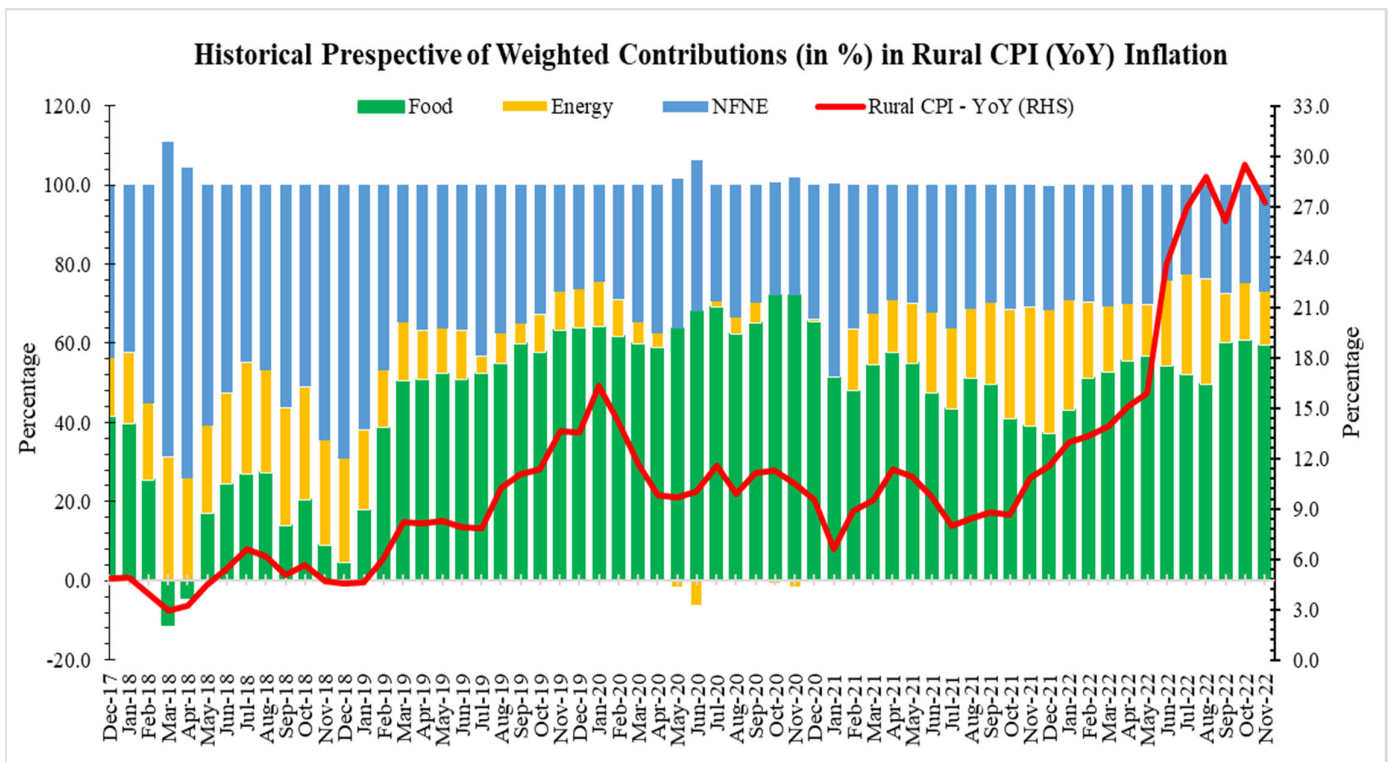




Inflation Monitor

November 2022



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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 & World Bank websites for global inflation analysis

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Data Support

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1. Inflation in Brief

- I. National CPI Inflation on year-on-year (YoY) basis decreased to 23.8 percent in November 2022 from 26.6 percent in previous month. It stood at 11.5 percent in the corresponding month of last year. On month-on-month (MoM) basis, National CPI Inflation decreased to 0.8 percent in November 2022 from 4.7 percent in previous month. It stood at 3.0 percent during corresponding month of last year.
- II. Urban CPI Inflation (YOY) decreased to 21.6 percent in November 2022 from 24.6 percent in previous month. It stood at 12.0 percent during the corresponding month of last year. On MoM basis, Urban CPI Inflation decreased to 0.4 percent in November 2022 from 4.5 percent in the previous month. It stood at 2.9 percent during corresponding month of last year. Seasonally adjusted MoM CPI showed an inflation of 0.4 percent in November 2022 compared to an inflation of 4.0 percent in the previous month.
- III. Rural CPI Inflation (YoY) decreased to 27.2 percent in November 2022 from 29.5 percent in previous month. It was recorded 10.9 percent during the corresponding month of last year. Rural CPI Inflation (on MoM basis) decreased to 1.3 percent in November 2022 from 5.0 percent in the previous month. It stood at 3.1 percent during corresponding month of last year. Seasonally adjusted (MoM) CPI showed an inflation of 0.8 percent in November 2022 as compared to an inflation of 3.9 percent in previous month.
- IV. Urban Core (Non-food, Non-energy (NFNE)) Inflation on YoY basis decreased to 14.6 percent in November 2022 from 14.9 percent in previous month. It stood at 7.6 percent during corresponding month of last year. On MoM basis, Urban Core (NFNE) Inflation decreased to 0.8 percent in November 2022 from 1.3 percent in previous month. It stood at 1.1 percent during the corresponding month of last year.
- V. Rural Core (Non-food, Non-energy (NFNE)) Inflation on YOY basis increased to 18.5 percent in November 2022 from 18.2 percent in previous month. It stood at 8.2 percent during the corresponding month of last year. On MoM basis, it increased to 2.1 percent in November 2022 from 1.5 percent in previous month. It was recorded 1.8 percent during the corresponding month of last year.
- VI. Urban Core Inflation (trimmed) on YoY basis decreased to 19.8 percent in November 2022 from 22.0 percent in previous month. It stood at 9.8 percent during the corresponding month of last year. On MoM basis, Urban Core Inflation (trimmed) decreased to 0.5 percent in November 2022 from 1.9 percent in previous month. It stood at 1.7 percent during the corresponding month of last year.
- VII. Rural Core Inflation (trimmed) on YoY basis decreased to 25.4 percent in November 2022 from 26.7 percent in previous month. It was recorded 9.5 percent during the corresponding month of last year. On MoM basis, Rural Core Inflation (trimmed) decreased to 1.8 percent in November 2022 from 2.7 percent in previous month. It stood at 2.2 percent during corresponding month of last year.

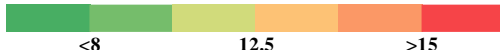
- VIII. WPI Inflation on YoY basis decreased to 27.7 percent in November 2022 from 32.6 percent in previous month. It stood at 27.0 percent during the corresponding month of last year. On MoM basis, a deflation of 0.02 percent is observed in November 2022 as compared to a deflation of 0.5 percent in previous month. It was recorded 3.8 percent during the corresponding month of last year.
- IX. SPI Inflation on YoY basis increased to 29.7 percent in November 2022 from 28.6 percent in previous month. During corresponding month of last year, SPI Inflation stood at 17.4 percent. On MoM basis, SPI showed an inflation of 4.9 percent in November 2022 as compared to a deflation of 2.4 percent in previous month. It stood at 4.1 percent during corresponding month of last year.

2. Heat Maps of CPI inflation

Heat map visually elaborates the evolution of inflation. 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. The observed inflation is compared with the benchmark of inflation target of 11.5 percent¹ for FY23. Green areas indicate low inflation pressures whereas red areas indicate higher inflationary pressures.


Heat Map of National, Urban and Rural CPI inflation (YoY)														
		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Headline	National	11.5	12.3	13.0	12.2	12.7	13.4	13.8	21.3	24.9	27.3	23.2	26.6	23.8
	Urban	12.0	12.7	13.0	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6
	Rural	10.9	11.6	12.9	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2
Food	Urban	11.9	11.7	13.3	14.3	14.5	15.6	15.5	24.0	27.4	28.8	30.8	34.7	29.7
	Rural	8.6	9.0	11.8	14.6	15.5	17.7	19.0	27.0	29.6	30.2	32.7	37.2	33.5
Core	Urban	7.6	8.3	8.2	7.8	8.9	9.1	9.7	11.5	12.0	13.8	14.4	14.9	14.6
	Rural	8.2	8.9	9.0	9.4	10.3	10.9	11.5	13.6	14.6	16.5	17.6	18.2	18.5

Source: Pakistan Bureau of Statistics

Key 

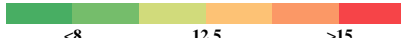
Heat Map of National, Urban and Rural CPI inflation (MoM)														
		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Headline	National	3.0	-0.02	0.4	1.20	0.8	1.6	0.4	6.3	4.3	2.4	-1.2	4.7	0.8
	Urban	2.9	0.3	0.1	0.9	0.7	1.6	0.3	6.2	4.5	2.6	-2.1	4.5	0.4
	Rural	3.1	-0.5	0.9	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3
Food	Urban	3.9	-2.3	-0.8	2.2	1.8	3.7	1.0	5.3	4.3	1.6	5.2	4.6	0.0
	Rural	3.3	-3.1	0.4	2.6	2.3	2.8	1.3	6.0	3.7	1.2	5.7	6.1	0.5
Core	Urban	1.1	1.1	0.8	0.8	1.2	1.1	0.7	2.0	1.2	1.8	0.9	1.3	0.8
	Rural	1.8	1.1	1.2	0.9	1.1	1.2	0.9	2.3	1.6	1.8	1.4	1.5	2.1

Source: Pakistan Bureau of Statistics

Key 

Heat Map of National CPI inflation (YoY)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
General	100.00	11.5	12.3	13.0	12.2	12.7	13.4	13.8	21.3	24.9	27.3	23.2	26.6	23.8
Food and Non-Alcoholic Beverages	34.58	10.5	10.3	12.8	14.7	15.3	17.0	17.3	25.9	28.8	29.5	31.7	36.2	31.2
Alcoholic Beverages, Tobacco	1.02	1.8	2.0	2.0	2.1	1.8	5.1	10.1	17.6	22.5	25.8	32.7	34.6	35.9
Clothing and Footwear	8.60	9.8	11.2	11.2	9.7	9.7	10.8	11.3	13.7	14.6	17.6	17.7	18.3	18.6
Housing, Water, Elec., Gas and Other Fuels	23.63	14.8	16.6	15.5	9.0	8.3	7.1	5.8	13.5	21.8	27.6	3.4	11.9	9.9
Furnishing and Household Equipment Maintenance	4.10	10.4	12.3	13.0	13.4	13.8	14.7	16.1	18.8	19.7	21.9	25.1	27.6	29.1
Health	2.79	8.5	9.4	9.2	10.1	10.0	10.4	10.6	11.3	11.2	11.9	13.8	16.2	17.1
Transport	5.91	24.4	24.1	23.1	25.0	26.3	28.3	31.8	62.2	64.7	63.1	64.5	53.4	44.2
Communication	2.21	2.5	2.5	2.6	2.5	2.6	1.6	1.8	2.0	1.2	1.2	1.3	1.6	1.6
Recreation and Culture	1.59	7.5	7.7	7.8	8.2	9.3	9.7	12.3	14.4	15.4	21.8	22.8	23.7	25.6
Education	3.79	2.4	2.8	3.2	3.4	8.3	8.4	9.5	9.5	9.8	10.0	10.0	10.9	11.1
Restaurants and Hotels	6.92	11.0	12.6	13.0	14.4	14.6	14.6	16.0	21.9	25.0	27.4	28.8	30.4	28.4
Misc. Goods and Services	4.87	10.0	10.6	10.3	10.1	12.4	12.8	13.3	15.8	17.2	20.0	22.9	22.4	23.0

Source: Pakistan Bureau of Statistics

Key 

¹ As per Annual Plan 2022-23 published by Planning Commission of Pakistan.

Heat Map of Urban CPI inflation (YoY)														
Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	
General	100.00	12.0	12.7	13.0	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6
Food and Non-Alcoholic Beverages	30.42	12.2	11.7	13.6	14.5	14.8	16.0	15.8	24.6	27.8	28.9	30.7	34.8	28.9
Alcoholic Beverages, Tobacco	0.85	1.9	2.1	2.0	2.0	1.5	4.8	9.4	18.3	21.7	25.8	34.1	35.4	37.2
Clothing and Footwear	8.01	9.5	12.2	12.4	9.4	9.6	10.5	11.0	14.2	15.0	18.8	18.9	19.5	19.6
Housing, Water, Elec., Gas and Other Fuels	27.03	13.6	15.4	14.2	7.8	7.1	5.6	4.4	11.3	19.2	24.8	1.0	9.5	7.3
Furnishing and Household Equipment Maintenance	4.09	10.0	11.4	11.9	12.4	12.6	13.5	15.2	17.6	18.2	20.3	24.3	27.6	29.0
Health	2.31	9.3	10.1	10.0	10.2	10.0	10.3	10.3	10.9	10.8	11.8	12.3	13.6	14.1
Transport	6.14	25.7	25.0	23.4	24.8	26.3	28.6	32.2	61.5	63.8	62.4	63.3	51.7	42.1
Communication	2.35	3.4	3.3	3.4	3.3	3.3	2.0	2.3	2.5	1.1	1.2	1.2	1.7	1.8
Recreation and Culture	1.73	7.5	7.9	8.1	8.0	8.7	8.9	11.9	13.3	13.9	20.4	21.1	21.4	22.3
Education	4.88	2.2	2.6	3.0	3.2	9.0	9.2	10.4	10.4	10.5	10.1	10.0	11.1	11.1
Restaurants and Hotels	7.41	11.4	13.2	13.2	15.0	14.5	14.5	14.5	21.2	24.7	27.4	29.1	31.8	29.5
Misc. Goods and Services	4.77	10.1	10.4	10.1	9.6	11.9	12.0	12.2	15.1	16.8	20.1	23.1	23.7	23.8

Source: Pakistan Bureau of Statistics

Heat Map of Rural CPI inflation (YoY)														
Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	
General	100.00	10.9	11.6	12.9	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2
Food and Non-Alcoholic Beverages	40.87	8.7	8.9	12.0	15.0	15.9	18.2	19.0	27.4	29.9	30.2	32.8	37.9	33.7
Alcoholic Beverages, Tobacco	1.28	1.7	1.9	2.0	2.3	2.3	5.5	11.0	16.9	23.4	25.8	31.1	33.7	34.4
Clothing and Footwear	9.48	10.1	10.1	9.7	10.0	9.8	11.3	11.7	13.1	14.0	16.2	16.3	16.8	17.4
Housing, Water, Elec., Gas and Other Fuels	18.49	17.5	19.2	18.5	11.6	11.1	10.3	9.1	18.4	27.6	33.9	8.6	17.3	15.6
Furnishing and Household Equipment Maintenance	4.10	11.0	13.7	14.8	15.0	15.6	16.4	17.5	20.5	22.0	24.2	26.2	27.7	29.2
Health	3.51	7.8	8.7	8.3	10.0	10.0	10.4	10.9	11.8	11.7	12.0	15.2	18.9	20.2
Transport	5.56	22.3	22.5	22.5	25.4	26.2	27.9	31.0	63.4	66.3	64.2	66.6	56.4	47.9
Communication	1.99	0.8	0.9	1.1	1.1	1.1	0.8	0.8	1.0	1.2	1.4	1.4	1.3	1.4
Recreation and Culture	1.38	7.5	7.3	7.4	8.5	10.5	11.0	13.0	16.3	18.2	24.3	25.7	27.7	31.3
Education	2.13	3.2	3.5	3.7	4.4	5.6	5.1	6.0	6.2	7.2	9.8	9.8	10.2	11.1
Restaurants and Hotels	6.19	10.3	11.5	12.6	13.3	14.6	14.7	18.5	23.0	25.4	27.5	28.2	27.9	26.4
Misc. Goods and Services	5.02	9.7	10.7	10.8	10.7	13.1	13.9	14.9	16.8	17.7	19.7	22.6	20.5	21.9

Source: Pakistan Bureau of Statistics

Heat Map of National CPI inflation (MoM)														
Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	
General	100.00	3.0	-0.02	0.4	1.20	0.8	1.6	0.4	6.3	4.3	2.4	-1.2	4.7	0.8
Food and Non-Alcoholic Beverages	34.58	3.9	-3.4	-0.5	2.5	2.3	3.7	0.9	5.5	4.1	1.3	5.8	5.6	0.1
Alcoholic Beverages, Tobacco	1.02	0.2	0.3	0.1	0.3	0.0	3.1	4.9	7.0	4.1	2.7	5.9	1.8	1.1
Clothing and Footwear	8.60	1.9	2.0	0.8	1.0	1.0	2.1	0.7	2.3	1.1	2.8	0.3	1.0	2.2
Housing, Water, Elec., Gas and Other Fuels	23.63	2.4	2.8	1.0	-1.6	-2.2	-0.7	-2.3	7.7	8.8	5.5	-17.7	10.9	0.6
Furnishing and Household Equipment Maintenance	4.10	1.6	2.3	1.1	1.8	1.4	1.6	1.8	2.9	1.7	2.3	3.4	2.9	2.8
Health	2.79	1.2	1.6	0.7	2.1	0.6	0.9	0.5	1.2	0.2	1.2	2.2	2.8	1.9
Transport	5.91	6.3	1.3	1.0	3.6	0.3	0.4	2.7	24.4	5.7	-0.3	2.2	-1.8	-0.1
Communication	2.21	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.4	0.1	0.1	0.4	0.1
Recreation and Culture	1.59	0.4	0.6	0.4	0.5	1.3	0.4	2.8	3.2	1.6	6.3	2.0	1.9	2.0
Education	3.79	0.2	0.4	0.4	0.3	4.7	0.6	1.0	0.3	0.5	1.1	0.0	1.0	0.4
Restaurants and Hotels	6.92	3.5	2.1	1.0	1.7	0.9	0.2	1.8	5.8	2.9	2.3	2.2	2.5	1.9
Misc. Goods and Services	4.87	1.8	0.7	0.8	1.1	1.6	0.8	1.2	3.3	1.6	2.7	3.8	0.9	2.3

Source: Pakistan Bureau of Statistics

Heat Map of Urban CPI inflation (MoM)														
Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	
General	100.00	2.9	0.3	0.1	0.9	0.7	1.6	0.3	6.2	4.5	2.6	-2.1	4.5	0.4
Food and Non-Alcoholic Beverages	30.42	4.3	-3.0	-1.1	2.3	2.1	4.3	0.9	5.0	4.3	1.4	5.4	4.8	-0.3
Alcoholic Beverages, Tobacco	0.85	0.3	0.1	0.0	0.2	0.1	3.3	4.6	8.2	2.9	3.4	6.8	1.3	1.6
Clothing and Footwear	8.01	1.3	2.9	0.7	1.3	0.9	2.0	0.5	3.0	1.0	3.4	0.1	1.0	1.3
Housing, Water, Elec., Gas and Other Fuels	27.03	2.0	2.6	0.6	-1.6	-2.2	-0.6	-2.3	7.0	8.6	5.2	-17.8	10.9	-0.1
Furnishing and Household Equipment Maintenance	4.09	1.4	1.8	0.9	2.0	1.1	1.6	2.0	2.6	1.5	2.3	4.1	3.3	2.6
Health	2.31	1.1	1.6	0.5	1.6	0.9	0.8	0.4	1.4	0.1	1.6	1.0	1.7	1.6
Transport	6.14	6.6	1.3	0.4	3.4	0.5	0.6	2.9	23.5	5.6	-0.2	2.0	-2.2	-0.1
Communication	2.35	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.4	0.0	0.1	0.6	0.0
Recreation and Culture	1.73	0.3	0.5	0.3	0.2	0.9	0.2	3.0	3.1	1.2	6.3	2.0	1.7	1.1
Education	4.88	0.2	0.5	0.5	0.1	5.7	0.6	1.1	0.1	0.3	0.7	0.0	1.1	0.2
Restaurants and Hotels	7.41	3.5	2.3	0.6	2.0	0.7	0.2	0.6	6.6	3.3	2.3	2.8	3.0	1.8
Misc. Goods and Services	4.77	1.7	0.6	0.7	1.2	1.8	0.7	1.1	3.7	1.4	3.4	3.9	1.4	1.7

Source: Pakistan Bureau of Statistics

Heat Map of Rural CPI inflation (MoM)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
General	100.00	3.1	-0.5	0.9	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3
Food and Non-Alcoholic Beverages	40.87	3.6	-3.7	0.2	2.8	2.5	3.1	0.8	6.1	3.8	1.2	6.2	6.6	0.4
Alcoholic Beverages, Tobacco	1.28	0.1	0.5	0.3	0.3	0.0	2.8	5.3	5.6	5.5	1.9	4.8	2.5	0.6
Clothing and Footwear	9.48	2.6	0.9	0.8	0.6	1.1	2.3	0.9	1.6	1.2	2.0	0.5	1.0	3.2
Housing, Water, Elec., Gas and Other Fuels	18.49	3.3	3.2	1.9	-1.4	-2.3	-0.8	-2.5	9.2	9.4	6.0	-17.5	10.9	1.8
Furnishing and Household Equipment Maintenance	4.10	2.0	3.1	1.3	1.3	1.7	1.6	1.5	3.3	2.0	2.4	2.4	2.2	3.2
Health	3.51	1.3	1.7	0.9	2.5	0.2	0.9	0.6	1.1	0.3	0.8	3.4	3.9	2.3
Transport	5.56	5.8	1.3	2.0	3.9	0.0	0.2	2.5	25.9	5.7	-0.5	2.5	-1.3	0.0
Communication	1.99	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.2	0.4	0.2	0.1	0.0	0.1
Recreation and Culture	1.38	0.5	0.6	0.7	1.2	2.0	0.8	2.5	3.4	2.2	6.4	2.2	2.4	3.4
Education	2.13	0.0	0.3	0.2	0.8	1.1	1.0	0.8	0.9	1.4	2.8	0.0	0.5	0.8
Restaurants and Hotels	6.19	3.5	1.6	1.6	1.0	1.2	0.3	3.9	4.4	2.2	2.4	1.2	1.7	2.3
Misc. Goods and Services	5.02	2.0	0.9	1.0	0.8	1.4	1.0	1.3	2.8	2.0	1.9	3.7	0.2	3.2

Source: Pakistan Bureau of Statistics

<0.00 0.75 >1.50

Heat Map of Rural CPI inflation (YoY)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Rural	100.00	10.9	11.6	12.9	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2
Food	45.95	8.6	9.0	11.8	14.6	15.5	17.7	19.0	27.0	29.6	30.2	32.7	37.2	33.5
Non-perishable	40.16	11.7	12.8	12.8	12.4	13.7	15.8	17.0	25.5	29.3	29.6	29.7	31.9	31.8
Perishable	5.79	-5.5	-12.0	6.6	35.8	32.8	34.4	33.7	41.2	33.5	34.3	52.6	74.2	43.8
Non Food	54.05	13.0	14.0	13.9	12.2	12.5	12.8	13.1	20.4	24.5	27.5	20.1	22.4	21.4
Energy	11.41	32.0	34.0	32.7	21.9	20.4	19.8	19.3	46.6	61.2	67.8	28.8	36.9	30.7
NFNE (Core)	42.64	8.2	8.9	9.0	9.4	10.3	10.9	11.5	13.6	14.6	16.5	17.6	18.2	18.5
HRI	8.61	6.6	6.6	5.9	5.9	5.9	5.7	5.7	5.7	5.9	5.9	5.9	5.9	5.9
Core Excl HRI	34.03	8.6	9.5	9.7	10.3	11.4	12.2	12.9	15.5	16.8	19.1	20.4	21.2	21.5

Source: Pakistan Bureau of Statistics

<8 12.5 >15

Heat Map of Urban CPI inflation (YoY)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Urban	100.00	12.0	12.7	13.0	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6
Food	36.80	11.9	11.7	13.3	14.3	14.5	15.6	15.5	24.0	27.4	28.8	30.8	34.7	29.7
Non-perishable	32.34	15.3	15.5	14.7	11.8	13.0	14.4	15.0	23.5	27.1	28.2	27.9	29.4	27.1
Perishable	4.46	-1.9	-8.7	6.3	34.1	28.0	25.6	20.6	32.4	32.4	33.5	48.3	67.0	38.6
Non Food	63.20	12.0	13.4	12.8	9.9	10.4	10.2	10.4	17.3	21.3	24.7	15.2	18.2	16.4
Energy	9.47	37.2	41.3	38.1	20.2	18.0	15.7	14.1	48.8	70.2	80.7	18.9	34.1	24.5
NFNE (Core)	53.73	7.6	8.3	8.2	7.8	8.9	9.1	9.7	11.5	12.0	13.8	14.4	14.9	14.6
HRI	19.26	6.6	6.6	6.1	6.1	6.1	5.6	5.6	5.6	5.6	5.6	5.6	5.3	5.3
Core Excl HRI	34.47	8.1	9.2	9.3	8.7	10.5	11.0	11.9	14.7	15.5	18.2	19.2	20.1	19.6

Source: Pakistan Bureau of Statistics

<8 12.5 >15

Heat Map of Rural CPI inflation (MoM)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Rural	100.00	3.1	-0.5	0.9	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3
Food	45.95	3.3	-3.1	0.4	2.6	2.3	2.8	1.3	6.0	3.7	1.2	5.7	6.1	0.5
Non-perishable	40.16	1.8	-0.4	1.0	1.4	2.8	0.6	2.8	6.2	3.5	0.7	4.2	3.7	1.7
Perishable	5.79	14.5	-21.8	-5.1	13.3	0.5	20.0	-10.7	5.2	6.0	3.9	18.4	22.2	-5.5
Non Food	54.05	3.0	1.9	1.4	0.4	-0.2	0.5	0.0	7.1	4.6	3.1	-4.9	3.9	2.1
Energy	11.41	7.0	4.4	1.9	-0.9	-4.0	-1.8	-2.8	24.3	13.4	6.4	-21.0	11.8	2.2
NFNE (Core)	42.64	1.8	1.1	1.2	0.9	1.1	1.2	0.9	2.3	1.6	1.8	1.4	1.5	2.1
HRI	8.61	0.0	0.0	2.1	0.0	0.0	1.0	0.0	0.0	1.4	0.0	0.0	1.3	0.0
Core Excl HRI	34.03	2.2	1.4	1.0	1.1	1.3	1.3	1.0	2.9	1.7	2.2	1.7	1.6	2.5

