Food Inflation in India
Encourage Competition for a Long-term Solution

Introduction

Food inflation in India has become a contentious issue, for obvious reasons. This is happening alongside a very impressive growth of the Indian economy and a significant increase in per capita income over the last several years. The economy is growing at more than eight percent per annum and per capita income has doubled in the last five years. This has given birth to an argument that one of the major factors for food inflation is sustained economic growth – which is critical for an emerging economy like India, with a large number of poor – over the last few decades.

Recent inflation of food articles, which touched 22.9 percent in June 2010, was unprecedented. It was, however, argued by many, including policy makers, that this was due to seasonal factors and will come down in the near future. It has led the Government of India to take some drastic monetary policy actions. Between March 2010 and July 2011, the Reserve Bank of India increased the short-term lending (repo) and borrowing (reverse repo) rates by 275 basis points.

Unprecedented food inflation has put the policy makers in a dilemma – whether to continue with the present growth strategy and let the growth take care of inflation, through increasing per capita income, leading to reduction in poverty, or to focus on reducing inflation and allow economic growth to moderate. Indeed, high food inflation is neutralising the gains made in poverty reduction in recent years, but it is not clear how reduction in growth will control food inflation.

The Briefing Paper analyses the current state of food inflation in India. It describes the impact of food inflation on the poor and analyses the factors that are contributing to upward movement in food prices. It concludes with a set of possible way out to address food inflation.

Cost of Food Inflation

According to a recent report by Credit Rating and Information Services of India Ltd. (CRISIL), the rise in food inflation to eight percent per year during 2008-09 to 2010-11, from five percent in the preceding three years, significantly eroded the purchasing power of money, particularly those of the poor, who have a disproportionately high percentage of expenditure on food articles, and inflated the consumption expenditure bill of Indian households by ₹5.8tr.

An Asian Development Bank (ADB) study estimates that India will be badly affected by high food prices, as a 10-percent increase could push close to 30 million Indians below the poverty line.

India is not the only country which is expected to face such a crisis in near future. The ADB report projects an alarming scenario for Asia. A sustained 10 percent increase in domestic food prices could push an additional 64 million people, nearly two percent of Asia’s 3.3 billion people, below the poverty line. According to an Oxfam report, the 2008 food price spike pushed around 100 million more people into poverty, while the current spike has, so far, pushed another 44 million into poverty this year.

It may be recalled that, in 2009, the number of hungry people in the world reached a record one billion, one-sixth of the world’s population. This figure is expected to increase, if current food price situation continues.
Another report by the United Nations and the Organisation for Economic Cooperation and Development predicts that any further increase in global food prices will have a devastating impact on the world’s poor and is likely to lead to political unrest, famine and starvation. It also indicates that food prices are likely to increase by as much as 30 percent over the next 10 years.

**Volatility vs. Price Increase**

Volatility connotes two concepts: variability and uncertainty. While the former describes overall movement, the latter refers to movement that is unpredictable. By this definition, when price movement is downward, it is indicative of decline in demand. An upward movement, on the other hand, is an indication of increase in demand, which can arise out of increase in income level, change in consumption pattern, etc.

Supply-side factors such as decline in production also play a significant role in this equation. One can, therefore, describe volatility as a situation where both demand-side and supply-side factors work in tandem.

A review of the Wholesale Price Index (WPI) data of India during the last four decades shows that there is significant increase in prices of all food and non-food items. While WPI for all commodities has increased by nearly 17 times (from a WPI of 14.3 in 1970-71 to 242.7 in 2009-10), the price increase of primary articles is over 18 times (from a WPI of 15.1 in 1970-71 to 276.6 in 2009-10). Increase in food prices has been the highest – 18.3 times (from a WPI of 15 in 1970-71 to 274.9 in 2009-10). Only major variation during this period has been the difference in the rates of this increase. While for some years the rate was lower, in others it was unexpectedly high. (Graph 1)

There are some distinct features of price movements before 1991 (liberalisation of the Indian economy) and afterwards. While during the period preceding 1991 wholesale price indices of all commodities were above food article indices, in later years, the figures for food article indices were greater than those of wholesale price indices. (Table 1)

<table>
<thead>
<tr>
<th>Period</th>
<th>WPI Exceeding Food Article Indices</th>
<th>Food Article Indices Exceeding WPI</th>
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<tbody>
<tr>
<td>1970-71 to 1990-91</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>1990-91 to 2009-10</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>1970-71 to 2009-10</td>
<td>18</td>
<td>22</td>
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Source: Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India

**Graph 1: Movement of Wholesale Price Index (Average of Weeks: 1993-94 = 100)**

Price data with base year of 1970-71 and 1981-82 converted into Base Year 1993-94
This is mainly due to unbalanced growth in the demand for food not duly supported by increase in supply. This also reflects that food prices in the post-reform period influenced WPI more than non-food prices. However, data on the rates of increase in food prices do not show any sign of sustained fluctuation (volatility) during this period. From consumers’ point of view, food inflation in India was not a case of volatility, but rather that of continuous rise.

