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Inflation Accounting Across Income Groups: Does Inflation Hurt the Poor More in Bangladesh?

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Abstract: *This note provides estimates of the contribution of food prices to inflation in Bangladesh. The results suggest that the current inflation takes a bigger toll on the poor because they spend more of their income on food. The note calculates inflation rates separately for two poor groups, the hardcore poor and the moderate poor, as well as for the middle income group and the rich. The results indicate that recent inflation is mainly driven by higher food prices; and the inflation rate faced by the poor exceeds the corresponding rates for the non-poor groups. The results highlight the importance for the government to follow pro-poor growth and anti-inflation policies to mitigate the adverse effects of recent inflation on the poor.*

I. Introduction

In recent years, global consumers have been facing higher prices of essential products, especially food items. Globally, consumer food prices rose at 8 percent annually in the last quarter of 2007, which, along with other effects, reduced household real incomes by 1.5 percentage points, calculated at an annual rate (Hensley and Lupton 2008). The adverse effects of current inflation are particularly worrisome for the poor countries, and more so for the poorer segments of their population. The obvious reason is that food accounts for a sizeable share of total household expenditure for the poor and any increase in food inflation translates into a higher effective inflation for the poor. Additionally, because a large part of their budget is tied to food, higher food inflation reduces their real incomes disproportionately. Bangladesh has been experiencing high inflation rates in the last few years, rising from 1.9 percent in FY01 to 7.2 percent in FY07. The main feature of the current inflationary trend moreover is higher inflation in food items compared with that for non-food items. Since food accounts for over half the budget for the poor, it is obvious that the poor face a higher inflation rate than the rich and consequently a tighter squeeze in real income.

High food inflation has two important economic implications. *First*, high food inflation increases the price of food relative to those of non-food items and since a higher proportion of the consumption basket of the poor in Bangladesh is allocated to food items, the poor have to buy the same food items at higher prices. Ideally, households buy less of the relatively more

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expensive items, food in this instance, but since the poor mostly survive at the subsistence level with little scope to further reduce food consumption, there is not much reprieve through the substitution effect. As such, the poor bear almost the full brunt of food inflation. *Second,* food inflation reduces the real income of the poor, there is less money left over after food purchases to consume other necessary goods such as education, health, fuel and energy. That is, the income effect also hurts the poor more. Thus, higher food inflation negatively affects the welfare of the poor both because they cannot substitute out of food and because real incomes are reduced.

This note identifies the role of food inflation in overall inflation by computing the contribution of food inflation to the overall inflation rate in order to assess the hypothesis that current inflation is driven by food inflation in Bangladesh. It also estimates separate inflation rates for different income groups—the hardcore poor, the moderate poor, the middle-income group, and the rich—in both rural and urban areas to see if inflation hurts the poor relatively more than the rich. Finally, the note draws some policy implications.

Inflation, real income and poverty

Conceptually, a number of linkages between inflation and its distributional impacts can be identified. *First,* there is *a priori* argument that the rich are better able to protect themselves against the adverse effects of inflation than the poor because of their better access to financial instruments (Easterly and Fisher 2000). In contrast, the poor have a larger share of their income in cash which faces the inflation tax. Moreover, poorer people typically have less flexibility in responding to adverse changes in their environment because of erosion real incomes and savings and low wages which are often fixed nominally (McKay and Sowa 2005). *Second,* The poor, especially the elderly poor, may depend more than the rich on state-determined income such as state subsidies, pensions, or direct transfers that are not fully indexed to inflation, thus reducing their real income (Easterly and Fisher 2000).[2] *Third,* inflation appears to increase poverty by lowering real incomes.[3] In this regard, Romer and Romer (1998) argue that an increase in unanticipated inflation may reduce the unemployment rate in the short-run and benefit the poor. However, in the long run, higher inflation cannot permanently reduce the unemployment rate because real wages adjust, and thus the adverse effects of inflation on the poor may persist in the long run.

