

The Impact of Price Hike on the Income of Poor Households in Bangladesh

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Abstract

This study provides a number of important insights regarding the impact of price hike of essentials on poor households. Price hike is not necessarily bad for every poor household. It depends on the nature of their income earning activities. One of the finding of this study is that the average real income of households did not decrease for all regions. Average real income of households decreased 3% for the entire sample while the largest decrease, 11%, is observed for the slums in Dhaka and Chittagong metropolitan areas. This means since households in metro cities are net consumers of essentials, they do not gain from price hike of essentials. The largest increase in average real income of households was observed for Kurigram. The increase was mainly driven by the substantial increase of rice price and agricultural wage rate. A remarkable increase in average real income was observed for Sunamganj which resulted mainly from the large increase of both rice production per decimal and the price of rice. This means adjustment is fast in informal sectors. We need to place more support or safety net programs targeting slum households in big cities. Support toward agricultural sector should continue so that farmers can get direct and agricultural workers can get indirect benefits from them.

1.1 Introduction

There was a huge price surge in Bangladesh during 2007- 2008. The prices of key staples increased by 50% over the two year time span till price declines started since April 2008. Factors such as cyclones (like Sidr) and floods in Bangladesh

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and Nargis in Myanmar, global crisis in terms of rice and wheat production etc. stimulated the price hike. A particular reason for concern about the impacts of high food prices on poor households arises from the fact that the poorest people spend almost three quarters of their income on staple foods in developing countries (Preckel, Cranfield and Hertel 2007). The share of food in total expenditure is 65% for the low income groups in Dhaka city while it is 82% for the same groups in rural areas of Bangladesh (Raihan and Haque, 2007). Thus, a large segment of Bangladesh population is perceived to have been adversely affected by the spiraling price increases of daily essentials.

The livelihood status of poor households largely depends on how their members adjust to economic shocks, such as the recent price hike, by adapting to changes in their food expenditures as well as by undertaking other expenditure-saving and income-enhancing activities. Price hike of this magnitude may have forced many low and/ or fixed income people to rearrange their household expenditures on food items, particularly through changing the food basket, by dropping many essential items with adverse nutritional implications. Existing analyses show that the impact of higher food prices on poor households are likely to be very diverse, depending on the reasons for the price change and on the structure of the economy (Hertel and Winters 2006; Ravallion and Lokhsin 2005). For a fixed income household, an increase in rice price forces households to spend less on non-rice foods or non-food items. But for most of the poor households income is not fixed and they make try to make income adjustments in various ways. This study finds out to what extent the poor households are able to make adjustments in their incomes.

Therefore, this study aims to identify the impact of price changes on the income of different occupational groups living in various places in Bangladesh. The study will concentrate on the poor households living in different parts of the country with special emphasis on the most vulnerable households such as day laborers, landless farmers in rural areas and garment workers, rickshaw pullers in urban areas. The objective of the study is to:

Measure changes in the income of poor households due to price hike
Compare changes in income across regions for both rural and urban households and
Capture the dynamics of the changes in production (crop, livestock and poultry),
occupation, off-firm activities, migration (permanent versus seasonal), in-kind transfer, remittance, and others.

1.2 An assessment of price movement of essentials

Table 1 illustrates the change in consumer price index for national, rural and urban areas for the three fiscal years (2006-08) taking 2005-06 as base year.

Table 1 : Consumer Price Index Derived from base 1995-96=100

| | Period | General | Food | Nonfood |
|----------|---------|---------|--------|---------|
| National | 2005-06 | 100.00 | 100.00 | 100.00 |
| | 2006-07 | 107.22 | 108.12 | 105.90 |
| | 2007-08 | 117.86 | 121.40 | 112.58 |
| Rural | 2005-06 | 100.00 | 100.00 | 100.00 |
| | 2006-07 | 107.29 | 107.95 | 106.10 |
| | 2007-08 | 118.00 | 120.83 | 112.91 |
| Urban | 2005-06 | 100.00 | 100.00 | 100.00 |
| | 2006-07 | 107.03 | 108.54 | 105.33 |
| | 2007-08 | 117.51 | 122.71 | 111.72 |

