

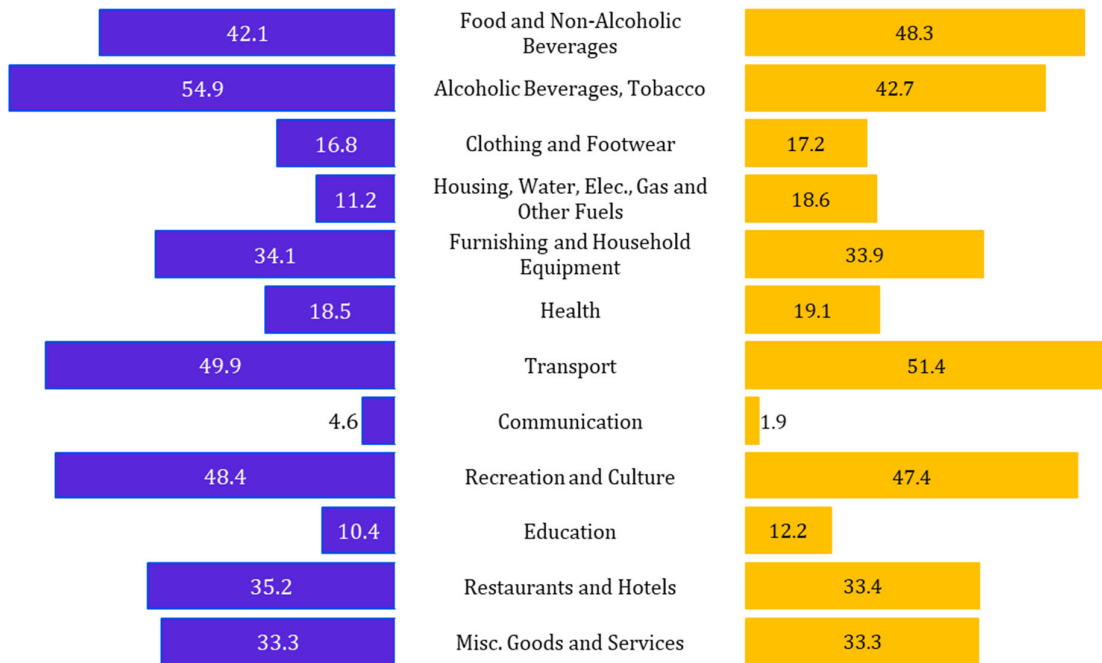


Inflation Monitor

February 2023

Group-wise CPI Inflation of Urban and Rural Baskets (YoY in percentage)

■ Urban Areas ■ Rural Areas



State Bank of Pakistan

Data Services and Innovations Department

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- Provided by Pakistan Bureau of Statistics (PBS), for domestic inflation analysis
- Retrieved from Bloomberg, Trading Economics, IMF & World Bank websites for global inflation analysis

For feedback and queries: feedback.statistics@sbp.org.pk



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Team

Syed Aamir Ali Bokhari

Joint Director

Publication Manager

Mazhar Hussain

Sr. Joint Director

Publication Reviewer

Shahid Hussain Javaid

Sr. Joint Director

Data Support

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For data related feedback and queries: feedback.statistics@sbp.org.pk

1. Inflation in Brief

- I. National CPI Inflation on year-on-year (YoY) basis increased to 31.5 percent in February 2023 from 27.6 percent in previous month. It stood at 12.2 percent in the corresponding month of last year. On month-on-month (MoM) basis, National CPI Inflation increased to 4.3 percent in February 2023 from 2.9 percent in previous month. It was recorded 1.2 percent during the corresponding month of last year.
- II. Urban CPI Inflation (YOY) increased to 28.8 percent in February 2023 from 24.4 percent in previous month. It stood at 11.5 percent during the corresponding month of last year. On MoM basis, Urban CPI Inflation increased to 4.5 percent in February 2023 from 2.4 percent in the previous month. It stood at 0.9 percent during corresponding month of last year. Seasonally adjusted MoM CPI showed an inflation of 4.7 percent in February 2023 compared to an inflation of 2.0 percent in the previous month.
- III. Rural CPI Inflation (YoY) increased to 35.6 percent in February 2023 from 32.3 percent in previous month. It was recorded 13.3 percent during the corresponding month of last year. Rural CPI Inflation (on MoM basis) increased to 4.0 percent in February 2023 from 3.6 percent in the previous month. It stood at 1.5 percent during corresponding month of last year. Seasonally adjusted (MoM) CPI showed an inflation of 3.9 percent in February 2023 as compared to an inflation of 4.2 percent in previous month.
- IV. Urban Core (Non-food, Non-energy (NFNE)) Inflation on YoY basis increased to 17.1 percent in February 2023 from 15.4 percent in previous month. It stood at 7.8 percent during corresponding month of last year. On MoM basis, Urban Core (NFNE) Inflation increased to 2.2 percent in February 2023 from 1.4 percent in previous month. It stood at 0.8 percent during the corresponding month of last year.
- V. Rural Core (Non-food, Non-energy (NFNE)) Inflation on YOY basis increased to 21.5 percent in February 2023 from 19.4 percent in previous month. It stood at 9.4 percent during the corresponding month of last year. On MoM basis, Urban Core (NFNE) Inflation increased to 2.6 percent in February 2023 from 1.5 percent in previous month. It was recorded 0.9 percent during the corresponding month of last year.
- VI. Urban Core Inflation (trimmed) on YoY basis increased to 25.1 percent in February 2023 from 20.9 percent in previous month. It stood at 9.8 percent during the corresponding month of last year. On MoM basis, Urban Core Inflation (trimmed) increased to 2.9 percent in February 2023 from 1.5 percent in previous month. It stood at 0.8 percent during the corresponding month of last year.
- VII. Rural Core Inflation (trimmed) on YoY basis increased to 31.6 percent in February 2023 from 27.8 percent in previous month. It was recorded 11.3 percent during the corresponding month of last year. On MoM basis, Rural Core Inflation (trimmed) increased to 3.9 percent in February 2023 from 2.1 percent in previous month. It stood at 1.2 percent during corresponding month of last year.

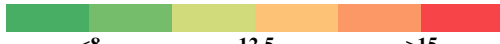
- VIII. WPI Inflation on YoY basis increased to 36.4 percent in February 2023 from 28.5 percent in previous month. It stood at 23.6 percent during the corresponding month of last year. On MoM basis, it increased to 8.2 percent in February 2023 from 1.8 percent in previous month. WPI Inflation stood at 1.9 percent during the corresponding month of last year.
- IX. SPI Inflation on YoY basis increased to 37.1 percent in February 2023 from 31.7 percent in previous month. During corresponding month of last year, SPI Inflation stood at 18.1 percent. On MoM basis, SPI inflation increased to 5.4 percent in February 2023 from 1.3 percent in previous month. SPI Inflation stood at 1.3 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 inflation target of 11.5 percent¹ for FY23. Green areas indicate low inflation pressures whereas red areas indicate higher inflationary pressures.


National, Urban and Rural CPI inflation (YoY)														
		Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Headline	National	12.2	12.7	13.4	13.8	21.3	24.9	27.3	23.2	26.6	23.8	24.5	27.6	31.5
	Urban	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6	21.6	24.4	28.8
	Rural	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2	28.8	32.3	35.6
Food	Urban	14.3	14.5	15.6	15.5	24.0	27.4	28.8	30.8	34.7	29.7	32.7	39.0	41.9
	Rural	14.6	15.5	17.7	19.0	27.0	29.6	30.2	32.7	37.2	33.5	37.9	45.2	47.0
Core	Urban	7.8	8.9	9.1	9.7	11.5	12.0	13.8	14.4	14.9	14.6	14.7	15.4	17.1
	Rural	9.4	10.3	10.9	11.5	13.6	14.6	16.5	17.6	18.2	18.5	19.0	19.4	21.5

Source: Pakistan Bureau of Statistics

Key 


National, Urban and Rural CPI inflation (MoM)														
		Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Headline	National	1.2	0.8	1.6	0.4	6.3	4.3	2.4	-1.2	4.7	0.8	0.5	2.9	4.3
	Urban	0.9	0.7	1.6	0.3	6.2	4.5	2.6	-2.1	4.5	0.4	0.3	2.4	4.5
	Rural	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3	0.7	3.6	4.0
Food	Urban	2.2	1.8	3.7	1.0	5.3	4.3	1.6	5.2	4.5	0.0	0.0	3.9	4.3
	Rural	2.6	2.3	2.8	1.3	6.0	3.7	1.2	5.7	6.1	0.5	0.1	5.7	3.9
Core	Urban	0.8	1.2	1.1	0.7	2.0	1.2	1.8	0.9	1.3	0.8	1.2	1.4	2.2
	Rural	0.9	1.1	1.2	0.9	2.3	1.6	1.8	1.4	1.5	2.1	1.5	1.5	2.6

Source: Pakistan Bureau of Statistics

Key 

National CPI inflation (YoY)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	12.2	12.7	13.4	13.8	21.3	24.9	27.3	23.2	26.6	23.8	24.5	27.6	31.5
Food and Non-Alcoholic Beverages	34.58	14.7	15.3	17.0	17.3	25.9	28.8	29.5	31.7	36.2	31.2	35.5	42.9	45.1
Alcoholic Beverages, Tobacco	1.02	2.1	1.8	5.1	10.1	17.6	22.5	25.8	32.7	34.6	35.9	36.2	36.3	49.2
Clothing and Footwear	8.60	9.7	9.7	10.8	11.3	13.7	14.6	17.6	17.7	18.3	18.6	17.1	16.8	17.0
Housing, Water, Elec., Gas and Other Fuels	23.63	9.0	8.3	7.1	5.8	13.5	21.8	27.6	3.4	11.9	9.9	7.0	7.8	13.6
Furnishing and Household Equipment Maintenance	4.10	13.4	13.8	14.7	16.1	18.8	19.7	21.9	25.1	27.6	29.1	29.2	29.9	34.0
Health	2.79	10.1	10.0	10.4	10.6	11.3	11.2	11.9	13.8	16.2	17.1	17.5	18.7	18.8
Transport	5.91	25.0	26.3	28.3	31.8	62.2	64.7	63.1	64.5	53.4	44.2	41.2	39.1	50.5
Communication	2.21	2.5	2.6	1.6	1.8	2.0	1.2	1.2	1.3	1.6	1.6	1.7	1.6	3.7
Recreation and Culture	1.59	8.2	9.3	9.7	12.3	14.4	15.4	21.8	22.8	23.7	25.6	38.5	44.1	48.1
Education	3.79	3.4	8.3	8.4	9.5	9.5	9.8	10.0	10.0	10.9	11.1	10.9	10.6	10.8
Restaurants and Hotels	6.92	14.4	14.6	14.6	16.0	21.9	25.0	27.4	28.8	30.4	28.4	27.4	30.1	34.5
Misc. Goods and Services	4.87	10.1	12.4	12.8	13.3	15.8	17.2	20.0	22.9	22.4	23.0	25.8	28.7	33.3

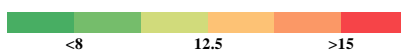
Source: Pakistan Bureau of Statistics

Key 

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

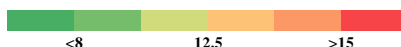
Urban CPI inflation (YoY)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6	21.6	24.4	28.8
Food and Non-Alcoholic Beverages	30.42	14.5	14.8	16.0	15.8	24.6	27.8	28.9	30.7	34.8	28.9	32.6	39.5	42.1
Alcoholic Beverages, Tobacco	0.85	2.0	1.5	4.8	9.4	18.3	21.7	25.8	34.1	35.4	37.2	37.3	37.3	54.9
Clothing and Footwear	8.01	9.4	9.6	10.5	11.0	14.2	15.0	18.8	18.9	19.5	19.6	17.0	16.8	16.8
Housing, Water, Elec., Gas and Other Fuels	27.03	7.8	7.1	5.6	4.4	11.3	19.2	24.8	1.0	9.5	7.3	4.1	5.0	11.2
Furnishing and Household Equipment Maintenance	4.09	12.4	12.6	13.5	15.2	17.6	18.2	20.3	24.3	27.6	29.0	29.7	30.0	34.1
Health	2.31	10.2	10.0	10.3	10.3	10.9	10.8	11.8	12.3	13.6	14.1	13.5	16.7	18.5
Transport	6.14	24.8	26.3	28.6	32.2	61.5	63.8	62.4	63.3	51.7	42.1	39.2	38.0	49.9
Communication	2.35	3.3	3.3	2.0	2.3	2.5	1.1	1.2	1.2	1.7	1.8	1.8	1.8	4.6
Recreation and Culture	1.73	8.0	8.7	8.9	11.9	13.3	13.9	20.4	21.1	21.4	22.3	38.0	43.6	48.4
Education	4.88	3.2	9.0	9.2	10.4	10.4	10.5	10.1	10.0	11.1	11.1	10.8	10.4	10.4
Restaurants and Hotels	7.41	15.0	14.5	14.5	14.5	21.2	24.7	27.4	29.1	31.8	29.5	28.6	32.4	35.2
Misc. Goods and Services	4.77	9.6	11.9	12.0	12.2	15.1	16.8	20.1	23.1	23.7	23.8	25.9	28.8	33.3

Source: Pakistan Bureau of Statistics



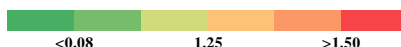
Rural CPI inflation (YoY)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2	28.8	32.3	35.6
Food and Non-Alcoholic Beverages	40.87	15.0	15.9	18.2	19.0	27.4	29.9	30.2	32.8	37.9	33.7	38.7	46.8	48.3
Alcoholic Beverages, Tobacco	1.28	2.3	2.3	5.5	11.0	16.9	23.4	25.8	31.1	33.7	34.4	35.0	35.2	42.7
Clothing and Footwear	9.48	10.0	9.8	11.3	11.7	13.1	14.0	16.2	16.3	16.8	17.4	17.2	16.7	17.2
Housing, Water, Elec., Gas and Other Fuels	18.49	11.6	11.1	10.3	9.1	18.4	27.6	33.9	8.6	17.3	15.6	13.2	14.0	18.6
Furnishing and Household Equipment Maintenance	4.10	15.0	15.6	16.4	17.5	20.5	22.0	24.2	26.2	27.7	29.2	28.6	29.8	33.9
Health	3.51	10.0	10.0	10.4	10.9	11.8	11.7	12.0	15.2	18.9	20.2	21.4	20.7	19.1
Transport	5.56	25.4	26.2	27.9	31.0	63.4	66.3	64.2	66.6	56.4	47.9	44.6	41.0	51.4
Communication	1.99	1.1	1.1	0.8	0.8	1.0	1.2	1.4	1.4	1.3	1.4	1.4	1.2	1.9
Recreation and Culture	1.38	8.5	10.5	11.0	13.0	16.3	18.2	24.3	25.7	27.7	31.3	39.4	45.1	47.4
Education	2.13	4.4	5.6	5.1	6.0	6.2	7.2	9.8	9.8	10.2	11.1	11.3	11.2	12.2
Restaurants and Hotels	6.19	13.3	14.6	14.7	18.5	23.0	25.4	27.5	28.2	27.9	26.4	25.2	26.0	33.4
Misc. Goods and Services	5.02	10.7	13.1	13.9	14.9	16.8	17.7	19.7	22.6	20.5	21.9	25.6	28.5	33.3

Source: Pakistan Bureau of Statistics



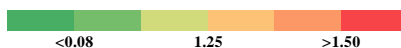
National CPI inflation (MoM)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	1.2	0.8	1.6	0.4	6.3	4.3	2.4	-1.2	4.7	0.8	0.5	2.9	4.3
Food and Non-Alcoholic Beverages	34.58	2.5	2.3	3.7	0.9	5.5	4.1	1.3	5.8	5.6	0.1	-0.1	5.0	4.1
Alcoholic Beverages, Tobacco	1.02	0.3	0.0	3.1	4.9	7.0	4.1	2.7	5.9	1.8	1.1	0.5	0.2	9.7
Clothing and Footwear	8.60	1.0	1.0	2.1	0.7	2.3	1.1	2.8	0.3	1.0	2.2	0.7	0.5	1.2
Housing, Water, Elec., Gas and Other Fuels	23.63	-1.6	-2.2	-0.7	-2.3	7.7	8.8	5.5	-17.7	10.9	0.6	0.0	1.8	3.7
Furnishing and Household Equipment Maintenance	4.10	1.8	1.4	1.6	1.8	2.9	1.7	2.3	3.4	2.9	2.8	2.4	1.6	5.0
Health	2.79	2.1	0.6	0.9	0.5	1.2	0.2	1.2	2.2	2.8	1.9	1.9	1.8	2.1
Transport	5.91	3.6	0.3	0.4	2.7	24.4	5.7	-0.3	2.2	-1.8	-0.1	-0.8	-0.5	12.0
Communication	2.21	0.0	0.0	0.0	0.1	0.2	0.4	0.1	0.1	0.4	0.0	0.1	0.0	2.1
Recreation and Culture	1.59	0.5	1.3	0.4	2.8	3.2	1.6	6.3	2.0	1.9	2.0	10.9	4.5	3.3
Education	3.79	0.3	4.7	0.6	1.0	0.3	0.5	1.1	0.0	1.0	0.4	0.3	0.1	0.5
Restaurants and Hotels	6.92	1.7	0.9	0.2	1.8	5.8	2.9	2.3	2.2	2.5	1.9	1.3	3.1	5.1
Misc. Goods and Services	4.87	1.1	1.6	0.8	1.2	3.3	1.6	2.7	3.8	0.9	2.3	3.0	3.2	4.7

Source: Pakistan Bureau of Statistics




Urban CPI inflation (MoM)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	0.9	0.7	1.6	0.3	6.2	4.5	2.6	-2.1	4.5	0.4	0.3	2.4	4.5
Food and Non-Alcoholic Beverages	30.42	2.3	2.1	4.3	0.9	5.0	4.3	1.4	5.4	4.8	-0.3	-0.3	4.1	4.2
Alcoholic Beverages, Tobacco	0.85	0.2	0.1	3.3	4.6	8.2	2.9	3.4	6.8	1.3	1.6	0.2	0.1	13.0
Clothing and Footwear	8.01	1.3	0.9	2.0	0.5	3.0	1.0	3.4	0.1	1.0	1.3	0.7	0.6	1.3
Housing, Water, Elec., Gas and Other Fuels	27.03	-1.6	-2.2	-0.6	-2.3	7.0	8.6	5.2	-17.8	10.9	-0.1	-0.5	1.4	4.3
Furnishing and Household Equipment Maintenance	4.09	2.0	1.1	1.6	2.0	2.6	1.5	2.3	4.1	3.3	2.6	2.3	1.1	5.3
Health	2.31	1.6	0.9	0.8	0.4	1.4	0.1	1.6	1.0	1.7	1.6	1.1	3.4	3.2
Transport	6.14	3.4	0.5	0.6	2.9	23.5	5.6	-0.2	2.0	-2.2	-0.1	-0.7	-0.4	12.3
Communication	2.35	0.0	0.0	0.0	0.2	0.2	0.4	0.0	0.1	0.6	0.0	0.1	0.0	2.8
Recreation and Culture	1.73	0.2	0.9	0.2	3.0	3.1	1.2	6.3	2.0	1.7	1.1	13.4	4.3	3.6
Education	4.88	0.1	5.7	0.6	1.1	0.1	0.3	0.7	0.0	1.1	0.2	0.2	0.1	0.1
Restaurants and Hotels	7.41	2.0	0.7	0.2	0.6	6.6	3.3	2.3	2.8	3.0	1.8	1.6	3.6	4.2
Misc. Goods and Services	4.77	1.2	1.8	0.7	1.1	3.7	1.4	3.4	3.9	1.4	1.7	2.4	3.1	4.7

Source: Pakistan Bureau of Statistics




Rural CPI inflation (MoM)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	100.00	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3	0.7	3.6	4.0
Food and Non-Alcoholic Beverages	40.87	2.8	2.5	3.1	0.8	6.1	3.8	1.2	6.2	6.6	0.4	0.0	6.0	3.9
Alcoholic Beverages, Tobacco	1.28	0.3	0.0	2.8	5.3	5.6	5.5	1.9	4.8	2.5	0.6	0.9	0.4	5.9
Clothing and Footwear	9.48	0.6	1.1	2.3	0.9	1.6	1.2	2.0	0.5	1.0	3.2	0.8	0.4	1.0
Housing, Water, Elec., Gas and Other Fuels	18.49	-1.4	-2.3	-0.8	-2.5	9.2	9.4	6.0	-17.5	10.9	1.8	1.1	2.6	2.6
Furnishing and Household Equipment Maintenance	4.10	1.3	1.7	1.6	1.5	3.3	2.0	2.4	2.4	2.2	3.2	2.6	2.3	4.5
Health	3.51	2.5	0.2	0.9	0.6	1.1	0.3	0.8	3.4	3.9	2.3	2.8	0.4	1.1
Transport	5.56	3.9	0.0	0.2	2.5	25.9	5.7	-0.5	2.5	-1.3	0.0	-0.9	-0.5	11.6
Communication	1.99	0.0	0.1	0.1	0.0	0.2	0.4	0.2	0.1	0.0	0.1	0.0	0.1	0.7
Recreation and Culture	1.38	1.2	2.0	0.8	2.5	3.4	2.2	6.4	2.2	2.4	3.4	6.8	4.9	2.7
Education	2.13	0.8	1.1	1.0	0.8	0.9	1.4	2.8	0.0	0.5	0.8	0.4	0.2	1.7
Restaurants and Hotels	6.19	1.0	1.2	0.3	3.9	4.4	2.2	2.4	1.2	1.7	2.3	0.7	2.3	6.9
Misc. Goods and Services	5.02	0.8	1.4	1.0	1.3	2.8	2.0	1.9	3.7	0.2	3.2	3.9	3.3	4.6

