Rickshaw Fare, Suzuki Fare Minimum Within City, Train Fare
Communication	Mobile Call Charges, Telephone Call Charges, Internet Charges (Ds) 1 Mb (Unlimited),			Courier Charges Minimum Within Zone Outside City (Tcs), Mobile Set With Rear Camera And Without
Recreation & Culture	Newspaper Daily Dawn,		Akhbar-E-Jehan Weekly, Recreational Park Charges (Minimum Playland Ticket),	Cable Charges, Urdu Book Ba/B.Sc, Mag The Weekly (Magazine), Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Photostat Paper 70 Gm, 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, Private College Fee First Year, Government College Fee First Year, Government Medical	Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class I), Private School Fee English Medium
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, Perfume Medium Size Broche/Medora, Hair Cut Charges For Men, Lipstick Swiss

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

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Food & Non-Alcoholic Beverages	Chilies (Green), Tomatoes, Onions, Turai, Lemon, Tinda, Spinach (Paalak), Cucumber (Kheera), Turnip (Shalgham), Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg	Gram Whole Black (Average Quality), Mustard Oil (Average Quality), Pulse Masoor (Washed), Karela, Besan,	Guava (Amrood) (Average Quality), Honey Marhaba Bottle 500 Gm, Radish (Mooli), Bottlegourd (Loki),	Pulse Moong (Washed), Brinjal, Apple (Average Quality), Chilies Powder Loose, Gram Whole Yellow (Average Quality), Beef With Bone (Average Quality), Fish Fresh, Mutton (Average Quality), Ice Cream
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle Nuts), Chewing Tobacco (Niswar), Tobacco Hukka Twisted, Cigarettes Canstan 20'S Packet, Cigarettes Gold
Clothing & Footwear				Pullover Ladies (Average Quality), Full Pant Boy Length 24"/26", Shirt Boy Length 24"/26", Tailoring Charges Simple Suit (Female), Lawn Printed (Average Quality), Chaddar (Wash-N-Wear) (2X2.5 Meter), Pullover Gents (Average Quality), Footwear Gents Loaf (Average Quality)
Housing, Water, Elec, Gas & other Fuels			House Rent Combined,	Charges For Refuse/Waste Collection, Bajri, Carpenter Wage Rate, Bricks New 1St Class, Mason Wage Rate, Cement (Local) 50 Kg Bag, Unskilled Labor Wage Rate,
Furnishing & Household Equip. Maintenance etc				Readymade Quilt (3 Kg), Blanket Single (Sn), Bucket (Balti) Plastic Medium Size, Dinner Set Plastic 72 Pieces Super Quality, Cot Iron (Charpai), Lota Plastic Medium Size
Health			Cost Of Surgery (C-Section),	Physiotherapist Fee Per Visit, Dental Surgeon Fee Per Visit, Cac 1000 Tablets Sandoz Bottle, Amoxil Capsule 250 Mg, Doctor (Mbbs)
Transport	Air Fare Economy Class Per Kilometer, Car Suzuki 800 Cc Without Ac, Car Tax 800 Cc To 1500 Cc,		Cng,	Train Fare Economy Per Person, Mobil Oil (Havoline 20W-50), Motorcycle Service Charges, Bicycle, Chingchi Rickshaw Charges, Minimum, Tire Cycle, Tire Car
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				Cable Charges, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Pets Feed, Led Sony/Samsung 32" Colored, Exercise Book (With Lines) 80 To 100 Pages, Lead Pencil Goldfish, Newspaper
Education		Vocational Training Basic Computer Short Course Fee (3 Months) ,		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), Marriage Hall Charges With Furniture, Cooked
Miscellaneous				Tooth Brush (Shield), Hair Color (Kala Kola), Toilet Soap Lux 75 Gm, Artificial Jewelry (Locket Set) (Average Quality), Tooth Paste Colgate 75 Gm, Trunk Medium Size (Average Quality), Hair Removing Cream (Eu-Cream) 30Ml Tube



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

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Agriculture Forestry & Fisher Product	Vegetables, Fiber Crops, Maize, Other Oil Seeds,		Fresh Fruits,	Cotton Seeds, Hides, Skins & Fur Skins, Raw, Pulses, Raw Milk from Bovine Animals, Sorghum / Jowar, Fish Live Fresh or Chilled, Raw Animal Materials / Wool, Fuel Wood in Logs, Poultry, Eggs, Millet / Bajra, Sugar Crops, Wheat,
Ores/Minerals, Elec., Gas & Water				Natural Gas Liquified, Electrical Energy, Coal not Agglomerated, Salt & Pure Sodium Chloride,
Food, Beverages, Tobacco, Textile, Apparel and Leather Product	Vegetable Ghee, Nylon Yarn, Cotton Yarn, Blended Yarn,	Synthetic Carpets, Other Cereal Flour,	Other Leather N.E.C, Chocolate, Footwears, Vegetable Oils Refined,	Woolen Carpets, Towels, Oil Cakes, Sugar Confectionary, Hosiery Products, Meat of Animals, Ice Cream, Readymade Garments, Other Fabrics, Woven Fabrics, Quilts, Bed Sheets, Leather Without Hair,
Other Transportable Goods except Metal Products, Machinery and Equipments				Bricks, Blocks & Tiles, Fertilizers, Chemicals, Mobil Oil, Timber, Kerosene Oil, Cement, Bed Foam, Pesticides, Diesel Oil, Ceramics & Sanitary Fixture, Furnace Oil, Medicines,
Metal Product, Machinery & Equipments	Vacuum Pumps,			Steel Bar & Sheets, Engines & Motors, Motor Vehicles, Concrete Mixture, Lathe Machines, Bicycles, Motorcycles, Electric Wires, Fridge, WashM, SewM, Fans, Iron, Tractors, Pipe Fittings, Chuff Cutter, Radio & Television,

