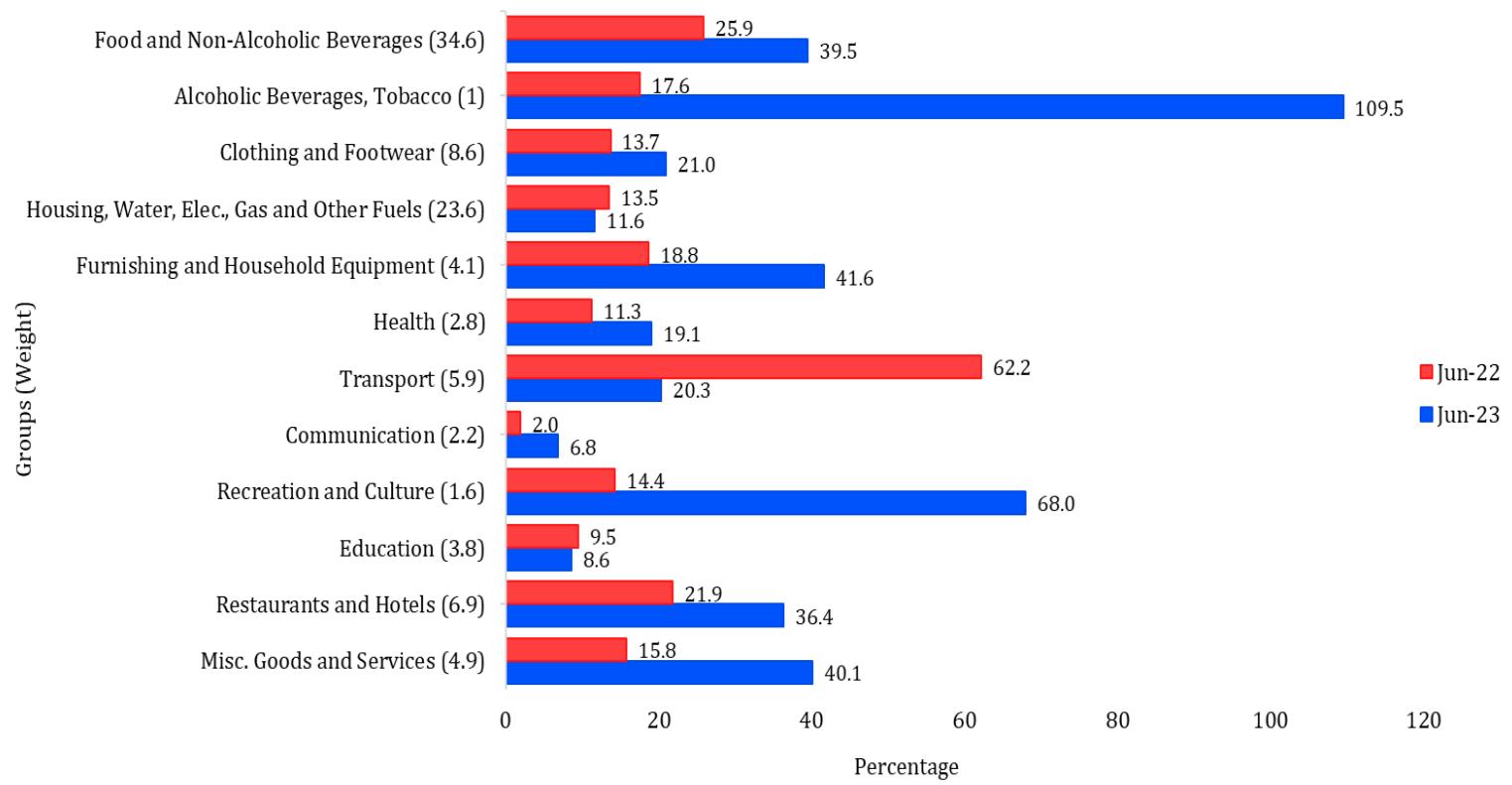




Inflation Monitor

June 2023

Group-wise National CPI Inflation



State Bank of Pakistan
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The analysis in this document is based on data

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

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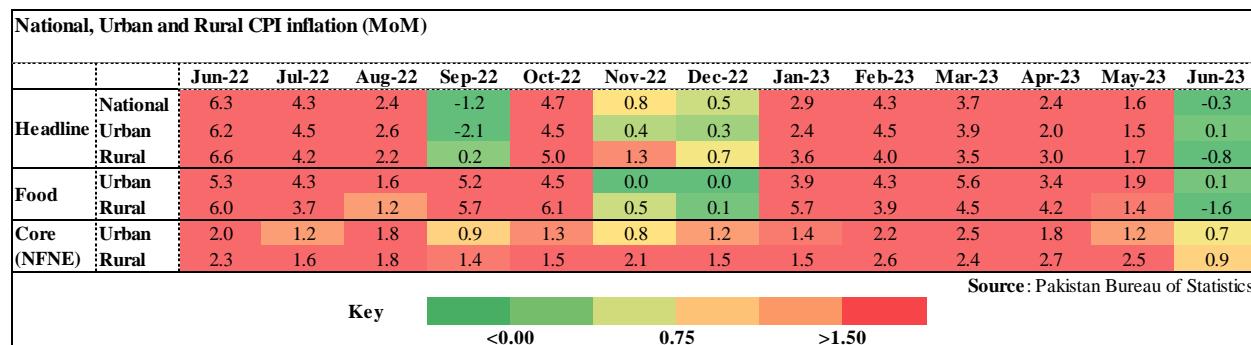
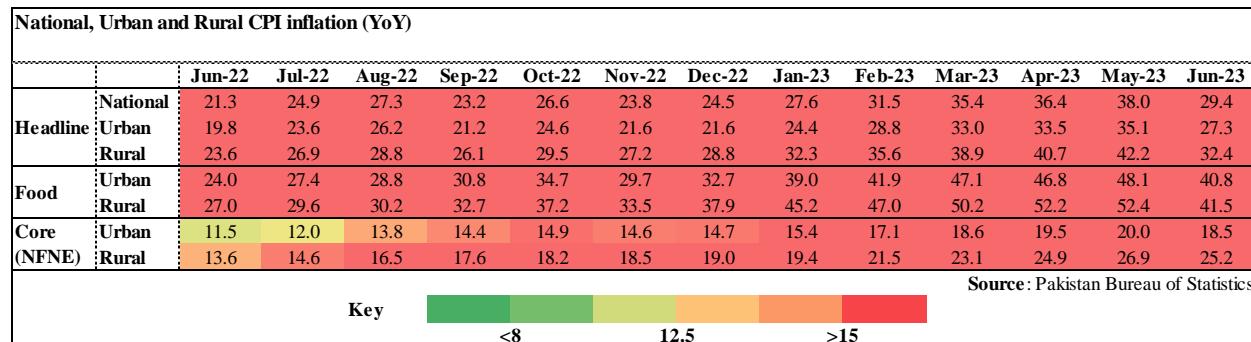
1. Inflation in Brief

- I. National CPI Inflation on year-on-year (YoY) basis decreased to 29.4 percent in Jun 2023 from 38.0 percent in previous month. It stood at 21.3 percent in the corresponding month of last year. On month-on-month (MoM) basis, National CPI showed a deflation of 0.3 percent in Jun 2023 as compared to an inflation of 1.6 percent in previous month. It was recorded 6.3 percent during the corresponding month of last year.
- II. Urban CPI Inflation (YOY) decreased to 27.3 percent in Jun 2023 from 35.1 percent in previous month. It stood at 19.8 percent during the corresponding month of last year. On MoM basis, Urban CPI Inflation decreased to 0.1 percent in Jun 2023 from 1.5 percent in the previous month. It stood at 6.2 percent during the corresponding month of last year. Seasonally adjusted MoM CPI showed an inflation of 0.8 percent in Jun 2023 compared to an inflation of 1.7 percent in the previous month.
- III. Rural CPI Inflation (YoY) decreased to 32.4 percent in Jun 2023 from 42.2 percent in previous month. It was recorded 23.6 percent during the corresponding month of last year. Rural CPI Inflation (on MoM basis) showed a deflation of 0.8 percent in Jun 2023 as compared to an inflation of 1.7 percent in the previous month. It stood at 6.6 percent during the corresponding month of last year. Seasonally adjusted (MoM) CPI showed a deflation of 0.4 percent in Jun 2023 as compared to an inflation of 2.5 percent in previous month.
- IV. Urban Core (Non-food, Non-energy (NFNE)) Inflation on YoY basis decreased to 18.5 percent in Jun 2023 from 20.0 percent in previous month. It stood at 11.5 percent during the corresponding month of last year. On MoM basis, Urban Core (NFNE) Inflation decreased to 0.7 percent in Jun 2023 from 1.2 percent in previous month. It stood at 2.0 percent during the corresponding month of last year.
- V. Rural Core (Non-food, Non-energy (NFNE)) Inflation on YOY basis decreased to 25.2 percent in Jun 2023 from 26.9 percent in previous month. It stood at 13.6 percent during the corresponding month of last year. On MoM basis, Rural Core (NFNE) Inflation decreased to 0.9 percent in Jun 2023 from 2.5 percent in previous month. It was recorded 2.3 percent during the corresponding month of last year.
- VI. Urban Core Inflation (trimmed) on YoY basis decreased to 22.9 percent in Jun 2023 from 30.5 percent in previous month. It stood at 16.7 percent during the corresponding month of last year. On MoM basis, Urban Core Inflation (trimmed) decreased to 0.8 percent in Jun 2023 from 1.5 percent in previous month. It stood at 3.5 percent during the corresponding month of last year.
- VII. Rural Core Inflation (trimmed) on YoY basis decreased to 29.9 percent in Jun 2023 from 38.8 percent in previous month. It was recorded 19.1 percent during the corresponding month of last year. On MoM basis, Rural Core Inflation (trimmed) decreased to 0.1 percent in Jun 2023 from 2.0 percent in previous month. It stood at 4.3 percent during the corresponding month of last year.

- VIII. WPI Inflation on YoY basis decreased to 22.4 percent in Jun 2023 from 32.8 percent in previous month. It stood at 38.9 percent during the corresponding month of last year. On MoM basis, WPI Inflation showed a deflation of 0.3 percent in Jun 2023 as compared to an inflation of 1.0 percent in previous month. It stood at 8.2 percent during the corresponding month of last year.
- IX. SPI (combined) Inflation on YoY basis decreased to 36.0 percent in Jun 2023 from 47.0 percent in previous month. During the corresponding month of last year, SPI Inflation stood at 26.5 percent. On MoM basis, SPI inflation decreased to 0.04 percent in Jun 2023 from 1.3 percent in previous month. SPI Inflation stood at 8.1 percent during the 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 CPI inflation (YoY)

	Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	100.00	21.3	24.9	27.3	23.2	26.6	23.8	24.5	27.6	31.5	35.4	36.4	38.0	29.4
Food and Non-Alcoholic Beverages	34.58	25.9	28.8	29.5	31.7	36.2	31.2	35.5	42.9	45.1	47.2	48.1	48.7	39.5
Alcoholic Beverages, Tobacco	1.02	17.6	22.5	25.8	32.7	34.6	35.9	36.2	36.3	49.2	140.0	133.5	124.0	109.5
Clothing and Footwear	8.60	13.7	14.6	17.6	17.7	18.3	18.6	17.1	16.8	17.0	21.9	21.6	22.5	21.0
Housing, Water, Elec., Gas and Other Fuels	23.63	13.5	21.8	27.6	3.4	11.9	9.9	7.0	7.8	13.6	17.5	16.9	20.5	11.6
Furnishing and Household Equipment Maintenance	4.10	18.8	19.7	21.9	25.1	27.6	29.1	29.2	29.9	34.0	39.0	40.5	43.5	41.6
Health	2.79	11.3	11.2	11.9	13.8	16.2	17.1	17.5	18.7	18.8	18.5	18.8	19.3	19.1
Transport	5.91	62.2	64.7	63.1	64.5	53.4	44.2	41.2	39.1	50.5	54.9	56.8	52.9	20.3
Communication	2.21	2.0	1.2	1.2	1.3	1.6	1.6	1.7	1.6	3.7	6.6	6.7	7.0	6.8
Recreation and Culture	1.59	14.4	15.4	21.8	22.8	23.7	25.6	38.5	44.1	48.1	50.6	68.6	72.2	68.0
Education	3.79	9.5	9.8	10.0	10.0	10.9	11.1	10.9	10.6	10.8	7.2	8.5	8.4	8.6
Restaurants and Hotels	6.92	21.9	25.0	27.4	28.8	30.4	28.4	27.4	30.1	34.5	38.5	39.0	42.3	36.4
Misc. Goods and Services	4.87	15.8	17.2	20.0	22.9	22.4	23.0	25.8	28.7	33.3	34.4	38.8	43.3	40.1

Key  Source: Pakistan Bureau of Statistics

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

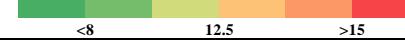
Urban CPI inflation (YoY)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	100.00		19.8	23.6	26.2	21.2	24.6	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3
Food and Non-Alcoholic Beverages	30.42		24.6	27.8	28.9	30.7	34.8	28.9	32.6	39.5	42.1	45.5	45.1	45.8	38.6
Alcoholic Beverages, Tobacco	0.85		18.3	21.7	25.8	34.1	35.4	37.2	37.3	37.3	54.9	140.8	133.7	124.5	107.6
Clothing and Footwear	8.01		14.2	15.0	18.8	18.9	19.5	19.6	17.0	16.8	16.8	22.4	21.5	21.3	19.1
Housing, Water, Elec., Gas and Other Fuels	27.03		11.3	19.2	24.8	1.0	9.5	7.3	4.1	5.0	11.2	15.0	14.5	18.0	10.2
Furnishing and Household Equipment Maintenance	4.09		17.6	18.2	20.3	24.3	27.6	29.0	29.7	30.0	34.1	39.6	40.8	42.1	40.6
Health	2.31		10.9	10.8	11.8	12.3	13.6	14.1	13.5	16.7	18.5	17.9	19.1	19.4	18.5
Transport	6.14		61.5	63.8	62.4	63.3	51.7	42.1	39.2	38.0	49.9	54.6	55.9	51.4	20.0
Communication	2.35		2.5	1.1	1.2	1.2	1.7	1.8	1.8	1.8	4.6	8.5	8.6	9.0	8.8
Recreation and Culture	1.73		13.3	13.9	20.4	21.1	21.4	22.3	38.0	43.6	48.4	51.4	68.5	71.6	67.3
Education	4.88		10.4	10.5	10.1	10.0	11.1	11.1	10.8	10.4	10.4	5.8	6.0	5.7	5.9
Restaurants and Hotels	7.41		21.2	24.7	27.4	29.1	31.8	29.5	28.6	32.4	35.2	39.8	40.4	46.1	38.8
Misc. Goods and Services	4.77		15.1	16.8	20.1	23.1	23.7	23.8	25.9	28.8	33.3	34.3	39.1	43.0	39.5

Source: Pakistan Bureau of Statistics



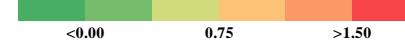
Rural CPI inflation (YoY)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	100.00		23.6	26.9	28.8	26.1	29.5	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4
Food and Non-Alcoholic Beverages	40.87		27.4	29.9	30.2	32.8	37.9	33.7	38.7	46.8	48.3	49.0	51.4	51.9	40.4
Alcoholic Beverages, Tobacco	1.28		16.9	23.4	25.8	31.1	33.7	34.4	35.0	35.2	42.7	139.1	133.3	123.3	111.8
Clothing and Footwear	9.48		13.1	14.0	16.2	16.3	16.8	17.4	17.2	16.7	17.2	21.3	21.8	23.9	23.3
Housing, Water, Elec., Gas and Other Fuels	18.49		18.4	27.6	33.9	8.6	17.3	15.6	13.2	14.0	18.6	22.9	22.2	26.0	14.8
Furnishing and Household Equipment Maintenance	4.10		20.5	22.0	24.2	26.2	27.7	29.2	28.6	29.8	33.9	38.1	40.2	45.5	43.1
Health	3.51		11.8	11.7	12.0	15.2	18.9	20.2	21.4	20.7	19.1	19.0	18.4	19.3	19.7
Transport	5.56		63.4	66.3	64.2	66.6	56.4	47.9	44.6	41.0	51.4	55.5	58.4	55.5	20.9
Communication	1.99		1.0	1.2	1.4	1.4	1.3	1.4	1.4	1.2	1.9	3.2	3.2	3.2	3.0
Recreation and Culture	1.38		16.3	18.2	24.3	25.7	27.7	31.3	39.4	45.1	47.4	49.2	68.9	73.2	69.2
Education	2.13		6.2	7.2	9.8	9.8	10.2	11.1	11.3	11.2	12.2	12.5	18.0	18.8	18.8
Restaurants and Hotels	6.19		23.0	25.4	27.5	28.2	27.9	26.4	25.2	26.0	33.4	36.1	35.9	35.9	32.1
Misc. Goods and Services	5.02		16.8	17.7	19.7	22.6	20.5	21.9	25.6	28.5	33.3	34.6	38.5	43.8	40.9

Source: Pakistan Bureau of Statistics



National CPI inflation (MoM)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	100.00		6.3	4.3	2.4	-1.2	4.7	0.8	0.5	2.9	4.3	3.7	2.4	1.6	-0.3
Food and Non-Alcoholic Beverages	34.58		5.5	4.1	1.3	5.8	5.6	0.1	-0.1	5.0	4.1	3.7	4.4	1.3	-1.0
Alcoholic Beverages, Tobacco	1.02		7.0	4.1	2.7	5.9	1.8	1.1	0.5	0.2	9.7	60.9	0.3	0.6	0.1
Clothing and Footwear	8.60		2.3	1.1	2.8	0.3	1.0	2.2	0.7	0.5	1.2	5.3	1.9	1.4	1.1
Housing, Water, Elec., Gas and Other Fuels	23.63		7.7	8.8	5.5	-17.7	10.9	0.6	0.0	1.8	3.7	1.1	-1.1	0.7	-0.2
Furnishing and Household Equipment Maintenance	4.10		2.9	1.7	2.3	3.4	2.9	2.8	2.4	1.6	5.0	5.1	2.7	3.9	1.6
Health	2.79		1.2	0.2	1.2	2.2	2.8	1.9	1.9	1.8	2.1	0.3	1.1	0.9	1.1
Transport	5.91		24.4	5.7	-0.3	2.2	-1.8	-0.1	-0.8	-0.5	12.0	3.3	1.6	0.2	-2.1
Communication	2.21		0.2	0.4	0.1	0.1	0.4	0.0	0.1	0.0	2.1	2.9	0.1	0.4	0.1
Recreation and Culture	1.59		3.2	1.6	6.3	2.0	1.9	2.0	10.9	4.5	3.3	3.1	12.4	5.0	0.7
Education	3.79		0.3	0.5	1.1	0.0	1.0	0.4	0.3	0.1	0.5	1.3	1.9	0.9	0.4
Restaurants and Hotels	6.92		5.8	2.9	2.3	2.2	2.5	1.9	1.3	3.1	5.1	3.8	0.6	4.2	1.4
Misc. Goods and Services	4.87		3.3	1.6	2.7	3.8	0.9	2.3	3.0	3.2	4.7	4.1	4.4	4.4	1.0

Source: Pakistan Bureau of Statistics



Urban CPI inflation (MoM)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	100.00		6.2	4.5	2.6	-2.1	4.5	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1
Food and Non-Alcoholic Beverages	30.42		5.0	4.3	1.4	5.4	4.8	-0.3	-0.3	4.1	4.2	4.5	4.0	1.4	-0.2
Alcoholic Beverages, Tobacco	0.85		8.2	2.9	3.4	6.8	1.3	1.6	0.2	0.1	13.0	55.6	0.3	0.5	0.0
Clothing and Footwear	8.01		3.0	1.0	3.4	0.1	1.0	1.3	0.7	0.6	1.3	5.8	1.1	0.4	1.1
Housing, Water, Elec., Gas and Other Fuels	27.03		7.0	8.6	5.2	-17.8	10.9	-0.1	-0.5	1.4	4.3	1.1	-1.1	0.7	-0.1
Furnishing and Household Equipment Maintenance	4.09		2.6	1.5	2.3	4.1	3.3	2.6	2.3	1.1	5.3	5.2	2.5	2.9	1.6
Health	2.31		1.4	0.1	1.6	1.0	1.7	1.6	1.1	3.4	3.2	0.4	1.9	0.6	0.7
Transport	6.14		23.5	5.6	-0.2	2.0	-2.2	-0.1	-0.7	-0.4	12.3	3.6	1.4	0.0	-2.2
Communication	2.35		0.2	0.4	0.0	0.1	0.6	0.0	0.1	0.0	2.8	3.7	0.2	0.6	0.1
Recreation and Culture	1.73		3.1	1.2	6.3	2.0	1.7	1.1	13.4	4.3	3.6	3.0	11.5	4.9	0.5
Education	4.88		0.1	0.3	0.7	0.0	1.1	0.2	0.2	0.1	0.1	1.3	0.8	0.8	0.2
Restaurants and Hotels	7.41		6.6	3.3	2.3	2.8	3.0	1.8	1.6	3.6	4.2	4.2	0.6	4.7	1.3
Misc. Goods and Services	4.77		3.7	1.4	3.4	3.9	1.4	1.7	2.4	3.1	4.7	2.6	4.2	3.9	1.2

