

WIDER Working Paper No. 2013/034

The political economy of food price policy

The case study of India

Kavery Ganguly and Ashok Gulati

April 2013

Abstract

India did not experience any food price spikes during 2007–08 when global food prices erupted. It was partly due to India's ban on exports of wheat and common rice India resorted to. But the fiscal stimulus that the government of India provided in 2009 in the wake of G8 countries' and other major economies' call to avert economic recession, coupled with one of the worst droughts India experienced in that year, led to rising food prices in India since mid-2009. Food price inflation has hovered between 8–12 per cent per annum since then. The nature of food inflation, however, changed from being cereals-led to high value products (fruits and vegetables, and protein foods) during 2010–11 and 2011–12. While food inflation invited severe political protests, the situation did not escalate to any riots or violence. The government has been trying hard to cool down food prices by reining-in .../

Keywords: economic development, agricultural economics JEL classification: O21, Q1

Copyright © UNU-WIDER 2013

¹Independent consultant, ²Chairman of the Commission for Agricultural Costs and Prices, Government of India, corresponding author email: kavery.ganguly@gmail.com This study has been prepared within the UNU-WIDER project 'Political Economy of Food

Price Policy' directed by Per Pinstrup-Andersen.

UNU-WIDER gratefully acknowledges the financial contributions to the research programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.

ISSN 1798-7237

ISBN 978-92-9230-611-3



fiscal deficit, tightening monetary policy, releasing more grains from public stocks, and distributing subsidized grains through the public distribution system to targeted population. Yet it has not quite succeeded in containing an uncomfortably high level of food inflation. This is a cause for concern given that India continues to face food security challenges given the large number of people living below the poverty line and a significant part of them being susceptible to food price shocks.

The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy-making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

www.wider.unu.edu

publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER) Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Lisa Winkler at UNU-WIDER.

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

Global food prices erupted to new heights in 2007–08, with significant acceleration in prices of staples like rice, wheat and corn, touching a peak in May 2008. But in the second half of 2008, unexpectedly, most of the global food prices started declining, generating fears of financial crisis, which could have lead to recession. A concerted attempt by G8 and major emerging economies (including India, China, Brazil, and South Africa) was made to infuse 'fiscal stimulus' to avoid any possible recession. Globally, food prices started escalating again in September 2010 onward, and by 2012, as per FAO's food price index, they had reached a new high level. There are valid concerns around the world on various factors that have led to such a rally in food prices. These factors range from traditional supply shocks emanating from droughts (such as the one in the USA in 2012, which is considered as the worst in the last 50 years) and rising demand for food in developing countries to new drivers like the use of corn and palm oil for bio-fuels, and the role of financial markets in pushing up food prices. The high level and volatility in global prices, however, has also raised concerns regarding global food and nutrition security, especially in terms of economic access to food by large numbers of poor and vulnerable people. The global food price crisis has had a strong impact on net food importing countries, some of which witnessed violent protests, and even riots, creating political instability in those countries.

Renewed concerns about resurging global food inflation brought together the world leaders to put together a co-ordinated policy response as observed at the G8 Summit in L'Aquila, Italy in July 2009. The recent crisis also brought to the fore the widening gap in agricultural investments and triggered a consensus among world leaders on the need to bridge this gap. Volatility in global markets arising from the sudden imposition of export bans and restrictions, the increasing threat of climate change on the sustainability of agricultural production systems, among other issues, have ushered in the urgency to ensure long-term availability of food.

In the context of the global food price crisis of 2007–08, India took some big decisions: adopted a very restrictive export policy for essential food articles (e.g., banning exports of wheat and common rice) and not allowing the domestic fertilizer prices (especially urea) to increase in line with global prices. This helped India to contain the food price rise in 2007–08 remarkably well (within 5 per cent to 7 per cent only). But this food price stability did not last too long. From mid-2009 on, India's food prices started rising in the wake of (a) the severest drought in 2009 that India experienced since 1972, and (b) India injected high doses of 'fiscal stimulus' as a part of a synchronized strategy adopted by G8 and major emerging economies to avert global economic recession in the aftermath of the financial crisis of 2008. High food inflation in India continues until today (December 2012), hovering between 8–12 per cent in most of the quarters since mid-2009) with occasional easing out in certain months and picking up spikes (even going up to 20 per cent) in some other months. But the composition of food inflation changed from cereals-led in 2009 to the one led by high value foods (fruits and vegetables, and protein foods) in 2010 and 2011. This changing complexion of food inflation suggests increasing demand pressures emanating from rising incomes.

India as an emerging economy with a growing population is likely to experience increased demand for food. India being the second most populous country and home to a large number of poor in the world (41.6 per cent of the Indian population or 456 million people lived on less than UD\$1.25 a day in 2004–05 (Chen and Ravallion 2008) faces a challenge of bringing

down its food price inflation to economically and politically acceptable levels. In the context of this multi-country study, it is of interest to understand the politico-economic underpinnings of food price policy in India as it may have ramifications not only for neighbouring countries but also for global prices. As Timmer (2011) rightly observes that political dynamics play a powerful role in determining the policy responses particularly in times of rising food prices, it cannot be more true than in a country like India with a vibrant democracy, and where the government is based on multi-party coalition.

The overarching food policy in India has been driven by the objective of food security for a large and growing population. For this, India has followed the path of attaining almost selfsufficiency in the production of key staples like rice and wheat, and making them available to economically weaker sections at affordable (highly subsidized) prices. The food price policy, therefore, has twin instruments, remunerative minimum support prices (MSPs) for rice and wheat farmers, and subsidized prices through public distribution system (PDS) for poor consumers. The export basket of Indian agriculture has been expanding and diversifying. While India is a net exporter of cereals, it is a major importer of edible oils and pulses. In case of edible oils, almost half of its domestic consumption is imported (imports crossed UD\$9 billion in 2011–12), and pulses imports hover generally around 3 million tonnes. However, overall food availability (through domestic production and imports) is reasonably comfortable, and increasing over time in per capita terms. The challenge is more on the distribution front, especially for the poor. Despite highly subsidized staples being distributed through the PDS, consumption and nutrition levels of the poor remain low and a cause for much concern. The recent food price crisis has infused even greater urgency to address the food and nutrition security concerns through strategic policy actions placed over short-, medium- and long-term. Lately the 'rights' approach (entitlements) is being discussed and debated in the country with respect to food, and the National Food Security Bill is with the Parliamentary Committee (as in December 2012) for its perusal and accommodating various viewpoints.

Section 1 is followed by section 2, which provides the country context focusing on the macro-economic indicators (particularly economic growth, trends in capital formation, and accumulation of foreign exchange reserves). This section also discusses the broad structure of agriculture in India, highlighting the key production, consumption, and trade patterns. Section 3 discusses the patterns and structural changes in food price inflation in all commodities in general and selected commodities such as rice, wheat, maize, and pulses over time. Section 4 provides the details of the policy responses targeting short-, medium- and long-term. Section 5 highlights the key policy players involved in the decision-making process and their respective roles. Section 6 summarizes the discussion in the earlier sections, and looks at the likely outcomes of these policies.

2 Country context

2.1 Overall economic performance and macro-economic trends

India posted an average economic growth of 8.5 per cent during the past five years ending 2010–11. Over the past three decades, GDP has increased from an average of about 5.6 per cent during the 1980s and 1990s to 7.4 per cent in the 2000s. While several developed countries, as also countries in Asia, have been struggling to hold on to a modest economic growth in the wake of the global economic crisis, India had done reasonably well in holding on to relatively high and stable growth rate, at least until 2010–11. In 2007–08, when global

commodity prices erupted, India could get a GDP growth rate of 9.3 per cent, which fell to 6.7 per cent in 2008–09 in the wake of the global financial crisis, but recovered to 8.4 per cent in 2009–10 as well as in 2010–11. However, in 2011–12, the overall GDP ratio again fell to 6.5 per cent and in 2012–13, the expectation is even worse, somewhere between 5.5 to 6 per cent.