Source: Pakistan Bureau of Statistics




Rural CPI inflation (YoY)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Rural	100.00	13.3	13.9	15.1	15.9	23.6	26.9	28.8	26.1	29.5	27.2	28.8	32.3	35.6
Food	45.95	14.6	15.5	17.7	19.0	27.0	29.6	30.2	32.7	37.2	33.5	37.9	45.2	47.0
Non-perishable	40.16	12.4	13.7	15.8	17.0	25.5	29.3	29.6	29.7	31.9	31.8	35.7	44.4	47.6
Perishable	5.79	35.8	32.8	34.4	33.7	41.2	33.5	34.3	52.6	74.2	43.8	59.5	64.3	53.1
Non Food	54.05	12.2	12.5	12.8	13.1	20.4	24.5	27.5	20.1	22.4	21.4	20.7	20.9	25.3
Energy	11.41	21.9	20.4	19.8	19.3	46.6	61.2	67.8	28.8	36.9	30.7	26.2	25.7	37.5
NFNE (Core)	42.64	9.4	10.3	10.9	11.5	13.6	14.6	16.5	17.6	18.2	18.5	19.0	19.4	21.5
HRI	8.61	5.9	5.9	5.7	5.7	5.7	5.9	5.9	5.9	5.9	5.9	5.9	6.9	6.9
Core Excl HRI	34.03	10.3	11.4	12.2	12.9	15.5	16.8	19.1	20.4	21.2	21.5	22.1	22.4	24.9

Source: Pakistan Bureau of Statistics




Urban CPI inflation (YoY)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Urban	100.00	11.5	11.9	12.2	12.4	19.8	23.6	26.2	21.2	24.6	21.6	21.6	24.4	28.8
Food	36.80	14.3	14.5	15.6	15.5	24.0	27.4	28.8	30.8	34.7	29.7	32.7	39.0	41.9
Non-perishable	32.34	11.8	13.0	14.4	15.0	23.5	27.1	28.2	27.9	29.4	27.1	29.6	36.7	42.0
Perishable	4.46	34.1	28.0	25.6	20.6	32.4	32.4	33.5	48.3	67.0	38.6	52.9	59.3	42.9
Non Food	63.20	9.9	10.4	10.2	10.4	17.3	21.3	24.7	15.2	18.2	16.4	14.8	15.6	20.8
Energy	9.47	20.2	18.0	15.7	14.1	48.8	70.2	80.7	18.9	34.1	24.5	15.4	16.3	37.1
NFNE (Core)	53.73	7.8	8.9	9.1	9.7	11.5	12.0	13.8	14.4	14.9	14.6	14.7	15.4	17.1
HRI	19.26	6.1	6.1	5.6	5.6	5.6	5.6	5.6	5.6	5.3	5.3	5.3	5.4	5.4
Core Excl HRI	34.47	8.7	10.5	11.0	11.9	14.7	15.5	18.2	19.2	20.1	19.6	19.7	20.8	23.3

Source: Pakistan Bureau of Statistics

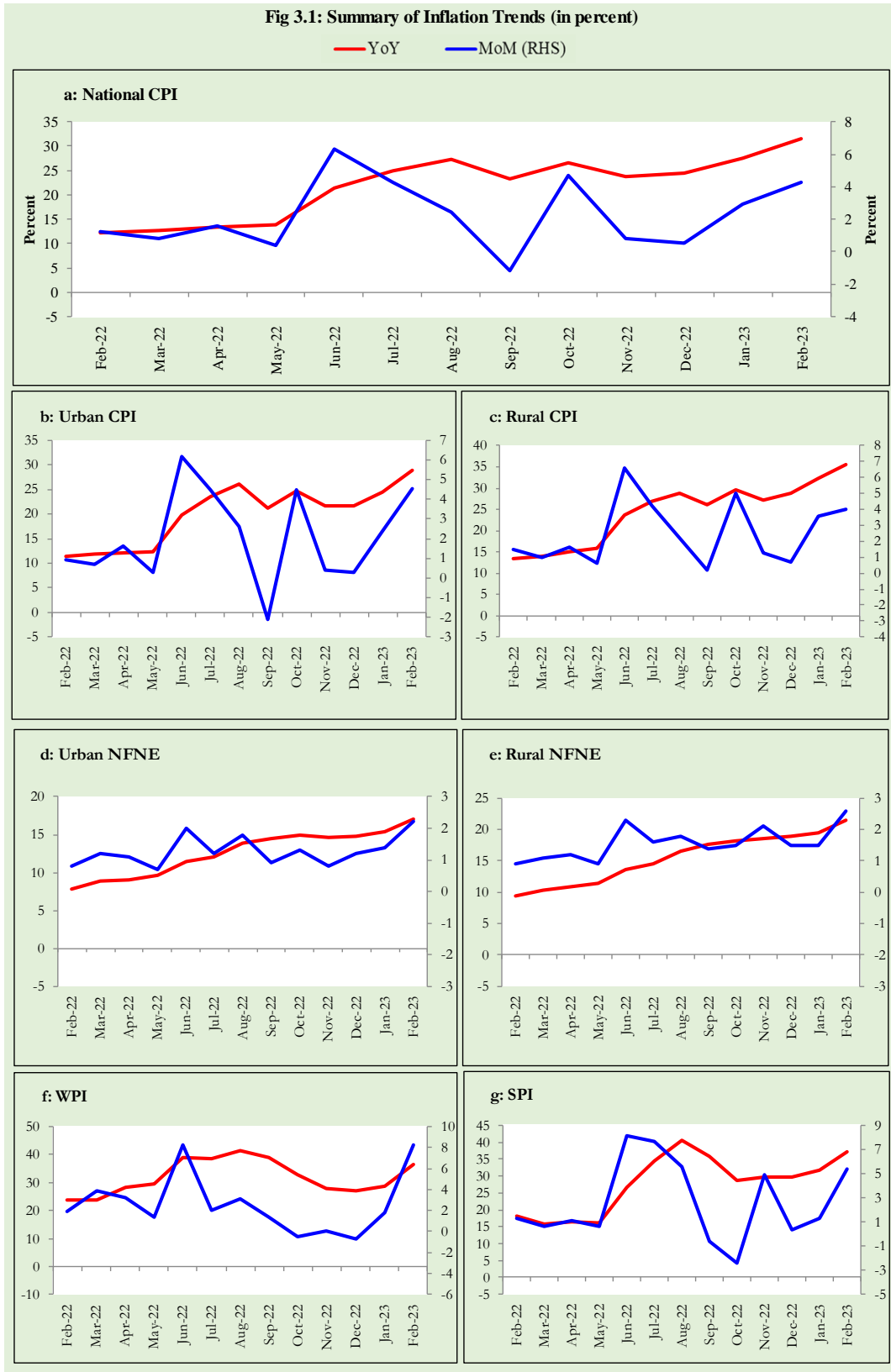


Rural CPI inflation (MoM)														
	Weights	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Rural	100.00	1.5	1.0	1.6	0.6	6.6	4.2	2.2	0.2	5.0	1.3	0.7	3.6	4.0
Food	45.95	2.6	2.3	2.8	1.3	6.0	3.7	1.2	5.7	6.1	0.5	0.1	5.7	3.9
Non-perishable	40.16	1.4	2.8	0.6	2.8	6.2	3.5	0.7	4.2	3.7	1.7	2.6	7.4	3.6
Perishable	5.79	13.3	0.5	20.0	-10.7	5.2	6.0	3.9	18.4	22.2	-5.5	-13.2	-2.2	5.5
Non Food	54.05	0.4	-0.2	0.5	0.0	7.1	4.6	3.1	-4.9	3.9	2.1	1.4	1.5	4.1
Energy	11.41	-0.9	-4.0	-1.8	-2.8	24.3	13.4	6.4	-21.0	11.8	2.2	0.8	1.5	8.4
NFNE (Core)	42.64	0.9	1.1	1.2	0.9	2.3	1.6	1.8	1.4	1.5	2.1	1.5	1.5	2.6
HRI	8.61	0.0	0.0	1.0	0.0	0.0	1.4	0.0	0.0	1.3	0.0	0.0	3.1	0.0
Core Excl HRI	34.03	1.1	1.3	1.3	1.0	2.9	1.7	2.2	1.7	1.6	2.5	1.8	1.2	3.2

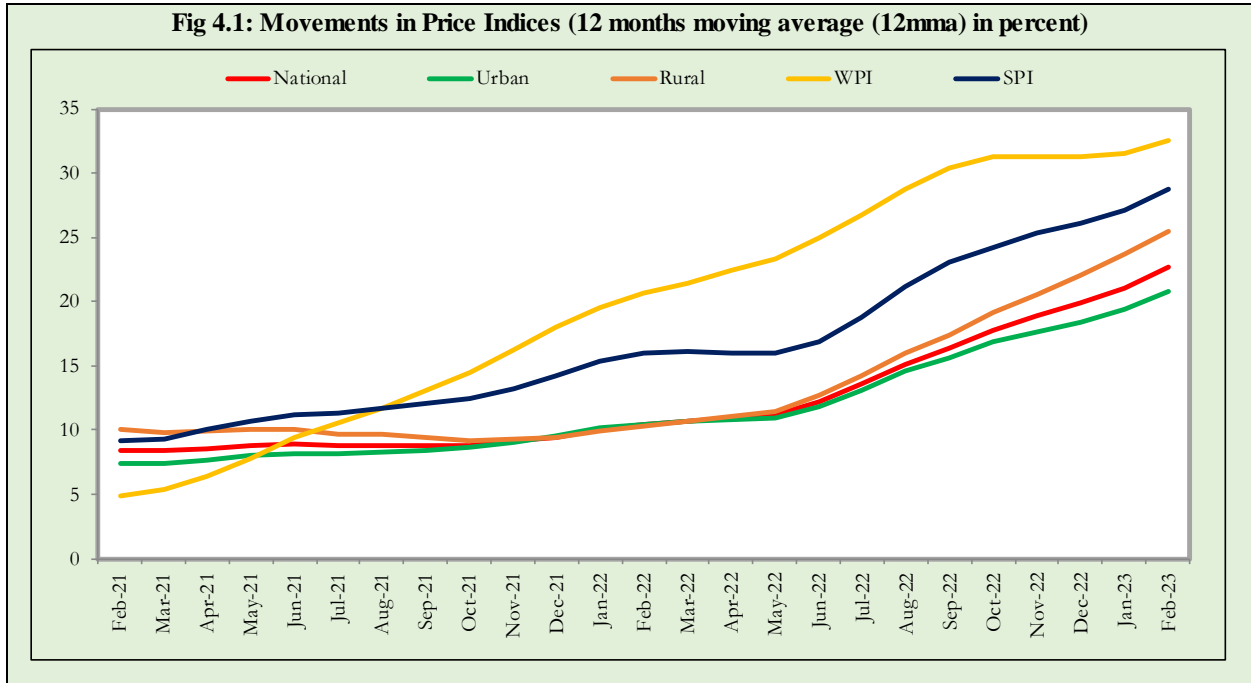
Source: Pakistan Bureau of Statistics



3. Trends in Inflation



4. Movement in Price Indices (Moving Averages)



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

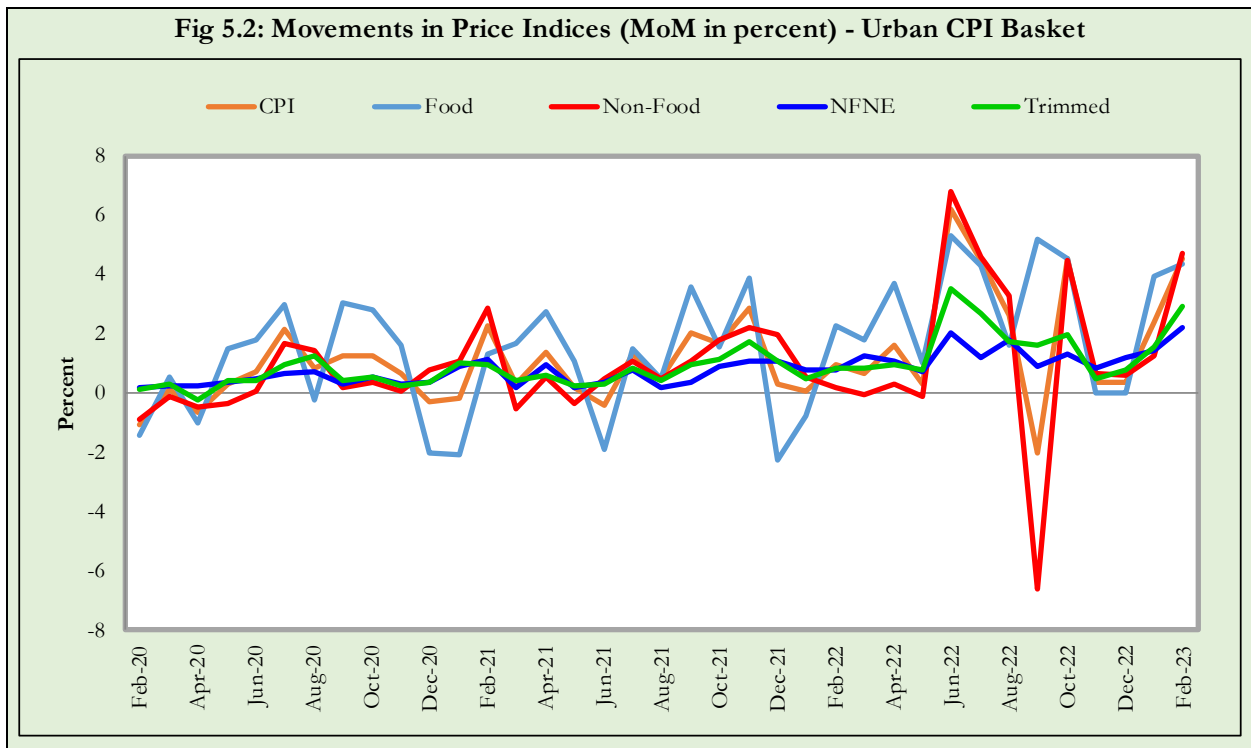
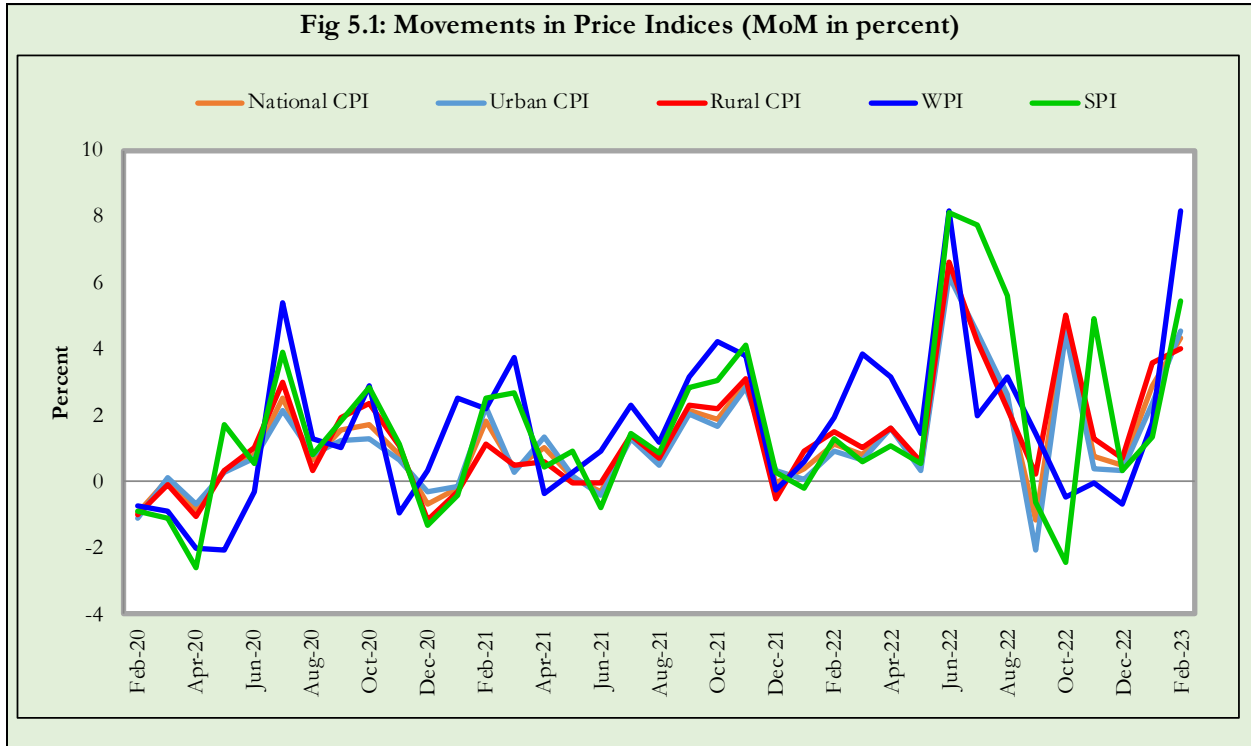
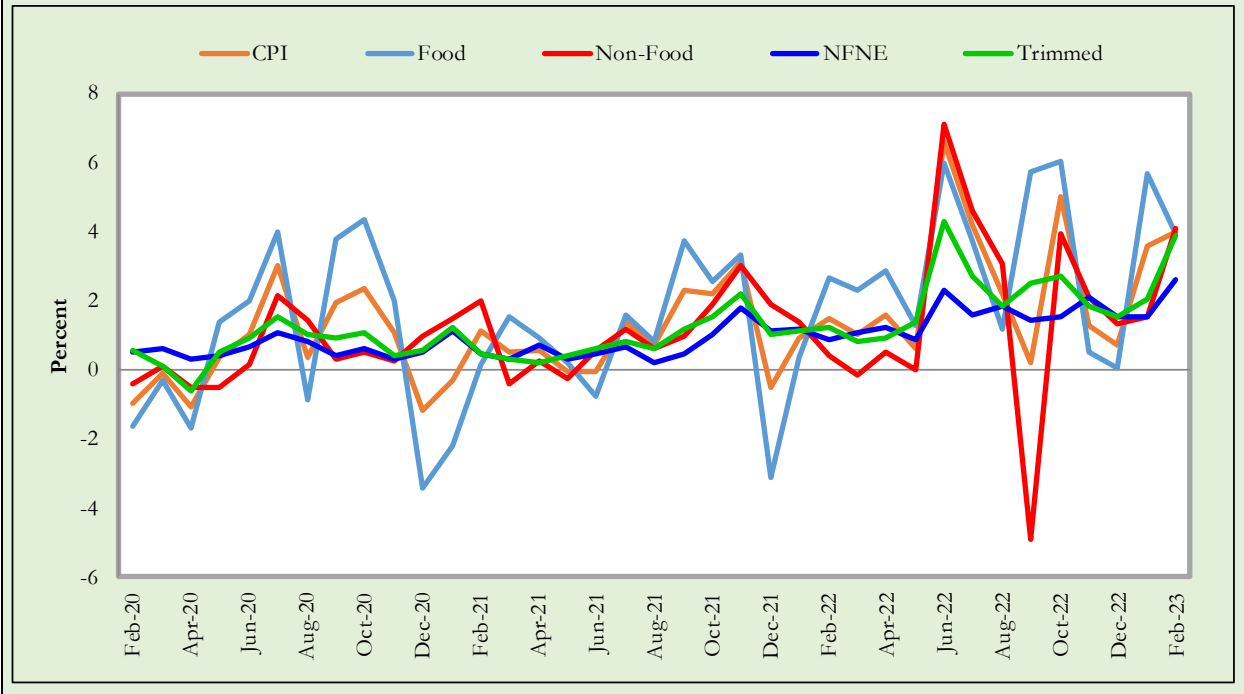
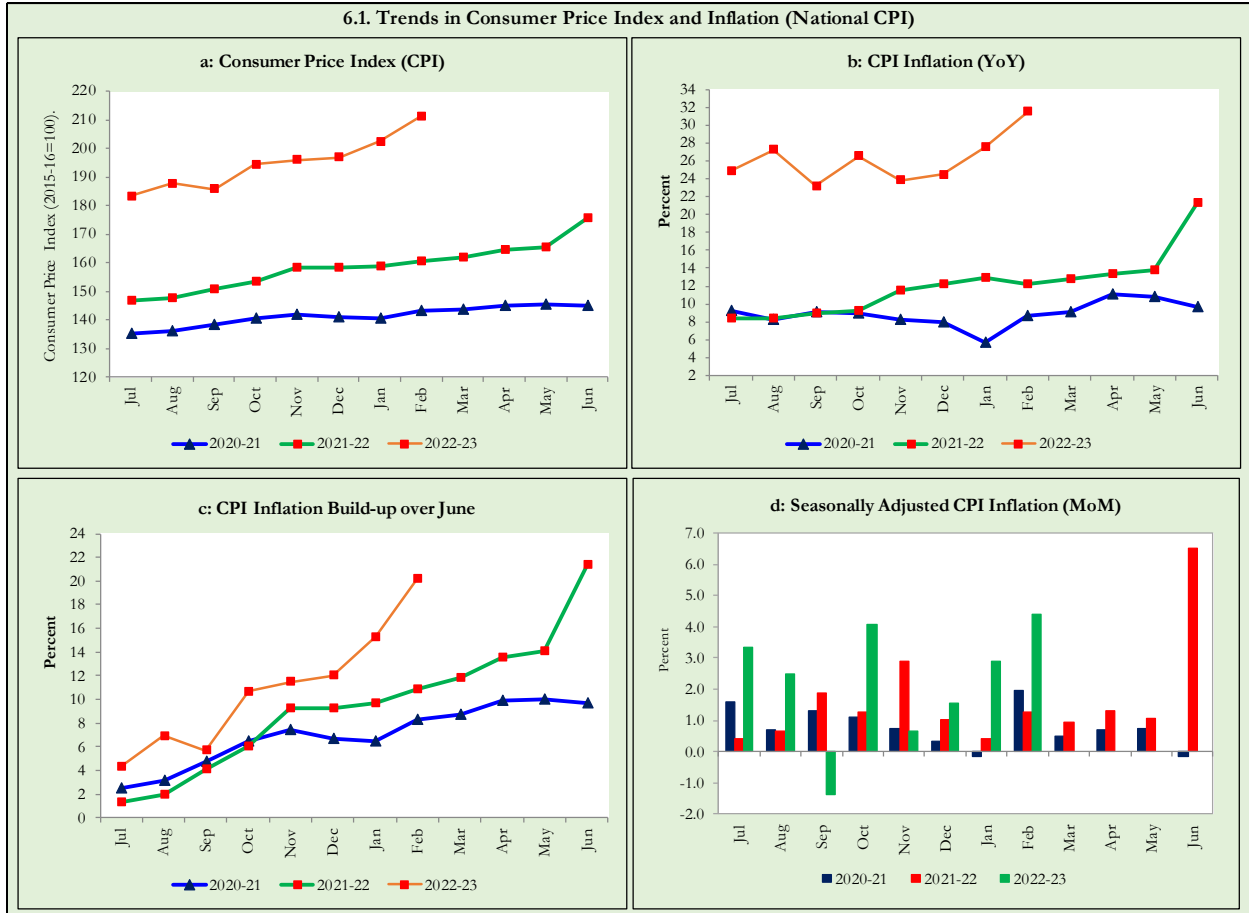