Source: Pakistan Bureau of Statistics



Rural CPI inflation (MoM)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General		100.00	6.6	4.2	2.2	0.2	5.0	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8
Food and Non-Alcoholic Beverages		40.87	6.1	3.8	1.2	6.2	6.6	0.4	0.0	6.0	3.9	2.9	4.7	1.1	-1.9
Alcoholic Beverages, Tobacco		1.28	5.6	5.5	1.9	4.8	2.5	0.6	0.9	0.4	5.9	67.5	0.3	0.8	0.2
Clothing and Footwear		9.48	1.6	1.2	2.0	0.5	1.0	3.2	0.8	0.4	1.0	4.7	2.8	2.6	1.1
Housing, Water, Elec., Gas and Other Fuels		18.49	9.2	9.4	6.0	-17.5	10.9	1.8	1.1	2.6	2.6	1.2	-1.3	0.6	-0.6
Furnishing and Household Equipment Maintenance		4.10	3.3	2.0	2.4	2.4	2.2	3.2	2.6	2.3	4.5	4.9	3.1	5.4	1.6
Health		3.51	1.1	0.3	0.8	3.4	3.9	2.3	2.8	0.4	1.1	0.2	0.4	1.3	1.5
Transport		5.56	25.9	5.7	-0.5	2.5	-1.3	0.0	-0.9	-0.5	11.6	2.7	2.0	0.6	-2.1
Communication		1.99	0.2	0.4	0.2	0.1	0.0	0.1	0.0	0.1	0.7	1.3	0.1	0.0	0.0
Recreation and Culture		1.38	3.4	2.2	6.4	2.2	2.4	3.4	6.8	4.9	2.7	3.3	14.1	5.2	1.0
Education		2.13	0.9	1.4	2.8	0.0	0.5	0.8	0.4	0.2	1.7	1.4	5.9	1.5	0.8
Restaurants and Hotels		6.19	4.4	2.2	2.4	1.2	1.7	2.3	0.7	2.3	6.9	3.3	0.7	3.4	1.5
Misc. Goods and Services		5.02	2.8	2.0	1.9	3.7	0.2	3.2	3.9	3.3	4.6	2.4	3.9	5.2	0.8

Source: Pakistan Bureau of Statistics

<0.00 0.75 >1.50

Rural CPI inflation (YoY)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Rural		100.00	23.6	26.9	28.8	26.1	29.5	27.2	28.8	32.3	35.6	38.9	40.7	42.2	32.4
Food		45.95	27.0	29.6	30.2	32.7	37.2	33.5	37.9	45.2	47.0	50.2	52.2	52.4	41.5
<i>Non-perishable</i>		40.16	25.5	29.3	29.6	29.7	31.9	31.8	35.7	44.4	47.6	48.2	54.8	54.4	43.0
<i>Perishable</i>		5.79	41.2	33.5	34.3	52.6	74.2	43.8	59.5	64.3	53.1	54.5	31.9	35.3	24.0
Non Food		54.05	20.4	24.5	27.5	20.1	22.4	21.4	20.7	20.9	25.3	28.5	29.9	32.5	23.8
Energy		11.41	46.6	61.2	67.8	28.8	36.9	30.7	26.2	25.7	37.5	46.6	47.3	52.6	19.8
NFNE (Core)		42.64	13.6	14.6	16.5	17.6	18.2	18.5	19.0	19.4	21.5	23.1	24.9	26.9	25.2
HRI		8.61	5.7	5.9	5.9	5.9	5.9	5.9	6.9	6.9	6.9	7.1	7.1	7.1	7.1
Core Excl HRI		34.03	15.5	16.8	19.1	20.4	21.2	21.5	22.1	22.4	24.9	26.9	29.0	31.4	29.2

Source: Pakistan Bureau of Statistics

<8 12.5 >15

Urban CPI inflation (YoY)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Urban		100.00	19.8	23.6	26.2	21.2	24.6	21.6	21.6	24.4	28.8	33.0	33.5	35.1	27.3
Food		36.80	24.0	27.4	28.8	30.8	34.7	29.7	32.7	39.0	41.9	47.1	46.8	48.1	40.8
<i>Non-perishable</i>		32.34	23.5	27.1	28.2	27.9	29.4	27.1	29.6	36.7	42.0	44.9	48.5	47.9	40.7
<i>Perishable</i>		4.46	32.4	32.4	33.5	48.3	67.0	38.6	52.9	59.3	42.9	49.4	26.9	32.3	25.6
Non Food		63.20	17.3	21.3	24.7	15.2	18.2	16.4	14.8	15.6	20.8	24.1	24.9	26.6	18.7
Energy		9.47	48.8	70.2	80.7	18.9	34.1	24.5	15.4	16.3	37.1	50.3	52.1	61.2	19.4
NFNE (Core)		53.73	11.5	12.0	13.8	14.4	14.9	14.6	14.7	15.4	17.1	18.6	19.5	20.0	18.5
HRI		19.26	5.6	5.6	5.6	5.6	5.3	5.3	5.3	5.4	5.4	5.4	5.3	5.3	5.3
Core Excl HRI		34.47	14.7	15.5	18.2	19.2	20.1	19.6	19.7	20.8	23.3	25.4	26.8	27.5	25.0

Source: Pakistan Bureau of Statistics

<8 12.5 >15

Rural CPI inflation (MoM)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Rural		100.00	6.6	4.2	2.2	0.2	5.0	1.3	0.7	3.6	4.0	3.5	3.0	1.7	-0.8
Food		45.95	6.0	3.7	1.2	5.7	6.1	0.5	0.1	5.7	3.9	4.5	4.2	1.4	-1.6
<i>Non-perishable</i>		40.16	6.2	3.5	0.7	4.2	3.7	1.7	2.6	7.4	3.6	3.2	5.1	2.6	-1.7
<i>Perishable</i>		5.79	5.2	6.0	3.9	18.4	22.2	-5.5	-13.2	-2.2	5.5	1.5	2.5	-8.4	-3.6
Non Food		54.05	7.1	4.6	3.1	-4.9	3.9	2.1	1.4	1.5	4.1	2.4	1.6	2.0	0.1
Energy		11.41	24.3	13.4	6.4	-21.0	11.8	2.2	0.8	1.5	8.4	2.4	-1.4	0.7	-2.4
NFNE (Core)		42.64	2.3	1.6	1.8	1.4	1.5	2.1	1.5	1.5	2.6	2.4	2.7	2.5	0.9
HRI		8.61	0.0	1.4	0.0	0.0	1.3	0.0	0.0	3.1	0.0	0.0	1.2	0.0	0.0
Core Excl HRI		34.03	2.9	1.7	2.2	1.7	1.6	2.5	1.8	1.2	3.2	2.9	3.0	3.0	1.1

Source: Pakistan Bureau of Statistics

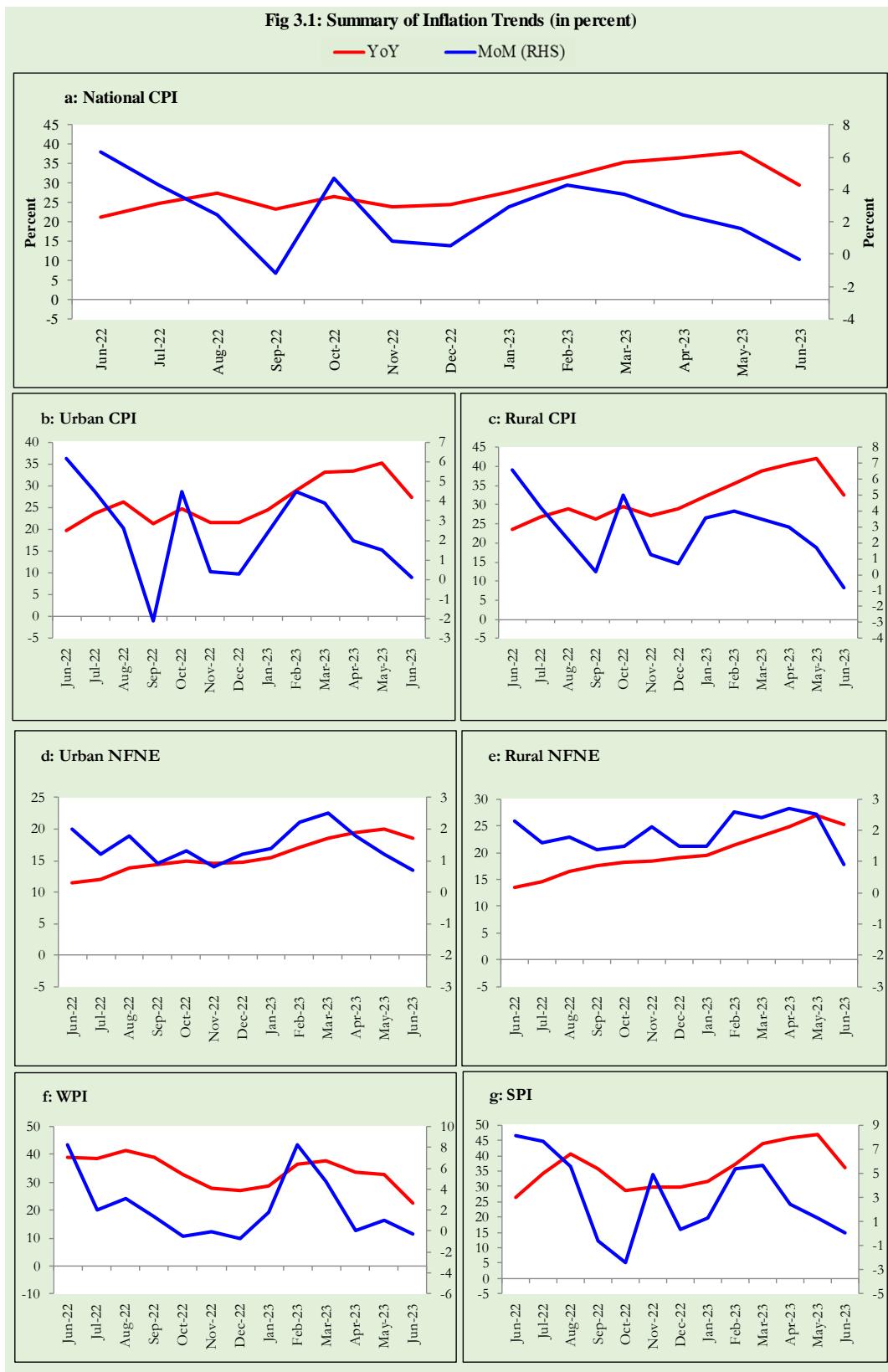
<0.00 0.75 >1.50

Urban CPI inflation (MoM)		Weights	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Urban	100.00		6.2	4.5	2.6	-2.1	4.5	0.4	0.3	2.4	4.5	3.9	2.0	1.5	0.1
Food	36.80		5.3	4.3	1.6	5.2	4.5	0.0	0.0	3.9	4.3	5.6	3.4	1.9	0.1
Non-perishable	32.34		4.9	3.8	1.2	4.0	2.2	0.7	2.2	5.0	4.4	4.6	4.3	2.7	-0.2
Perishable	4.46		5.5	7.3	2.8	14.0	18.5	-4.4	-12.0	-1.4	2.9	3.5	2.5	-7.0	0.1
Non Food	63.20		6.8	4.6	3.3	-6.6	4.5	0.6	0.6	1.2	4.7	2.7	1.0	1.2	0.1
Energy	9.47		32.2	18.3	8.4	-31.1	19.5	-0.2	-1.9	0.4	15.2	3.1	-2.2	1.1	-2.1
NFNE (Core)	53.73		2.0	1.2	1.8	0.9	1.3	0.8	1.2	1.4	2.2	2.5	1.8	1.2	0.7
HRI	19.26		0.0	1.5	0.0	0.0	1.1	0.0	0.0	1.7	0.0	0.0	1.0	0.0	0.0
Core Excl HRI	34.47		3.0	1.1	2.7	1.4	1.4	1.2	1.7	1.3	3.3	3.7	2.1	1.7	1.0

Source: Pakistan Bureau of Statistics

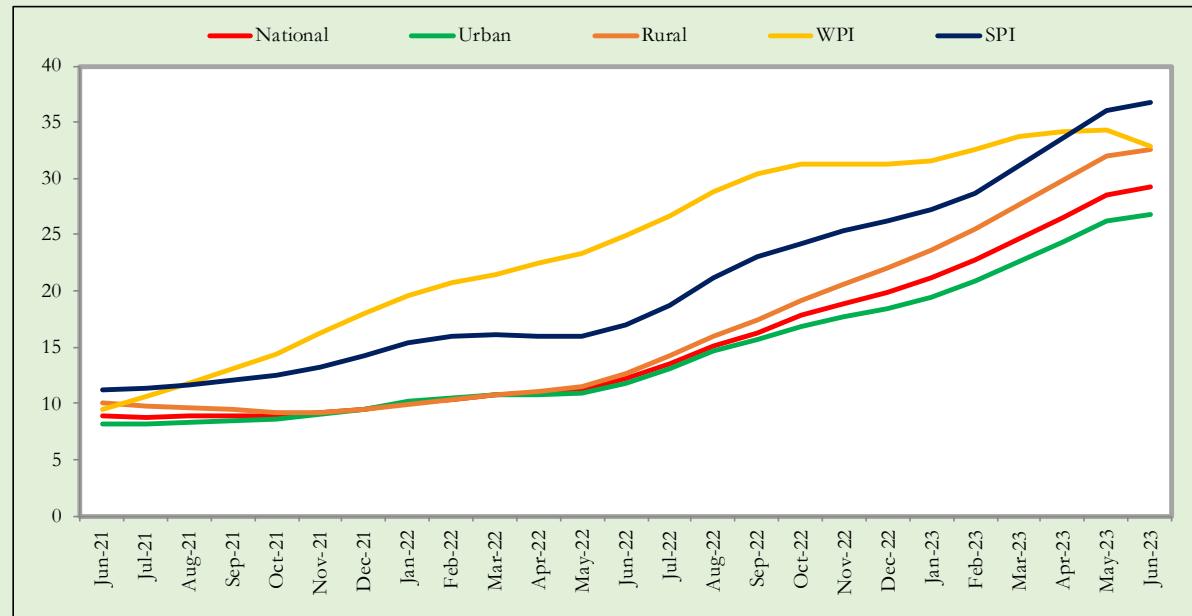


3. Trends in Inflation



4. Movement in Price Indices (Moving Averages)

Fig 4.1: Movements in Price Indices (12 months moving average (12mma) in percent)



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

Fig 5.1: Movements in Price Indices (MoM in percent)