Source: Derived from BBS data

The price index increased 17.86 percentage points over the period of 2007-08. A greater increase, 21.40 percentage points, is observed for food which is much higher than the increase in general price index. Besides, for some key essentials the price hike was even greater than what food price index suggested. It is obvious from the trends in monthly wholesale and retail price of coarse rice in Bangladesh since 2000 (Deb and Hossain, 2009). According to them, a small price increase was observed during July 2000 to January 2003, and the retail prices of coarse rice were less than Tk 15 per kg. Between February, 2003 and January, 2007 the prices of coarse rice increased at over 10 percent per year reaching almost Tk 20 per kg (Graph 1). These prices started to increase rapidly since February 2008 and reached Tk 35 per kg within three months. A substantial decline in these prices was observed in beginning from late December 2008 and by late January 2009 the price almost followed the normal trend (Deb and Hossain, 2009).

Since 2000 the wholesale and retail price of atta (flour) followed the same trend as in the case of rice price in Bangladesh. During July 2000 to January 2004, the price of atta increased at a slow pace with retail prices of atta varied between Tk 14 and Tk16 per kg. During February 2004 to October 2006 prices of atta increased at a high rate, from Tk 16 per kg in February 2004 to Tk 22 per kg in October 2006. Since November 2006 prices of atta started to increase at a rapid rate leading to an escalation in the price in late 2007. The retail price reached its pick of Tk 45 per kg in March 2008. It started to decline since April 2008 reaching

Tk 39 per kg in July 2008 (Deb and Hossain, 2009). Constructed from Deb and Hossain, 2009

The increase in nonfood price index, which is 12.58 percentage points, is much lower than the increase in general price index and food price index. Also, the increase in price index was slightly higher in rural areas. The increase in general price index in urban areas was slightly lower than the national level. Interestingly, the increase in food price index was greater in urban areas, although the increases in nonfood price index were very close in rural and urban areas.

However, Raihan and Haque (2007) calculated a higher food inflation rate for a selected occupational groups (small traders, ready-made garment (RMG) workers, rickshaw pullers, day laborer) living in Dhaka city and in rural areas. Average food inflation rate for them was 20% during June 2007 - June 2008. The corresponding figures for the selected occupational groups (small traders, farmers, rickshaw /van pullers, day laborer) in rural areas and for the four big cities (Dhaka, Chittagong, Rajshahi, and Khulna) were 17.34% and 21% respectively.²

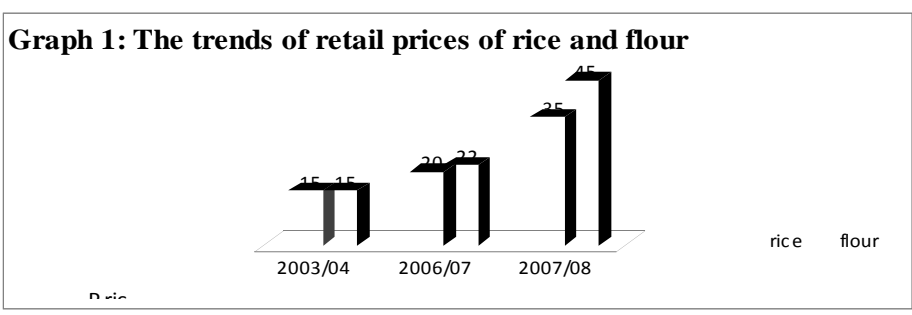
2.1 Conceptualization of the study

Before going to analyze methodology, we need to understand the process through which price hike transmits to household income. It is conceivable that price hike will force households to bring certain adjustments in their consumption and income so that they can contain the shock of the price hike. These adjustments are likely to come through the optimization behavior of households given the new parameters (i.e., higher prices), which can be depicted with a flow chart as below (Flow chart 1). The price hike of food and other essentials is expected to increase or decrease the household real income depending on whether the household is a net producer or consumer of these essentials. If everything else remains the same, the higher price of an essential will decrease (increase) the real income if a household is a net consumer (producer) of that essential.³ For a fixed nominal income or fixed salaried household, real income decreases.