Source: Pakistan Bureau of Statistics

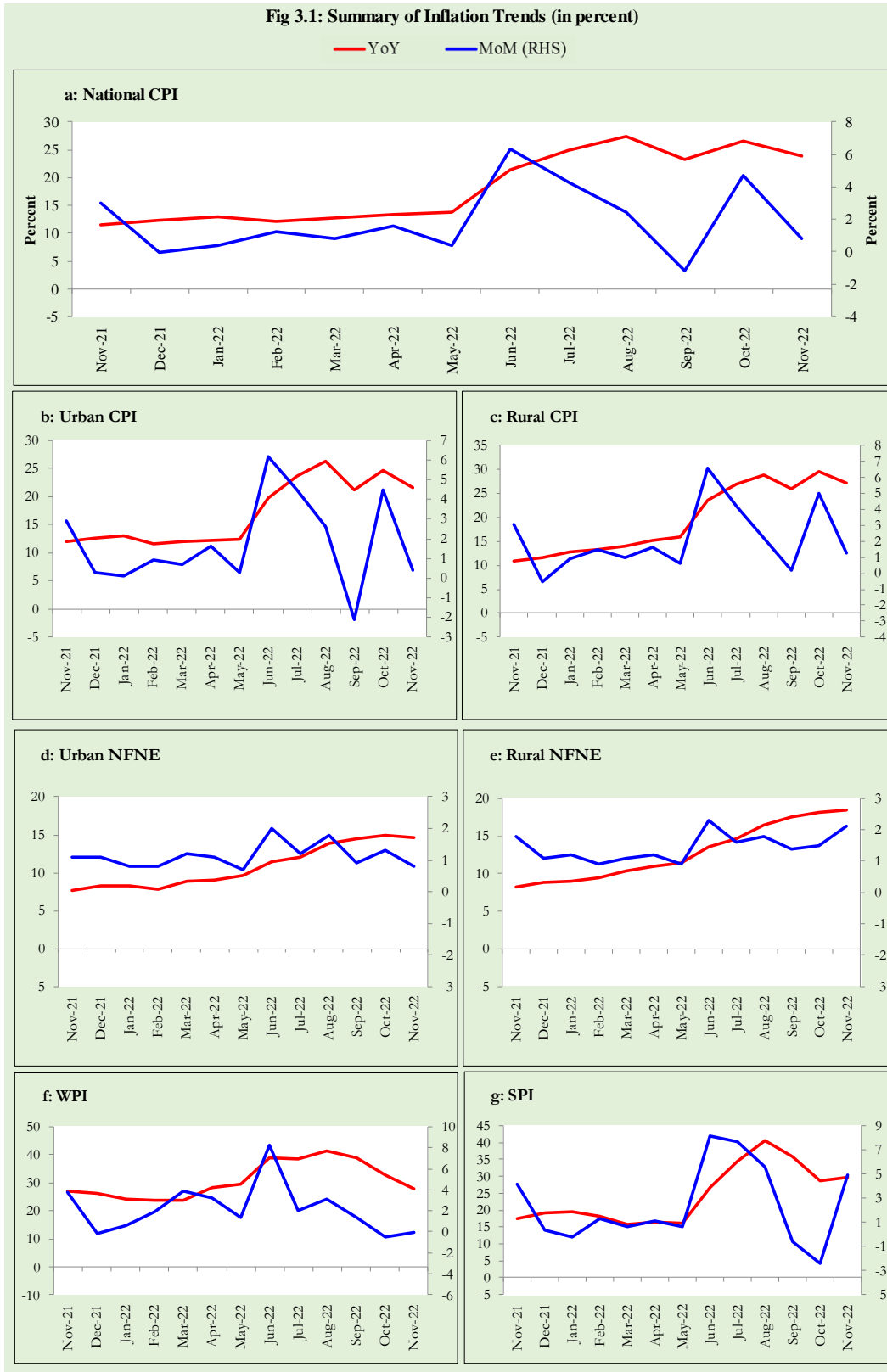
<0.00 0.75 >1.50

Heat Map of Urban CPI inflation (MoM)														
	Weights	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
Urban	100.00	2.9	0.3	0.1	0.9	0.7	1.6	0.3	6.2	4.5	2.6	-2.1	4.5	0.4
Food	36.80	3.9	-2.3	-0.8	2.2	1.8	3.7	1.0	5.3	4.3	1.6	5.2	4.6	0.0
<i>Non-perishable</i>	32.34	2.4	0.2	-0.4	0.5	2.6	1.7	3.1	4.9	3.8	1.2	4.0	2.2	0.7
<i>Perishable</i>	4.46	15.1	-20.2	-5.4	14.7	-1.1	20.8	-10.8	5.5	7.3	2.8	14.0	18.5	-4.4
Non Food	63.20	2.2	2.0	0.6	0.2	-0.1	0.3	-0.1	6.8	4.6	3.3	-6.6	4.5	0.6
<i>Energy</i>	9.47	7.6	5.8	-0.4	-2.3	-5.9	-3.4	-4.6	32.2	18.3	8.4	-31.1	19.5	-0.2
<i>NFNE (Core)</i>	53.73	1.1	1.1	0.8	0.8	1.2	1.1	0.7	2.0	1.2	1.8	0.9	1.3	0.8
<i>HRI</i>	19.26	0.0	0.0	1.5	0.0	0.0	1.1	0.0	0.0	1.5	0.0	0.0	1.1	0.0
<i>Core Excl HRI</i>	34.47	1.7	1.7	0.4	1.1	1.9	1.0	1.1	3.0	1.1	2.7	1.4	1.4	1.2

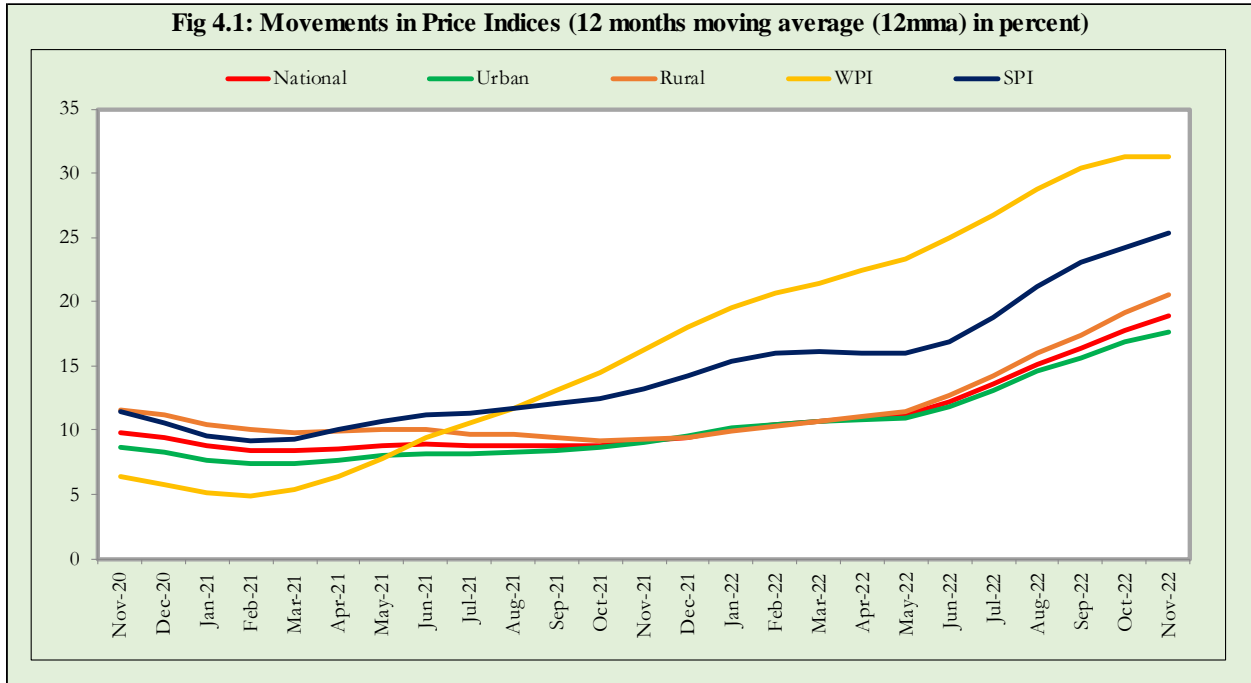
Source: Pakistan Bureau of Statistics

<0.00 0.75 >1.50

3. Trends in Inflation



4. Movement in Price Indices (Moving Averages)



5. Movement in Price Indices (Month-on-Month)

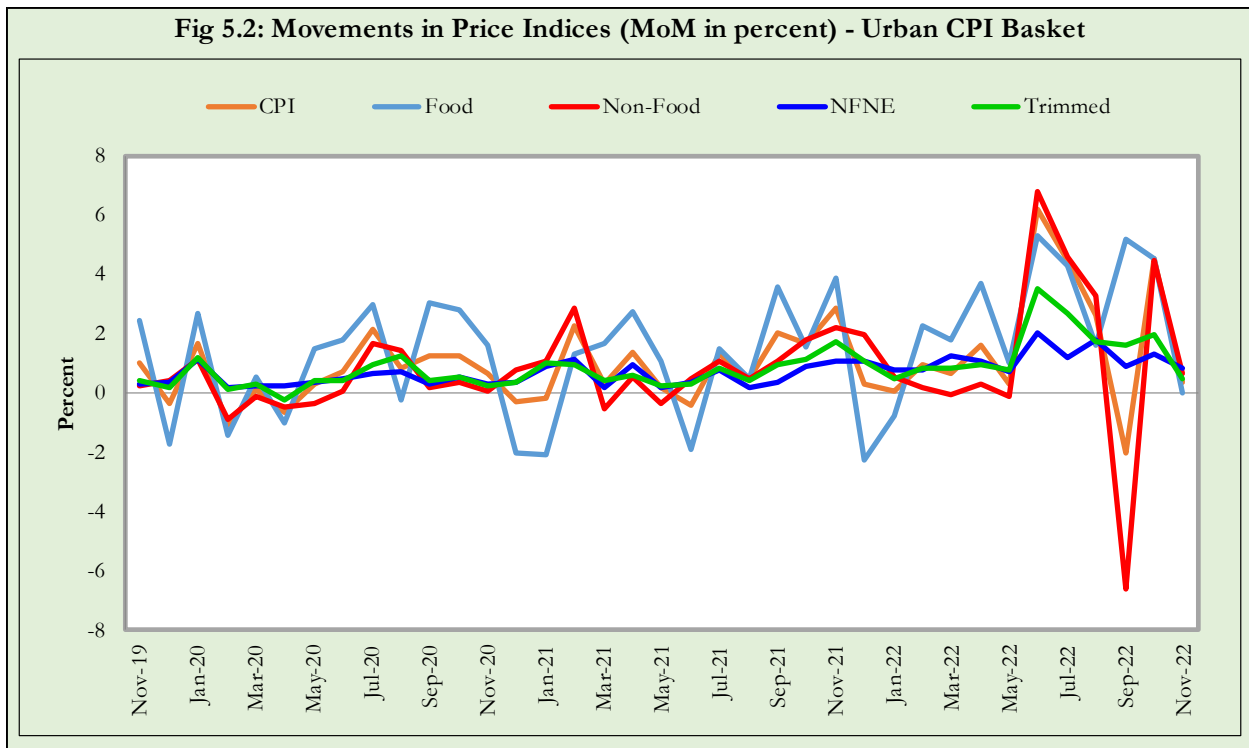
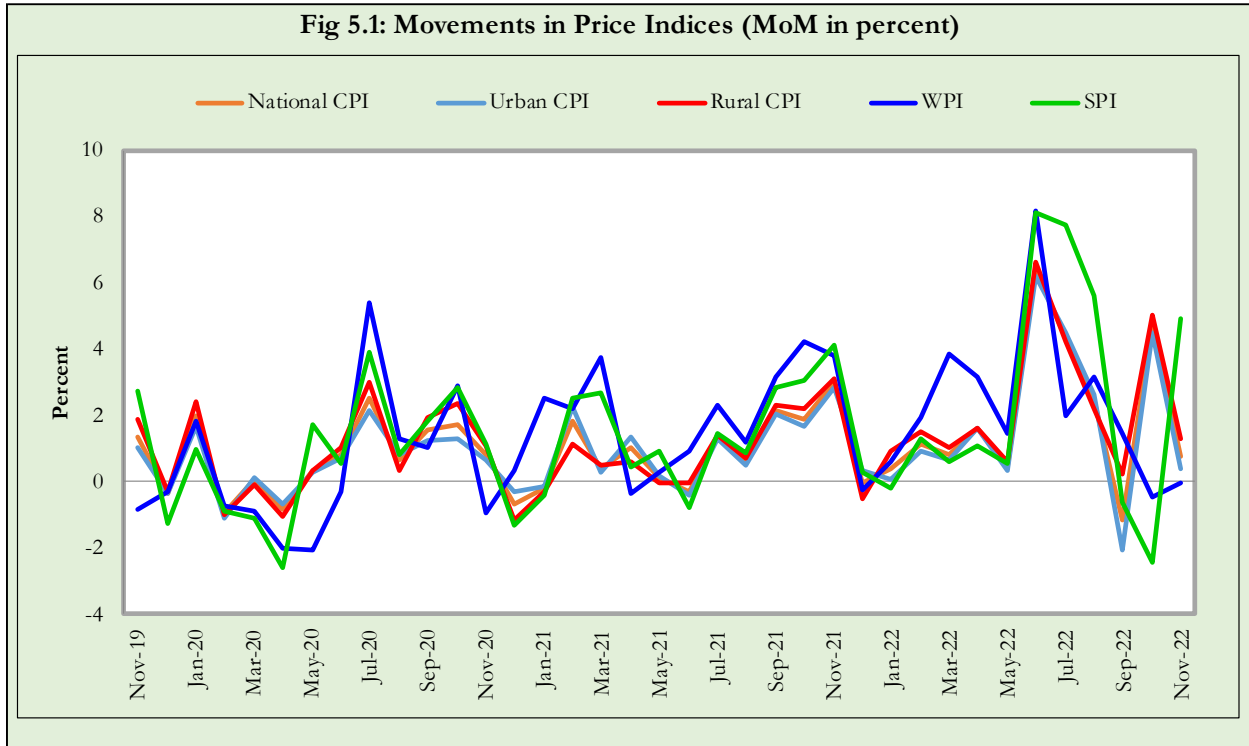
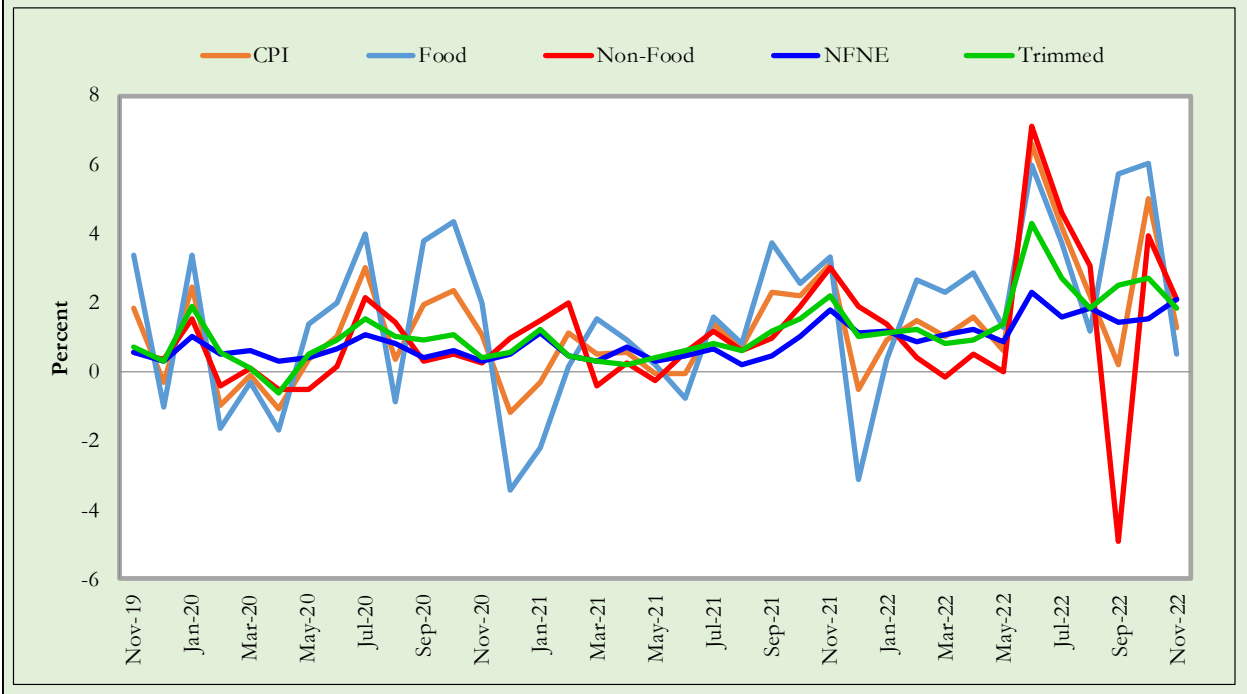
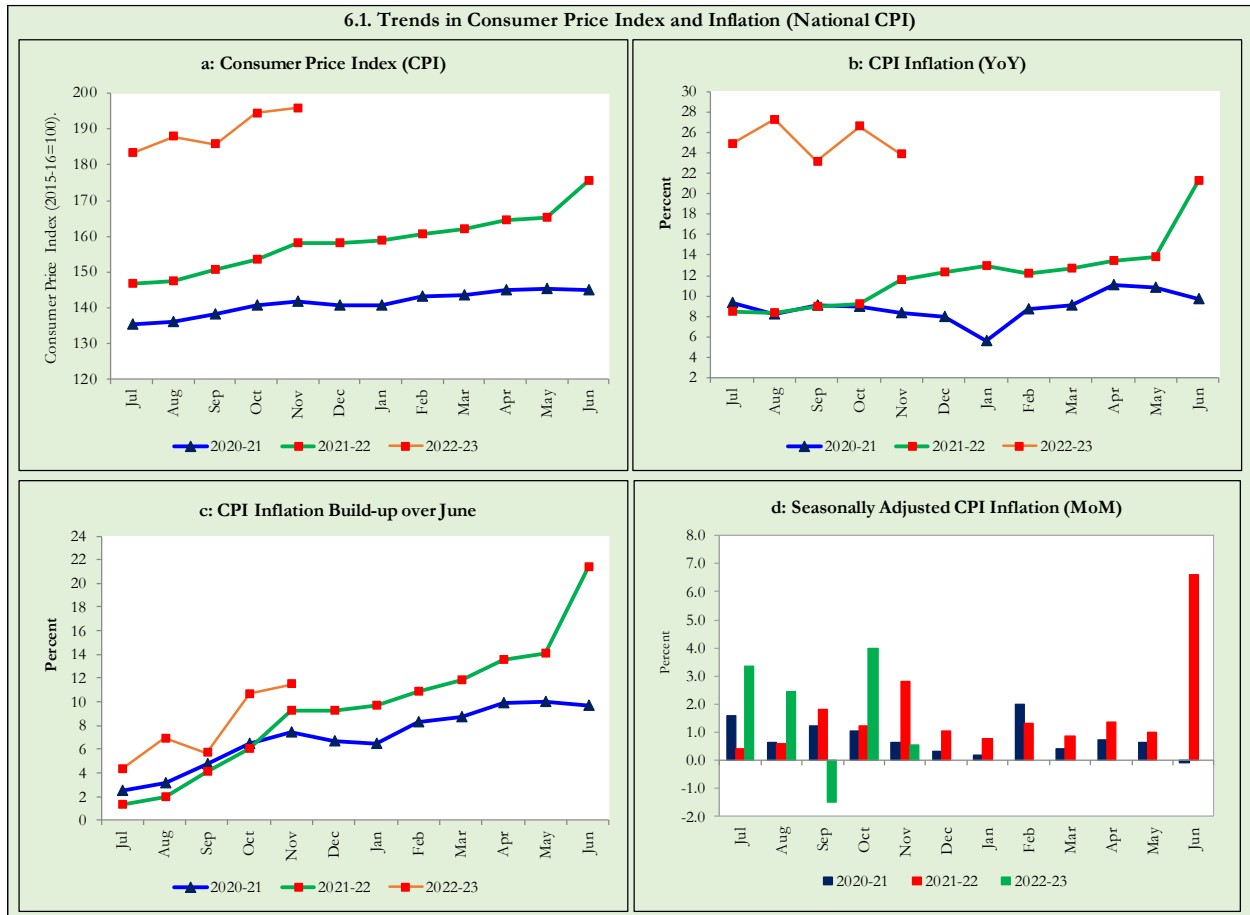


Fig 5.3: Movements in Price Indices (MoM in percent) - Rural CPI Basket

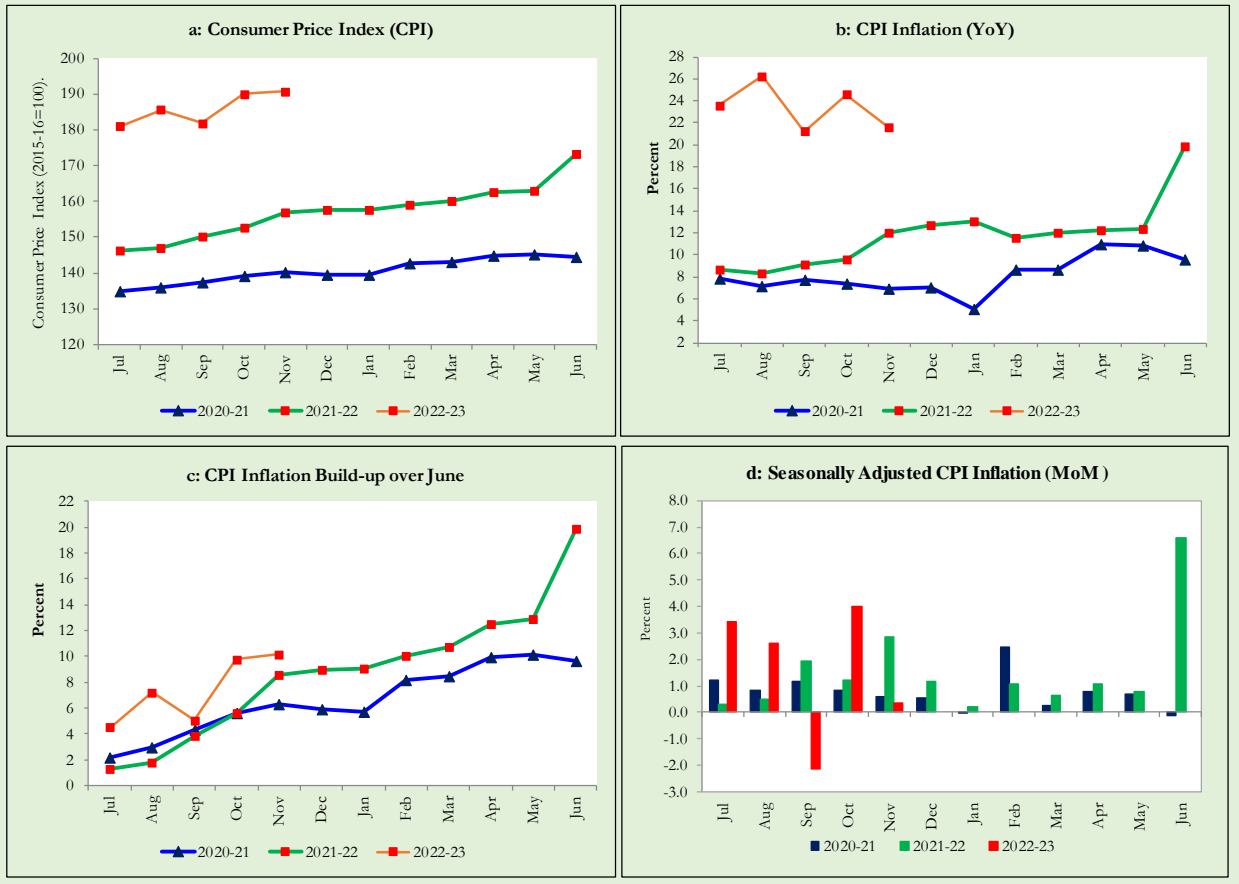


6. Trends in Consumer Price Indices and Inflation

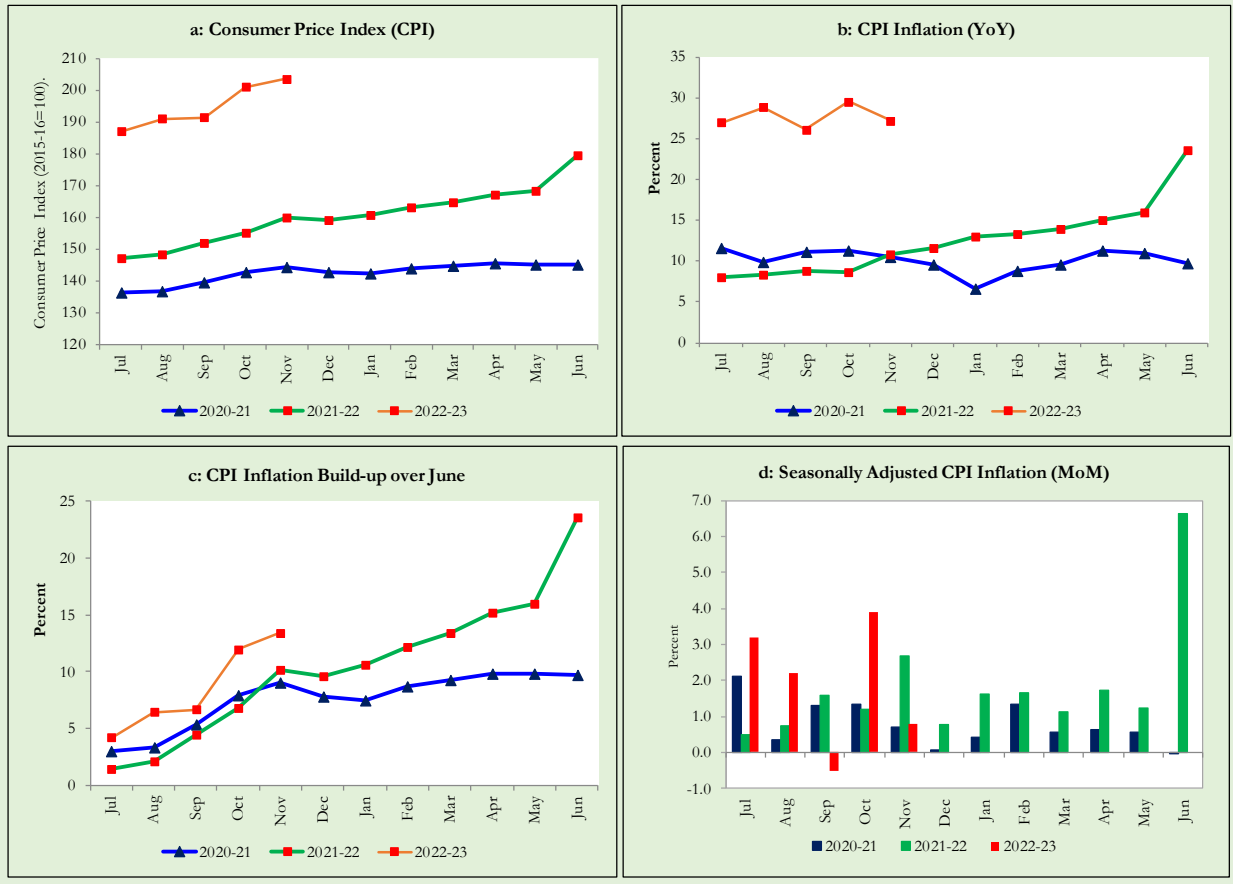
Monthly Consumer Price Indices, YoY growth rates and inflation build up over November along with seasonally adjusted (MoM) growth rates in CPI (National, Urban and Rural) is summarized in the following graphs (Figure 6.1 to 6.3).