Fig 5.3: Movements in Price Indices (MoM in percent) - Rural CPI Basket

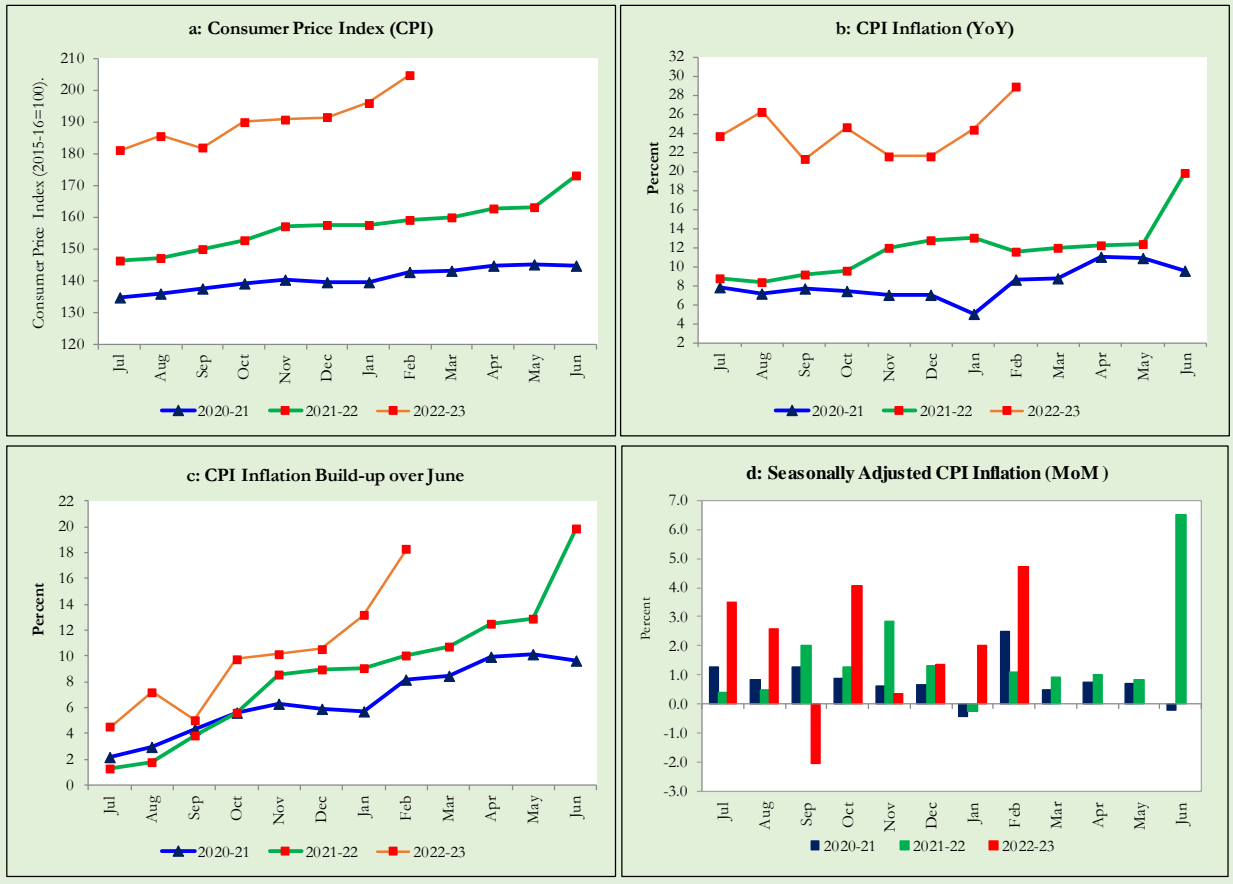


6. Trends in Consumer Price Indices and Inflation

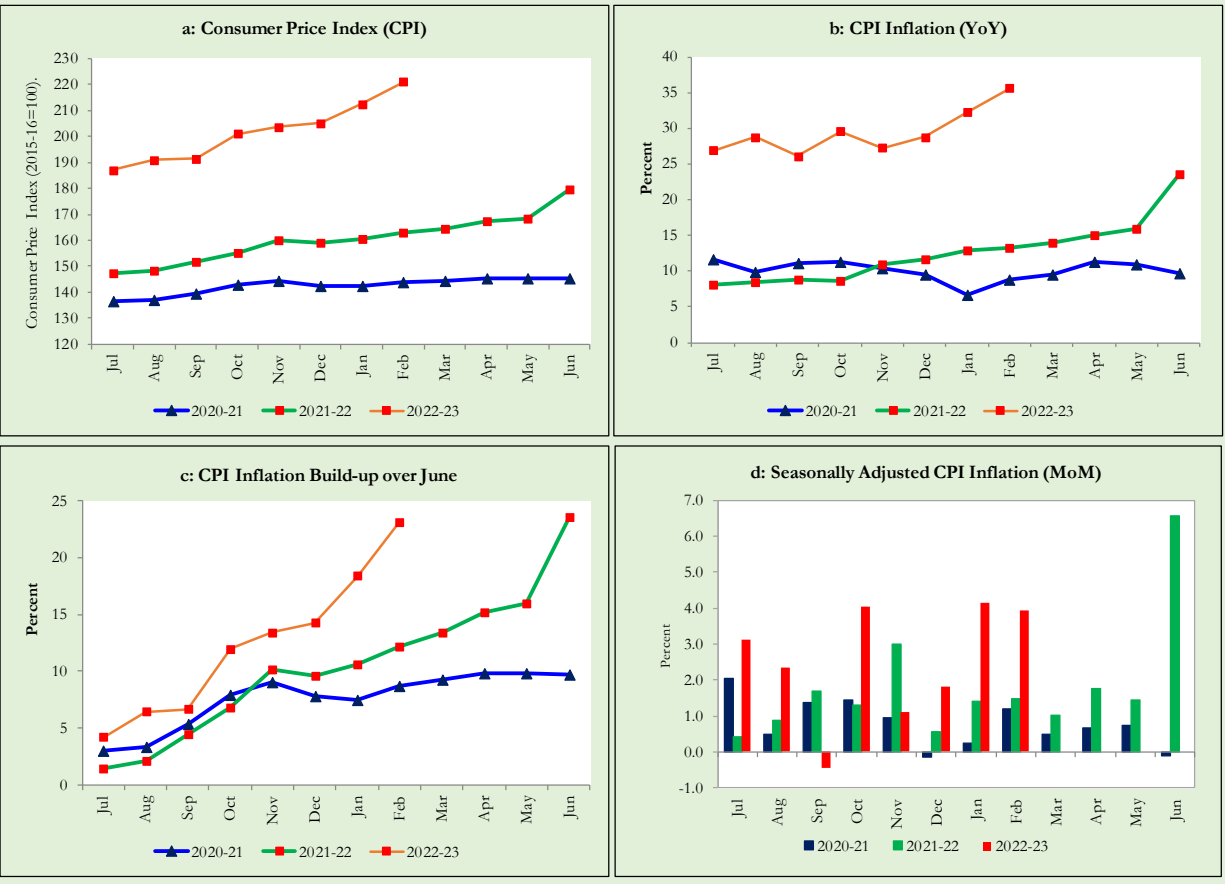
Monthly Consumer Price Indices, CPI inflation (YoY) and inflation build up over June along with seasonally adjusted (MoM) growth rates in CPI (National, Urban and Rural) is summarized in the following graphs (Figure 6.1 to 6.3).



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 55.2 percent during February 2023 from 60.0 percent in previous month. It was 46.1 percent during corresponding month of last year. The weighted contribution of non-food group increased to 44.8 percent in February 2023 from 40.0 percent in previous month. Weighted Contribution of non-food was 54.0 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
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
Dec-22	100.0	57.3	10.0	47.3	42.7	8.5	34.2	30.0	4.2
Jan-23	100.0	60.0	9.4	50.6	40.0	7.9	32.1	28.1	3.9
Feb-23	100.0	55.2	6.6	48.6	44.8	14.8	30.0	26.7	3.3

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 62.5 percent during February 2023 from 65.5 percent in previous month. It was 51.3 percent during corresponding month of last year. The weighted contribution of non-food group increased to 37.5 percent in February 2023 from 34.5 percent in previous month. Weighted contribution of non-food group was 48.7 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
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
Dec-22	100.0	61.9	10.9	50.9	38.1	11.6	26.5	25.0	1.6
Jan-23	100.0	65.5	9.9	55.6	34.5	10.3	24.2	22.6	1.7
Feb-23	100.0	62.5	8.3	54.3	37.5	13.3	24.2	22.7	1.5

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 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	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	60.1	60.1	57.3	61.2	75.3	71.1	70.8	62.4	66.3	54.5	56.7	68.8	78.9
Food & Non-Alcoholic Beverages	46.7	34.4	44.4	37.8	57.8	66.7	54.4	56.7	43.3	18.9	26.7	55.6	68.9
Alcoholic Beverages & Tobacco	33.3	33.3	66.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	33.3	100.0
Clothing & Footwear	77.5	70.0	67.5	72.5	82.5	62.5	70.0	62.5	72.5	75.0	77.5	77.5	67.5
Housing, Water, Elect, Gas & other Fuels	3.4	10.3	17.2	20.7	72.4	75.9	58.6	3.4	51.7	24.1	10.3	58.6	75.9
Furnishing & Household Equip. Maintenance etc.	90.5	90.5	90.5	97.6	100.0	97.6	95.2	97.6	100.0	100.0	95.2	100.0	100.0
Health	87.1	77.4	74.2	61.3	90.3	61.3	77.4	87.1	80.6	83.9	71.0	80.6	87.1
Transport	62.5	59.4	40.6	53.1	93.8	81.3	50.0	37.5	46.9	34.4	25.0	34.4	90.6
Communication	20.0	20.0	20.0	20.0	40.0	40.0	20.0	40.0	40.0	20.0	40.0	20.0	40.0
Recreation & Culture	36.0	68.0	44.0	76.0	44.0	52.0	80.0	72.0	80.0	24.0	72.0	84.0	80.0
Education	37.5	75.0	43.8	50.0	25.0	31.3	75.0	12.5	37.5	50.0	56.3	31.3	31.3
Restaurant & Hotels	92.9	78.6	78.6	92.9	92.9	85.7	100.0	92.9	100.0	100.0	100.0	85.7	92.9
Miscellaneous	86.2	100.0	89.7	96.6	100.0	86.2	96.6	93.1	89.7	100.0	96.6	100.0	100.0
NFNE	69.4	76.6	67.2	72.8	81.3	71.5	77.4	67.2	76.6	71.5	72.3	76.6	82.6

Table 8.1(b) Inflation Diffusion Index for Rural CPI Basket - based on MoM change													
Groups	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
General	59.4	52.0	54.9	59.0	74.2	76.6	72.5	67.2	68.0	54.5	48.8	67.6	77.9
Food & Non-Alcoholic Beverages	45.6	41.8	32.9	40.5	53.2	64.6	53.2	62.0	55.7	13.9	12.7	57.0	62.0
Alcoholic Beverages & Tobacco	100.0	0.0	80.0	100.0	100.0	100.0	100.0	100.0	60.0	100.0	80.0	80.0	100.0
Clothing & Footwear	92.6	74.1	92.6	88.9	81.5	81.5	88.9	66.7	81.5	96.3	85.2	81.5	96.3
Housing, Water, Elect, Gas & other Fuels	4.3	0.0	26.1	26.1	82.6	95.7	78.3	30.4	56.5	34.8	0.0	82.6	56.5
Furnishing & Household Equip. Maintenance etc.	92.3	84.6	80.8	84.6	92.3	92.3	100.0	88.5	100.0	100.0	96.2	96.2	100.0
Health	78.6	42.9	71.4	42.9	100.0	64.3	71.4	92.9	64.3	100.0	78.6	35.7	85.7
Transport	62.5	37.5	50.0	68.8	87.5	75.0	43.8	68.8	31.3	18.8	25.0	12.5	81.3
Communication	20.0	20.0	20.0	20.0	20.0	40.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Recreation & Culture	53.8	69.2	30.8	76.9	53.8	53.8	84.6	69.2	84.6	46.2	84.6	76.9	92.3
Education	80.0	80.0	100.0	80.0	80.0	100.0	80.0	0.0	100.0	80.0	80.0	80.0	80.0
Restaurant & Hotels	57.1	78.6	57.1	71.4	92.9	85.7	92.9	85.7	85.7	85.7	71.4	85.7	85.7
Miscellaneous	76.5	88.2	94.1	76.5	94.1	94.1	94.1	94.1	88.2	100.0	94.1	94.1	100.0
NFNE	71.3	66.9	74.3	69.9	82.4	78.7	80.9	72.1	76.5	80.9	74.3	72.8	86.8

9. Domestic Food Commodity Prices (Growth)

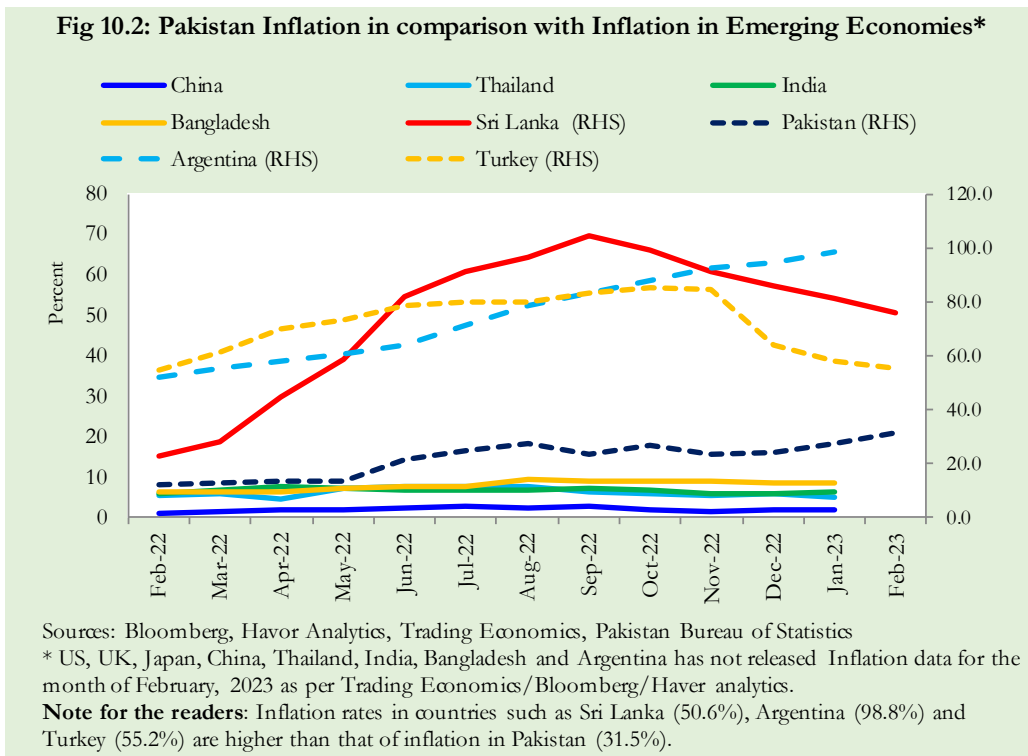
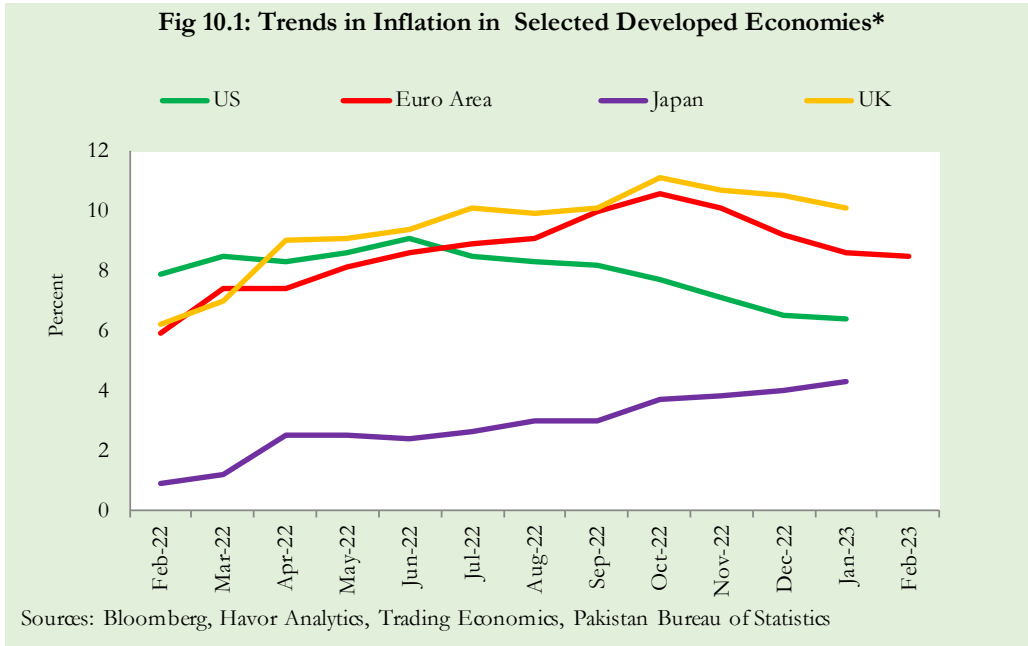
Growth of domestic food commodities (YoY and MoM in percent) for selected essential food items covering both urban and rural CPI baskets is given in table 9.1.

S. No	Item	Unit	Urban CPI		Rural CPI	
			YoY	MoM	YoY	MoM
1	Wheat	10 Kg	70.7	-3.3	82.3	-6.3
2	Wheat Flour Bag	20 Kg	51.0	-4.3	47.0	-3.0
3	Rice Basmati Broken (Superior/Average Quality)*	1 Kg	87.8	4.2	79.5	13.3
4	Beef With Bone (Average Quality)	1 Kg	18.2	1.8	17.6	0.3
5	Mutton (Average Quality)	1 Kg	24.5	2.1	21.2	2.9
6	Chicken Farm Broiler (Live)	1 Kg	96.9	19.9	100.1	15.2
7	Milk Fresh (Un-Boiled)	1 Litre	31.2	2.4	36.1	4.6
8	Eggs Farm	Dozen	78.7	-3.3	71.8	-2.1
9	Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch	Each	47.3	18.0	43.2	13.5
10	Pulse Masoor (Washed)	1 Kg	27.8	5.9	35.1	8.7
11	Pulse Moong (Washed)	1 Kg	56.4	6.4	64.2	8.2
12	Pulse Mash (Washed)	1 Kg	50.8	10.4	53.3	7.9
13	Pulse Gram	1 Kg	56.0	11.0	57.4	8.9
14	Potatoes	1 Kg	22.6	4.3	16.2	1.0
15	Onions	1 Kg	416.7	-17.1	517.8	-7.5
16	Tomatoes	1 Kg	-62.7	-11.1	-58.6	-15.1
17	Sugar Refined	1 Kg	5.1	0.1	5.9	0.5
18	Garlic (Lehsun)	1 Kg	24.8	21.9	17.6	24.6
19	Ginger (Adrak)	500 Gm	60.8	27.5	66.8	39.1
20	Tea Lipton Yellow Label 190 Gm Packet	Each	62.8	0.3	64.2	2.8

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

10. Inflation in Global Context

In global context, inflation trends in selected developed and emerging economies is given in figure 10.1 and 10.2.