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

Items	Jun-23	Oct-22	Sep-23	Oct-23
<b>Energy</b>				
Crude Oil (US\$ per barrel)	73.3	90.3	92.2	89.1
WB Energy Index (2010 = 100)	95.2	146.2	117.7	115.7
<b>Food</b>				
Rice (\$/MT)	514.0	431.0	620.0	590.0
Wheat (\$/MT)	345.5	438.0	314.7	298.1
Sugar (US cent/ pound)^	0.5	0.4	0.6	0.6
Palm Oil (\$/MT)	817.0	889.0	829.6	804.3
Soybean Oil (\$/MT)	1,007.1	1,575.9	1,111.6	1,133.9
<b>Non-Food Non-Energy</b>				
Cotton Outlook 'A' Index (\$/KG) #	2.0	2.2	2.2	2.1
Metal Price Index (2010 = 100)	106.7	103.7	105.4	102.4
Copper (\$/MT)	8,396.5	7,651.1	8,276.7	7,937.2
Aluminum (\$/MT)	2,184.8	2,255.5	2,184.7	2,192.2
Iron Ore (\$ cents/dry MT)	113.5	92.6	121.0	118.8
Tin (\$/MT)	27,216.7	19,391.2	25,573.9	24,536.1
Nickle (\$/MT)	21,233.3	22,032.9	19,644.6	18,281.2
Zinc (\$/MT)	2,375.5	2,967.2	2,495.5	2,448.6
Lead (\$/MT)	2,122.9	1,999.9	2,252.1	2,133.7
Uranium (\$/MT)	56.1	52.3	71.6	74.4
DAP (\$/MT)	454.6	725.0	527.9	534.8
Urea (\$/MT)	287.5	636.3	380.0	411.4

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	246.69
Nov	130.90	141.83	158.18	195.89	
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>					
Jul	123.63	135.19	146.60	183.22	235.14
Aug	125.72	136.08	147.47	187.66	239.05
Sep	126.32	137.71	150.05	184.79	242.82
Oct	128.07	139.49	152.34	192.84	244.72
Nov	129.70	140.52	156.74	194.09	
Dec	130.58	141.03	158.40	197.21	
Jan	133.76	141.41	159.82	203.95	
Feb	132.18	143.57	161.04	211.71	
Mar	132.13	143.98	162.21	219.47	
Apr	130.46	144.89	164.21	223.93	
May	131.66	145.94	165.99	229.01	
Jun	133.02	145.97	177.20	229.41	

**Table A25: Urban 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	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	
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	
<b>Seasonally Adjusted Series</b>					
Jul	124.47	134.25	145.90	180.37	227.75
Aug	126.37	135.39	146.65	185.09	231.31
Sep	127.18	136.90	149.35	180.97	234.70
Oct	128.81	138.27	151.49	188.72	236.81
Nov	130.17	139.23	155.94	189.58	
Dec	130.92	140.06	157.93	192.08	
Jan	133.65	140.49	158.84	197.70	
Feb	131.91	143.15	159.55	205.43	
Mar	132.06	143.51	160.57	213.42	
Apr	130.37	144.62	162.27	216.56	
May	131.40	145.64	163.61	221.01	
Jun	132.68	145.53	174.51	222.33	

**Table A26: Rural 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	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	259.03
Nov	130.67	144.34	160.03	203.57	
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>					
Jul	122.35	136.61	147.65	187.51	246.30
Aug	124.76	137.13	148.71	191.54	250.74
Sep	125.04	138.94	151.09	190.55	255.06
Oct	126.94	141.35	153.63	199.06	256.65
Nov	128.99	142.47	157.95	200.90	
Dec	130.08	142.49	159.10	204.97	
Jan	133.92	142.80	161.30	213.39	
Feb	132.59	144.18	163.28	221.19	
Mar	132.23	144.70	164.69	228.60	
Apr	130.59	145.30	167.15	235.06	
May	132.04	146.41	169.59	241.08	
Jun	133.54	146.63	181.25	240.09	

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

Month	FY20	FY21	FY22	FY23	FY24	Average
Jul	100.19	100.14	100.11	100.07	100.04	100.11
Aug	100.13	100.11	100.10	100.10	100.09	100.10
Sep	100.42	100.44	100.46	100.48	100.51	100.46
Oct	100.85	100.84	100.83	100.82	100.81	100.83
Nov	100.93	100.93	100.92	100.93		100.93
Dec	99.90	99.88	99.85	99.82		99.86
Jan	99.46	99.40	99.35	99.30		99.38
Feb	99.59	99.67	99.73	99.80		99.70
Mar	99.67	99.74	99.80	99.85		99.76
Apr	100.10	100.14	100.17	100.21		100.16
May	99.51	99.52	99.54	99.54		99.53
Jun	99.29	99.21	99.16	99.11		99.19

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

Month	FY20	FY21	FY22	FY23	FY24	Average
Jul	100.38	100.36	100.35	100.33	100.31	100.35
Aug	100.32	100.32	100.32	100.34	100.35	100.33
Sep	100.43	100.46	100.49	100.51	100.55	100.49
Oct	100.73	100.72	100.72	100.72	100.72	100.72
Nov	100.68	100.67	100.66	100.64		100.66
Dec	99.73	99.72	99.70	99.68		99.71
Jan	99.34	99.26	99.19	99.13		99.23
Feb	99.56	99.62	99.67	99.73		99.64
Mar	99.57	99.64	99.69	99.73		99.66
Apr	100.18	100.20	100.22	100.25		100.21
May	99.69	99.69	99.71	99.71		99.70
Jun	99.40	99.33	99.27	99.22		99.30