² When their food inflation rate is used to construct the overall inflation rate for the poorest groups, the rate is 23.32 for the identical food and nonfood weights as used in the official estimate. This becomes 26.17 when weights are used from the study findings of Raihan and Haque (2007). The corresponding figures for the urban areas are 28.63 and 32.55, respectively. However, in all these recalculation for the poorest group's inflation rate official nonfood price index is applied. Otherwise, the overall inflation is likely to be even greater than these.

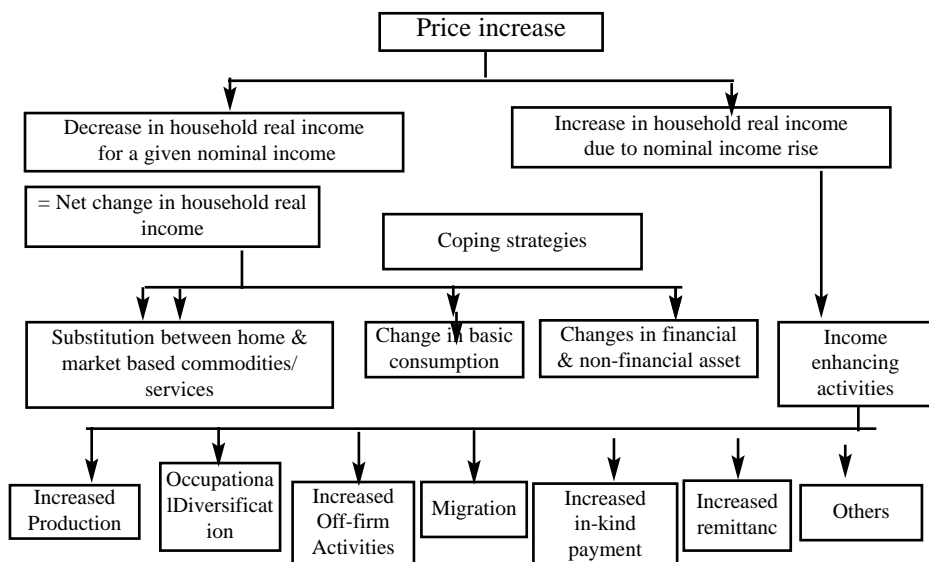
³ This can be extended for a number of commodities, even when the household is a net producer of some and a net consumer of the rest, leaving the conclusions unchanged.

However, presuming everything else unchanged goes against household optimization behavior. A household potentially adjusts household production and changes its labour allocation accordingly to boost up household real income. Besides, households undertake other income-enhancing activities to cope with the price changes. Thus, a price increase may lead to two contrasting changes: (i) decrease in household real income for a given nominal income, and (ii) increase in household real income through income enhancing activities. Depending on the net change in household real income, a household determines its coping strategies



on consumption and savings. Price increase changes the relative prices of different goods and services, leading households to substitute between homemade and market based commodities and services and change basic consumption. Substitution might take place among different homemade goods and services as

Chart 1: Household optimization behavior in flow chart



well. Services produced at home are aimed for reproduction of essential services and savings of household expenditures. Households with reduced real income may be forced to dispose some of their financial and non-financial assets.

The aim of this study is to focus on the impact of price hike on the income of poor households as well as to capture the dynamics of the changes in production (crop, livestock and poultry), occupation, off-firm activities, migration (permanent versus seasonal), in-kind transfer, remittance, and others.

2.2 Data

Information on the correlates required for this study is obtained from the primary dataset generated from the household survey in the context of a price hike study anchored by ERG and funded by the Save the Children, UK. The survey respondents were asked in the questionnaire if they were cutting their food consumption, consuming cheaper, lower quality food, reducing their non-food expenditures on items such as child education and health, spending from savings, selling livestock, agricultural land and other assets, borrowing from various sources, working more, sending non-working members or children to work, removing children from schools etc. to deal with the high prices of essentials.