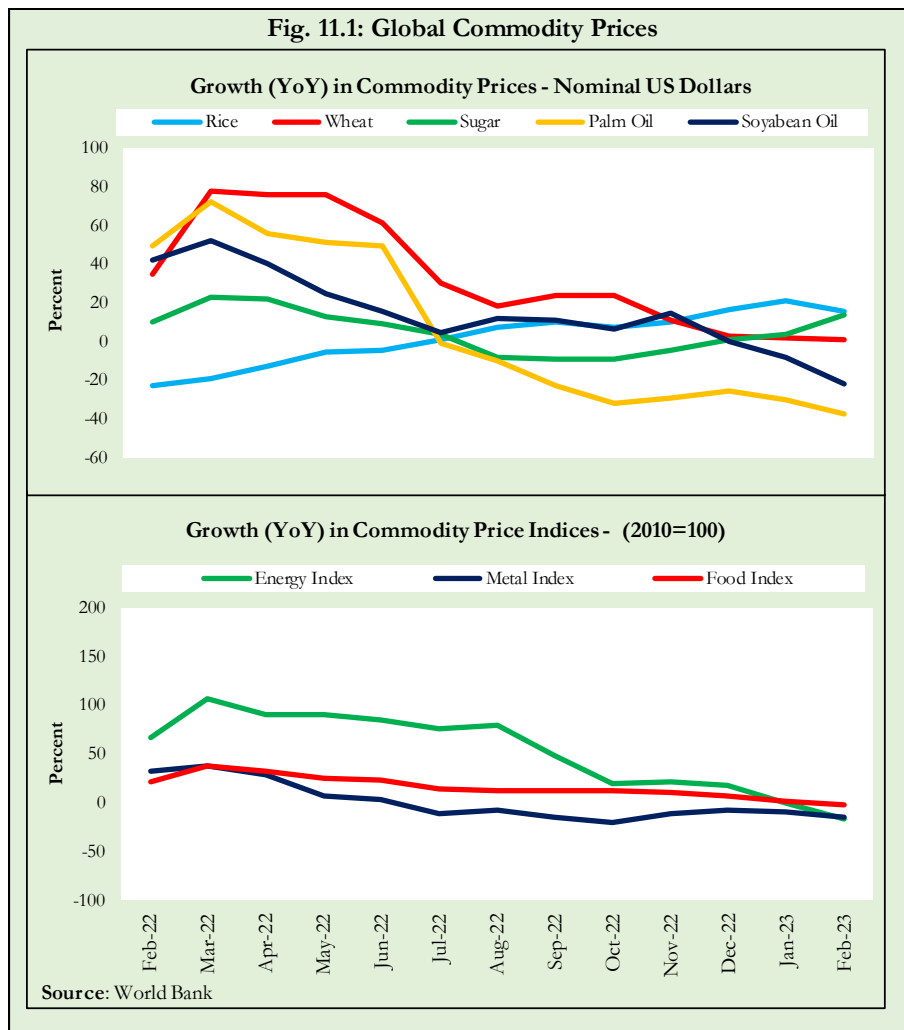


11. Global Commodity Prices (Growth)

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	Feb-22		Jan-23		Feb-23	
	YoY	MoM	YoY	MoM	YoY	MoM
Food	21.2	5.6	1.6	0.4	-2.8	1.0
Metals	32.3	4.3	-9.1	5.4	-15.2	-2.7
Energy	65.9	9.9	-1.7	-8.9	-17.0	-7.3
Agricultural	19.3	4.3	-2.5	0.3	-5.5	1.2
Cotton	49.2	4.8	-24.1	-0.6	-28.2	-0.9

Source: World Bank



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 December 2008 to February 2023 has been used for seasonal adjustment analysis.

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.

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

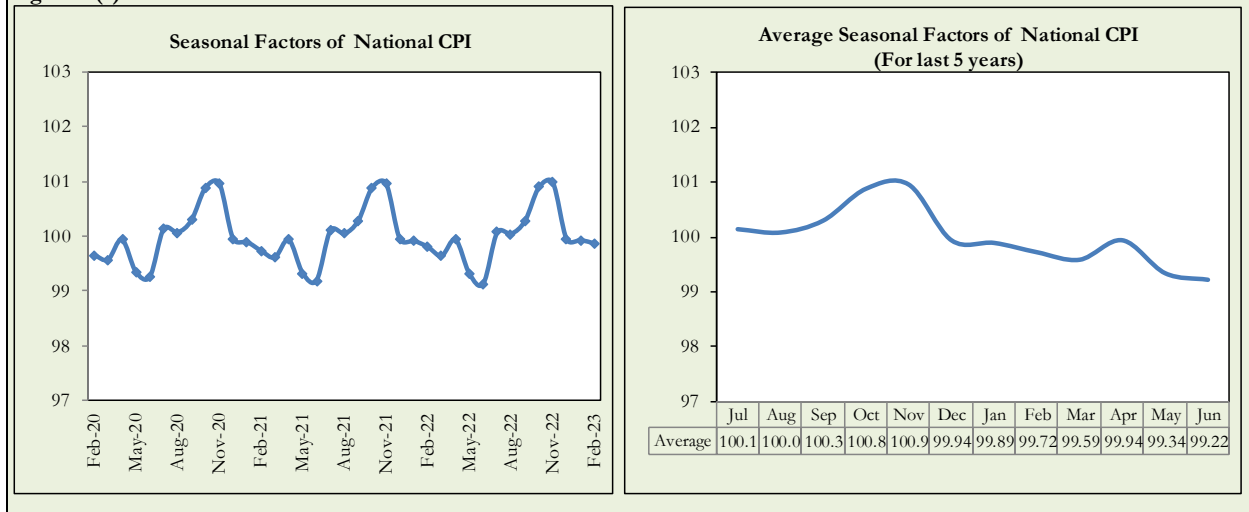


Fig. 12.1 (b): Seasonal Factor of Urban CPI

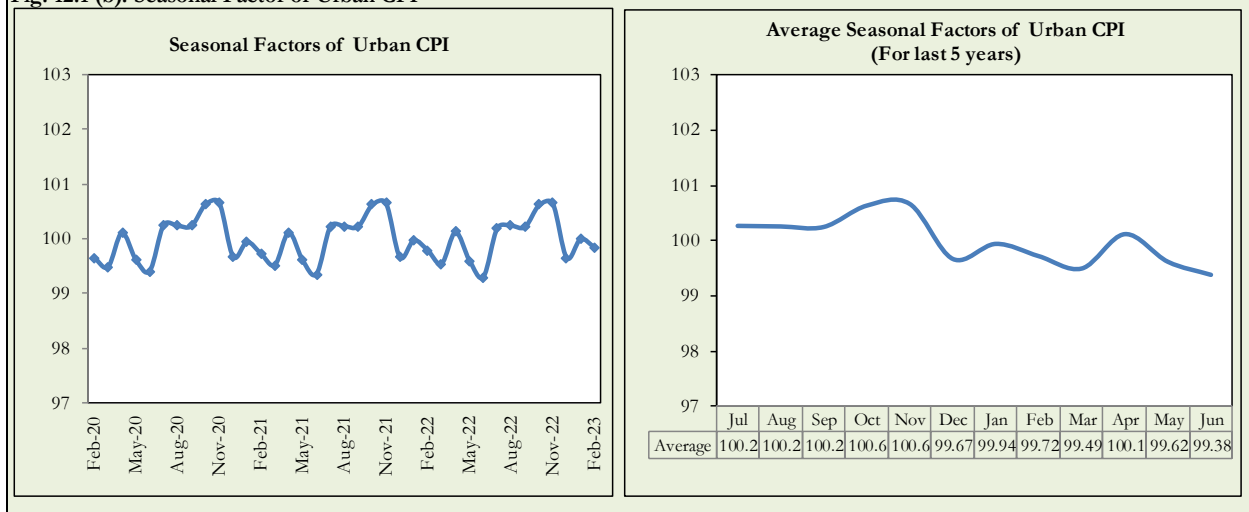
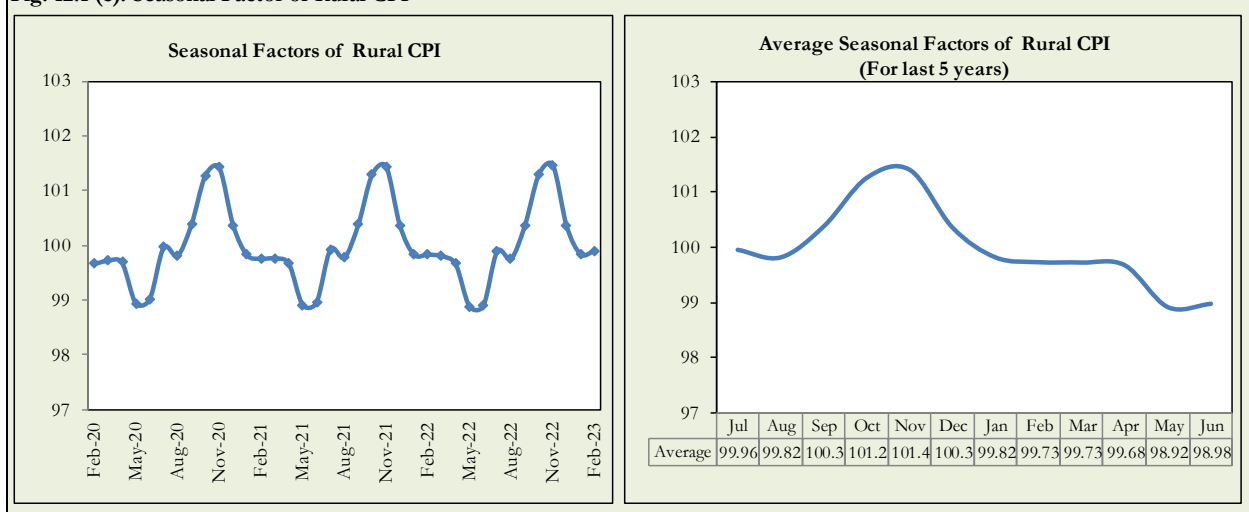


Fig. 12.1 (c): Seasonal Factor of Rural CPI



Figures 12.2 shows 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

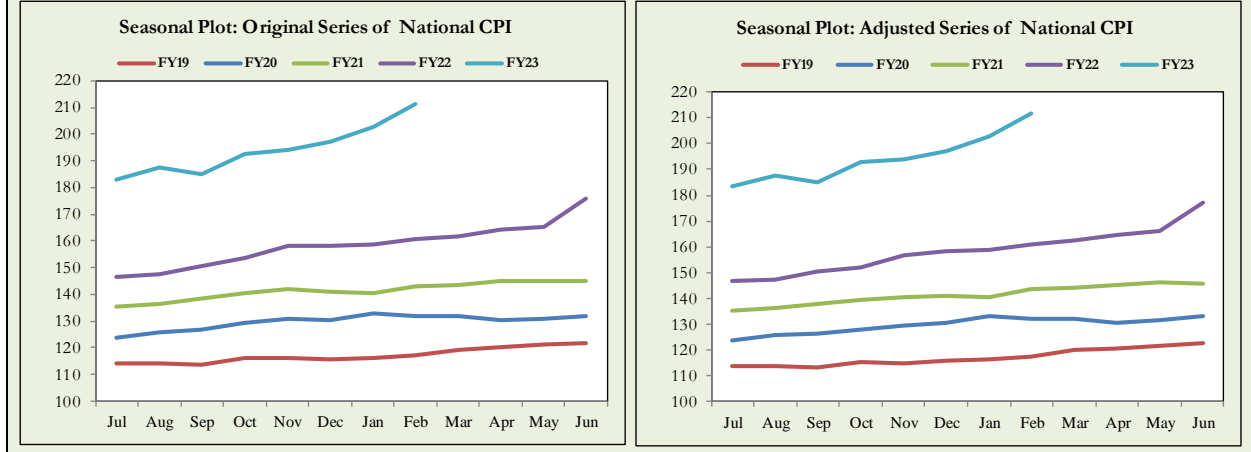


Fig. 12.2 (b): Seasonal Plot of Urban CPI

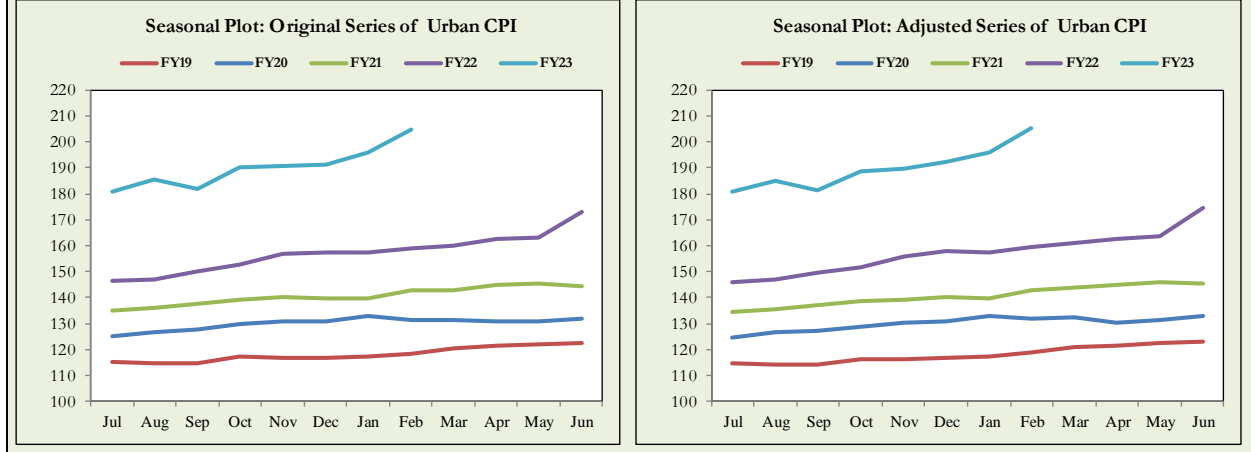
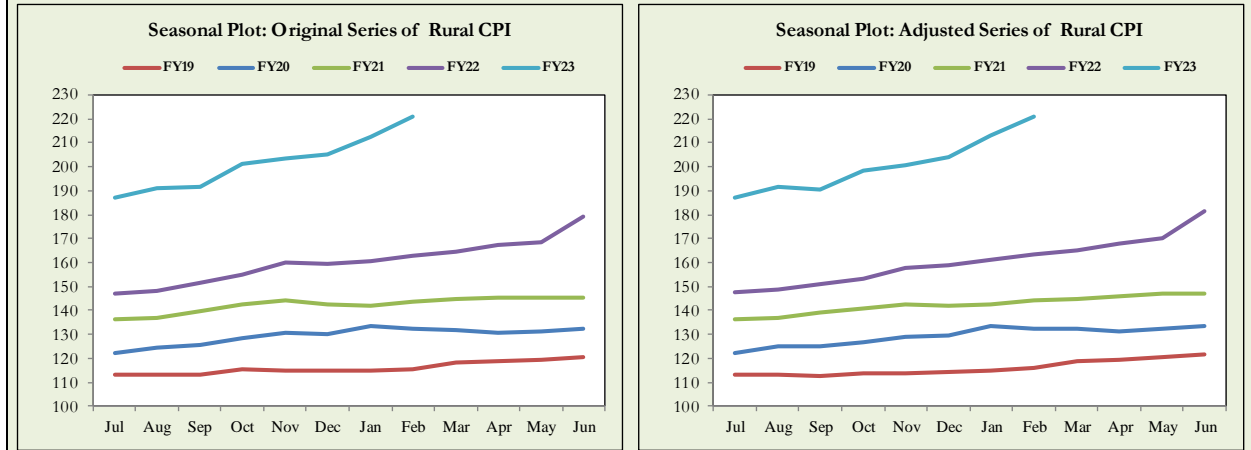


Fig. 12.2 (c): Seasonal Plot of Rural CPI

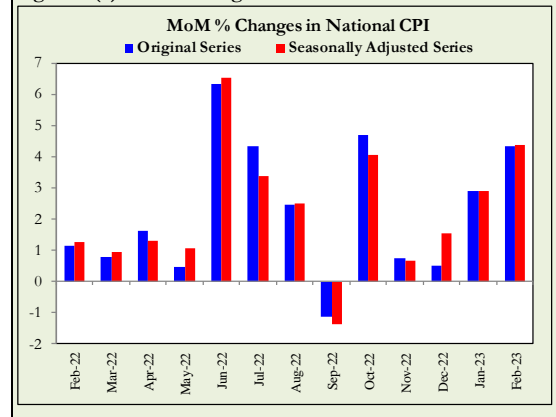


Seasonally adjusted Index of National CPI for February 2023 stood at 211.56 against 211.28 in original series showing an increase of 0.28 because of seasonal adjustment.

Seasonally adjusted Index of Urban CPI for February 2023 stood at 205.18 against 204.87 in original series showing an increase of 0.31 on account of seasonal adjustment.

Seasonally adjusted Index of Rural CPI for February 2023 stood at 221.18 against 220.95 in original series showing an increase of 0.23 on account of seasonal adjustment.

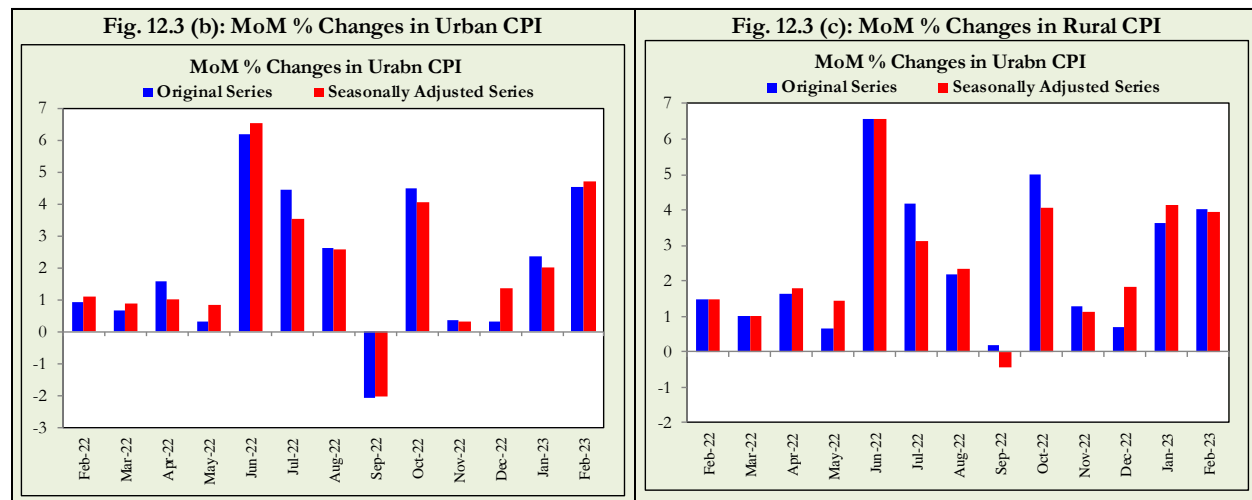
Fig. 12.3 (a): MoM Changes in National CPI



Month-on-month change of seasonally adjusted National CPI series showed an inflation of 4.39% during February 2023 over previous month against an inflation of 4.32% in original series.

Month-on-month change of seasonally adjusted Urban CPI series showed an inflation of 4.70% during February 2023 over previous month against an inflation of 4.54% in original series.

Month-on-month change of seasonally adjusted Rural CPI series showed an inflation of 3.95% during February 2023 over previous month against an inflation of 4.01% in original series.