**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	99.89	99.81	99.75	99.69	99.65	99.76
Aug	99.84	99.79	99.75	99.74	99.73	99.77
Sep	100.41	100.41	100.43	100.44	100.45	100.43
Oct	101.05	101.02	100.99	100.95	100.93	100.99
Nov	101.30	101.31	101.32	101.33		101.31
Dec	100.16	100.11	100.07	100.02		100.09
Jan	99.62	99.60	99.58	99.55		99.59
Feb	99.66	99.75	99.82	99.89		99.78
Mar	99.83	99.90	99.96	100.01		99.92
Apr	99.99	100.04	100.10	100.16		100.07
May	99.23	99.26	99.29	99.31		99.27
Jun	99.11	99.05	99.01	98.97		99.04

**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	1.08	
Nov	1.35	0.82	2.98	0.76		
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>						
Jul	0.98	1.63	0.43	3.40	2.50	
Aug	1.70	0.66	0.60	2.42	1.66	
Sep	0.48	1.20	1.75	-1.53	1.57	
Oct	1.38	1.29	1.53	4.36	0.78	
Nov	1.28	0.74	2.88	0.65		
Dec	0.68	0.36	1.06	1.61		
Jan	2.43	0.27	0.90	3.42		
Feb	-1.18	1.53	0.76	3.81		
Mar	-0.04	0.29	0.73	3.66		
Apr	-1.26	0.64	1.24	2.03		
May	0.92	0.72	1.08	2.27		
Jun	1.04	0.02	6.75	0.18		



**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		
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>						
Jul	1.05	1.18	0.26	3.36	2.44	
Aug	1.52	0.85	0.51	2.61	1.56	
Sep	0.64	1.12	1.84	-2.23	1.47	
Oct	1.29	1.00	1.43	4.28	0.90	
Nov	1.05	0.69	2.93	0.45		
Dec	0.58	0.60	1.28	1.32		
Jan	2.09	0.30	0.58	2.93		
Feb	-1.31	1.90	0.45	3.91		
Mar	0.12	0.24	0.64	3.89		
Apr	-1.28	0.78	1.06	1.47		
May	0.79	0.70	0.82	2.05		
Jun	0.98	-0.07	6.66	0.60		

**Table A32: Rural 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	1.60	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	1.10	
Nov	1.86	1.09	3.15	1.30		
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>						
Jul	0.86	2.30	0.69	3.46	2.58	
Aug	1.97	0.38	0.72	2.15	1.80	
Sep	0.23	1.32	1.60	-0.52	1.72	
Oct	1.52	1.74	1.68	4.47	0.62	
Nov	1.62	0.79	2.81	0.92		
Dec	0.84	0.02	0.73	2.02		
Jan	2.96	0.22	1.38	4.11		
Feb	-1.00	0.97	1.23	3.66		
Mar	-0.27	0.35	0.86	3.35		
Apr	-1.24	0.42	1.49	2.82		
May	1.11	0.76	1.46	2.56		
Jun	1.13	0.15	6.87	-0.41		