To capture the dynamics and strategies of household behavior the most appropriate way is the recall method through cross section study. One of the most appropriate ways of applying recall methods is asking questions on household aspects like how much child labor a household gave two years ago in the year 2006 when the price hike was not a phenomenon as in 2008. Then we compare the amount of child labor that the household gave in 2008 when the increase in price level was quite unbearable for the families that earn fixed income. Then by combining the two year data we analyze how the dynamics of child labor evolved overtime. The 2 year-recall is chosen because there was a remarkable price difference between the year end of 2006 and 2008 and the former is a good reference point to remember as it was the closing point of the BNP-led government.

To capture regional variation a survey of the rural, urban, and metropolitan poor households has been completed to capture all the relevant aspects of households in 2006 and 2008. For this purpose Economic Research Group (ERG) has conducted a study entitled “Impact of price Increase on Poor Household and Children Well being”. Besides Dhaka and Chittagong metropolitan areas, the information on households is collected from the North-West, the *Haor* areas, the Coastal areas, and the Chittagong Hill Tracts, where there is a large concentration

of extreme poor. To avoid misleading conclusions we excluded certain areas that received considerable external help for one reason or the other. For example we excluded the rat infested districts in the CHT, the *Sidr*-affected upazilas in the coastal areas and the *Monga*-affected upazilas in the North-West. We then purposively selected one upazila i from each of the four areas. The selected upazilas are Ulipur of Kurigram, Shyamnagar of Satkhira, Darampasha of Sunamganj, and Khagrachari sadar of Khagrachari.

For the urban sample, all upzaila centers (towns) from the four selected upazilas are included in the survey. For selection of a rural sample, 3 villages are randomly chosen from the list of all villages in that upazila with an exception for Khagrachari where only 2 villages are chosen. This exception is made for Khagrachari sadar to account for a large fraction of urban population there. For each of the villages selected in an upazila, 20 households are randomly selected with appropriate representation of vulnerable occupational groups such as day laborers, landless farmers, and marginal farmers in rural areas.

For each of the two metropolitan cities and the four upazila towns, the clusters of residence, with higher concentration of poor people are identified. From this subset, 2 clusters for each of the four upazila towns and Chittagong metropolitan city and 3 clusters for Dhaka metropolitan city are randomly selected. The final stage we randomly drew 50 households from each of the clusters in metropolitan cities and 30 households from each of the clusters in upazila town. In addition, 50 families/households, representing the floating population, are surveyed from several key spots in Dhaka metropolitan city.

Representation of vulnerable occupational groups such as rickshaw pullers and garment-workers are ensured in these areas. Thus, of the 664 households used in this analysis, 99 are from Kurigram, 95 are from Satkhira, 92 are from Sunamganj, 96 are from Khagrachhari, 187 are from Dhaka, and the rest 95 are from Chittagong metropolitan areas.

3. Impact of price hike on the income of poor households

According to the flow chart, the households are expected to experience changes in their incomes (both nominal and real) due to the price hike, and consequently, they would act on to change their income undertaking income enhancing activities. We will delve into the changes in income sources and accordingly the changes in nominal and real income.

3.1 Changes in household nominal income

The total nominal income increased in all regions (Table 2.1). The share of cropping, self employment, wage and salary in total nominal income were 8%, 39%, 25%, and 21%, respectively (Table 2.2). Since all these sources experienced substantial growth over that period, the significant growth in average household income is expected. Accordingly, there is a jump in total average household income over the two year period. Average household income increased from Tk. 44545 in 2006 to Tk. 54775 in 2008. The increase was highest for Kurigram which was 53%, an increase from Tk 20194 in 2006 to Tk 30966 in 2008.

The share of cropping in total nominal income was 21% for Kurigram. The increase in rice price was 47% for Kurigram when the increase in production per decimal land experienced an increase of 4%. These together explain a substantial

Table 2.1 : Average nominal income of surveyed households (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|-------|
| 2006 | 20194 | 42606 | 40796 | 41922 | 56485 | 52815 | 44545 |
| 2008 | 30966 | 52588 | 58971 | 47784 | 65495 | 62066 | 54775 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

part of the growth of the household income in Kurigram. The share of agricultural wage in total nominal income was 30% whereas the increase in agricultural wage was 52% for Kurigram explaining 15.6 ($=.30*.52$) percentage points of the total income growth of Kurigram. The non-agricultural wage increased by 25% when its share in total nominal income was 10%. Altogether, the large increase in total nominal income of Kurigram was expected. Still that income was roughly half of the average income in each of the other regions. That was the case in 2006 too.