6.2. Trends in Consumer Price Index and Inflation (Urban CPI Basket)



6.3. Trends in Consumer Price Index and Inflation (Rural CPI Basket)



7. Weighted Contribution

The weighted contribution of food group in the overall Urban CPI Inflation decreased to 53.5 percent during November 2022 from 54.3 percent in previous month. It was 38.6 percent during corresponding month of last year. The weighted contribution of non-food group increased to 46.6 percent in November 2022 from 45.7 percent in previous month. Weighted Contribution of non-food was 61.4 percent during corresponding month of last year. Table 7.1 provides the historical perspective of weighted contribution of food and non-food group and their respective sub-indices (Perishable food, Non-Perishable food, Energy, Core Inflation (NFNE), NFNE excluding HRI and HRI) in the overall inflation for urban basket.

Period	Overall CPI	Food Group			Non-Food Group				
		Food	Perishable food	Non-Perishable food	Non-food	Energy	Core Inflation (NFNE)	NFNE excl HRI	HRI
		a=(b+e)	b=(c+d)	c	d	e=(f+g)	f	g=(h+i)	h
Nov-21	100.0	38.6	-0.9	39.5	61.4	28.6	32.8	22.7	10.1
Dec-21	100.0	35.0	-3.4	38.5	65.0	30.8	34.2	24.6	9.5
Jan-22	100.0	38.2	2.0	36.2	61.8	28.4	33.4	24.5	8.9
Feb-22	100.0	46.1	10.9	35.2	54.0	18.7	35.3	25.5	9.8
Mar-22	100.0	45.6	8.9	36.7	54.4	15.3	39.1	29.7	9.4
Apr-22	100.0	48.5	9.6	38.9	51.5	12.7	38.7	30.4	8.4
May-22	100.0	48.2	7.1	41.1	51.7	10.9	40.9	32.6	8.3
Jun-22	100.0	45.7	6.7	39.0	54.3	23.9	30.3	25.2	5.2
Jul-22	100.0	44.0	6.0	38.0	56.0	29.5	26.5	22.1	4.4
Aug-22	100.0	41.6	5.6	36.0	58.4	31.0	27.3	23.4	3.9
Sep-22	100.0	56.0	10.1	45.8	44.0	9.2	34.8	30.0	4.8
Oct-22	100.0	54.3	12.6	41.7	45.7	15.0	30.7	26.9	3.8
Nov-22	100.0	53.5	9.2	44.2	46.6	12.8	33.8	29.5	4.3

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

For rural basket, the weighted contribution of food group in the overall Rural CPI Inflation decreased to 59.4 percent during November 2022 from 60.7 percent in previous month. It was 39.2 percent during corresponding month of last year. The weighted contribution of non-food group increased to 40.6 percent in November 2022 from 39.3 percent in previous month. Weighted contribution of non-food group was 60.8 percent during corresponding month of last year. Table 7.2 provides the historical perspective of weighted contribution of food (Perishable food, Non-Perishable food) and non-food group (Energy, Core Inflation (NFNE), NFNE excluding HRI and HRI) in the overall inflation for rural basket.

Table 7.2 Weighted Contribution (in percent) to Rural CPI Inflation (YoY)

Period	Overall CPI	Food Group			Non-Food Group				
		Food	Perishable food	Non- Perishable food	Non-food	Energy	Core Inflation (NFNE)	NFNE excl HRI	HRI
		a=(b+e)	b=(c+d)	c	d	e=(f+g)	f	g=(h+i)	h
Nov-21	100.0	39.2	-4.0	43.2	60.8	30.1	30.8	25.9	4.9
Dec-21	100.0	37.2	-6.9	44.1	62.8	31.2	31.6	27.0	4.6
Jan-22	100.0	43.2	2.7	40.5	56.8	27.7	29.1	25.3	3.8
Feb-22	100.0	51.3	12.4	38.9	48.7	19.2	29.5	25.8	3.6
Mar-22	100.0	52.6	11.2	41.5	47.4	16.7	30.7	27.2	3.5
Apr-22	100.0	55.5	12.7	42.8	44.5	14.6	29.9	26.8	3.1
May-22	100.0	56.7	10.6	46.1	43.3	13.2	30.1	27.1	3.0
Jun-22	100.0	54.2	8.7	45.4	45.8	21.7	24.1	22.1	2.0
Jul-22	100.0	52.1	6.9	45.2	47.9	25.4	22.6	20.8	1.8
Aug-22	100.0	49.6	6.8	42.9	50.4	26.7	23.7	22.0	1.7
Sep-22	100.0	60.1	11.6	48.5	39.9	12.6	27.3	25.5	1.8
Oct-22	100.0	60.7	15.2	45.5	39.3	14.6	24.7	23.1	1.6
Nov-22	100.0	59.4	10.8	48.6	40.6	13.7	26.9	25.3	1.6

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 (MoM change) 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 basket for which prices have reported. IDI for urban and rural baskets (CPI, Core and twelve groups) is presented in Table 8.1(a & b) for the last thirteen months.

Table 8.1(a) Inflation Diffusion Index for Urban CPI Basket - based on MoM change													
Groups	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
General	70.2	63.2	57.6	60.1	60.1	57.3	61.2	75.3	71.1	70.8	62.4	66.3	54.5
Food & Non-Alcoholic Beverages	42.2	34.4	40.0	46.7	34.4	44.4	37.8	57.8	66.7	54.4	56.7	43.3	18.9
Alcoholic Beverages & Tobacco	33.3	33.3	66.7	33.3	33.3	66.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Clothing & Footwear	80.0	85.0	77.5	77.5	70.0	67.5	72.5	82.5	62.5	70.0	62.5	72.5	75.0
Housing, Water, Elect, Gas & other Fuels	72.4	69.0	13.8	3.4	10.3	17.2	20.7	72.4	75.9	58.6	3.4	51.7	24.1
Furnishing & Household Equip. Maintenance etc.	90.5	88.1	88.1	90.5	90.5	90.5	97.6	100.0	97.6	95.2	97.6	100.0	100.0
Health	64.5	90.3	71.0	87.1	77.4	74.2	61.3	90.3	61.3	77.4	87.1	80.6	83.9
Transport	93.8	53.1	62.5	62.5	59.4	40.6	53.1	93.8	81.3	50.0	37.5	46.9	34.4
Communication	0.0	20.0	40.0	20.0	20.0	20.0	20.0	40.0	40.0	20.0	40.0	40.0	20.0
Recreation & Culture	68.0	24.0	36.0	36.0	68.0	44.0	76.0	44.0	52.0	80.0	72.0	80.0	24.0
Education	81.3	68.8	31.3	37.5	75.0	43.8	50.0	25.0	31.3	75.0	12.5	37.5	50.0
Restaurant & Hotels	85.7	100.0	78.6	92.9	78.6	78.6	92.9	92.9	85.7	100.0	92.9	100.0	100.0
Miscellaneous	96.6	86.2	89.7	86.2	100.0	89.7	96.6	100.0	86.2	96.6	93.1	89.7	100.0
NFNE	80.9	75.3	67.2	69.4	76.6	67.2	72.8	81.3	71.5	77.4	67.2	76.6	71.5

Table 8.1(b) Inflation Diffusion Index for Rural CPI Basket - based on MoM change

Groups	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
General	61.9	56.1	57.4	59.4	52.0	54.9	59.0	74.2	76.6	72.5	67.2	68.0	54.5
Food & Non-Alcoholic Beverages	29.1	21.5	44.3	45.6	41.8	32.9	40.5	53.2	64.6	53.2	62.0	55.7	13.9
Alcoholic Beverages & Tobacco	40.0	80.0	60.0	100.0	0.0	80.0	100.0	100.0	100.0	100.0	100.0	60.0	100.0
Clothing & Footwear	96.3	96.3	70.4	92.6	74.1	92.6	88.9	81.5	81.5	88.9	66.7	81.5	96.3
Housing, Water, Elect, Gas & other Fuels	87.0	73.9	17.4	4.3	0.0	26.1	26.1	82.6	95.7	78.3	30.4	56.5	34.8
Furnishing & Household Equip. Maintenance etc.	88.5	96.2	92.3	92.3	84.6	80.8	84.6	92.3	92.3	100.0	88.5	100.0	100.0
Health	71.4	78.6	64.3	78.6	42.9	71.4	42.9	100.0	64.3	71.4	92.9	64.3	100.0
Transport	81.3	43.8	62.5	62.5	37.5	50.0	68.8	87.5	75.0	43.8	68.8	31.3	18.8
Communication	0.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	40.0	20.0	20.0	20.0	20.0
Recreation & Culture	53.8	15.4	38.5	53.8	69.2	30.8	76.9	53.8	53.8	84.6	69.2	84.6	46.2
Education	0.0	20.0	60.0	80.0	80.0	100.0	80.0	80.0	100.0	80.0	0.0	100.0	80.0
Restaurant & Hotels	85.7	85.7	78.6	57.1	78.6	57.1	71.4	92.9	85.7	92.9	85.7	85.7	85.7
Miscellaneous	88.2	82.4	94.1	76.5	88.2	94.1	76.5	94.1	94.1	94.1	94.1	88.2	100.0
NFNE	75.0	72.1	67.6	71.3	66.9	74.3	69.9	82.4	78.7	80.9	72.1	76.5	80.9

9. Domestic Commodity Prices (Growth)

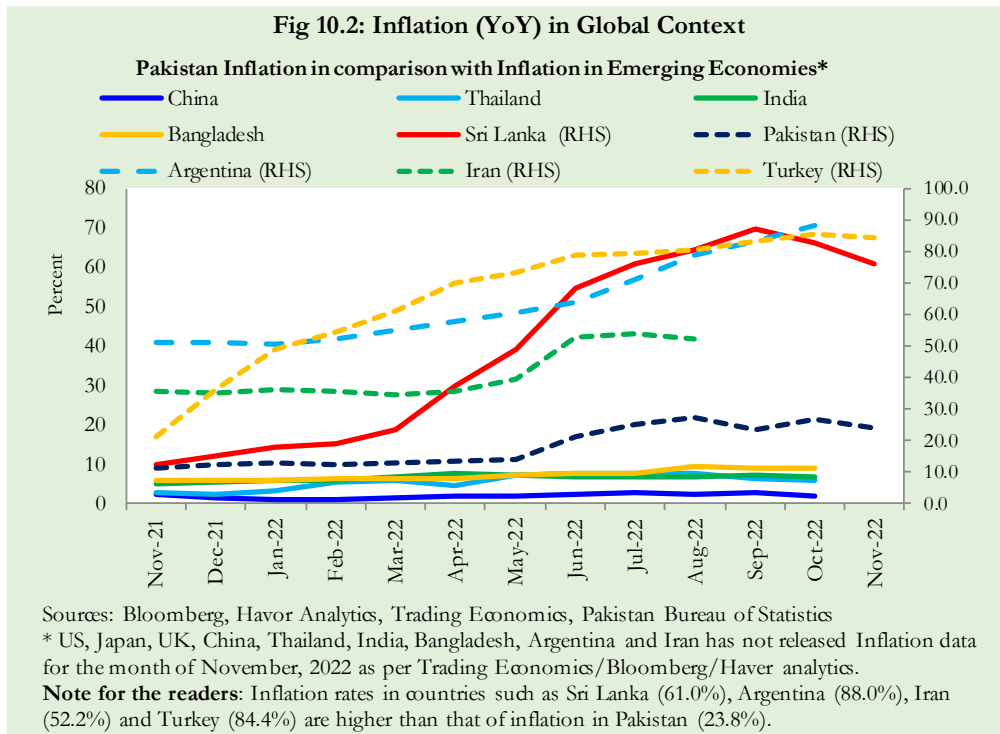
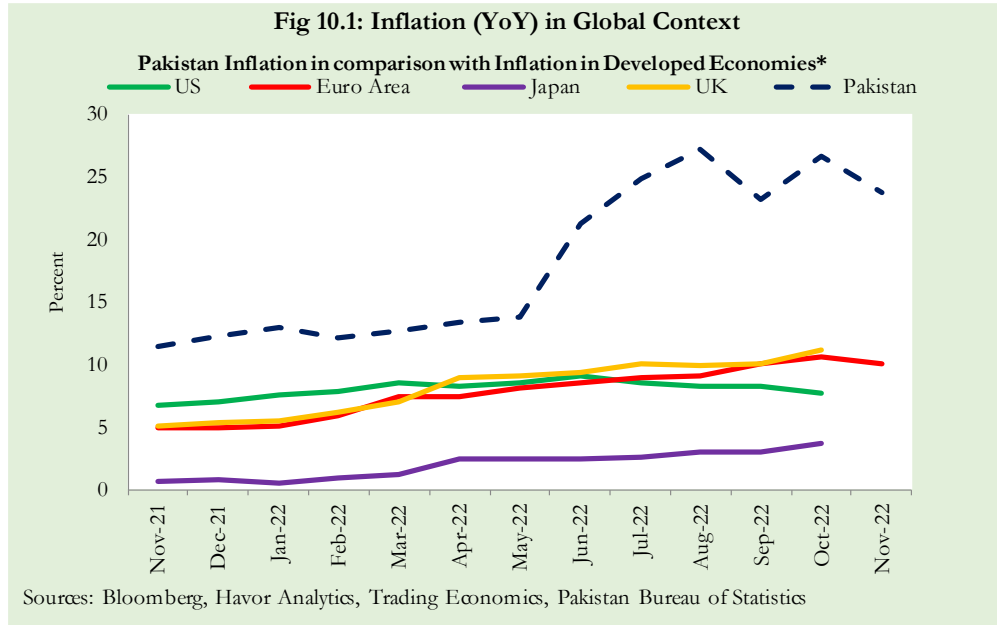
Growth of domestic food commodities (YoY and MoM in percent) for selected essential food items covering both urban and rural CPI baskets is given in table 9.1.

S. No	Item	Unit	Urban CPI		Rural CPI	
			YoY	MoM	YoY	MoM
1	Wheat	10 Kg	43.4	-0.6	47.2	0.3
2	Wheat Flour Bag	20 Kg	27.0	-1.4	32.4	-1.3
3	Rice Basmati Broken (Superior/Average Quality)*	1 Kg	59.8	1.3	37.8	1.6
4	Beef With Bone (Average Quality)	1 Kg	19.6	0.1	23.4	0.3
5	Mutton (Average Quality)	1 Kg	26.5	0.6	24.2	0.8
6	Chicken Farm Broiler (Live)	1 Kg	11.4	-5.1	13.7	-2.7
7	Milk Fresh (Un-Boiled)	1 Litre	26.7	0.8	30.0	4.2
8	Eggs Farm	Dozen	36.5	5.3	37.7	2.8
9	Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch	Each	33.3	-2.5	39.8	-1.8
10	Pulse Masoor (Washed)	1 Kg	38.7	-11.2	49.4	-12.3
11	Pulse Moong (Washed)	1 Kg	46.3	-3.1	46.9	-1.5
12	Pulse Mash (Washed)	1 Kg	47.8	-4.3	50.8	-4.8
13	Pulse Gram	1 Kg	56.2	-5.5	62.6	-3.2
14	Potatoes	1 Kg	27.3	14.6	23.2	5.8
15	Onions	1 Kg	284.9	34.4	286.6	29.2
16	Tomatoes	1 Kg	25.2	-9.6	35.9	-9.6
17	Sugar Refined	1 Kg	-9.9	3.7	-14.1	3.7
18	Garlic (Lehsun)	1 Kg	23.7	0.7	22.2	-1.4
19	Ginger (Adrak)	500 Gm	2.2	1.2	1.5	-2.5
20	Tea Lipton Yellow Label 190 Gm Packet	Each	62.2	14.8	54.1	10.4

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

10. Inflation in Global Context

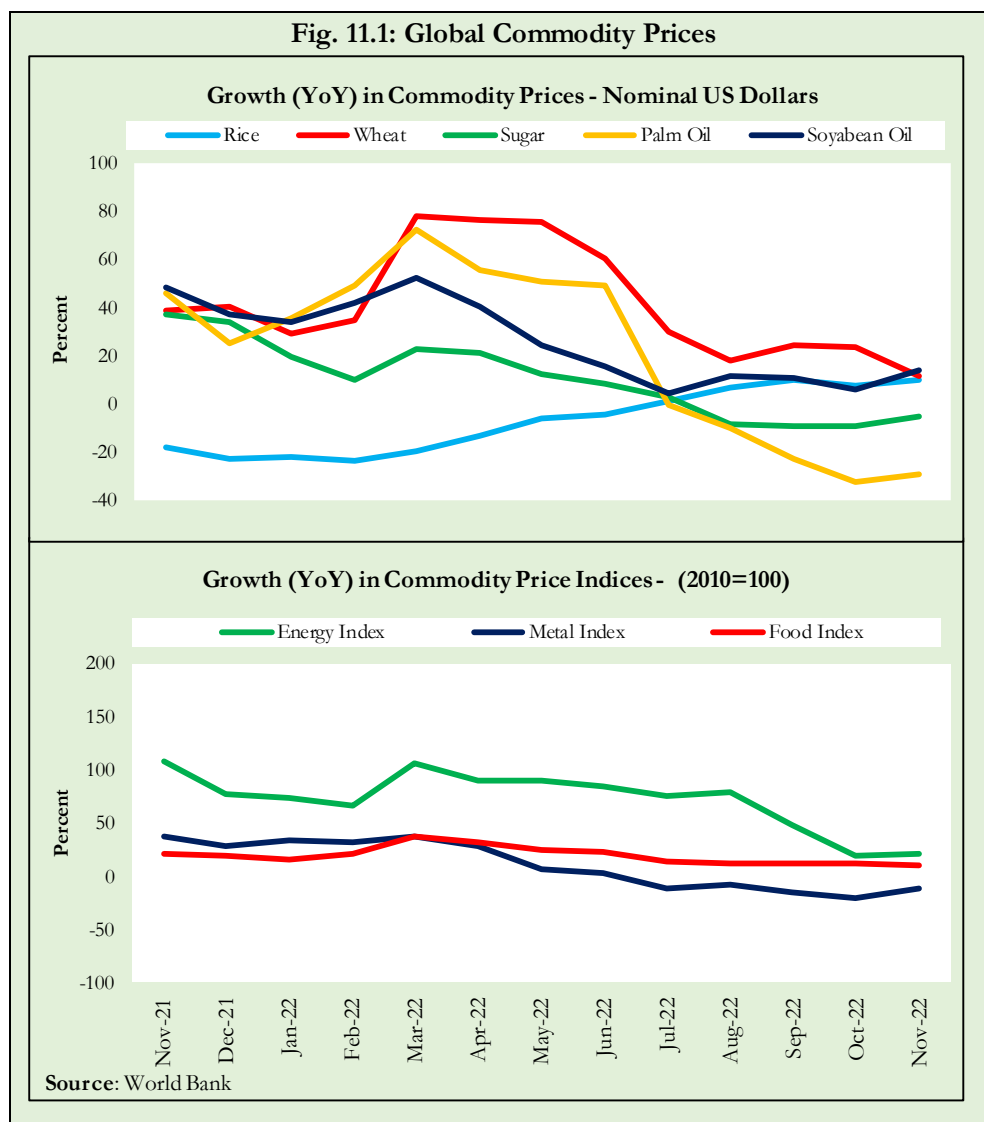
In global context, Pakistan’s inflation in comparison with inflation in selected developed and emerging economies is given in figure 10.1 and 10.2.



11. Global Commodity Prices

Global commodity prices and various group indices have a relation with 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	Nov-21		Oct-22		Nov-22	
	YoY	MoM	YoY	MoM	YoY	MoM
Food	21.1	1.5	11.0	0.8	9.2	-0.1
Metals	36.9	-3.7	-20.3	-0.9	-12.5	5.6
Energy	108.0	-6.8	18.5	-7.6	21.4	-4.5
Agricultural	19.5	1.4	4.2	-0.9	2.4	-0.4
Cotton	62.8	7.8	-15.1	-15.2	-20.2	1.3



12. Seasonal Adjustment in CPI

Seasonal adjustment is the process of estimating and removing the seasonal effects from a time series after decomposing it into seasonal, trend, cycle and irregular components. The purpose is to identify the different components of the time series and thus provide a better understanding of its underlying behavior. Seasonally adjusted changes are usually preferred for analyzing general price trends in the economy because these eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year. Various statistical methods can be used 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 year-on-year and month-on-month basis. Seasonal adjustment is particularly useful for analyzing month-on-month changes. The monthly data series of Consumer Price Indices (National CPI, Urban CPI and Rural CPI) from November 2008 to November 2022 has been used for seasonal adjustment analysis. The seasonal analysis is carried out without taking trading-day or Islamic calendar month's effects.

Figure 12.1 reveals that 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 the months from July to December and downward seasonality in the remaining months of the year. Upward and downward seasonality is above and below the trend line respectively. It is important to note that seasonal factors are estimate on historical data and that the future data Jun not necessarily show the same seasonal pattern.

Fig. 12.1 (a): Seasonal Factor of National CPI

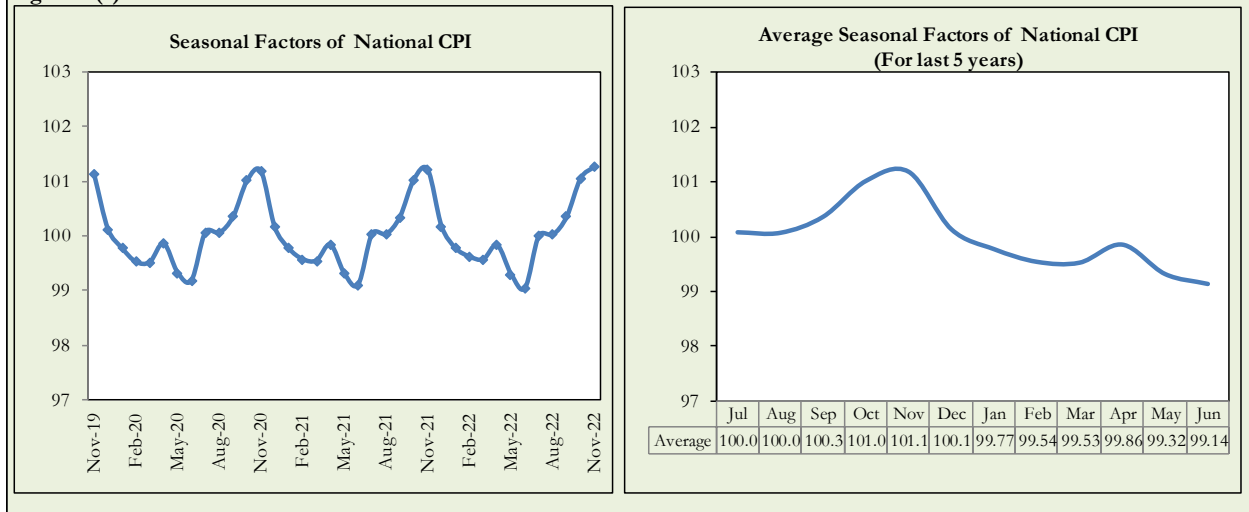


Fig. 12.1 (b): Seasonal Factor of Urban CPI

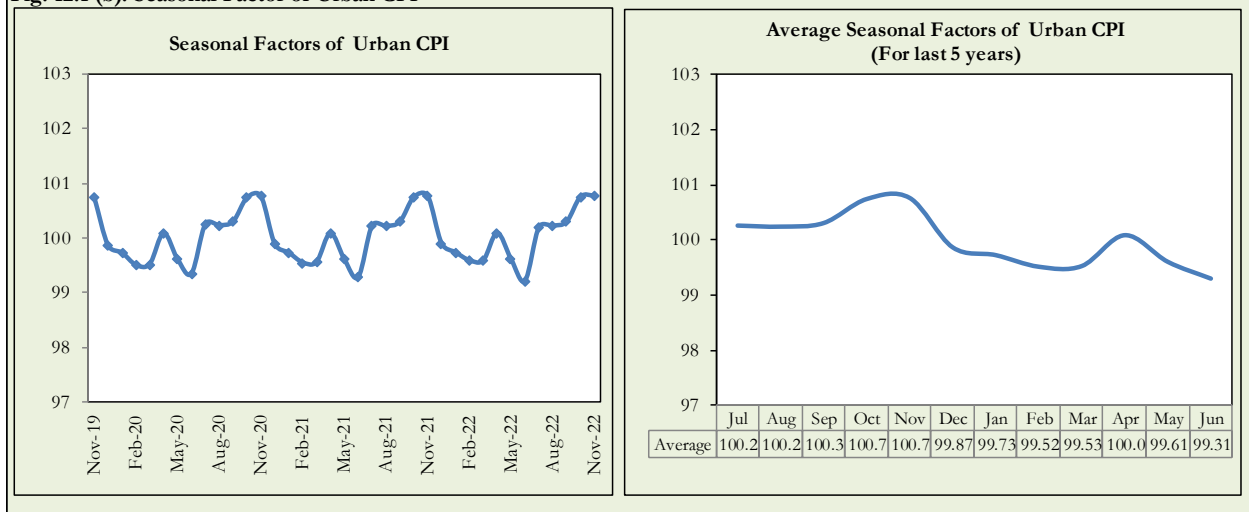
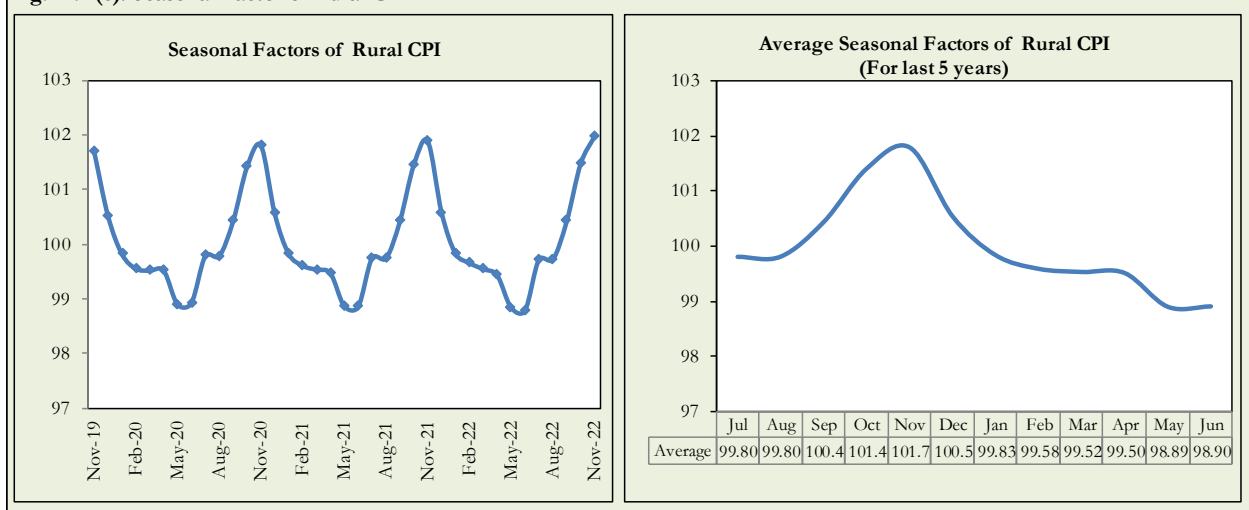


Fig. 12.1 (c): Seasonal Factor of Rural CPI



Figures 12.2 show that seasonally adjusted series are relatively smoother than the original series due to the removal of the seasonal variations. The trend follows the long-term movement in original series and is smoother than the original series because some irregular fluctuations have been removed.