With more than two decades since the reforms started in 1991, the Indian economy has undergone several structural changes characterized by major achievements as also significant challenges. Noteworthy have been the increase in overall savings and investment rates and impressive build-ups of foreign exchange reserves. Beginning 2001-02, the share of investment and savings in GDP increased considerably; gross capital formation (GCF) accounted for 38 per cent of GDP in 2009–10, gross domestic savings accounted for nearly 36 per cent of GDP in 2009–10. Trends in GCF have undergone a structural change wherein the share of the public sector in GCF has declined and accounted for less than 25 per cent of total GCF in 2009–10. India has also witnessed an impressive build-up of foreign exchange reserves in response to the corrective measures adopted in 1991. Foreign exchange reserves increased from a woefully low level of UD\$1.1 billion in June 1991, triggering a balance of payments crisis, to UD\$315.7 billion in June 2011. This is the biggest success of economic reforms, providing enough stability on foreign exchange accounts that has not been given the credit it deserves. The whole issue and obsession with self-sufficiency in critical agriproducts (and generally import substitution strategies for the country as such) has its foundation in the acute scarcity of foreign exchange that India faced all through from 1947 to 1991. But now, with reasonable foreign exchange reserves, India is gradually integrating with the global economy. Its overall trade (import plus exports) to GDP ratio for the economy, which was only 15 per cent in 1990–91, shot up to 46 per cent in 2011–12, and agri-trade as a percentage of agri-GDP went up from a meagre 5 per cent in 1990–91 to 18 per cent in 2011– 12. Also, gross capital formation in agriculture (GCFA) has increased manifold from INR312 billion in triennium ending (TE) 1992-93 to INR729 billion in TE 2007-08 at 1999-2000 constant prices. GCFA as a percentage of agricultural GDP took off 2003-04 onward and now (2009–10) accounts for 21 per cent of agricultural GDP (Figure 10). The private sector contributes 74 per cent of GCFA (in TE 2007-08). The increase in GCFA has been quite sharp since 2003-04 much before the recent food crisis period. The need to invest in agricultural products has gained momentum in the wake of rising food prices wherein it is observed that it will be important to augment supplies in response to the growing demand for food.

Despite robust economic growth and significant achievements on many other key economic indicators, India has not been as successful in addressing its concerns related to poverty and food and nutritional security of a large number of vulnerable people. While poverty has surely declined over a period of time, the pace has been somewhat slow and the absolute number of poor continues to be rather large. The number of people living below the poverty line (as per the national definition of poverty line) as a per cent of the total population has declined from 55 per cent in 1973–74 to 36 per cent in 1993–94 to 27.5 per cent in 2004–05 and further to 22 per cent in 2009. However the number of poor people has decreased only slightly from 320 million in 1973–74 to 302 million in 2004–05 (as per national estimates, GoI 2010), indicating that India still has a huge burden of poverty, concentrated in less developed states. According to Tendulkar Committee, which set a different poverty line, almost 37 per cent of the people still lived below the poverty line in India in 2004. However, preliminary reports based on latest data from the National Sample Survey Organization for 2011 suggest that the rate of poverty reduction has been faster during 2004 to 2011 than has

been the case before that. GoI, CACP (2012). Analysis of farm wages also reveals that during the last five years ending in 2011–12, real farm wages have increased by 6.8 per cent per annum, suggesting a much faster reduction in poverty than has been the case in earlier years.

Although India achieved high rates of overall GDP growth, its agri-GDP growth remained very low. During the last decade of the 2000s, agri-GDP growth hovered around 3 per cent per annum, despite the fact that each Five-Year-Plan during this period was targeting at least 4 per cent. Boosting agricultural growth to 4 per cent plus will be critical in reducing poverty even faster given that agriculture employs nearly 58 per cent of the workforce and a larger number of people are dependent on agriculture. Welfare programmes of a gigantic scale will need resources, and these resources need to be tapped through growth. The new vigour towards welfare programmes emanating from the 'rights' approach (right to food and right to work) is perhaps putting the cart before the horse. While the expenditure on food subsidy is likely to touch UD\$20 billion with the introduction of the proposed National Food Security Act, approximately UD\$8 billion on the employment programme, and a fertilizer subsidy bill of UD\$15 billion, public investments in agriculture remain pitiably low at less than UD\$5 billion. The major concern is what will be the fallout of diverting large funds that could have gone for public investments in agriculture and rural roads, having a much higher degree of impact on poverty than the subsidy schemes. Also, how long such welfare programmes can be sustained financially without wrecking the fiscal balance of the budget.

2.2 Major food crops: production, trade, and consumption

Rice and wheat are the major cereal crops in India accounting for 57 per cent of the area under food grains (125.7 million hectares in 2010–11) and 75 per cent of the overall food grain production (218.1 million tonnes in 2010–11). Augmenting the availability of food grains has been a policy priority in India arising from food security concerns that emanated in the 1950s and 1960s when India witnessed several episodes of hunger and famine. Although the food grain production has increased manifold and per capita availability of food grains improved, there continues to be an over-emphasis on attaining self-sufficiency and a surplus in food grains. Lately, there has been a debate in terms of sustainable agricultural practices, especially in the cultivation of rice in north-west India, where the water table has been going down by 33 cm per year during 2002–08, as indicated by satellite images released by NASA.

Food accounts for a large part of the total monthly budget of an average Indian, although its share has been declining over time and as per the 2009–10 survey estimates, it is still almost 50 per cent of the monthly per capita expenditure—53.6 per cent in rural areas and 40.7 per cent in urban areas (NSSO 2011). However, the low expenditure classes (bottom 30 per cent) spend more than 60 per cent of their monthly expenditure on food. National survey estimates suggest that the demand for cereals has been declining over time driven by changing consumption preferences. Per capita monthly consumption of cereals declined from nearly 15 kg in 1983 to 12 kg in 2004–05 and 11.3 kg in 2009–10 in rural areas while that in urban areas has declined from 11.3 kg in 1983 to almost 10 kg in 2004–05 and 9.4 kg in 2009–10. The consumption patterns are diversifying towards high value commodities across rural and urban areas and also across expenditure groups. Rising income levels, changing lifestyles and trends in urbanization are among the key drivers of this change. Increase and shift in rural demand for high value, protein rich foods are attributable to the increase in rural incomes where even agricultural wages have increased by 6.8 per cent per annum in real terms between 2007/08 to 2011/12 as against -0.44 per cent per annum between 2000/01 to 2006/07 (Gulati and Jena 2012). Fast growth in the construction industry, supported by an overall development in the economy, as well as the expansion of the Mahatma Gandhi national rural employment guarantee scheme (MGNREGS) resulted in an increased demand for labour resulting in the paucity of farm labourers, and triggering a rise in agricultural real wages. India has moved on from being a food aid-dependent country towards self-sufficiency and is now largely self-reliant in food grains, and an overall net exporter of agri-commodities worth more than UD\$20 billion in 2011–12. India has been a net exporter of cereals, especially rice and corn, of meat and fish, of cotton, of oilseeds cake, and a wide variety of other commodities. Its imports of agri-commodites are largely concentrated in edible oils and pulses.

Although India has emerged as a significant player in the global agricultural market (largest exporter of rice, beef (buffalo) meat, and guargum) with a much diversified export basket, the reforms related to agricultural trade have been rather piecemeal and very cautionary in nature. Driven by food security challenges, there have been several policy hiccups in liberalizing grain markets since the 1990s. Although India has moved away from import controls and quotas there still exist knee jerk reactions taking recourse to export controls and bans to augment domestic supplies.

The future food and agricultural policies need to recognize the change in consumption patterns and that food security is no longer restricted to food grain security; the diversification of the production base will be critical in attaining the objective of food security. Also, there is a need to understand the role of stocks—on a country as well as regional level—and trade, and integrate them in the food policy framework.