Though there is no systematic analysis of the relationship between inflation and poverty rates in the context of Bangladesh, a casual look at the historical data show that the overall poverty rate was higher during the period of rapid inflation, particularly in the 1970s and 1980s. And the poverty rate started to fall in the early 1990s when inflation rates were also substantially lower. However, inflation has become a major problem in Bangladesh at present, led by rapidly rising food prices.

[2] The above arguments are debatable in that the actual effects of inflation depend in complicated ways on the tax system, including capital taxation as described in Fisher and Modigliani (1978). This paper, however, questions the applicability of this idea to a developing country because of the inefficient tax system that prevails in Bangladesh and the relatively higher weights on food items that are not taxed in the same way.

[3] However, in drawing the empirical evidence from Latin America, Cardoso (1992) argues that inflation tax does not affect those already below the poverty line because of their negligible cash holdings.

Current inflation scenario

The Bangladesh economy has experienced a moderate rate of inflation, 5.6 percent on average in the second half of the 1990s, mainly dominated by food inflation in both rural and urban areas (Table 1). In the case of general, food and non-food inflation, rural inflation was higher than urban inflation. The rate of general inflation in FY01 was 1.9 percent, mainly due to lower food price inflation as compared with non-food inflation. The inflation rate started to rise since FY01, reaching 5.8 percent in FY04 with an acceleration of food inflation (6.9 percent), especially in the urban areas. The inflation rate further increased to 7.2 percent in FY07, with food inflation reaching 8.1 percent. Recent statistics show that 12-month average inflation rate has further gone up to 9.6 percent in January 2008, while the rate was 11.4 percent on point-to-point basis in the same month.

Table 1: Trends in inflation: FY96-FY07

Year	National			Rural			Urban		
	General	Food	Non-food	General	Food	Non-food	General	Food	Non-food
FY96-FY00	5.60	6.39	4.43	6.39	6.24	6.74	4.50	4.84	3.92
FY01	1.94	1.38	3.04	2.26	1.18	3.83	1.52	1.89	1.13
FY02	2.79	1.63	4.61	2.43	1.44	4.57	3.36	2.09	4.70
FY03	4.38	3.46	5.66	4.74	4.05	5.91	3.52	2.09	5.00
FY04	5.83	6.92	4.37	5.77	6.55	4.47	5.66	7.80	4.14
FY05	6.48	7.91	4.33	6.62	7.99	4.27	6.14	7.71	4.49
FY06	7.16	7.76	6.40	7.36	7.62	6.90	6.68	8.09	5.14
FY07	7.20	8.11	5.90	7.28	7.93	6.10	7.02	8.53	5.34

Sources: *Statistical Year Book* (various issues), Bangladesh Bureau of Statistics (BBS).

Two main characteristics of recent inflation trends are observed: *first*, inflation in Bangladesh varies directly with food prices, especially in the urban areas; *second*, overall inflation in rural areas is higher than the corresponding urban rate, but while food inflation is higher in the urban areas, non-food inflation tends to be higher in the rural areas (Table 1). This suggests that the rural poor are somewhat differently affected than the urban poor—both suffer from rising food prices, but the rural poor additionally suffer from rising non-food prices as well.

Although the above results show the dominance of food inflation, these do not provide any information about the contribution of food inflation to overall inflation in the country for which inflation accounting is necessary.

II. Inflation Accounting

The inflation accounting framework helps to break down the overall inflation rate into its main components. The advantage is that it allows one to better assess where the inflationary pressures are more acute and where they are benign. This note breaks down overall inflation into food and non-food components, for both rural and urban households.[4] For inflation accounting, this note

[4] Though inflation accounting does not explain causality, this framework can be viewed as a step in understanding the basic elements of inflation. An important next step involves the analysis of pass-through effects of food and non-food inflation, which is not attempted in this note.

employs two base years: 1995/96 = 100, which is usually used as the base year for calculating the official inflation rate by the BBS, and 2005 = 100, based on the report of the *Household Income and Expenditure Survey 2005* (HIES 2005). The reason for employing a new base year is that the consumption patterns of the households have changed since 1995/96, so that using the 1995/96 consumption basket would distort measured inflation by assuming that the households still buy the old basket.