List of Illustrations

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															
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
Dec-22	24.5	21.6	28.8	32.7	37.9	14.8	20.7	27.1	31.0	25.2	29.7	14.7	19.0	19.4	26.4
Jan-23	27.6	24.4	32.3	39.0	45.2	15.6	20.9	28.5	35.6	24.9	31.7	15.4	19.4	20.9	27.8
Feb-23	31.5	28.8	35.6	41.9	47.0	20.8	25.3	36.5	40.7	34.3	37.1	17.1	21.5	25.1	31.6
12- Month Moving Average															
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
Dec-22	19.9	18.4	22.0	23.7	25.9	15.2	18.5	31.3	22.2	36.3	26.2	11.7	14.2	17.3	19.6
Jan-23	21.1	19.4	23.7	25.9	28.7	15.4	19.1	31.5	24.1	35.7	27.2	12.3	15.0	17.7	21.1
Feb-23	22.7	20.8	25.5	28.2	31.4	16.3	20.2	32.6	26.4	35.9	28.7	13.1	16.0	19.0	23.0
Period Average (Since July)															
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
Dec-22	25.0	23.1	27.9	30.7	33.6	18.4	22.7	34.1	28.5	37.1	33.0	14.1	17.4	21.6	25.4
Jan-23	25.4	23.3	28.5	31.9	35.3	17.9	22.4	33.3	29.5	35.2	32.8	14.3	17.7	21.7	26.5
Feb-23	26.2	24.0	29.5	33.2	36.8	18.3	22.8	33.7	31.0	35.1	33.4	14.6	18.2	22.1	27.3
Month-on-Month															
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	4.5	6.1	4.5	3.9	-0.5	3.4	-2.4	-2.4	1.3	1.5	1.9	2.7
Nov-22	0.8	0.4	1.3	0.0	0.5	0.6	2.1	0.0	-1.4	0.7	4.9	0.8	2.1	0.5	1.8
Dec-22	0.5	0.3	0.7	0.0	0.1	0.6	1.4	-0.7	1.5	-1.8	0.3	1.2	1.5	0.8	1.5
Jan-23	2.9	2.4	3.6	3.9	5.7	1.2	1.5	1.8	4.0	0.6	1.3	1.4	1.5	1.5	2.1
Feb-23	4.3	4.5	4.0	4.3	3.9	4.7	4.1	8.2	5.3	9.8	5.4	2.2	2.6	2.9	3.9

* 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		
		Feb-22	Jan-23	Feb-23	Feb-22	Jan-23	Feb-23
Food & Non-Alcoholic	34.6	2.5	5.0	4.1	14.7	42.9	45.1
Alcoholic Beverages & Tobacco	1.0	0.3	0.2	9.7	2.1	36.3	49.2
Clothing & Footwear	8.6	1.0	0.5	1.2	9.7	16.8	17.0
Housing, Water, Elec, Gas & other Fuels	23.6	-1.6	1.8	3.7	9.0	7.8	13.6
Furnishing & Household Equip. Maintenance etc	4.1	1.8	1.6	5.0	13.4	29.9	34.0
Health	2.8	2.1	1.8	2.1	10.1	18.7	18.8
Transport	5.9	3.6	-0.5	12.0	25.0	39.1	50.5
Communication	2.2	0.0	0.0	2.1	2.5	1.6	3.7
Recreation & Culture	1.6	0.5	4.5	3.3	8.2	44.1	48.1
Education	3.8	0.3	0.1	0.5	3.4	10.6	10.8
Restaurants & Hotels	6.9	1.7	3.1	5.1	14.4	30.1	34.5
Miscellaneous	4.9	1.1	3.2	4.7	10.1	28.7	33.3
Overall National CPI	100.0	1.2	2.9	4.3	12.2	27.6	31.5

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

Groups	Weights	MoM change			YoY change		
		Feb-22	Jan-23	Feb-23	Feb-22	Jan-23	Feb-23
I. Food Group	36.8	2.2	3.9	4.3	14.3	39.0	41.9
Food & Non-Alcoholic Beverages	30.4	2.3	4.1	4.2	14.5	39.5	42.1
Alcoholic Beverages & Tobacco	0.9	0.2	0.1	13.0	2.0	37.3	54.9
Restaurant & Hotels (Food)	5.5	2.4	3.9	3.9	15.6	36.7	38.7
II. Non-Food Group	63.2	0.2	1.2	4.7	9.9	15.6	20.8
Clothing & Footwear	8.0	1.3	0.6	1.3	9.4	16.8	16.8
Housing, Water, Elec, Gas & other Fuels	27.0	-1.6	1.4	4.3	7.8	5.0	11.2
Furnishing & Household Equip. Maintenance etc	4.1	2.0	1.1	5.3	12.4	30.0	34.1
Health	2.3	1.6	3.4	3.2	10.2	16.7	18.5
Transport	6.1	3.4	-0.4	12.3	24.8	38.0	49.9
Communication	2.4	0.0	0.0	2.8	3.3	1.8	4.6
Recreation & Culture	1.7	0.2	4.3	3.6	8.0	43.6	48.4
Education	4.9	0.1	0.1	0.1	3.2	10.4	10.4
Restaurants & Hotels (Non-food Component)	1.9	0.9	2.6	5.4	13.0	19.2	24.5
Miscellaneous	4.8	1.2	3.1	4.7	9.6	28.8	33.3
Overall Urban CPI	100.0	0.9	2.4	4.5	11.5	24.4	28.8

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

Groups	Weights	MoM Change			YoY Change		
		Feb-22	Jan-23	Feb-23	Feb-22	Jan-23	Feb-23
I. Food Group	45.9	2.6	5.7	3.9	14.6	45.2	47.0
Food and Non-Alcoholic Beverages	40.9	2.8	6.0	3.9	15.0	46.8	48.3
Alcoholic Beverages, Tobacco	1.3	0.3	0.4	5.9	2.3	35.2	42.7
Restaurants and Hotels (Food Component)	3.8	1.5	3.1	4.2	14.1	31.4	34.8
II. Non-Food Group	54.1	0.4	1.5	4.1	12.2	20.9	25.3
Clothing and Footwear	9.5	0.6	0.4	1.0	10.0	16.7	17.2
Housing, Water, Elec., Gas and Other Fuels	18.5	-1.4	2.6	2.6	11.6	14.0	18.6
Furnishing and Household Equip. Maintenance	4.1	1.3	2.3	4.5	15.0	29.8	33.9
Health	3.5	2.5	0.4	1.1	10.0	20.7	19.1
Transport	5.6	3.9	-0.5	11.6	25.4	41.0	51.4
Communication	2.0	0.0	0.1	0.7	1.1	1.2	1.9
Recreation and Culture	1.4	1.2	4.9	2.7	8.5	45.1	47.4
Education	2.1	0.8	0.2	1.7	4.4	11.2	12.2
Restaurants and Hotels (Non-Food Component)	2.4	0.0	0.6	12.9	11.9	15.7	30.6
Miscellaneous	5.0	0.8	3.3	4.6	10.7	28.5	33.3
Overall Rural CPI	100.0	1.5	3.6	4.0	13.3	32.3	35.6

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	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
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
Dec-22	24.5	35.5	32.5	55.9	36.2	17.1	7.0	29.2	17.5	41.2	1.7	38.5	10.9	27.4	25.8
Jan-23	27.6	42.9	40.3	61.6	36.3	16.8	7.8	29.9	18.7	39.1	1.6	44.1	10.6	30.1	28.7
Feb-23	31.5	45.1	44.7	47.6	49.2	17.0	13.6	34.0	18.8	50.5	3.7	48.1	10.8	34.5	33.3
12- Month Moving Average															
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
Dec-22	19.9	25.0	23.0	38.3	18.9	14.3	11.7	20.4	12.5	44.3	1.8	17.7	8.8	22.0	17.3
Jan-23	21.1	27.5	25.2	42.6	21.8	14.7	11.0	21.8	13.3	45.4	1.7	20.7	9.4	23.4	18.9
Feb-23	22.7	30.0	28.0	43.5	25.7	15.3	11.4	23.5	14.0	47.5	1.8	24.1	10.0	25.1	20.8
Period Average (Since July)															
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
Dec-22	25.0	32.2	29.7	47.6	31.3	17.3	13.4	25.5	14.7	54.6	1.4	24.7	10.4	27.9	21.9
Jan-23	25.4	33.8	31.3	49.4	32.0	17.2	12.6	26.2	15.3	52.2	1.5	27.5	10.5	28.2	22.9
Feb-23	26.2	35.2	33.0	49.2	34.2	17.2	12.7	27.2	15.7	52.0	1.7	30.2	10.5	29.1	24.3
Month-on-Month															
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	0.0	2.0	0.4	1.9	2.3
Dec-22	0.5	-0.1	2.4	-12.6	0.5	0.7	0.0	2.4	1.9	-0.8	0.1	10.9	0.3	1.3	3.0
Jan-23	2.9	5.0	6.2	-1.8	0.2	0.5	1.8	1.6	1.8	-0.5	0.0	4.5	0.1	3.1	3.2
Feb-23	4.3	4.1	4.0	4.1	9.7	1.2	3.7	5.0	2.1	12.0	2.1	3.3	0.5	5.1	4.7
3-Years Average (in current month during FY21-FY23)															
YoY	17.5	23.2	23.8	21.7	19.0	12.7	11.1	18.7	12.7	24.8	2.3	20.3	5.1	19.0	18.5
MoM	2.4	2.5	2.5	2.7	3.4	1.5	2.2	2.7	1.8	5.8	0.7	1.4	0.2	2.4	2.3

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	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year															
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
Dec-22	21.6	32.6	29.6	52.9	37.3	17.0	4.1	29.7	13.5	39.2	1.8	38.0	10.8	28.6	25.9
Jan-23	24.4	39.5	36.7	59.3	37.3	16.8	5.0	30.0	16.7	38.0	1.8	43.6	10.4	32.4	28.8
Feb-23	28.8	42.1	42.0	42.9	54.9	16.8	11.2	34.1	18.5	49.9	4.6	48.4	10.4	35.2	33.3
12- Month Moving Average															
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
Dec-22	18.4	23.9	22.0	35.8	19.2	14.7	9.6	19.5	11.5	43.5	2.1	16.5	9.1	22.2	17.2
Jan-23	19.4	26.0	23.9	39.8	22.1	15.1	8.9	21.0	12.1	44.6	2.0	19.5	9.7	23.8	18.8
Feb-23	20.8	28.3	26.4	40.5	26.5	15.7	9.1	22.9	12.8	46.6	2.1	23.0	10.3	25.5	20.8
Period Average (Since July)															
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
Dec-22	23.1	30.7	28.2	45.5	31.9	18.1	10.8	24.9	12.7	53.1	1.5	22.9	10.6	28.6	22.3
Jan-23	23.3	31.9	29.5	47.3	32.7	17.9	9.9	25.7	13.3	50.8	1.5	25.9	10.6	29.1	23.2
Feb-23	24.0	33.3	31.1	46.7	35.5	17.8	10.1	26.8	14.0	50.7	1.9	28.8	10.6	29.9	24.5
Month-on-Month															
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
Dec-22	0.3	-0.3	2.2	-12.0	0.2	0.7	-0.5	2.3	1.1	-0.7	0.1	13.4	0.2	1.6	2.4
Jan-23	2.4	4.1	5.0	-1.4	0.1	0.6	1.4	1.1	3.4	-0.4	0.0	4.3	0.1	3.6	3.1
Feb-23	4.5	4.2	4.4	2.9	13.0	1.3	4.3	5.3	3.2	12.3	2.8	3.6	0.1	4.2	4.7
3-Years Average (in current month during FY21-FY23)															
YoY	16.3	22.4	23.1	20.5	21.1	12.8	9.7	18.0	12.5	24.6	2.9	20.0	4.9	19.3	18.3
MoM	2.6	2.6	2.7	2.8	4.5	2.2	2.3	3.0	2.1	5.9	1.0	1.4	0.1	2.2	2.5

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	Health	Transport	Communication	Recreation and Culture	Education	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year															
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
Dec-22	28.8	38.7	35.7	59.5	35.0	17.2	13.2	28.6	21.4	44.6	1.4	39.4	11.3	25.2	25.6
Jan-23	32.3	46.8	44.4	64.3	35.2	16.7	14.0	29.8	20.7	41.0	1.2	45.1	11.2	26.0	28.5
Feb-23	35.6	48.3	47.6	53.1	42.7	17.2	18.6	33.9	19.1	51.4	1.9	47.4	12.2	33.4	33.3
12- Month Moving Average															
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
Dec-22	22.0	26.3	24.0	41.3	18.7	13.7	16.2	21.6	13.5	45.6	1.2	19.7	7.6	21.6	17.5
Jan-23	23.7	29.2	26.7	45.8	21.5	14.3	15.9	22.9	14.5	46.9	1.2	22.9	8.2	22.7	19.0
Feb-23	25.5	32.0	29.7	47.1	24.8	14.9	16.4	24.5	15.3	49.0	1.3	26.1	8.8	24.4	20.9
Period Average (Since July)															
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
Dec-22	27.9	33.9	31.4	49.9	30.6	16.3	19.1	26.3	16.6	57.2	1.4	27.8	9.9	26.7	21.4
Jan-23	28.5	35.8	33.3	51.8	31.3	16.4	18.4	26.9	17.2	54.7	1.3	30.4	10.1	26.6	22.4
Feb-23	29.5	37.4	35.2	52.0	32.7	16.5	18.4	27.8	17.5	54.2	1.4	32.6	10.3	27.5	23.8
Month-on-Month															
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
Dec-22	0.7	0.0	2.6	-13.2	0.9	0.8	1.1	2.6	2.8	-0.9	0.0	6.8	0.4	0.7	3.9
Jan-23	3.6	6.0	7.4	-2.2	0.4	0.4	2.6	2.3	0.4	-0.5	0.1	4.9	0.2	2.3	3.3
Feb-23	4.0	3.9	3.6	5.5	5.9	1.0	2.6	4.5	1.1	11.6	0.7	2.7	1.7	6.9	4.6
3-Years Average (in current month during FY21-FY23)															
YoY	19.2	24.1	24.6	23.2	16.7	12.4	14.1	19.7	13.0	25.2	1.1	21.0	6.1	18.3	18.9
MoM	2.2	2.3	2.2	2.6	2.1	0.6	1.9	2.3	1.5	5.7	0.3	1.3	0.9	2.7	2.1

Source: Pakistan Bureau of Statistics

Table A7: Top Ten Contributors to Urban CPI Inflation (YoY) – February 2023

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Feb-22	Feb-23		
<u>A. Ranked by Weighted Contribution</u>					
1	Motor Fuel	2.91	39.72	63.20	8.60
2	Milk Fresh	7.11	10.84	31.99	7.59
3	Readymade Food	5.52	15.63	38.66	7.55
4	Wheat Flour	3.01	15.06	55.92	5.78
5	Onions	0.59	-5.35	416.74	4.54
6	Chicken	1.36	-4.62	96.86	4.45
7	House Rent	19.26	6.13	5.43	3.29
8	Gas Charges	1.08	0.00	62.82	3.21
9	Appliances/Articles/Products for Personal	2.98	8.97	31.82	3.15
10	Rice	1.18	11.89	77.81	3.14
Total		45.00			51.30
<u>B. Ranked by Percentage Change</u>					
1	Onions	0.59	-5.35	416.74	4.54
2	Chicken	1.36	-4.62	96.86	4.45
3	Eggs	0.51	5.57	78.73	1.57
4	Rice	1.18	11.89	77.81	3.14
5	Text Books	0.67	10.98	74.13	1.44
6	Wheat	0.61	9.83	70.66	1.75
7	Dessert Preparation	0.04	6.81	70.51	0.09
8	Gram Whole	0.09	24.38	64.93	0.20
9	Motor Fuel	2.91	39.72	63.20	8.60
10	Gas Charges	1.08	0.00	62.82	3.21
Total		9.04			28.99
<u>C. Ranked by Weights</u>					
1	House Rent	19.26	6.13	5.43	3.29
2	Milk Fresh	7.11	10.84	31.99	7.59
3	Readymade Food	5.52	15.63	38.66	7.55
4	Education	4.88	3.15	10.40	1.67
5	Electricity Charges	4.56	11.30	7.41	1.27
6	Wheat Flour	3.01	15.06	55.92	5.78
7	Appliances/Articles/Products for Personal	2.98	8.97	31.82	3.15
8	Motor Fuel	2.91	39.72	63.20	8.60
9	Cotton Cloth	2.22	11.28	18.82	1.49
10	Meat	2.04	23.64	20.82	1.79
Total		54.49			42.18

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item; this is then reported as a share in YoY change in Urban CPI, which is 28.8 percent in February 2023.

Table A8: Top Ten Contributors to Urban CPI Inflation (MoM) in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Gas Charges	1.08	0.00	62.82	16.55
2	Motor Fuel	2.91	-0.60	16.53	16.22
3	Chicken	1.36	24.62	19.89	7.73
4	Cooking Oil	1.10	-0.36	17.21	6.54
5	Vegetable Ghee	1.03	-1.21	16.59	5.94
6	Liquefied Hydrocarbons	0.51	2.81	35.55	5.38
7	Readymade Food	5.52	3.90	3.86	5.18
8	Fresh Fruits	1.44	5.19	15.13	4.60
9	Fresh Vegetables	1.53	-0.33	13.97	3.80
10	Milk Fresh	7.11	2.03	2.25	3.55
Total		23.59			75.49
B. Ranked by Percentage Change					
1	Gas Charges	1.08	0.00	62.82	16.55
2	Liquefied Hydrocarbons	0.51	2.81	35.55	5.38
3	Chicken	1.36	24.62	19.89	7.73
4	Cooking Oil	1.10	-0.36	17.21	6.54
5	Dessert Preparation	0.04	3.44	16.72	0.16
6	Vegetable Ghee	1.03	-1.21	16.59	5.94
7	Motor Fuel	2.91	-0.60	16.53	16.22
8	Cigarettes	0.72	0.10	15.64	2.45
9	Fresh Fruits	1.44	5.19	15.13	4.60
10	Fresh Vegetables	1.53	-0.33	13.97	3.80
Total		11.72			69.37
C. Ranked by Weights					
1	House Rent	19.26	1.66	0.00	0.00
2	Milk Fresh	7.11	2.03	2.25	3.55
3	Readymade Food	5.52	3.90	3.86	5.18
4	Education	4.88	0.07	0.12	0.11
5	Electricity Charges	4.56	0.86	-1.60	-1.54
6	Wheat Flour	3.01	13.23	-3.69	-3.18
7	Appliances/Articles/Products For Personal	2.98	1.19	4.97	3.18
8	Motor Fuel	2.91	-0.60	16.53	16.22
9	Cotton Cloth	2.22	0.02	2.03	0.96
10	Meat	2.04	0.09	1.93	1.02
Total		54.49			25.50

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 4.5 percent in February 2023.

Table A9: Top and Bottom Fifteen Contributors to Urban CPI Inflation (YoY) in February 2023

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Feb-22	Feb-23		
A. Ranked by Weighted Contribution					
1	Motor Fuel	2.91	39.72	63.20	8.60
2	Milk Fresh	7.11	10.84	31.99	7.59
3	Readymade Food	5.52	15.63	38.66	7.55
4	Wheat Flour	3.01	15.06	55.92	5.78
5	Onions	0.59	-5.35	416.74	4.54
6	Chicken	1.36	-4.62	96.86	4.45
7	House Rent	19.26	6.13	5.43	3.29
8	Gas Charges	1.08	0.00	62.82	3.21
9	Appliances/Articles/Products For Personal	2.98	8.97	31.82	3.15
10	Rice	1.18	11.89	77.81	3.14
11	Cooking Oil	1.10	41.03	50.66	2.91
12	Washing Soap/Detergents/Match Box	1.41	17.09	51.63	2.60
13	Vegetable Ghee	1.03	38.82	45.89	2.55
14	Fresh Fruits	1.44	26.07	45.17	2.12
15	Transport Services	1.75	9.26	33.13	1.81
Total		51.73			63.29
Bottom 15 Contributors					
1	Tomatoes	0.35	310.06	-62.68	-1.36
2	Gur	0.04	11.29	-1.87	0.00
3	Therapeutic Appliances And Equipme	0.01	5.40	4.43	0.00
4	Dental Services	0.02	6.58	11.54	0.01
5	Major Tools & Equipments	0.01	10.54	24.63	0.01
6	Carpets	0.03	7.86	10.36	0.01
7	Newspapers	0.07	0.00	4.21	0.01
8	Postal Services	0.02	2.09	15.21	0.01
9	Motor Vehicle Tax	0.05	7.62	8.92	0.01
10	Electrical Appliances For Personal	0.05	11.16	11.34	0.02
11	Communication Services	1.88	1.96	0.52	0.02
12	Accommodation Services	0.13	4.94	7.10	0.02
13	Honey	0.10	19.10	7.77	0.03
14	Mustard Oil	0.01	49.85	48.11	0.03
15	Plastic Products	0.05	11.43	26.28	0.04
Total		2.82			-1.14

Table A10: Top and Bottom Fifteen Contributors to Urban CPI Inflation (MoM) in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Gas Charges	1.08	0.00	62.82	16.55
2	Motor Fuel	2.91	-0.60	16.53	16.22
3	Chicken	1.36	24.62	19.89	7.73
4	Cooking Oil	1.10	-0.36	17.21	6.54
5	Vegetable Ghee	1.03	-1.21	16.59	5.94
6	Liquefied Hydrocarbons	0.51	2.81	35.55	5.38
7	Readymade Food	5.52	3.90	3.86	5.18
8	Fresh Fruits	1.44	5.19	15.13	4.60
9	Fresh Vegetables	1.53	-0.33	13.97	3.80
10	Milk Fresh	7.11	2.03	2.25	3.55
11	Rice	1.18	14.16	9.54	3.22
12	Appliances/Articles/Products For Personal	2.98	1.19	4.97	3.18
13	Cigarettes	0.72	0.10	15.64	2.45
14	Marriage Hall Charges	1.75	2.71	5.61	2.05
15	Washing Soap/Detergents/Match Box	1.41	1.69	5.43	2.03
Total		31.63			88.42
Bottom 15 Contributors					
1	Onions	0.59	9.74	-17.12	-5.99
2	Wheat Flour	3.01	13.23	-3.69	-3.18
3	Electricity Charges	4.56	0.86	-1.60	-1.54
4	Wheat	0.61	16.47	-3.28	-0.74
5	Eggs	0.51	4.36	-3.28	-0.62
6	Tomatoes	0.35	-39.01	-11.09	-0.52
7	Honey	0.10	0.61	-0.01	0.00
8	Newspapers	0.07	0.00	0.00	0.00
9	Communication Services	1.88	0.00	0.00	0.00
10	Motor Vehicle Tax	0.05	0.00	0.00	0.00
11	House Rent	19.26	1.66	0.00	0.00
12	Ice Cream	0.10	0.12	0.01	0.00
13	Therapeutic Appliances and Equipme	0.01	0.06	0.61	0.00
14	Woolen Readymade Garments	0.43	0.73	0.01	0.00
15	Dental Services	0.02	0.40	1.25	0.00
Total		31.55			-12.59