The increase was second highest for Sunamganj which was 45%, an increase from Tk 40796 in 2006 to Tk 58971 in 2008. The share of cropping in total nominal income was 10%, and thus the 194% increase in rice profit alone explains 19.4 ($=.10*1.94$) percentage points increase of total nominal income of Sunamganj households. This happened because cropping means mostly rice in haor areas. The rest is explained by the increases in wage, salary, self employed earnings and so on. However, the 14% increase for Khagrachhari sadar was the lowest when 16% and 18% for Dhaka and Chittagong metropolitan cities, respectively places them around the lower end as expected. Since households in metro cities are net consumers of essentials, they are not expected to gain from price hike of essentials.

Table 22 : Average household income by sources (Tk.)

| | Profit from | | Self employed | Wage agri | salary Nonagi | other - | - | Transfer | | | Total Income | | |
|------|-------------|----------|------------------|--------------|------------------|------------|-------|----------|------|------|--------------|-------|-------|
| | crop | Ivestook | | | | | | fishery | cash | rice | | wheat | food |
| 2006 | 2417 | 880 | 569 | 19211 | 2815 | 8344 | 9139 | 782 | 92 | 115 | 29 | 202 | 44545 |
| 2008 | 4459 | 835 | 523 | 21285 | 3972 | 9887 | 11587 | 1132 | 218 | 447 | 79 | 351 | 54775 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

Table 2.2 presents income generated from different income sources in year 2006 and 2008 for all sampled households across regions. There is a huge jump in income from crop production. It went up from Tk 2417 in 2006 to Tk 4459 in 2008 which is a significant change between the two years. A substantial jump is also observed for the agricultural wage component. There are substantial jumps in transfers and other category even though the magnitude of transfer is very small. The reasons for these jumps will be clear when each of individual components will be discussed in what follows.

Crop production

The profits (gross imputed revenue minus purchased input cost) generated from crop production. Here imputed revenue means revenue which is obtained through

Table 3: Average household income as profit from crops (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|------|
| 2006 | 4454 | 4314 | 4030 | 3971 | . | . | 2417 |
| 2008 | 6622 | 7192 | 11855 | 5801 | . | . | 4459 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

multiplying total production with market price. Production might be consumed in households and not sold in the market. The huge increase in this component was driven by a large increment in income from cropping in Sunamganj, an increase from Tk 4030 in 2006 to Tk 11855 in 2008 (Table 3).

Rice producers of Sunamganj experienced an increase of 41% on both rice production per decimal and rice price per maund, although the total land for rice cultivation fall by 1% (from decimal 157 in 2006 to 155 in 2008) over that period. Thus, these accounts for more than 80% increase in revenue from rice production there. The increase in revenue is 97% (from Tk 18815 in 2006 to Tk 37067 in 2008). However, the 194% increase (from Tk 8379 in 2006 to Tk 24670 in 2008) in rice profit was partly driven by the relatively smaller increase in total cost of rice production which was only 19% (from Tk 10436 in 2006 to Tk 12397 in 2008) over that period. Thus, an abrupt crop failure in 2006, bumper Boro

Table 4.1: Average household income as profit from livestock (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|-----|
| 2006 | 719 | 897 | 2532 | 1558 | . | . | 830 |
| 2008 | 834 | 427 | 2676 | 1824 | . | . | 835 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

production and rapid price increase in 2008 drove the huge profit increase from cropping in Sunamganj. This does not imply that the households of Sunamganj are mostly net sellers of rice because that increment is meant for imputed income from crop production. Increases in other regions are also substantial

Fishery and livestock

There was a slight (less than 1%) increase in income generated from livestock and 8% decrease in income generated from fishery in 2008 (Table 4.1 and 4.2).