Table 2: Direct impact of food prices on inflation

Month	Base: 1995-96=100		Base: 2005=100	
	2006 contribution (percent)	2007 contribution (percent)	2006 contribution (percent)	2007 contribution (percent)
January	59.55	65.87	54.47	60.25
February	56.89	67.55	52.03	61.79
March	58.08	67.58	53.12	61.81
April	65.23	63.84	59.66	58.39
May	68.81	61.01	62.94	55.81
June	68.75	62.86	62.89	57.50
July	64.49	66.52	58.99	60.84
August	65.46	67.55	59.87	61.79
September	70.45	68.03	64.44	62.22
October	72.44	68.61	66.26	62.76
November	67.25	72.58	61.51	66.38
December	67.96	73.41	62.16	67.15

Source: Authors' calculation

Note: Inflation is calculated on the basis of 12-month point-to-point basis. The contribution is calculated as the share of food in the CPI multiplied by food price inflation divided by overall inflation.

First, the direct impact of food prices on overall annual (12 month point-to-point) inflation between January 2006 and December 2007 is reported. Using the old base year, on average, more than 60 percent of current inflation is contributed by food inflation (Table 2). The contribution rises from 59.6 percent in January 2006 to 73.4 percent in December 2007. For the new base year (2005 = 100), the contribution of food prices also rises, though the increase is about 5 percentage points less each month. The new base year shows a lower contribution of food to overall inflation because of low weight to food relative to non-food items. For example, expenditure on food accounts for 58.8 percent of total expenditure in the 1995-96 basket, whereas similar share drops to 53.8 percent in HIES 2005. Thus, although the share of food is high in consumption expenditure relative to non-food items giving food inflation greater weight in overall inflation, food share declines with overall increase in income as evidenced in the composition of the 1995/96 and 2005 baskets.

It is useful to note that the high contribution of food inflation has been a perennial feature of Bangladesh inflation during the period FY97-FY07. There are two ways in which food inflation could be the source of rising overall inflation: (i) contribution of food inflation is *rising*, and (ii) its pass-through effect on overall inflation is *high*—that is, food inflation is quickly translated to general inflation. Accordingly, because the contribution of food inflation has been sharply increasing since the early 2000s, it is easily verified that food inflation is a source of high overall inflation. The pass-through effect is also potent since the contribution of food inflation to overall

inflation has generally remained steady and high. Given that the share of food inflation has been fairly consistent, averaging about 65 percent from FY97 to FY07, food inflation and overall inflation must have generally moved together, though not one-for-one in every year, since food inflation has led overall inflation in some years.[5] Put together, the two channels suggest that the rising contribution of food inflation in the early 2000s led to higher inflation, with a significant pass-through effect. From FY01 to FY04, at the national level, the contribution of food inflation rose from about 42 percent to 73 percent and overall inflation went from about 2.0 percent to 5.8 percent, reflecting both increasing contribution of food inflation and a significant pass-through effect. In the next couple years, FY2005 to FY2007, the contribution of food inflation remained at about 67 percent and the overall inflation rose to about 7 percent, reflecting not increasing contribution of food inflation but a rising pass-through effect—the second channel described above. It is thus evident that food inflation is a significant source, and both channels have been active in raising inflation in Bangladesh.

Table 3: Contribution of food inflation to overall inflation

Year	National (percent)	Rural (percent)	Urban (percent)
FY97	54.53	62.58	49.13
FY98	71.07	81.74	60.98
FY99	77.51	77.38	75.59
FY00	56.52	54.86	54.09
FY01	41.88	32.87	60.68
FY02	34.33	37.31	30.35
FY03	46.44	53.79	28.98
FY04	73.28	71.47	63.55
FY05	71.73	75.99	61.28
FY06	63.77	65.18	59.10
FY07	66.28	68.58	59.30