Table A11: Top and Bottom Fifteen Contributors to MoM Urban CPI Food Inflation in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Chicken	1.36	24.62	19.89	7.73
2	Cooking oil	1.10	-0.36	17.21	6.54
3	Vegetable ghee	1.03	-1.21	16.59	5.94
4	Readymade food	5.52	3.90	3.86	5.18
5	Fresh fruits	1.44	5.19	15.13	4.60
6	Fresh vegetables	1.53	-0.33	13.97	3.80
7	Milk fresh	7.11	2.03	2.25	3.55
8	Rice	1.18	14.16	9.54	3.22
9	Cigarettes	0.72	0.10	15.64	2.45
10	Condiments and Spices	1.33	1.62	5.35	1.56
11	Meat	2.04	0.09	1.93	1.02
12	Beverages	0.89	0.26	4.44	0.73
13	Dry fruits	0.33	3.75	6.07	0.48
14	Sweetmeat	0.35	1.98	4.92	0.44
15	Milk powder	0.31	1.84	6.07	0.41
Total		26.25			47.64
Bottom 15 Contributors					
1	Onions	0.59	9.74	-17.12	-5.99
2	Wheat flour	3.01	13.23	-3.69	-3.18
3	Wheat	0.61	16.47	-3.28	-0.74
4	Eggs	0.51	4.36	-3.28	-0.62
5	Tomatoes	0.35	-39.01	-11.09	-0.52
6	Honey	0.10	0.61	-0.01	0.00
7	Ice cream	0.10	0.12	0.01	0.00
8	Gur	0.04	-0.09	1.06	0.01
9	Sugar	1.11	-0.87	0.11	0.02
10	Mustard oil	0.01	1.09	10.40	0.04
11	Butter	0.09	3.62	1.33	0.04
12	Tea	0.84	0.80	0.33	0.08
13	Wheat products	0.09	11.70	3.10	0.08
14	Beans	0.04	2.88	8.32	0.09
15	Nimco	0.12	2.15	4.66	0.15
Total		7.63			-10.55

Table A12: Top and Bottom Fifteen Contributors to MoM Urban CPI Non-Food Inflation in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Gas charges	1.08	0.00	62.82	16.55
2	Motor fuel	2.91	-0.60	16.53	16.22
3	Liquefied Hydrocarbons	0.51	2.81	35.55	5.38
4	Appliances/Articles/Products for Personal	2.98	1.19	4.97	3.18
5	Marriage Hall Charges	1.75	2.71	5.61	2.05
6	Washing soap/detergents/match Box	1.41	1.69	5.43	2.03
7	Motor vehicles	0.81	0.49	10.32	1.97
8	Transport services	1.75	-1.50	5.12	1.83
9	Household equipments	1.00	0.61	8.66	1.80
10	Personal Effects n.e.c.	0.94	7.90	4.75	1.44
11	Cotton cloth	2.22	0.02	2.03	0.96
12	Drugs and medicines	1.07	4.05	4.01	0.95
13	Tailoring	1.07	1.32	4.19	0.93
14	stationery	0.35	1.74	10.32	0.86
15	Communication apparatus	0.45	0.17	12.20	0.85
Total		20.31			57.01
Bottom 15 Contributors					
1	Electricity charges	4.56	0.86	-1.60	-1.54
2	Newspapers	0.07	0.00	0.00	0.00
3	Communication Services	1.88	0.00	0.00	0.00
4	Motor vehicle tax	0.05	0.00	0.00	0.00
5	House rent	19.26	1.66	0.00	0.00
6	Therapeutic Appliances and Equipme	0.01	0.06	0.61	0.00
7	Woolen readymade garments	0.43	0.73	0.01	0.00
8	Dental services	0.02	0.40	1.25	0.00
9	Electrical Appliances for Personal	0.05	0.80	0.73	0.01
10	Carpets	0.03	0.64	1.24	0.01
11	Postal services	0.02	0.00	1.94	0.01
12	Footware	1.48	0.11	0.03	0.01
13	Major tools & equipments	0.01	2.78	5.20	0.01
14	Garbage collection	0.11	0.00	0.38	0.01
15	Dopatta	0.17	0.20	0.34	0.01
Total		28.13			-1.48

Table A13: Top Ten Contributors to Rural CPI Inflation (YoY) in February 2023

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Feb-22	Feb-23		
A. Ranked by Weighted Contribution					
1	Milk Fresh	10.38	10.42	36.06	9.43
2	Wheat	3.47	7.19	82.33	9.21
3	Onions	0.90	-5.06	517.77	6.29
4	Motor Fuels	2.49	38.93	66.73	6.06
5	Wheat Flour	3.43	18.91	48.91	4.95
6	Vegetable Ghee	2.38	44.06	42.10	4.67
7	Solid Fuel	4.48	15.11	36.32	4.57
8	Chicken	1.46	-3.15	100.14	4.05
9	Rice	1.55	8.91	74.98	4.02
10	Readymade Food	3.80	14.09	34.78	3.97
Total		34.34			57.22
B. Ranked by Percentage Change					
1	Onions	0.90	-5.06	517.77	6.29
2	Chicken	1.46	-3.15	100.14	4.05
3	Wheat	3.47	7.19	82.33	9.21
4	Rice	1.55	8.91	74.98	4.02
5	Eggs	0.57	13.55	71.81	1.28
6	Text Books	0.50	7.56	71.05	0.78
7	Wheat Products	0.11	12.74	67.10	0.21
8	Motor Fuels	2.49	38.93	66.73	6.06
9	Gram Whole	0.11	34.43	65.01	0.20
10	Tea	1.26	9.20	64.19	2.10
Total		12.42			34.20
C. Ranked by Weights					
1	Milk Fresh	10.38	10.42	36.06	9.43
2	House Rent	8.61	5.92	6.90	1.49
3	Solid Fuel	4.48	15.11	36.32	4.57
4	Readymade Food	3.80	14.09	34.78	3.97
5	Wheat	3.47	7.19	82.33	9.21
6	Electricity Charges	3.44	11.30	7.41	0.76
7	Wheat Flour	3.43	18.91	48.91	4.95
8	Cotton Cloth	2.84	8.70	15.63	1.35
9	Motor Fuels	2.49	38.93	66.73	6.06
10	Vegetable Ghee	2.38	44.06	42.10	4.67
Total		45.32			46.46

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 35.6 percent in February 2023.

Table A14: Top Ten Contributors to Rural CPI Inflation (MoM) in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Motor Fuels	2.49	-0.50	17.99	15.71
2	Vegetable Ghee	2.38	-1.02	12.35	11.79
3	Milk Fresh	10.38	0.91	4.63	10.71
4	Chicken	1.46	32.95	15.25	7.28
5	Liquefied Hydrocarbons	1.00	4.15	23.64	7.02
6	Fresh Fruits	1.45	5.75	21.19	6.75
7	Marriage Hall Charges	2.25	0.57	13.38	5.90
8	Fresh Vegetables	2.09	3.36	14.30	5.79
9	Rice	1.55	12.26	9.09	5.31
10	Condiments And Spices	1.49	2.06	10.91	4.18
Total		26.54			80.44
B. Ranked by Percentage Change					
1	Liquefied Hydrocarbons	1.00	4.15	23.64	7.02
2	Fresh Fruits	1.45	5.75	21.19	6.75
3	Motor Fuels	2.49	-0.50	17.99	15.71
4	Chicken	1.46	32.95	15.25	7.28
5	Fresh Vegetables	2.09	3.36	14.30	5.79
6	Dessert Preparation	0.01	7.83	13.91	0.04
7	Marriage Hall Charges	2.25	0.57	13.38	5.90
8	Cooking Oil	0.60	1.02	12.94	3.17
9	Vegetable Ghee	2.38	-1.02	12.35	11.79
10	Condiments And Spices	1.49	2.06	10.91	4.18
Total		15.22			67.63
C. Ranked by Weights					
1	Milk Fresh	10.38	0.91	4.63	10.71
2	House Rent	8.61	3.12	0.00	0.00
3	Solid Fuel	4.48	2.92	3.59	4.05
4	Readymade Food	3.80	3.10	4.15	4.17
5	Wheat	3.47	27.90	-6.26	-9.26
6	Electricity Charges	3.44	0.86	-1.60	-1.21
7	Wheat Flour	3.43	13.81	-2.78	-2.93
8	Cotton Cloth	2.84	0.14	0.68	0.46
9	Motor Fuels	2.49	-0.50	17.99	15.71
10	Vegetable Ghee	2.38	-1.02	12.35	11.79
Total		45.32			33.49

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 4.0 percent in February 2023.

Table A15: Top and Bottom Fifteen Contributors to Rural CPI Inflation (YoY) in February 2023

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)	
		Feb-22	Feb-23		
A. Ranked by Weighted Contribution					
1	Milk Fresh	10.38	10.42	36.06	9.43
2	Wheat	3.47	7.19	82.33	9.21
3	Onions	0.90	-5.06	517.77	6.29
4	Motor Fuels	2.49	38.93	66.73	6.06
5	Wheat Flour	3.43	18.91	48.91	4.95
6	Vegetable Ghee	2.38	44.06	42.10	4.67
7	Solid Fuel	4.48	15.11	36.32	4.57
8	Chicken	1.46	-3.15	100.14	4.05
9	Rice	1.55	8.91	74.98	4.02
10	Readymade Food	3.80	14.09	34.78	3.97
11	Condiments And Spices	1.49	-16.05	51.82	2.13
12	Washing Soaps, Detergents And Match Box	1.70	18.62	45.36	2.12
13	Tea	1.26	9.20	64.19	2.10
14	Personal Effects N.E.C.	1.21	10.72	47.08	2.04
15	Transport Services	1.80	16.72	42.20	1.99
Total		41.80			67.60
Bottom 15 Contributors					
1	Tomatoes	0.51	267.51	-58.65	-1.39
2	Postal Services	0.01	0.00	0.00	0.00
3	Newspapers	0.02	0.00	0.10	0.00
4	Garbage Collection	0.01	12.67	5.78	0.00
5	Water Supply	0.06	1.63	1.63	0.00
6	Communication Services	1.65	0.62	0.16	0.00
7	Honey	0.03	22.36	6.23	0.01
8	Motor Vehicle Tax	0.02	-5.56	24.88	0.01
9	Dental Services	0.02	5.48	26.37	0.01
10	Cleaning And Laundering	0.02	16.82	28.63	0.01
11	Accommodation Services	0.14	0.00	7.08	0.02
12	Ice Cream	0.06	6.94	12.38	0.02
13	Dessert Preparation	0.01	6.36	62.34	0.02
14	Gur	0.15	8.12	5.77	0.02
15	Major Tools And Equipments	0.03	13.17	34.42	0.03
Total		2.74			-1.24

Table A16: Top and Bottom Fifteen Contributors to Rural CPI (MoM) Inflation in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Motor Fuels	2.49	-0.50	17.99	15.71
2	Vegetable Ghee	2.38	-1.02	12.35	11.79
3	Milk Fresh	10.38	0.91	4.63	10.71
4	Chicken	1.46	32.95	15.25	7.28
5	Liquefied Hydrocarbons	1.00	4.15	23.64	7.02
6	Fresh Fruits	1.45	5.75	21.19	6.75
7	Marriage Hall Charges	2.25	0.57	13.38	5.90
8	Fresh Vegetables	2.09	3.36	14.30	5.79
9	Rice	1.55	12.26	9.09	5.31
10	Condiments And Spices	1.49	2.06	10.91	4.18
11	Readymade Food	3.80	3.10	4.15	4.17
12	Solid Fuel	4.48	2.92	3.59	4.05
13	Cooking Oil	0.60	1.02	12.94	3.17
14	Personal Effects N.E.C.	1.21	7.24	6.07	2.48
15	Washing Soaps, Detergents And Match Box	1.70	4.08	5.35	2.35
Total		38.33			96.66
Bottom 15 Contributors					
1	Wheat	3.47	27.90	-6.26	-9.26
2	Onions	0.90	8.75	-7.50	-4.14
3	Wheat Flour	3.43	13.81	-2.78	-2.93
4	Electricity Charges	3.44	0.86	-1.60	-1.21
5	Tomatoes	0.51	-37.83	-15.05	-1.18
6	Eggs	0.57	1.65	-2.09	-0.45
7	Drugs And Medicines	1.58	0.38	-0.45	-0.18
8	Honey	0.03	0.89	-0.05	0.00
9	Postal Services	0.01	0.00	0.00	0.00
10	Newspapers	0.02	0.00	0.00	0.00
11	Garbage Collection	0.01	0.00	0.00	0.00
12	Communication Services	1.65	0.00	0.00	0.00
13	Accommodation Services	0.14	0.00	0.00	0.00
14	Motor Vehicle Tax	0.02	0.00	0.00	0.00
15	Water Supply	0.06	0.00	0.00	0.00
Total		15.84			-19.35

Table A17: Top and Bottom Fifteen Contributors to MoM Rural CPI Food Inflation in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Vegetable ghee	2.38	-1.02	12.35	11.79
2	Milk fresh	10.38	0.91	4.63	10.71
3	Chicken	1.46	32.95	15.25	7.28
4	Fresh fruits	1.45	5.75	21.19	6.75
5	Fresh Vegetables	2.09	3.36	14.30	5.79
6	Rice	1.55	12.26	9.09	5.31
7	Condiments and Spices	1.49	2.06	10.91	4.18
8	Readymade Food	3.80	3.10	4.15	4.17
9	Cooking oil	0.60	1.02	12.94	3.17
10	Cigarettes	1.24	0.44	6.12	1.64
11	Milk products	0.96	1.75	5.19	1.07
12	Tea	1.26	1.42	2.79	0.99
13	Sweetmeat	0.40	1.31	6.38	0.63
14	Pulse Gram	0.28	2.52	8.85	0.58
15	Meat	1.71	0.96	1.06	0.49
Total		31.05			64.55
Bottom 15 Contributors					
1	Wheat	3.47	27.90	-6.26	-9.26
2	Onions	0.90	8.75	-7.50	-4.14
3	Wheat Flour	3.43	13.81	-2.78	-2.93
4	Tomatoes	0.51	-37.83	-15.05	-1.18
5	Eggs	0.57	1.65	-2.09	-0.45
6	Honey	0.03	0.89	-0.05	0.00
7	Ice Cream	0.06	0.00	0.00	0.00
8	Pan Prepared	0.04	0.29	1.90	0.02
9	Dessert Preparation	0.01	7.83	13.91	0.04
10	Gur	0.15	0.49	1.50	0.04
11	Mustard oil	0.01	3.23	10.09	0.05
12	Milk powder	0.11	1.59	3.66	0.08
13	Besan	0.07	2.67	5.69	0.10
14	Nimco	0.08	0.76	5.26	0.11
15	Fish	0.26	3.64	2.18	0.11
Total		9.70			-17.40

Table A18: Top and Bottom Fifteen Contributors to MoM Rural CPI Non-Food Inflation in February 2023

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)	
		Jan-23	Feb-23		
A. Ranked by Weighted Contribution					
1	Motor Fuels	2.49	-0.50	17.99	15.71
2	Liquefied Hydrocarbons	1.00	4.15	23.64	7.02
3	Marriage Hall Charges	2.25	0.57	13.38	5.90
4	Solid Fuel	4.48	2.92	3.59	4.05
5	Personal Effects n.e.c.	1.21	7.24	6.07	2.48
6	Washing Soaps, Detergents and Match Box	1.70	4.08	5.35	2.35
7	Appliances/Articles/Products for Personal	2.27	1.12	4.80	2.13
8	Household Equipments	1.28	0.67	4.06	1.21
9	Personal Grooming Services	1.54	2.06	2.86	1.17
10	Motor Vehicles	0.73	0.02	7.76	1.09
11	Transport Services	1.80	-0.99	2.23	1.00
12	Furniture and Furnishing	0.58	1.49	5.27	0.69
13	Education	2.13	0.21	1.70	0.66
14	Hospitals Services	1.01	0.00	3.10	0.54
15	Cotton Cloth	2.84	0.14	0.68	0.46
Total		27.30			46.46
Bottom 15 Contributors					
1	Electricity Charges	3.44	0.86	-1.60	-1.21
2	Drugs and Medicines	1.58	0.38	-0.45	-0.18
3	Postal Services	0.01	0.00	0.00	0.00
4	Newspapers	0.02	0.00	0.00	0.00
5	Garbage Collection	0.01	0.00	0.00	0.00
6	Communication Services	1.65	0.00	0.00	0.00
7	Accommodation Services	0.14	0.00	0.00	0.00
8	Motor Vehicle Tax	0.02	0.00	0.00	0.00
9	Water Supply	0.06	0.00	0.00	0.00
10	House Rent	8.61	3.12	0.00	0.00
11	Dental Services	0.02	0.00	5.55	0.02
12	Major Tools and Equipments	0.03	1.56	3.14	0.02
13	Cleaning and Laundering	0.02	0.69	7.41	0.03
14	Plastic Products	0.08	1.41	1.96	0.04
15	Dopatta	0.21	0.10	1.20	0.05
Total		15.89			-1.24

Table A19: Distribution of Price Changes (YoY) - Selected Urban CPI Items: February 2023

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	Tomatoes, Cauliflower (Phool Gobhi), Chilies (Green), Cardamom Small (Average Quality), Chilies Powder National 200 Gm Packet, Gur (Average Quality), Kinnu (Average Quality),	Turnip (Shalgham), Jam-E-Shireen Standard Size (800 MI),	Sugar Refined, Cardamom Large (Loose) (Average Quality), Radish (Mooli), Honey Marhaba Bottle 500 Gm,	Coriander Seed Powder National 200 Gm Packet, Spinach (Paalak), Ice Cream Walls Cup (Large Size), Lemon, Carrot (Gajar), Almonds (Badam) Kaghazi With Shell (Average Quality), Beef With Bone
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle Nuts), Cigarettes Capstan 20'S Packet, Cigarettes Gold Leaf 20'S Packet,
Clothing & Footwear	Cheetah 50 Size 3-5 Servis, Gents Shoes Servis, Children Shoes Power Lite Bata, Ladies Sandal Bata,		Vest "Baniyan" For Men Average Quality, Shirt Boy Length 24"/26", Pant Cloth Wash & Wear (Average Quality),	Women Shalwar Kameez (Average Quality), Dopatta Georgette (Average Quality), Socks Nylon Local (Average Quality), Dopatta Cotton (Average Quality), Dry Cleaning Charges Pant Coat Both, Heavy Weight Suiting Lawrance Pur (Average Quality), Gents Shoes Paul Bata, Full Pant Boy Length 24"/26", Awami Suit Gents Wash & Wear (Average Quality),
Housing, Water, Elec, Gas & other Fuels	Electricity Charges 51-100 Units, Electricity Charges Upto 50 Units,		Water Charges Per House, House Rent Combined, Electricity Charges Combined, Electricity Charges 101-300 Units,	Mason Wage Rate, Bricks New 1st Class, Charges For Refuse/Waste Collection, Painter Wage Rate, Electricity Charges Above 700 Units, Unskilled Labor Wage Rate, Electrician Charges, Plumber Wage Rate, Electricity Charges 301-700 Units, Gas Charges 10.1157 - 13.4876 Mmbtu
Furnishing & Household Equip. Maintenance etc			Bed Sheet Double With Two Pillow Covers (Superior Quality), Bed Sheet Single (Superior Quality),	Plain Carpet, Bucket (Balti) Plastic Medium Size, Dinner Set Plastic 72 Pieces Super Quality, Sofa Set Five Seater, Water Set (Omroc) 6 Glasses + Jug, Household Servant Female Part Time, Air Cooler Super Asia Ecm-4000/Jc-1000, Towel Medium Size (3' X 2'), Dining Table Wit
Health		Ventolin Tablets 2 Mg, Electronic Bp Checking Apparatus, Physiotherapist Fee Per Visit, Flayyl Tablets 400 Mg, Phenergan Syrup 120 MI Bottle,	Sugar Test (Random/Fasting) Charges Of Both, Glucometer, Amoxil Capsule 250 Mg, Gynecologist Fee Per Visit, Cac 1000 Tablets Sandoz Bottle, Cost Of Surgery (C-Section), Lederplex Syrup Bottle, Daonil Tablets 5 Mg,	Betnovate-N Ointment 10 Gm Tube, Dental Extraction Fee, Dental Surgeon Fee Per Visit, Ecg Charges, Inderal Tablets 10 Mg, Urine Test (Dr) Charges, Blood Test (Cp) Charges, Septran Tablets, Ultrasound Abdominal, Calpol Syrup 100 MI Bottle, Johar Joshanda Instant (Sachet) Packet,
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, Motorcycle Service Charges, Tire Car Puncture Charges, Cng, Mini Bus Fare Minimum Within City, Car Toyota 1300 Cc Xli, Bus Fare Minimum Within City, Taxi Four Seater Fare, Bus Fare Maximum
Communication	Mobile Call Charges, Telephone Call Charges,	Internet Charges (Dsl) 1 Mb (Unlimited),		Courier Charges Minimum Within Zone Outside City (Tcs), Mobile Set With Rear Camera And Without Touch Screen,
Recreation & Culture	Newspaper Daily Jang, Mag The Weekly (Magazine),		Akhbar-E-Jehan Weekly, Urdu Book Ba/B.Sc, Recreational Park Charges (Minimum Playland Ticket),	Cable Charges, Newspaper Daily Dawn, Led Sony/Samsung 32" Colored, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Laptop Dell/Hp/Acer Core I5, Display (14'-15'), English Book Ba/B.Sc, Pen Ink Dollar 57 MI Bottle, Exercise Book (With Lines) 80 To 100
Education		Government College Fee First Year, Government University Fee M.S.C / M.A., Coaching Fee For Class Xi/Xii Science Group, Vocational Training Basic Computer Short Course Fee (3	Coaching Fee For Class Ix/X Science Group, Government Medical College/University Tuition Fee For Mbbs (1St Year), Tuition Fee Private University M.Sc./M.A.,	Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class V), Private School Fee English Medium Average Standard (Class
Restaurant & Hotels		Government Hostel Accommodation Fee For Intermediate College Per Student,		Private Hostel Accommodation Fee For Intermediate College Per Student, Marriage Hall Service Charges With Food (Average Meal), Pizza Chicken Medium Size (Average Quality), Cooked Daal At Average Hotel, Seekh Kabab (Beef)
Miscellaneous			Purse Ladies Medium Size (Average Quality),	Electric Hair Straightener (Philips), Hair Style Charges (At Average Beauty Parlor), Tooth Brush (Shield), Artificial Jewelry (Locket Set) (Average Quality), Nail Polish Swiss Miss/Medora (Medium), Wall Clock Quartz (Average Quality), Perfume Medium Size Broche/Medora, Shaving Cream