Fig. 12.2 (a): Seasonal Plot of National CPI

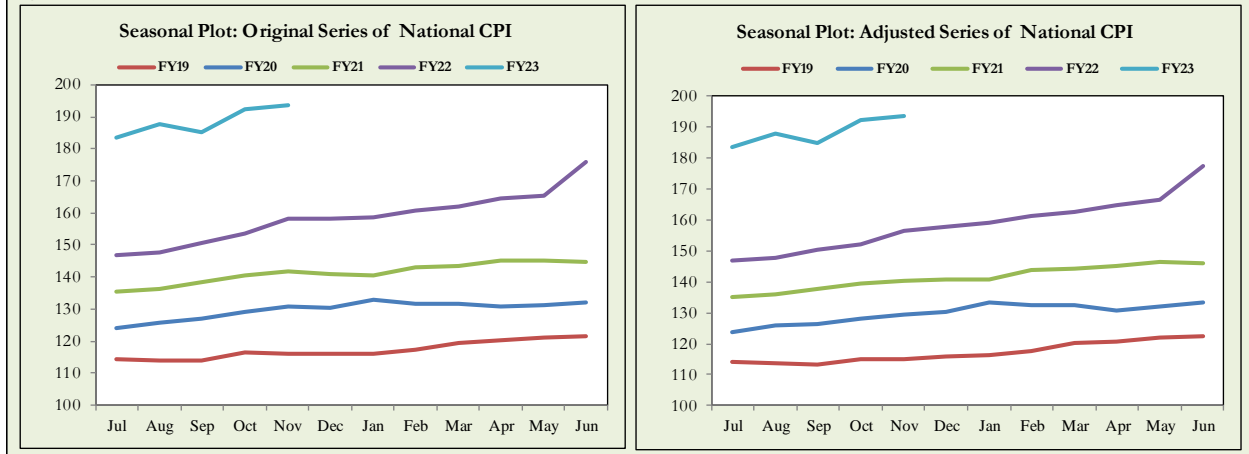


Fig. 12.2 (b): Seasonal Plot of Urban CPI

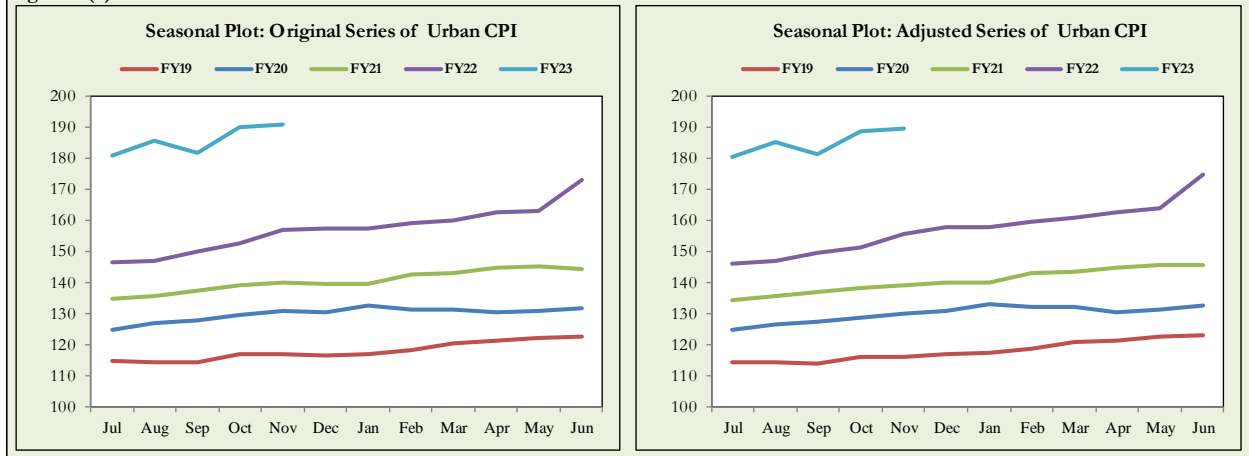
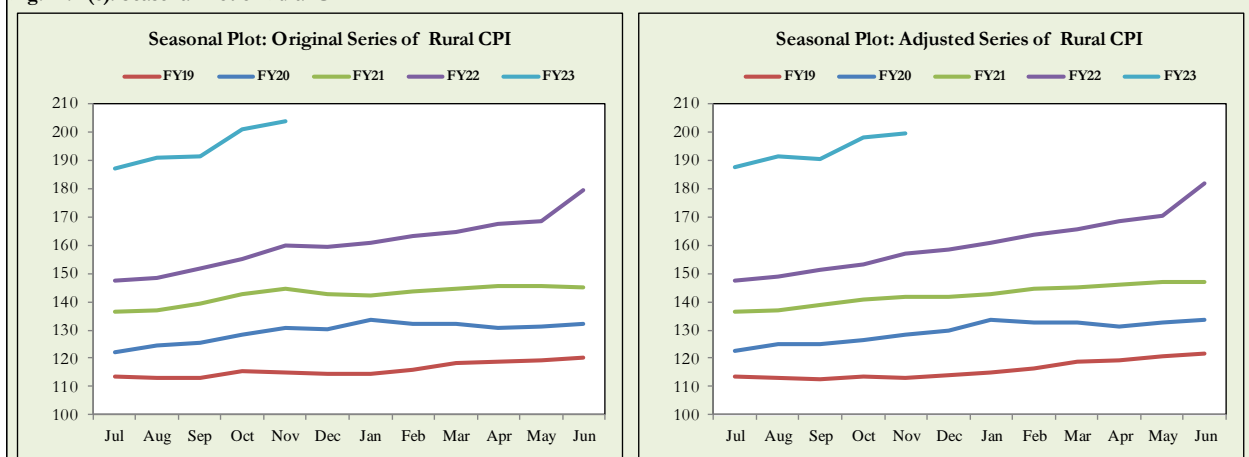


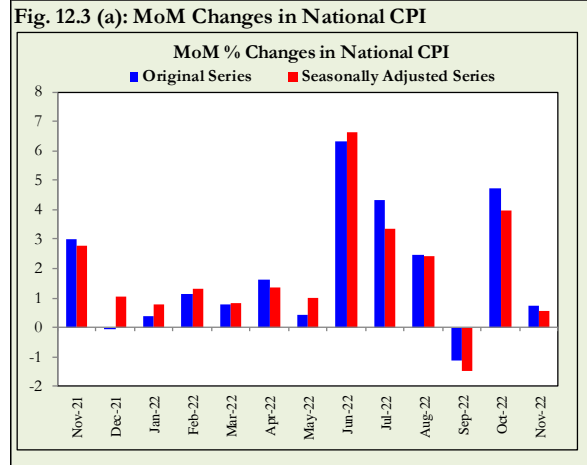
Fig. 12.2 (c): Seasonal Plot of Rural CPI



Seasonally adjusted Index of National CPI for November 2022 stood at 193.43 against 195.89 in original series showing a decrease of 2.46 because of seasonal adjustment.

Seasonally adjusted Index of Urban CPI for November 2022 stood at 189.32 against 190.80 in original series showing a decrease of 1.48 on account of seasonal adjustment.

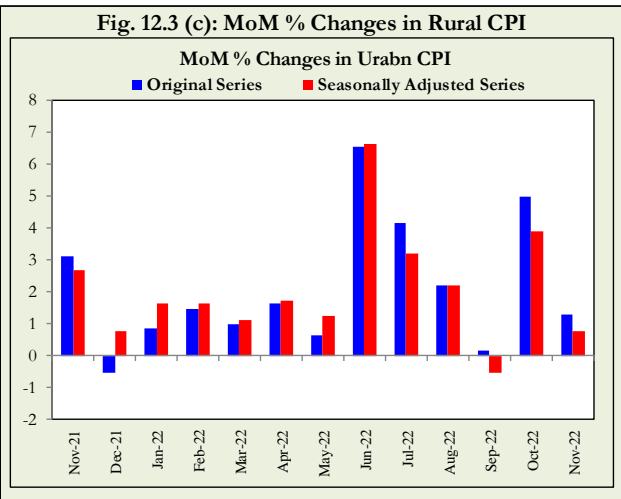
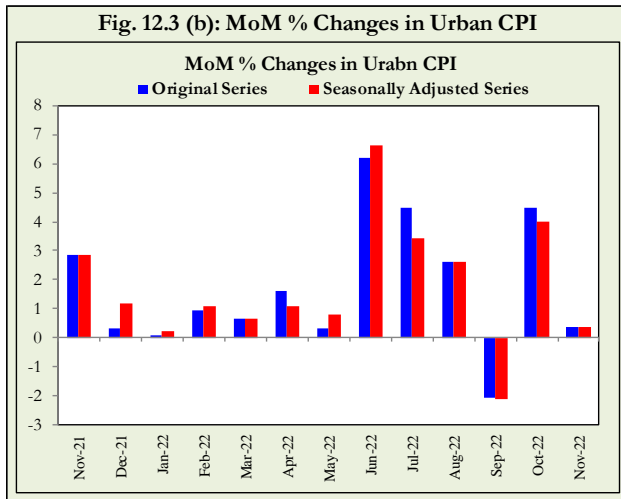
Seasonally adjusted Index of Rural CPI for November 2022 stood at 199.62 against 203.57 in original series showing a decrease of 3.95 on account of seasonal adjustment.



Month-on-month change of seasonally adjusted National CPI series showed an inflation of 0.54% during November 2022 over previous month against an inflation of 0.76% in original series.

Month-on-month change of seasonally adjusted Urban CPI series showed an inflation of 0.36% during November 2022 over previous month against an inflation of 0.38% in original series.

Month-on-month change of seasonally adjusted Rural CPI series showed an inflation of 0.80% during November 2022 over previous month against an inflation of 1.30% in original series.



List of Tables

Table A0: Inflation – Summary

Period	CPI							WPI			SPI**	Core Inflation			
	General			Food		Non-Food		General	Food	Non-Food		NFNE*		Trimmed	
	National	Urban	Rural	Urban	Rural	Urban	Rural					Urban	Rural	Urban	Rural
Annual Average															
FY20	10.7	10.2	11.6	13.6	15.9	8.3	8.1	10.2	13.3	8.6	14.4	7.5	8.7	8.3	10.1
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
Year-on-Year															
Nov-21	11.5	12.0	10.9	11.9	8.6	12.0	13.0	27.0	11.3	36.9	17.4	7.6	8.2	9.8	9.5
Dec-21	12.3	12.7	11.6	11.7	9.0	13.4	14.0	26.2	11.7	35.2	19.3	8.3	8.9	10.8	10.3
Jan-22	13.0	13.0	12.9	13.3	11.8	12.8	13.9	24.0	12.5	30.7	19.5	8.2	9.0	10.6	10.9
Feb-22	12.2	11.5	13.3	14.3	14.6	9.9	12.2	23.6	12.5	30.1	18.1	7.8	9.4	9.8	11.3
Mar-22	12.7	11.9	13.9	14.5	15.5	10.4	12.5	23.8	14.3	29.1	15.8	8.9	10.3	10.5	11.7
Apr-22	13.4	12.2	15.1	15.6	17.7	10.2	12.8	28.1	15.3	35.7	16.5	9.1	10.9	10.5	12.8
May-22	13.8	12.4	15.9	15.5	19.0	10.4	13.1	29.6	13.9	38.9	16.1	9.7	11.5	10.7	14.1
Jun-22	21.3	19.8	23.6	24.0	27.0	17.3	20.4	38.9	23.6	47.8	26.5	11.5	13.6	16.7	19.1
Jul-22	24.9	23.6	26.9	27.4	29.6	21.3	24.5	38.5	24.2	46.7	34.3	12.0	14.6	19.1	21.7
Aug-22	27.3	26.2	28.8	28.8	30.2	24.7	27.5	41.2	26.4	49.6	40.6	13.8	16.5	21.4	23.8
Sep-22	23.2	21.2	26.1	30.8	32.7	15.2	20.1	38.9	29.6	44.0	35.9	14.4	17.6	19.5	24.4
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
12- Month Moving Average															
Nov-21	9.1	9.1	9.3	11.2	9.8	7.7	8.7	16.3	12.6	18.5	13.3	6.5	7.3	8.8	9.2
Dec-21	9.5	9.5	9.4	11.2	9.5	8.5	9.4	18.0	12.4	21.4	14.2	6.7	7.4	9.2	9.3
Jan-22	10.1	10.2	10.0	11.7	9.9	9.3	10.1	19.5	12.5	23.8	15.3	7.0	7.5	9.5	9.4
Feb-22	10.4	10.4	10.4	12.0	10.3	9.5	10.4	20.7	12.4	25.8	16.0	7.1	7.6	9.6	9.6
Mar-22	10.7	10.7	10.7	12.3	10.7	9.8	10.7	21.5	12.4	27.0	16.1	7.3	7.9	9.6	9.8
Apr-22	10.9	10.8	11.1	12.3	11.1	9.9	11.1	22.5	12.4	28.6	16.0	7.5	8.2	9.7	9.9
May-22	11.2	11.0	11.5	12.3	11.6	10.1	11.4	23.3	12.2	30.1	16.0	7.7	8.5	9.7	10.3
Jun-22	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
Jul-22	13.6	13.1	14.2	15.0	14.9	11.9	13.6	26.7	14.2	34.2	18.8	8.6	9.7	11.4	12.5
Aug-22	15.1	14.6	15.9	16.5	16.6	13.4	15.3	28.8	15.5	36.6	21.1	9.2	10.5	12.4	13.9
Sep-22	16.3	15.6	17.4	18.2	18.7	14.0	16.3	30.4	17.2	38.1	23.0	9.9	11.5	13.7	15.4
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
Period Average (Since July)															
Nov-21	9.3	9.6	9.0	10.4	8.3	9.1	9.6	20.5	10.6	26.7	14.1	6.8	6.9	8.7	8.3
Dec-21	9.8	10.1	9.4	10.6	8.4	9.8	10.3	21.5	10.8	28.1	15.0	7.0	7.2	9.0	8.5
Jan-22	10.3	10.5	9.9	11.0	8.9	10.2	10.9	21.8	11.0	28.5	15.7	7.2	7.5	9.1	8.8
Feb-22	10.5	10.6	10.4	11.4	9.6	10.2	11.0	22.1	11.2	28.7	16.0	7.3	7.7	9.2	9.2
Mar-22	10.8	10.8	10.8	11.7	10.3	10.2	11.2	22.3	11.6	28.8	15.9	7.5	8.0	9.4	9.5
Apr-22	11.0	10.9	11.2	12.1	11.0	10.2	11.4	22.9	11.9	29.5	16.0	7.6	8.3	9.7	9.9
May-22	11.3	11.1	11.6	12.5	11.7	10.2	11.5	23.5	12.1	30.4	16.0	7.8	8.6	9.8	10.4
Jun-22	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
Jul-22	24.9	23.6	26.9	27.4	29.6	21.3	24.5	38.5	24.2	46.7	34.3	12.0	14.6	19.1	21.7
Aug-22	26.1	24.9	27.9	28.1	29.9	23.0	26.0	39.9	25.3	48.1	37.5	12.9	15.6	20.5	23.2
Sep-22	25.1	23.7	27.3	29.0	30.9	20.4	24.0	39.6	26.7	46.7	36.9	13.4	16.2	21.4	24.6
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
Month-on-Month															
Nov-21	3.0	2.9	3.1	3.9	3.3	2.2	3.0	3.8	1.9	4.8	4.1	1.1	1.8	1.7	2.2
Dec-21	-0.02	0.3	-0.5	-2.3	-3.1	2.0	1.9	-0.2	-1.1	0.2	0.3	1.1	1.1	1.1	1.0
Jan-22	0.4	0.1	0.9	-0.8	0.4	0.6	1.4	0.6	0.5	0.7	-0.2	0.8	1.2	0.5	1.1
Feb-22	1.2	0.9	1.5	2.2	2.6	0.2	0.4	1.9	1.5	2.2	1.3	0.8	0.9	0.8	1.2
Mar-22	0.8	0.7	1.0	1.8	2.3	-0.1	-0.2	3.9	3.0	4.3	0.6	1.2	1.1	0.8	0.8
Apr-22	1.6	1.6	1.6	3.7	2.8	0.3	0.5	3.2	2.8	3.4	1.1	1.1	1.2	0.9	0.9
May-22	0.4	0.3	0.6	1.0	1.3	-0.1	0.0	1.4	0.1	2.1	0.6	0.7	0.9	0.8	1.4
Jun-22	6.3	6.2	6.6	5.3	6.0	6.8	7.1	8.2	7.6	8.5	8.1	2.0	2.3	3.5	4.3
Jul-22	4.3	4.5	4.2	4.3	3.7	4.6	4.6	2.0	1.7	2.1	7.7	1.2	1.6	2.7	2.7
Aug-22	2.4	2.6	2.2	1.6	1.2	3.3	3.1	3.1	2.2	3.6	5.6	1.8	1.8	1.7	1.8
Sep-22	-1.2	-2.1	0.2	5.2	5.7	-6.6	-4.9	1.4	5.0	-0.2	-0.6	0.9	1.4	1.6	2.5
Oct-22	4.7	4.5	5.0	4.6	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	-0.02	-1.4	0.7	4.9	0.8	2.1	0.5	1.8

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

Source: Pakistan Bureau of Statistics

Table A1: National CPI Inflation by Groups (YoY and MoM in percent)

Groups	Weights	MoM change			YoY change		
		Nov-21	Oct-22	Nov-22	Nov-21	Oct-22	Nov-22
Food & Non-Alcoholic	34.6	3.9	5.6	0.1	10.5	36.2	31.2
Alcoholic Beverages & Tobacco	1.0	0.2	1.8	1.1	1.8	34.6	35.9
Clothing & Footwear	8.6	1.9	1.0	2.2	9.8	18.3	18.6
Housing, Water, Elec, Gas & other Fuels	23.6	2.4	10.9	0.6	14.8	11.9	9.9
Furnishing & Household Equip. Maintenance etc	4.1	1.6	2.9	2.8	10.4	27.6	29.1
Health	2.8	1.2	2.8	1.9	8.5	16.2	17.1
Transport	5.9	6.3	-1.8	-0.1	24.4	53.4	44.2
Communication	2.2	0.0	0.4	0.1	2.5	1.6	1.6
Recreation & Culture	1.6	0.4	1.9	2.0	7.5	23.7	25.6
Education	3.8	0.2	1.0	0.4	2.4	10.9	11.1
Restaurants & Hotels	6.9	3.5	2.5	1.9	11.0	30.4	28.4
Miscellaneous	4.9	1.8	0.9	2.3	10.0	22.4	23.0
Overall National CPI	100.0	3.0	4.7	0.8	11.5	26.6	23.8

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

Groups	Weights	MoM change			YoY change		
		Nov-21	Oct-22	Nov-22	Nov-21	Oct-22	Nov-22
I. Food Group	36.8	3.9	4.6	0.0	11.9	34.7	29.7
Food & Non-Alcoholic Beverages	30.4	4.3	4.8	-0.3	12.2	34.8	28.9
Alcoholic Beverages & Tobacco	0.9	0.3	1.3	1.6	1.9	35.4	37.2
Restaurant & Hotels (Food)	5.5	2.3	3.8	1.4	12.2	34.4	33.2
II. Non-Food Group	63.2	2.2	4.5	0.6	12.0	18.2	16.4
Clothing & Footwear	8.0	1.3	1.0	1.3	9.5	19.5	19.6
Housing, Water, Elec, Gas & other Fuels	27.0	2.0	10.9	-0.1	13.6	9.5	7.3
Furnishing & Household Equip. Maintenance etc	4.1	1.4	3.3	2.6	10.0	27.6	29.0
Health	2.3	1.1	1.7	1.6	9.3	13.6	14.1
Transport	6.1	6.6	-2.2	-0.1	25.7	51.7	42.1
Communication	2.4	0.0	0.6	0.0	3.4	1.7	1.8
Recreation & Culture	1.7	0.3	1.7	1.1	7.5	21.4	22.3
Education	4.9	0.2	1.1	0.2	2.2	11.1	11.1
Restaurants & Hotels (Non-food Component)	1.9	7.6	0.3	3.0	9.0	23.4	18.1
Miscellaneous	4.8	1.7	1.4	1.7	10.1	23.7	23.8
Overall Urban CPI	100.0	2.9	4.5	0.4	12.0	24.6	21.6

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

Groups	Weights	MoM Change			YoY Change		
		Nov-21	Oct-22	Nov-22	Nov-21	Oct-22	Nov-22
I. Food Group	45.9	3.3	6.1	0.5	8.6	37.2	33.5
Food and Non-Alcoholic Beverages	40.9	3.6	6.6	0.4	8.7	37.9	33.7
Alcoholic Beverages, Tobacco	1.3	0.1	2.5	0.6	1.7	33.7	34.4
Restaurants and Hotels (Food Component)	3.8	1.6	1.4	1.8	10.6	31.1	31.4
II. Non-Food Group	54.1	3.0	3.9	2.1	13.0	22.4	21.4
Clothing and Footwear	9.5	2.6	1.0	3.2	10.1	16.8	17.4
Housing, Water, Elec., Gas and Other Fuels	18.5	3.3	10.9	1.8	17.5	17.3	15.6
Furnishing and Household Equip. Maintenance	4.1	2.0	2.2	3.2	11.0	27.7	29.2
Health	3.5	1.3	3.9	2.3	7.8	18.9	20.2
Transport	5.6	5.8	-1.3	0.0	22.3	56.4	47.9
Communication	2.0	0.0	0.0	0.1	0.8	1.3	1.4
Recreation and Culture	1.4	0.5	2.4	3.4	7.5	27.7	31.3
Education	2.1	0.0	0.5	0.8	3.2	10.2	11.1
Restaurants and Hotels (Non-Food Component)	2.4	7.4	2.3	3.3	9.8	21.6	16.9
Miscellaneous	5.0	2.0	0.2	3.2	9.7	20.5	21.9
Rural CPI	100.0	3.1	5.0	1.3	10.9	29.5	27.2