**Figures**

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

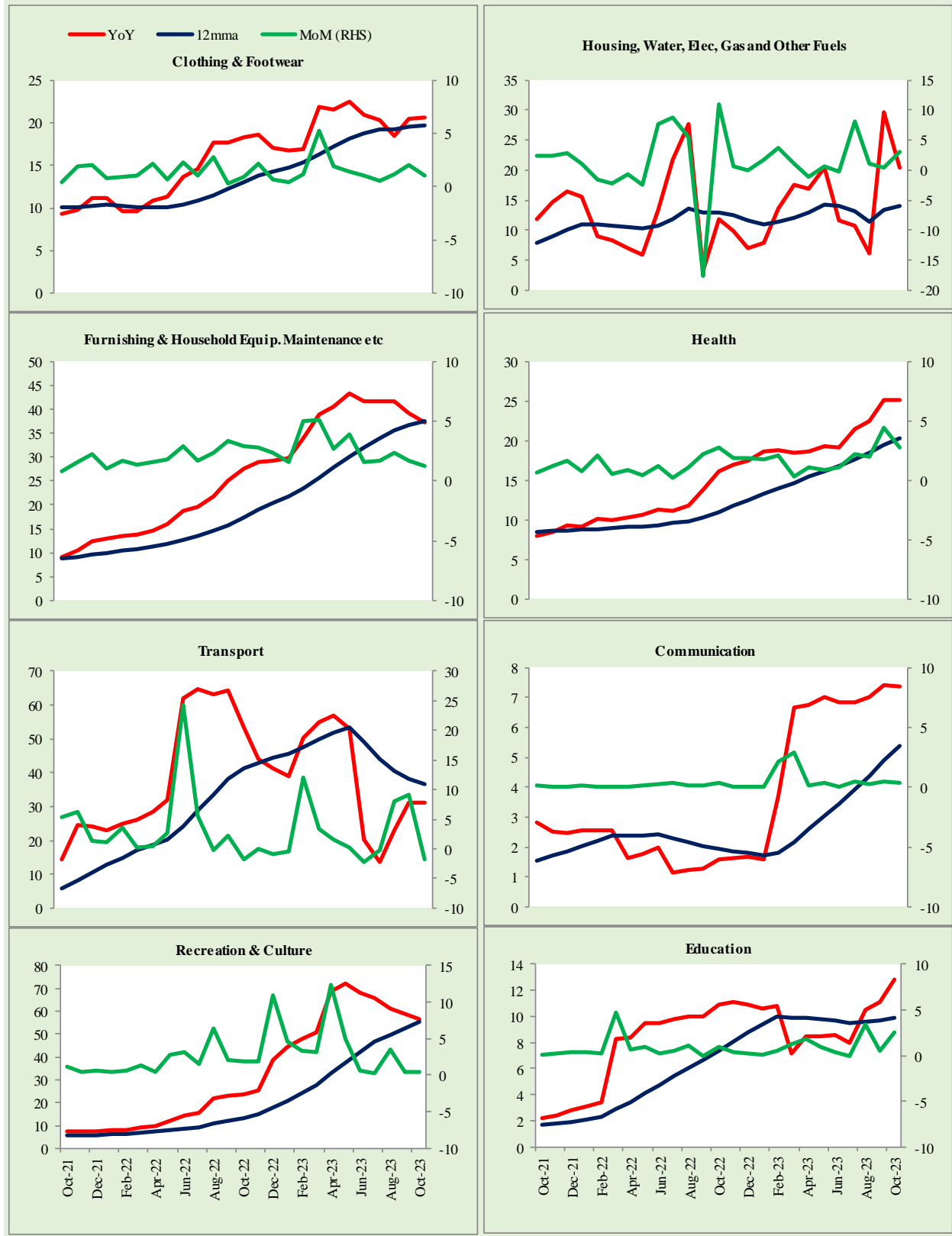
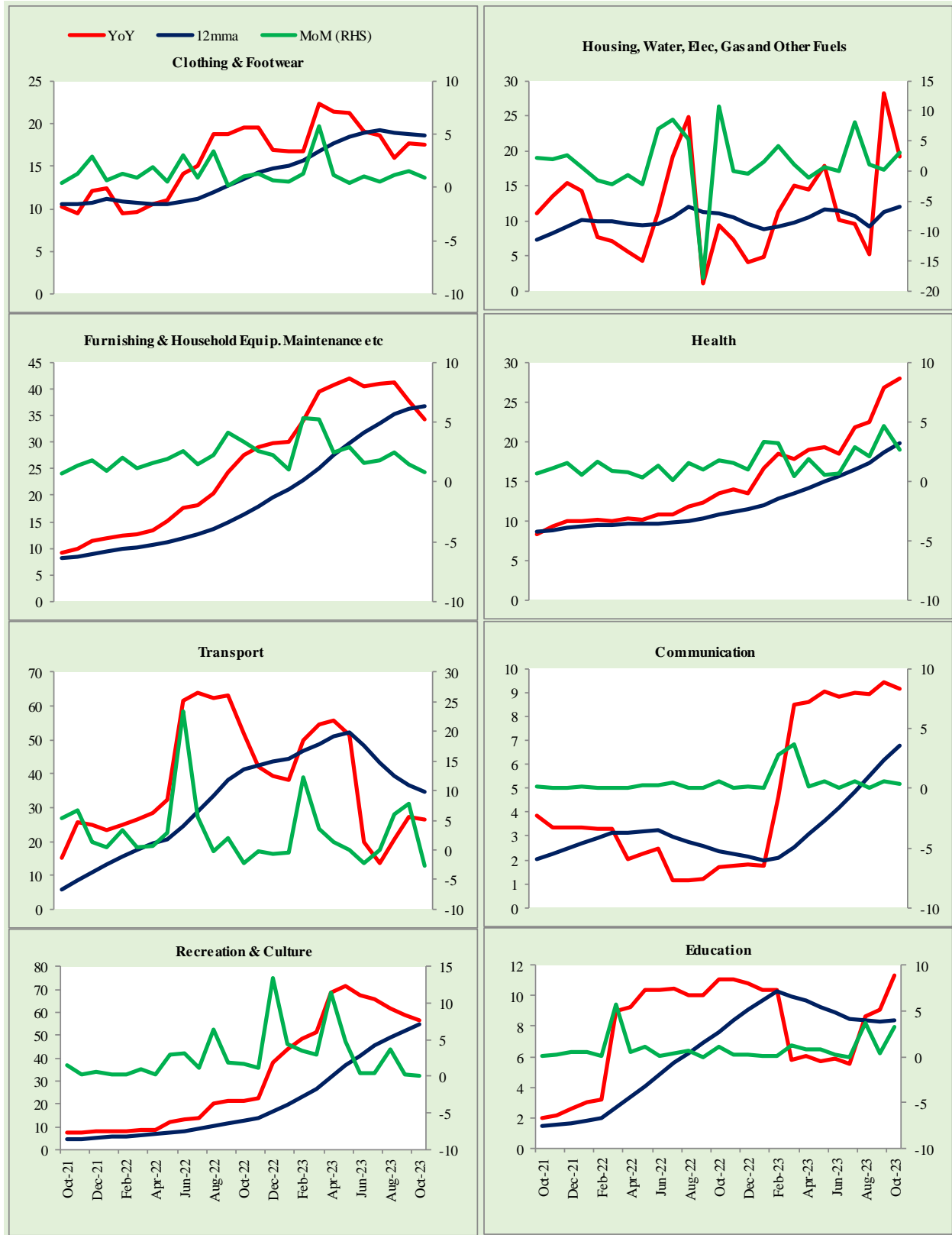
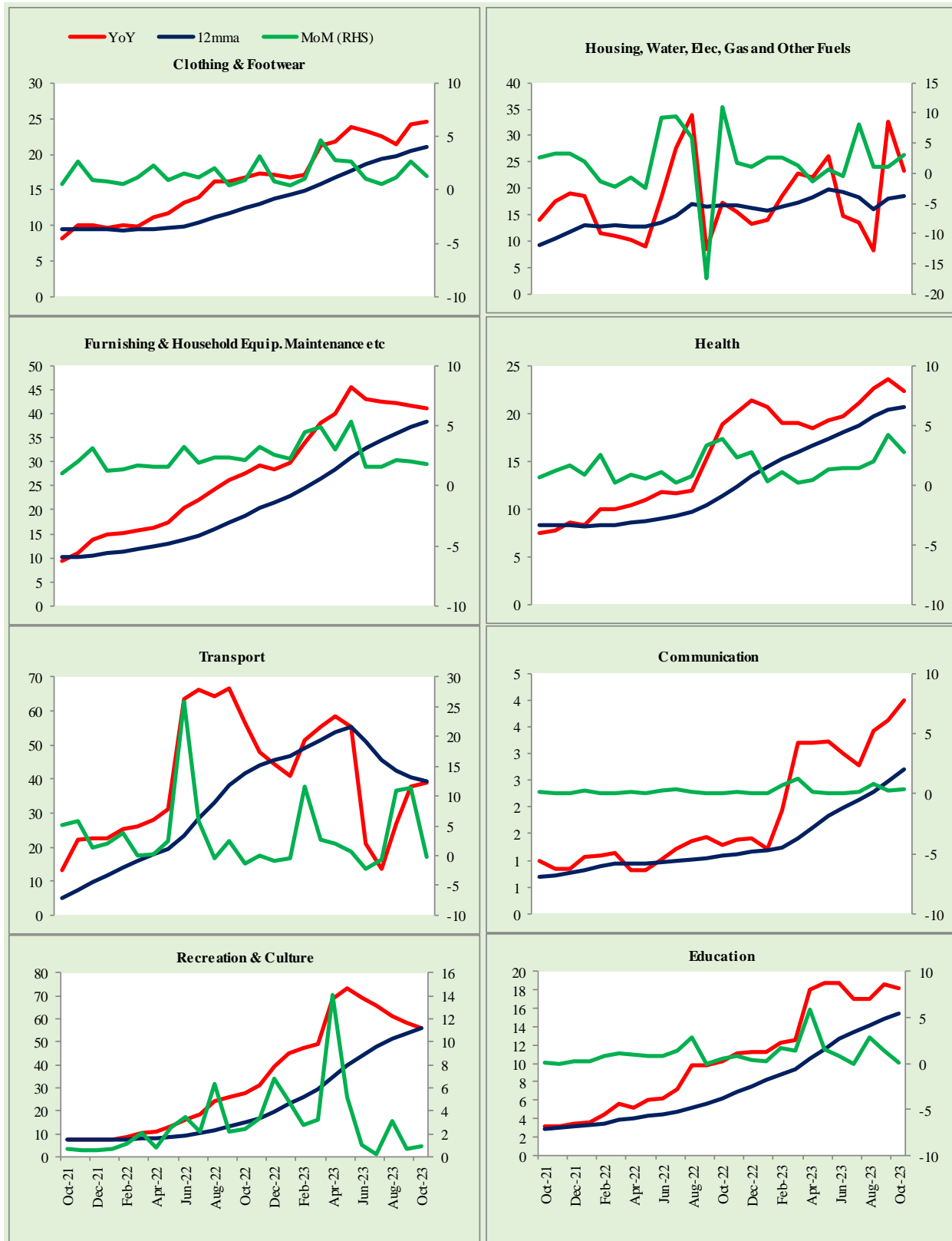