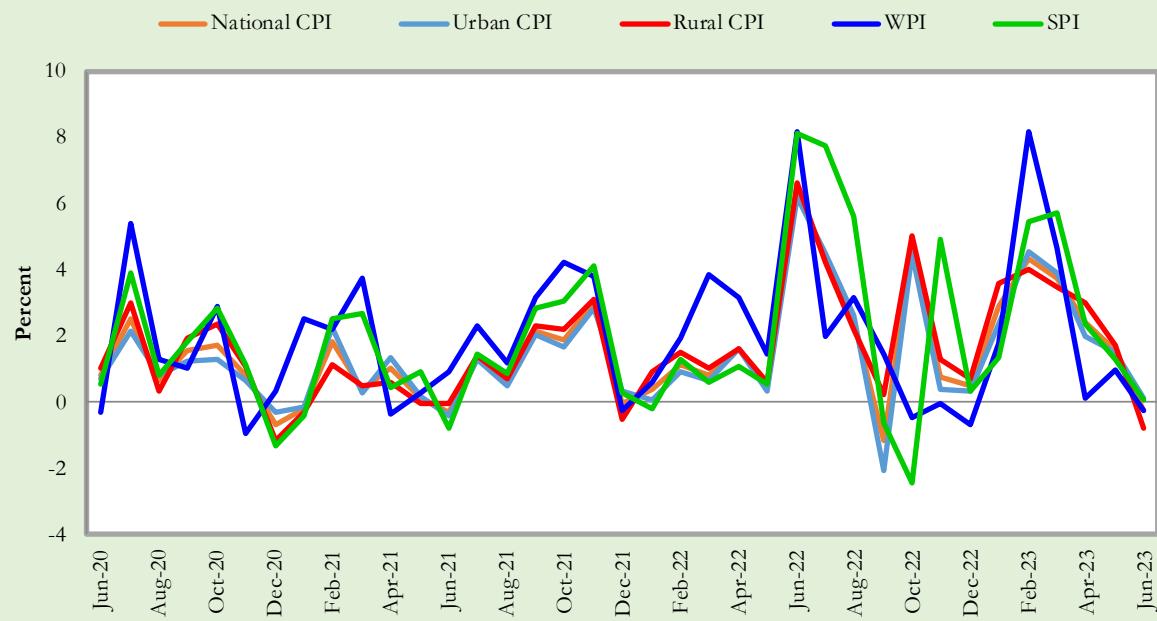


Fig 5.2: Movements in Price Indices (MoM in percent) - Urban CPI Basket

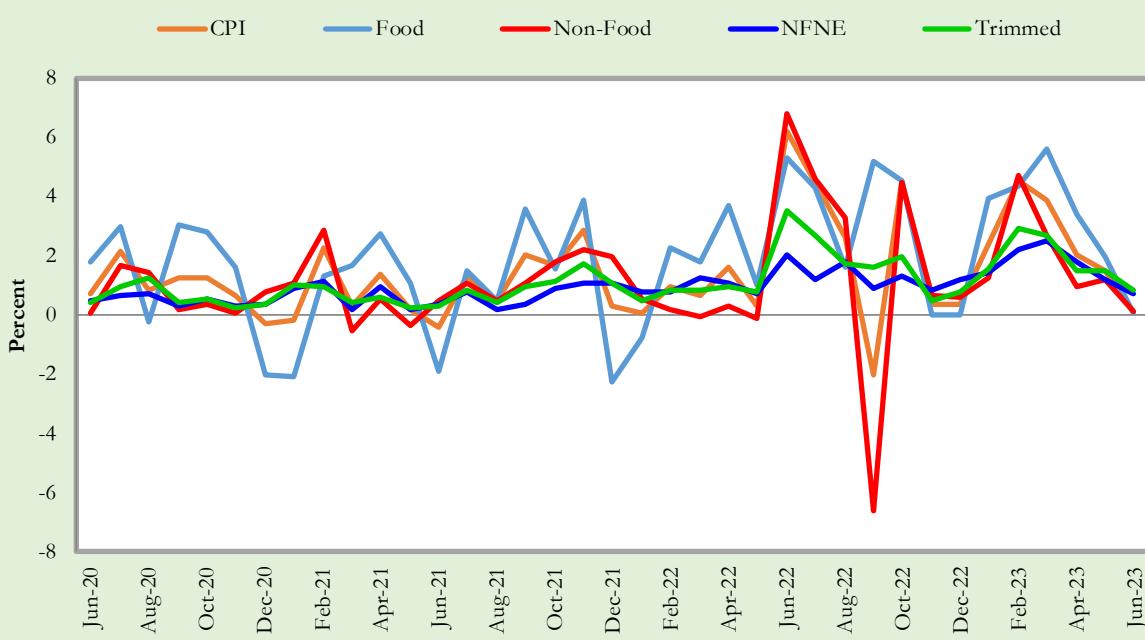
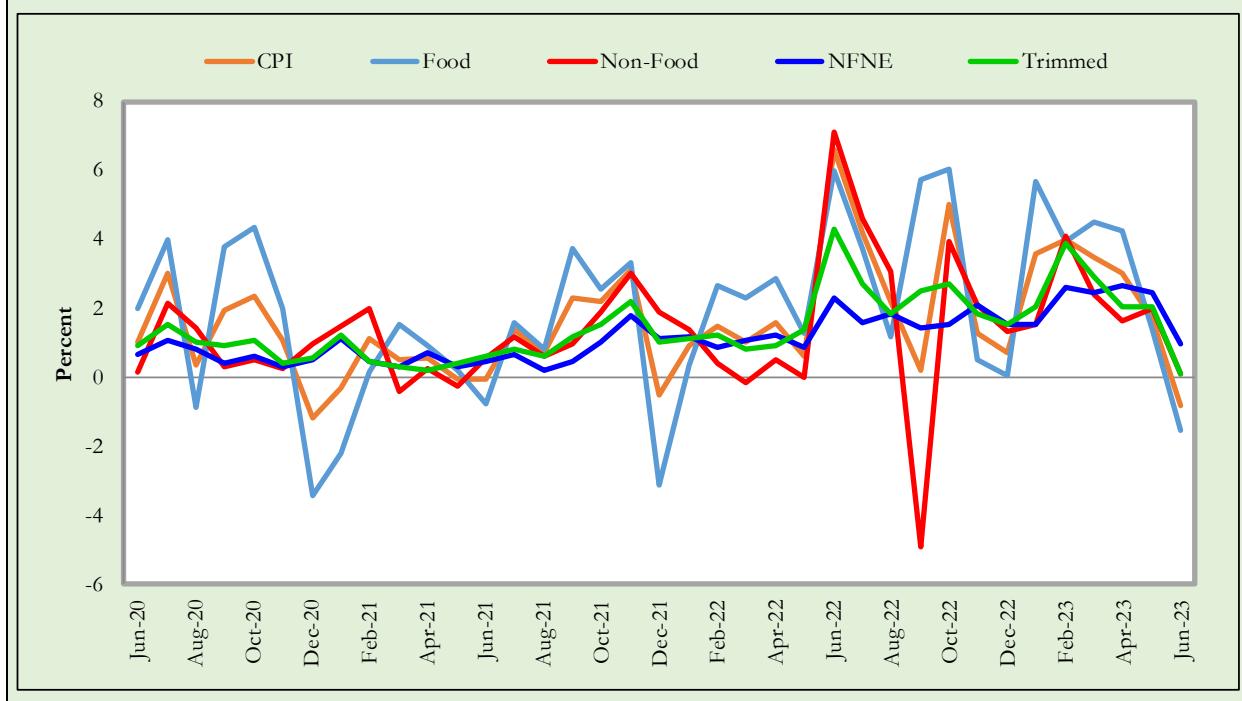
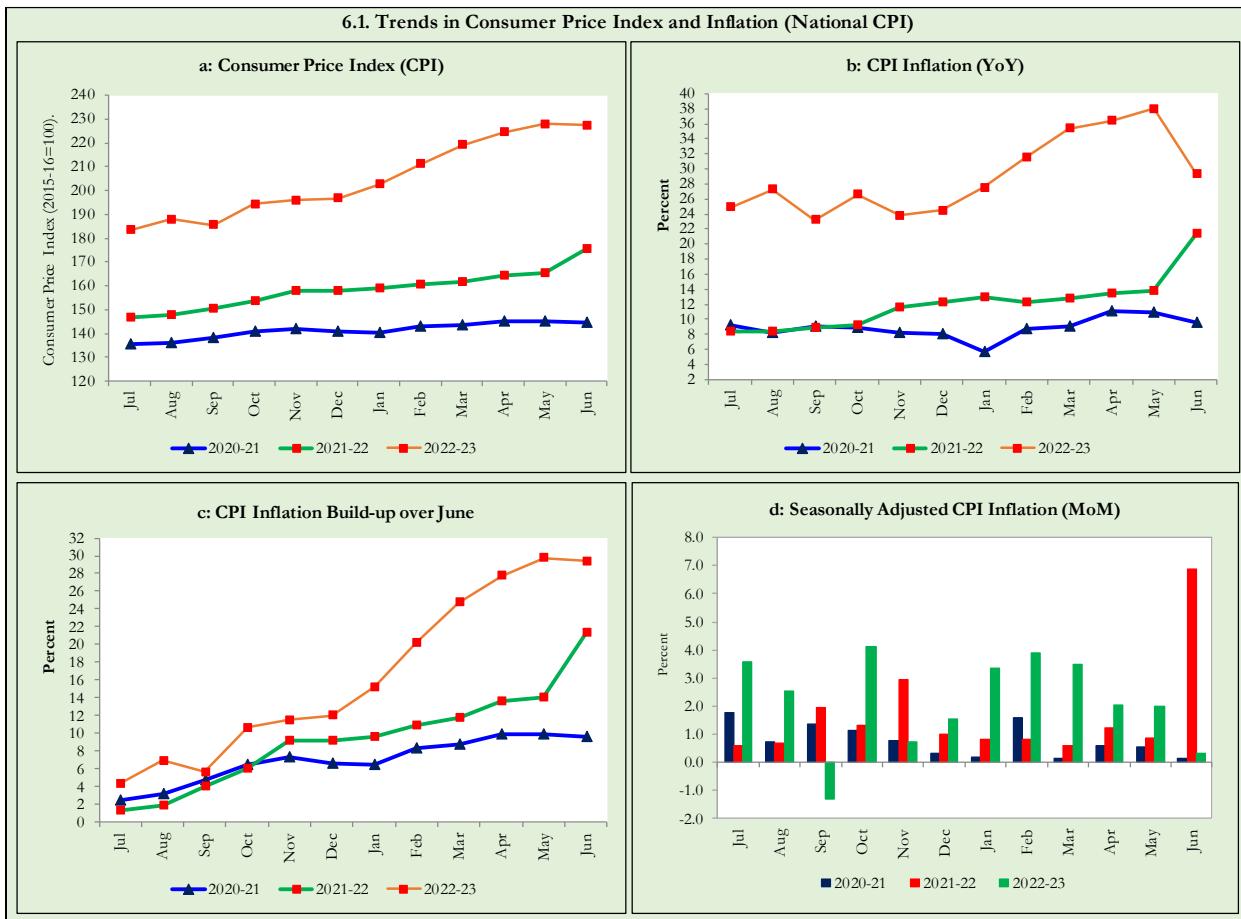
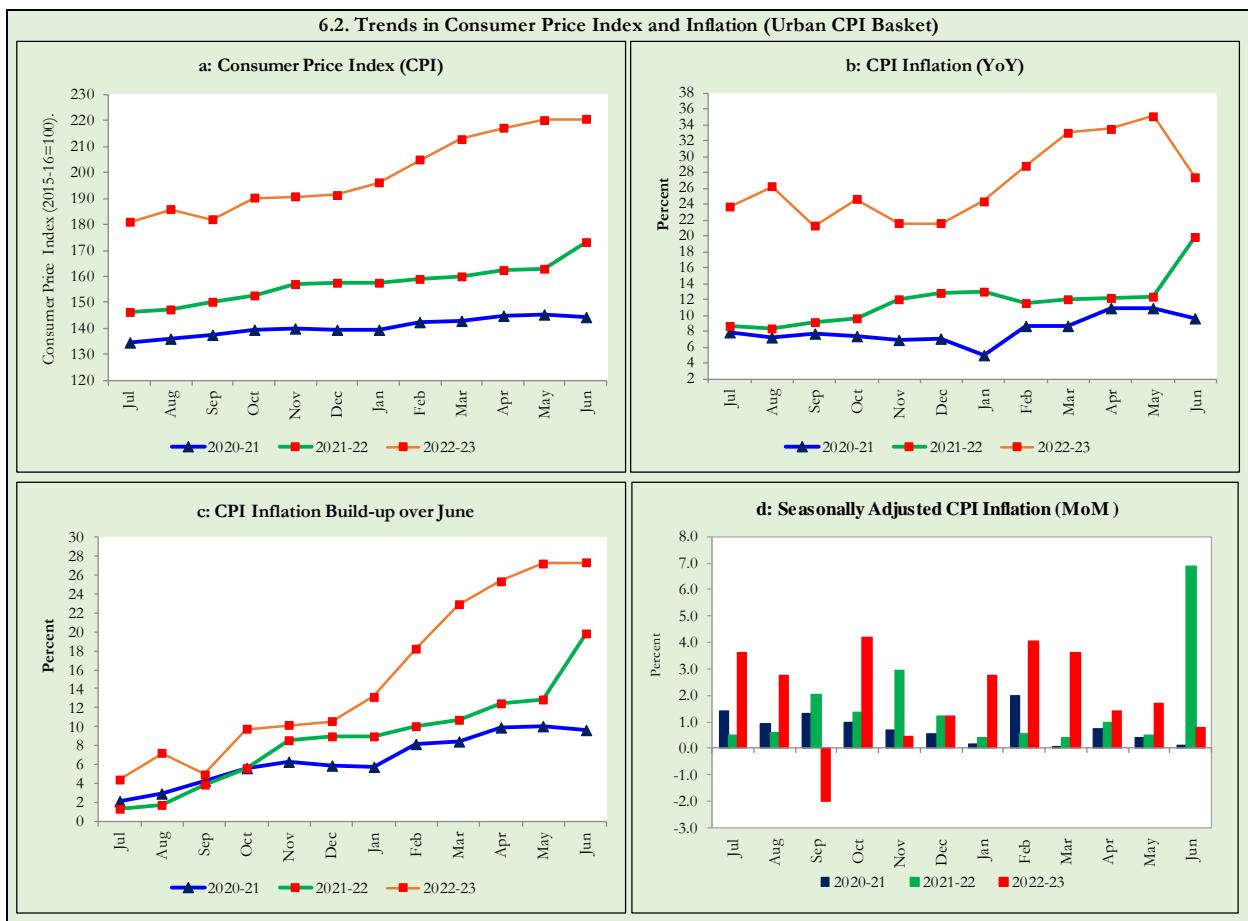


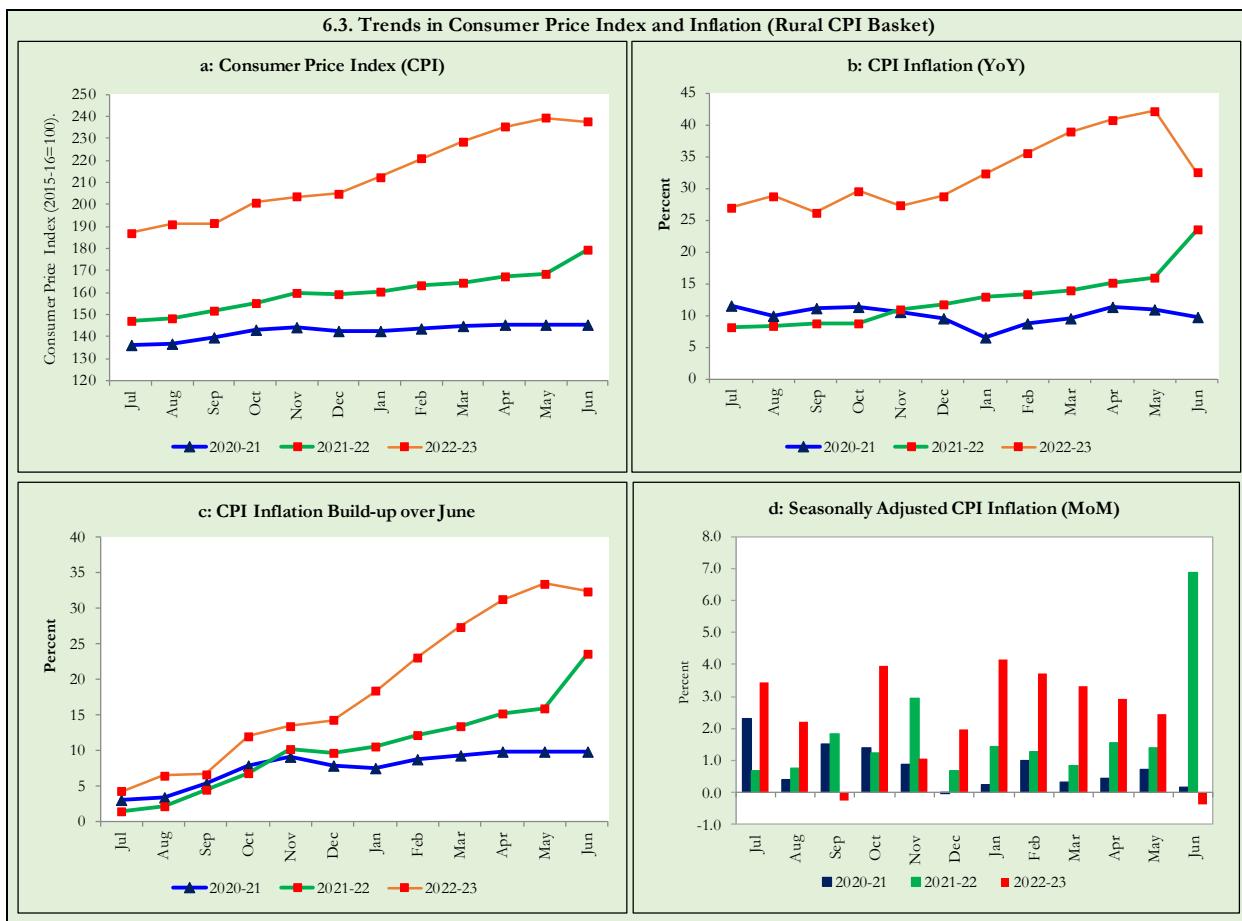
Fig 5.3: Movements in Price Indices (MoM in percent) - Rural CPI Basket

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).







7. Weighted Contribution

The weighted contribution of food group in the overall Urban CPI Inflation increased to 58.5 percent during Jun 2023 from 54.2 percent in previous month. It was 45.7 percent during the corresponding month of last year. The weighted contribution of non-food group decreased to 41.5 percent in Jun 2023 from 45.8 percent in previous month. Weighted Contribution of non-food was 54.3 percent during the 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.

Table 7.1 Weighted Contribution (in percent) to Urban 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
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
Mar-23	100.0	54.9	6.5	48.4	45.0	16.3	28.7	25.9	2.9
Apr-23	100.0	54.7	4.1	50.6	45.3	15.8	29.4	26.7	2.8
May-23	100.0	54.2	4.2	50.0	45.8	16.9	28.9	26.3	2.6
Jun-23	100.0	58.5	4.3	54.2	41.5	8.5	33.0	29.8	3.2

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 increased to 62.2 percent during Jun 2023 from 60.6 percent in previous month. It was 54.2 percent during the corresponding month of last year. The weighted contribution of non-food group decreased to 37.9 percent in Jun 2023 from 39.4 percent in previous month. The weighted contribution of non-food group was 45.8 percent during corresponding month of last year. Table 7.2 provides the historical perspective of weighted contribution of food (Perishable food, Non-Perishable food) and non-food group (Energy, Core Inflation (NFNE), NFNE excluding HRI and HRI) in the overall inflation for rural basket.

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

Period	Overall CPI	Food Group			Non-Food Group				
		Food	Perishable food	Non- Perishable food	Non-food	Energy	Core Inflation (NFNE)	NFNE excl HRI	HRI
		a=(b+e)	b=(c+d)	c	d	e=(f+g)	f	g=(h+i)	h
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
Mar-23	100.0	61.8	7.7	54.1	38.2	14.3	23.9	22.5	1.3
Apr-23	100.0	62.1	5.1	57.0	37.8	13.4	24.4	23.1	1.3
May-23	100.0	60.6	4.8	55.7	39.4	13.9	25.5	24.3	1.3
Jun-23	100.0	62.2	4.2	57.9	37.9	8.0	29.9	28.3	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	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	
General	75.3	71.1	70.8	62.4	66.3	54.5	56.7	68.8	78.9	73.6	64.9	65.2	55.9	
Food & Non-Alcoholic Beverages	57.8	66.7	54.4	56.7	43.3	18.9	26.7	55.6	68.9	66.7	50.0	44.4	24.4	
Alcoholic Beverages & Tobacco	100.0	100.0	100.0	100.0	100.0	100.0	100.0	33.3	100.0	100.0	100.0	100.0	33.3	
Clothing & Footwear	82.5	62.5	70.0	62.5	72.5	75.0	77.5	77.5	67.5	72.5	70.0	70.0	72.5	
Housing, Water, Elect, Gas & other Fuels	72.4	75.9	58.6	3.4	51.7	24.1	10.3	58.6	75.9	48.3	10.3	44.8	51.7	
Furnishing & Household Equip. Maintenance etc.	100.0	97.6	95.2	97.6	100.0	100.0	95.2	100.0	100.0	100.0	100.0	100.0	95.2	
Health	90.3	61.3	77.4	87.1	80.6	83.9	71.0	80.6	87.1	77.4	67.7	74.2	67.7	
Transport	93.8	81.3	50.0	37.5	46.9	34.4	25.0	34.4	90.6	81.3	59.4	37.5	46.9	
Communication	40.0	40.0	20.0	40.0	40.0	20.0	40.0	20.0	40.0	40.0	20.0	40.0	40.0	
Recreation & Culture	44.0	52.0	80.0	72.0	80.0	24.0	72.0	84.0	80.0	56.0	72.0	64.0	32.0	
Education	25.0	31.3	75.0	12.5	37.5	50.0	56.3	31.3	31.3	62.5	56.3	62.5	56.3	
Restaurant & Hotels	92.9	85.7	100.0	92.9	100.0	100.0	100.0	85.7	92.9	92.9	92.9	100.0	92.9	
Miscellaneous	100.0	86.2	96.6	93.1	89.7	100.0	96.6	100.0	100.0	86.2	100.0	100.0	82.8	
NFNE	81.3	71.5	77.4	67.2	76.6	71.5	72.3	76.6	82.6	77.0	75.7	74.5	68.9	

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

Groups	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
General	74.2	76.6	72.5	67.2	68.0	54.5	48.8	67.6	77.9	72.5	63.1	63.1	54.1
Food & Non-Alcoholic Beverages	53.2	64.6	53.2	62.0	55.7	13.9	12.7	57.0	62.0	53.2	39.2	43.0	19.0
Alcoholic Beverages & Tobacco	100.0	100.0	100.0	100.0	60.0	100.0	80.0	80.0	100.0	100.0	100.0	40.0	40.0
Clothing & Footwear	81.5	81.5	88.9	66.7	81.5	96.3	85.2	81.5	96.3	92.6	92.6	92.6	92.6
Housing, Water, Elect, Gas & other Fuels	82.6	95.7	78.3	30.4	56.5	34.8	0.0	82.6	56.5	69.6	21.7	47.8	65.2
Furnishing & Household Equip. Maintenance etc.	92.3	92.3	100.0	88.5	100.0	100.0	96.2	96.2	100.0	100.0	88.5	92.3	92.3
Health	100.0	64.3	71.4	92.9	64.3	100.0	78.6	35.7	85.7	64.3	71.4	64.3	64.3
Transport	87.5	75.0	43.8	68.8	31.3	18.8	25.0	12.5	81.3	81.3	62.5	37.5	37.5
Communication	20.0	40.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Recreation & Culture	53.8	53.8	84.6	69.2	84.6	46.2	84.6	76.9	92.3	69.2	84.6	84.6	38.5
Education	80.0	100.0	80.0	0.0	100.0	80.0	80.0	80.0	80.0	80.0	100.0	80.0	60.0
Restaurant & Hotels	92.9	85.7	92.9	85.7	85.7	85.7	71.4	85.7	85.7	85.7	78.6	71.4	85.7
Miscellaneous	94.1	94.1	94.1	94.1	88.2	100.0	94.1	94.1	100.0	88.2	100.0	100.0	88.2
NFNE	82.4	78.7	80.9	72.1	76.5	80.9	74.3	72.8	86.8	80.9	81.6	77.2	74.3

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.

Table 9.1 Growth in Domestic Urban and Rural CPI Food Commodities (in percent) – Jun 2023

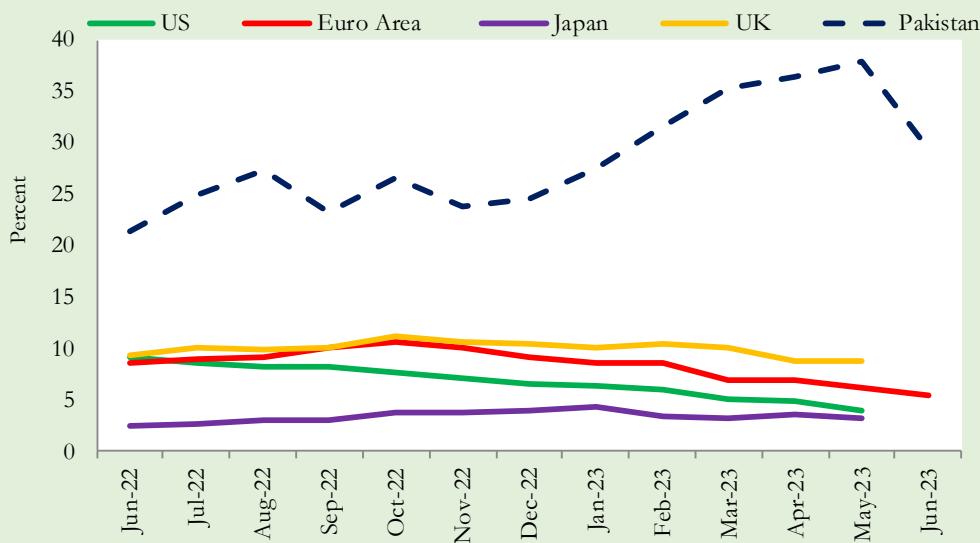
S. No	Item	Unit	Urban CPI		Rural CPI	
			YoY	MoM	YoY	MoM
1	Wheat	10 Kg	62.3	-5.9	63.1	-7.4
2	Wheat Flour Bag	20 Kg	104.8	-8.5	93.2	-11.0
3	Rice Basmati Broken (Superior/Average Quality)*	1 Kg	56.6	3.8	85.7	3.1
4	Beef With Bone (Average Quality)	1 Kg	17.6	2.3	18.3	2.4
5	Mutton (Average Quality)	1 Kg	19.7	2.8	21.8	2.5
6	Chicken Farm Broiler (Live)	1 Kg	57.7	6.8	63.5	5.4
7	Milk Fresh (Un-Boiled)	1 Litre	30.4	3.8	35.3	1.7
8	Eggs Farm	Dozen	37.0	-13.6	40.4	-10.6
9	Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch	Each	4.4	-3.3	-1.5	-5.4
10	Pulse Masoor (Washed)	1 Kg	1.6	-1.7	3.9	-3.1
11	Pulse Moong (Washed)	1 Kg	50.5	-3.9	50.4	-4.9
12	Pulse Mash (Washed)	1 Kg	49.9	1.5	58.0	2.8
13	Pulse Gram	1 Kg	24.1	-4.7	29.7	-3.5
14	Potatoes	1 Kg	66.1	6.5	76.7	3.6
15	Onions	1 Kg	-16.5	13.6	-22.8	2.1
16	Tomatoes	1 Kg	-29.6	28.3	-35.1	37.3
17	Sugar Refined	1 Kg	41.6	2.6	39.6	1.4
18	Garlic (Lehsun)	1 Kg	11.7	-2.2	10.7	-0.5
19	Ginger (Adrak)	500 Gm	194.2	2.3	174.7	8.6
20	Tea Lipton Yellow Label 190 Gm Packet	Each	113.1	0.5	110.8	2.1

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

10. Inflation in Global Context

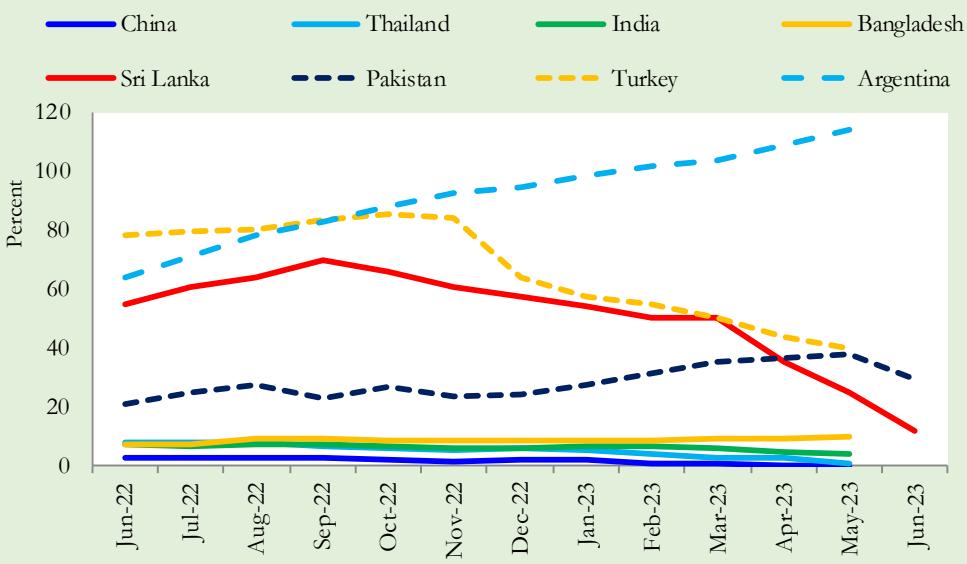
In global context, inflation trends in selected developed and emerging economies is given in figure 10.1 and 10.2.