Table A4: 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 Maintenance	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year															
Nov-21	11.5	10.5	13.6	-3.6	1.8	9.8	14.8	10.4	8.5	24.4	2.5	7.5	2.4	11.0	10.0
Dec-21	12.3	10.3	14.2	-10.2	2.0	11.2	16.6	12.3	9.4	24.1	2.5	7.7	2.8	12.6	10.6
Jan-22	13.0	12.8	13.8	6.4	2.0	11.2	15.5	13.0	9.2	23.1	2.6	7.8	3.2	13.0	10.3
Feb-22	12.2	14.7	12.1	34.9	2.1	9.7	9.0	13.4	10.1	25.0	2.5	8.2	3.4	14.4	10.1
Mar-22	12.7	15.3	13.3	30.1	1.8	9.7	8.3	13.8	10.0	26.3	2.6	9.3	8.3	14.6	12.4
Apr-22	13.4	17.0	15.0	29.6	5.1	10.8	7.1	14.7	10.4	28.3	1.6	9.7	8.4	14.6	12.8
May-22	13.8	17.3	15.9	26.4	10.1	11.3	5.8	16.1	10.6	31.8	1.8	12.3	9.5	16.0	13.3
Jun-22	21.3	25.9	24.4	36.3	17.6	13.7	13.5	18.8	11.3	62.2	2.0	14.4	9.5	21.9	15.8
Jul-22	24.9	28.8	28.1	32.9	22.5	14.6	21.8	19.7	11.2	64.7	1.2	15.4	9.8	25.0	17.2
Aug-22	27.3	29.5	28.9	33.9	25.8	17.6	27.6	21.9	11.9	63.1	1.2	21.8	10.0	27.4	20.0
Sep-22	23.2	31.7	28.8	50.3	32.7	17.7	3.4	25.1	13.8	64.5	1.3	22.8	10.0	28.8	22.9
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
12- Month Moving Average															
Nov-21	9.1	10.7	14.3	-7.6	4.1	10.1	8.9	9.2	8.6	8.0	1.7	5.7	1.8	8.6	9.9
Dec-21	9.5	10.5	14.1	-8.5	3.7	10.2	10.0	9.6	8.7	10.4	1.9	6.0	2.0	8.9	9.8
Jan-22	10.1	11.0	14.2	-6.2	3.4	10.3	11.1	10.0	8.8	12.6	2.0	6.2	2.1	9.2	9.7
Feb-22	10.4	11.4	14.0	-2.7	3.1	10.2	10.9	10.4	8.9	14.9	2.2	6.5	2.3	9.8	9.5
Mar-22	10.7	11.8	13.7	0.7	2.8	10.1	10.9	10.8	9.0	17.0	2.4	6.9	2.9	10.3	9.7
Apr-22	10.9	11.9	13.5	2.9	2.8	10.0	10.6	11.3	9.1	18.8	2.4	7.3	3.5	10.8	9.9
May-22	11.2	12.1	13.3	5.2	3.3	10.1	10.4	11.8	9.2	20.2	2.4	8.0	4.1	11.5	10.2
Jun-22	12.2	13.4	14.3	8.2	4.3	10.4	10.8	12.6	9.4	24.1	2.4	8.7	4.8	12.6	10.6
Jul-22	13.6	15.2	15.7	11.7	6.0	10.9	11.8	13.4	9.6	28.7	2.3	9.5	5.4	14.0	11.3
Aug-22	15.1	16.8	17.2	14.3	7.9	11.6	13.5	14.5	9.9	33.4	2.2	10.8	6.0	15.6	12.4
Sep-22	16.3	18.6	18.5	19.5	10.5	12.3	12.9	15.8	10.4	38.1	2.0	12.1	6.6	17.4	13.7
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
Period Average (Since July)															
Nov-21	9.3	9.5	12.5	-5.9	2.2	9.4	10.7	9.7	8.3	13.3	2.7	6.8	2.4	8.6	8.3
Dec-21	9.8	9.6	12.8	-6.6	2.2	9.7	11.7	10.1	8.5	15.1	2.7	7.0	2.5	9.3	8.7
Jan-22	10.3	10.1	12.9	-5.1	2.1	9.9	12.3	10.5	8.6	16.3	2.7	7.1	2.6	9.8	8.9
Feb-22	10.5	10.6	12.8	-1.4	2.1	9.9	11.8	10.9	8.8	17.4	2.7	7.2	2.7	10.4	9.1
Mar-22	10.8	11.2	12.9	1.4	2.1	9.9	11.4	11.2	8.9	18.4	2.6	7.5	3.3	10.9	9.4
Apr-22	11.0	11.8	13.1	4.2	2.4	10.0	11.0	11.6	9.1	19.4	2.5	7.7	3.8	11.3	9.8
May-22	11.3	12.3	13.4	6.0	3.1	10.1	10.5	12.0	9.2	20.5	2.5	8.1	4.4	11.7	10.1
Jun-22	12.2	13.4	14.3	8.2	4.3	10.4	10.8	12.6	9.4	24.1	2.4	8.7	4.8	12.6	10.6
Jul-22	24.9	28.8	28.1	32.9	22.5	14.6	21.8	19.7	11.2	64.7	1.2	15.4	9.8	25.0	17.2
Aug-22	26.1	29.2	28.5	33.4	24.1	16.1	24.7	20.8	11.6	63.9	1.2	18.6	9.9	26.2	18.6
Sep-22	25.1	30.0	28.6	39.2	27.0	16.6	17.5	22.2	12.3	64.1	1.2	20.0	9.9	27.1	20.0
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
Month-on-Month															
Nov-21	3.0	3.9	2.1	14.8	0.2	1.9	2.4	1.6	1.2	6.3	0.0	0.4	0.2	3.5	1.8
Dec-21	-0.02	-3.4	-0.1	-20.9	0.3	2.0	2.8	2.3	1.6	1.3	0.0	0.6	0.4	2.1	0.7
Jan-22	0.4	-0.5	0.3	-5.2	0.1	0.8	1.0	1.1	0.7	1.0	0.1	0.4	0.4	1.0	0.8
Feb-22	1.2	2.5	0.9	14.0	0.3	1.0	-1.6	1.8	2.1	3.6	0.0	0.5	0.3	1.7	1.1
Mar-22	0.8	2.3	2.7	-0.3	0.0	1.0	-2.2	1.4	0.6	0.3	0.0	1.3	4.7	0.9	1.6
Apr-22	1.6	3.7	1.2	20.4	3.1	2.1	-0.7	1.6	0.9	0.4	0.0	0.4	0.6	0.2	0.8
May-22	0.4	0.9	3.0	-10.8	4.9	0.7	-2.3	1.8	0.5	2.7	0.1	2.8	1.0	1.8	1.2
Jun-22	6.3	5.5	5.5	5.4	7.0	2.3	7.7	2.9	1.2	24.4	0.2	3.2	0.3	5.8	3.3
Jul-22	4.3	4.1	3.6	6.7	4.1	1.1	8.8	1.7	0.2	5.7	0.4	1.6	0.5	2.9	1.6
Aug-22	2.4	1.3	1.0	3.3	2.7	2.8	5.5	2.3	1.2	-0.3	0.1	6.3	1.1	2.3	2.7
Sep-22	-1.2	5.8	4.1	16.1	5.9	0.3	-17.7	3.4	2.2	2.2	0.1	2.0	0.0	2.2	3.8
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	0.1	2.0	0.4	1.9	2.3
3-Years Average (in current month during FY21-FY23)															
YoY	14.6	18.9	20.1	14.5	14.5	12.6	9.1	15.7	11.1	21.5	1.6	12.4	4.9	16.2	15.0
MoM	1.5	2.0	1.4	5.4	0.5	1.8	1.0	1.7	1.2	1.3	0.1	0.9	0.2	2.1	1.6

Source: Pakistan Bureau of Statistics

Table A5: 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 Maintenance	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year															
Nov-21	12.0	12.2	15.3	-1.9	1.9	9.5	13.6	10.0	9.3	25.7	3.4	7.5	2.2	11.4	10.1
Dec-21	12.7	11.7	15.5	-8.7	2.1	12.2	15.4	11.4	10.1	25.0	3.3	7.9	2.6	13.2	10.4
Jan-22	13.0	13.6	14.7	6.3	2.0	12.4	14.2	11.9	10.0	23.4	3.4	8.1	3.0	13.2	10.1
Feb-22	11.5	14.5	11.8	34.1	2.0	9.4	7.8	12.4	10.2	24.8	3.3	8.0	3.2	15.0	9.6
Mar-22	11.9	14.8	13.0	28.0	1.5	9.6	7.1	12.6	10.0	26.3	3.3	8.7	9.0	14.5	11.9
Apr-22	12.2	16.0	14.4	25.6	4.8	10.5	5.6	13.5	10.3	28.6	2.0	8.9	9.2	14.5	12.0
May-22	12.4	15.8	15.0	20.6	9.4	11.0	4.4	15.2	10.3	32.2	2.3	11.9	10.4	14.5	12.2
Jun-22	19.8	24.6	23.5	32.4	18.3	14.2	11.3	17.6	10.9	61.5	2.5	13.3	10.4	21.2	15.1
Jul-22	23.6	27.8	27.1	32.4	21.7	15.0	19.2	18.2	10.8	63.8	1.1	13.9	10.5	24.7	16.8
Aug-22	26.2	28.9	28.2	33.5	25.8	18.8	24.8	20.3	11.8	62.4	1.2	20.4	10.1	27.4	20.1
Sep-22	21.2	30.7	27.9	48.3	34.1	18.9	1.0	24.3	12.3	63.3	1.2	21.1	10.0	29.1	23.1
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
12- Month Moving Average															
Nov-21	9.1	11.5	15.1	-6.3	4.7	10.5	8.2	8.5	8.9	8.4	2.3	4.8	1.5	9.0	9.8
Dec-21	9.5	11.4	15.1	-7.1	4.4	10.8	9.3	8.9	9.1	10.9	2.5	5.2	1.6	9.3	9.8
Jan-22	10.2	12.0	15.2	-5.1	4.0	11.1	10.3	9.4	9.3	13.2	2.7	5.6	1.8	9.6	9.7
Feb-22	10.4	12.3	14.9	-1.7	3.7	10.9	10.1	9.8	9.5	15.5	2.9	6.0	2.0	10.2	9.6
Mar-22	10.7	12.6	14.6	1.4	3.2	10.7	10.0	10.2	9.6	17.5	3.2	6.4	2.7	10.8	9.7
Apr-22	10.8	12.5	14.2	3.2	3.1	10.5	9.6	10.6	9.6	19.3	3.2	6.9	3.3	11.3	9.9
May-22	11.0	12.5	13.9	4.8	3.4	10.5	9.3	11.1	9.7	20.8	3.2	7.6	4.1	11.7	10.0
Jun-22	11.8	13.7	14.8	7.5	4.5	10.8	9.6	11.9	9.7	24.5	3.2	8.3	4.9	12.7	10.4
Jul-22	13.1	15.2	16.0	11.0	6.0	11.2	10.5	12.6	9.9	29.0	3.0	9.0	5.6	14.0	11.0
Aug-22	14.6	16.8	17.3	13.6	7.9	11.9	12.0	13.5	10.1	33.6	2.8	10.2	6.2	15.7	12.2
Sep-22	15.6	18.5	18.4	18.8	10.5	12.7	11.3	14.8	10.4	38.1	2.6	11.5	6.9	17.4	13.5
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
Period Average (Since July)															
Nov-21	9.6	10.5	13.8	-5.6	2.6	10.1	9.9	9.5	9.0	14.1	3.7	6.5	2.1	9.1	8.6
Dec-21	10.1	10.7	14.1	-6.1	2.5	10.4	10.8	9.8	9.2	15.9	3.7	6.7	2.2	9.8	8.9
Jan-22	10.5	11.1	14.1	-4.6	2.5	10.7	11.3	10.1	9.3	17.0	3.6	6.9	2.3	10.3	9.0
Feb-22	10.6	11.5	13.8	-0.9	2.4	10.6	10.8	10.4	9.4	18.0	3.6	7.0	2.4	10.9	9.1
Mar-22	10.8	11.9	13.7	1.7	2.3	10.4	10.4	10.6	9.5	19.0	3.5	7.2	3.1	11.3	9.4
Apr-22	10.9	12.3	13.8	4.1	2.6	10.4	9.9	10.9	9.6	19.9	3.4	7.4	3.8	11.7	9.7
May-22	11.1	12.7	13.9	5.5	3.2	10.5	9.4	11.3	9.6	21.1	3.3	7.8	4.4	11.9	9.9
Jun-22	11.8	13.7	14.8	7.5	4.5	10.8	9.6	11.9	9.7	24.5	3.2	8.3	4.9	12.7	10.4
Jul-22	23.6	27.8	27.1	32.4	21.7	15.0	19.2	18.2	10.8	63.8	1.1	13.9	10.5	24.7	16.8
Aug-22	24.9	28.4	27.6	33.0	23.7	16.9	22.0	19.2	11.3	63.1	1.2	17.1	10.3	26.1	18.5
Sep-22	23.7	29.2	27.7	38.2	27.2	17.6	14.9	20.9	11.6	63.2	1.2	18.5	10.2	27.1	20.0
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
Month-on-Month															
Nov-21	2.9	4.3	2.4	15.1	0.3	1.3	2.0	1.4	1.1	6.6	0.0	0.3	0.2	3.5	1.7
Dec-21	0.3	-3.0	0.2	-20.2	0.1	2.9	2.6	1.8	1.6	1.3	0.0	0.5	0.5	2.3	0.6
Jan-22	0.1	-1.1	-0.4	-5.4	0.0	0.7	0.6	0.9	0.5	0.4	0.1	0.3	0.5	0.6	0.7
Feb-22	0.9	2.3	0.5	14.7	0.2	1.3	-1.6	2.0	1.6	3.4	0.0	0.2	0.1	2.0	1.2
Mar-22	0.7	2.1	2.6	-1.1	0.1	0.9	-2.2	1.1	0.9	0.5	0.0	0.9	5.7	0.7	1.8
Apr-22	1.6	4.3	1.7	20.8	3.3	2.0	-0.6	1.6	0.8	0.6	0.0	0.2	0.6	0.2	0.7
May-22	0.3	0.9	3.1	-10.8	4.6	0.5	-2.3	2.0	0.4	2.9	0.2	3.0	1.1	0.6	1.1
Jun-22	6.2	5.0	4.9	5.5	8.2	3.0	7.0	2.6	1.4	23.5	0.2	3.1	0.1	6.6	3.7
Jul-22	4.5	4.3	3.8	7.3	2.9	1.0	8.6	1.5	0.1	5.6	0.4	1.2	0.3	3.3	1.4
Aug-22	2.6	1.4	1.2	2.8	3.4	3.4	5.2	2.3	1.6	-0.2	0.0	6.3	0.7	2.3	3.4
Sep-22	-2.1	5.4	4.0	14.0	6.8	0.1	-17.8	4.1	1.0	2.0	0.1	2.0	0.0	2.8	3.9
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
3-Years Average (in current month during FY21-FY23)															
YoY	13.5	18.3	19.4	13.9	15.2	12.7	7.7	15.1	10.1	21.1	1.9	11.0	4.8	16.7	14.8
MoM	1.3	1.9	1.2	5.9	0.8	1.5	0.6	1.5	1.0	1.4	0.2	0.6	0.2	2.1	1.4

Source: Pakistan Bureau of Statistics

Table A6: 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 Maintenance	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year															
Nov-21	10.9	8.7	11.7	-5.5	1.7	10.1	17.5	11.0	7.8	22.3	0.8	7.5	3.2	10.3	9.7
Dec-21	11.6	8.9	12.8	-12.0	1.9	10.1	19.2	13.7	8.7	22.5	0.9	7.3	3.5	11.5	10.7
Jan-22	12.9	12.0	12.8	6.6	2.0	9.7	18.5	14.8	8.3	22.5	1.1	7.4	3.7	12.6	10.8
Feb-22	13.3	15.0	12.4	35.8	2.3	10.0	11.6	15.0	10.0	25.4	1.1	8.5	4.4	13.3	10.7
Mar-22	13.9	15.9	13.7	32.8	2.3	9.8	11.1	15.6	10.0	26.2	1.1	10.5	5.6	14.6	13.1
Apr-22	15.1	18.2	15.8	34.4	5.5	11.3	10.3	16.4	10.4	27.9	0.8	11.0	5.1	14.7	13.9
May-22	15.9	19.0	17.0	33.7	11.0	11.7	9.1	17.5	10.9	31.0	0.8	13.0	6.0	18.5	14.9
Jun-22	23.6	27.4	25.5	41.2	16.9	13.1	18.4	20.5	11.8	63.4	1.0	16.3	6.2	23.0	16.8
Jul-22	26.9	29.9	29.3	33.5	23.4	14.0	27.6	22.0	11.7	66.3	1.2	18.2	7.2	25.4	17.7
Aug-22	28.8	30.2	29.6	34.3	25.8	16.2	33.9	24.2	12.0	64.2	1.4	24.3	9.8	27.5	19.7
Sep-22	26.1	32.8	29.7	52.6	31.1	16.3	8.6	26.2	15.2	66.6	1.4	25.7	9.8	28.2	22.6
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
12- Month Moving Average															
Nov-21	9.3	9.9	13.4	-9.1	3.3	9.5	10.5	10.2	8.4	7.3	0.7	7.3	3.0	8.0	10.1
Dec-21	9.4	9.5	13.1	-10.0	3.0	9.5	11.7	10.5	8.4	9.5	0.8	7.4	3.1	8.2	9.8
Jan-22	10.0	9.9	13.1	-7.5	2.8	9.4	12.9	10.9	8.3	11.7	0.8	7.4	3.3	8.5	9.7
Feb-22	10.4	10.5	13.0	-3.8	2.5	9.4	12.9	11.4	8.3	14.0	0.9	7.5	3.5	8.9	9.5
Mar-22	10.7	10.9	12.7	-0.1	2.3	9.4	12.9	11.8	8.4	16.1	1.0	7.8	3.8	9.5	9.7
Apr-22	11.1	11.2	12.7	2.6	2.5	9.5	12.9	12.3	8.6	17.9	1.0	8.2	4.0	10.1	10.0
May-22	11.5	11.7	12.7	5.6	3.1	9.6	12.8	12.9	8.8	19.3	1.0	8.6	4.3	11.0	10.4
Jun-22	12.7	13.2	13.9	9.0	4.2	9.9	13.5	13.7	9.1	23.4	1.0	9.3	4.5	12.3	10.9
Jul-22	14.2	15.1	15.5	12.7	6.0	10.4	14.9	14.7	9.4	28.3	1.0	10.3	4.7	13.9	11.6
Aug-22	15.9	16.8	17.1	15.0	8.0	11.1	17.0	15.9	9.7	33.2	1.0	11.7	5.2	15.6	12.8
Sep-22	17.4	18.8	18.6	20.3	10.5	11.8	16.6	17.3	10.4	38.1	1.1	13.2	5.7	17.4	14.1
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
Period Average (Since July)															
Nov-21	9.0	8.3	11.1	-6.3	1.7	8.6	12.7	9.9	7.6	11.9	1.0	7.5	3.8	7.7	7.9
Dec-21	9.4	8.4	11.4	-7.2	1.7	8.9	13.8	10.6	7.8	13.7	0.9	7.5	3.8	8.3	8.3
Jan-22	9.9	8.9	11.6	-5.6	1.8	9.0	14.5	11.2	7.9	15.0	1.0	7.5	3.8	8.9	8.7
Feb-22	10.4	9.7	11.7	-1.8	1.8	9.1	14.1	11.7	8.2	16.3	1.0	7.6	3.8	9.5	9.0
Mar-22	10.8	10.4	11.9	1.2	1.9	9.2	13.8	12.1	8.4	17.5	1.0	7.9	4.0	10.1	9.4
Apr-22	11.2	11.2	12.3	4.3	2.3	9.4	13.4	12.6	8.6	18.5	1.0	8.2	4.2	10.6	9.9
May-22	11.6	11.9	12.8	6.5	3.0	9.6	13.0	13.0	8.8	19.7	1.0	8.7	4.3	11.3	10.3
Jun-22	12.7	13.2	13.9	9.0	4.2	9.9	13.5	13.7	9.1	23.4	1.0	9.3	4.5	12.3	10.9
Jul-22	26.9	29.9	29.3	33.5	23.4	14.0	27.6	22.0	11.7	66.3	1.2	18.2	7.2	25.4	17.7
Aug-22	27.9	30.0	29.5	33.9	24.6	15.1	30.8	23.1	11.8	65.3	1.3	21.3	8.5	26.4	18.7
Sep-22	27.3	31.0	29.6	40.4	26.8	15.5	23.3	24.1	13.0	65.7	1.3	22.7	8.9	27.0	20.0
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
Month-on-Month															
Nov-21	3.1	3.6	1.8	14.5	0.1	2.6	3.3	2.0	1.3	5.8	0.0	0.5	0.0	3.5	2.0
Dec-21	-0.5	-3.7	-0.4	-21.8	0.5	0.9	3.2	3.1	1.7	1.3	0.0	0.6	0.3	1.6	0.9
Jan-22	0.9	0.2	1.0	-5.1	0.3	0.8	1.9	1.3	0.9	2.0	0.2	0.7	0.2	1.6	1.0
Feb-22	1.5	2.8	1.4	13.3	0.3	0.6	-1.4	1.3	2.5	3.9	0.0	1.2	0.8	1.0	0.8
Mar-22	1.0	2.5	2.8	0.5	0.0	1.1	-2.3	1.7	0.2	0.0	0.1	2.0	1.1	1.2	1.4
Apr-22	1.6	3.1	0.6	20.0	2.8	2.3	-0.8	1.6	0.9	0.2	0.1	0.8	1.0	0.3	1.0
May-22	0.6	0.8	2.8	-10.7	5.3	0.9	-2.5	1.5	0.6	2.5	0.0	2.5	0.8	3.9	1.3
Jun-22	6.6	6.1	6.2	5.2	5.6	1.6	9.2	3.3	1.1	25.9	0.2	3.4	0.9	4.4	2.8
Jul-22	4.2	3.8	3.5	6.0	5.5	1.2	9.4	2.0	0.3	5.7	0.4	2.2	1.4	2.2	2.0
Aug-22	2.2	1.2	0.7	3.9	1.9	2.0	6.0	2.4	0.8	-0.5	0.2	6.4	2.8	2.4	1.9
Sep-22	0.2	6.2	4.2	18.4	4.8	0.5	-17.5	2.4	3.4	2.5	0.1	2.2	0.0	1.2	3.7
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
3-Years Average (in current month during FY21-FY23)															
YoY	16.2	19.7	20.8	15.2	13.7	12.5	12.2	16.6	12.0	22.2	0.9	14.9	5.5	15.3	15.2
MoM	1.8	2.0	1.6	5.0	0.2	2.2	1.8	1.9	1.5	1.3	0.1	1.4	0.3	2.3	1.9

Source: Pakistan Bureau of Statistics

Table A7: Top Ten Contributors to Urban CPI Inflation (YoY) – November 2022

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Nov-21	Nov-22		
<u>A. Ranked by Weighted Contribution</u>					
1	Motor Fuel	2.91	40.81	52.02	9.05
2	Milk Fresh	7.11	11.71	27.64	8.68
3	Readymade Food	5.52	12.23	33.22	8.34
4	Onions	0.59	-37.68	284.87	5.65
5	Wheat Flour	3.01	19.04	35.56	5.07
6	House Rent	19.26	6.62	5.27	4.26
7	Electricity Charges	4.56	47.87	14.97	3.38
8	Appliances/Articles/Products for Personal	2.98	11.98	24.34	3.21
9	Cooking Oil	1.10	53.59	41.88	3.00
10	Washing Soap/Detergents/Match Box	1.41	14.41	43.42	2.78
Total		48.45			53.42
<u>B. Ranked by Percentage Change</u>					
1	Onions	0.59	-37.68	284.87	5.65
2	Gram Whole	0.09	14.69	63.49	0.24
3	Tea	0.84	8.41	62.18	2.36
4	Pulse Gram	0.17	4.76	56.19	0.34
5	Besan	0.08	3.76	56.10	0.18
6	Butter	0.09	10.83	53.05	0.29
7	Motor Fuel	2.91	40.81	52.02	9.05
8	Pulse Mash	0.12	2.89	47.76	0.17
9	Pulse Moong	0.17	-27.03	46.29	0.25
10	Mustard Oil	0.01	56.96	44.69	0.03
Total		5.07			18.56
<u>C. Ranked by Weights</u>					
1	House Rent	19.26	6.62	5.27	4.26
2	Milk Fresh	7.11	11.71	27.64	8.68
3	Readymade Food	5.52	12.23	33.22	8.34
4	Education	4.88	2.18	11.07	2.38
5	Electricity Charges	4.56	47.87	14.97	3.38
6	Wheat Flour	3.01	19.04	35.56	5.07
7	Appliances/Articles/Products for Personal	2.98	11.98	24.34	3.21
8	Motor Fuel	2.91	40.81	52.02	9.05
9	Cotton Cloth	2.22	8.64	22.24	2.26
10	Meat	2.04	20.20	22.51	2.53
Total		54.49			49.16

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 21.6 percent in November 2022.

Table A8: Top Ten Contributors to Urban CPI Inflation (MoM) in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.59	66.36	34.42	91.79
2	Tea	0.84	9.82	14.79	37.30
3	Potatoes	0.45	-1.28	14.57	24.74
4	Readymade Food	5.52	3.82	1.40	21.63
5	Washing Soap/Detergents/Match Box	1.41	3.72	3.63	15.11
6	Milk Fresh	7.11	1.21	0.77	14.41
7	Marriage Hall Charges	1.75	0.29	3.11	13.01
8	Personal Effects N.E.C.	0.94	-1.55	4.03	12.79
9	Woolen Readymade Garments	0.43	0.10	12.71	12.14
10	Eggs	0.51	-0.55	5.34	10.40
Total		19.55			253.32
B. Ranked by Percentage Change					
1	Onions	0.59	66.36	34.42	91.79
2	Tea	0.84	9.82	14.79	37.30
3	Potatoes	0.45	-1.28	14.57	24.74
4	Dry Fruits	0.33	6.04	12.79	9.79
5	Woolen Readymade Garments	0.43	0.10	12.71	12.14
6	Fish	0.39	6.37	7.01	5.02
7	Pan Prepared	0.14	1.35	6.48	3.62
8	Solid Fuel	0.42	1.74	5.87	5.03
9	Household Textiles	0.34	3.02	5.53	3.95
10	Eggs	0.51	-0.55	5.34	10.40
Total		4.44			203.78
C. Ranked by Weights					
1	House Rent	19.26	1.08	0.00	0.00
2	Milk Fresh	7.11	1.21	0.77	14.41
3	Readymade Food	5.52	3.82	1.40	21.63
4	Education	4.88	1.10	0.23	2.58
5	Electricity Charges	4.56	89.59	-0.34	-4.11
6	Wheat Flour	3.01	8.90	-1.04	-9.52
7	Appliances/Articles/Products for Personal	2.98	2.39	1.02	7.74
8	Motor Fuel	2.91	-4.22	-0.01	-0.08
9	Cotton Cloth	2.22	0.42	1.06	6.11
10	Meat	2.04	2.09	0.30	1.96
Total		54.49			40.72

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in MoM change in Urban CPI, which is 0.4 percent in November 2022.