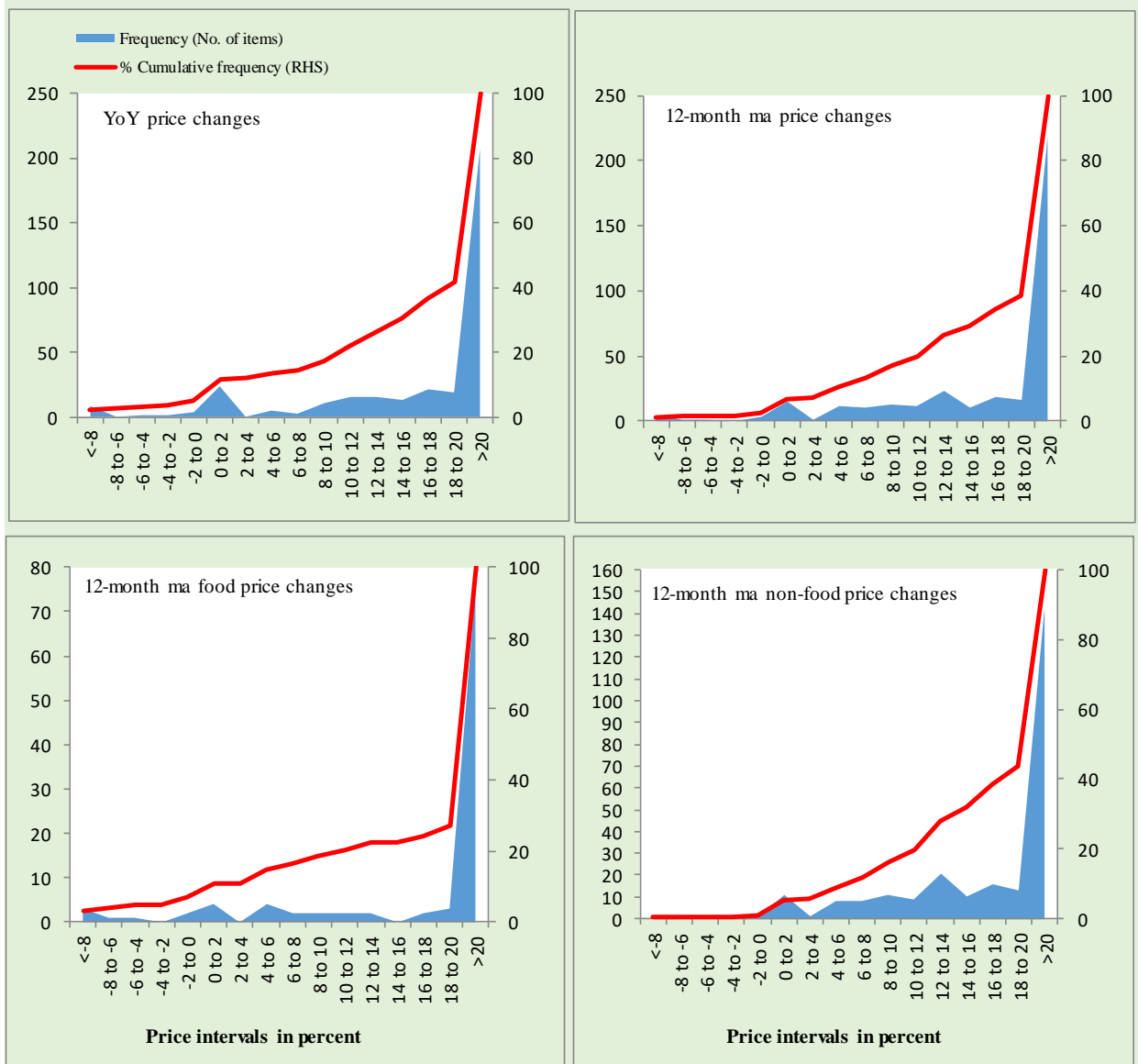
Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)