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



Sources: Bloomberg, Havor Analytics, Trading Economics, Pakistan Bureau of Statistics

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



Sources: Bloomberg, Havor Analytics, Trading Economics, Pakistan Bureau of Statistics

* US, UK, Japan, China, India, Bangladesh and Argentina has not released Inflation data for the month of June, 2023 as per Trading Economics/Bloomberg/Haver analytics.

11. Global Commodity Prices and Indices (Growth)

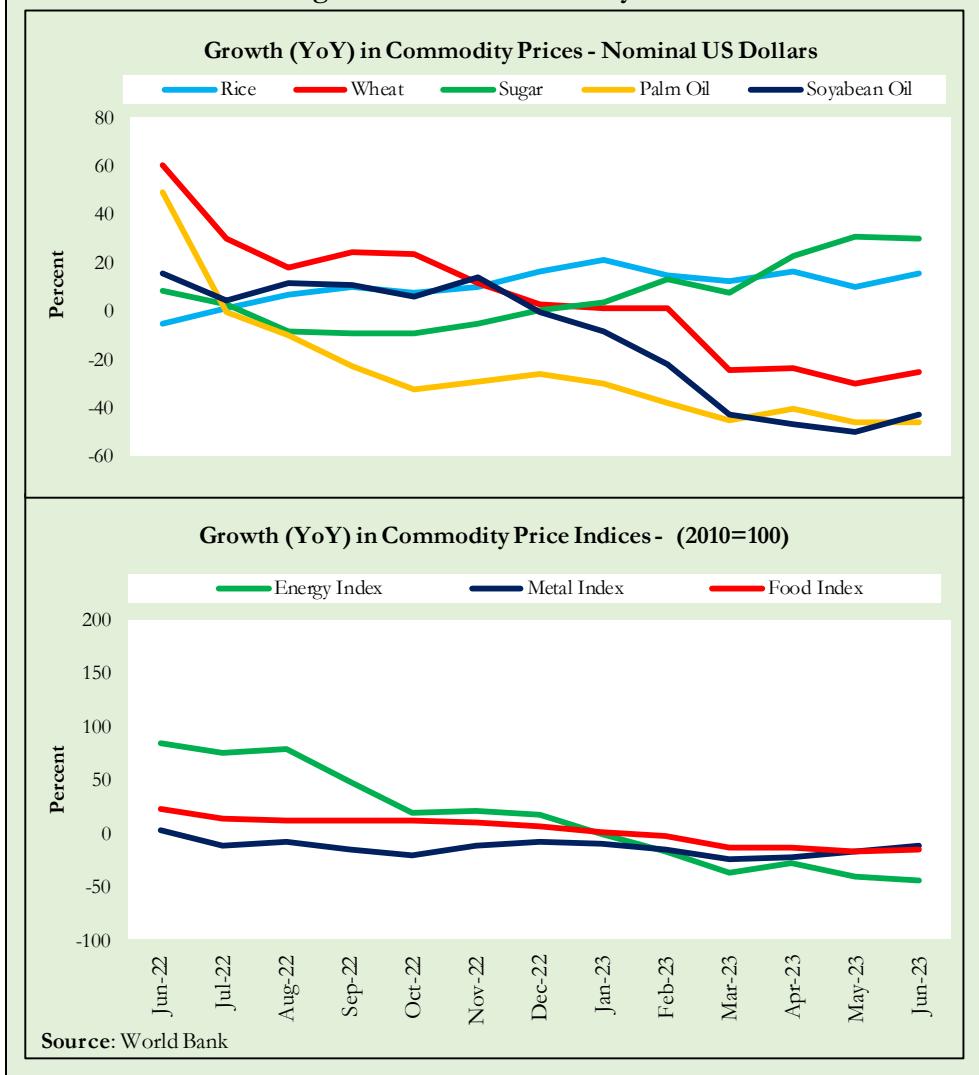
Global commodity prices and various group indices have a relation with domestic inflation. In this context, changes in major global commodity prices and indices along with price trends are given in table 11.1 and figure 11.1.

Table 11.1 Changes in Major Global Indices (percent)

Item/ Group	Jun-22		May-23		Jun-23	
	YoY	MoM	YoY	MoM	YoY	MoM
Food	22.8	-4.7	-16.3	-3.1	-15.2	-3.5
Metals	2.3	-6.3	-17.6	-5.7	-12.4	-0.4
Energy	84.7	6.0	-40.8	-11.3	-45.1	-1.8
Agricultural	18.3	-3.7	-14.0	-2.7	-12.9	-2.4
Cotton	63.1	-5.9	-42.6	-1.2	-40.0	-1.7

Source: World Bank

Fig. 11.1: Global Commodity Prices

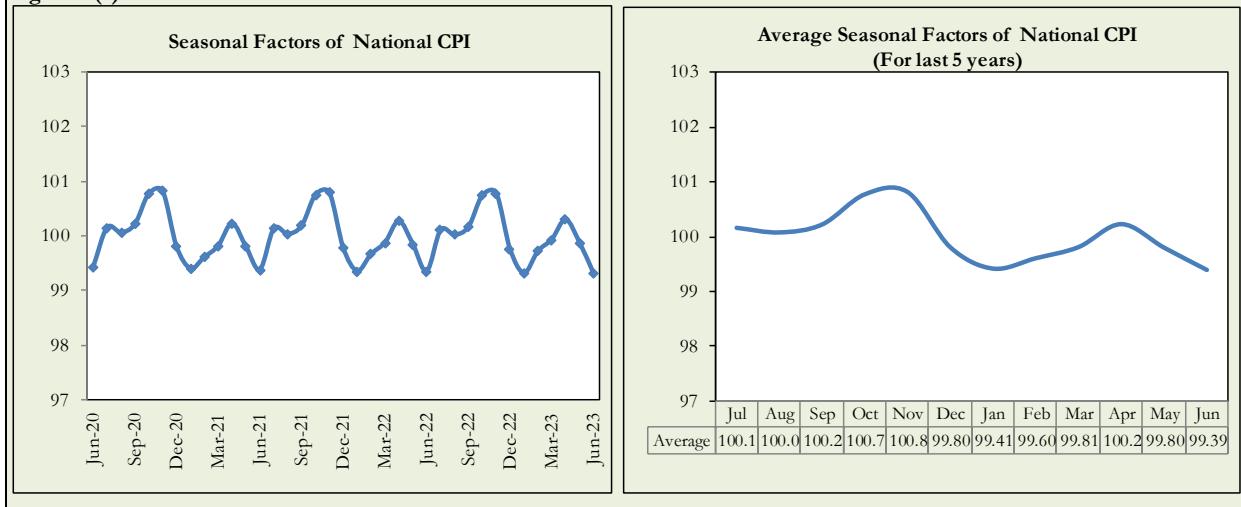
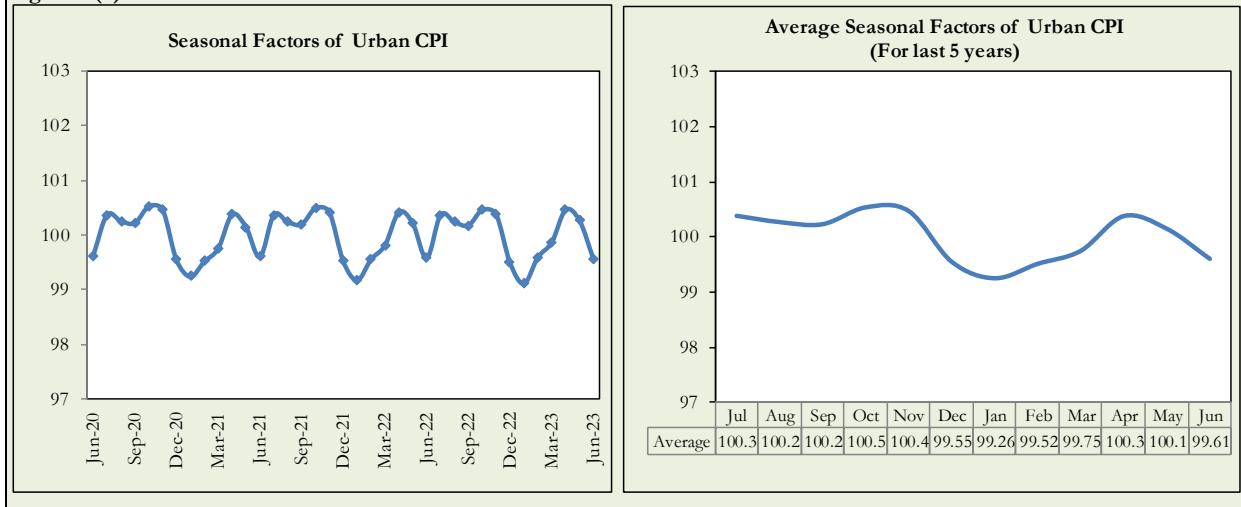
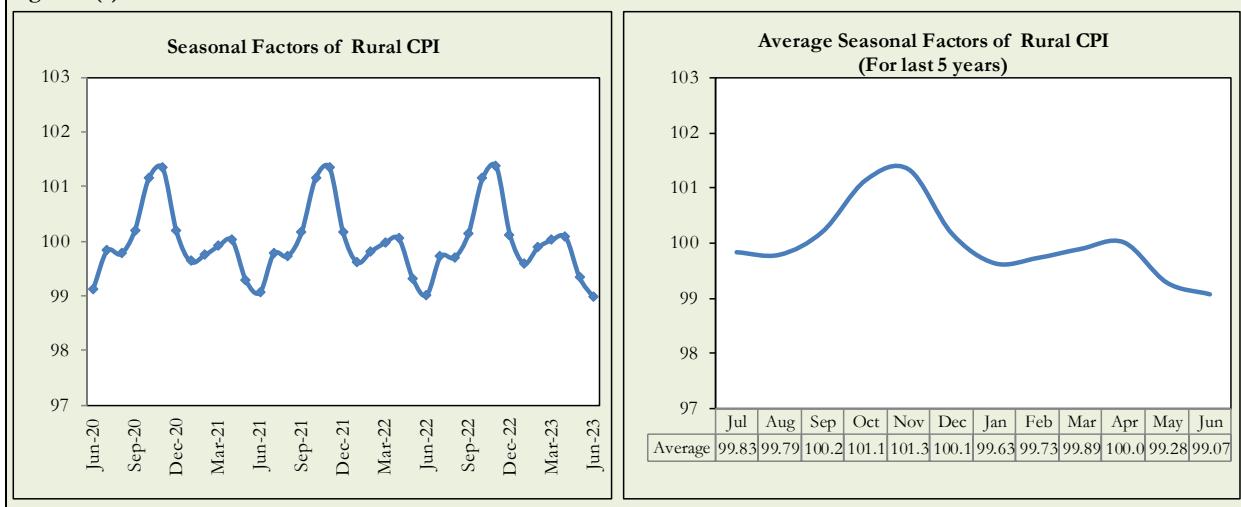


12. Seasonal Adjustment in CPI

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 July 2008 to Jun 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

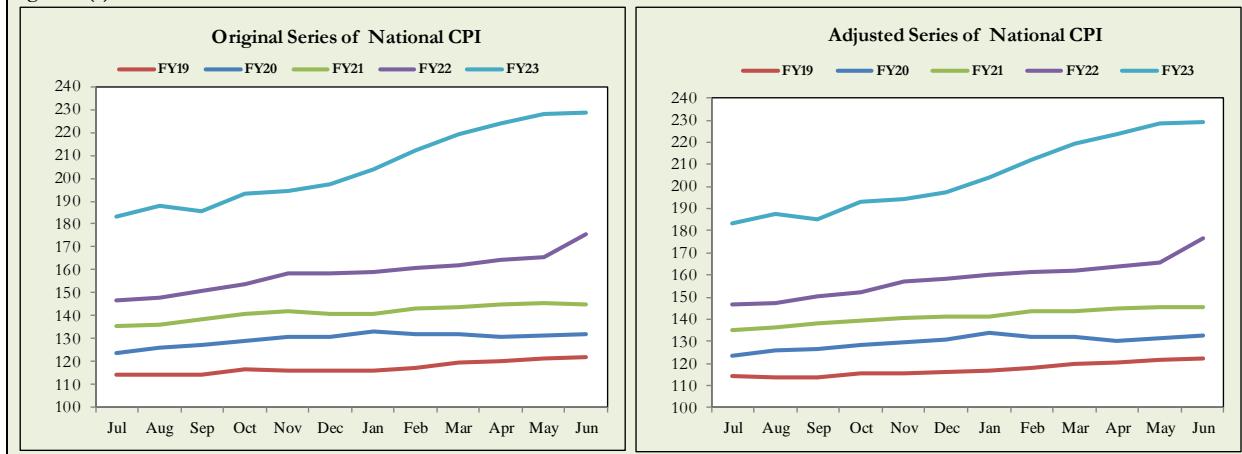


Fig. 12.2 (b): Seasonal Plot of Urban CPI

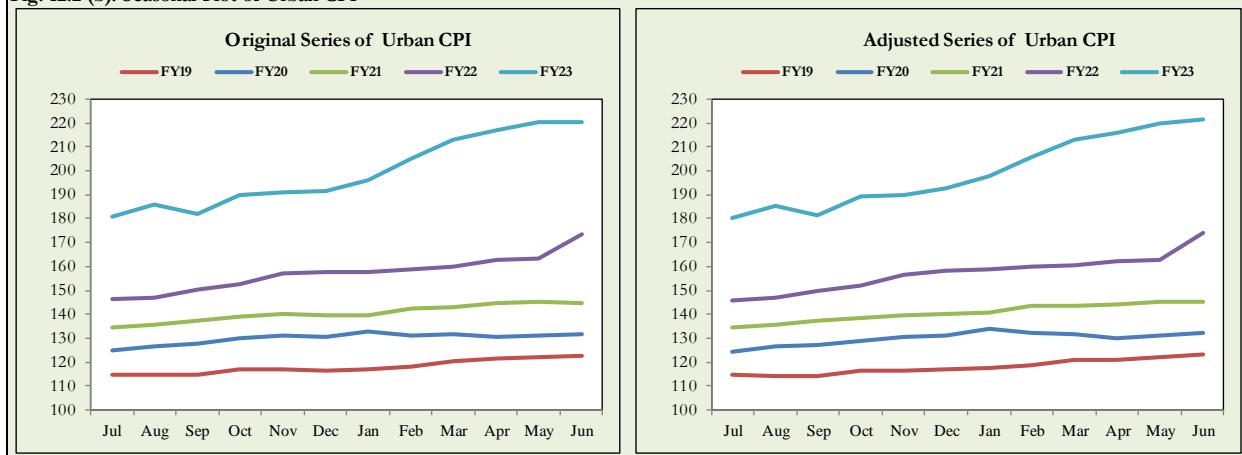
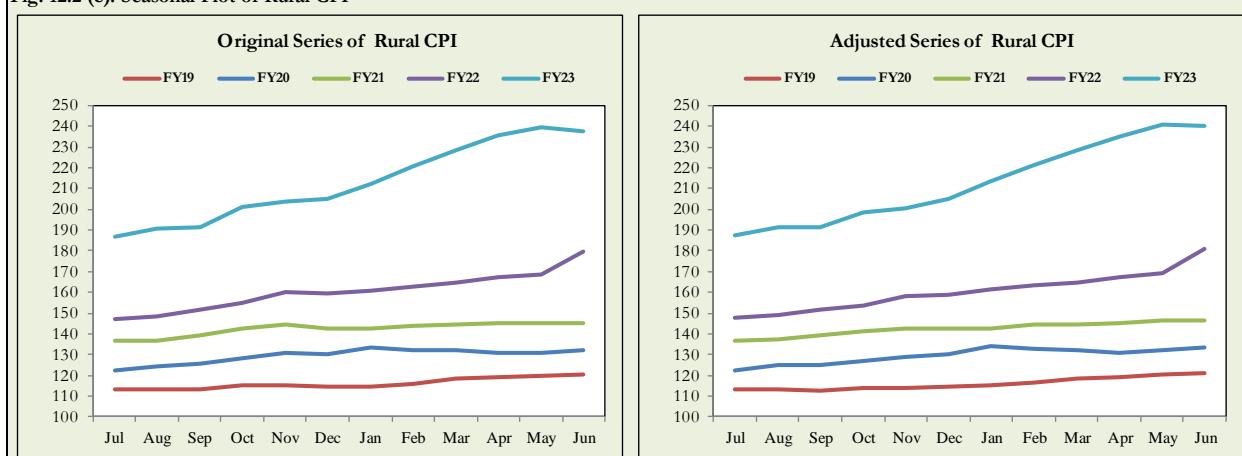


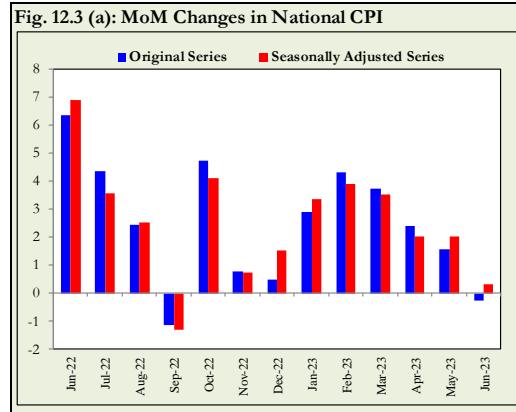
Fig. 12.2 (c): Seasonal Plot of Rural CPI



Seasonally adjusted Index of National CPI for Jun 2023 stood at 228.93 against 227.37 in original series showing an increase of 1.56 because of seasonal adjustment.

Seasonally adjusted Index of Urban CPI for Jun 2023 stood at 221.54 against 220.59 in original series showing an increase of 0.95 on account of seasonal adjustment.

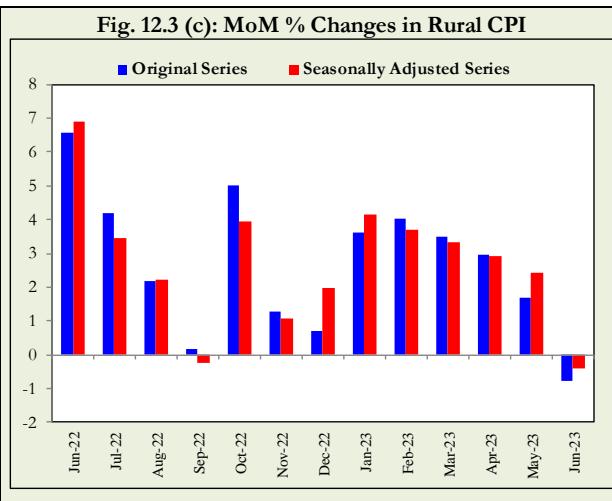
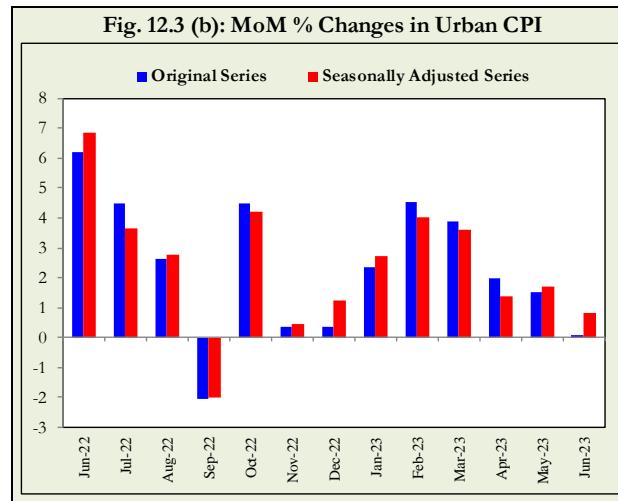
Seasonally adjusted Index of Rural CPI for Jun 2023 stood at 240.08 against 237.61 in original series showing an increase of 2.47 on account of seasonal adjustment.



Month-on-month change of seasonally adjusted National CPI series showed an inflation of 0.30% during Jun 2023 over previous month against a deflation of 0.26% in original series.

Month-on-month change of seasonally adjusted Urban CPI series showed an inflation of 0.80% during Jun 2023 over previous month against an inflation of 0.10% in original series.

Month-on-month change of seasonally adjusted Rural CPI series showed a deflation of 0.39% during Jun 2023 over previous month against a deflation of 0.76% in original series.