3 Food price crisis

3.1 Crisis episodes: trends and patterns

Since independence in 1947, India witnessed the highest inflation (measured in terms of wholesale price index) in September 1974, when overall inflation reached 33.3 per cent.¹ November 1973 to December 1974 has been the worst period of inflationary pressure when inflation did not drop below 20 per cent. Inflation hovered over and above 30 per cent for four consecutive months starting June 1974 (Basu 2011).

A headline inflation accelerated in the second half of 2009–10, and continued to remain high in 2010–11.² Inflation in India has also undergone structural changes with food inflation being an important driver to begin with in mid-2009 and then outpaced by increasing energy prices post economic crisis (RBI 2011a). India experienced lower food price volatility/spikes in the domestic market in 2007–08. When world prices of food commodities touched new peaks, and several countries had domestic food prices, especially for staples, going up by 20– 40 per cent, a food price increase in India remained within 5–6 per cent. But the relief was not long-lasting and in 2009, India was hit by a severe drought that set food prices soaring. The increase in food prices was further fuelled by somewhat loose monetary and fiscal policies emanating from the need to provide fiscal stimulus in the wake of averting global recession as a strategy conceived by G8 and major emerging economies. Price transmission effects of international prices on domestic prices have been somewhat muted in the context of

¹ The monthly inflation is measured as percentage change of the wholesale price index of the month in the current year over the same month in the previous year.

 $^{^2}$ The headline inflation measures the overall inflation within an economy and is significantly influenced by sudden price spikes in food or energy sectors.

India, given the continuing ban on exports of rice and wheat during 2007–11, raising the fertilizer subsidy bill to contain the shocks arising from global price spikes in fertilizers. Rather populist measures, like loan waiver, expansion of Mahatma Gandhi national rural employment guarantee scheme (MGNREGS), raising agricultural subsidies which were announced ahead of the 2009 general elections, were all dubbed as measures to boost the fiscal stimulus.

The food price index here is defined as the weighted average of the wholesale price index of food articles and manufactured food products. Inflation measured in terms of the change in monthly wholesale price index of commodities year on year has been highly volatile after having touched unprecedented levels. Domestic food prices started flaring up to mid-2009 onward crossing the 10 per cent mark in June 2009, the 15 per cent mark in November 2009, touched a peak of more than 20 per cent in February 2010. Though it slid from those high levels, yet until November 2011, it has remained largely in double digit, lately hovering around 10 per cent, attracting a major debate in the Parliament (Figure 1). During this period nearly all food commodities registered a price spike, their contribution varying over a period of time.



Figure 1: Per cent change in wholesale price index of food articles and manufactured food products (per month this year over same month in the previous year)

Source: Gol, OEA (2012).

The pressure has been on food articles which witnessed a consistent 20 per cent and more inflation during December 2009 until June 2010.³ Flaring up of prices of manufactured food products was relatively short-lived attaining a peak of 19 per cent for two consecutive months, December 2009 and January 2010, and prices started cooling off thereafter.⁴ However, prices of manufactured food products are once again on an upward swing from 2.4

³ Food articles include food grains, fruits and vegetables, milk, eggs, meat and fish, condiments and spices, tea and coffee.

⁴ Manufactured food products include dairy products, grain mill products, bakery products, sugar, khandsari and gur, common salts, sugar and confectionary, edible oils, oil cakes, processed tea, coffee, cattle feed, and malted foods.

per cent in March 2011 to more than 8 per cent since June 2011. During the course of the recent price spikes the contribution of individual food items and groups has been varying. To begin with, manufactured food products contributed the most to the rising inflation on food; 56 per cent in the first quarter of 2008, followed by food grains at 23.4 per cent. Over time, the contribution of manufactured food products declined substantially to 3.5 per cent in the first quarter of 2011 and thereafter zoomed to more than 32 per cent over the second and third quarter of 2011 (Figure 2). The pressure on manufactured food is coming from the rising wholesale price index of edible oils at 16.2 per cent and 14.4 per cent during the second and third quarters of 2011. Within food articles, the contribution of cereals in total food inflation has come down from 30.2 per cent in the first quarter of 2008 to 5.3 per cent in the fourth quarter in 2010 and has risen to over 8 per cent in the last two quarters of 2011. High value commodities such as fruits, vegetables (highly fluctuating), milk, meat and eggs are contributing significantly to total food inflation.



Figure 2: Contribution of various commodities in total food inflation

It is quite evident that the pressure on food inflation is arising from high-value commodities in the sub-group of food articles. This is perhaps explained in terms of the growing demand for these commodities (considering the structural changes in consumption patterns) and the lack of adequate supply responses. This in turn is affected by domestic production, import patterns to fill up the gap, and also fragmented supply chains. This offers an insight into the current policy thinking that holds food grains as the key to food and nutrition security of the nation. With the price pressure on cereals and pulses cooling off and that lingering on and even worsening in the case of high value commodities, there is need to address the demandsupply gap. In the case of manufactured food, it is quite evident that edible oils have been putting pressure on total food inflation.

3.2 Price trends for key food crops

Rice is the staple crop in India, production of which increased at a rate of 1.0 per cent per annum during 1999–2000 to 2009–10. During the same period, area under rice reduced at a rate of 0.52 per cent while productivity increased at a rate of 1.28 per cent annually. A large part of the total rice production is procured by the Food Corporation of India (FCI), together

Source: Gol, OEA (2012).

with other agencies. Rice exports from India reached a peak of 6.5 million tonnes in 2007–08, when a ban on exports of common rice was imposed. During 2010–11, India exported 2.28 million tonnes of rice (basmati) worth UD\$2.4 billion. Common rice exports were opened in September 2011, and during the one year from October 2011 to September 2012; India exported 10 million tonnes of rice valued around UD\$6 billion, becoming the largest exporter of rice in the world.

It is interesting to observe that the wholesale price index of rice started increasing after July 2006 onwards (over the corresponding months of the previous year). This upward movement in monthly rice prices (over the last year's corresponding months) continued until the end of 2008, and thereafter it started declining (Figure 3). However, month to month increases (of the same year) in prices of rice was much lower, and Indian rice prices remained much more subdued in relation to international prices of rice (Figure 4 (a) and 4 (b)). This was primarily due to ban on exports of common rice and increasing production and stocks at home. The domestic prices started rising again in December 2011 in the wake of the opening-up of rice exports in September 2011.



Figure 3: Trends in wholesale price index of rice

Source: Gol, OEA (2012).



Figure 4 (a): International and domestic price movements of rice

Note: International prices are of Thai Rice, 25 per cent broken, FOB Bangkok. Domestic prices have been calculated by averaging monthly data across government regulated market yards (known as mandis) in all states available from DES.

Source: Gol, CACP (2011).



Figure 4 (b): International and domestic rice prices (USD/mt), (January 2007 to December 2008)

Source: Gol, CACP (2012).

Wheat prices witnessed periods of high growth in some parts of 2006, and then again from July 2009 to end of 2009, and therafter precipitously falling to negative price rise (Figure 5). The export ban on wheat and also increased the import of wheat together with favourable production helped contain the price rise. But since July 2012, wheat prices have shot by 15 to 20 per cent over the corresponding months of previous year. This has happened despite the government having stocks of more than 40 million tonnes (in November 2012) compared to a buffer stock norm of 14 million tonnes. The large scale procurement of wheat to the tune of 38 million tonnes in the marketing season of 2012–13 (April to June) has left very little in the open market, which is putting pressures on market prices. The government has lately taken a decision to offload 6.5 million tonnes in the open market and export about 4.5 million tonnes of wheat. The process is on, but given the government's procedural formalities and the price at which it is being released, there is not much hope that prices in the open market will come down until March 2013.