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

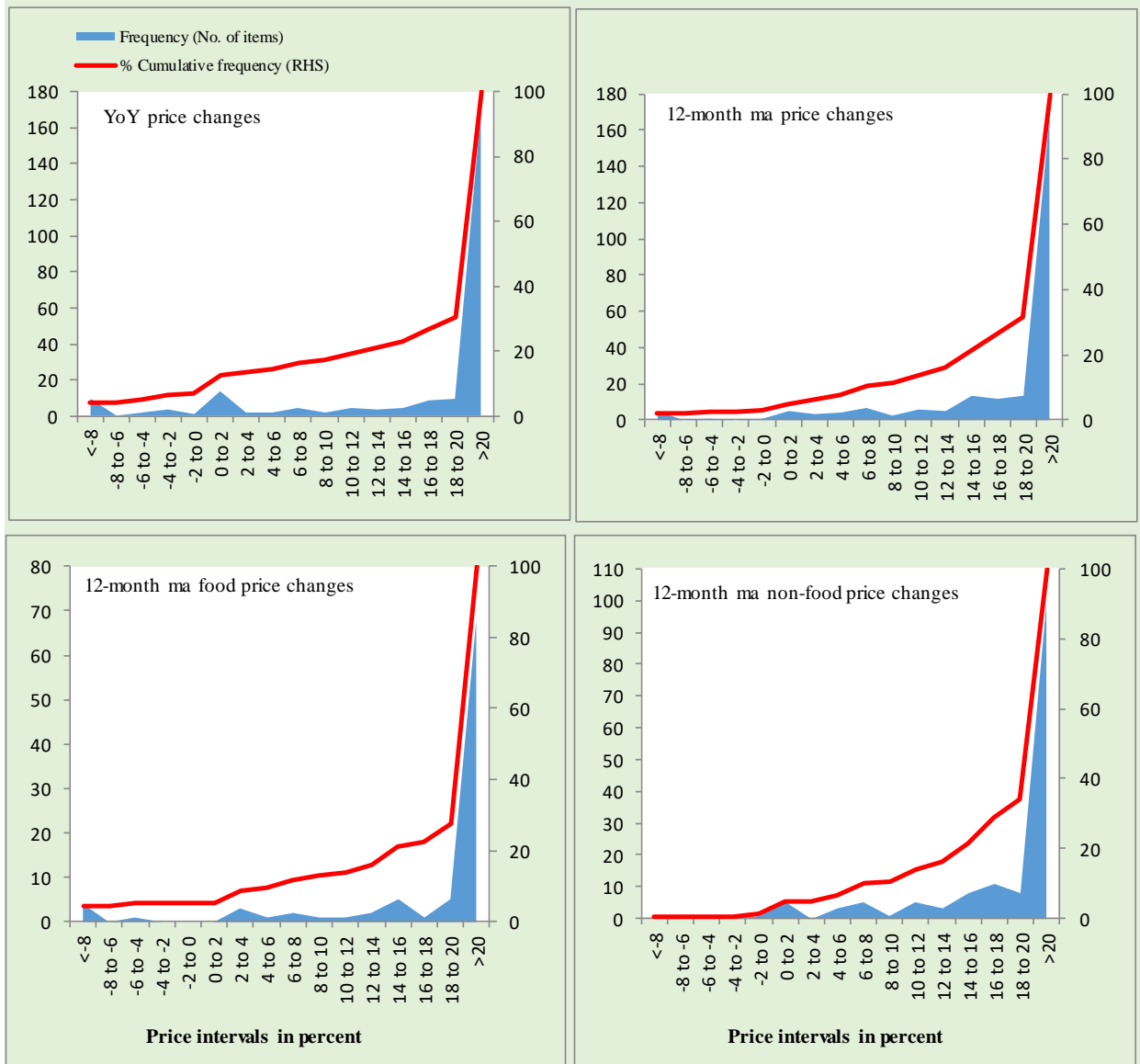


**Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY)**



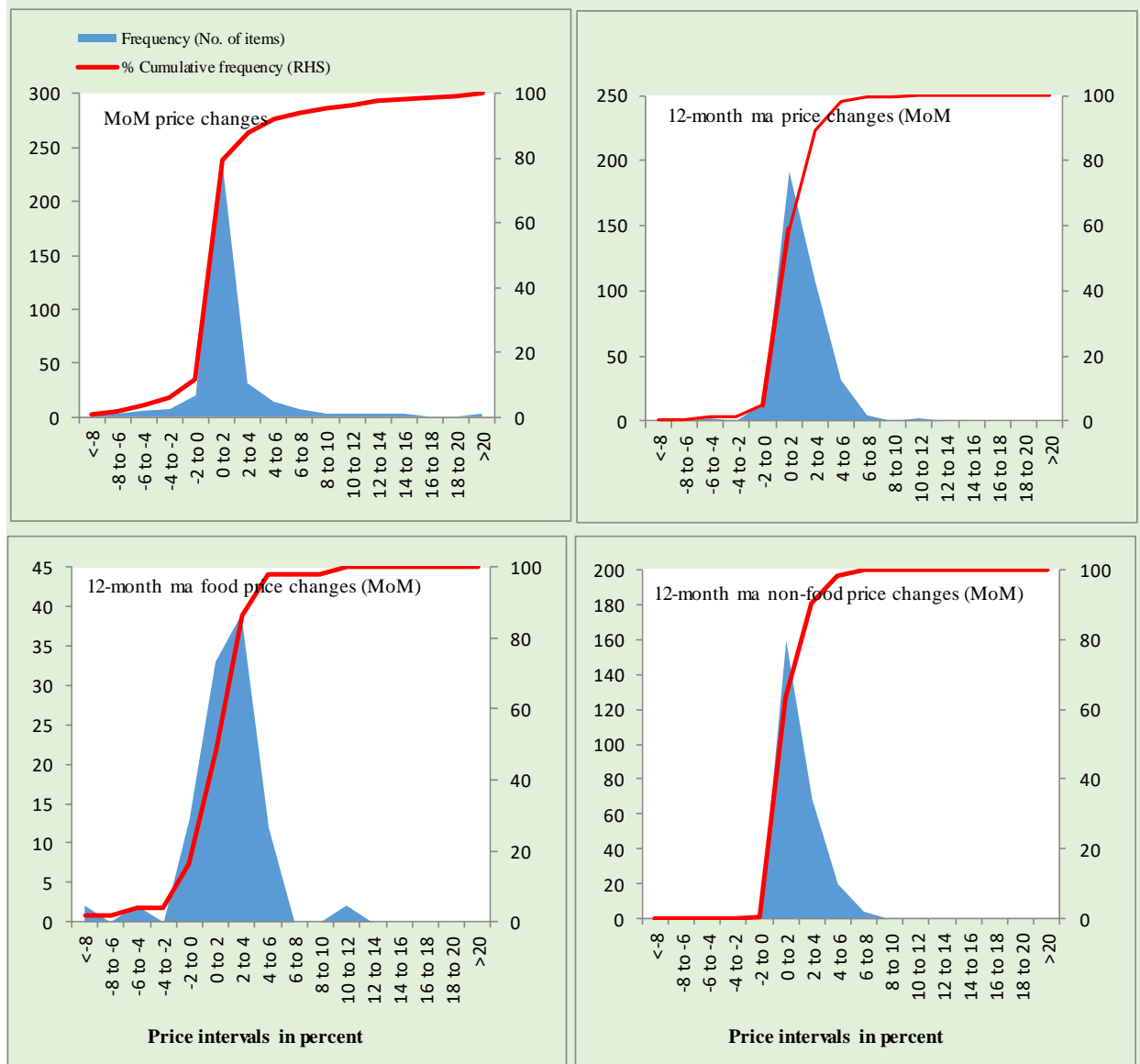
Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