Table A9: Top and Bottom Fifteen Contributors to Urban CPI Inflation (YoY) in November 2022

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Nov-21	Nov-22		
A. Ranked by Weighted Contribution					
1	Motor Fuel	2.91	40.81	52.02	9.05
2	Milk Fresh	7.11	11.71	27.64	8.68
3	Readymade Food	5.52	12.23	33.22	8.34
4	Onions	0.59	-37.68	284.87	5.65
5	Wheat Flour	3.01	19.04	35.56	5.07
6	House Rent	19.26	6.62	5.27	4.26
7	Electricity Charges	4.56	47.87	14.97	3.38
8	Appliances/Articles/Products for Personal	2.98	11.98	24.34	3.21
9	Cooking Oil	1.10	53.59	41.88	3.00
10	Washing Soap/Detergents/Match Box	1.41	14.41	43.42	2.78
11	Vegetable Ghee	1.03	58.29	35.15	2.53
12	Meat	2.04	20.20	22.51	2.53
13	Education	4.88	2.18	11.07	2.38
14	Tea	0.84	8.41	62.18	2.36
15	Transport Services	1.75	12.24	33.43	2.35
Total		58.99			65.57
Bottom 15 Contributors					
1	Condiments And Spices	1.33	3.85	-9.78	-0.80
2	Sugar	1.11	2.24	-9.90	-0.53
3	Gur	0.04	12.31	-3.64	-0.01
4	Liquefied Hydrocarbons	0.51	80.34	-0.03	0.00
5	Gas Charges	1.08	0.00	0.00	0.00
6	Therapeutic Appliances and Equipments	0.01	3.02	7.23	0.00
7	Dental Services	0.02	6.41	13.35	0.01
8	Major Tools & Equipments	0.01	8.36	24.53	0.01
9	Carpets	0.03	4.91	11.47	0.01
10	Postal Services	0.02	10.87	13.79	0.01
11	Newspapers	0.07	0.00	4.21	0.01
12	Motor Vehicle Tax	0.05	7.62	8.92	0.02
13	Accommodation Services	0.13	4.43	6.63	0.03
14	Communication Services	1.88	1.96	0.52	0.03
15	Electrical Appliances for Personal	0.05	1.98	18.97	0.03
Total		6.34			-1.18

Table A10: Top and Bottom Fifteen Contributors to Urban CPI Inflation (MoM) in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.59	66.36	34.42	91.79
2	Tea	0.84	9.82	14.79	37.30
3	Potatoes	0.45	-1.28	14.57	24.74
4	Readymade Food	5.52	3.82	1.40	21.63
5	Washing Soap/Detergents/Match Box	1.41	3.72	3.63	15.11
6	Milk Fresh	7.11	1.21	0.77	14.41
7	Marriage Hall Charges	1.75	0.29	3.11	13.01
8	Personal Effects N.E.C.	0.94	-1.55	4.03	12.79
9	Woolen Readymade Garments	0.43	0.10	12.71	12.14
10	Eggs	0.51	-0.55	5.34	10.40
11	Dry Fruits	0.33	6.04	12.79	9.79
12	Sugar	1.11	0.36	3.67	8.02
13	Appliances/Articles/Products for Personal	2.98	2.39	1.02	7.74
14	Cotton Cloth	2.22	0.42	1.06	6.11
15	Drugs And Medicines	1.07	2.51	2.10	5.68
Total		27.26			290.66
Bottom 15 Contributors					
1	Fresh Vegetables	1.53	9.49	-26.42	-161.12
2	Tomatoes	0.35	41.32	-9.56	-21.88
3	Chicken	1.36	3.98	-5.08	-19.59
4	Wheat Flour	3.01	8.90	-1.04	-9.52
5	Vegetable Ghee	1.03	-0.33	-1.74	-8.09
6	Cooking Oil	1.10	-2.70	-1.53	-7.41
7	Transport Services	1.75	1.07	-1.54	-6.92
8	Fresh Fruits	1.44	10.99	-1.97	-6.34
9	Liquefied Hydrocarbons	0.51	-11.37	-3.06	-5.73
10	Pulse Masoor	0.16	-10.29	-11.17	-5.01
11	Electricity Charges	4.56	89.59	-0.34	-4.11
12	Pulse Gram	0.17	-1.77	-5.51	-2.59
13	Wheat	0.61	0.66	-0.62	-1.36
14	Pulse Moong	0.17	1.28	-3.05	-1.15
15	Pulse Mash	0.12	-2.73	-4.26	-1.13
Total		17.87			-261.95

Table A11: Top and Bottom Fifteen Contributors to MoM Urban CPI Food Inflation in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.59	66.36	34.42	91.79
2	Tea	0.84	9.82	14.79	37.30
3	Potatoes	0.45	-1.28	14.57	24.74
4	Readymade food	5.52	3.82	1.40	21.63
5	Milk fresh	7.11	1.21	0.77	14.41
6	Eggs	0.51	-0.55	5.34	10.40
7	Dry fruits	0.33	6.04	12.79	9.79
8	Sugar	1.11	0.36	3.67	8.02
9	Fish	0.39	6.37	7.01	5.02
10	Condiments and Spices	1.33	-0.35	1.35	4.63
11	Pan prepared	0.14	1.35	6.48	3.62
12	Rice	1.18	1.56	1.00	3.41
13	Bakery and confectionary	0.48	6.19	2.11	2.90
14	Milk powder	0.31	2.37	2.97	2.35
15	Meat	2.04	2.09	0.30	1.96
Total		22.33			241.97
Bottom 15 Contributors					
1	Fresh vegetables	1.53	9.49	-26.42	-161.12
2	Tomatoes	0.35	41.32	-9.56	-21.88
3	Chicken	1.36	3.98	-5.08	-19.59
4	Wheat flour	3.01	8.90	-1.04	-9.52
5	Vegetable ghee	1.03	-0.33	-1.74	-8.09
6	Cooking oil	1.10	-2.70	-1.53	-7.41
7	Fresh fruits	1.44	10.99	-1.97	-6.34
8	Pulse masoor	0.16	-10.29	-11.17	-5.01
9	Pulse gram	0.17	-1.77	-5.51	-2.59
10	Wheat	0.61	0.66	-0.62	-1.36
11	Pulse moong	0.17	1.28	-3.05	-1.15
12	Pulse mash	0.12	-2.73	-4.26	-1.13
13	Besan	0.08	2.14	-3.50	-0.83
14	Gram whole	0.09	-1.48	-2.01	-0.60
15	Gur	0.04	0.62	-1.61	-0.14
Total		11.25			-246.76

Table A12: Top and Bottom Fifteen Contributors to MoM Urban CPI Non-Food Inflation in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Washing soap/detergents/match Box	1.41	3.72	3.63	15.11
2	Marriage Hall Charges	1.75	0.29	3.11	13.01
3	Personal Effects n.e.c.	0.94	-1.55	4.03	12.79
4	Woolen readymade garments	0.43	0.10	12.71	12.14
5	Appliances/Articles/Products for Personal	2.98	2.39	1.02	7.74
6	Cotton cloth	2.22	0.42	1.06	6.11
7	Drugs and medicines	1.07	2.51	2.10	5.68
8	Solid Fuel	0.42	1.74	5.87	5.03
9	Household textiles	0.34	3.02	5.53	3.95
10	Recreation and culture	0.65	0.91	3.14	3.56
11	Household equipments	1.00	1.96	1.20	3.02
12	Education	4.88	1.10	0.23	2.58
13	Woolen cloth	0.84	6.15	1.27	2.54
14	Household servant	0.77	5.01	1.31	2.31
15	Furniture and furnishing	0.48	3.13	1.88	2.20
Total		20.19			97.79
Bottom 15 Contributors					
1	Transport services	1.75	1.07	-1.54	-6.92
2	Liquefied Hydrocarbons	0.51	-11.37	-3.06	-5.73
3	Electricity charges	4.56	89.59	-0.34	-4.11
4	Motor fuel	2.91	-4.22	-0.01	-0.08
5	Gas charges	1.08	0.00	0.00	0.00
6	Newspapers	0.07	0.00	0.00	0.00
7	Communication Services	1.88	0.00	0.00	0.00
8	Motor vehicle tax	0.05	0.00	0.00	0.00
9	Garbage collection	0.11	0.00	0.00	0.00
10	Postal services	0.02	0.24	0.00	0.00
11	House rent	19.26	1.08	0.00	0.00
12	Major tools & equipments	0.01	1.13	0.45	0.01
13	Therapeutic Appliances and Equipments	0.01	0.65	1.78	0.02
14	Dental services	0.02	0.52	0.77	0.02
15	Electrical Appliances for Personal	0.05	1.76	0.41	0.04
Total		32.26			-16.75

Table A13: Top Ten Contributors to Rural CPI Inflation (YoY) in November 2022

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Nov-21	Nov-22		
A. Ranked by Weighted Contribution					
1	Milk Fresh	10.38	9.62	30.03	10.27
2	Wheat	3.47	4.08	47.16	6.66
3	Onions	0.90	-40.57	286.55	6.24
4	Motor Fuels	2.49	40.22	53.70	6.12
5	Vegetable Ghee	2.38	53.00	42.38	5.70
6	Solid Fuel	4.48	10.35	32.71	4.97
7	Readymade Food	3.80	10.57	31.35	4.52
8	Wheat Flour	3.43	15.48	33.45	4.40
9	Transport Services	1.80	5.78	59.86	3.28
10	Rice	1.55	5.33	40.02	2.73
Total		34.68			54.89
B. Ranked by Percentage Change					
1	Onions	0.90	-40.57	286.55	6.24
2	Gram Whole	0.11	20.56	71.67	0.26
3	Pulse Gram	0.28	6.87	62.58	0.50
4	Transport Services	1.80	5.78	59.86	3.28
5	Besan	0.07	10.24	59.74	0.13
6	Nimco	0.08	11.98	58.54	0.15
7	Tea	1.26	8.48	54.07	2.34
8	Motor Fuels	2.49	40.22	53.70	6.12
9	Pulse Mash	0.15	3.90	50.78	0.18
10	Pulse Masoor	0.21	17.88	49.40	0.31
Total		7.35			19.51
C. Ranked by Weights					
1	Milk Fresh	10.38	9.62	30.03	10.27
2	House Rent	8.61	6.64	5.86	1.65
3	Solid Fuel	4.48	10.35	32.71	4.97
4	Readymade Food	3.80	10.57	31.35	4.52
5	Wheat	3.47	4.08	47.16	6.66
6	Electricity Charges	3.44	47.87	14.97	1.98
7	Wheat Flour	3.43	15.48	33.45	4.40
8	Cotton Cloth	2.84	9.16	16.06	1.82
9	Motor Fuels	2.49	40.22	53.70	6.12
10	Vegetable Ghee	2.38	53.00	42.38	5.70
Total		45.32			48.09

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 Rural CPI, which is 27.2 percent in November 2022.

Table A14: Top Ten Contributors to Rural CPI Inflation (MoM) in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.90	59.54	29.22	31.75
2	Milk Fresh	10.38	1.12	4.16	29.63
3	Solid Fuel	4.48	2.27	7.61	23.77
4	Tea	1.26	14.77	10.42	10.48
5	Footwear	1.92	0.21	6.26	7.12
6	Condiments And Spices	1.49	3.85	5.68	6.52
7	Personal Effects N.E.C.	1.21	-3.12	5.10	5.68
8	Readymade Food	3.80	1.35	1.80	5.59
9	Potatoes	0.74	4.38	5.72	4.98
10	Washing Soaps, Detergents and Match Box	1.70	3.81	3.79	4.83
Total		27.88			130.35
B. Ranked by Percentage Change					
1	Onions	0.90	59.54	29.22	31.75
2	Dry Fruits	0.25	1.75	16.61	2.97
3	Tea	1.26	14.77	10.42	10.48
4	Woolen Readymade Garments	0.54	0.85	10.26	3.53
5	Solid Fuel	4.48	2.27	7.61	23.77
6	Household Textiles	0.44	1.86	7.36	2.01
7	Footware	1.92	0.21	6.26	7.12
8	Stationery	0.37	0.63	6.02	1.67
9	Potatoes	0.74	4.38	5.72	4.98
10	Condiments And Spices	1.49	3.85	5.68	6.52
Total		12.39			94.80
C. Ranked by Weights					
1	Milk Fresh	10.38	1.12	4.16	29.63
2	House Rent	8.61	1.29	0.00	0.00
3	Solid Fuel	4.48	2.27	7.61	23.77
4	Readymade Food	3.80	1.35	1.80	5.59
5	Wheat	3.47	10.14	0.35	1.21
6	Electricity Charges	3.44	89.59	-0.34	-0.86
7	Wheat Flour	3.43	15.21	-1.85	-5.53
8	Cotton Cloth	2.84	1.19	1.38	2.99
9	Motor Fuels	2.49	-4.32	-0.03	-0.10
10	Vegetable Ghee	2.38	-1.62	-1.14	-3.70
Total		45.32			53.00

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in MoM change in Rural CPI, which is 1.3 percent in November 2022.

Table A15: Top and Bottom Fifteen Contributors to Rural CPI Inflation (YoY) in November 2022

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Nov-21	Nov-22		
A. Ranked by Weighted Contribution					
1	Milk Fresh	10.38	9.62	30.03	10.27
2	Wheat	3.47	4.08	47.16	6.66
3	Onions	0.90	-40.57	286.55	6.24
4	Motor Fuels	2.49	40.22	53.70	6.12
5	Vegetable Ghee	2.38	53.00	42.38	5.70
6	Solid Fuel	4.48	10.35	32.71	4.97
7	Readymade Food	3.80	10.57	31.35	4.52
8	Wheat Flour	3.43	15.48	33.45	4.40
9	Transport Services	1.80	5.78	59.86	3.28
10	Rice	1.55	5.33	40.02	2.73
11	Tea	1.26	8.48	54.07	2.34
12	Washing Soaps, Detergents and Match Box	1.70	12.71	38.12	2.19
13	Electricity Charges	3.44	47.87	14.97	1.98
14	Cotton Cloth	2.84	9.16	16.06	1.82
15	Drugs And Medicines	1.58	8.58	30.24	1.75
Total		45.50			64.97
Bottom 15 Contributors					
1	Sugar	2.03	0.93	-14.06	-1.12
2	Gur	0.15	13.56	-3.96	-0.02
3	Postal Services	0.01	0.00	0.00	0.00
4	Newspapers	0.02	0.00	0.10	0.00
5	Garbage Collection	0.01	8.74	9.60	0.00
6	Water Supply	0.06	1.63	1.63	0.01
7	Communication Services	1.65	0.62	0.16	0.01
8	Motor Vehicle Tax	0.02	-5.56	24.88	0.01
9	Honey	0.03	15.94	12.43	0.01
10	Dental Services	0.02	7.97	22.24	0.01
11	Dessert Preparation	0.01	7.76	31.14	0.01
12	Cleaning And Laundering	0.02	10.07	25.42	0.02
13	Accommodation Services	0.14	0.00	7.08	0.02
14	Ice Cream	0.06	7.38	12.90	0.02
15	Major Tools and Equipments	0.03	10.65	29.50	0.03
Total		4.26			-0.99

Table A16: Top and Bottom Fifteen Contributors to Rural CPI (MoM) Inflation in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.90	59.54	29.22	31.75
2	Milk Fresh	10.38	1.12	4.16	29.63
3	Solid Fuel	4.48	2.27	7.61	23.77
4	Tea	1.26	14.77	10.42	10.48
5	Footwear	1.92	0.21	6.26	7.12
6	Condiments And Spices	1.49	3.85	5.68	6.52
7	Personal Effects N.E.C.	1.21	-3.12	5.10	5.68
8	Readymade Food	3.80	1.35	1.80	5.59
9	Potatoes	0.74	4.38	5.72	4.98
10	Washing Soaps, Detergents and Match Box	1.70	3.81	3.79	4.83
11	Marriage Hall Charges	2.25	2.42	3.43	4.73
12	Drugs And Medicines	1.58	6.89	3.82	4.62
13	Sugar	2.03	0.27	3.75	4.12
14	Personal Grooming Services	1.54	1.03	3.00	3.70
15	Woolen Readymade Garments	0.54	0.85	10.26	3.53
Total		35.82			151.05
Bottom 15 Contributors					
1	Fresh Vegetables	2.09	16.45	-26.88	-63.77
2	Tomatoes	0.51	38.40	-9.57	-9.10
3	Wheat Flour	3.43	15.21	-1.85	-5.53
4	Vegetable Ghee	2.38	-1.62	-1.14	-3.70
5	Chicken	1.46	3.80	-2.70	-3.20
6	Pulse Masoor	0.21	-4.65	-12.33	-2.22
7	Liquefied Hydrocarbons	1.00	-12.72	-2.25	-2.12
8	Transport Services	1.80	4.41	-0.99	-1.47
9	Cooking Oil	0.60	-2.28	-1.32	-1.06
10	Electricity Charges	3.44	89.59	-0.34	-0.86
11	Pulse Gram	0.28	1.99	-3.16	-0.70
12	Pulse Mash	0.15	1.12	-4.75	-0.45
13	Gram Whole	0.11	1.07	-2.33	-0.25
14	Pulse Moong	0.25	1.83	-1.51	-0.24
15	Gur	0.15	2.23	-2.53	-0.24
Total		17.86			-94.91

Table A17: Top and Bottom Fifteen Contributors to MoM Rural CPI Food Inflation in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Onions	0.90	59.54	29.22	31.75
2	Milk fresh	10.38	1.12	4.16	29.63
3	Tea	1.26	14.77	10.42	10.48
4	Condiments and Spices	1.49	3.85	5.68	6.52
5	Readymade Food	3.80	1.35	1.80	5.59
6	Potatoes	0.74	4.38	5.72	4.98
7	Sugar	2.03	0.27	3.75	4.12
8	Milk products	0.96	1.99	5.04	3.17
9	Dry fruits	0.25	1.75	16.61	2.97
10	Rice	1.55	1.44	1.57	2.47
11	Fresh fruits	1.45	13.05	2.14	1.93
12	Eggs	0.57	0.77	2.80	1.64
13	Wheat	3.47	10.14	0.35	1.21
14	Butter	0.33	3.38	3.19	0.77
15	Meat	1.71	0.42	0.45	0.66
Total		30.90			107.89
Bottom 15 Contributors					
1	Fresh Vegetables	2.09	16.45	-26.88	-63.77
2	Tomatoes	0.51	38.40	-9.57	-9.10
3	Wheat Flour	3.43	15.21	-1.85	-5.53
4	Vegetable ghee	2.38	-1.62	-1.14	-3.70
5	Chicken	1.46	3.80	-2.70	-3.20
6	Pulse Masoor	0.21	-4.65	-12.33	-2.22
7	Cooking oil	0.60	-2.28	-1.32	-1.06
8	Pulse Gram	0.28	1.99	-3.16	-0.70
9	Pulse Mash	0.15	1.12	-4.75	-0.45
10	Gram Whole	0.11	1.07	-2.33	-0.25
11	Pulse Moong	0.25	1.83	-1.51	-0.24
12	Gur	0.15	2.23	-2.53	-0.24
13	Mustard oil	0.01	1.71	0.31	0.00
14	Dessert Preparation	0.01	1.48	1.82	0.02
15	Honey	0.03	0.41	1.40	0.03
Total		11.67			-90.42

Table A18: Top and Bottom Fifteen Contributors to MoM Rural CPI Non-Food Inflation in November 2022

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Oct-22	Nov-22		
A. Ranked by Weighted Contribution					
1	Solid Fuel	4.48	2.27	7.61	23.77
2	Footwear	1.92	0.21	6.26	7.12
3	Personal Effects n.e.c.	1.21	-3.12	5.10	5.68
4	Washing Soaps, Detergents and Match Box	1.70	3.81	3.79	4.83
5	Marriage Hall Charges	2.25	2.42	3.43	4.73
6	Drugs and Medicines	1.58	6.89	3.82	4.62
7	Personal Grooming Services	1.54	1.03	3.00	3.70
8	Woolen Readymade Garments	0.54	0.85	10.26	3.53
9	Woolen Cloth	1.10	1.54	4.19	3.06
10	Cotton Cloth	2.84	1.19	1.38	2.99
11	Appliances/Articles/Products for Personal	2.27	2.14	1.76	2.42
12	Household Textiles	0.44	1.86	7.36	2.01
13	Household Equipments	1.28	1.08	1.92	1.80
14	Stationery	0.37	0.63	6.02	1.67
15	Readymade Garments	1.13	1.10	2.09	1.58
Total		24.64			73.49
Bottom 15 Contributors					
1	Liquefied Hydrocarbons	1.00	-12.72	-2.25	-2.12
2	Transport Services	1.80	4.41	-0.99	-1.47
3	Electricity Charges	3.44	89.59	-0.34	-0.86
4	Motor Fuels	2.49	-4.32	-0.03	-0.10
5	Postal Services	0.01	0.00	0.00	0.00
6	Newspapers	0.02	0.00	0.00	0.00
7	Garbage Collection	0.01	0.00	0.00	0.00
8	Communication Services	1.65	0.00	0.00	0.00
9	Accommodation Services	0.14	0.00	0.00	0.00
10	Motor Vehicle Tax	0.02	0.00	0.00	0.00
11	Water Supply	0.06	0.00	0.00	0.00
12	Textbooks	0.50	4.39	0.00	0.00
13	House Rent	8.61	1.29	0.00	0.00
14	Dental Services	0.02	3.11	1.54	0.02
15	Cleaning and Laundering	0.02	0.00	2.61	0.03
Total		19.79			-4.48

Table A19: Distribution of Price Changes (YoY) - Selected Urban CPI Items: November 2022

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 Powder National 200 Gm Packet, Turnip (Shalgham), Karela, Sugar Refined, Tinda, Cardamom Small (Average Quality), Peas (Matar), Bottlegourd (Loki), Gur (Average)	Cauliflower (Phool Gobhi), Ginger (Adrak), Jam-E-Shireen Standard Size (800 Ml), Cucumber (Kheera),	Coriander Seed Powder National 200 Gm Packet, Guava (Amrood) (Average Quality), Cardamom Large (Loose) (Average Quality),	Chicken Farm Broiler (Live), Turmeric Powder National 50 Gm Packet, Cumin Seed (Zeera) White National 50 Gm Packet, Almonds (Badam) Kaghazi With Shell (Average Quality), Honey Marhaba Bottle
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,		Dry Cleaning Charges Pant Coat Both,	Shirt Boy Length 24"/26", Women Shalwar Kameez (Average Quality), Dopatta Georgette (Average Quality), Dopatta Cotton (Average Quality), Tailoring Charges Pant (Men), Vest "Baniyan" For Men Average Quality, Pant Cloth Wash & Wear (Average Quality), Awami Suit Gents Wash & Wear (Average Quality), Linen, Ladies (Average Quality), Full Pant Boy Length 24"/26",
Housing, Water, Elec, Gas & other Fuels	Electricity Charges 51-100 Units, Electricity Charges Upto 50 Units, Lpg 11.67 Kg Cylinder, Gas Charges Upto 3.3719 Mmbtu, Gas Charges 3.3719 - 6.7438 Mmbtu, Gas Charges 6.7438 - 10.1157 Mmbtu, Gas Charges 10.1157 - 13.4876 Mmbtu		House Rent Combined, Water Charges Per House, Iron Bars (M.S. Bar) 1/2 " 40 Grade,	Electrician Charges, Painter Wage Rate, Mason Wage Rate, Bricks New 1St Class, Unskilled Labor Wage Rate, Plumber Wage Rate, Electricity Charges Combined, Electricity Charges 101-300 Units, Charges For Refuse/Waste Collection, Sand (Black Pit), Electricity Charges Above 700 Units,
Furnishing & Household Equip. Maintenance etc			Bed Sheet Double With Two Pillow Covers (Superior Quality), Water Set (Omroc) 6 Glasses + Jug,	Sewing Machine (Sn) Without Cover, Dining Table Wit Glass Top And Six Chairs (Average Quality), Plain Carpet, Bed Sheet Single (Superior Quality), Bucket (Balti) Plastic Medium Size, Frying Pan Non-Stick Medium Size Sonex, Dinner Set Plastic 72 Pieces Super Quality, Cot Iron (Charpai)
Health		Ventolin Tablets 2 Mg, Sugar Test (Random/Fasting) Charges Of Both, Blood Test (Cp) Charges,	Gynecologist Fee Per Visit, Electronic Bp Checking Apparatus, Cost Of Surgery (C-Section), Cac 1000 Tablets Sandoz Bottle, Lederplex Syrup Bottle, Hydryllin Syrup 120 Ml Bottle, Glucometer, Septran Tablets, Phenergan Syrup	Flagyl Tablets 400 Mg, Physiotherapist Fee Per Visit, Daonil Tablets 5 Mg, Dental Surgeon Fee Per Visit, Ecg Charges, Dental Extraction Fee, Glaxose-D 400 Gm Packet, Ultrasound Abdominal, Urine Test (Dr) Charges, Betnovate-N Ointment 10 Gm Tube, Johar Joshanda Instant (Sachet)
Transport	Car Suzuki 800 Cc Without Ac,		Car Tax 800 Cc To 1500 Cc,	Air Fare Economy Class Per Kilometer (National Average), Car Service Charges, Tire Car Puncture Charges, Motorcycle Service Charges, Car Toyota 1300 Cc Xli, Mini Bus Fare Minimum Within City, Tire Motorcycle Cd 70 (Back Wheel), Bus Fare Maximum Within City, Mini Bus Fare
Communication	Mobile Call Charges, Telephone Call Charges,	Internet Charges (Dsl) 1 Mb (Unlimited),	Mobile Set With Rear Camera And Without Touch Screen,	Courier Charges Minimum Within Zone Outside City (Tcs),
Recreation & Culture	Newspaper Daily Jang, Mag The Weekly (Magazine),	English Book Ba/B.Sc, Urdu Book Ba/B.Sc,	Akhbar-E-Jehan Weekly, Cable Charges,	Led Sony/Samsung 32" Colored, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Pen Ink Dollar 57 Ml Bottle, Laptop Dell/Hp/Acer Core I5, Display (14'-15'), Newspaper Daily Dawn, Mathematics Book Class Xi (Text Book Board), Urdu Book Class Xi/Inter, English
Education		Government College Fee First Year, Government University Fee M.S.C / M.A., Coaching Fee For Class Xi/Xii Science Group, Coaching Fee For Class Xi/Xii Commerce Group, Vocational	Private College Fee First Year, Government Medical College/University Tuition Fee For Mbbs (1St Year), Tuition Fee Private University M.Sc./M.A.,	Private Engineering University Tuition Fee For Be (1St Year), Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class V), Private School
Restaurant & Hotels		Government Hostel Accommodation Fee For Intermediate College Per Student,		Marriage Hall Service Charges With Food (Average Meal), Private Hostel Accommodation Fee For Intermediate College Per Student, Marriage Hall Charges With Furniture, Tea Prepared Ordinary, Seekh Kabab (Beef) (Average Quality),
Miscellaneous			Purse Ladies Medium Size (Average Quality), Shampoo Sun Silk/Pantene 90 Ml Bottle,	Tissue Paper Perfumed Box 100 Napkins, Silver Tezabi 24 Carett, Hair Style Charges (At Average Beauty Parlor), Toothbrush (Shield), Talcum Powder Viceroy/Black Cat Large Size, Nail Polish Swiss Miss/Medora (Medium), Artificial Jewelry (Locket Set) (Average Quality), Blade Treet Ordinary