This trend is further reinforced by the data on Consumer Price Index for Agricultural Labourers and Industrial Workers. In both the cases, during the period 2000-01 and 2009-10, food price indices showed greater increase than the general price index. For agricultural labourers, the food price index has increased by nearly 89 percent, whereas it was 84 percent in the case of general price index. Similarly, for industrial workers, the food price index has increased by 113 percent and the general price index by 109 percent. (Graph 2)

Going by this price data, one can say that the much talked about food price volatility does not seem to be happening in India, though it might be a relevant issue in the world food market. A comparison between Indian and global food price movements during 2000 and 2009 can clarify this point. (Graphs 3 and 4)
One observes a different pattern in world food market. Fluctuations in price levels are more pronounced. For all the three selected years, a new price level was attained, even though there were significant fluctuations within a year, especially in 2005 and 2009. However, volatility even in the world market appears to be a short-term phenomenon, as prices get stabilised at a higher level in subsequent periods.

**Understanding Food Inflation**

In the last 40 years and especially during the post-reform period, India has experienced significant growth, leading to an increase in per capita income and improvement in many other socio-economic indicators. These factors are now exerting tremendous pressure on food prices. (Graph 5)

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*Graph 5: India’s Growth Dynamics*

Source: Various, including Economic Survey of India, 2010-11

**Box 1: Factors Influencing Food Inflation**

- **Increase in per capita income**
  - (doubled in the last five years and increased 81 times since 1970)

- **Leakages in the food supply chain**
  - (in PDS leakage estimated at 43 per cent)

- **One way integration of Indian food market with the global market**
  - (supply shocks in global food market lead to increase in food prices in India, the reverse rarely happen)

- **Speculation in the food market**
  - (speculators exaggerate the price rallies)

- **Shift in consumption pattern**
  - (with increase in per capita income, people are shifting for more protein based food)

- **Inadequate storage facilities**
  - (over 30% of produce -- foodgrains, vegetables and fruits -- rotting due to lack of proper storage facilities)

- **Increase in population**
  - (growing at the rate of about 1.7 per cent and doubled since 1970)

- **Increasing cost of production**
  - (due to increase in price of fertilizers, pesticides, irrigation, etc.)

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The above-stated factors can be divided into influencer and influenced. Increase in population, increase in per capita income and increase in food grain production can be termed as influencer, whereas increase in WPI and increase in per capita food availability as influenced. The figures reveal that effective demand for food has significantly increased over the last four decades.

Since production of food grains has not kept pace with this increase, it has resulted in almost negligible increase in per capita food availability. Besides this, other factors are also influencing food prices in India. (Box 1)

Furthermore, recent data on food consumption expenditure indicate that there is a definitive shift towards consuming more protein-based food. For all food articles, except cereals and cereal-based products, per capita consumption expenditure has more than doubled in 2007-08 compared to that in 1993-94.

Out of the total increase in per capita consumption expenditure on food, while vegetables had the highest share (18.4 percent) in rural areas, milk and milk-based products accounted for about one-fifth of total increased per capita expenditure in urban areas. Cereals and cereal-based based products were ranked third in both rural and urban areas. (Graphs 6 and 7)
Possible Way Out

A multi-pronged approach towards tackling food inflation is required through policy responses – short-term as well as long-term. Short-term responses could include measures to:

- Plug loopholes in the public distribution system, especially by revising the list of poor households and making the system IT-enabled – research has shown that PDS is more effective when there is functional local accountability mechanism6
- Make PDS more efficient by linking it with conditional cash/food transfer in order to reduce price pressure on local food market; however, unless increased demand for food is met with increased supply there will be further inflationary pressure
- Strengthen and create local infrastructure for storage of food, especially non-cereal perishable food articles such as vegetables, fruits, meat, fish, etc., as that would help in reducing wastage and transportation cost and, thus, final cost of food articles. It is estimated that transportation cost accounts for 30 percent of the price of fruits and vegetables, whereas about 45 percent of food is wasted7
- Popularise and inventorise production-enhancing local innovations. Central and state governments should take steps to revive agriculture extension services so as to diffuse new production-enhancing technologies

The other set of issues, especially inter-related issues of speculation in the food market and integration of Indian food market with the world market, need to be addressed through long-term responses. There is a need for better coherence and coordination in policy responses.

It is often observed that, while in the case of global supply shocks, Indian food market responds with increase in food prices, the reverse rarely happens. This gives an indication of one-way integration and this is to be transformed into a two-way process.

Secondly and to a large extent, the Indian food market is localised and fragmented. The nature of this market is such that anti-competitive practices are galore. Laws and regulations dealing with anti-competitive practices like entry barriers are either absent or ineffective. For instance, even after the amendment to the Agriculture Produce and Marketing Committee (Regulation) Act, the most important law in India addressing entry barriers to agricultural markets, there are significant implementation concerns.

Furthermore, localised cartels and other anti-competitive practices are negatively impacting consumer welfare. A functional competition policy regime, with particular emphasis on its implementation at the local level, is a long-term solution for enhancing consumer welfare, as it can provide good quality products to consumers at reasonable prices and with more choice.

Endnotes

4 http://www.guardian.co.uk/environment/2011/jun/17/global-food-prices-increase-united-nations
6 http://www.3dsyndication.com/dna/article/DNMUM218023, August 01, 2011