Figure 5: Per cent change in monthly wholesale price index of wheat

Source: Gol, OEA (2012).



Figure 6: International and domestic price movements of wheat

Note: (1) International prices are of Wheat (USA), no. 1, hard red winter, and no. 2, soft red winter, export price delivered at the US Gulf port. (2) Domestic wholesale prices for wheat have been calculated by averaging monthly data across mandis in Punjab and Uttar Pradesh.

Source: Gol, CACP (2011).

Domestic price of wheat is largely in line with international prices except for certain periods of extreme swings as observed in the case of international prices during the last two quarters of 2007 and that in the last quarter of 2010 and first quarter of 2011 (Figure 6). After almost remaining flat from 2001 until 2005, the minimum support price of wheat has been increasing and has increased significantly thereafter.

Maize prices have been fluctuating during this period and hovered around double digit inflation and since January 2011 prices have spiraled rapidly (Figure 7).



Figure 7: Per cent change in monthly wholesale price index of maize

Source: Gol, OEA (2012).

Domestic prices of maize have been relatively stable as compared to periodic fluctuations in international prices of maize. Maize MSP has been moving in tandem with the international prices. In 2008 the domestic price of maize was ruling below international price and there was a significant increase in the export of maize during that year (Figure 8). Lately, India has been exporting around 3–4 million tonnes of maize.



Figure 8: International and domestic price movements of maize

Note: (1) International prices are of Maize (USA), no. 2, yellow, FOB US Gulf ports. (2) Domestic wholesale prices for maize have been calculated by averaging monthly data across mandis in Karnataka and Andhra Pradesh.

Source: Gol, CACP (2011)

3.3 Price transmission: causes and impact

The degree of price transmission among cereals crops has been controlled and filtered by the government through its various policy interventions such as export controls, imposition of minimum export prices, and varying tariffs. But to say that international price movements have no impact on Indian prices will be far from truth. Nevertheless, policy packages safeguard the consumers and producers from the brunt of price spikes and troughs in global prices. For example, during 2007–08 when global prices were surging, India did not witness large price spikes. But then support prices were increased by large percentages to help farmers tide over increasing costs of production as well as to catch up with global price trends (not spikes), though with a little lag. In the case of increasing global prices of fertilizers, the government contained the spiralling of domestic prices by increasing the fertilizer subsidy bill which cost nearly UD\$16 billion in 2008–09.

Chand (2008, 2009) as cited in Acharya et al. 2012 states that India successfully restricted the snowballing of abnormally high international prices in 2007–08 on domestic prices. Although rice and wheat witnessed high price inflation, the extent was lower than that observed in their global prices. The lack of a strong price transmission effect is largely attributable to a robust domestic production (except 2009–10 when the production was hit due to a severe drought), timely intervention by the government to control price rise in domestic markets, and the containing rise in cost of production due to a rise in global prices of crude oil and fertilizers. As observed by Dasgupta et al. 2011 (cited by Acharya et al. 2012), the domestic price of wheat is weakly and only moderately impacted by international prices due to the policy intermediation of the government (export bans, lowering duties to import and also incentivizing production through an increase in MSP). Co-integration test results from Acharya et al. (2012) do not show any co-integration between international and domestic prices of rice. In the case of wheat, the wholesale domestic price and international price are somewhat co-integrated—the speed of adjustment in response to change in international price was 4 per cent.

Although from late 2009 onward, food inflation started flaring up and so did the prices of rice and wheat to begin with, but they were still lower than the international prices. The global price inflation on rice fluctuated between 206 per cent in April 2008 to 4.7 per cent in March 2009. In contrast, domestic inflation on rice ranged from 8.7 per cent in April 2008 to 17.1 per cent in February 2009. In the case of wheat, global inflation declined to negative in March 2009 from 83 per cent in April 2008 whereas, domestic inflation on wheat hovered between 7 per cent to 5 per cent during the above period.

The price surge in 2009 can be partly attributed to the bad agricultural year when food grain production suffered a set-back. It was the worst drought year since 1972. Nearly 59 per cent of the Indian districts received deficient/scanty rainfall. The departure of actual rainfall from the normal monsoon was as high as (-) 23 per cent (GoI 2010). While the government's earlier set of policy package (prior to 2009) was instrumental in arresting the cascading impact of global price rise on domestic prices, the crisis that arose as a result of the drought had a severe impact on food inflation. Although the government took immediate steps to augment supply from existing stocks, and through publicly managed distribution centres, high food inflation persisted. However, it drove the government to look at medium- to long-term measures much through the existing public programmes geared toward augmenting productivity (for example; Rashtriya Krishi Vikas Yojana, National Food Security Mission, Second Green Revolution) to be better equipped to be able to avert such inflationary situations in the future.

3.4 Key drivers of food price inflation

As observed, food inflation is being driven more by non-cereal commodities and the phenomenon is largely demand-driven in nature. It is also perceived that although there are supply-side issues that need to be addressed to contain price surge, increasing income levels of the people in urban but also in rural areas (owing to rising real wages in rural areas) are fuelling food prices. The soaring prices of protein rich food (meat, fish and eggs, milk and milk products) indicates the rise in consumption of these high value food items owing to rising income levels and changing lifestyle patterns of the people. The price spikes in fruits and vegetables can be attributed to a large extent to fragmented supply chains and not as much due to supply constraints, although a detailed study on what is actually driving up prices of fruits and vegetables in not available. There is a widening gap between the prices received by farmers and that paid by the consumers. The presence of a large number of intermediaries and extended supply chains are primarily responsible for the widening gap between producer and consumer prices. Prevalence of high taxes on agricultural commodities, mandi fees, and high fees charged by the commission agents in governmentregulated market yards further fuel prices. Increasing fuel prices is seen to effect availability of vegetables and hence the shooting up of prices. Although not quite established, the hoarding and speculation in commodity markets has been held responsible for price spikes. According to the chief economic advisor, of the Government of India, rising wages are responsible for sustained high inflation in India.⁵ The introduction of the sixth pay commission, the expansion of MGNREGS, kisan credit cards, and popular loan waivers and fertilizer subsidies resulted in increasing disposable income with the people both in urban and rural areas thereby giving rise to increase in demand for food as also for non-food items.

⁵ 'Rising wages feeding inflation, says Kaushik Basu'. *The Economic Times*, 18 October 2011. Available at http://articles.economictimes.indiatimes.com/2011-10-18/news/30295760_1_labour-reforms-labour-intensive-sectors-kaushik-basu

It is quite evident that the consumers have been adversely hit owing to a continuous surge in food prices. While consumer prices have increased during the period of the crisis, it has not translated into commensurate higher prices for producers, despite substantial increases in minimum support prices for various agri-products.

In brief, the food inflation in India has been driven by both supply and demand factors, depending upon the commodity under consideration. For commodities like edible oils, and pulses, there are clearly serious supply constraints, and rising demand is being met by huge imports. So their prices react quickly to what is happening in the global markets. Wheat and rice have been largely insulated from global spikes, and it is largely the domestic policies (MSP, procurement, stocking, and distribution) that influence their prices. For fruits and vegetables, supply is not as much an issue, but fragmented supply chains have often contributed to the price spikes.

4 Key policy responses

Anti-inflationary policies adopted by the Government of India typically involve fiscal and monetary measures, the rationalization of excise and import duties on key commodities to safeguard the interests of the consumers, the use of liberal tariff and trade policies to manage demand-supply situation of key commodities, and also the strengthening the public distribution system to improve availability and accessibility of food. In addressing the broader issue of food and nutrition security, reforming the existing social safety net programmes (improving the delivery mechanism, moving from physical transfer to cash transfers), procurement and stocking policies have been on the policy agenda. There has been a lot of emphasis on shaping up long-term policy measures with a focus on boosting agricultural production in a sustainable manner (in the wake of threats from climate change and other environmental impacts). Emphasis has been given to reforming agricultural marketing practices to cut down the margins between consumer and farmer price.