Table A20: Distribution of Price Changes (YoY) - Selected Rural CPI Items: November 2022

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	Turnip (Shalgham), Sugar Refined, Karela, Cauliflower (Phool Gobhi), Peas (Matar), Gur (Average Quality),	Guava (Amrood) (Average Quality), Ginger (Adrak), Spinach (Paalak), Cucumber (Kheera), Jam-E-Shireen Standard Size (800 MI), Bottlegourd (Loki),	Tinda,	Radish (Mooli), Brinjal, Honey Marhaba Bottle 500 Gm, Ice Cream Walls Cup (Large Size), Chicken Farm Broiler (Live), Cold Drink (Pepsi/Coca-Cola) 1.5 Liter Bottle, Almonds (Badam) Kaghazi With Shell (Average Quality), Fish Fresh, Fruit Juice Small Packet 250 MI, Chilies Powder
Alcoholic Beverages & Tobacco				Tobacco Hukka Twisted, Chewing Tobacco (Niswar), Cigarettes Gold Leaf 20'S Packet, Cigarettes Capstan 20'S Packet, Pan Prepared (Sweet With Beetle Nuts),
Clothing & Footwear				Dopatta Georgette (Average Quality), Footware Gents Local (Average Quality), Chaddar (Wash-N-Wear) (2X2.5 Meter), Shirting (Average Quality), Lawn Printed (Average Quality), Full Pant Boy Length 24"/26", Shirt Boy Length 24"/26", Lungi/Dhoti Cotton (Average Quality), Long Cloth, Pullover Ladies (Average Quality), School Uniform Girls (Kameez & Mason Wage Rate, Painter Wage Rate, Plumber Wage Rate, Unskilled Labor Wage Rate, Electricity Charges Combined, Electricity Charges 101-300 Units, Electrician Charges, Electricity Charges Above 1000 Units, Electricity Charges 301-
Housing, Water, Elec, Gas & other Fuels	Electricity Charges 51-100 Units, Electricity Charges Upto 50 Units, Lpg 11.67 Kg Cylinder,	Water Charges Per House,	House Rent Combined, Carpenter Wage Rate, Charges For Refuse/Waste Collection,	Water Set (Omroc) 6 Glass, Cleanser Powder Vim 900 Gm Polybag, Cot Iron (Charpai), Finis 400 MI Bottle, Sewing Machine (Sn) Without Cover, Readymade Quilt (3 Kg), Bucket (Balti) Plastic Medium Size, Aluminium Cooking Pan (Degchi),
Furnishing & Household Equip. Maintenance etc				Blood Test (Cp) Charges, Amoxil Capsule 250 Mg, Inderal Tablets 10 Mg, X-Ray (Chest) Charges, Johar Joshanda Instant (Sachet) Packet, Doctor (Mbbs) Clinic Fee, Dental Surgeon Fee Per Visit, Dettol
Health		Hydryllin Syrup 120 MI Bottle,	Cost Of Surgery (C-Section), Physiotherapist Fee Per Visit, Daonil Tablets 5 Mg, Cac 1000 Tablets Sandoz Bottle,	
Transport	Car Suzuki 800 Cc Without Ac,			Air Fare Economy Class Per Kilometer, Motorcycle Service Charges, Cng, Car Tax 800 Cc To 1500 Cc, Tire Cycle, Tire Motorcycle Cd 70 (Back Wheel), Motorcycle Honda Cd 70, Tire Car Mehran Tubeless (General), Bus Fare Outside City
Communication	Postal Registration Charges, Mobile Call Charges, Telephone Call Charges,	Internet Charges (Dsl) 1 Mb (Unlimited),	Mobile Set With Rear Camera And Without Touch Screen,	
Recreation & Culture		Newspaper Daily Jang,	Cable Charges,	Led Sony/Samsung 32" Colored, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Urdu Books Class Ix And X (Text Book Board), English Books Class Ix And X, English Books Class Vi, English Books Class Xi Complete Set, Urdu Books Class V/(Text Book Board), Exercise
Education			Private School Fee English Medium Average Standard (Class I), Vocational Training Basic Computer Short Course Fee (3 Months), Private School Fee English Medium Average Standard (Class V),	Private School Fee English Medium Average Standard (Class Vi), Coaching Fee For Class Ix/X Science Group,
Restaurant & Hotels	Government Hostel Accommodation Fee For Intermediate College Per Student,		Marriage Hall Charges With Furniture,	Marriage Hall Service Charges With Food (Average Meal), Chicken Roast (Full) (Average Quality), Tea Prepared Ordinary, Pizza Chicken Medium Size (Average Quality), Cooked Beef At Average Hotel, Private Hostel Accommodation Fee For
Miscellaneous				Talcum Powder Viceroy/Black Cat, Shampoo Sun Silk/Pantene 90 MI Bottle, Tooth Brush (Shield), Tooth Paste Colgate 75 Gm, Blade Treet Ordinary (10 No. Packet), Shaving Cream (Touchme Large/Admiral), Trunk Medium Size (Average Quality), Purse Ladies Medium Size, Hair Color (Kala Kola), Hair Cut

Table A21: Distribution of Price Changes (YoY) - WPI Items: November 2022

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		Raw Animal Materials / Wool, Fiber Crops,	Unmanufactured Tobacco, Millet / Bajra, Poultry, Cotton Seeds, Sugar Crops,	Fuel Wood in Logs, Fish Live Fresh or Chilled, Sorghum / Jowar, Stimulant & Spice Crops, Other Oil Seeds, Rice, Fresh Fruits, Raw Milk from Bovine Animals, Vegetables, Edible Roots / Potatoes, Maize, Eggs, Hides, Skins & Fur Skins, Raw,
ores/Minerals, Elec., Gas & Water	Natural Gas Liquified,			Salt & Pure Sodium Chloride, Electrical Energy, Coal not Agglomerated,
Food, Beverages, Tobacco, Textile, Apparel and Leather Product	Spices, Sugar Refined, Nylon Yarn, Cotton Yarn, Blended Yarn, Woolen Carpets,		Synthetic Carpets, Sugar Confectionary, Chocolate, Woven Fabrics,	Bed Sheets, Ice Cream, Hosiery Products, Meat of Animals, Cotton Fabrics, Other Food Products, Leather Without Hair, Towels, Beverages, Blankets, Dairy Products N.E.C, Other Leather N.E.C, Mineral Water,
Other Transportable Goods except Metal Products, Machinery and Equipments	Hard Board, Dyeing Material, Insecticides,	Other Glass Articles,	Pesticides, Furnace Oil, Plastic Products,	Ceramics & Sanitary Fixture, Bricks, Blocks & Tiles, Timber, Matches, Soaps & Detergents, Auto Tyres, Paints & Varnishes, Bed Foam, Chemicals, Fertilizers, Printing Paper, Cement, Mobil Oil,
Metal Product, Machinery & Equipments	Vacuum Pumps, Cultivators,	Steel Products,	Steel Bar & Sheets, Fridge, WashM, SewM, Fans, Iron, Engines & Motors,	Radio & Television, Motor Vehicles, Electric Wires, Motorcycles, Pipe Fittings, Bicycles, Tractors, Air Conditioners, Lathe Machines, Concrete Mixture, Chuff Cutter, Lighting Equipments,

Table A22: International Commodity Prices/Indices				
Commodity/Indices	Jun-21	Nov-21	Oct-22	Nov-22
Energy				
Crude Oil (US\$ per barrel)*	71.8	79.9	90.3	87.4
Energy Index (2010 = 100)	93.9	115.0	146.2	139.6
Food				
Rice (\$/MT)	466.0	400.0	431.0	440.0
Wheat (\$/MT)##	285.6	379.5	438.0	422.7
Sugar, World (\$/KG)	0.4	0.4	0.4	0.4
Palm Oil (\$/MT)	1,004.4	1,340.7	889.0	945.7
Soybean Oil (\$/MT)	1,518.2	1,443.0	1,575.9	1,651.6
Non-Food Non-Energy				
Cotton Outlook 'A' Index (\$/KG) #	2.1	2.8	2.2	2.2
Metal Price Index (2010 = 100)	119.0	125.2	103.7	109.5
Copper (\$/MT)	9,631.5	9,728.9	7,651.1	8,049.9
Aluminum (\$/MT)	2,446.7	2,636.5	2,255.5	2,350.7
Iron Ore (\$ cents/dry MT)	214.4	96.2	92.6	93.3
Tin (\$/MT)	32,502.6	39,158.7	19,391.2	21,249.5
Nickel (\$/MT)	17,979.6	19,932.9	22,032.9	25,562.7
Zinc (\$/MT)	2,951.9	3,311.3	2,967.2	2,938.9
Lead (\$/MT)	2,191.0	2,330.0	1,999.9	2,100.0
Uranium (\$/MT)@	32.3	45.8	52.3	49.9
DAP (\$/MT)	604.8	726.7	725.0	665.6
Urea (\$/MT)	393.3	900.5	636.3	588.8

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

@ Data has been taken from Cameco website, as it is not available in World Bank dataset.

* 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 Jun 1968 to November 1981 strict middling 1-1/16 inch staple. Prior to 1968, Mexican 1-1/16.2/

Wheat, US HRW (Hard Red Winter) reported by World Bank.

DAP: Di-ammonium Phosphate

Table A23: National CPI Data Series Original and Seasonally Adjusted

Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	114.29	123.86	135.38	146.76	183.35
Aug	113.93	125.89	136.23	147.61	187.84
Sep	113.90	126.86	138.32	150.74	185.68
Oct	116.32	129.16	140.67	153.61	194.42
Nov	116.18	130.90	141.83	158.18	195.89
Dec	115.82	130.45	140.86	158.16	
Jan	116.12	133.04	140.56	158.78	
Feb	117.12	131.64	143.09	160.61	
Mar	119.46	131.69	143.61	161.88	
Apr	120.33	130.59	145.09	164.50	
May	121.05	131.01	145.24	165.23	
Jun	121.63	132.08	144.82	175.71	
Seasonally Adjusted Series					
Jul	114.10	123.72	135.29	146.70	183.34
Aug	113.77	125.77	136.15	147.57	187.80
Sep	113.46	126.40	137.83	150.22	185.03
Oct	115.21	127.90	139.26	152.04	192.39
Nov	114.95	129.44	140.16	156.27	193.43
Dec	115.72	130.29	140.64	157.89	
Jan	116.39	133.34	140.88	159.14	
Feb	117.76	132.27	143.70	161.22	
Mar	120.09	132.33	144.26	162.58	
Apr	120.47	130.77	145.32	164.78	
May	121.84	131.90	146.25	166.40	
Jun	122.56	133.17	146.13	177.42	

Table A24: Urban CPI Data Series Original and Seasonally Adjusted					
Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	114.94	124.95	134.73	146.41	180.97
Aug	114.58	126.77	135.82	147.12	185.72
Sep	114.49	127.72	137.53	150.08	181.90
Oct	117.04	129.75	139.27	152.59	190.08
Nov	116.94	131.05	140.16	156.96	190.80
Dec	116.57	130.57	139.67	157.46	
Jan	117.07	132.77	139.45	157.56	
Feb	118.08	131.32	142.61	159.03	
Mar	120.29	131.49	142.99	160.07	
Apr	121.29	130.60	144.91	162.63	
May	122.11	130.99	145.19	163.13	
Jun	122.52	131.89	144.55	173.23	
Seasonally Adjusted Series					
Jul	114.55	124.58	134.38	146.07	180.61
Aug	114.24	126.45	135.50	146.80	185.30
Sep	114.11	127.32	137.12	149.63	181.36
Oct	116.19	128.80	138.24	151.45	188.65
Nov	116.08	130.07	139.09	155.76	189.32
Dec	116.76	130.75	139.83	157.62	
Jan	117.39	133.13	139.83	157.98	
Feb	118.74	131.97	143.26	159.69	
Mar	120.93	132.13	143.63	160.73	
Apr	121.18	130.48	144.78	162.48	
May	122.58	131.50	145.76	163.77	
Jun	123.26	132.76	145.60	174.61	

Table A25: Rural CPI Data Series Original and Seasonally Adjusted

Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	113.30	122.22	136.36	147.28	186.94
Aug	112.96	124.56	136.84	148.34	191.04
Sep	113.01	125.55	139.51	151.74	191.38
Oct	115.23	128.28	142.79	155.15	200.96
Nov	115.03	130.67	144.34	160.03	203.57
Dec	114.70	130.28	142.65	159.21	
Jan	114.68	133.44	142.23	160.62	
Feb	115.68	132.13	143.82	162.99	
Mar	118.21	132.00	144.55	164.62	
Apr	118.89	130.58	145.37	167.31	
May	119.45	131.03	145.32	168.39	
Jun	120.29	132.36	145.24	179.45	
Seasonally Adjusted Series					
Jul	113.42	122.42	136.64	147.64	187.46
Aug	113.05	124.75	137.13	148.72	191.57
Sep	112.49	125.01	138.92	151.10	190.58
Oct	113.73	126.54	140.80	152.93	198.04
Nov	113.24	128.48	141.77	157.06	199.62
Dec	114.16	129.61	141.86	158.29	
Jan	114.88	133.65	142.48	160.89	
Feb	116.27	132.72	144.38	163.54	
Mar	118.82	132.64	145.22	165.37	
Apr	119.39	131.20	146.14	168.26	
May	120.73	132.49	146.98	170.36	
Jun	121.50	133.79	146.91	181.65	

Table A26: National CPI Monthly & Average Seasonal Factors						
Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.16	100.11	100.07	100.04	100.01	100.08
Aug	100.15	100.10	100.06	100.03	100.02	100.07
Sep	100.39	100.37	100.35	100.35	100.35	100.36
Oct	100.96	100.98	101.01	101.03	101.05	101.01
Nov	101.07	101.13	101.19	101.22	101.27	101.18
Dec	100.08	100.12	100.16	100.17		100.13
Jan	99.77	99.78	99.77	99.78		99.77
Feb	99.46	99.52	99.57	99.62		99.54
Mar	99.48	99.52	99.55	99.57		99.53
Apr	99.89	99.86	99.84	99.83		99.86
May	99.35	99.33	99.31	99.30		99.32
Jun	99.24	99.18	99.11	99.04		99.14

Table A27: Urban CPI Monthly & Average Seasonal Factors						
Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.34	100.30	100.26	100.23	100.20	100.26
Aug	100.29	100.26	100.23	100.22	100.22	100.25
Sep	100.34	100.32	100.30	100.30	100.30	100.31
Oct	100.73	100.74	100.74	100.75	100.76	100.74
Nov	100.74	100.75	100.77	100.77	100.78	100.76
Dec	99.84	99.86	99.89	99.90		99.87
Jan	99.73	99.73	99.73	99.74		99.73
Feb	99.44	99.50	99.55	99.59		99.52
Mar	99.47	99.52	99.56	99.59		99.53
Apr	100.09	100.09	100.09	100.09		100.09
May	99.61	99.61	99.61	99.61		99.61
Jun	99.40	99.34	99.28	99.21		99.31

Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	99.89	99.84	99.79	99.76	99.72	99.80
Aug	99.92	99.85	99.79	99.74	99.72	99.80
Sep	100.46	100.44	100.42	100.42	100.42	100.43
Oct	101.32	101.37	101.42	101.45	101.47	101.41
Nov	101.58	101.70	101.81	101.89	101.98	101.79
Dec	100.47	100.52	100.56	100.58		100.53
Jan	99.83	99.82	99.83	99.84		99.83
Feb	99.49	99.56	99.61	99.66		99.58
Mar	99.49	99.52	99.54	99.55		99.52
Apr	99.58	99.52	99.48	99.44		99.50
May	98.94	98.90	98.87	98.84		98.89
Jun	99.01	98.93	98.86	98.79		98.90

Table A29: National CPI (Month-on-Month) Original & Seasonally Adjusted					
Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	1.51	1.83	2.50	1.34	4.35
Aug	-0.31	1.64	0.63	0.58	2.45
Sep	-0.03	0.77	1.53	2.12	-1.15
Oct	2.12	1.81	1.70	1.90	4.71
Nov	-0.12	1.35	0.82	2.98	0.76
Dec	-0.31	-0.34	-0.68	-0.02	
Jan	0.26	1.99	-0.21	0.39	
Feb	0.86	-1.05	1.80	1.15	
Mar	2.00	0.04	0.36	0.79	
Apr	0.73	-0.84	1.03	1.62	
May	0.60	0.32	0.10	0.44	
Jun	0.48	0.82	-0.29	6.34	
Seasonally Adjusted Series					
Jul	0.65	0.95	1.59	0.39	3.34
Aug	-0.29	1.66	0.64	0.59	2.43
Sep	-0.27	0.50	1.23	1.80	-1.47
Oct	1.54	1.19	1.03	1.21	3.98
Nov	-0.23	1.20	0.65	2.79	0.54
Dec	0.67	0.66	0.34	1.03	
Jan	0.57	2.34	0.17	0.79	
Feb	1.18	-0.80	2.00	1.31	
Mar	1.98	0.04	0.39	0.84	
Apr	0.32	-1.18	0.73	1.35	
May	1.14	0.86	0.64	0.98	
Jun	0.59	0.97	-0.08	6.62	

Table A30: Urban CPI (Month-on-Month) Original & Seasonally Adjusted Series					
Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	1.41	1.98	2.15	1.29	4.47
Aug	-0.31	1.46	0.81	0.48	2.62
Sep	-0.08	0.75	1.26	2.01	-2.06
Oct	2.23	1.59	1.27	1.67	4.50
Nov	-0.09	1.00	0.64	2.86	0.38
Dec	-0.32	-0.37	-0.35	0.32	
Jan	0.43	1.68	-0.16	0.06	
Feb	0.86	-1.09	2.27	0.93	
Mar	1.87	0.13	0.27	0.65	
Apr	0.83	-0.68	1.34	1.60	
May	0.68	0.30	0.19	0.31	
Jun	0.34	0.69	-0.44	6.19	
Seasonally Adjusted Series					
Jul	0.52	1.07	1.22	0.32	3.44
Aug	-0.27	1.50	0.83	0.50	2.60
Sep	-0.12	0.69	1.19	1.93	-2.13
Oct	1.83	1.16	0.82	1.21	4.02
Nov	-0.10	0.98	0.61	2.84	0.36
Dec	0.58	0.52	0.53	1.20	
Jan	0.54	1.82	0.00	0.23	
Feb	1.15	-0.87	2.45	1.08	
Mar	1.84	0.11	0.26	0.66	
Apr	0.21	-1.24	0.80	1.09	
May	1.16	0.78	0.68	0.80	
Jun	0.55	0.96	-0.11	6.62	

Table A31: Rural CPI (Month-on-Month) Original & Seasonally Adjusted Series					
Original Series					
Period	FY19	FY20	FY21	FY22	FY23
Jul	1.67	1.60	3.02	1.40	4.17
Aug	-0.30	1.91	0.35	0.72	2.19
Sep	0.04	0.79	1.95	2.29	0.18
Oct	1.96	2.17	2.35	2.25	5.01
Nov	-0.17	1.86	1.09	3.15	1.30
Dec	-0.29	-0.30	-1.17	-0.51	
Jan	-0.02	2.43	-0.29	0.89	
Feb	0.87	-0.98	1.12	1.48	
Mar	2.19	-0.10	0.51	1.00	
Apr	0.58	-1.08	0.57	1.63	
May	0.47	0.34	-0.03	0.65	
Jun	0.70	1.02	-0.06	6.57	
Seasonally Adjusted Series					
Jul	0.84	0.76	2.13	0.49	3.20
Aug	-0.33	1.91	0.36	0.73	2.20
Sep	-0.49	0.20	1.30	1.60	-0.52
Oct	1.10	1.23	1.35	1.21	3.92
Nov	-0.43	1.53	0.69	2.70	0.80
Dec	0.81	0.87	0.06	0.78	
Jan	0.63	3.12	0.44	1.64	
Feb	1.21	-0.70	1.34	1.65	
Mar	2.19	-0.06	0.58	1.11	
Apr	0.49	-1.08	0.63	1.75	
May	1.12	0.98	0.58	1.25	
Jun	0.64	0.99	-0.04	6.63	

List of Figures

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

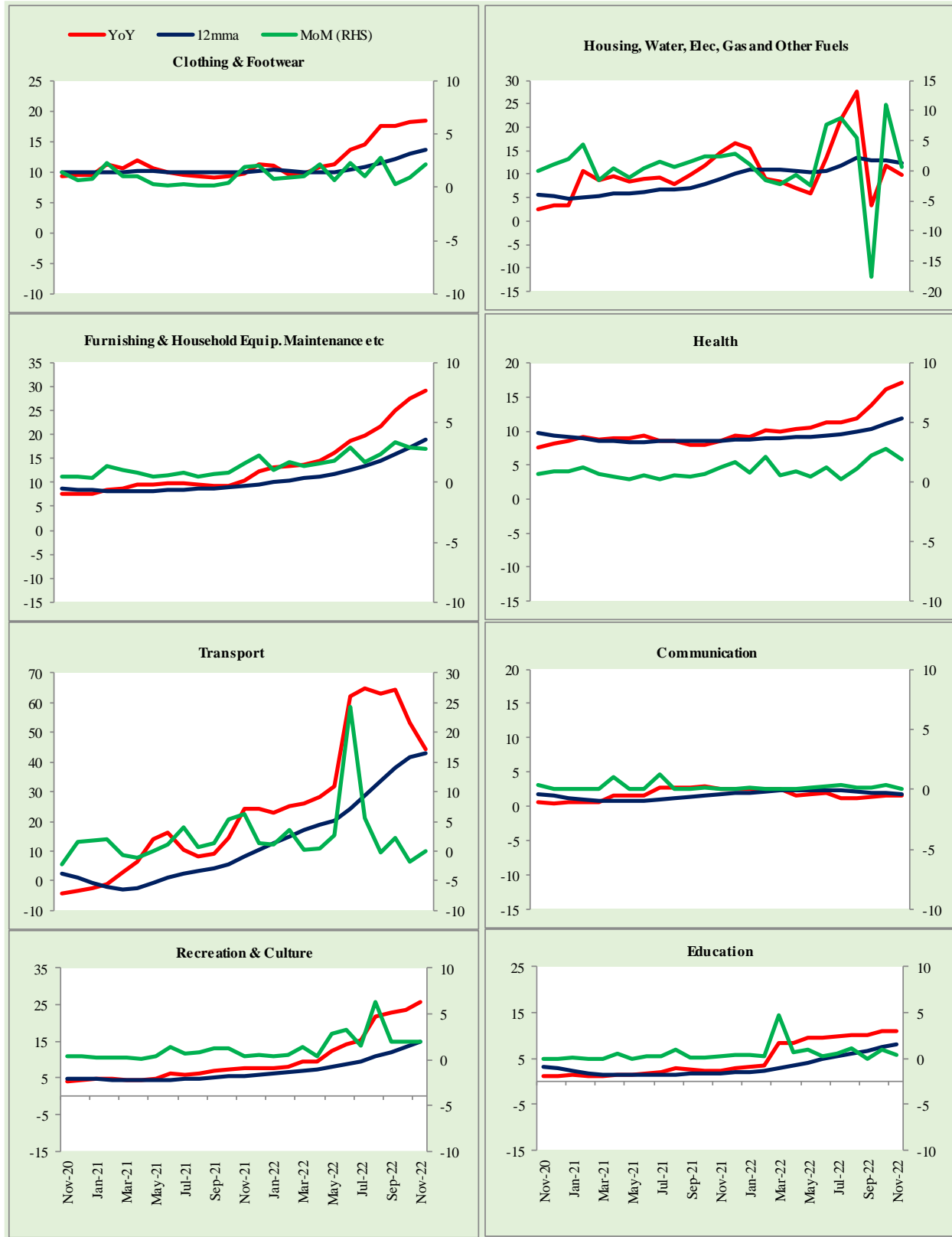


Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)