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



Total Items in CPI Basket (244), Food Items (94) and non-Food Items (150).

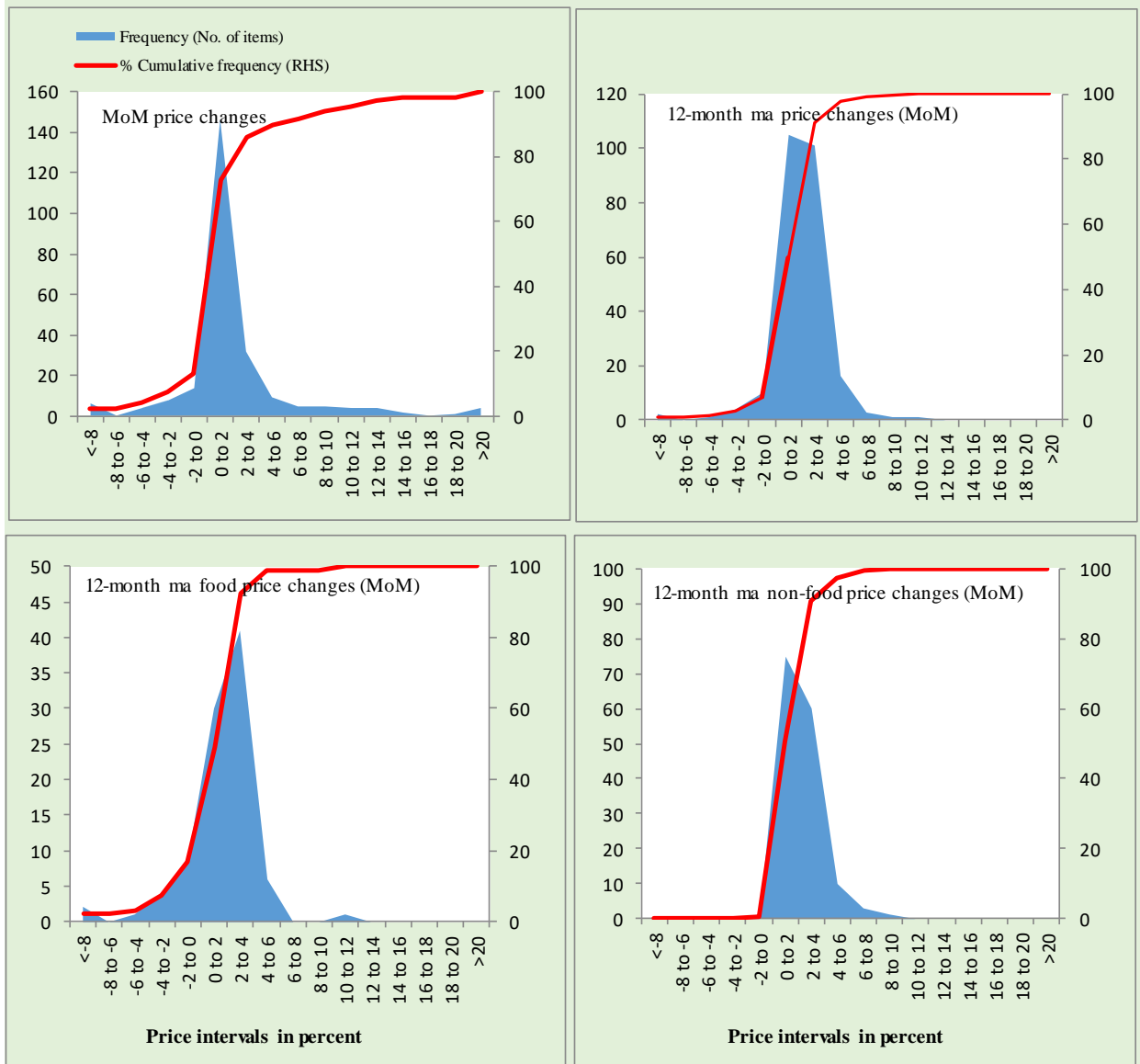
**Figure A6: Frequency Distribution of Price Changes of Urban CPI Items (MoM)**



Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

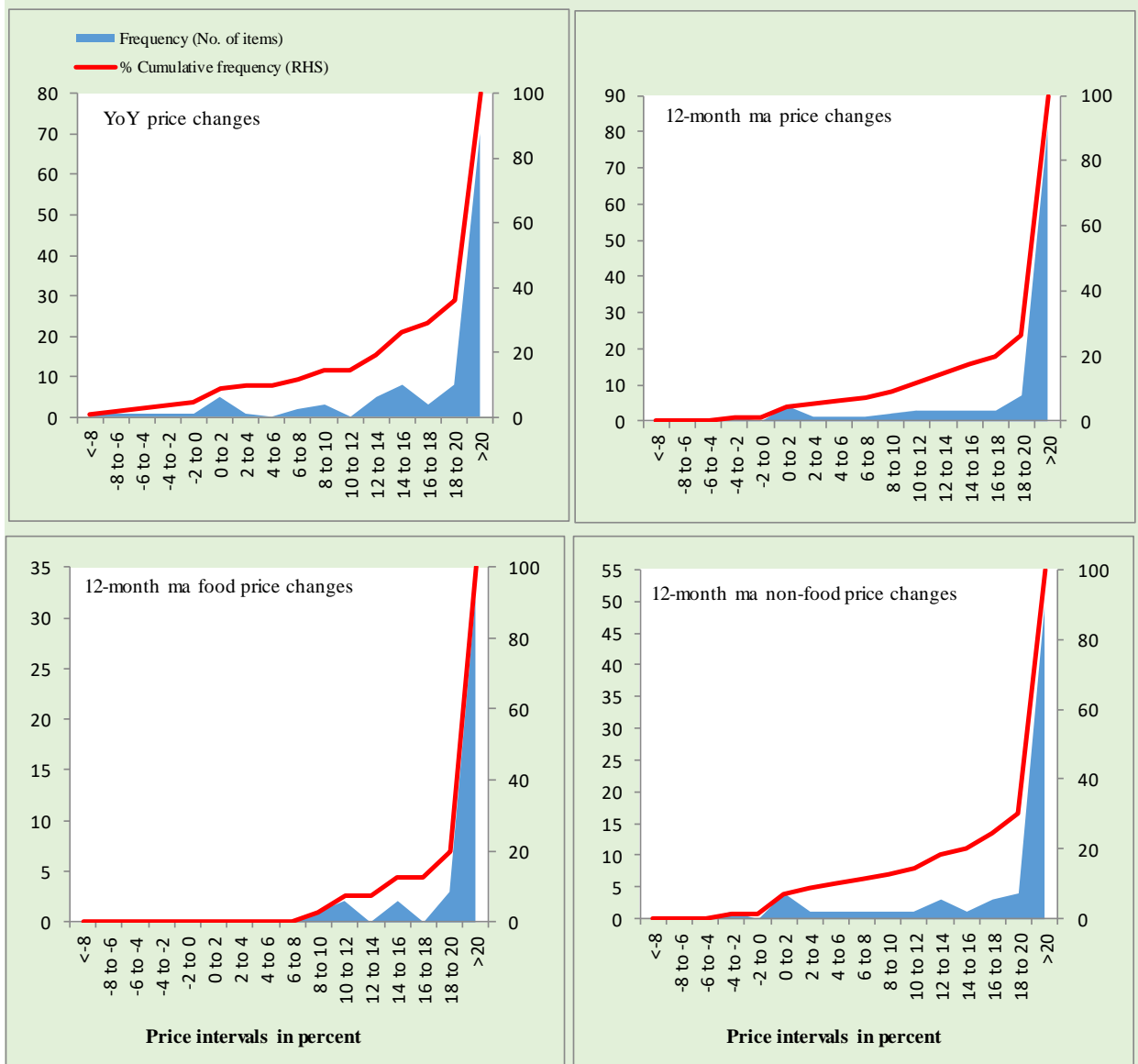


**Figure A7: Frequency Distribution of Price Changes of Rural CPI Items (MoM)**



Total Items in CPI Basket (244), Food Items (94) and non-Food Items (150).

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



Total Items in WPI Basket (110), Food Items (40) and non-Food Items (70).

## 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<sup>2</sup>.

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<sup>2</sup> Prices of certain items (like the seasonal items) during certain period may not be observed/available. To calculate the inflation diffusion index, the items for which prices have been reported (irrespective of changed or not) during the month under review are considered.