Source: Authors' calculation

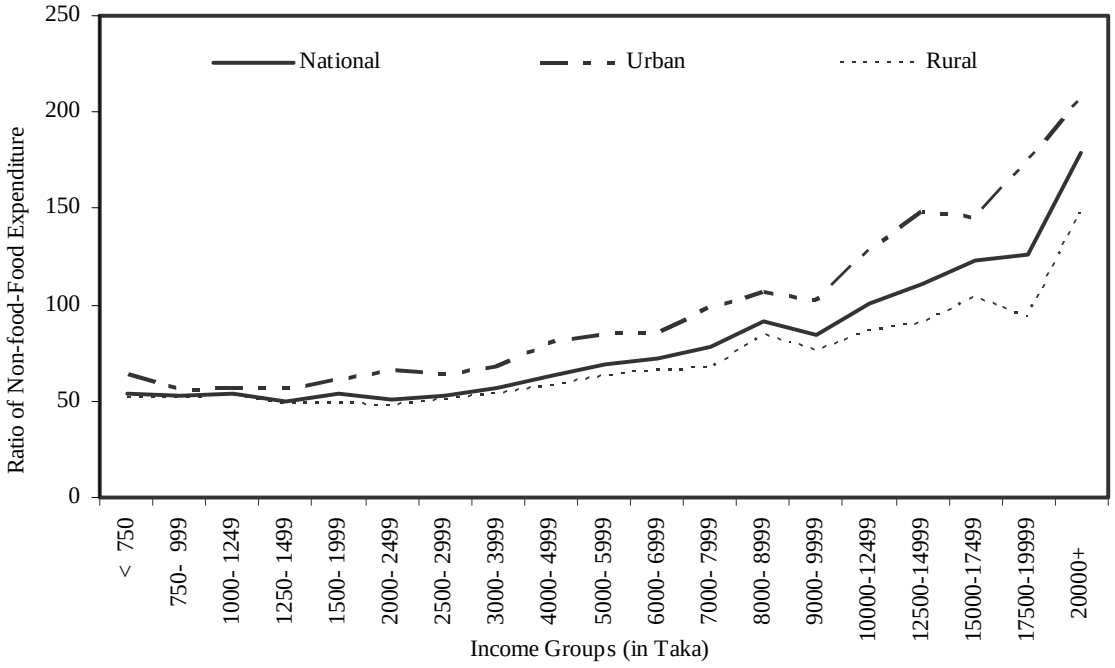
III. Inflation and the Poor

Inflation in Bangladesh is constructed using the consumer price index (CPI) that reflects the average inflation of all income groups in the country. However, as the poor constitute a large part of the population and they spend a bigger share of their budget on food, the inflation rate based on CPI does not fully capture the inflation rates facing households having different income levels. Moreover, since the poverty rate is different between rural and urban areas, the actual inflation rate facing households may also vary over locations.

[5] It may be noted that a high pass-through effect is consistent with a steady share of food inflation, since share of food inflation $= \frac{w_f \pi_f}{\pi}$, where w_f is weight of food in total expenditure, π_f is food inflation and π is overall inflation. Given that w_f remains steady, the inflation ratio must be constant for the share of food inflation to be constant—implying that food inflation and overall inflation move together. Thus, it appears that the pass-through effect of food inflation on overall inflation is high. This makes sense since food constitutes over half the budget for most households in Bangladesh—all sectors try to recoup the high food cost, like any production cost, by raising their own prices in turn.

It is generally argued that the consumption pattern of households shifts in favor of non-food items with increase in income, that is expenditure on non-food items will be higher among the richer income groups. This is seen in Figure 1, which shows that the ratio of non-food to food expenditure increases with household income. It also shows that the slope of the curve is relatively flat at lower income levels, suggesting that higher food inflation affects the real income of the poor more adversely, possibly also reducing their consumption of non-food items. On the other hand, the curve is steeper for the higher income groups suggesting a rapid change in favor of non-food items with the increase in income. That is, low-income groups may not have the ability to substitute away from food, which the high-income groups have.