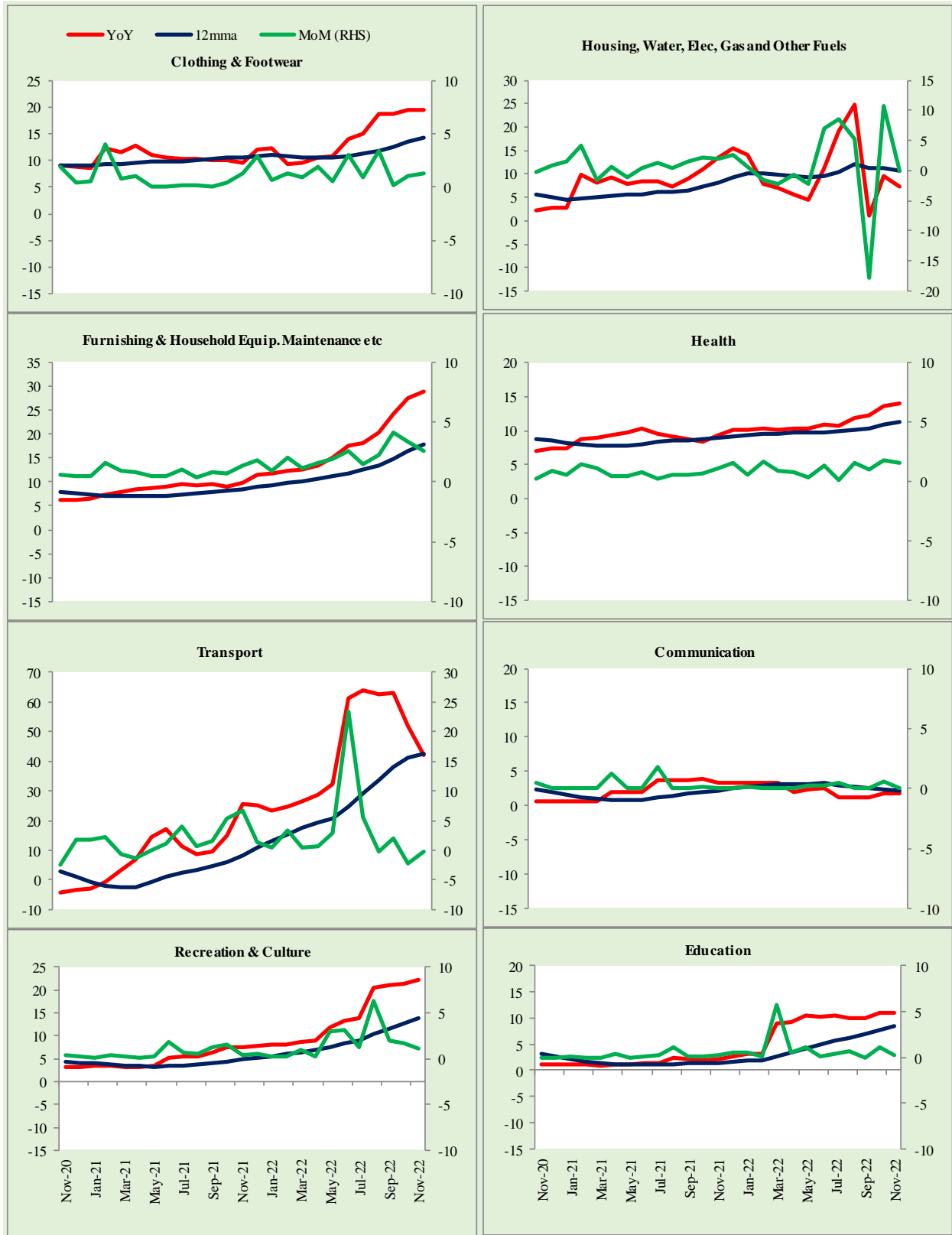


Figure A3: Rural CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)

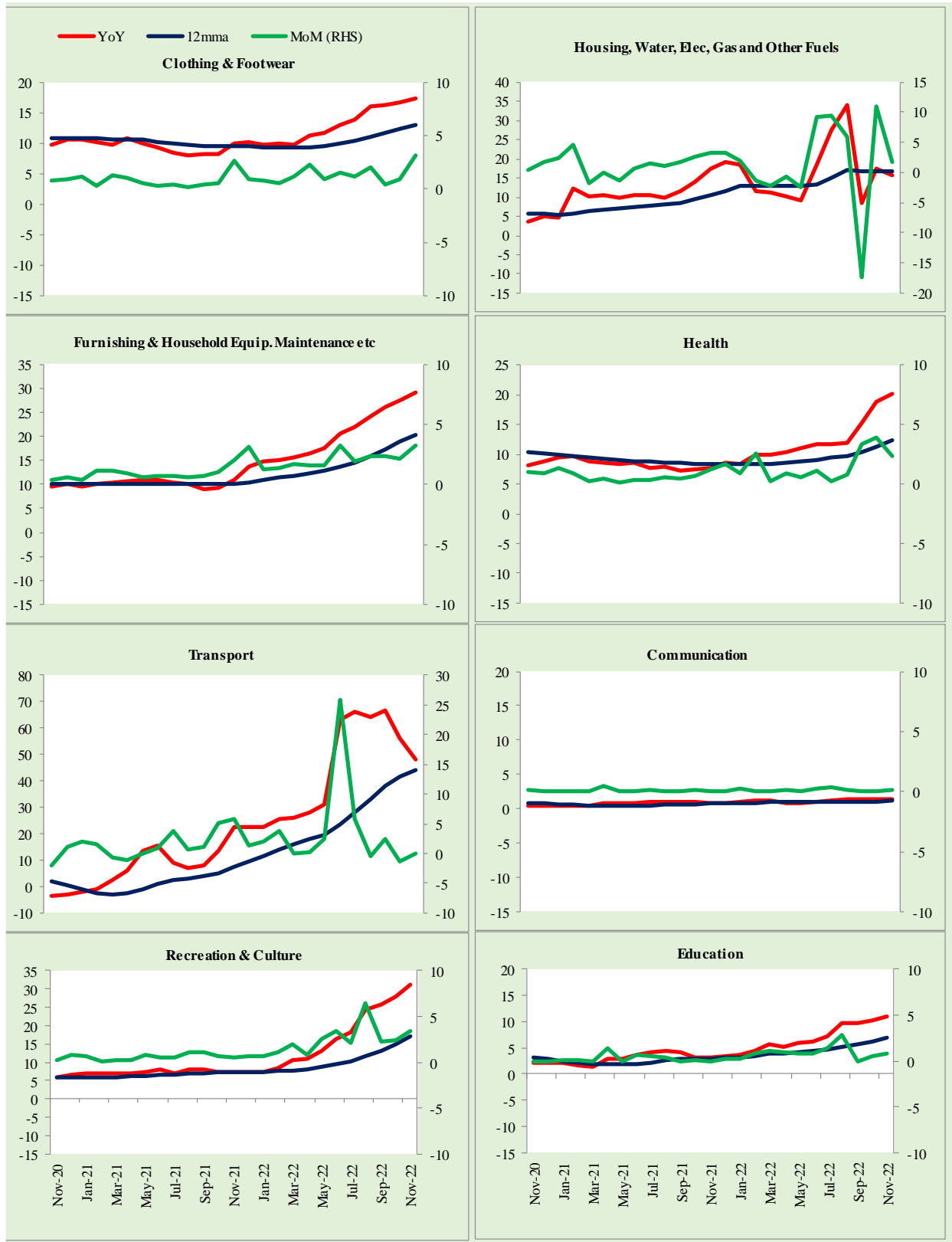
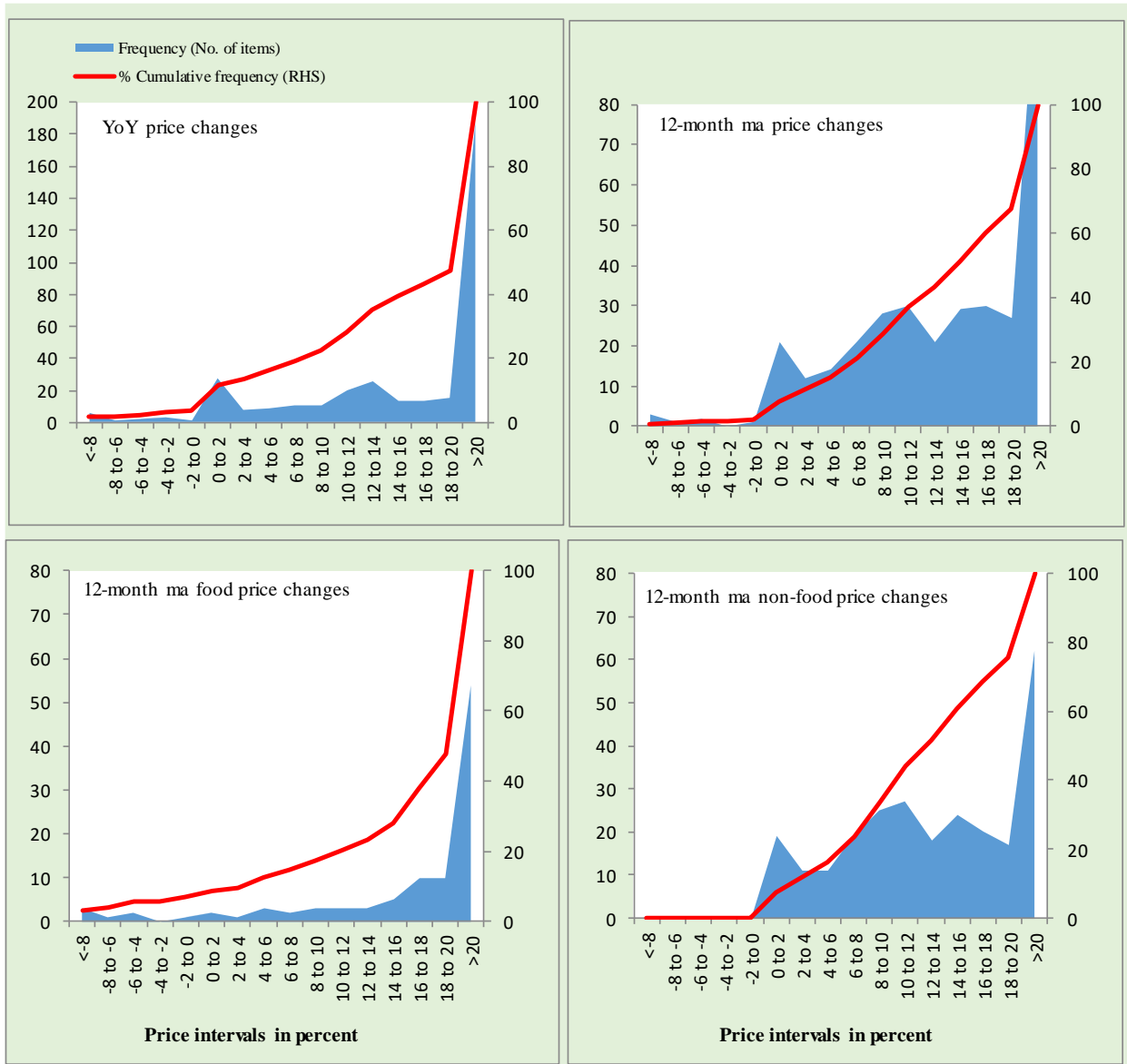
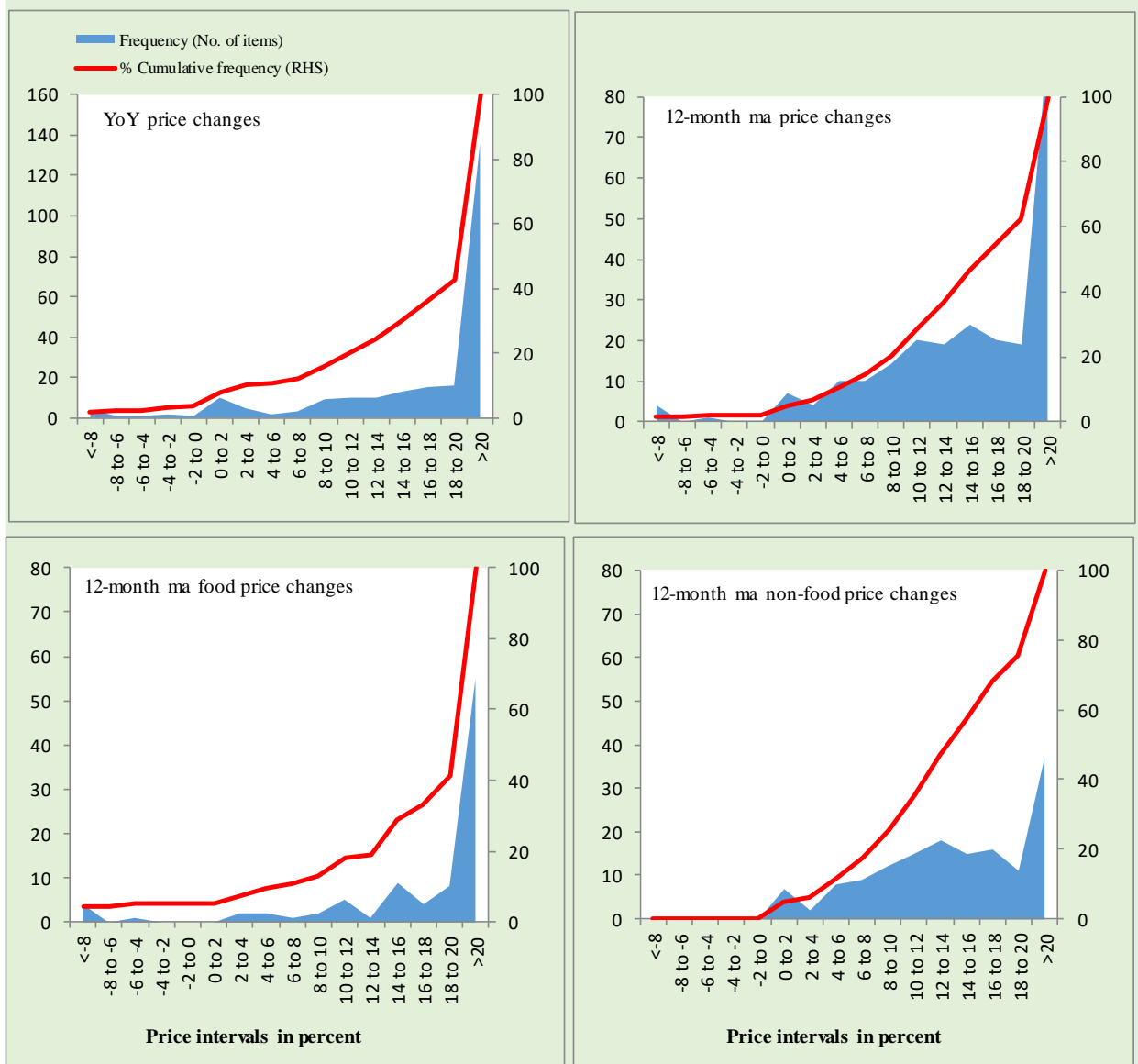


Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY)



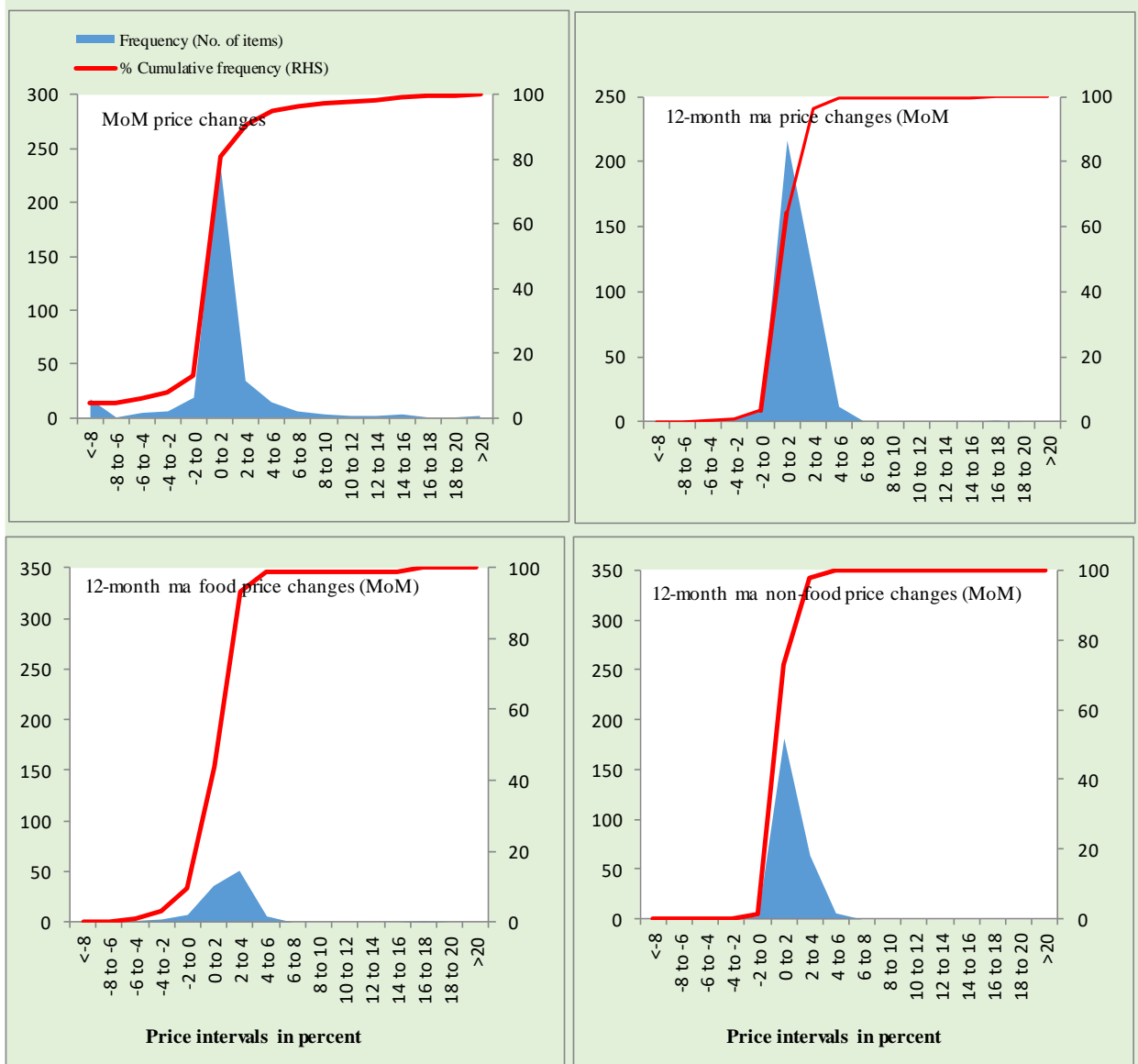
Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

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



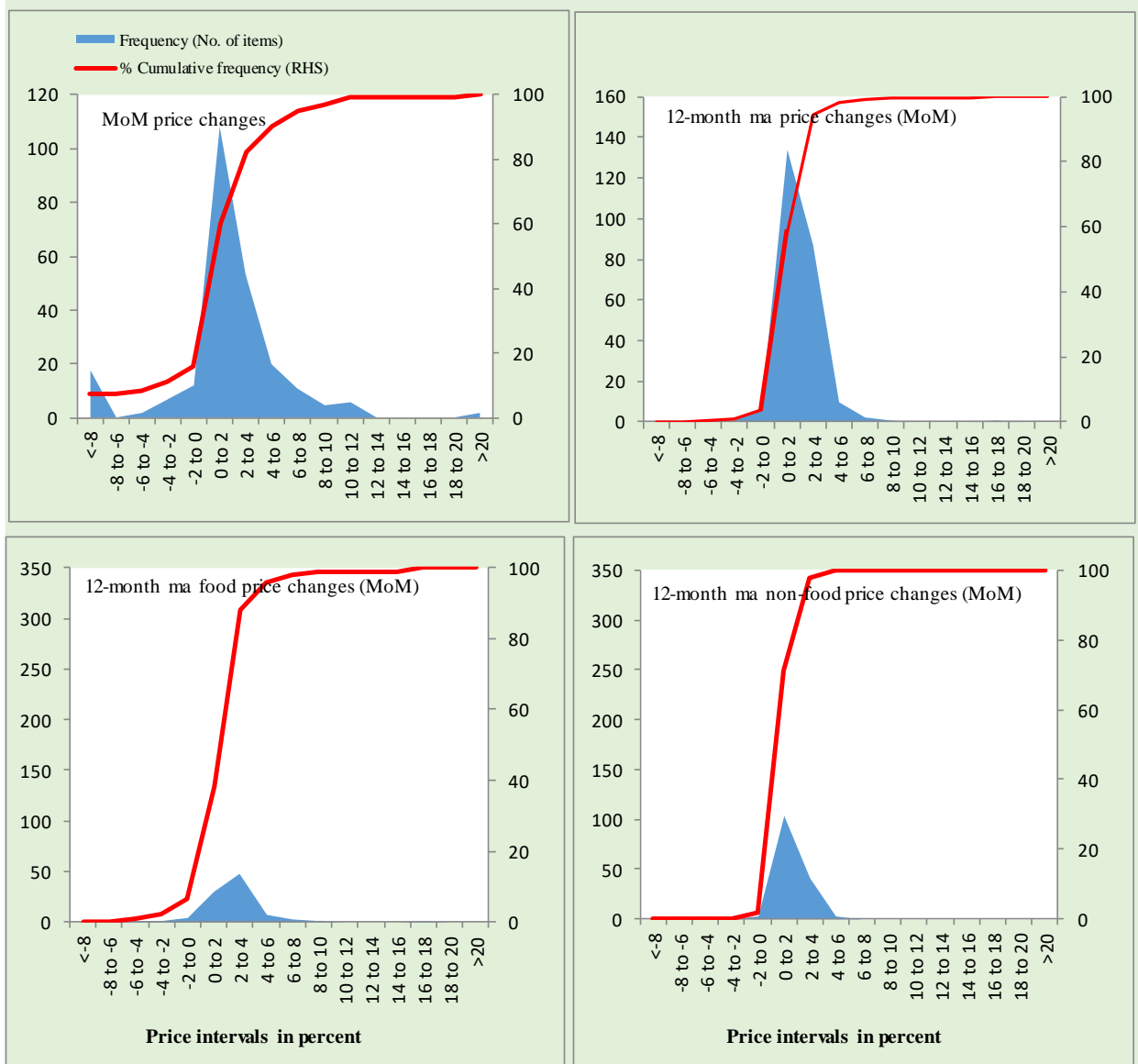
Total Items in CPI Basket (244), Food Items (94) and non-Food Items (150).

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



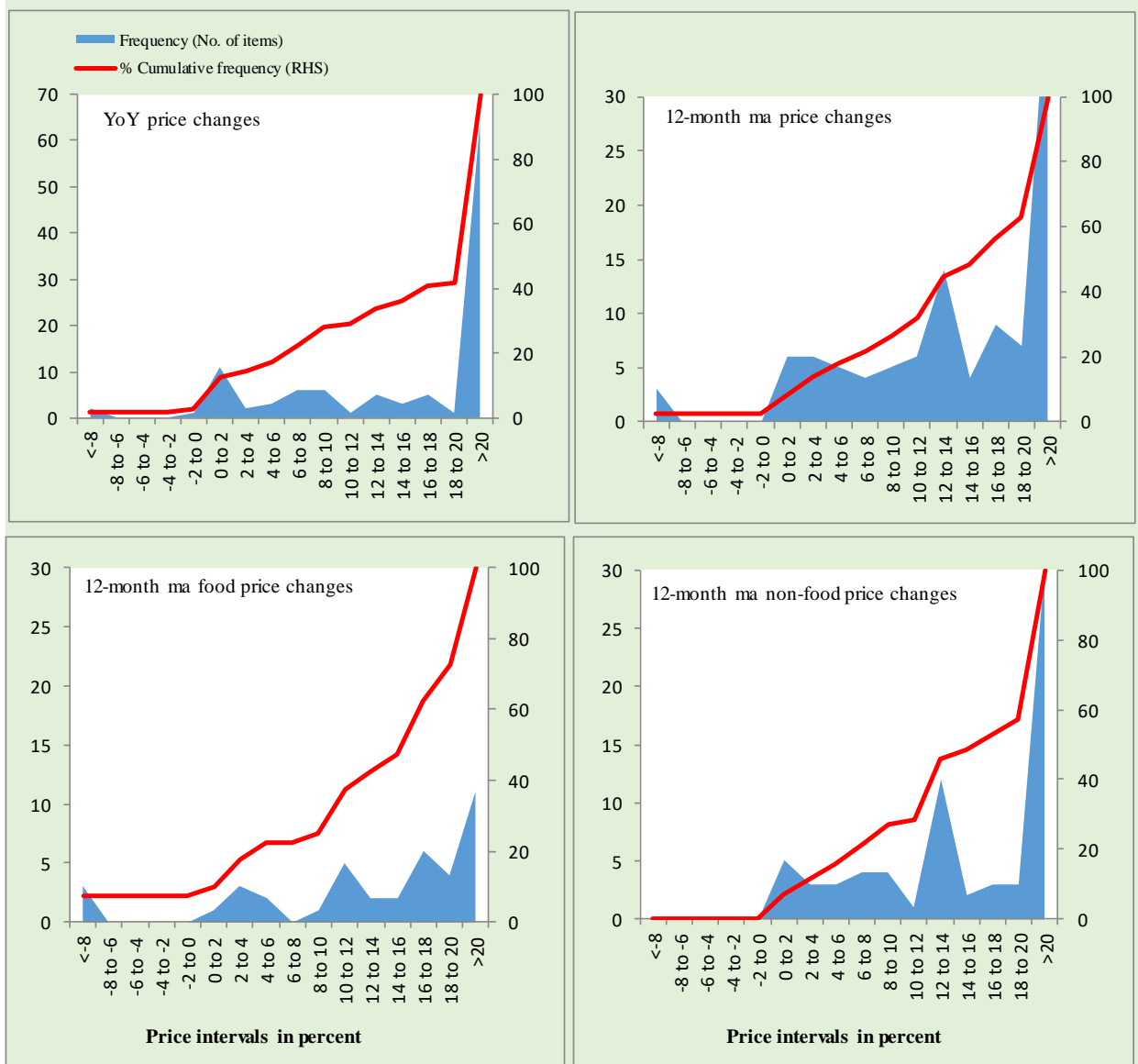
Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

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, Definitions and Methodologies

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 November 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:

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

Where v is the serial number of the month of November 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:

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

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^{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^{th} item

π_{it} : Inflation of i^{th} item

π_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 constant².

Based upon item level prices data from November 2001 to Jun 2011, inflation diffusion indices for overall (general) CPI basket and for all groups in CPI basket (except House Rent Index being single item) were computed. A simple analysis³ suggests that IDI was a leading indicator for Pakistan’s YoY inflation.

² 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.

³ Formal test shows one way ‘Granger’ causality from IDI to YoY inflation.