Table A20: Distribution of Price Changes (YoY) - Selected Rural CPI Items: February 2023

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	Tomatoes, Chilies (Green), Cauliflower (Phool Gobhi),	Jam-E-Shireen Standard Size (800 Ml),	Gur (Average Quality), Sugar Refined, Honey Marhaba Bottle 500 Gm,	Radish (Mooli), Turnip (Shalgham), Ice Cream Walls Cup (Large Size), Potatoes, Garlic (Lehsun), Beef With Bone (Average Quality), Cold Drink (Pepsi/Coca-Cola) 1.5 Liter Bottle, Fruit Juice Small Packet 250 Ml, Almonds (Badam) Kaghazi With Shell (Average Quality), Fish Fresh, Mutton
Alcoholic Beverages & Tobacco				Tobacco Hukka Twisted, Pan Prepared (Sweet With Beetle Nuts), Chewing Tobacco (Niswar), Cigarettes Gold Leaf 20'S Packet, Cigarettes Capstan 20'S Packet,
Clothing & Footwear				Dopatta Georgette (Average Quality), Footware Gents Local (Average Quality), Shirting (Average Quality), Chaddar (Wash-N-Wear) (2X2.5 Meter), Lawn Printed (Average Quality), Full Pant Boy Length 24"/26", Long Cloth, Pullover Ladies (Average Quality), Shirt Boy Length 24"/26", Georgette (Average Quality), Footware Ladies Local (Average Quality),
Housing, Water, Elec, Gas & other Fuels	Electricity Charges 51-100 Units, Electricity Charges Upto 50 Units,	Water Charges Per House,	Charges For Refuse/Waste Collection, House Rent Combined, Electricity Charges Combined, Electricity Charges 101-300 Units,	Carpenter Wage Rate, Plumber Wage Rate, Painter Wage Rate, Mason Wage Rate, Electricity Charges Above 1000 Units, Unskilled Labor Wage Rate, Electricity Charges 301-1000 Units, Electrician Charges, Bricks New 1St Class, Coal,
Furnishing & Household Equip. Maintenance etc				Bucket (Balti) Plastic Medium Size, Aluminium Cooking Pan (Degchi), Water Set (Omroc) 6 Glass, Dinner Set Plastic 72 Pieces Super Quality, Blanket Single (Sn), Readymade Quilt (3 Kg), Cot Iron (Charpai), Towel Medium Size (2' X 3'),
Health			Hydryllin Syrup 120 Ml Bottle, Cost Of Surgery (C-Section), Physiotherapist Fee Per Visit, Cac 1000 Tablets Sandoz Bottle, Daonil Tablets 5 Mg, Amoxil Capsule 250	Blood Test (Cp) Charges, Inderal Tablets 10 Mg, X-Ray (Chest) Charges, Johar Joshanda Instant (Sachet) Packet, Doctor (Mbbs) Clinic Fee, Dental Surgeon Fee Per Visit, Panadol Tablets Plain, Dettol Medium
Transport	Car Suzuki 800 Cc Without Ac,			Bus Fare Outside City (Non Ac), Motorcycle Service Charges, Cng, Air Fare Economy Class Per Kilometer, Car Tax 800 Cc To 1500 Cc, Tire Cycle, Tire Motorcycle Cd 70 (Back Wheel), Bicycle, Tire Car Mehran Tubeless (General), Mobil
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, Ballpoint Pen Local, Lead Pencil Goldfish, Exercise Book (With Lines) 80 To 100 Pages, Pets Feed, English Books Class Vi, English Books Class Vi Complete Set, Urdu
Education			Vocational Training Basic Computer Short Course Fee (3 Months) ,	Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class I), Private School Fee English Medium Average Standard (Class V), Coaching Fee For Class Ix/X Science Group,
Restaurant & Hotels	Government Hostel Accommodation Fee For Intermediate College Per Student,			Marriage Hall Charges With Furniture, Cooked Beef At Average Hotel, Pizza Chicken Medium Size (Average Quality), Private Hostel Accommodation Fee For Intermediate College Per Student, Cooked Daal At Average Hotel, Tea Prepared
Miscellaneous				Tooth Brush (Shield), Talcum Powder Viceroy/Black Cat, Shaving Cream (Touchme Large/Admiral), Tooth Paste Colgate 75 Gm, Hair Color (Kala Kola), Trunk Medium Size (Average Quality), Blade Treet Ordinary (10 No. Packet), Shampoo Sun Silk/Pantene 90 Ml Bottle, Shaving Charges, Hair Removing Cream

Table A21: Distribution of Price Changes (YoY) - WPI Items: February 2023

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

Table A22: International Commodity Prices/Indices

Commodity/Indices	Jun-21	Feb-22	Jan-23	Feb-23
Energy				
Crude Oil (US\$ per barrel)*	71.8	93.5	80.4	80.3
Energy Index (2010 = 100)	93.9	133.3	119.3	110.6
Food				
Rice (\$/MT)	466.0	427.0	517.0	492.0
Wheat (\$/MT)##	285.6	390.5	380.4	394.8
Sugar, World (\$/KG)	0.4	0.4	0.4	0.4
Palm Oil (\$/MT)	1,004.4	1,522.4	942.0	950.0
Soybean Oil (\$/MT)	1,518.2	1,595.7	1,351.8	1,243.0
Non-Food Non-Energy				
Cotton Outlook 'A' Index (\$/KG) #	2.1	3.1	2.2	2.2
Metal Price Index (2010 = 100)	119.0	138.9	121.0	117.8
Copper (\$/MT)	9,631.5	9,943.2	9,038.0	8,936.6
Aluminum (\$/MT)	2,446.7	3,245.8	2,501.8	2,416.2
Iron Ore (\$ cents/dry MT)	214.4	142.8	122.2	127.6
Tin (\$/MT)	32,502.6	43,983.4	28,154.1	26,862.9
Nickel (\$/MT)	17,979.6	24,015.6	28,194.6	26,728.0
Zinc (\$/MT)	2,951.9	3,620.0	3,309.8	3,133.8
Lead (\$/MT)	2,191.0	2,296.9	2,201.3	2,093.1
Uranium (\$/MT)@	32.3	48.8	50.6	50.9
DAP (\$/MT)	604.8	747.1	631.0	612.5
Urea (\$/MT)	393.3	744.2	443.8	357.5

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 December 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	196.86
Jan	116.12	133.04	140.56	158.78	202.53
Feb	117.12	131.64	143.09	160.61	211.28
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	114.03	123.63	135.19	146.60	183.21
Aug	113.76	125.76	136.13	147.54	187.75
Sep	113.51	126.46	137.91	150.31	185.16
Oct	115.31	128.04	139.43	152.25	192.69
Nov	115.11	129.66	140.46	156.66	193.97
Dec	115.89	130.52	140.93	158.25	196.98
Jan	116.29	133.20	140.71	158.91	202.67
Feb	117.64	132.10	143.47	160.92	211.56
Mar	120.04	132.26	144.17	162.46	
Apr	120.39	130.67	145.18	164.60	
May	121.81	131.87	146.23	166.38	
Jun	122.48	133.08	146.01	177.25	

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	191.46
Jan	117.07	132.77	139.45	157.56	195.97
Feb	118.08	131.32	142.61	159.03	204.87
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	114.54	124.57	134.38	146.06	180.60
Aug	114.24	126.43	135.49	146.77	185.26
Sep	114.15	127.39	137.20	149.73	181.49
Oct	116.27	128.92	138.39	151.63	188.90
Nov	116.16	130.17	139.22	155.92	189.55
Dec	116.94	131.00	140.13	157.99	192.13
Jan	117.21	132.89	139.53	157.60	195.97
Feb	118.60	131.77	142.99	159.36	205.18
Mar	120.98	132.17	143.68	160.80	
Apr	121.15	130.45	144.73	162.42	
May	122.56	131.49	145.76	163.78	
Jun	123.19	132.68	145.49	174.46	

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	205.00
Jan	114.68	133.44	142.23	160.62	212.43
Feb	115.68	132.13	143.82	162.99	220.95
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	113.26	122.22	136.42	147.40	187.15
Aug	113.05	124.74	137.11	148.69	191.52
Sep	112.54	125.07	138.99	151.19	190.69
Oct	113.85	126.71	141.00	153.18	198.40
Nov	113.52	128.90	142.33	157.77	200.64
Dec	114.30	129.81	142.14	158.64	204.30
Jan	114.90	133.68	142.49	160.90	212.78
Feb	116.20	132.59	144.18	163.28	221.18
Mar	118.63	132.38	144.90	164.96	
Apr	119.24	131.00	145.86	167.89	
May	120.69	132.44	146.93	170.30	
Jun	121.41	133.68	146.78	181.46	

Table A26: National CPI Monthly & Average Seasonal Factors						
Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.22	100.18	100.14	100.11	100.08	100.15
Aug	100.15	100.11	100.07	100.05	100.05	100.09
Sep	100.34	100.32	100.29	100.28	100.28	100.30
Oct	100.87	100.88	100.89	100.89	100.90	100.89
Nov	100.93	100.96	100.98	100.97	100.99	100.96
Dec	99.94	99.94	99.95	99.94	99.94	99.94
Jan	99.85	99.88	99.90	99.92	99.93	99.89
Feb	99.55	99.65	99.74	99.81	99.87	99.72
Mar	99.52	99.57	99.61	99.64		99.59
Apr	99.95	99.94	99.94	99.94		99.94
May	99.37	99.35	99.32	99.31		99.34
Jun	99.30	99.25	99.19	99.13		99.22

Table A27: Urban CPI Monthly & Average Seasonal Factors						
Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.35	100.31	100.26	100.24	100.20	100.27
Aug	100.30	100.27	100.25	100.24	100.25	100.26
Sep	100.29	100.26	100.24	100.23	100.22	100.25
Oct	100.66	100.65	100.64	100.63	100.62	100.64
Nov	100.68	100.68	100.67	100.66	100.66	100.67
Dec	99.68	99.67	99.67	99.66	99.65	99.67
Jan	99.88	99.91	99.95	99.98	100.00	99.94
Feb	99.56	99.66	99.73	99.79	99.85	99.72
Mar	99.43	99.48	99.52	99.54		99.49
Apr	100.11	100.12	100.12	100.13		100.12
May	99.64	99.62	99.61	99.60		99.62
Jun	99.46	99.41	99.35	99.30		99.38

Table A28: Rural CPI Monthly & Average Seasonal Factors						
Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.03	100.00	99.95	99.92	99.89	99.96
Aug	99.92	99.86	99.80	99.77	99.75	99.82
Sep	100.42	100.39	100.37	100.37	100.36	100.38
Oct	101.21	101.24	101.27	101.28	101.29	101.26
Nov	101.33	101.37	101.41	101.43	101.46	101.40
Dec	100.35	100.36	100.36	100.36	100.34	100.35
Jan	99.81	99.81	99.82	99.83	99.83	99.82
Feb	99.55	99.65	99.75	99.82	99.90	99.73
Mar	99.64	99.71	99.76	99.80		99.73
Apr	99.71	99.68	99.66	99.65		99.68
May	98.97	98.93	98.90	98.88		98.92
Jun	99.08	99.01	98.95	98.89		98.98

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	-0.01	0.50
Jan	0.26	1.99	-0.21	0.39	2.88
Feb	0.86	-1.05	1.80	1.15	4.32
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	0.63	0.94	1.59	0.41	3.36
Aug	-0.24	1.72	0.70	0.64	2.48
Sep	-0.22	0.56	1.31	1.88	-1.38
Oct	1.58	1.25	1.10	1.29	4.07
Nov	-0.18	1.27	0.74	2.90	0.67
Dec	0.68	0.67	0.33	1.02	1.55
Jan	0.34	2.05	-0.16	0.42	2.89
Feb	1.16	-0.83	1.96	1.26	4.39
Mar	2.04	0.12	0.49	0.96	
Apr	0.29	-1.20	0.70	1.32	
May	1.18	0.92	0.72	1.08	
Jun	0.55	0.92	-0.15	6.54	

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	0.35
Jan	0.43	1.68	-0.16	0.06	2.36
Feb	0.86	-1.09	2.27	0.93	4.54
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	0.55	1.12	1.28	0.39	3.52
Aug	-0.27	1.49	0.83	0.48	2.58
Sep	-0.07	0.76	1.26	2.02	-2.03
Oct	1.86	1.20	0.87	1.27	4.08
Nov	-0.10	0.97	0.60	2.83	0.35
Dec	0.68	0.64	0.65	1.33	1.36
Jan	0.23	1.44	-0.43	-0.25	2.00
Feb	1.19	-0.84	2.49	1.12	4.70
Mar	2.00	0.31	0.48	0.91	
Apr	0.15	-1.31	0.73	1.01	
May	1.16	0.80	0.71	0.84	
Jun	0.52	0.90	-0.19	6.52	

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	0.70
Jan	-0.02	2.43	-0.29	0.89	3.62
Feb	0.87	-0.98	1.12	1.48	4.01
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	0.76	0.67	2.05	0.42	3.13
Aug	-0.19	2.06	0.50	0.87	2.33
Sep	-0.44	0.26	1.38	1.68	-0.43
Oct	1.16	1.31	1.45	1.32	4.04
Nov	-0.29	1.73	0.94	2.99	1.13
Dec	0.69	0.71	-0.13	0.56	1.82
Jan	0.52	2.98	0.25	1.42	4.15
Feb	1.13	-0.81	1.19	1.48	3.95
Mar	2.09	-0.16	0.50	1.03	
Apr	0.51	-1.04	0.66	1.78	
May	1.22	1.10	0.73	1.43	
Jun	0.60	0.94	-0.10	6.56	

Figures

Figure A1: National CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent) – February 2023