4.1 Domestic price policies (consumer prices, minimum support prices)

Flaring up of domestic prices at the retail level has invited varied responses. For example, when prices of pulses shot up, the government took measures to make available other varieties of low-priced pulses through agencies such as the Kendriya Bhandars, National Agricultural Co-operative Marketing Federation of India, Safal outlets of Mother Dairy, and other organizations. Sometimes such operations were also taken up in case of onions. There was media publicity of such measures to generate awareness among people who were already feeling the heat of rising prices. The issue price at which subsidized food grains are distributed to people under PDS did not undergo any change during this period. This led to rising food subsidies.

MSPs of cereal crops have seen a significant increase in order to incentivize the production given the rising cost of production of such crops. After 6 million tonnes of wheat import in 2006–07, and fast rising international prices of wheat and rice in 2007–08, the MSP of wheat was increased by more than 30 per cent in 2007–08 over 2006–07. The MSP of rice, maize, and pulses have witnessed an unprecedented increase by 30 to 50 per cent in 2008–09 over 2007–08, basically to catch up with rising global prices as well as to compensate the farmers for their rising costs of production. In that sense, it reflects a transmission of international prices to domestic prices, albeit with a little lag, but not matching the spikes in international prices.

4.2 Trade policies (export bans, import tariffs, exchange rate policies)

The price control measures taken by the government included selective bans on exports as observed in the case of rice and futures trading in food grains, zero import duty on selected food items, among other measures pertaining to key food items. Larger quantities of rice and wheat were released from buffer stocks to ease out pressure on domestic prices.

In response to rising global prices of food grain, the government banned wheat exports in February 2007 and common non-basmati rice exports in October 2007. About three months after this, an export quota was opened for Bangladesh followed by very small export quotas of both rice and wheat for a number of other neighbouring South Asian countries and some African countries. Despite the ban on the export of rice, India honoured the existing commitment to its neighbouring country, Bangladesh and African countries on humanitarian grounds and existing relations. These decisions were taken at the central government level. These highly restrictive export policies mostly remained in place until early September 2011. The rice exports in a major way with a lag around March–April 2008. The government finally lifted the ban on wheat and non-basmati rice exports up to 2 million tonnes each (as in September 2011). While estimates for the financial year (April to March) 2011–12 show that rice exports have reached 6.75 million tonnes, wheat exports are not more than 1 million tonnes given the lower international prices owing to the large supplies from Russia and Ukraine.

4.3 Increased agricultural production (input subsidies, investment, enhanced extension)

Agriculture in India has evolved under such a regime wherein subsidies (both on inputs for producers and on outputs for consumers) have often outpaced investments in agriculture. Food and fertilizers account for the giant share of total agricultural subsidies and both have been spiralling over time. Food, fertilizer, power and irrigation subsides together account for 15.1 per cent of agricultural GDP in TE 2009–10 up from 7.8 per cent of the same in TE 1995–96. Food and fertilizer subsidies account for the larger share of agricultural subsidies and their share peaked to 74.3 per cent in 2008–09, when world prices of food and fertilizers peaked (Figure 9 (a)).

The fertilizer subsidy bill of INR766 billion (or approximately UD\$16 billion) in 2008/09 was a result of high global prices of fertilizer during that year (UD\$470 per tonne in April 2008 to March 2009) and the government's effort not to pass on the price burden to the Indian farmers (Figure 9 (b)). The nutrient based subsidy (NBS) (for fertilizers) has been in place since April 2010 that aims to correct the imbalanced use of nitrogen, phosphorus, and potash (NPK) and move toward direct transfer of fertilizer subsidies to the farmers. The scheme is applicable to 17 fertilizer products (excluding urea) that are controlled by the government. The only change related to urea is the increase in urea prices (farm gate) by 10 per cent. The union budget of 2011–12 announced bringing in urea under this scheme at the earliest. Urea is largely produced domestically and ruled by administered price regime. Hence it has been a challenge to bring it under the NBS unlike P and K both of which are largely imported and prices of which are linked to international prices.





Note: All subsidies here are budgetary subsidies. The percentage distribution is calculated on the sum total of the listed subsidies. Data on power and irrigation subsidies are available up to 2007/08 only. Irrigation subsidies account for the subsidies on canal irrigation and power subsidies account for the subsidies on tubewell irrigation.

Source: Gol (2009, 2007).

Figure 9 (b): Comparing fertilizer subsidies with international prices for Indian fiscal year (April to March)



Source: Gol (2007, 2010), World Bank (2012).

Public expenditure in agriculture is more skewed in the form of input subsidies which as a percentage of agri-GDP from 8.9 per cent in 2000–01 to 17.4 per cent in 2009–10, much faster than public investment (Figure 10).



Figure 10: Composition of public expenditure in agriculture: 1993–94 to 2009–10

Source: Gol, CACP (2012).

In February 2008, the finance minister announced a relief package for farmers which included a complete waiver of loans given to small and marginal farmers. The INR600 billion agricultural debt waiver and debt relief scheme included the total value of the loans to be waived for 30 million small and marginal farmers (estimated at INR500 billion) and a one time settlement scheme (OTS) for another 10 million farmers (estimated at INR100 billion). In 2008–09, the debt waiver amount increased by 20 per cent to INR716.8 billion and the overall benefit of the waiver and the OTS was extended to 43 million farmers. This loan waiver scheme has been criticized widely as a populist measure ahead of the 2009 general elections in India and since it was applicable to loans taken from formal sources, which are not as much accessible by the small and marginal farmers as by the large farmers, it meant that a large number of small and marginal farmers were not better off.

4.4 Larger public programmes to boost agricultural productivity

The urgency to boost agricultural productivity particularly food grains resulted in the launching of the National Food Security Mission (NFSM) 2007-08, a flagship programme aimed at boosting the production of rice (by 10 million tonnes), wheat (by 8 million tonnes), and pulses (by 2 million tonnes) by 2011–12. The geographical coverage includes the potential districts with a heavy representation of the eastern states. During 2008–09 nearly 50 per cent of the NFSM-rice districts, 50 per cent of NFSM-pulses districts, and 33 per cent of NFSM-wheat districts have recorded a 10-20 per cent increase in productivity compared to 2006-07 (GoI 2010). The Rashtriya Krishi Vikas Yojana (RKVY) or the (National Agricultural Development Programme) with an outlay of INR250 billion for five years, has provided the much needed impetus to strengthen state outlay for agriculture. State outlays went up by INR20 billion from INR167 billion in 2008–09 to INR186.35 billion in 2009–10. Outlay under RKVY for 2010–11 has been substantially increased to INR67.2 billion, which includes INR4 billion for 'extending the green revolution to the eastern region of India'. The second green revolution aims at shifting the cereal basket to the eastern region, which is largely rain-fed in nature and with lower yield levels providing scope for expanding the production frontier. The idea of the second green revolution is a serious attempt to address the issue of sustainable food grain production given that the erstwhile states that pioneered the first green revolution in the 1960s and early 1970s are under severe environmental stress (including rapid groundwater depletion, deteriorating soil and water condition from overuse of fertilizers and other chemicals). While the objective and direction of this change are right

and laudable, the allocation of resources to achieve these ends is pitiably low in terms of investment and heavily skewed towards subsidies owing to socio-political considerations. Given the history of famines and food shortages and the dependence on food aid before the green revolution period, the policy thinking around food and agriculture is dominated by the objective of attaining and sustaining food grain sufficiency. While shifting demand patterns are driving agricultural diversification in India, the pace is somewhat slow owing to lack of adequate infrastructure, investments in supply chains, and also the general policy environment related to agriculture marketing.