List of Illustrations

Tables

Table A1: Inflation – Summary

Period	CPI						WPI			SPI**	Core Inflation				
	General			Food		Non-Food		General	Food	Non-Food		NFNE*		Trimmed	
	National	Urban	Rural	Urban	Rural	Urban	Rural					Urban	Rural	Urban	Rural
Annual Average															
FY21	8.9	8.1	10.0	12.4	13.1	5.7	7.4	9.4	14.5	6.6	11.2	6.0	7.6	7.6	9.6
FY22	12.2	11.8	12.7	13.4	13.0	10.8	12.3	24.9	13.1	32.0	16.9	8.1	9.0	10.4	11.2
FY23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7
Year-on-Year															
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	29.7	14.6	18.5	19.8	25.4	
Dec-22	24.5	21.6	28.8	32.7	37.9	14.8	20.7	27.1	31.0	25.2	29.7	14.7	19.0	19.4	26.4
Jan-23	27.6	24.4	32.3	39.0	45.2	15.6	20.9	28.5	35.6	24.9	31.7	15.4	19.4	20.9	27.8
Feb-23	31.5	28.8	35.6	41.9	47.0	20.8	25.3	36.4	40.7	34.3	37.1	17.1	21.5	25.1	31.6
Mar-23	35.4	33.0	38.9	47.1	50.2	24.1	28.5	37.5	45.2	33.7	44.0	18.6	23.1	28.7	35.0
Apr-23	36.4	33.5	40.7	46.8	52.2	24.9	29.9	33.4	44.4	28.0	45.9	19.5	24.9	28.6	37.3
May-23	38.0	35.1	42.2	48.1	52.4	26.6	32.5	32.8	47.7	25.6	47.0	20.0	26.9	30.5	38.8
Jun-23	29.4	27.3	32.4	40.8	41.5	18.7	23.8	22.4	37.5	15.2	36.0	18.5	25.2	22.9	29.9
12-Month Moving Average															
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
Mar-23	24.6	22.6	27.6	30.9	34.3	17.5	21.6	33.7	29.0	36.2	31.1	13.9	17.1	20.6	25.0
Apr-23	26.6	24.4	29.8	33.6	37.3	18.7	23.0	34.1	31.5	35.5	33.6	14.7	18.3	22.3	27.4
May-23	28.6	26.3	32.0	36.3	40.0	20.0	24.6	34.3	34.3	34.3	36.1	15.6	19.6	24.4	30.0
Jun-23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7
Period Average (Since July)															
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
Mar-23	27.3	25.0	30.6	34.8	38.4	19.0	23.5	34.1	32.6	34.9	34.6	15.1	18.8	23.0	28.5
Apr-23	28.2	25.9	31.6	36.1	39.9	19.6	24.1	34.1	33.9	34.2	35.8	15.5	19.4	23.9	29.6
May-23	29.2	26.8	32.7	37.3	41.1	20.3	24.9	33.9	35.2	33.3	36.9	16.0	20.1	24.8	30.7
Jun-23	29.2	26.9	32.6	37.6	41.1	20.1	24.8	32.8	35.5	31.4	36.8	16.2	20.6	24.1	30.7
Month-on-Month															
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	-0.02	-1.4	0.7	4.9	0.8	2.1	0.5	1.8
Dec-22	0.5	0.3	0.7	0.0	0.1	0.6	1.4	-0.7	1.5	-1.8	0.3	1.2	1.5	0.8	1.5
Jan-23	2.9	2.4	3.6	3.9	5.7	1.2	1.5	1.8	4.0	0.6	1.3	1.4	1.5	1.5	2.1
Feb-23	4.3	4.5	4.0	4.3	3.9	4.7	4.1	8.2	5.3	9.8	5.4	2.2	2.6	2.9	3.9
Mar-23	3.7	3.9	3.5	5.6	4.5	2.7	2.4	4.7	6.3	3.8	5.7	2.5	2.4	2.7	2.9
Apr-23	2.4	2.0	3.0	3.4	4.2	1.0	1.6	0.1	2.2	-1.0	2.4	1.8	2.7	1.5	2.0
May-23	1.6	1.5	1.7	1.9	1.4	1.2	2.0	1.0	2.4	0.2	1.3	1.2	2.5	1.5	2.0
Jun-23	-0.3	0.1	-0.8	0.1	-1.6	0.1	0.1	-0.3	0.2	-0.5	0.04	0.7	0.9	0.8	0.1

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

Source: Pakistan Bureau of Statistics

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

Groups	Weights	MoM change			YoY change		
		Jun-22	May-23	Jun-23	Jun-22	May-23	Jun-23
Food & Non-Alcoholic	34.6	5.5	1.3	-1.0	25.9	48.7	39.5
Alcoholic Beverages & Tobacco	1.0	7.0	0.6	0.1	17.6	124.0	109.5
Clothing & Footwear	8.6	2.3	1.4	1.1	13.7	22.5	21.0
Housing, Water, Elec, Gas & other Fuels	23.6	7.7	0.7	-0.2	13.5	20.5	11.6
Furnishing & Household Equip. Maintenance etc	4.1	2.9	3.9	1.6	18.8	43.5	41.6
Health	2.8	1.2	0.9	1.1	11.3	19.3	19.1
Transport	5.9	24.4	0.2	-2.1	62.2	52.9	20.3
Communication	2.2	0.2	0.4	0.1	2.0	7.0	6.8
Recreation & Culture	1.6	3.2	5.0	0.7	14.4	72.2	68.0
Education	3.8	0.3	0.9	0.4	9.5	8.4	8.6
Restaurants & Hotels	6.9	5.8	4.2	1.4	21.9	42.3	36.4
Miscellaneous	4.9	3.3	4.4	1.0	15.8	43.3	40.1
Overall National CPI	100.0	6.3	1.6	-0.3	21.3	38.0	29.4

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

Groups	Weights	MoM change			YoY change		
		Jun-22	May-23	Jun-23	Jun-22	May-23	Jun-23
I. Food Group	36.8	5.3	1.9	0.1	24.0	48.1	40.8
Food & Non-Alcoholic	30.4	5.0	1.4	-0.2	24.6	45.8	38.6
Beverages	0.9	8.2	0.5	0.0	18.3	124.5	107.6
Alcoholic Beverages & Restaurant & Hotels (Food)	5.5	6.5	5.7	1.5	21.3	50.2	43.0
II. Non-Food Group	63.2	6.8	1.2	0.1	17.3	26.6	18.7
Clothing & Footwear	8.0	3.0	0.4	1.1	14.2	21.3	19.1
Housing, Water, Elec, Gas & other Fuels	27.0	7.0	0.7	-0.1	11.3	18.0	10.2
Furnishing & Household Equip. Maintenance etc	4.1	2.6	2.9	1.6	17.6	42.1	40.6
Health	2.3	1.4	0.6	0.7	10.9	19.4	18.5
Transport	6.1	23.5	0.0	-2.2	61.5	51.4	20.0
Communication	2.4	0.2	0.6	0.1	2.5	9.0	8.8
Recreation & Culture	1.7	3.1	4.9	0.5	13.3	71.6	67.3
Education	4.9	0.1	0.8	0.2	10.4	5.7	5.9
Restaurants & Hotels (Non-food Component)	1.9	6.9	1.4	0.7	20.8	33.1	25.4
Miscellaneous	4.8	3.7	3.9	1.2	15.1	43.0	39.5
Overall Urban CPI	100.0	6.2	1.5	0.1	19.8	35.1	27.3

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

Groups	Weights	MoM Change			YoY Change		
		Jun-22	May-23	Jun-23	Jun-22	May-23	Jun-23
I. Food Group	45.9	6.0	1.4	-1.6	27.0	52.4	41.5
Food and Non-Alcoholic Beverages	40.9	6.1	1.1	-1.9	27.4	51.9	40.4
Alcoholic Beverages, Tobacco	1.3	5.6	0.8	0.2	16.9	123.3	111.8
Restaurants and Hotels (Food Component)	3.8	5.2	5.0	1.8	26.5	38.3	33.8
II. Non-Food Group	54.1	7.1	2.0	0.1	20.4	32.5	23.8
Clothing and Footwear	9.5	1.6	2.6	1.1	13.1	23.9	23.3
Housing, Water, Elec., Gas and Other Fuels	18.5	9.2	0.6	-0.6	18.4	26.0	14.8
Furnishing and Household Equip. Maintenance	4.1	3.3	5.4	1.6	20.5	45.5	43.1
Health	3.5	1.1	1.3	1.5	11.8	19.3	19.7
Transport	5.6	25.9	0.6	-2.1	63.4	55.5	20.9
Communication	2.0	0.2	0.0	0.0	1.0	3.2	3.0
Recreation and Culture	1.4	3.4	5.2	1.0	16.3	73.2	69.2
Education	2.1	0.9	1.5	0.8	6.2	18.8	18.8
Restaurants and Hotels (Non-Food Component)	2.4	2.5	0.0	0.6	16.2	31.0	28.6
Miscellaneous	5.0	2.8	5.2	0.8	16.8	43.8	40.9
Overall Rural CPI	100.0	6.6	1.7	-0.8	23.6	42.2	32.4

Table A5: National CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Perishable Food Items	Non-Perishable Food Items	Year-on-Year										Misc. Goods and Services
					Health	Transport	Communication	Education	Recreation and Culture	Hotels	Restaurants and				
12-Month Moving Average															
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
Mar-23	35.4	47.2	46.4	51.8	140.0	21.9	17.5	39.0	18.5	54.9	6.6	50.6	7.2	38.5	34.4
Apr-23	36.4	48.1	51.5	29.2	133.5	21.6	16.9	40.5	18.8	56.8	6.7	68.6	8.5	39.0	38.8
May-23	38.0	48.7	51.0	33.7	124.0	22.5	20.5	43.5	19.3	52.9	7.0	72.2	8.4	42.3	43.3
Jun-23	29.4	39.5	41.8	24.8	109.5	21.0	11.6	41.6	19.1	20.3	6.8	68.0	8.6	36.4	40.1
Period Average (Since July)															
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
Mar-23	24.6	32.7	30.8	45.2	37.3	16.3	12.2	25.7	14.8	49.8	2.2	27.6	9.9	27.2	22.7
Apr-23	26.6	35.3	33.8	44.8	48.3	17.3	13.0	27.9	15.5	52.0	2.6	32.6	9.9	29.2	24.9
May-23	28.6	37.9	36.8	45.1	58.2	18.2	14.2	30.2	16.2	53.5	3.0	37.7	9.8	31.4	27.4
Jun-23	29.2	39.0	38.2	43.8	66.4	18.8	14.0	32.1	16.8	49.2	3.4	42.2	9.7	32.6	29.5
Month-on-Month															
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
Mar-23	3.7	3.7	3.9	2.5	60.9	5.3	1.1	5.1	0.3	3.3	2.9	3.1	1.3	3.8	2.5
Apr-23	2.4	4.4	4.7	2.5	0.3	1.9	-1.1	2.7	1.1	1.6	0.1	12.4	1.9	0.6	4.1
May-23	1.6	1.3	2.6	-7.7	0.6	1.4	0.7	3.9	0.9	0.2	0.4	5.0	0.9	4.2	4.4
Jun-23	-0.3	-1.0	-0.9	-1.6	0.1	1.1	-0.2	1.6	1.1	-2.1	0.1	0.7	0.4	1.4	1.0
3-Years Average (in current month during FY21-FY23)															
YoY	20.1	25.3	26.4	19.1	44.0	14.9	11.4	23.4	13.3	33.0	3.5	29.5	6.6	22.3	22.3
MoM	1.9	0.9	1.0	0.5	2.4	1.2	2.6	1.7	1.0	7.8	0.1	1.7	0.3	2.6	1.8

Source: Pakistan Bureau of Statistics

Table A6: Urban CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Perishable Food Items	Non-Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Health	Transport	Communication	Education	Recreation and Culture	Misc. Goods and Services
Year-on-Year												
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
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
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
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
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
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
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
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
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
Mar-23	33.0	45.5	44.9	49.4	140.8	22.4	15.0	39.6	17.9	54.6	8.5	51.4
Apr-23	33.5	45.1	48.5	26.9	133.7	21.5	14.5	40.8	19.1	55.9	8.6	68.5
May-23	35.1	45.8	47.9	32.3	124.5	21.3	18.0	42.1	19.4	51.4	9.0	71.6
Jun-23	27.3	38.6	40.7	25.6	107.6	19.1	10.2	40.6	18.5	20.0	8.8	67.3
12-Month Moving Average												
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
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
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
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
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
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
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
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
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
Mar-23	22.6	30.9	29.1	42.1	38.2	16.8	9.8	25.2	13.5	48.9	2.5	26.6
Apr-23	24.4	33.3	32.0	41.9	49.2	17.7	10.5	27.5	14.2	51.0	3.1	31.6
May-23	26.3	35.8	34.7	42.6	59.2	18.5	11.6	29.8	15.0	52.3	3.7	36.6
Jun-23	26.9	37.0	36.2	41.8	67.1	18.9	11.5	31.7	15.6	48.1	4.2	41.2
Period Average (Since July)												
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
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
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
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
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
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
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
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
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
Mar-23	25.0	34.7	32.7	47.0	47.3	18.3	10.7	28.3	14.4	51.2	2.6	31.4
Apr-23	25.9	35.8	34.4	44.6	56.2	18.7	11.0	29.6	14.9	51.7	3.2	35.2
May-23	26.8	36.8	35.7	43.4	62.9	18.9	11.7	30.8	15.3	51.6	3.8	38.6
Jun-23	26.9	37.0	36.2	41.8	67.1	18.9	11.5	31.7	15.6	48.1	4.2	41.2
Month-on-Month												
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
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
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
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
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
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
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
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
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
Mar-23	3.9	4.5	4.6	3.5	55.6	5.8	1.1	5.2	0.4	3.6	3.7	3.0
Apr-23	2.0	4.0	4.3	2.5	0.3	1.1	-1.1	2.5	1.9	1.4	0.2	11.5
May-23	1.5	1.4	2.7	-7.0	0.5	0.4	0.7	2.9	0.6	0.0	0.6	4.9
Jun-23	0.1	-0.2	-0.2	0.1	0.0	1.1	-0.1	1.6	0.7	-2.2	0.1	0.5
3-Years Average (in current month during FY21-FY23)												
YoY	18.9	24.8	25.9	18.5	44.0	14.6	10.0	22.4	13.2	32.8	4.4	28.5
MoM	2.0	0.8	0.8	0.6	2.8	1.4	2.4	1.6	1.0	7.5	0.1	1.8

Source: Pakistan Bureau of Statistics

Table A7: Rural CPI Inflation by Groups

Period	General	Food and Non-Alcoholic Beverages	Perishable Food Items	Non-Perishable Food Items	Alcoholic Beverages, Tobacco	Clothing and Footwear	Health	Transport	Communication	Education	Recreation and Culture	Restaurants and Hotels	Misc. Goods and Services
Year-on-Year													
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
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
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
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
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
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
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
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
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
Mar-23	38.9	49.0	48.2	54.5	139.1	21.3	22.9	38.1	19.0	55.5	3.2	49.2	12.5
Apr-23	40.7	51.4	54.8	31.9	133.3	21.8	22.2	40.2	18.4	58.4	3.2	68.9	18.0
May-23	42.2	51.9	54.4	35.3	123.3	23.9	26.0	45.5	19.3	55.5	3.2	73.2	18.8
Jun-23	32.4	40.4	43.0	24.0	111.8	23.3	14.8	43.1	19.7	20.9	3.0	69.2	18.8
12-Month Moving Average													
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
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
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
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
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
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
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
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
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
Mar-23	27.6	34.7	32.6	48.8	36.4	15.8	17.4	26.4	16.1	51.4	1.4	29.4	9.4
Apr-23	29.8	37.5	35.9	48.1	47.3	16.7	18.4	28.5	16.7	53.7	1.6	34.3	10.5
May-23	32.0	40.3	39.1	47.9	57.1	17.8	19.7	30.9	17.4	55.5	1.8	39.5	11.6
Jun-23	32.6	41.2	40.5	46.1	65.5	18.6	19.4	32.8	18.0	51.1	2.0	44.0	12.6
Period Average (Since July)													
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
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
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
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
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
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
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
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
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
Mar-23	30.6	38.8	36.7	52.3	44.7	17.1	18.9	29.0	17.7	54.4	1.6	34.5	10.6
Apr-23	31.6	40.2	38.6	49.8	53.8	17.6	19.2	30.2	17.7	54.8	1.8	38.1	11.3
May-23	32.7	41.3	40.2	48.4	60.7	18.2	19.8	31.7	17.9	54.9	1.9	41.5	12.0
Jun-23	32.6	41.2	40.5	46.1	65.5	18.6	19.4	32.8	18.0	51.1	2.0	44.0	12.6
Month-on-Month													
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
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	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
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
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
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
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
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
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
Mar-23	3.5	2.9	3.2	1.5	67.5	4.7	1.2	4.9	0.2	2.7	1.3	3.3	1.4
Apr-23	3.0	4.7	5.1	2.5	0.3	2.8	-1.3	3.1	0.4	2.0	0.1	14.1	5.9
May-23	1.7	1.1	2.6	-8.4	0.8	2.6	0.6	5.4	1.3	0.6	0.0	5.2	1.5
Jun-23	-0.8	-1.9	-1.7	-3.6	0.2	1.1	-0.6	1.6	1.5	-2.1	0.0	1.0	0.8
3-Years Average (in current month during FY21-FY23)													
YoY	21.9	25.9	26.9	19.9	44.1	15.2	14.6	24.9	13.4	33.2	1.6	31.2	9.5
MoM	1.9	1.1	1.2	0.5	2.1	1.0	3.1	1.8	1.0	8.2	0.1	1.7	0.8

Source: Pakistan Bureau of Statistics

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

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
		Jun-22	Jun-23	
A. Ranked by Weighted Contribution				
1 Wheat Flour	3.01	16.12	89.89	9.80
2 Readymade Food	5.52	21.32	43.04	8.83
3 Milk Fresh	7.11	21.29	31.80	8.17
4 Appliances/Articles/Products For Personal	2.98	14.39	38.42	3.97
5 Motor Fuel	2.91	95.74	18.54	3.39
6 Chicken	1.36	47.52	57.72	3.35
7 Rice	1.18	25.90	72.83	3.32
8 Washing Soap/Detergents/Match Box	1.41	22.63	61.96	3.28
9 Cigarettes	0.72	18.40	129.20	3.27
10 Tea	0.84	12.97	113.09	3.20
Total	27.04			50.58
B. Ranked by Percentage Change				
1 Cigarettes	0.72	18.40	129.20	3.27
2 Text Books	0.67	9.14	113.98	2.21
3 Tea	0.84	12.97	113.09	3.20
4 Wheat Flour	3.01	16.12	89.89	9.80
5 Rice	1.18	25.90	72.83	3.32
6 Dessert Preparation	0.04	14.11	72.79	0.10
7 Stationery	0.35	30.75	68.53	0.88
8 Potatoes	0.45	4.50	64.69	1.24
9 Gas Charges	1.08	0.00	62.82	3.11
10 Wheat	0.61	31.86	62.27	1.64
Total	8.95			28.77
C. Ranked by Weights				
1 House Rent	19.26	5.58	5.34	3.17
2 Milk Fresh	7.11	21.29	31.80	8.17
3 Readymade Food	5.52	21.32	43.04	8.83
4 Education	4.88	10.35	5.89	0.98
5 Electricity Charges	4.56	34.65	7.97	1.35
6 Wheat Flour	3.01	16.12	89.89	9.80
7 Appliances/Articles/Products For Personal	2.98	14.39	38.42	3.97
8 Motor Fuel	2.91	95.74	18.54	3.39
9 Cotton Cloth	2.22	15.71	28.45	2.32
10 Meat	2.04	26.08	18.50	1.73
Total	54.49			43.71

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item. This is reported as a share in YoY change in Urban CPI, which is 27.3 percent in Jun 2023.

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	7.11	1.55	3.55	249.71
2 Chicken	1.36	11.31	6.75	124.79
3 Electricity Charges	4.56	2.92	2.90	111.01
4 Readymade Food	5.52	5.68	1.46	91.14
5 Appliances/Articles/Products For Personal	2.98	2.44	2.88	86.03
6 Rice	1.18	1.93	4.22	68.73
7 Meat	2.04	4.50	2.50	58.17
8 Washing Soap/Detergents/Match Box	1.41	4.29	2.69	48.37
9 Onions	0.59	-32.96	13.58	47.99
10 Tomatoes	0.35	-28.89	28.32	45.99
Total	27.10			931.93
B. Ranked by Percentage Change				
1 Tomatoes	0.35	-28.89	28.32	45.99
2 Onions	0.59	-32.96	13.58	47.99
3 Gur	0.04	15.73	7.21	2.47
4 Chicken	1.36	11.31	6.75	124.79
5 Potatoes	0.45	17.22	6.50	41.40
6 Milk Products	0.64	1.16	4.51	28.74
7 Rice	1.18	1.93	4.22	68.73
8 Readymade Garments	1.32	0.40	3.75	39.83
9 Milk Fresh	7.11	1.55	3.55	249.71
10 Construction Input Items	0.38	1.42	3.39	13.90
Total	13.42			663.55
C. Ranked by Weights				
1 House Rent	19.26	0.00	0.00	0.00
2 Milk Fresh	7.11	1.55	3.55	249.71
3 Readymade Food	5.52	5.68	1.46	91.14
4 Education	4.88	0.78	0.23	8.87
5 Electricity Charges	4.56	2.92	2.90	111.01
6 Wheat Flour	3.01	6.40	-8.17	-396.44
7 Appliances/Articles/Products For Personal	2.98	2.44	2.88	86.03
8 Motor Fuel	2.91	-0.07	-4.33	-211.02
9 Cotton Cloth	2.22	0.15	0.43	9.70
10 Meat	2.04	4.50	2.50	58.17
Total	54.49			7.17

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item. This is reported as a share in MoM change in Urban CPI, which is 0.1 percent in Jun 2023.