Decrease in income from fishery and almost no change in livestock was mainly driven by the losses of livestock due to Sidr attack in coastal area. Income from

Table 4.2: Average household income as profit from fisheries (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|-----|
| 2006 | 155 | 1999 | 1837 | 20 | . | . | 569 |
| 2008 | 313 | 946 | 2448 | -76 | . | . | 523 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

fishery and livestock in Satkhira dropped to Tk 946 and Tk 427 in 2008 from Tk 1999 and Tk 897, respectively, in 2006. At the same time, income from cropping increased to Tk 7192 from Tk 4314 (Table 3, 4.1 and 4.2).

Self employment

An 11% increase in income generated from self employment outside agriculture is worth mentioning (Table 5). These self employments include rickshaw/van

Table 5: Average household income from self employment (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|-------|
| 2006 | 5758 | 16453 | 19837 | 15680 | 28792 | 18627 | 19211 |
| 2008 | 7367 | 16455 | 22539 | 15583 | 31512 | 23523 | 21285 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

puller, weaver/handloom, small enterprise (shop), hawker/ferry, small business, tailor, bamboo/canework, carpenter, mason, boatman, fisherman, potter, goldsmith, blacksmith, broker, cobbler, katha sewer, food processor, transport

Table 6.1: Average household income from agricultural wage (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|------|
| 2006 | 5356 | 6072 | 4493 | 2871 | 273 | 482 | 2815 |
| 2008 | 9294 | 8017 | 6473 | 3910 | 117 | . | 3972 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

helper, tannery worker, plastic factory, painting, shrimp fry collector, stone collector, woodcutter, crab/ snail/ turtle collector, honey collector , animal trader, village doctor (Polli chikitsok) and so on. Increase in income from salary was 27% for the entire sample. Salaried occupations are garments worker, driver, security guard, servant, teacher, imam, muajjin, and so on.

Wages

Likewise, there were significant increases in income from both agricultural and nonagricultural wage payments (Table 6.1 and 6.2). This happened mainly due to

Table 6.2: Average household income from non-agricultural wage (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|------|
| 2006 | 2174 | 8302 | 4152 | 9357 | 8941 | 16957 | 8344 |
| 2008 | 3090 | 11395 | 5844 | 10357 | 9762 | 19556 | 9887 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

the increase in daily wage rates. Agricultural wage increased by 35% (an increase from Tk. 69 in 2006 to Tk. 94 in 2008) which is substantially greater than the overall inflation rate.

The increase in nonagricultural wage was smaller than the agricultural one. Nonagricultural wage increased by 20%. However, there was no significant change in the days per year that an average agricultural laborer worked. The average number of days that an agricultural laborer worked increased from 122

Table 7: Average transfer received by households (Tk.)

| | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong | All |
|------|----------|----------|-----------|--------------|-------|------------|------|
| 2006 | 89 | 315 | 563 | 328 | 525 | 679 | 438 |
| 2008 | 413 | 1625 | 1531 | 1153 | 1033 | 893 | 1095 |

Note: the figures in this table are averages over all households. Source: Estimated from ERG survey (2008)

days in 2006 to 123 days in 2008 showing an increase by 1%. In fact, there was a 4% decrease in the average number of days worked by a nonagricultural laborer.

Transfers

However, transfers received both in cash and in kind in all forms increased significantly raising its share in total income substantially. For example, a 250% increase in transfers raised its share in total income from 1% in 2006 to 2% in

Table 8.1 : Average real income of households based on BBS (in 2006 Tk.)

| | All | Kurigram | Satkhira | Sunamganj | Khagrachhari | Dhaka | Chittagong |
|------|-------|----------|----------|-----------|--------------|-------|------------|
| 2006 | 44545 | 20194 | 42606 | 40796 | 41922 | 56485 | 52815 |
| 2008 | 47545 | 27482 | 46291 | 52518 | 41961 | 56490 | 52926 |

Source: Estimated from ERG survey (2008)

2008 for the entire sample whereas despite a 462% increase in transfers in Kurigram, its share in total income rose from less than 0.5% in 2006 to 1% in 2008.

Satkhira experienced the largest increase in transfers as a share of nominal income through the increase of this share from 0.7% in 2006 to 3.1% in 2008. The increase in transfers was 516% for Satkhira which is also the largest among all the regions. This was due to the receipts from sidr related support activities.