4.5 Safety nets (PDS, food for work, cash transfers)

India has a legacy of social safety net programmes to help improve people's economic access to food with a particular focus on the poor and vulnerable. However, it has been observed that these programmes have not been very successful in improving access to food and hence improve nutritional and health outcomes. India has been struggling to get the reforms on the right track to improve the functioning of the social safety net programmes and this effort has received fillip during the recent crisis period. The flaring up of food prices has worsened the situation and a larger number of people find it difficult to access food. The National Food Security Act which was already under discussion is held as an important means of extending the coverage of subsidized food grains to households below and above the poverty line. This bill was moved as an election promise by the ruling government in 2009 but it came in at a time when the onslaught of high food prices has hit the masses, particularly the poor.

There is also a strong advocacy for universalizing the existing public distribution system. Cash transfer programmes as an alternative to physical transfer of grains is an idea that is being debated and discussed. One of the policy thinking is to reform the existing PDS and improve its functioning given the fact that India lacks the required infrastructure and incentive mechanism to roll out cash transfer programmes. On the other hand, there are suggestions to pilot cash transfer programmes in India and also make it conditional to improve nutritional, health, as also educational outcomes. This is justifiable given the current situation wherein the PDS together with the FCI has several loopholes such as leakages, pilferage, and corruption. While nothing is off the ground in a significant way, state governments of Delhi, Haryana, and Uttar Pradesh have submitted proposals for substituting food subsidies with cash transfers on a pilot basis. The Ministry of Finance is supportive of the shift from food transfer to cash transfer but the government and policy think tanks are yet to arrive at a consensus. In this context, linking cash transfer to the Aadhaar (unique identification number) scheme through which cash can be transferred to an individual bank account is a welcome idea. This is being tested on a pilot basis for cash transfer for kerosene and LPG gas. Eventually the shift from food transfer under PDS to cash transfer will leverage the existing technology.

4.6 Procurement, stocking, and other marketing policies

There is a strong policy advocacy to decentralize and eventually downsize the operation of parastatals in India learning from some of the international experiences (within the Asian region). Agricultural markets particularly that of food grains have been closed to market competition and highly distorted given the controls and regulations (for example: procurement at minimum support price often less than the market price, compulsory levy on rice millers). The FCI is responsible for procuring grains from the farmers at the prices offered to them by the government. Procurement levels have increased over time and have reached unprecedented levels in the recent years. From 11.2 million tonnes of rice and wheat

in 1980–81, procurement has increased to 56.5 million tonnes in 2010–11. Procurement of wheat in particular more than doubled in 2008–09 at 22.7 million tonnes from 11 million tonnes in 2007–08 (Figure 11).



Figure 11: Procurement of rice and wheat for the central pool

Source: Food Corporation of India (2011).

With a record production of food grains, an export ban on rice and wheat until September 2011, and increasing procurement of the same by FCI, the central pool is flushed with grain stocks much in excess of the buffer stock requirement. India had accumulated 64.7 million tonnes of rice and wheat in June 2002, which it had to later dispose by an export subsidy. The stocks were at the lowest between 2004 and 2007 during the 2000 decade and plummeted to as low as 12.4 million tonnes in October 2006. Once again during 2010 and 2011, stocks piled and touched the highest peak of 65.5 million tonnes in June 2011 and 64 million tonnes in July 2011 against a buffer norm (including strategic reserves) of 32 million tonnes (Figure 12). As in June 2012, grain stocks have reached a record high of 82 million tonnes.



Figure 12: Stocks of rice and wheat with the central pool (up to October 2012)

Source: Food Corporation of India (2011).

This poses a huge financial burden to the exchequer given the rising costs of managing these food grain stocks. Also, there are reports of grain damage owing to lack of proper and adequate storage facilities. Despite structural changes observed in consumption patterns from cereals to high value commodities, food grains continue to be the mainstay of food security in India. There is very little scope for private sector participation in grain marketing given the controls that are in place arising out of food security concerns. It is difficult to liberalize the grain markets extensively owing to food security concerns and political will be driven by the mandate to provide food for all. Efforts are on to liberalize high value commodity markets such as fruits and vegetables which do not directly and largely impact the food security concerns. In a fairly recent move (September 2011), the central government has asked states to lift all restrictions on the movement of fruit and vegetables, in order to eliminate intermediaries, reduce wastage, and tame the stubbornly high food inflation (Sikarwar 2011).

4.7 Other policies (environmental policies and land acquisitions)

Agriculture being highly dependent on monsoons and natural conditions, increasing environmental stress and climate change impacts on sustainable food production are concerns for India. It is observed that the frequency of droughts and erratic climatic conditions are increasing over time which is possibly an outcome of climate change. The inter-governmental panel on climate change and the India meteorological department reports of 2 to 4 degrees increase in mean temperatures (FAO-GOI Mission 2009) and this is likely to adversely impact the production of food crops. Production losses in wheat are likely to be around 6 million tonnes for every one degree increase in temperatures, which turns out to be around 7 per cent of the current wheat output (Ibid.). Also, the increasing pressure on water and soil in the cereal growing states in north India has necessitated taking the second green revolution to eastern India, which is water abundant and environmental conditions are more favourable.

The emerging trend in outsourcing of food production to countries where land is abundant has caught a lot of attention. Rising volatility in world markets, challenges confronting sustainable food production in populous countries where land is fast competing with nonagricultural uses are driving several countries to buy or lease in land in other countries. This unfolding trend observed as 'land grabbing' or 'global land rush' raised concerns about native poor farmers losing ownership, and hence adversely affecting their livelihood opportunities. However, to what extent this trend is risky and what the size of such acquisitions is (whether purchasing or leasing in land) is not clearly understood.⁶ A 2010 World Bank study reports that between 2008 and 2009, nearly 45 million hectares of agricultural land deals were announced, the majority of the foreign investments were done in Sub-Saharan Africa (World Bank 2010).There are reports of Indian farmers and agrientrepreneurs buying land in Africa and Latin American countries for agricultural activities (Rowden 2011).

5 Political economy context

5.1 Key decision-making actors

India has a coalition government. The executive office of the Prime Minister is responsible for the day-to-day functioning of the government. Given the parliamentary form of government, all major policy decisions that require legislative clearance are tabled in the

⁶ 'Buying farmland abroad: Outsourcing's third wave'. *The Economist*, 21 May 2009.

parliament. The central government together with the Ministry of Food, Consumer Affairs, and Public Distribution and the Ministry of Agriculture in consultation with state governments and other ministries are helm of agriculture and food price policy-making. The prime minister has expressed his concern over rising food inflation and that it poses a threat to economic growth. In his address at the Second Annual Conference of Chief Secretaries on 4 February 2011, he emphasized the need to augment agricultural productivity together with a paradigm shift in institutions to contain escalating food prices. He pointed out that the state governments need to be pro-active in bringing about these changes—particularly reviewing the scope of the amended Agricultural Produce Market Committee Act, feasibility of waiving market and other taxes. He also reiterated the need to reform the public distribution system, and create adequate storage facilities for increasing stocks of cereals. Rising food prices indicated gaps in supply chain management which need to be strengthened by creating a level playing field for the organized retailers (GoI, PMO 2011). The cabinet approval to FDI in multi-brand retail (that includes food retail) in September 2012 was long overdue. This is held as a break away from the policy paralysis that the ruling government has been criticized by various stakeholders both national and international. Implementation of the policy is likely to facilitate enhanced FDI inflows, generate employment opportunities, usher in global best practices, which altogether have the potential to benefit consumers and farmers and invoke greater supply chain efficiencies in the agricultural sector and development of critical backend infrastructure.

States have a distinct role to play in the area of agriculture policies given that agriculture is a state subject under the provisions of the Constitution of India. The states have the authority to impose taxes and levies (compulsory selling to the state agencies) on marketing of agricultural commodities and this includes rice and wheat. It is observed that Punjab imposes statutory levies (tax, cess) of 14.5 per cent on wheat, which has driven the private sector away from markets, and hence the state has almost a monopoly over procurement. For rice millers, there has been an indirect taxation given that they have to sell 50 per cent to 70 per cent of the milled rice to state agencies at pre-determined prices. Also, in Madhya Pradesh, a bonus of INR100/quintal over and above the MSP resulted in a record production and procurement of wheat in the state resulting in an overflow of wheat stocks in the state (Box 1).