Figure 1: Expenditure-income line in Bangladesh, 2005



Source: HIES 2005

This shows that a unit change in food prices doesn't have the same effect on the poor and the non-poor. This note uses data on consumption expenditure on food and non-food items of different income groups at national, rural and urban levels using HIES 2005 to construct separate inflation rates (Table 4).

The distribution of consumption expenditure indicates that the poor spend relatively more on food than on non-food items.[6] For example, the hardcore poor spend almost two-thirds of their income on food items, whereas the people belonging to the rich category spend 41 percent of income on food at the national level (Table 4). Though the ratio varies in the rural and urban areas, food weights in consumption expenditure are higher in both areas for the poor.

[6] The definition of various income groups such as hardcore poor, absolute poor, middle class and upper class can be found in notes under Table 4.

Table 4: Distribution of consumption expenditure on food and non-food items by household expenditure groups, 2005

Household expenditure group	% of household	Total food weights							Total non-food weights					
		Total	Rice & rice flour	Fish	Condiments and spices	Meat and Poultry	Vegetables	Edible oil & fat	Total	Clothing and Footwear	Housing and House Rent	Fuel & Lighting	Household Effects	Miscellaneous Item
National														
Hardcore Poor	14.83	67.03	33.37	5.25	5.78	1.84	7.72	3.91	32.79	5.86	8.08	9.97	0.62	8.26
Absolute Poor	27.21	66.40	30.50	6.76	5.06	3.14	6.36	2.99	33.42	5.63	7.77	7.54	1.06	11.43
Middle Income	45.23	57.95	20.85	7.28	4.47	4.83	4.81	2.45	41.87	5.85	10.46	6.30	1.97	17.30
Rich	12.75	41.29	11.02	5.79	2.99	5.56	2.94	1.65	58.59	5.25	17.32	4.69	2.81	28.52
All groups	187.3	53.66	19.61	6.58	4.04	4.56	4.50	2.28	46.19	5.52	12.26	5.99	2.05	20.37
Urban														
Hardcore Poor	26.57	65.71	29.56	5.67	6.22	2.41	6.95	3.91	34.09	5.56	10.10	9.17	0.91	8.34
Absolute Poor	11.59	60.82	21.24	7.41	5.34	4.25	5.80	3.03	38.99	5.89	11.51	6.96	1.89	12.74
Middle Income	44.7	51.49	14.65	7.43	4.65	5.02	4.42	2.48	48.38	5.95	14.77	6.53	2.53	18.60
Rich	17.14	36.02	7.52	5.67	2.66	5.37	2.70	1.60	63.95	5.34	21.52	4.88	2.54	29.68
All groups	182.9	45.05	12.54	6.37	3.76	4.76	3.83	2.11	54.82	5.48	16.79	5.76	2.49	24.30
Rural														
Hardcore Poor	17.46	67.16	33.65	5.23	5.72	1.80	7.81	3.90	32.72	5.91	7.87	9.99	0.61	8.36
Absolute Poor	29.82	66.95	31.63	6.79	4.93	3.11	6.35	2.90	32.86	5.59	7.29	7.57	1.00	11.43
Middle Income	41.42	60.83	23.71	7.22	4.34	4.81	4.95	2.44	38.99	5.77	8.87	6.20	1.68	16.46
Rich	11.29	46.49	14.70	5.87	3.26	5.63	3.19	1.74	53.47	5.18	13.17	4.48	3.00	27.64
All groups	188.7	58.49	23.48	6.70	4.20	4.46	4.89	2.38	41.46	5.54	9.78	6.11	1.81	18.22

Source: HIES 2005

Notes: (i) Income groups have been selected on the basis of monthly household expenditures (in Taka) and ratio of population. Income groups at the national level have been selected considering weighted average of those at the urban and rural level followed by the method of HIES (2005). The groups have been defined as follows:

(1) Urban Level: (a) Hardcore poor: <Taka 750-3,999; (b) Absolute Poor: Taka 4,000-4,999; (c) Middle income: Taka 5,000-12,499; and (d) Rich: Taka 12,500-20,000+. ;

(2) Rural Level: (a) Hardcore poor: <Taka 750-2,499; (b) Absolute Poor: Taka 2,500-3,999; (c) Middle income: Taka 4,000-8,999; and (d) Rich: Taka 9,000-20,000+.