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

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
		Jun-22	Jun-23	
A. Ranked by Weighted Contribution				
1 Wheat Flour	3.01	16.12	89.89	9.80
2 Readymade Food	5.52	21.32	43.04	8.83
3 Milk Fresh	7.11	21.29	31.80	8.17
4 Appliances/Articles/Products For Personal	2.98	14.39	38.42	3.97
5 Motor Fuel	2.91	95.74	18.54	3.39
6 Chicken	1.36	47.52	57.72	3.35
7 Rice	1.18	25.90	72.83	3.32
8 Washing Soap/Detergents/Match Box	1.41	22.63	61.96	3.28
9 Cigarettes	0.72	18.40	129.20	3.27
10 Tea	0.84	12.97	113.09	3.20
11 House Rent	19.26	5.58	5.34	3.17
12 Gas Charges	1.08	0.00	62.82	3.11
13 Fresh Fruits	1.44	38.63	40.31	2.39
14 Cotton Cloth	2.22	15.71	28.45	2.32
15 Text Books	0.67	9.14	113.98	2.21
Total	51.71			63.78
Bottom 15 Contributors				
1 Tomatoes	0.35	121.72	-29.57	-0.41
2 Onions	0.59	124.30	-16.53	-0.37
3 Therapeutic Appliances And Equipme	0.01	5.56	7.86	0.00
4 Mustard Oil	0.01	81.82	5.97	0.00
5 Postal Services	0.02	13.61	6.40	0.00
6 Dental Services	0.02	7.04	12.83	0.01
7 Major Tools & Equipments	0.01	21.14	24.36	0.01
8 Pulse Masoor	0.16	74.32	1.56	0.01
9 Carpets	0.03	11.02	14.49	0.01
10 Motor Vehicle Tax	0.05	7.62	8.92	0.01
11 Electrical Appliances For Personal	0.05	14.41	13.95	0.02
12 Communication Services	1.88	0.33	0.52	0.02
13 Garbage Collection	0.11	13.81	5.94	0.03
14 Honey	0.10	19.17	10.31	0.03
15 Gur	0.04	3.82	36.60	0.05
Total	3.43			-0.58

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	7.11	1.55	3.55	249.71
2 Chicken	1.36	11.31	6.75	124.79
3 Electricity Charges	4.56	2.92	2.90	111.01
4 Readymade Food	5.52	5.68	1.46	91.14
5 Appliances/Articles/Products For Personal	2.98	2.44	2.88	86.03
6 Rice	1.18	1.93	4.22	68.73
7 Meat	2.04	4.50	2.50	58.17
8 Washing Soap/Detergents/Match Box	1.41	4.29	2.69	48.37
9 Onions	0.59	-32.96	13.58	47.99
10 Tomatoes	0.35	-28.89	28.32	45.99
11 Potatoes	0.45	17.22	6.50	41.40
12 Readymade Garments	1.32	0.40	3.75	39.83
13 Transport Services	1.75	-1.01	2.01	30.57
14 Milk Products	0.64	1.16	4.51	28.74
15 Beverages	0.89	1.21	3.32	26.68
Total	32.15			1,099.15
Bottom 15 Contributors				
1 Wheat Flour	3.01	6.40	-8.17	-396.44
2 Motor Fuel	2.91	-0.07	-4.33	-211.02
3 Liquefied Hydrocarbons	0.51	3.05	-17.89	-143.24
4 Fresh Vegetables	1.53	-10.71	-8.38	-108.81
5 Eggs	0.51	7.10	-13.64	-104.39
6 Cooking Oil	1.10	-0.60	-3.54	-66.30
7 Wheat	0.61	-2.29	-5.86	-57.17
8 Vegetable Ghee	1.03	-0.23	-2.68	-46.08
9 Personal Effects N.E.C.	0.94	6.82	-2.26	-33.71
10 Fresh Fruits	1.44	-3.16	-1.36	-24.61
11 Pulse Gram	0.17	1.63	-4.65	-7.36
12 Pulse Moong	0.17	1.67	-3.88	-5.25
13 Pulse Masoor	0.16	1.60	-1.71	-2.44
14 Besan	0.08	-0.27	-2.62	-2.11
15 Gram Whole	0.09	1.19	-1.11	-1.23
Total	14.26			-1,210.16

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk fresh	7.11	1.55	3.55	249.71
2 Chicken	1.36	11.31	6.75	124.79
3 Readymade food	5.52	5.68	1.46	91.14
4 Rice	1.18	1.93	4.22	68.73
5 Meat	2.04	4.50	2.50	58.17
6 Onions	0.59	-32.96	13.58	47.99
7 Tomatoes	0.35	-28.89	28.32	45.99
8 Potatoes	0.45	17.22	6.50	41.40
9 Milk products	0.64	1.16	4.51	28.74
10 Beverages	0.89	1.21	3.32	26.68
11 Sugar	1.11	-2.77	2.64	25.90
12 Bakery and confectionary	0.48	2.42	2.24	11.86
13 Sweetmeat	0.35	4.64	2.00	8.23
14 Tea	0.84	1.79	0.50	6.51
15 Condiments and Spices	1.33	2.52	0.38	5.09
Total	24.25			840.94
Bottom 15 Contributors				
1 Wheat flour	3.01	6.40	-8.17	-396.44
2 Fresh vegetables	1.53	-10.71	-8.38	-108.81
3 Eggs	0.51	7.10	-13.64	-104.39
4 Cooking oil	1.10	-0.60	-3.54	-66.30
5 Wheat	0.61	-2.29	-5.86	-57.17
6 Vegetable ghee	1.03	-0.23	-2.68	-46.08
7 Fresh fruits	1.44	-3.16	-1.36	-24.61
8 Pulse gram	0.17	1.63	-4.65	-7.36
9 Pulse moong	0.17	1.67	-3.88	-5.25
10 Pulse masoor	0.16	1.60	-1.71	-2.44
11 Besan	0.08	-0.27	-2.62	-2.11
12 Gram whole	0.09	1.19	-1.11	-1.23
13 Wheat products	0.09	4.36	-0.78	-1.01
14 Mustard oil	0.01	-1.04	-4.46	-0.82
15 Honey	0.10	0.63	-0.17	-0.13
Total	10.11			-824.15

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Electricity charges	4.56	2.92	2.90	111.01
2 Appliances/Articles/Products for Personal	2.98	2.44	2.88	86.03
3 Washing soap/detergents/match Box	1.41	4.29	2.69	48.37
4 Readymade garments	1.32	0.40	3.75	39.83
5 Transport services	1.75	-1.01	2.01	30.57
6 Construction input items	0.38	1.42	3.39	13.90
7 Household equipments	1.00	2.62	1.17	12.54
8 Marriage Hall Charges	1.75	0.42	0.75	12.50
9 Woolen cloth	0.84	0.15	1.51	11.02
10 Cotton cloth	2.22	0.15	0.43	9.70
11 Education	4.88	0.78	0.23	8.87
12 Personal Grooming Services	0.80	4.53	1.14	8.73
13 Mechanical services	0.43	0.88	2.10	8.07
14 stationery	0.35	5.44	1.75	7.97
15 Tailoring	1.07	0.10	0.57	5.61
Total	25.73			414.72
Bottom 15 Contributors				
1 Motor fuel	2.91	-0.07	-4.33	-211.02
2 Liquefied Hydrocarbons	0.51	3.05	-17.89	-143.24
3 Personal Effects n.e.c.	0.94	6.82	-2.26	-33.71
4 Newspapers	0.07	32.77	0.00	0.00
5 Communication Services	1.88	0.00	0.00	0.00
6 Motor vehicle tax	0.05	0.00	0.00	0.00
7 Woolen readymade garments	0.43	0.00	0.00	0.00
8 Gas charges	1.08	0.00	0.00	0.00
9 Water supply	0.53	1.50	0.00	0.00
10 Text books	0.67	5.15	0.00	0.00
11 House rent	19.26	0.00	0.00	0.00
12 Major tools & equipments	0.01	0.91	0.21	0.02
13 Therapeutic Appliances and Equipme	0.01	0.01	0.56	0.02
14 Household servant	0.77	1.60	0.01	0.03
15 Electrical Appliances for Personal	0.05	2.29	0.27	0.09
Total	29.15			-387.81

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

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
		Jun-22	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	10.38	19.66	35.33	10.29
2 Wheat Flour	3.43	15.00	87.15	8.82
3 Wheat	3.47	30.22	63.11	7.48
4 Rice	1.55	24.83	77.65	4.80
5 Readymade Food	3.80	26.54	33.80	4.36
6 Solid Fuel	4.48	20.19	31.36	4.10
7 Cigarettes	1.24	16.52	115.68	3.84
8 Tea	1.26	13.19	110.79	3.74
9 Chicken	1.46	33.62	63.53	3.24
10 Washing Soaps, Detergents And	1.70	24.60	58.30	2.95
Total	32.77			53.62
B. Ranked by Percentage Change				
1 Text Books	0.50	14.04	129.44	1.53
2 Cigarettes	1.24	16.52	115.68	3.84
3 Tea	1.26	13.19	110.79	3.74
4 Wheat Flour	3.43	15.00	87.15	8.82
5 Rice	1.55	24.83	77.65	4.80
6 Dessert Preparation	0.01	10.78	75.91	0.03
7 Potatoes	0.74	0.19	75.66	1.99
8 Wheat Products	0.11	19.94	71.76	0.24
9 Chicken	1.46	33.62	63.53	3.24
10 Wheat	3.47	30.22	63.11	7.48
Total	13.77			35.71
C. Ranked by Weights				
1 Milk Fresh	10.38	19.66	35.33	10.29
2 House Rent	8.61	5.73	7.10	1.54
3 Solid Fuel	4.48	20.19	31.36	4.10
4 Readymade Food	3.80	26.54	33.80	4.36
5 Wheat	3.47	30.22	63.11	7.48
6 Electricity Charges	3.44	34.65	7.97	0.83
7 Wheat Flour	3.43	15.00	87.15	8.82
8 Cotton Cloth	2.84	12.97	22.23	2.06
9 Motor Fuels	2.49	99.44	19.10	2.45
10 Vegetable Ghee	2.38	86.34	1.57	0.24
Total	45.32			42.17

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item. This is reported as a share in YoY change in Rural CPI, which is 32.4 percent in Jun 2023.

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	10.38	3.75	1.72	21.45
2 Rice	1.55	4.86	4.63	15.61
3 Chicken	1.46	9.36	5.35	13.62
4 Electricity Charges	3.44	2.92	2.90	10.20
5 Readymade Food	3.80	4.97	1.84	10.01
6 Tomatoes	0.51	-30.66	37.32	9.01
7 Appliances/Articles/Products For Personal	2.27	5.22	2.50	6.21
8 Meat	1.71	3.32	2.46	5.87
9 Washing Soaps, Detergents And Match Box	1.70	7.52	2.08	5.26
10 Potatoes	0.74	25.30	3.52	5.04
Total	27.56			102.28
B. Ranked by Percentage Change				
1 Tomatoes	0.51	-30.66	37.32	9.01
2 Gur	0.15	12.70	5.59	0.95
3 Chicken	1.46	9.36	5.35	13.62
4 Rice	1.55	4.86	4.63	15.61
5 Ice Cream	0.06	9.18	4.24	0.24
6 Milk Products	0.96	3.37	4.22	4.60
7 Stationery	0.37	4.71	3.65	1.90
8 Potatoes	0.74	25.30	3.52	5.04
9 Construction Input Items	0.63	0.26	3.46	2.47
10 Electricity Charges	3.44	2.92	2.90	10.20
Total	9.87			63.64
C. Ranked by Weights				
1 Milk Fresh	10.38	3.75	1.72	21.45
2 House Rent	8.61	0.00	0.00	0.00
3 Solid Fuel	4.48	-0.14	0.09	0.49
4 Readymade Food	3.80	4.97	1.84	10.01
5 Wheat	3.47	0.62	-7.40	-49.63
6 Electricity Charges	3.44	2.92	2.90	10.20
7 Wheat Flour	3.43	3.37	-10.40	-70.62
8 Cotton Cloth	2.84	2.37	1.20	4.33
9 Motor Fuels	2.49	-0.04	-4.64	-23.86
10 Vegetable Ghee	2.38	-1.53	-4.68	-24.50
Total	45.32			-122.13

Note: Weighted contribution is estimated by multiplying the weights by the price change of an item. This is reported as a share in MoM change in Rural CPI, which is -0.8 percent in Jun 2023.

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

Items/Contributors	Weights	YoY Change		Weighted Contribution (%)
		Jun-22	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	10.38	19.66	35.33	10.29
2 Wheat Flour	3.43	15.00	87.15	8.82
3 Wheat	3.47	30.22	63.11	7.48
4 Rice	1.55	24.83	77.65	4.80
5 Readymade Food	3.80	26.54	33.80	4.36
6 Solid Fuel	4.48	20.19	31.36	4.10
7 Cigarettes	1.24	16.52	115.68	3.84
8 Tea	1.26	13.19	110.79	3.74
9 Chicken	1.46	33.62	63.53	3.24
10 Washing Soaps, Detergents And Match Box	1.70	24.60	58.30	2.95
11 Condiments And Spices	1.49	-11.58	61.81	2.61
12 Motor Fuels	2.49	99.44	19.10	2.45
13 Personal Effects N.E.C.	1.21	22.22	49.73	2.36
14 Fresh Fruits	1.45	40.93	41.96	2.17
15 Appliances/Articles/Products For Personal	2.27	11.60	36.29	2.11
Total	41.68			65.32
Bottom 15 Contributors				
1 Onions	0.90	175.59	-22.76	-0.62
2 Tomatoes	0.51	149.57	-35.07	-0.56
3 Postal Services	0.01	0.00	0.00	0.00
4 Garbage Collection	0.01	10.16	2.48	0.00
5 Water Supply	0.06	1.63	0.90	0.00
6 Mustard Oil	0.01	78.06	5.50	0.00
7 Communication Services	1.65	0.09	0.16	0.00
8 Honey	0.03	18.61	8.28	0.01
9 Accommodation Services	0.14	3.64	3.31	0.01
10 Motor Vehicle Tax	0.02	-5.56	24.88	0.01
11 Dental Services	0.02	8.69	25.28	0.01
12 Cleaning And Laundering	0.02	28.36	31.56	0.02
13 Dessert Preparation	0.01	10.78	75.91	0.03
14 Pulse Masoor	0.21	73.93	3.86	0.03
15 Major Tools And Equipments	0.03	18.65	33.91	0.03
Total	3.63			-1.03

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk Fresh	10.38	3.75	1.72	21.45
2 Rice	1.55	4.86	4.63	15.61
3 Chicken	1.46	9.36	5.35	13.62
4 Electricity Charges	3.44	2.92	2.90	10.20
5 Readymade Food	3.80	4.97	1.84	10.01
6 Tomatoes	0.51	-30.66	37.32	9.01
7 Appliances/Articles/Products For Personal	2.27	5.22	2.50	6.21
8 Meat	1.71	3.32	2.46	5.87
9 Washing Soaps, Detergents And Match Box	1.70	7.52	2.08	5.26
10 Potatoes	0.74	25.30	3.52	5.04
11 Personal Grooming Services	1.54	4.08	2.30	4.91
12 Tea	1.26	3.50	2.15	4.82
13 Transport Services	1.80	0.36	2.12	4.63
14 Milk Products	0.96	3.37	4.22	4.60
15 Cotton Cloth	2.84	2.37	1.20	4.33
Total	35.96			125.57
Bottom 15 Contributors				
1 Wheat Flour	3.43	3.37	-10.40	-70.62
2 Wheat	3.47	0.62	-7.40	-49.63
3 Fresh Fruits	1.45	-3.13	-10.40	-27.35
4 Vegetable Ghee	2.38	-1.53	-4.68	-24.50
5 Liquefied Hydrocarbons	1.00	1.03	-14.55	-24.46
6 Motor Fuels	2.49	-0.04	-4.64	-23.86
7 Fresh Vegetables	2.09	-18.18	-7.74	-16.14
8 Eggs	0.57	6.58	-10.57	-10.33
9 Cooking Oil	0.60	-0.89	-5.59	-7.50
10 Personal Effects N.E.C.	1.21	6.10	-2.40	-5.61
11 Pulse Moong	0.25	3.64	-4.90	-1.31
12 Pulse Gram	0.28	1.94	-3.52	-1.15
13 Pulse Masoor	0.21	1.15	-3.12	-0.75
14 Besan	0.07	0.12	-1.80	-0.17
15 Mustard Oil	0.01	-1.13	-5.11	-0.13
Total	19.51			-263.51

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Milk fresh	10.38	3.75	1.72	21.45
2 Rice	1.55	4.86	4.63	15.61
3 Chicken	1.46	9.36	5.35	13.62
4 Readymade Food	3.80	4.97	1.84	10.01
5 Tomatoes	0.51	-30.66	37.32	9.01
6 Meat	1.71	3.32	2.46	5.87
7 Potatoes	0.74	25.30	3.52	5.04
8 Tea	1.26	3.50	2.15	4.82
9 Milk products	0.96	3.37	4.22	4.60
10 Sugar	2.03	-1.79	1.39	3.05
11 Condiments and Spices	1.49	1.80	1.04	2.25
12 Onions	0.90	-31.97	2.07	1.37
13 Bakery and Confectionary	0.37	2.66	2.07	1.11
14 Gur	0.15	12.70	5.59	0.95
15 Beverages	0.55	2.01	1.21	0.73
Total	27.87			99.50
Bottom 15 Contributors				
1 Wheat Flour	3.43	3.37	-10.40	-70.62
2 Wheat	3.47	0.62	-7.40	-49.63
3 Fresh fruits	1.45	-3.13	-10.40	-27.35
4 Vegetable ghee	2.38	-1.53	-4.68	-24.50
5 Fresh Vegetables	2.09	-18.18	-7.74	-16.14
6 Eggs	0.57	6.58	-10.57	-10.33
7 Cooking oil	0.60	-0.89	-5.59	-7.50
8 Pulse Moong	0.25	3.64	-4.90	-1.31
9 Pulse Gram	0.28	1.94	-3.52	-1.15
10 Pulse Masoor	0.21	1.15	-3.12	-0.75
11 Besan	0.07	0.12	-1.80	-0.17
12 Mustard oil	0.01	-1.13	-5.11	-0.13
13 Gram Whole	0.11	3.28	-0.59	-0.10
14 Wheat Products	0.11	3.14	-0.16	-0.03
15 Honey	0.03	0.76	0.25	0.01
Total	15.06			-209.69

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

Items/Contributors	Weights	MoM Change		Weighted Contribution (%)
		May-23	Jun-23	
A. Ranked by Weighted Contribution				
1 Electricity Charges	3.44	2.92	2.90	10.20
2 Appliances/Articles/Products for Personal	2.27	5.22	2.50	6.21
3 Washing Soaps, Detergents and Match Box	1.70	7.52	2.08	5.26
4 Personal Grooming Services	1.54	4.08	2.30	4.91
5 Transport Services	1.80	0.36	2.12	4.63
6 Cotton Cloth	2.84	2.37	1.20	4.33
7 Drugs and Medicines	1.58	1.53	2.15	4.14
8 Woolen Cloth	1.10	3.14	2.24	2.77
9 Household Equipments	1.28	4.64	1.54	2.65
10 Construction Input Items	0.63	0.26	3.46	2.47
11 Stationery	0.37	4.71	3.65	1.90
12 Tailoring	1.30	1.89	1.24	1.83
13 Education	2.13	1.50	0.83	1.69
14 Marriage Hall Charges	2.25	0.00	0.65	1.54
15 Readymade Garments	1.13	2.72	0.95	1.19
Total	25.36			55.71
Bottom 15 Contributors				
1 Liquefied Hydrocarbons	1.00	1.03	-14.55	-24.46
2 Motor Fuels	2.49	-0.04	-4.64	-23.86
3 Personal Effects n.e.c.	1.21	6.10	-2.40	-5.61
4 Postal Services	0.01	0.00	0.00	0.00
5 Newspapers	0.02	46.34	0.00	0.00
6 Garbage Collection	0.01	0.00	0.00	0.00
7 Communication Services	1.65	0.00	0.00	0.00
8 Accommodation Services	0.14	0.00	0.00	0.00
9 Motor Vehicle Tax	0.02	0.00	0.00	0.00
10 Water Supply	0.06	0.00	0.00	0.00
11 Woolen Readymade Garments	0.54	0.00	0.00	0.00
12 House Rent	8.61	0.00	0.00	0.00
13 Text Books	0.50	6.08	0.00	0.00
14 Dental Services	0.02	0.00	0.31	0.01
15 Motor Vehicles	0.73	2.10	0.01	0.01
Total	17.01			-53.91

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

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Food & Non-Alcoholic Beverages	Tomatoes, Lemon, Onions, Chilies (Green), Cardamom Small (Average Quality), Kinnu (Average Quality), Peach (Average Quality), Grapes (Angoor) (Average Quality), Mango	Chilies Powder National 200 Gm Packet, Pulse Masoor (Washed), Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch,	Mustard Oil (Average Quality), Bottlegourd (Loki),	Honey Marhaba Bottle 500 Gm, Tinda, Cardamom Large (Loose) (Average Quality), Garlic (Lehsun), Vegetable Ghee Dalda/Habib 2.5 Kg Tin, Beef With Bone (Average Quality), Almonds (Badam)
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle Nuts), Cigarettes Capstan 20'S Packet, Cigarettes Gold Leaf 20'S Packet,
Clothing & Footwear	Cheetah 50 Size 3-5 Servis, Gents Shoes Servis, Children Shoes Power Lite Bata, Ladies Sandal Bata, Ladies Sponge Chappal Bata, Gents Sandal Bata, Gents Shoes Paul Bata,		Pant Cloth Wash & Wear (Average Quality), Socks Nylon Local (Average Quality),	Women Shalwar Kameez (Average Quality), Dopatta Georgette (Average Quality), Heavy Weight Suiting Lawrence Pur (Average Quality), Tailoring Charges Pant (Men), Vest "Baniyan" For Men Average Quality, Awami Suit Gents Wash & Wear (Average Quality), Underwear Medium Size (Average Quality), Gents Sponge Chappal Bata, Pullover Gents
Housing, Water, Elec, Gas & other Fuels	Electricity Charges 51-100 Units, Electricity Charges Upto 50 Units,	Electricity Charges 101-300 Units,	Water Charges Per House, House Rent Combined, Charges For Refuse/Waste Collection, Electricity Charges Combined,	Lpg 11.67 Kg Cylinder, Mason Wage Rate, Painter Wage Rate, Electricity Charges 301-700 Units, Plumber Wage Rate, Cement (Local) 50 Kg Bag, Bricks New 1St Class, Electrician Charges, Unskilled Labor Wage Rate, Bajri, Iron Bar (M.S. Bar) 1/2 " 40 Grade, Sand (Black Pit), Gas Charges
Furnishing & Household Equip. etc			Bed Sheet Double With Two Pillow Covers (Superior Quality),	Bed Sheet Single (Superior Quality), Plain Carpet, Air Cooler Super Asia Ecm-4000/Jc-1000, Household Servant Female Part Time, Dinner Set Plastic 72 Pieces Super Quality, Blanket Single (Sn), Dining Table Wit Glass Top And Six Chairs (Average Quality), Towel Medium Size (3'
Health		Ventolin Tablets 2 Mg, Daonil Tablets 5 Mg,	Cac 1000 Tablets Sandoz Bottle, Sugar Test (Random/Fasting) Charges Of Both, Physiotherapist Fee Per Visit, Amoxil Capsule 250 Mg, Phenergan Syrup 120 ML Bottle, Flagyl Tablets 400 Mg, Betnovate-N Ointment 10 Gm Tube, Electronic	Lederplex Syrup Bottle, Hydrylic Syrup 120 ML Bottle, Septran Tablets, Dental Extraction Fee, Dental Surgeon Fee Per Visit, Urine Test (Dr) Charges, Calpol Syrup 100 ML Bottle, Cost Of Surgery (C-Section), Ultrasound Abdominal, Johar Jashanda Instant (Sachet) Packet, Blood
Transport	Air Fare Economy Class Per Kilometer (National Average), Car Suzuki 800 Cc Without Ac,	Cng,	Hi-Speed Diesel, Car Tax 800 Cc To 1500 Cc,	Auto Rickshaw Fare, Bus Fare Outside City (Ac), Bus Fare Outside City (Non Ac), Taxi Four Seater Fare, Mini Bus Fare Maximum Within City, Bus Fare Maximum Within City, Train Fare Ac Sleeper Per Person, Car Toyota 1300 Cc Xli, Petrol Super, Car Service Charges, Mini Bus Fare Minimum
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	Mag The Weekly (Magazine), Newspaper Daily Dawn, Akhbar-E-Jehan Weekly,		Recreational Park Charges (Minimum Playland Ticket), Urdu Book Ba/B.Sc,	Cable Charges, 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, Lead Pencil Goldfish, Led Sony/Samsung 32" Colored, Newspaper Daily Jang, Photostat Paper 70 Gm, Ballpoint Pen Local, Pen Ink Dollar 57
Education		Government University Fee M.S.C / M.A., Government Medical College/University Tuition Fee For Mbbs (1St Year), Government Engineering University Tuition Fee For Be (1St Year), Private Engineering University Tuition Fee For Be (1St Year), Tuition	Private College Fee First Year, Coaching Fee For Class Xi/Xii Science Group, Private School Fee English Medium Average Standard (Class I), Private School Fee English Medium Average Standard (Class Vi), Private School Fee English	Coaching Fee For Class Ix/X Science Group,
Restaurant & Hotels				Marriage Hall Service Charges With Food (Average Meal), Private Hostel Accommodation Fee For Intermediate College Per Student, Government Hostel Accommodation Fee For Intermediate College Per Student, Pizza Chicken
Miscellaneous				Purse Ladies Medium Size (Average Quality), Perfume Medium Size Broche/Medora, Electric Hair Straightener (Philips), Hair Color (Kala Kola), Pampers (Medium Size), Tooth Brush (Shield), Wall Clock Quartz (Average Quality), Hair Style Charges (At Average Beauty Parlor),