Box 1: Case of Madhya Pradesh: state monopoly over wheat market

• A bonus of INR100 per quintal of wheat over and above the MSP to the farmers since 2007–08 resulted in a spurt in production of wheat from 6 to 10.5 million tonnes in Madhya Pradesh;

• Between 2007–08 to 2011–12, area under wheat increased from 3.7 to 4.9 million hectares;

• Madhya Pradesh emerged as a major wheat procuring state (85 per cent of the wheat produced in the state was procured in 2011–12, up from 0.8 per cent in 2006–07, competing with Punjab, Haryana, and Uttar Pradesh (the traditional wheat producing states).

Source: Gol, CACP (2012).

The Reserve Bank of India also plays a critical role in terms of the monetary policies that are being used to mop up the extra liquidity in the system and tame inflation. The Reserve Bank

of India reversed its expansionary monetary policy stand beginning October 2009. Following which, it raised the cash reserve ratio by 100 basis points and the policy rate or the repo rate by a cumulative 275 basis points; the effective tightening was about 425 basis points (RBI 2011b).

The Ministry of Finance continuously monitors the food price situation, and one of the critical steps is to rein in the rising fiscal deficit, which in many ways is responsible for the flaring up of prices. A road map to bring it down to manageable levels of 3 to 4 per cent from its current level of more than 5.5 per cent, over a period of five years has been a policy priority. But given the high fuel prices, and the impending National Food Security Bill, it remains challenging to see how and when it can be done.

The Planning Commission has also been actively involved in suggesting measures to contain price surge and also envision medium- to long-term policies to tame inflation. The opposition political parties also play an important role in putting a pressure on the government to be more pro-active in controlling rising food inflation. In the context of the recent petrol price hike, one of the key alliance partners threatened a pull out if the government did not roll back the hike in the interest of common man. Within a week of the prime minister stating no roll back and neither guarantee of another hike and taking all members of the coalition in confidence, petrol prices were slashed.⁷ Over the period of the recent crisis, opposition parties have staged protests against rising prices mobilizing common people around the country, demanding government action on containing rising food prices. The National Advisory Council (comprising of the political representatives, policy makers, think tanks, and academia) has been quite influential in pushing the National Food Security Bill (which is now pending with the Parliamentary Committee to be examined) which gathered momentum in the wake of high food inflation. Research institutes (national as well as international) have been involved in analysing the trends in food prices, engaging in dialogue with the government, policy makers, and also the media to understand the situation and brain storm on the potential ways of containing high prices and smoothening them over time.

In the wake of high food price inflation, the Confederation of Indian Industry (CII) National Council on Agriculture has sought structural changes to augment growth in the farm sector, linking the farmers directly to the retailers and processors. It also recommended an introduction of input stamps whereby the farmers have the choice to avail the input subsidy that they require. CII has also suggested reforming the land lease markets in agriculture to enable the leasing of land and benefit from the economies of scale. It considers opening up multi-brand retailing to FDI will be critical in developing supply chains, and facilitate direct firm-farm linkages (Menon 2011).

While there have been no reports of major riots over increasing food and fuel prices in India, there was a report of public furore over rising prices in Bihar.⁸ There have been mass protests organized by farmers' and other lobbies in various parts of India, and also those organized by the opposition political parties, demanding the government to be pro-active and committed to protect the interests of the common man/woman and not subject him/her to the

⁷ 'Petrol price cut by Rs 2.22'. *The Hindu*, 15 November 2011.

Available at: http://www.thehindu.com/news/national/article2630325.ece

⁸ 'India Faces Food Price Discontent Violent Protests'. Reuters, 28 January 2010.

onslaught of rising prices.⁹ The issue of high food inflation led to a disruption of the parliament proceedings several times over the past few years, by the members of the opposition parties.

The media has been active in reporting increasing food prices and the reaction across various segments of the society. International institutions like the World Bank, the Food and Agriculture Organization (FAO), the Asian Development Bank, and others have been continuously tracking the global trends in prices and the forces behind them. The views expressed by international think tanks have had their impact on the policy thinking in India as observed in their being more cautionary and having a protectionist approach with respect to trade (export controls and bans) and in general procurement and stocking policies with respect to grains (resulting in record procurement and surmounting stocks of rice and wheat). The fact that FAO reports world poverty having gone up due to rising food prices has sent alarm bells ringing at home or that the world prices are going to be high in the near future influence the trade policies (export ban).

6 Conclusions

The period of high food price since the mid-2009 has raised concerns and challenges in taming prices, although for India as a developing country and home to a large number of poor and malnourished people, ensuring food and nutrition security has always ruled the policy domain. The policy makers have been confronted with the difficult task of balancing higher economic growth and improving the social welfare of the masses. The ruling coalition government is also committed to ensuring inclusive growth wherein people from different economic and social background are part of the economic growth process. It is met with fierce criticism and disruption of parliamentary proceedings by the opposition parties, putting pressure on the government to control surging prices. Rather than providing an actual solution to the problem of rising food prices, the opposition was more vocal to downgrade the efficacy of the ruling government, failing to protect the interests of the common man/woman. Rather policy decisions to hike transport and cooking fuel prices were met with severe criticism as these were seen to further fuel food prices. High food and fuel inflation is seen to thwart the high economic growth that India has achieved despite the fragile global economic scenario.

While short-term measures were undertaken to address the prevailing crisis, emphasis was also given to medium- to long-term policies to be able to ensure adequate availability of food and also improve people's economic access to food. The international food price increase did not change the Indian agricultural and food policy which was already geared towards ensuring sustainable agricultural production to ensure food security of the masses, although it provided the extra momentum. Immediate measures like offloading stocks in open markets, reducing tariffs on imported food commodities, raising price support or imposing export controls and bans are the general course of action taken time and again when prices were flaring up beyond the tolerable limits.

As observed in the case of the National Food Security Bill which was a part of the 2009 election promise of the ruling government, perhaps the period of high inflation and hence

⁹ 'India opposition parties strike over high food prices'. BBC News, 27 April 2010. Available at http://news.bbc.co.uk/2/hi/8645725.stm and 'Thousands protest against high food prices in Delhi'. BBC News South Asia, 23 February 2011. Available at http://www.bbc.co.uk/news/world-south-asia-12549050

increasing vulnerability of poor people to food price shocks prompted speeding up of deliberations. The proponents of the Act had more reason to push for the enactment of the bill without taking into consideration the fiscal and financial implications of continuing with such a huge programme. Reforming the PDS versus replacing it with other alternatives such as cash transfer, coupons/stamps are also being debated in the country. Recent research also reveals that the existing PDS has a leakage of around 40 per cent. Given this, a strategic move towards conditional cash transfer can be a real game changer. But some have expressed suspicion on the ability to do cash transfers in a society where financial inclusion of the poor remains a major challenge. However, under the Aadhaar project, there are plans to install one million micro-ATMs all over the country and use finger prints and Aadhar's unique number to widen the financial inclusion and the government has already taken a bold decision to move towards cash transfers for 29 schemes. Although food and fertilizer subsidy is not currently in this scheme, CACP has recommended piloting at 100 places food subsidy to be transferred through cash. This is a potential weapon to contain leakages in the system and enhance the effectiveness of social safety programmes. While the objective of seeking food and nutrition security of the masses remains the same or rather more highlighted due to the crisis, the means of achieving it is still debated. There have been suggestions of downsizing public procurement and storage of grains, particularly the operations of the Food Corporation of India and allow greater private sector participation and also allow markets to operate. The current inflationary trends in India are observed to be a mix of demand-driven factors as also supply factors that resulted in spikes and fluctuations in price movements. Factors such as the sixth pay commission, expansion of the MGNREGS, and farmers' loan waiver are considered to be driving demand for food and hence prices. Erratic supply conditions owing to weather and climatic changes resulted in rapid price fluctuations. On the other hand, large scale food subsidies have resulted in the accumulation of large stocks of wheat and rice. While the immediate impact of the policy responses to the crisis is not well captured/studied, in general poverty levels have been declining, but a lot remains to be achieved given the robust economic growth. One big finding is that despite rising food prices during 2007–12, the real farm wages have increased at 6.8 per cent per annum. Given that landless labour is generally at the bottom rung of the economic ladder, this is heartening news to policy makers.