Inflation rates for the poor

The estimated inflation rates for the four groups are provided in Tables 5, 6 and 7. The tables also provide the corresponding inflation rate based on the usual base year (Base 1995/96 = 100). Three important observations can be made from the results. *First*, the inflation rate varies across the four income groups and that inflation rates for the poor are higher than that for the rich (Table 5). That is, the hypothesis of higher inflation for the poor due to higher food prices is found to be valid from the results. For example, the inflation rate for all groups in November 2007 was 11.2 percent, whereas it was 15.6 percent for the hardcore poor and 9.8 percent for the rich households. This means the gap between overall inflation and inflation for the hardcore poor is 4.4 percentage points, whereas the difference is 5.8 percentage points between the hardcore poor and the rich households.

Table 5: National Inflation rates for different income groups

Month	Base: 2005 = 100					Base: 1995/96 = 100
	Hardcore Poor	Absolute Poor	Middle Income	Rich	All Groups	
Jan 06	6.34	6.48	6.52	6.33	6.35	6.59
Feb 06	5.22	5.37	5.55	5.59	5.60	5.72
Mar 06	5.35	5.61	5.85	5.91	5.95	6.17
Apr 06	6.46	6.62	6.78	6.50	6.89	7.46
May 06	7.36	7.47	7.49	7.03	7.40	7.61
Jun 06	7.10	7.40	7.59	7.09	7.46	7.54
Jul 06	6.53	6.43	6.71	6.59	6.67	6.77
Aug 06	6.60	6.45	6.64	6.60	6.62	6.67
Sep 06	7.02	6.72	6.72	6.46	6.66	6.89
Oct 06	7.40	7.15	7.12	6.76	7.07	7.31
Nov 06	6.12	5.94	6.09	6.13	6.09	6.37
Dec 06	5.54	5.63	5.92	6.03	5.79	6.13
Jan 07	5.03	5.34	5.72	5.91	5.61	5.94
Feb 07	6.68	6.91	7.14	7.07	6.91	7.28
Mar 07	7.86	7.72	7.67	7.39	7.28	7.43
Apr 07	8.63	8.59	8.52	8.20	7.93	8.28
May 07	8.73	8.46	8.10	7.92	7.51	8.05
Jun 07	9.93	9.76	9.47	9.21	8.91	9.20
Jul 07	11.23	11.03	10.40	9.62	10.30	10.10
Aug 07	12.73	11.72	10.49	9.31	10.23	10.12
Sep 07	12.28	11.13	9.81	8.71	9.66	9.60
Oct 07	14.15	12.50	10.76	9.20	10.13	10.06
Nov 07	15.59	13.74	11.76	9.79	11.16	11.21

Source: Authors' calculation

It is also important to note that, in addition to the inflation rate of the hardcore poor, the inflation rates of the absolute poor and the middle income group are also higher than the overall inflation rate during the last two years. The results suggest that inflation hurts the poor and the middle income households more who together constitute almost 90 percent of the country's total population.

Second, in terms of food inflation, the poor experience a higher rate than the rich at the national level (Table 6). In this case, the gap between the overall inflation rate and the inflation rate for the poor is even higher, suggesting adverse implications for the poor in terms of their main consumption basket.