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

Groups	Decrease or no change	Subdued increase (Greater than 0% but less than 5%)	Moderate increase (5% but less than 10%)	Double digit increase (10% or more)
Food & Non-Alcoholic Beverages	Tomatoes, Onions, Chilies (Green), Lemon, Vegetable Ghee Dalda/Habib Or Other Superior Quality 1 Kg Pouch,	Bottlegourd (Loki), Cooking Oil (Pouch), Pulse Masoor (Washed).	Vegetable Ghee Dalda/Habib 2.5 Kg Tin, Mustard Oil (Average Quality), Brinjal, Tinda, Honey Marhaba Bottle 500 Gm,	Garlic (Lehsun), Mango Kalmi (Average Quality), Beef With Bone (Average Quality), Chips (Loose), Cucumber (Kheera), Jam-E-Shireen Standard Size (800 Ml), Mutton (Average Quality), Fish Fresh, Almonds (Badam) Kaghazi With Shell (Average Quality), Apple (Average Quality)
Alcoholic Beverages & Tobacco				Pan Prepared (Sweet With Beetle Nuts), Chewing Tobacco (Niswar), Tobacco Hukka Twisted, Cigarettes Capstan 20'S Packet, Cigarettes Gold Leaf 20'S Packet,
Clothing & Footwear				Chaddar (Wash-N-Wear) (2X2.5 Meter), Pullover Ladies (Average Quality), Footware Gents Local (Average Quality), Full Pant Boy Length 24"/26", Lawn Printed (Average Quality), Pullover Gents (Average Quality), Shirt Boy Length 24"/26", Tailoring Charges Simple Suit (Female), Tailoring Charges Awami Suit (Male), Linen Ladies (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, Electricity Charges 101-300 Units,	House Rent Combined, Electricity Charges Combined, Lpg 11.67 Kg Cylinder,	Carpenter Wage Rate, Mason Wage Rate, Unskilled Labor Wage Rate, Electricity Charge 301-1000 Units, Cement (Local) 50 Kg Bag, Painter Wage Rate, Plumber Wage Rate, Coal, Bricks New 1St Class, Bajri, Electricity Charges Above 1000 Units,
Furnishing & Household Equip., Maintenance etc				Readymade Quilt (3 Kg), Blanket Single (Sn), Cot Iron (Charpai), Dinner Set Plastic 72 Pieces Super Quality, Lota Plastic Medium Size (Average Quality), Bucket (Balti) Plastic Medium Size, Energy Saver Philips 14 Watt, Towel Medium Size (2' X
Health			Cost Of Surgery (C-Section), Amoxil Capsule 250 Mg, Physiotherapist Fee Per Visit, Cac 1000 Tablets Sandoz Bottle, Daonil Tablets 5 Mg, Hydryllin Syrup 120	Inderal Tablets 10 Mg, Blood Test (Cp) Charges, X-Ray (Chest) Charges, Johar Joshanda Instant (Sachet) Packet, Doctor (Mbbs) Clinic Fee, Dental Surgeon Fee Per Visit, Panadol Tablets Plain, Dettol Medium
Transport	Air Fare Economy Class Per Kilometer, Car Suzuki 800 Cc Without Ac,	Bus Fare Outside City (Non Ac),	Cng, Hi-Speed Diesel,	Petrol Super, Car Tax 800 Cc To 1500 Cc, Motorcycle Service Charges, Tire Cycle, Tire Car Mehran Tubeless (General), Bicycle, Train Fare Economy Per Person, Chingchi Rickshaw Charges, Minimum, Tire Motorcycle Cd 70 (Back Wheel),
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				Cable Charges, Personal Computer With Led Monitor (17") Dell/Hp/Acer Core I5, Led Sony/Samsung 32" Colored, Exercise Book (With Lines) 80 To 100 Pages, Pets Feed, Newspaper Daily Jang, Lead Pencil Goldfish, Ballpoint Pen Local, English Books Class V, English Books Class VI
Education		Vocational Training Basic Computer Short Course Fee (3 Months) ,		Coaching Fee For Class Ix/X Science Group, Private School Fee English Medium Average Standard (Class Vi), Private School Fee English Medium Average Standard (Class V), Private School Fee English Medium Average Standard (Class I),
Restaurant & Hotels	Government Hostel Accommodation Fee For Intermediate College Per Student,			Private Hostel Accommodation Fee For Intermediate College Per Student, Pizza Chicken Medium Size (Average Quality), Marriage Hall Charges With Furniture, Tea Prepared Ordinary, Cooked Beef At Average Hotel, Marriage Hall Service
Miscellaneous				Tooth Brush (Shield), Hair Color (Kala Kola), Hair Removing Cream (Eu-Cream) 30Ml Tube, Tooth Paste Colgate 75 Gm, Trunk Medium Size (Average Quality), Shaving Cream (Touchme Large/Admiral), Talcum Powder Viceroy/Black Cat, Hair Cut Charges For Men, Artificial Jewelry (Locket Set) (Average Quality), Shaving

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

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

Table A23: International Commodity Prices/Indices

Commodity/Indices	Jun-22	Jun-22	May-23	Jun-23
Energy				
Crude Oil (US\$ per barrel)*	116.8	116.8	74.1	73.3
Energy Index (2010 = 100)	173.5	173.5	96.9	95.2
Food				
Rice (\$/MT)	444.0	444.0	510.0	514.0
Wheat (\$/MT)##	459.6	459.6	367.7	345.5
Sugar, World (\$/KG)	0.4	0.4	0.6	0.5
Palm Oil (\$/MT)	1,501.1	1,501.1	934.1	817.0
Soybean Oil (\$/MT)	1,751.8	1,751.8	988.3	1,007.1
Non-Food Non-Energy				
Cotton Outlook 'A' Index	3.4	3.4	2.1	2.0
Metal Price Index (2010 =	121.8	121.8	107.1	106.7
Copper (\$/MT)	9,024.5	9,024.5	8,217.5	8,396.5
Aluminum (\$/MT)	2,563.4	2,563.4	2,268.6	2,184.8
Iron Ore (\$ cents/dry MT)	130.7	130.7	105.2	113.5
Tin (\$/MT)	31,559.3	31,559.3	25,533.8	27,216.7
Nickel (\$/MT)	25,658.6	25,658.6	21,970.4	21,233.3
Zinc (\$/MT)	3,629.7	3,629.7	2,475.7	2,375.5
Lead (\$/MT)	2,066.4	2,066.4	2,083.6	2,122.9
Uranium (\$/MT)@	49.8	49.8	54.6	56.1
DAP (\$/MT)	783.8	783.8	510.0	454.6
Urea (\$/MT)	690.0	690.0	329.3	287.5

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. NA: Not Available

* 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 A24: National CPI Data Series Original and Seasonally Adjusted

Period	Original Series				
	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	219.14
Apr	120.33	130.59	145.09	164.50	224.41
Jun	121.05	131.01	145.24	165.23	227.96
Jun	121.63	132.08	144.82	175.71	227.37
Seasonally Adjusted Series					
Jul	114.04	123.63	135.17	146.56	183.15
Aug	113.77	125.76	136.14	147.56	187.80
Sep	113.57	126.54	138.03	150.46	185.38
Oct	115.39	128.15	139.59	152.46	192.99
Nov	115.21	129.82	140.67	156.94	194.36
Dec	116.00	130.68	141.14	158.51	197.34
Jan	116.69	133.76	141.40	159.81	203.92
Feb	117.75	132.24	143.65	161.14	211.87
Mar	119.87	132.03	143.87	162.08	219.28
Apr	120.16	130.35	144.76	164.05	223.74
Jun	121.42	131.33	145.53	165.48	228.24
Jun	122.29	132.84	145.72	176.86	228.93

Table A25: 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	212.85
Apr	121.29	130.60	144.91	162.63	217.11
Jun	122.11	130.99	145.19	163.13	220.37
Jun	122.52	131.89	144.55	173.23	220.59
Seasonally Adjusted Series					
Jul	114.50	124.48	134.23	145.86	180.30
Aug	114.23	126.42	135.47	146.76	185.27
Sep	114.17	127.40	137.22	149.78	181.57
Oct	116.34	129.02	138.54	151.84	189.20
Nov	116.30	130.39	139.51	156.30	190.08
Dec	117.03	131.12	140.30	158.21	192.42
Jan	117.77	133.67	140.50	158.85	197.70
Feb	118.77	132.01	143.29	159.72	205.68
Mar	120.76	131.90	143.33	160.36	213.12
Apr	120.96	130.17	144.36	161.95	216.10
Jun	122.10	130.88	144.97	162.78	219.78
Jun	122.96	132.38	145.12	173.95	221.54

Table A26: Rural CPI Data Series Original and Seasonally Adjusted

Period	Original Series				
	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	228.63
Apr	118.89	130.58	145.37	167.31	235.43
Jun	119.45	131.03	145.32	168.39	239.42
Jun	120.29	132.36	145.24	179.45	237.61
Seasonally Adjusted Series					
Jul	113.36	122.35	136.60	147.62	187.46
Aug	113.06	124.77	137.16	148.75	191.62
Sep	112.67	125.25	139.24	151.50	191.13
Oct	113.95	126.84	141.17	153.39	198.70
Nov	113.57	128.97	142.43	157.89	200.82
Dec	114.45	130.01	142.40	158.98	204.77
Jan	115.05	133.90	142.76	161.25	213.30
Feb	116.20	132.59	144.20	163.29	221.21
Mar	118.52	132.22	144.69	164.68	228.59
Apr	118.95	130.61	145.35	167.24	235.26
Jun	120.39	132.02	146.38	169.55	241.02
Jun	121.30	133.54	146.62	181.24	240.08

Table A27: National CPI Monthly & Average Seasonal Factors

Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.21	100.19	100.15	100.13	100.11	100.16
Aug	100.15	100.10	100.06	100.04	100.02	100.07
Sep	100.29	100.25	100.21	100.18	100.16	100.22
Oct	100.81	100.79	100.77	100.76	100.74	100.77
Nov	100.84	100.83	100.82	100.79	100.79	100.81
Dec	99.84	99.83	99.80	99.78	99.76	99.80
Jan	99.52	99.46	99.40	99.36	99.32	99.41
Feb	99.47	99.54	99.61	99.67	99.72	99.60
Mar	99.66	99.74	99.82	99.88	99.93	99.81
Apr	100.14	100.19	100.23	100.27	100.30	100.23
Jun	99.70	99.75	99.80	99.85	99.88	99.80
Jun	99.46	99.43	99.38	99.35	99.32	99.39

Table A28: Urban CPI Monthly & Average Seasonal Factors

Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	100.39	100.38	100.37	100.37	100.37	100.38
Aug	100.30	100.28	100.26	100.24	100.24	100.27
Sep	100.28	100.25	100.22	100.20	100.18	100.23
Oct	100.60	100.56	100.53	100.50	100.46	100.53
Nov	100.55	100.51	100.46	100.42	100.38	100.46
Dec	99.61	99.58	99.55	99.53	99.50	99.55
Jan	99.41	99.33	99.25	99.19	99.13	99.26
Feb	99.42	99.48	99.53	99.57	99.60	99.52
Mar	99.61	99.69	99.76	99.82	99.87	99.75
Apr	100.27	100.33	100.38	100.42	100.47	100.37
Jun	100.01	100.09	100.15	100.22	100.27	100.15
Jun	99.65	99.63	99.61	99.58	99.57	99.61

Period	FY19	FY20	FY21	FY22	FY23	Average
Jul	99.95	99.89	99.82	99.77	99.72	99.83
Aug	99.91	99.83	99.77	99.72	99.70	99.79
Sep	100.30	100.24	100.20	100.16	100.13	100.21
Oct	101.12	101.14	101.14	101.15	101.14	101.14
Nov	101.29	101.32	101.34	101.35	101.37	101.33
Dec	100.22	100.20	100.18	100.15	100.11	100.17
Jan	99.68	99.64	99.63	99.61	99.59	99.63
Feb	99.55	99.65	99.74	99.81	99.88	99.73
Mar	99.74	99.83	99.90	99.96	100.02	99.89
Apr	99.95	99.98	100.01	100.04	100.07	100.01
Jun	99.22	99.25	99.28	99.31	99.34	99.28
Jun	99.17	99.12	99.06	99.01	98.97	99.07

Table A30: National CPI (Month-on-Month) Original & Seasonally Adjusted

Period	Original Series				
	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	3.72
Apr	0.73	-0.84	1.03	1.62	2.40
Jun	0.60	0.32	0.10	0.44	1.58
Jun	0.48	0.82	-0.29	6.34	-0.26
Seasonally Adjusted Series					
Jul	0.77	1.09	1.76	0.58	3.56
Aug	-0.24	1.72	0.72	0.68	2.54
Sep	-0.17	0.62	1.38	1.97	-1.29
Oct	1.60	1.27	1.13	1.33	4.11
Nov	-0.15	1.30	0.78	2.94	0.71
Dec	0.69	0.66	0.33	1.00	1.53
Jan	0.59	2.36	0.19	0.82	3.33
Feb	0.91	-1.14	1.59	0.84	3.90
Mar	1.80	-0.16	0.15	0.58	3.50
Apr	0.24	-1.27	0.61	1.22	2.03
Jun	1.05	0.76	0.54	0.87	2.01
Jun	0.72	1.15	0.13	6.88	0.30

Table A31: 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	3.90
Apr	0.83	-0.68	1.34	1.60	2.00
Jun	0.68	0.30	0.19	0.31	1.50
Jun	0.34	0.69	-0.44	6.19	0.10
Seasonally Adjusted Series					
Jul	0.67	1.24	1.40	0.51	3.65
Aug	-0.23	1.56	0.92	0.62	2.76
Sep	-0.06	0.78	1.30	2.05	-2.00
Oct	1.90	1.27	0.96	1.37	4.21
Nov	-0.04	1.06	0.70	2.94	0.46
Dec	0.63	0.56	0.56	1.22	1.23
Jan	0.63	1.95	0.15	0.41	2.74
Feb	0.85	-1.24	1.98	0.55	4.04
Mar	1.67	-0.08	0.03	0.40	3.62
Apr	0.17	-1.31	0.72	0.99	1.40
Jun	0.94	0.54	0.42	0.51	1.70
Jun	0.70	1.15	0.10	6.87	0.80

Table A32: Rural CPI (Month-on-Month) Original & Seasonally Adjusted Series

Period	Original Series				
	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	3.48
Apr	0.58	-1.08	0.57	1.63	2.97
Jun	0.47	0.34	-0.03	0.65	1.69
Jun	0.70	1.02	-0.06	6.57	-0.76
Seasonally Adjusted Series					
Jul	0.92	0.87	2.29	0.68	3.44
Aug	-0.26	1.98	0.41	0.77	2.22
Sep	-0.34	0.38	1.51	1.84	-0.26
Oct	1.13	1.27	1.39	1.25	3.96
Nov	-0.33	1.68	0.89	2.93	1.07
Dec	0.78	0.81	-0.02	0.69	1.97
Jan	0.53	2.99	0.25	1.43	4.17
Feb	1.00	-0.98	1.01	1.27	3.71
Mar	2.00	-0.28	0.34	0.85	3.33
Apr	0.37	-1.22	0.45	1.55	2.92
Jun	1.20	1.08	0.71	1.38	2.45
Jun	0.76	1.14	0.17	6.89	-0.39

Figures

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

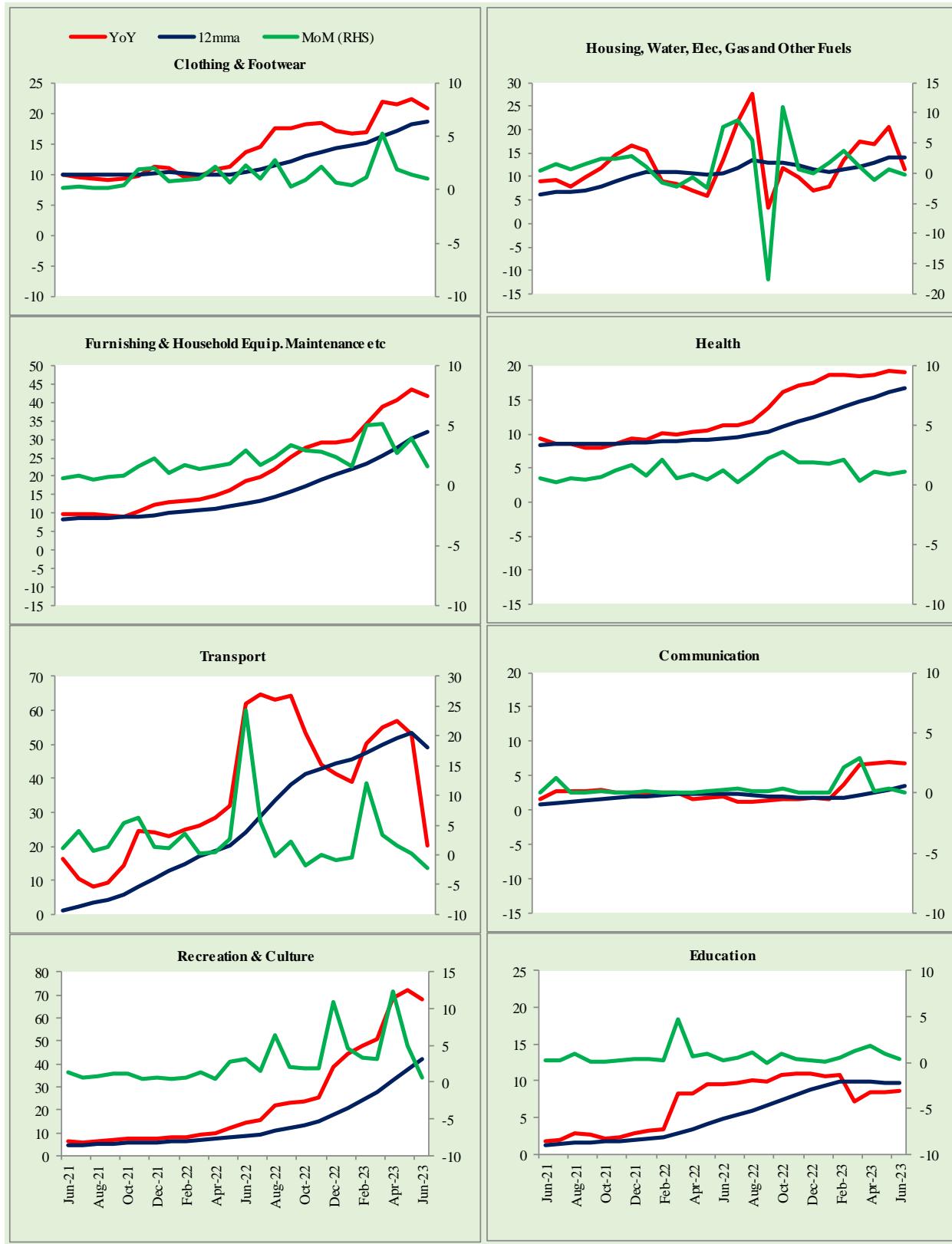


Figure A2: Urban CPI Inflation – Non Food Groups (YoY, 12MMA, MoM in percent)

