The food situation in India has become so problematic that it has recently triggered criticism of the government by its official think tank, the country’s Planning Commission in its mid-term appraisal of the Eleventh Plan (2007-12). Wide ranging reforms in agriculture have been called for.

In this Note, we highlight the basic characteristics of the food inflation problem and offer both a diagnosis and a comprehensive and updated strategy for cure.

The Issue

Over the last two decades (since the early 1990s), while India’s population has increased by 40 percent, its per capita gross domestic product (GDP) has grown by an impressive 125 percent. Together these two phenomena imply almost a trebling of GDP during the period. This phenomenal growth of the Indian economy has been attributed to significant growth of manufacturing and service sectors. The agricultural sector, still the source of livelihood for a majority of the Indian population, has exhibited sluggish growth: data indicate that food grain production grew at a low average annual rate of 1.2 percent during the mentioned period, far below that of population while non-food grain edible products exhibited even more unimpressive growth.

The mentioned significant increase in per capita income coupled with high rate of growth in population and low growth in agricultural produce has, not surprisingly, led to a crisis like situation in Indian food markets with prices for staple foods rising rapidly. Persistent food inflation in recent times is proof of the instability that even positive phenomena such as economic growth might produce.

This increase in domestic food prices is not inconsistent with global trends. Data indicate that global food prices increased by an average of about 12 percent between February-December 2009. At the regional (SAARC) level, countries have experienced sharp increases in price levels especially for items such as pulses, sugar and vegetables. In Pakistan, pulses are now being sold at about Rs 135 per kg. The situation is not much different in Bangladesh either.

In India, the price behaviour of pulses, sugar and vegetables has now become a serious cause for concern. What is more alarming is that over the last few years, the market has witnessed a sharper rise in the consumer price index (CPI) than the wholesale price indices (WPI), reversing the earlier trend up to 2006. In other words, before 2006, low purchasing power of people made the government support producers, while in the period after, such power has improved probably due to introduction of development programmes such as the demand stimulating National Rural Employment Guarantee Scheme.

The agricultural sector has clearly been hard pressed to cope with increase in demand through effective supply responses, leading to sharp and often abrupt escalation in food prices. In the first week of December 2009, food inflation based on wholesale prices hit a high of 20 percent for the year, the highest in a 10-year period. The situation was not much different even after two months despite some government initiatives to control food inflation: on February 13, recorded food inflation was 17.58 percent, still not offering much comfort.

The rapid surge in average price levels of food products can be attributed to runaway inflation in sugar, pulses (tur), vegetables (especially potato) etc. Figures available reveal that during January-November 2009, prices of potato increased by 200 percent (from Rs 8-24), that of other vegetables by over 41 percent, pulses by 82 percent (from Rs 50-91), and sugar by 65 percent (from Rs 23-38). In some other cases, the price increase was quite moderate implying that the general trend of runaway inflation hides disparate trends for different groups of products. Among the products exhibiting moderate inflationary behaviour were wheat (from Rs 13-15), Atta (Rs 14-18), and onion (Rs 21-23). A similar trend was observed for the next quarter (October-December): cereal prices went up by about 13 percent, large in absolute terms but small relative to 42 percent price rise for pulses; 31 percent for vegetables and a whopping 102 percent for potatoes. Sugar too exhibited worrying price rise.
Public memory being short, this rise in food prices has been labelled as ‘unprecedented’. This is far from the truth – a revealing recent article lists 13 occasions on which food inflation has crossed the danger level of 10 percent in the last six decades. There are, however, only three instances of food inflation creeping over the 20 percent mark – in 1973-74, then in 1974-75 and the present. On three other occasions – 1979-80, 1980-81 and 2008-09 – food inflation ranged between 15 to 20 percent. This indicates that the current episode of food inflation can be classified on the basis of empirics as ‘rare’ though not without precedent.

Adverse Consequences

Though there might be some disagreement over whether previous political regimes have seen such rampant inflation in food products, there should be none about the economic havoc that such inflation can cause. Fixed income earners, consisting of the poor and manual workers who spend a significant portion of their income on food, can often find their real income reduced drastically.

Imagine a person below the poverty line spending 80 percent of her income on food and the rest on non-food articles. The level of inflation facing this person is far more than that in CPI as she spends a much larger proportion of her income on food than the representative consumer. For instance, a 20 percent rate of food inflation combined with zero percent inflation in non food items will result in the person facing an effective rate of inflation of 16 percent (20 X 0.8). A rich person earning many times her income and consequently spending only 10 percent of it on food would experience an inflation rate of only 2 percent. In other words, food inflation exacerbates poverty as well as inequality.

Sustained food inflation can thus reverse the gains derived from employment generation programmes in terms of pulling people above the poverty line, and at the same time, push people living below it into an abyss of malnutrition and hunger. Such people still constitute around 25 percent of the population – a significant proportion who have been left untouched by the gloss of economic growth.

The Approach

The exposure of the Indian economy, including the agricultural sector, to external influences has further complicated inflation dynamics. Not only are domestic price movements being affected by global ones through macroeconomic linkages, even domestic behaviour relating to production and consumption, eating habits and spending patterns etc. is being influenced by global trends.

In the case of pulses, price rise may be directly attributed to both domestic and global factors especially production, supply and consumption trends. The period after 1991 has hardly seen any increase in production with levels remaining virtually stagnant at 14 million tonnes per year. The stagnation can be attributed to a marginal increase in yields being neutralised by a decline in area. At the same time, economic growth and development programmes have enhanced demand. Stagnation in supply combined with buoyancy in demand has led to rapid price rise.