Table 6: Food inflation for different income groups

Month	Base: 2005=100					Base: 1995/96=100
	Hardcore Poor	Absolute Poor	Middle Income	Rich	All Groups	
Jan 06	6.26	6.63	6.99	7.31	6.73	6.67
Feb 06	4.81	5.13	5.53	5.87	5.56	5.53
Mar 06	4.85	5.36	5.87	6.33	6.02	6.09
Apr 06	6.87	7.39	7.92	8.51	8.27	8.27
May 06	8.20	8.52	9.06	9.46	9.10	8.90
Jun 06	7.86	8.45	9.26	9.61	9.18	8.81
Jul 06	6.87	6.87	7.65	8.39	7.69	7.42
Aug 06	7.14	7.05	7.68	8.59	7.76	7.42
Sep 06	8.26	7.87	8.26	8.88	8.39	8.25
Oct 06	8.80	8.56	9.03	9.83	9.27	9.00
Nov 06	6.80	6.60	7.08	8.11	7.29	7.28
Dec 06	6.10	6.26	6.96	8.05	6.94	7.08
Jan 07	5.17	5.70	6.52	7.69	6.51	6.65
Feb 07	7.19	7.64	8.34	9.26	8.21	8.36
Mar 07	8.97	8.87	9.18	9.80	8.84	8.53
Apr 07	9.22	9.35	9.59	10.00	8.86	8.98
May 07	9.11	8.90	8.61	9.00	7.87	8.35
Jun 07	10.60	10.52	10.40	10.78	9.77	9.82
Jul 07	12.62	12.54	12.09	11.89	12.32	11.42
Aug 07	14.96	13.69	12.39	11.47	12.35	11.62
Sep 07	14.49	13.03	11.62	10.82	11.66	11.10
Oct 07	17.20	14.99	13.01	11.41	12.29	11.73
Nov 07	19.51	17.07	14.95	13.09	14.42	13.83

Source: Authors' calculation.

Third, in terms of rural and urban inflation, the poor in both rural and urban areas experience higher inflation rates than the rich in respective areas (Table 7). Moreover, the rural poor face higher inflation than the urban poor. Similarly, the urban rich are less adversely affected than the rural rich.

Table 7: General Inflation rates for different income groups in rural and urban areas

Month	All groups		Hardcore poor		Absolute poor		Middle income		Rich	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Jan 06	6.57	5.95	6.72	5.64	6.81	5.86	6.75	6.11	6.49	6.03
Feb 06	5.65	5.51	5.38	4.94	5.43	5.26	5.52	5.62	5.49	5.79
Mar 06	6.17	5.53	5.77	4.58	5.83	5.22	5.96	5.65	5.91	5.90
Apr 06	6.84	6.97	6.37	6.62	6.46	6.93	6.61	7.10	6.28	6.93
May 06	7.60	7.01	7.61	6.91	7.64	7.17	7.61	7.27	7.14	6.81
Jun 06	7.75	6.90	7.58	6.23	7.74	6.78	7.85	7.12	7.20	6.88
Jul 06	6.63	6.75	6.63	6.37	6.33	6.62	6.62	6.87	6.47	6.83
Aug 06	6.58	6.69	6.75	6.31	6.37	6.61	6.56	6.80	6.50	6.79
Sep 06	6.72	6.55	6.97	7.12	6.58	6.98	6.68	6.79	6.50	6.37
Oct 06	7.12	6.97	7.14	7.88	6.85	7.71	7.04	7.28	6.83	6.63
Nov 06	6.39	5.51	6.36	5.67	6.16	5.54	6.46	5.39	6.51	5.43
Dec 06	5.98	5.44	5.66	5.33	5.70	5.49	6.18	5.46	6.34	5.44
Jan 07	5.61	5.60	4.95	5.19	5.16	5.65	5.73	5.71	6.02	5.69
Feb 07	6.85	7.03	6.50	7.00	6.64	7.40	7.07	7.27	7.17	6.89
Mar 07	7.25	7.35	7.82	7.94	7.59	7.96	7.68	7.63	7.60	7.01
Apr 07	8.16	7.49	9.00	7.95	8.87	8.08	8.91	7.80	8.67	7.33
May 07	7.41	7.70	8.92	8.40	8.52	8.34	8.16	7.97	8.12	7.55
Jun 07	8.93	8.88	10.38	9.10	9.99	9.33	9.67	9.10	9.48	8.71
Jul 07	10.65	9.64	11.75	10.27	11.36	10.44	10.62	10.01	9.89	9.12
Aug 07	10.49	9.73	13.23	11.80	12.08	11.07	10.68	10.12	9.53	8.88
Sep 07	9.99	9.03	13.09	10.79	11.68	10.12	10.08	9.33	8.96	8.23
Oct 07	10.55	9.33	15.05	12.51	13.26	11.12	11.19	9.97	9.69	8.28
Nov 07	11.33	10.83	15.65	15.49	13.83	13.57	11.73	11.83	10.04	9.30

Source: Authors' calculation.