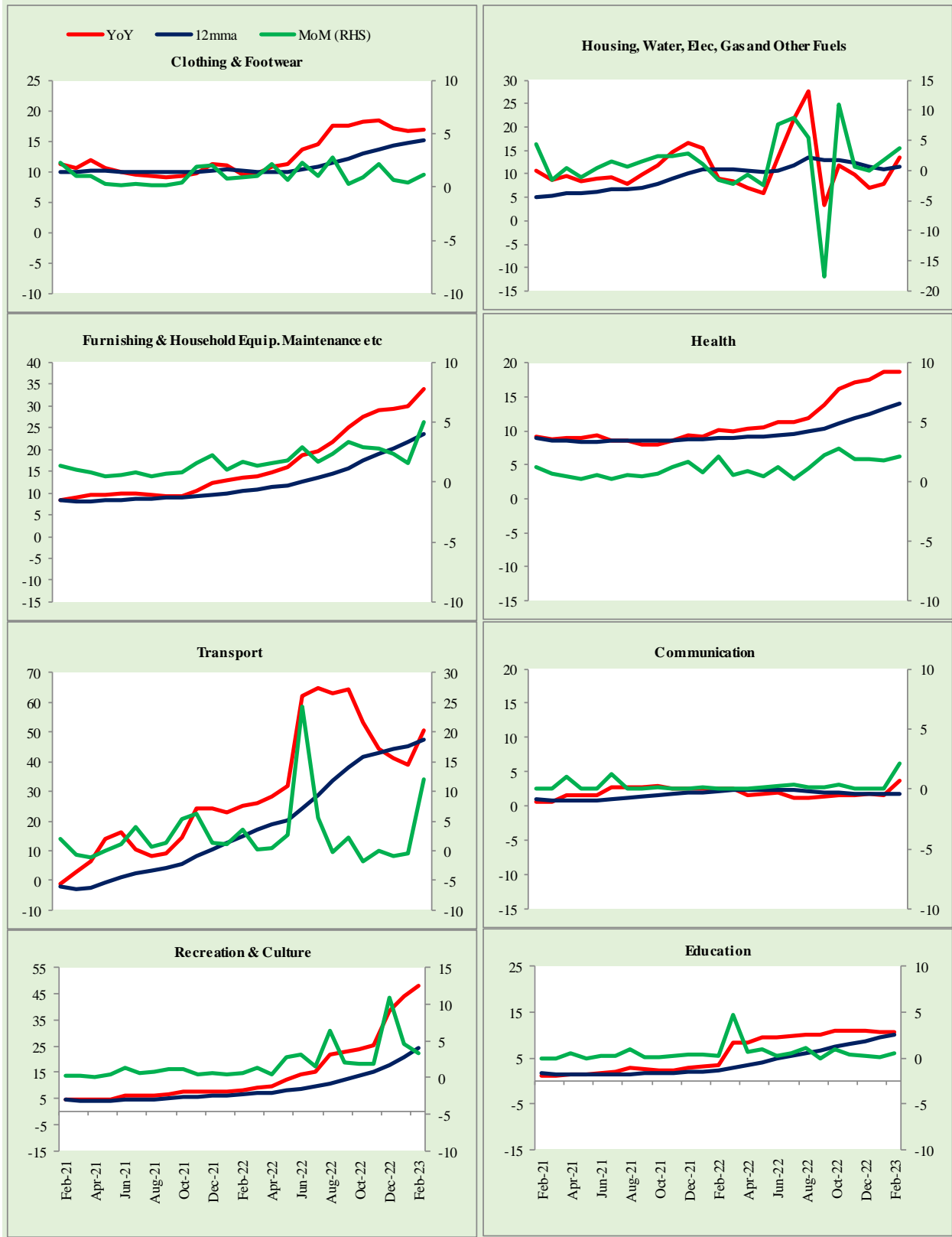


Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent) – February 2023

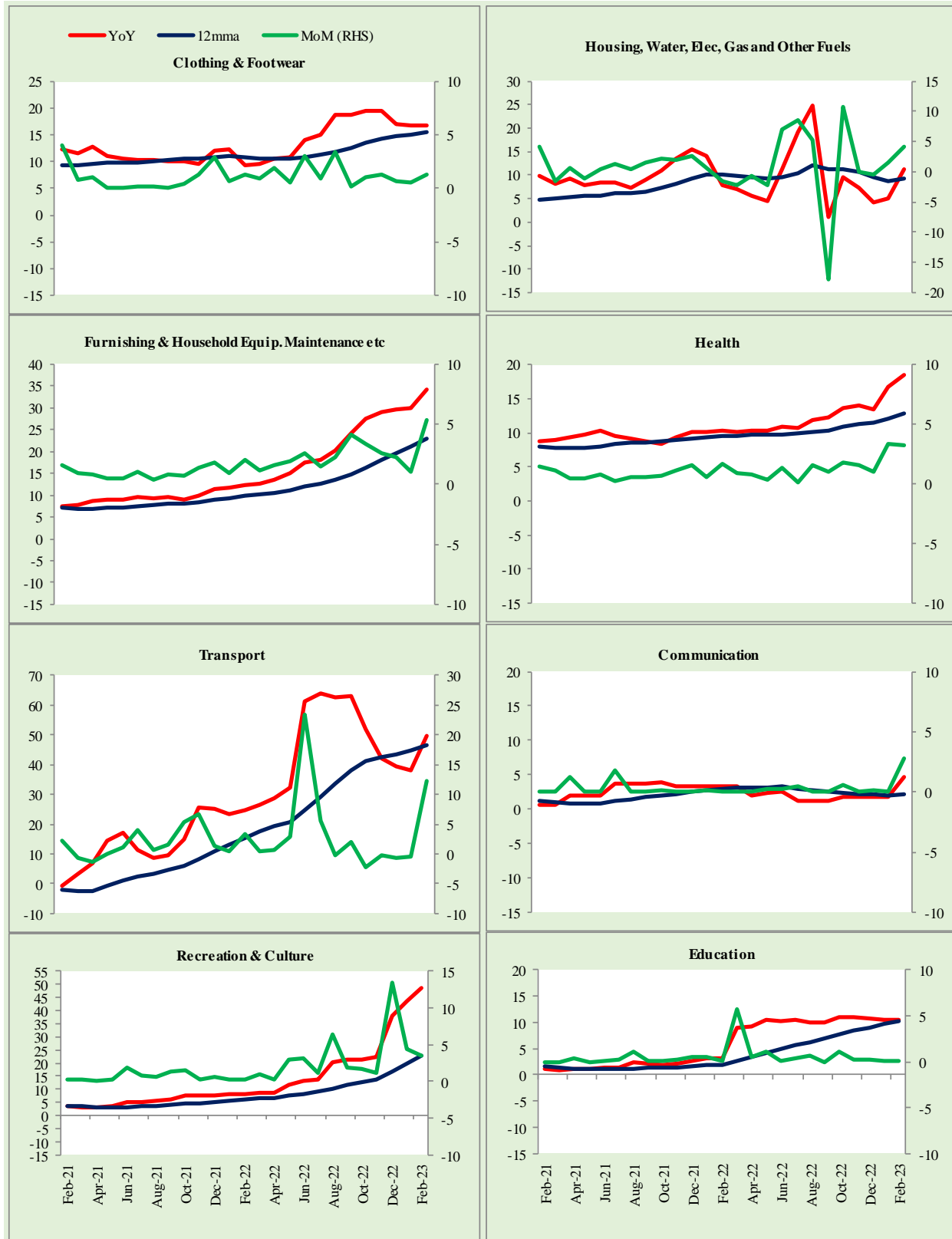
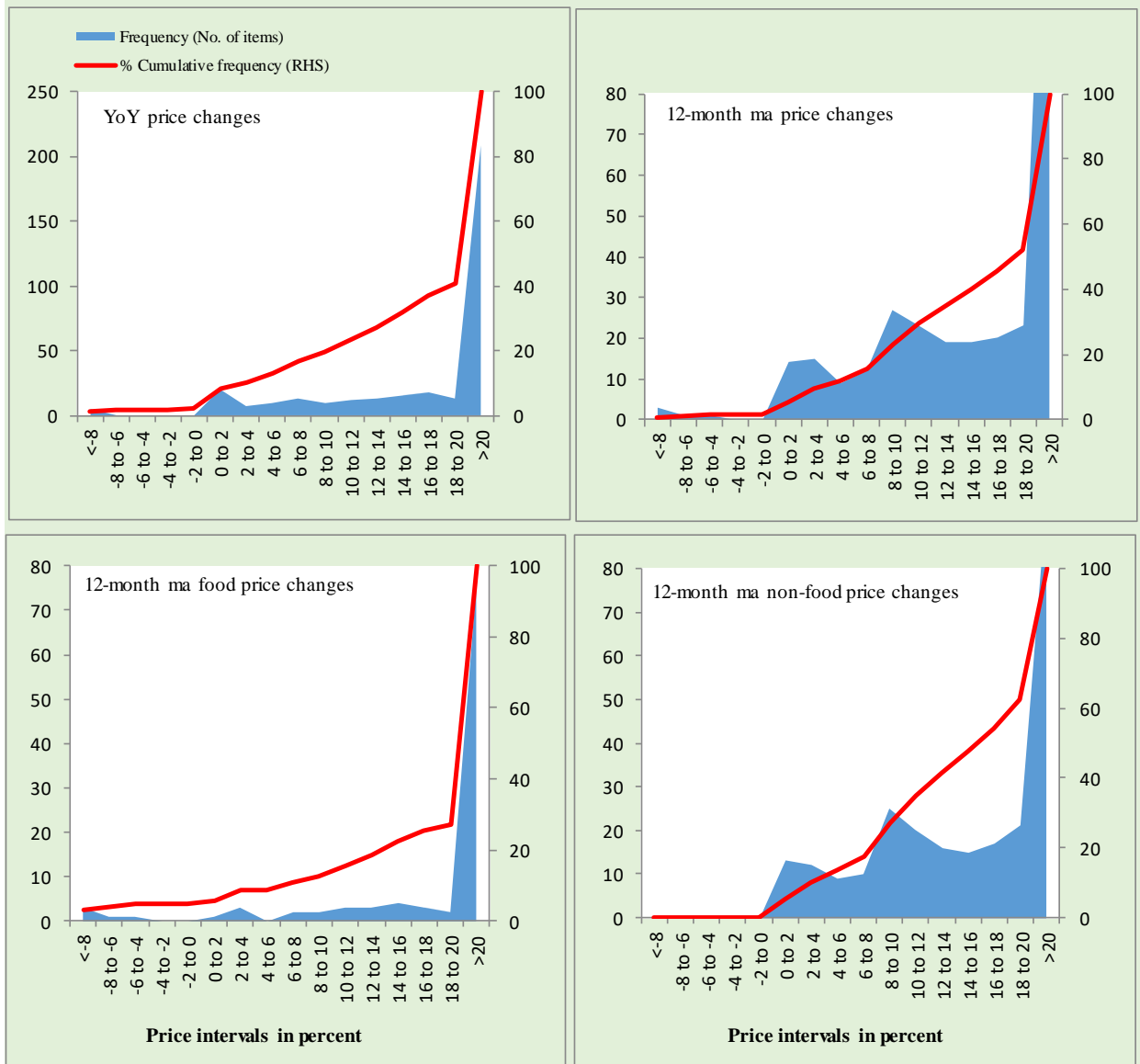


Figure A3: Rural CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent) – February 2023

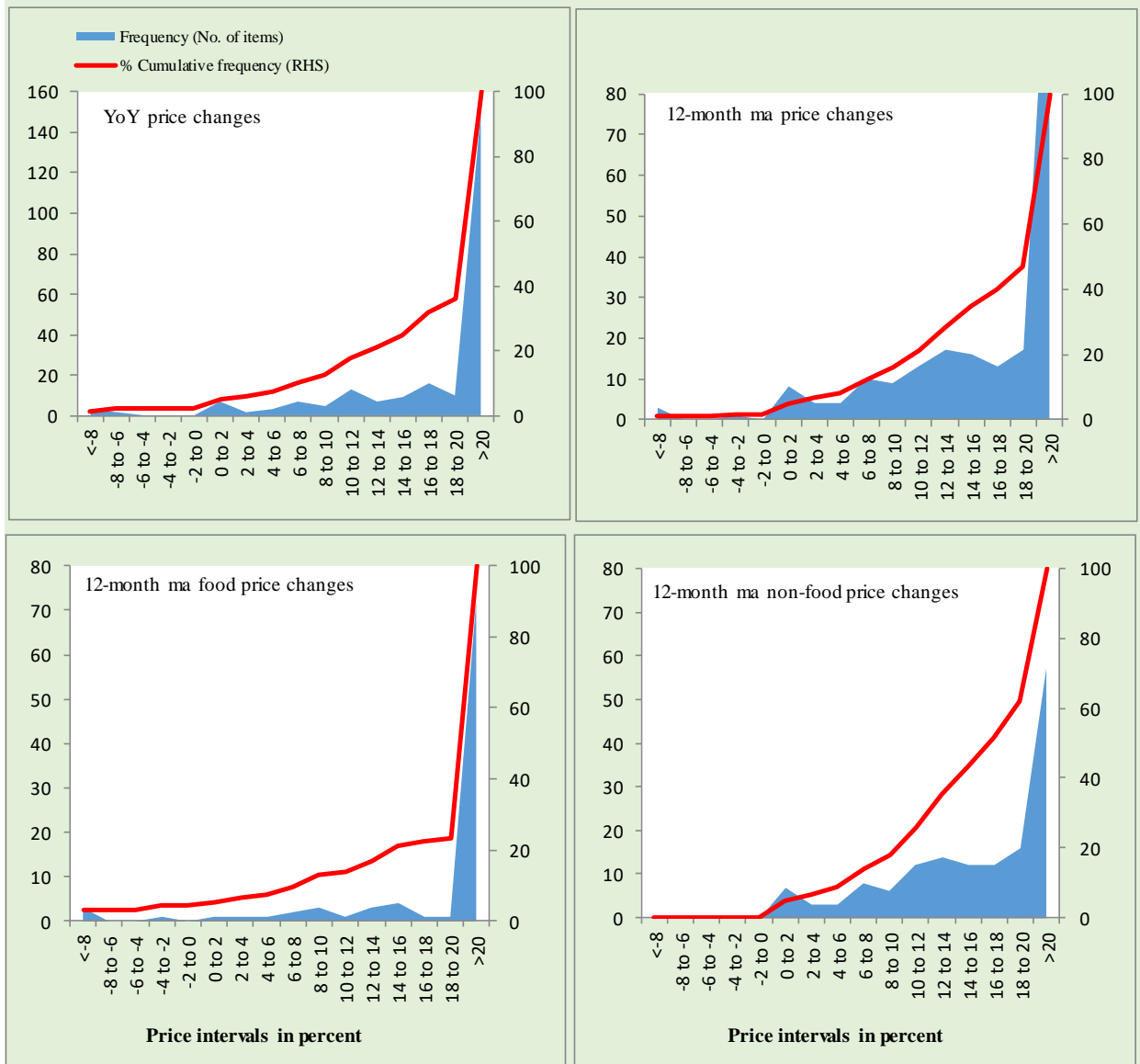


Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY) – February 2023



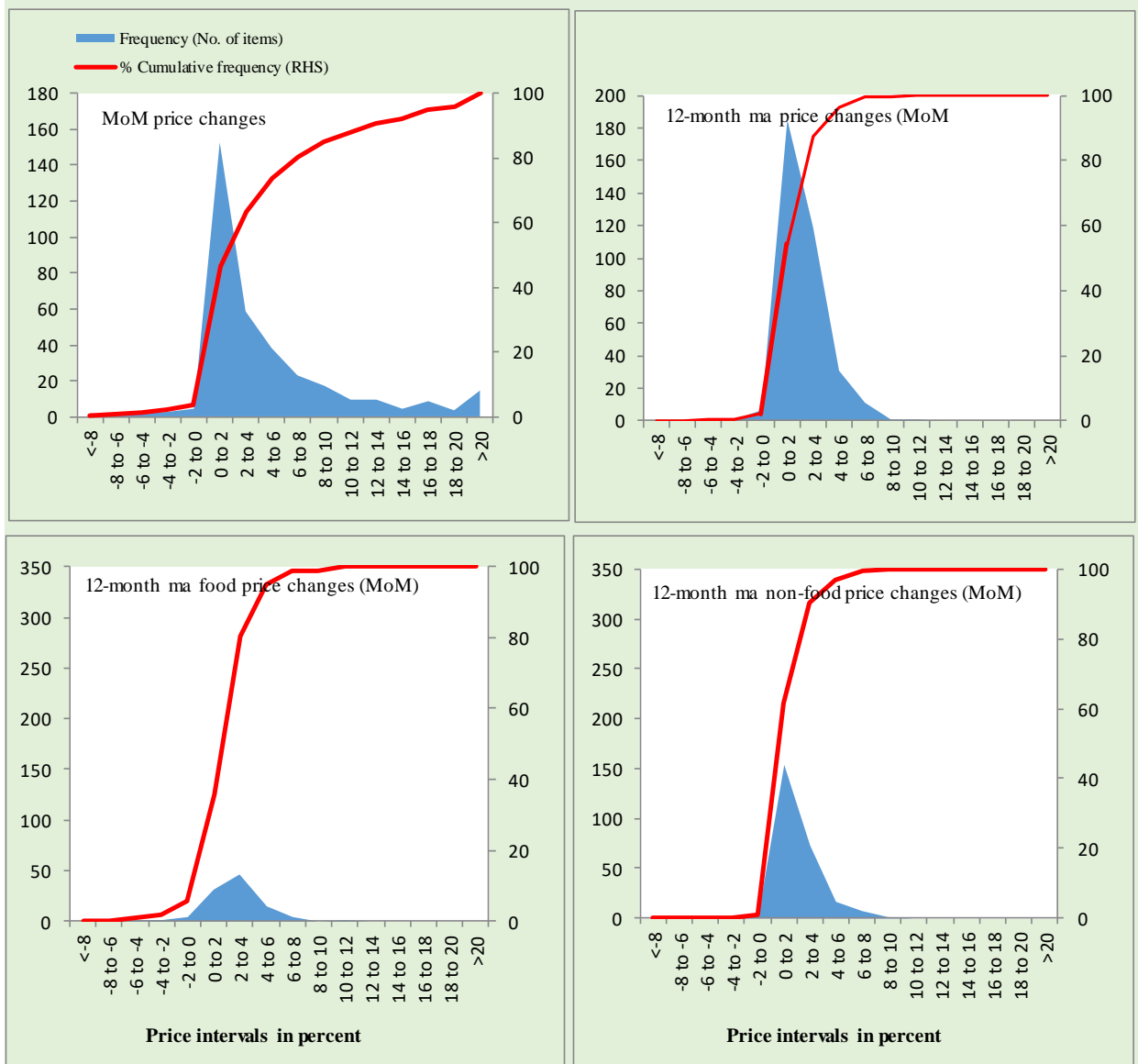
Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

Figure A5: Frequency Distribution of Price Changes of Rural CPI Items (YoY) – February 2023



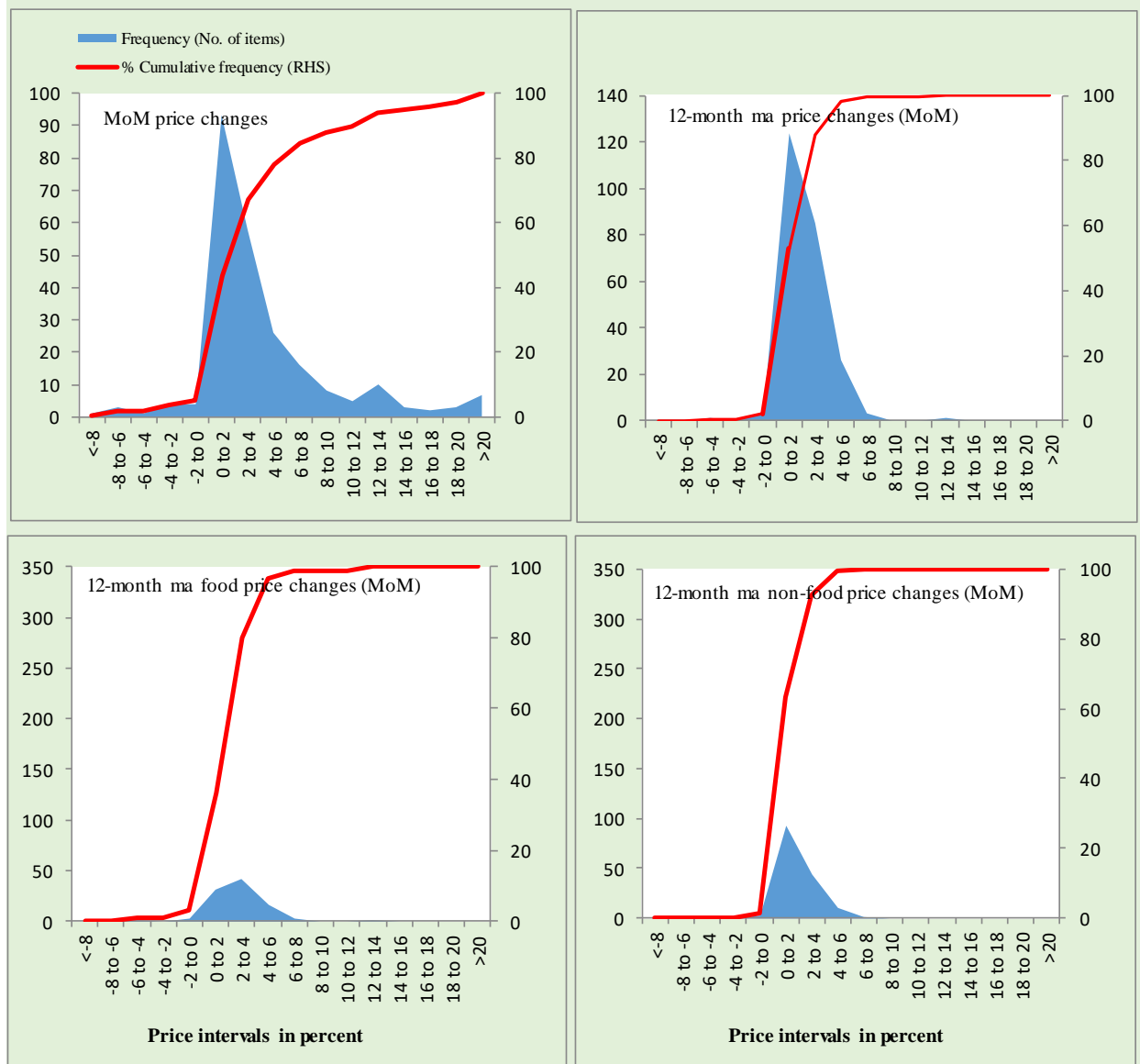
Total Items in CPI Basket (244), Food Items (94) and non-Food Items (150).

Figure A6: Frequency Distribution of Price Changes of Urban CPI Items (MoM) – February 2023



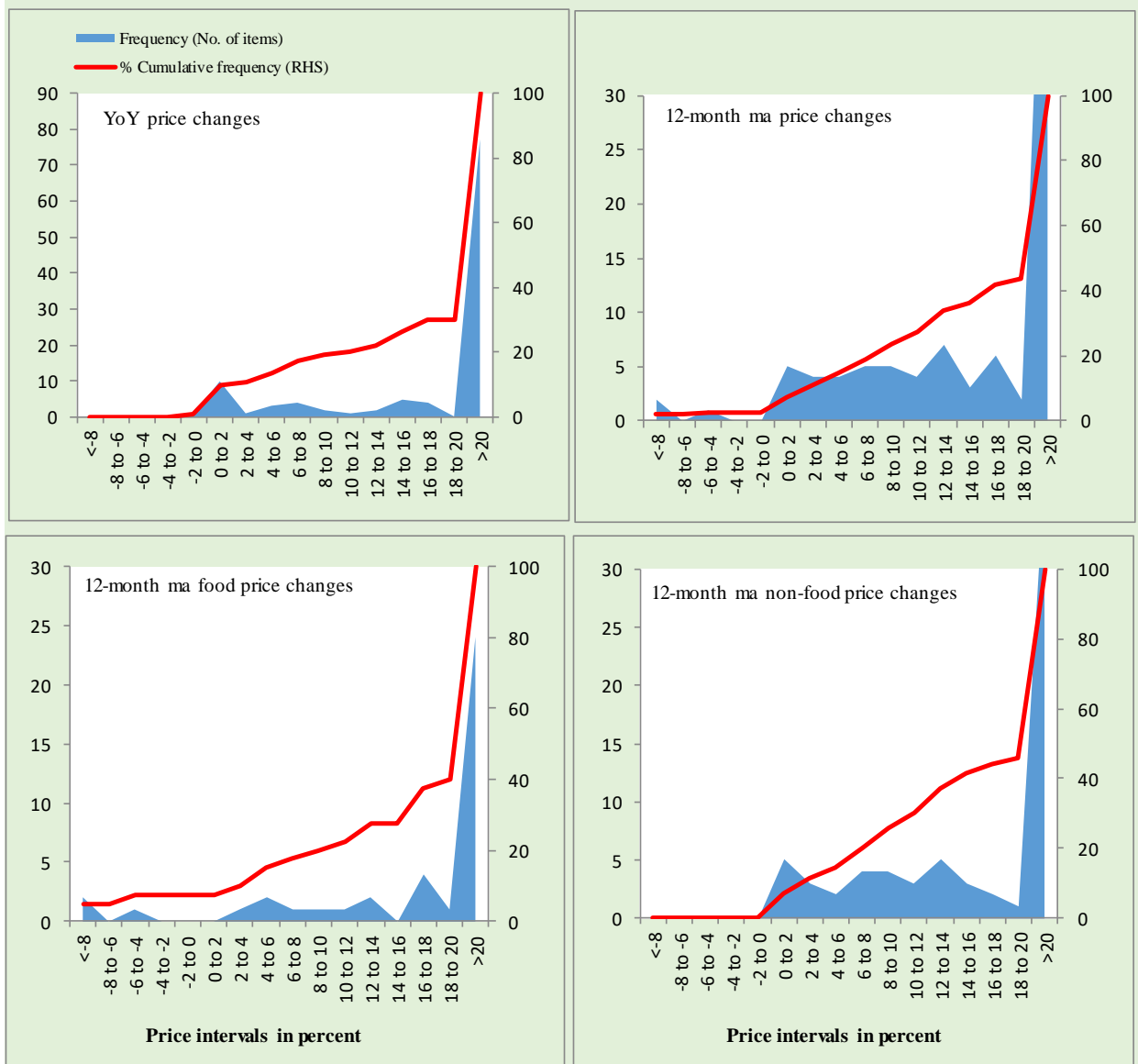
Total Items in CPI Basket (356), Food Items (103) and non-Food Items (253).

Figure A7: Frequency Distribution of Price Changes of Rural CPI Items (MoM) – February 2023



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) – February 2023



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

Technical Notes

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

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

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

2. Base year for all the indices is the year 2015-16.
3. CPI baskets for urban and rural areas contains 356 and 244 consumers' items respectively; WPI basket contains 419 items; SPI contains 51 items.
4. YoY inflation is the percent change of an index in a given month over the index in the same month of the last year. It is computed as follows:

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

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

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

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

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

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

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

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

8. Core Inflation is defined as the persistent component of measured inflation that excludes volatile and controlled prices. It reflects the normal supply and demand conditions in the economy. Core inflation is computed by the following two methods i.e. NFNE inflation and trimmed inflation:

- a) Non-food, Non-energy inflation (NFNE inflation); it is computed by excluding food group and energy items (kerosene oil, petrol, diesel, CNG, electricity and natural gas) from the CPI basket.

- b) 20% trimmed-mean inflation; it is computed through the following steps:
- i. All CPI items are arranged in ascending order according to YoY/12-month moving average/monthly/period average changes in their price indices in a given month.
 - ii. 20 percent of the items showing extreme changes are excluded with 10 percent of the items at the top of the list (corresponding to cumulative weight of 90% or more) and 10 percent of the items at the bottom of the list (corresponding to cumulative weight of 10 percent or less).
 - iii. The weighted mean of the changes in price indices of the rest of the items is core inflation.
9. Weighted contribution of different items (or sub-groups) to total inflation is worked out as below:
Let the overall index (I_t) is the weighted average of price indices of individual items or sub-groups (I_{it}), i.e.

$$I_t = \sum_i w_i \cdot I_{it}$$

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

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

Where C_{it} : Contribution of i^{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 December 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.