Table 8.2: Average real income based on poor specific adjustment in food index (in 2006 Tk.)

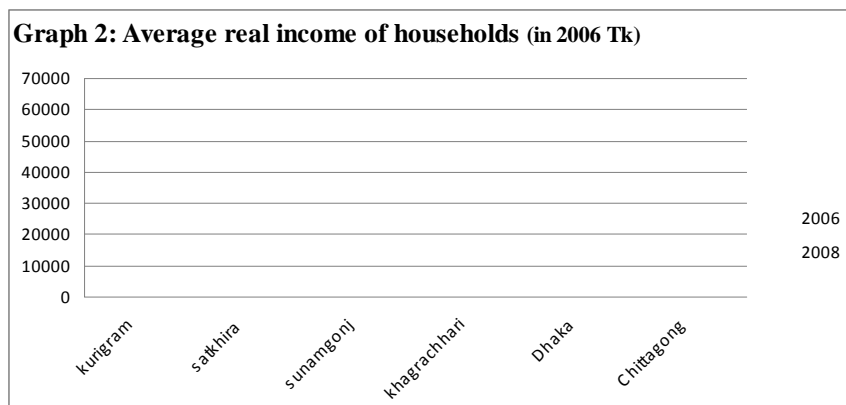
| Year | All | kurigram | satkhira | sunamgonj | khagrachhari | Dhaka | Chittagong |
|------|-------|----------|----------|-----------|--------------|-------|------------|
| 2006 | 44545 | 20194 | 42606 | 40796 | 41922 | 56485 | 52815 |

Source: Estimated from ERG survey (2008)

3.2 Changes in household real income

Thus, so far we have discussed the nominal income of households without an inflation adjustment. With adjusting income by consumer price index we obtain average real incomes of households residing in different regions.

Household real income increased for Kurigram, Satkhira, and Sunamganj and decreased for Khagrachhari, Chittagong and Dhaka metropolitan areas (Table 8.1). The highest increase of 36% is observed for Kurigram whereas it increased by 29% for Sunamganj. However, an inflation adjustment for poorest groups with consumer price index at the national level may not bring proper adjustment as intended. Even applying different consumer price index for rural and urban will not capture the socio-economic characteristic of the poorest groups in Bangladesh.



Source: Estimated from ERG survey (2008)

If nominal household income is adjusted with the inflation rate constructed for the poorest groups using the food price index and food share of poorest groups in both rural and urban areas in Bangladesh estimated by Raihan and Haque (2007) then the real income will fall for all except Kurigram and Sunamganj (Table 8.2 and Graph 2).⁴

Average real income of households decreased 3% for the entire sample while the largest decrease, 11%, is observed for the slums in Dhaka and Chittagong metropolitan area. The largest increase in average real income of households is observed for Kurigram, which is 27%. What this implies is that the urban households of Dhaka and Chittagong metropolitan areas suffer significantly more from the price hike of essentials.

4. Conclusions

The results of this study provide a number of important insights regarding the impact of price hike of essentials on poor households. The main empirical findings of this research can be summarized as follows.

The average real income of households decreased for all regions except Kurigram and Sunamganj. Average real income of households decreased 3% for the entire sample while the largest decrease, 11%, is observed for the slums in Dhaka and Chittagong metropolitan areas. This means since households in metro cities are

⁴ Differences in increases in BBS general food price index and those estimated for poor in rural areas and metro slums were averaged to obtain the adjustment factor. The later was constructed by Raihan and Haque (2007).

net consumers of essentials, they do not gain from price hike of essentials. This means price hike is not necessarily bad for every poor household. It depends on the nature of their income earning activities.

The largest increase in average real income of households is observed for Kurigram, which is 27%. This increase was mainly driven by the 47% increase of rice price and the 52% increase of agricultural wage rate. A 20% increase in average real income is observed for Sunamganj which resulted mainly from the 41% increase of both rice production per decimal and the price of rice. This means adjustment is fast in informal sectors.

From the policy perspective, we need to place more supportive or safety net programs targeting slum households in big cities. Support toward agricultural sector should continue so that farmers can get direct and agricultural workers can get indirect benefits from them.

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