IV. Some Policy Implications

The analysis in this note shows that the poor generally face a higher rate of inflation than the non-poor in Bangladesh. This is likely to have greater adverse consequences on the welfare of the poor in both rural and urban areas of the country. The analysis also shows that the higher inflation rate of the poor in recent years has mainly arisen from higher food prices which have larger weights in the consumption basket of the poor. As such the findings have significant implications for designing appropriate anti-inflation policies by the government and the Bangladesh Bank.

The results show that while high food inflation is a major problem in the urban areas, non-food inflation provides more impetus to the inflation process in the rural areas. This seems to suggest that inflation is lower at the point of origin, but rises as one moves further indicating that higher transportation costs, inadequate infrastructure, imperfect market organization, and other factors also contribute to raising the overall inflation in the country. Given the high food inflation in the urban areas and its potentially large pass-through effect, the impact on non-food inflation also becomes significant which, when progressively increasing mark-ups are added, results in high non-food inflation in the rural areas as well. A careful study of the behavior of both food and non-food components of inflation and their pass-through effects, and the associated mark-ups resulting from physical, financial, and other (e.g. the traffic bottlenecks!) constraints would be useful to understanding the current dynamics of inflation in Bangladesh.

Since the poor are most adversely affected by inflation, especially food inflation, targeted policies are required to mitigate the costs of inflation for the poor. In this context, the government has taken several measures to hold soaring prices, including reduction of import duty on imported food items and other measures of increasing domestic availability of essential consumer goods especially rice and other food items. The government has also taken steps to ensure increased supply of essential goods to the poor by raising open market operations of rice and widening the scope and coverage of different social safety nets programs especially in flood and cyclone affected areas and poverty pockets of the country. For sustaining these efforts, it is important to create decent and productive employment opportunities especially for the poor, for which increasing economic growth and improving its quality are key factors.

Since food inflation has been fueling the recent inflationary process in the country, along with containing demand pressures, the appropriate policy responses would be to take effective measures to increase domestic production of items such as rice, sugar, edible oil, vegetables, and other essential consumption goods. For this, an important prerequisite is to ensure adequate and timely supply of critical inputs such as credit, fertilizer, diesel, and good quality seeds to the farmers and availability of credit and other key inputs for non-farm production. In this respect, the government has taken integrated measures as a component of its overall strategy for increasing domestic production, especially in the agriculture sector. The Bangladesh Bank has raised the disbursement target of agricultural credit for FY08 by 32 percent over the previous fiscal year to Tk. 83.7 billion. During July-February FY08, the disbursement of agricultural credit amounted to Tk. 55.4 billion, which is nearly 70 percent higher than the amount disbursed during the same period of the preceding fiscal year.

As Bangladesh is a net food importing country, higher food prices in the international market are likely to have an adverse impact on the country's net trade balances. Moreover, higher import payments could adversely affect the foreign reserve situation and distract the ultimate goals of the monetary authority of maintaining a stable foreign exchange market and overall price stability. Thus it might be important for the Bangladesh Bank to follow a pro-poor monetary policy through minimizing the rapid depreciation of domestic currency and finding a better inflation forecasting mechanism prior to any possible price hike.

It might also be prudent for the government to monitor prices and take necessary action to ease the supply situation in the social sectors, such as education and healthcare, and ensure the supply of these basic services to the poor at low costs so that the long-term adverse effects of inflation on education and health can be avoided. This is necessary not only to sustain Bangladesh's impressive past achievements in the social sectors but also to ensure that the country is on the right path to achieve the MDGs.

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