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

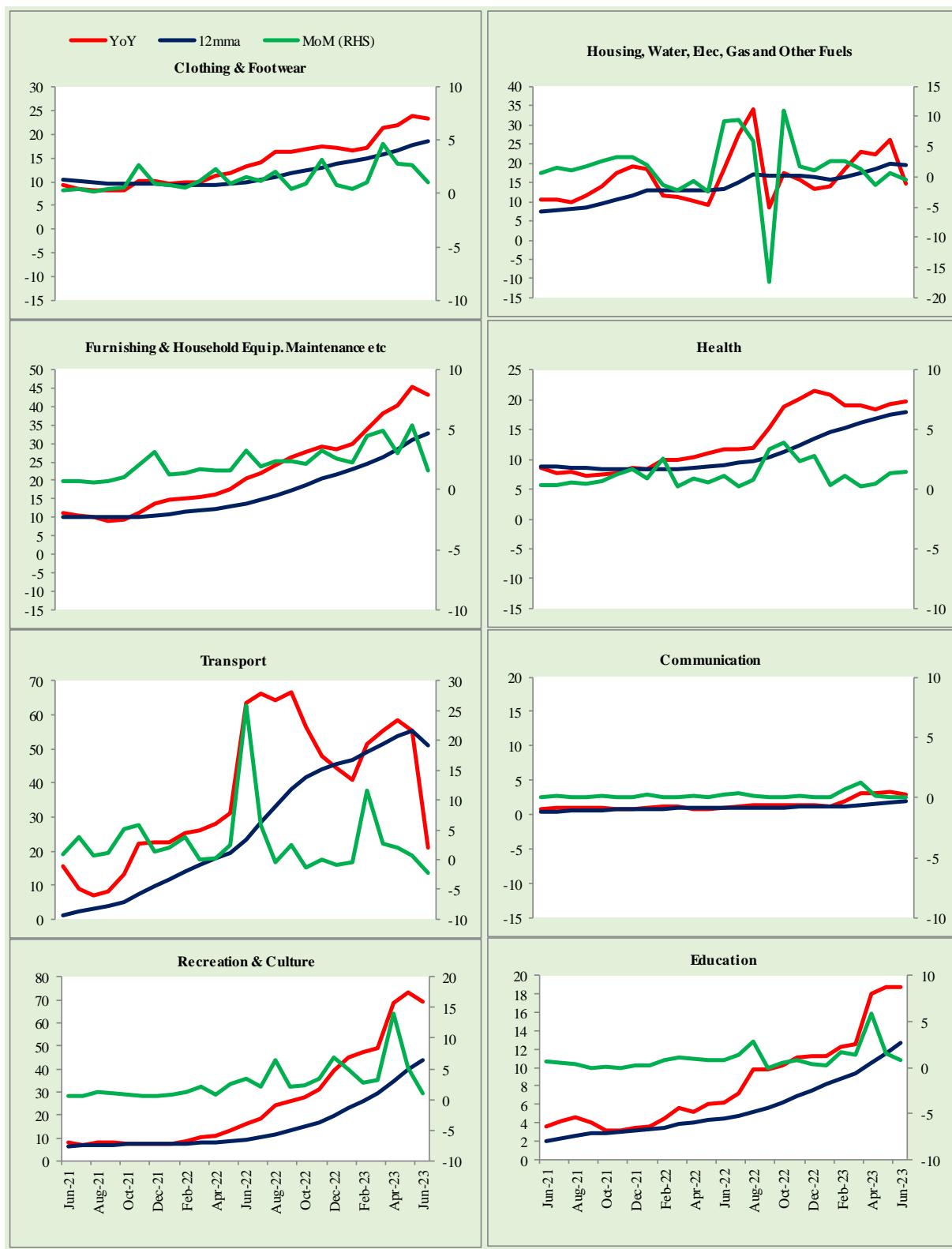


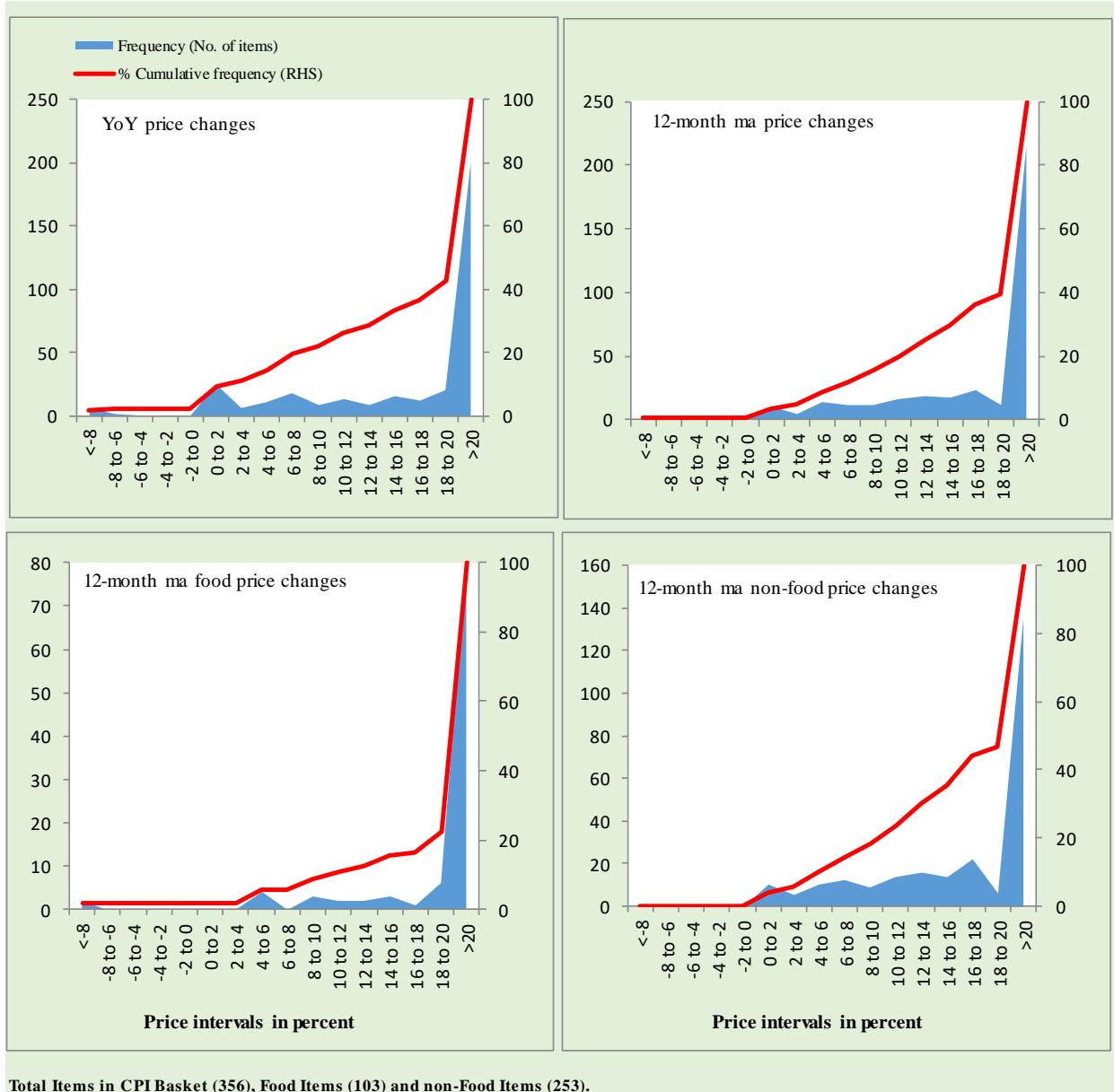
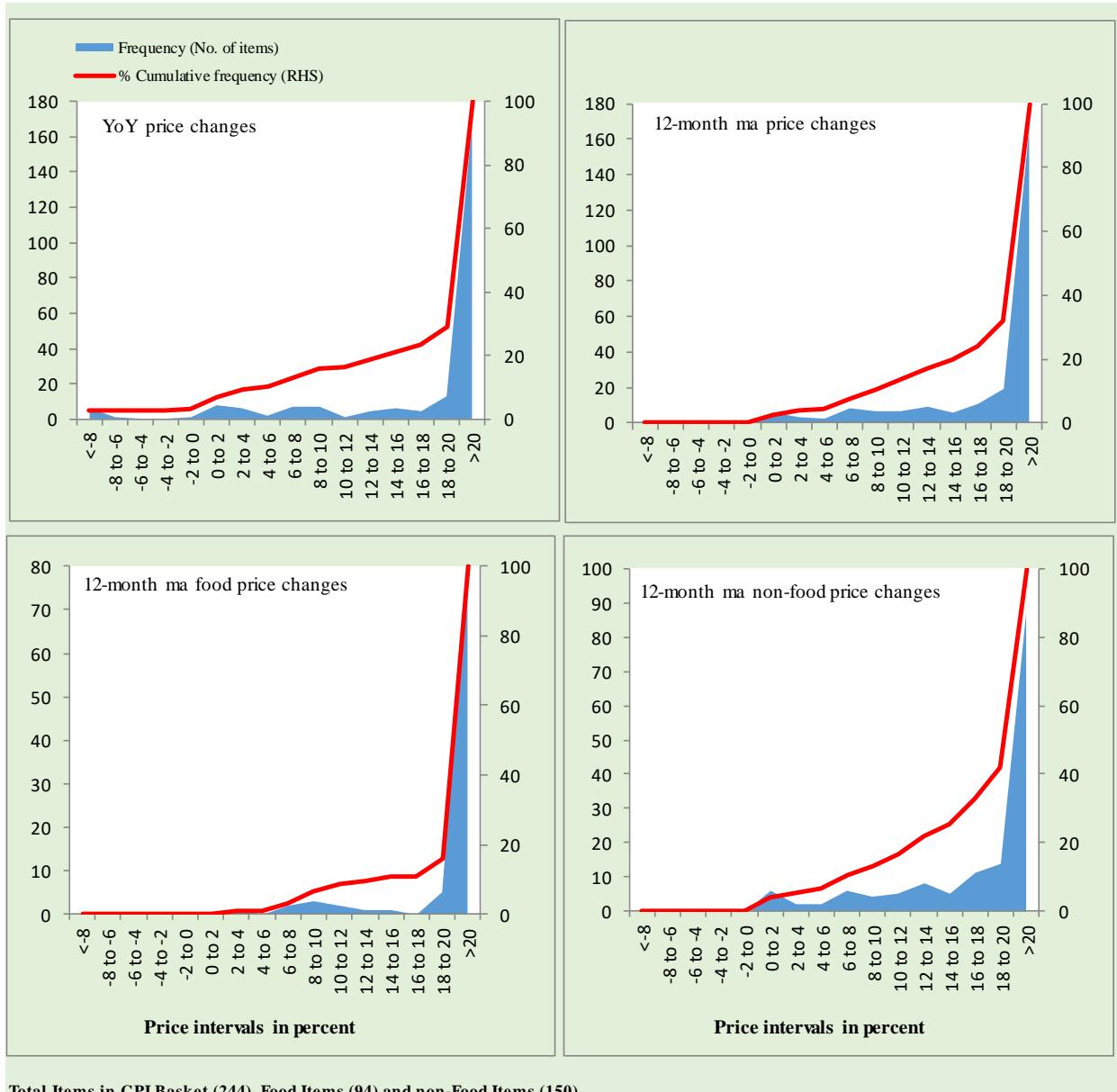
Figure A4: Frequency Distribution of Price Changes of Urban CPI Items (YoY)

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



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

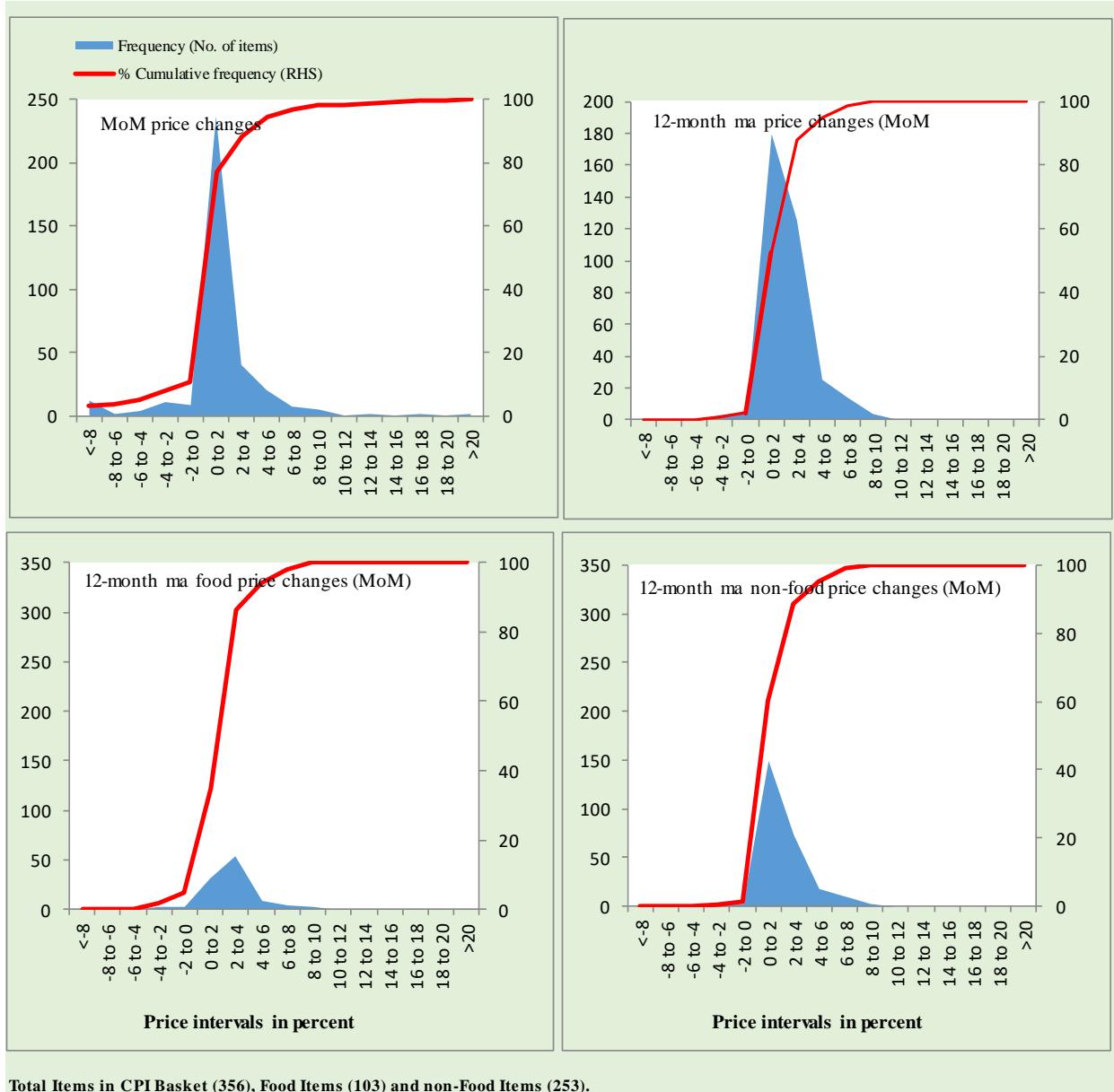
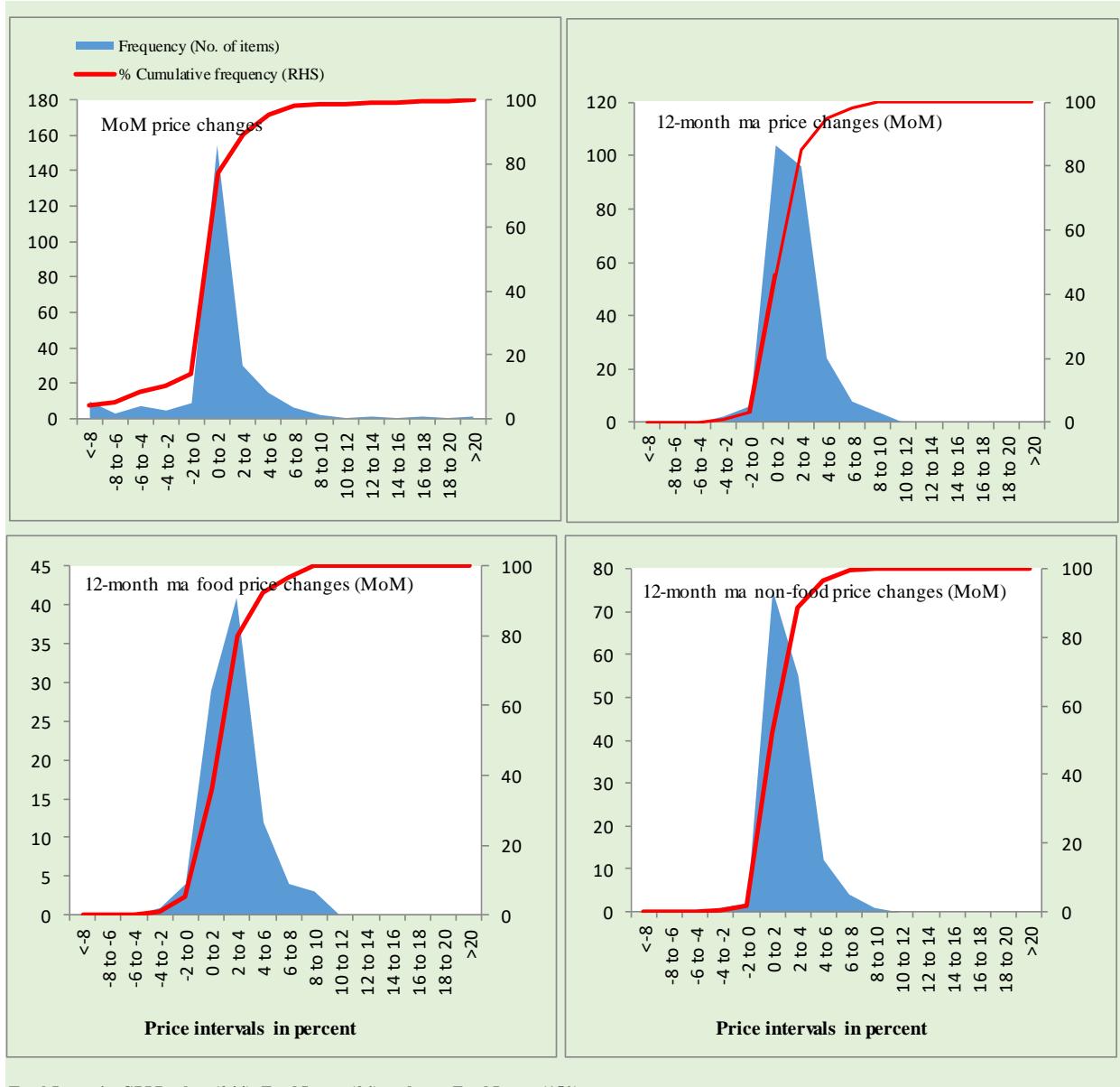
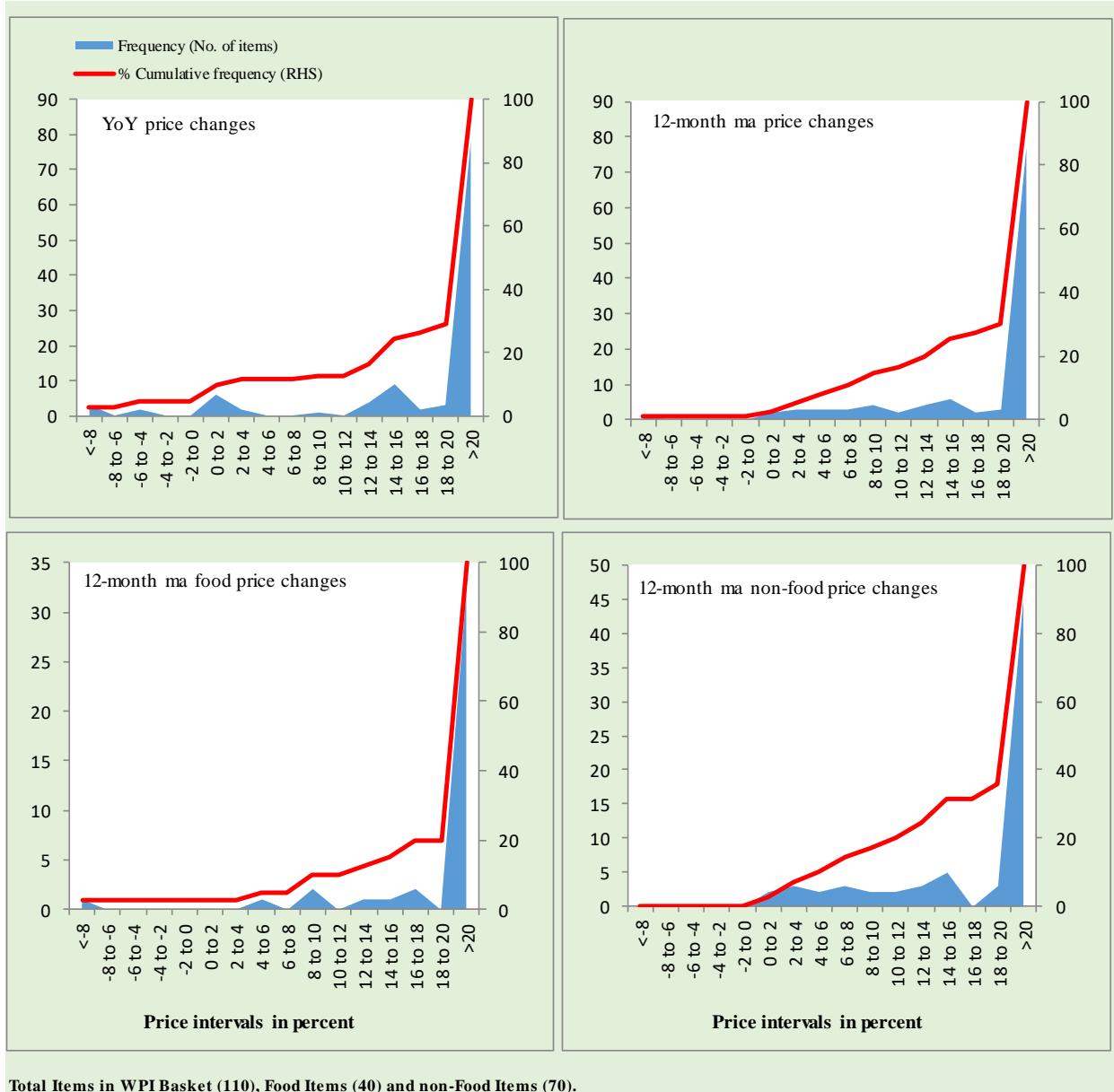
Figure A6: Frequency Distribution of Price Changes of Urban CPI Items (MoM)

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



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

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

Technical Notes

- 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.

- Base year for all the indices is the year 2015-16.
- CPI baskets for urban and rural areas contains 356 and 244 consumers' items respectively; WPI basket contains 419 items; SPI contains 51 items.
- 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:

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

- 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.

- 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:

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

- 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:

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

- 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:

- 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:
- 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.
 - 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).
 - 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.

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.