India is home to a rising middle class population which has been driving consumption patterns. This phenomenon to a large extent has fuelled the price inflation in high value and protein-rich commodities. As discussed earlier, the pressure is on prices of non-cereal commodities unlike at the onset when cereals prices were spiralling. The rising inflation in high value commodities is primarily demand-driven but also suffers from supply side issues such as weak and fragmented supply lines. The focus, therefore, is on streamlining the supply chain, reducing the margins and ensuring adequate supply response to increasing demand. Some of the policy measures that India adopted (largely populist in nature and part of the election manifesto) which helped address the concerns arising from the food and financial crisis resulted in inflating the fiscal deficit (deviating from the targets set out) and also adding to the inflation concerns. As observed earlier, increasing the subsidy bill (notably fertilizer) and loan waiver scheme resulted in a ballooning of the fiscal deficit from 4.1 per cent in 2007–08 to 8.5 per cent and 9.5 per cent in 2008–09 and 2009–10, respectively (RBI 2011b).

The nature and extent of food price inflation in India has been less severe than in many other developing countries. Although met with severe criticism by the opposition political parties, the flagging of issues by the media, and protests by civil society groups and people in general, the situation did not result in riots or major clashes. Given the seasonality of Indian agriculture, prices of certain commodities typically follow a cycle. As for grains (rice, wheat,

and maize), domestic prices have been fluctuating but their contribution to overall food inflation has eased out over time. Rising energy prices also contributed to a rise in overall inflation as also food inflation. Given the nature of food and nutrition security complex in India, agriculture and food policies have been by and large geared to address the concerns and ensure food for all. The period of high food inflation has brought these concerns to the forefront and there is a renewed interest among the representatives of the government, and the policy think tanks to devise strategies from a short-, medium- to long-term horizon to control prices and smooth out the impact of these price spikes on consumers. While immediate actions were taken to control price spikes, some of the medium- to long-term policy actions are aimed to ensure sustainable growth in agricultural productivity and food production. In the wake of the crisis, this policy stand has been further strengthened although a consensus on the strategic approach is missing. Indian agriculture and food policy measures have been conservative given the food security concerns particularly with respect to trade and stocking policies. While the trade restrictions and building up of stocks helped contain flaring up of grain prices in the domestic front by ensuring greater availability, India has been criticized for having adversely affected the global situation. Also, the decision to allow the export of grains came after much internal deliberations (taking into consideration the grain stocks to be able to feed the subsidized food distribution system (i.e. PDS) as also domestic market demand) despite comfortable stock position, and production of grains.

Overall, it seems the policies and political debates have ensured that there is ample food in the country, that the real wages of farm workers have gone up, and now the challenge is to bring down food inflation by controlling fiscal deficits, retaining somewhat tight monetary policy, improving the supply chains, and honing the social safety net programmes, besides improving productivity and overall food production in the country, and releasing more from the public stocks.

References

- Acharya, S. S., P. S. Ramesh Chand, S. K. Birthal, and D. S. Negi (2012). 'Market Integration and Price Transmission in India: A Case of Rice and Wheat with Special Reference to the World Food Crisis of 2007/08'. Rome: Food and Agriculture Organization.
- Basu, K. (2011). 'Understanding Inflation and Controlling It'. Paper. Available at: http://finmin.nic.in/WorkingPaper/understanding_inflation_controlling.pdf, (accessed 14 November 2011).
- Chen, S., and M. Ravallion (2008). 'The Developing World is Poorer Than We Thought, But No Less Successful in the Fight against Poverty'. Policy Research Working Paper 4703. Washington, DC: World Bank Development Research Group.
- FAO-GoI (2009). 'The Impacts of Climate Change on Wheat, Food, Agriculture, and the Environment'. Discussion Paper 29. Washington, DC: IFPRI.
- Food Corporation of India (2011). 'Data on Procurement. Food Corporation of India'. New Delhi: Food Corporation of India. Available at: www.fciweb.nic.in
- Government of India (GoI), Commission for Agricultural Costs and Prices (CACP) (2012). 'Report on Price Policy for Rabi Crops for Marketing Season 2013–2014'. New Delhi: GoI.

- (2011). 'Report on Price Policy for Kharif Crops of 2011–2012 Season. New Delhi: GoI.
- GoI, Office of Economic Advisor (OEA) (2012). 'Wholesale Price Index Database'. New Delhi: GoI.
- GoI, Prime Minister's Office (PMO) (2011). 'Handbook of Statistics on Government of India'. (2011). Available at: http://pmindia.nic.in/speeches.htm, (accessed 25 July 2012).
- Government of India (2007). Agricultural Statistics at a Glance 2007. Ministry of Agriculture. Government of India. New Delhi. India.
- (2010). Agricultural Statistics at a Glance 2010. Ministry of Agriculture. Government of India. New Delhi. India.
- (2009). Agricultural Statistics at a Glance 2009. Ministry of Agriculture. Government of India. New Delhi. India.
- Gulati, A., and A. K. Jena (2012). 'Rural Prosperity no Mirage; Real Rural Wages have Grown 6.8 Per Cent Each Year in Last 4 Years'. *The Economic Times*, 4 October.
- Menon, B. D. (2011). 'Exempt Horticulture from APMC Act, says CII Farm Panel Chief. *Business Line.* 23 January 2011. Available at http://www.thehindubusinessline.in/2011/01/24/stories/2011012451030200.htm, (accessed 26 October 2011).
- National Sample Survey Organization (NSSO) (2011). 'Key Indicators of Household Consumer Expenditure in India, 2009–10'. Report No. NSS KI (66/1.0). New Delhi: GoI: Central Statistical Organization, Ministry of Statistics and Programme Implementation.
- RBI (2011a). 'Striking the Balance between Growth and Inflation in India'. Speech by Subir
GokarnGokarn.Availableat
http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=12426#C4,(accessed14
October 2011). New Delhi: RBI.
- (2011b). 'First Quarter Review of Monetary Policy 2011–12 by Duvvuri Subbarao, Governor, Reserve Bank of India'. Available at: http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=12415 (accessed 10 November 2011). New Delhi: RBI.
- Rowden, R. (2011). 'India's Role in the New Global Farmland Grab: An Examination of the Role of the Indian Government and Indian Companies Engaged in Overseas Agricultural Land Acquisitions in Developing Countries'. New Delhi: GRAIN and the Economics Research Foundation.
- Sikarwar, D. (2011). 'Centre to States: Lift all Restrictions on Fruit and Vegetables Movement'. *The Economic Times*. 29 September. Available at: http://economictimes.indiatimes.com/news/economy/agriculture/-centre-to-states-lift-allrestrictions-on-fruit-and-vegetables-movement/articleshow/10164055.cms, (accessed 20 October 2011).
- Timmer, P. (2011). 'Managing Price Volatility: Approaches at the Global, National, and Household Levels'. Center on Food Security and the Environment. Stanford Symposium Series on Global Food Policy and Food Security in the 21st Century. Stanford University.
- World Bank (2012). 'International Commodity Price Date. Pinksheets'. Washington, DC: World Bank.