The marginality of yield increase can in turn be attributed to the lack of technological progress for decades – unlike food grains, the green revolution has completely bypassed this sub sector. Non-adoption of existing hybrid seed technology can be cited as another important reason for low yields in pulses. There are presently more than 400 improved varieties of pulses available in India. However, application by farmers is quite low – only 10 percent of pulse farmers have been reported as using improved varieties while only a dozen of the mentioned 400 varieties have seen actual use. Laboratory testing reveals that these improved varieties have potential to raise pulse yields by more than 100 percent; following large scale adoption by farmers, we could be looking at production levels exceeding 25 million tonnes, resulting in a huge net surplus of pulses over and above consumption requirements. This potential is underlined by state level data and the highlighted disparities in performance: states which have adopted improved varieties show yields which are far higher than the average. For instance, Delhi at 1700 kg per hectare, Andhra Pradesh (1078 kg), Haryana (1032 kg), Himachal Pradesh (1096 kg), and Nagaland (1200 kg) are far above the national average of 670 kg per hectare.

Other reasons for low and stagnant production and, therefore, large price rise in pulses include involvement of only small and marginal farmers; shifting of area under pulses to other crops (in North India, for instance production of pulses has been replaced by that of rice, wheat and maize); non-participation of the private sector in development of improved varieties of pulses; distortions in supply chains; and to some extent, trading in commodities markets leading to speculation and hoarding.

The agricultural marketing setup is also the source of malaise: procurement of pulses being insignificant, high support prices do not have the same salutary effect on pulse cultivation that these have on food grains. At the same time, long chains of exploitative intermediaries between the farmer and the ultimate consumer ensure that scarcity induced consumer price increase does not get reflected significantly in prices at the farm gate. This explains the lack of supply increase co-existing with runaway inflation in pulses over the long term.

Limitations of the global market to respond to price increase through increased production further aggravate the problem. The global supply is presently estimated at 64 million tonnes with India contributing nearly 23 percent
The alarming price rise in pulses calls for initiatives on multiple fronts:

(i) coordinated efforts among states to increase awareness about improved varieties of pulses;
(ii) further research in technology to bring about an increase in yields;
(iii) bringing in the private sector to develop, popularise and market improved and better yielding varieties of pulses;
(iv) shifting of rain fed area under paddy cultivation to production of pulses; and
(v) reform in the marketing system to bring farmers closer to the consumer.

Population of direct farming – the direct sale of agricultural produce by the farmer to the consumer – can help in regard to the last prescribed measure. Formation of marketing cooperatives by farmers and reform of existing ones on the lines of success stories in the dairy sector might help. In addition to these prescriptions, an increase in irrigated area might also shore up supply.

The government initiative through the National Food Security Mission (2008) aiming at increasing the production of pulses by two million tonnes by 2012 is a welcome step. The Mission lays emphasis on increasing area under pulses by another 4.05 million hectares.

10. In the case of sugar, the story is different. The existence of a powerful sugar lobby implies that the Indian sugar producers are a pampered lot, spoil by supply side subsidies on the one hand, and high support prices, on the other. Sugar cultivation in India is marked by high levels of inefficiency. While the Indian pulse sector has suffered because of too little government attention, the sugar sector has been spoilt by too much with high comfort levels leading to a lack of incentive to enhance efficiency and, therefore, productivity. Thus, and perhaps counter intuitively, a dilution of attention is the need of the hour. But political economy factors imply that this will not be easy. Even plans for sugar imports to curb scarcity have been shot down by the machinations of the sugar lobby.

It seems that the answer controversially lies in the hands of consumers and linked civil society organisations. Indians who are reasonably affluent consume too much sugar – this results in health problems such as obesity. Campaigns to reduce consumption through lifestyle and dietary changes would help in spreading the existing supply of sugar more evenly across all sections of consumers, and thus ensure healthy levels of consumption at reasonable prices. A more focused dual pricing system is the need of the hour – subsidised supply of sugar to the below poverty line (BPL) population coupled with a consumption tax in the open market to buttress advocacy efforts for restricting sugar intake.

In the case of vegetables, though India is the second largest producer after China, it has also the highest proportion of vegetable production going waste. Reports indicate that about 72 percent of all vegetables go waste due to inadequate harvesting and storage capacities. India’s demand for vegetables is thus effectively met through the remaining 28 percent actually harvested. Huge strides can be made in improving availability, lowering prices and checking price rise if adequate attention is paid to implementation of improvements in harvesting and storage.

Within vegetables – potatoes, tomatoes and onion – the problem of inflation takes on a seasonal hue. This is corroborated by some very recent developments in the vegetable market. Onion prices in various markets across metros have declined significantly. Similarly in case of potatoes, retail prices have declined by more than 55 percent across all metros. The decline has been particularly steep in Delhi where price has come down to Rs 6 a kg from Rs 19 per kg three months back. The phenomenon being illustrated by these price movements is one of seasonal inflation and deflation: usually, during the season there is a glut which has to be largely disposed of through market sales as cold storage and warehousing facilities are poor. This results in low consumer prices and abysmally low prices at the farm gate. During the off season, there is a corresponding shortage which has been exacerbated by the rise of fast food chains and the restaurant sector characterised by a greater inflexibility in demand than the household sector. The result is galloping price rise during the off season with prices returning to a low level during the season, though from year to year there is an increase in the average price of vegetables.

Thus, in the case of vegetables, the prescription is for development of cold storage chains which can smoothen seasonal fluctuations in demand. The sector also desperately needs effective organised and traditional retailing. Augmentation of production through technological change is also required.

The battle against food inflation has to be fought on various fronts through instruments that address its diverse causes.