

Prices, Agriculture and Food Management

05 CHAPTER

After remaining high for a prolonged period, inflation is finally trending down. Average Wholesale Price Index inflation declined to 3.4 per cent in 2014-15 (April-December) as compared to an average of 6 per cent during 2013-14. The WPI inflation even breached the psychological level of 0 per cent in November 2014 and January 2015. Consumer price inflation released by the Central Statistics Office (base 2012=100) reached 5.1 per cent in January 2015. This is lower than the targets of 8 per cent set for January 2015 and 6 per cent for January 2016 given by the Reserve Bank of India in its report on the new monetary policy framework. Prices of the major commodity groups contributing to high inflation, namely 'eggs, meat, and fish', fruits and vegetables, and fuel, have all softened. The major developments driving the stubborn inflation down were falling global commodity prices, especially of crude oil, decline in the growth rate of rural wages, moderation in the increase in minimum support prices as also slack in economic activity. In so far as high food inflation contributed to elevated headline inflation, for sustainability of low inflation the policy focus should be on enhancing the resilience of the agriculture sector and eliminating leakages, inclusion and exclusion errors, and various distortions created by the present food policy. Growth in agriculture has now to increasingly come from non-price factors. Markets for agricultural commodities have to be made more competitive in the interests of both producers and consumers. The High Level Committee headed by Shri Shanta Kumar has given useful recommendations on proposed changes in the food policy. The upside risk to inflation outlook also emanates from uncertainties surrounding the monsoon, international crude oil prices, and the stability in the value of the rupee, particularly in the event of monetary tightening by the US Fed.

TRENDS IN WPI AND CPI INFLATION

Wholesale Price Index

5.2 Headline inflation measured in terms of the Wholesale Price Index (WPI) (base year 2004-05=100) which remained persistently high at 6-9 per cent during 2011-13 moderated to a low of 3.4 per cent in 2014-15 (April-December) on the back of lower food and fuel prices. During the

first quarter of 2014-15, WPI headline inflation was at 5.8 per cent as mainly food and fuel prices were high. In second and third quarters of 2014-15, WPI inflation declined to 3.9 per cent and 0.5 per cent respectively (Table 5.1). WPI food inflation (weight: 24.3 per cent), which remained high at 9.4 per cent during 2013-14 moderated to 4.8 per cent during April-December 2014 following sharp correction in vegetables prices since

Table 5.1 : Quarter-wise Inflation in WPI broad groups (in per cent)

	Weights	2013-14				2014-15		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3(P)
All Commodities	100.0	4.8	6.6	7.1	5.4	5.8	3.9	0.5
I. Primary Articles	20.1	6.5	12.4	13.6	6.8	7.5	4.1	0.4
II. Fuel and Power	14.9	7.7	11.9	10.8	10.1	9.6	4.4	-4.0
III. Manufactured products	65.0	3.3	2.4	2.9	3.3	3.8	3.6	2.0
All Food	24.3	7.7	11.8	11.9	6.2	6.9	5.0	2.5
Core Inflation	55.0	2.6	2.4	3.1	3.7	4.0	3.6	2.0

Source: Office of Eco. Adviser, Deptt. of Industrial Policy and Promotion (DIPP) P: Provisional

December 2013 (except March 2014) and moderation in prices of cereals and eggs, meat, and fish. As fuel has larger weight in the WPI, the decline in fuel prices led to a sharper fall in the WPI as compared to the Consumer Price Index (CPI) (base year 2010=100). Inflation in manufactured products has remained within a narrow range since 2013-14. The WPI headline inflation (provisional) in January 2015 stood at -0.4 per cent. The build up inflation rate in the financial year till January 2015 was -1.1 percent compared to a build up rate of 5.2 percent in the corresponding period of the previous year.

Consumer Price Index

5.3 The Central Statistics Office (CSO) has started releasing state-wise and all-India rural, urban, and combined CPIs since January 2011. Retail inflation as measured by the CPI (combined) (base year 2010=100) remained stubbornly sticky around 9-10 per cent for the last two years. Like WPI inflation, CPI inflation has also moderated

significantly since the second quarter of 2014-15. It declined to an all-time low of 5 per cent in Q3 of 2014-15 (Table 5.2). The Reserve Bank of India (RBI) had announced its intent to anchor its monetary policy stance to headline CPI (combined) inflation from April 2014. Taking note of the sustained moderation in retail prices, it has signalled easing of the monetary stance by reducing policy repo rates by 25 basis points from 8 per cent to 7.75 per cent on 15 January 2015. The CSO has revised the base year from 2010 to 2012 (Box 5.1) and released the revised series on 12th February, 2015 along with inflation data for January, 2015. CPI inflation in terms of the revised series stood at 5.1 percent in January, 2015.

5.4 Persistence of food inflation in recent years has been the major contributing factor in high headline inflation. There have been wide variations in inflation in commodities within food sub-groups across states, across commodities, and across seasons indicating supply constraints. Demand pressures exerted by high rates of growth of rural

Table 5.2 : Quarter-wise Inflation in CPI (base 2010=100) broad groups (in per cent)

	Weights	2013-14				2014-15		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3(P)
General	100.0	9.5	9.7	10.4	8.4	8.1	7.4	5.0
I. Food, beverages & tobacco	49.7	11.0	11.1	12.9	9.2	8.9	8.6	4.8
II. Fuel and Light	9.5	8.4	7.9	7.0	6.3	5.2	4.0	3.4
III. Others	40.8	7.9	8.2	8.0	7.9	7.6	6.7	5.5
Food (CFPI)	42.7	11.1	11.4	13.6	9.3	9.1	8.8	4.5
Core inflation (Non-food non-fuel)	42.9	8.0	8.2	8.1	8.0	7.7	6.8	5.7

Source : CSO. P : Provisional.

Box 5.1 : Changes in CPI New Series

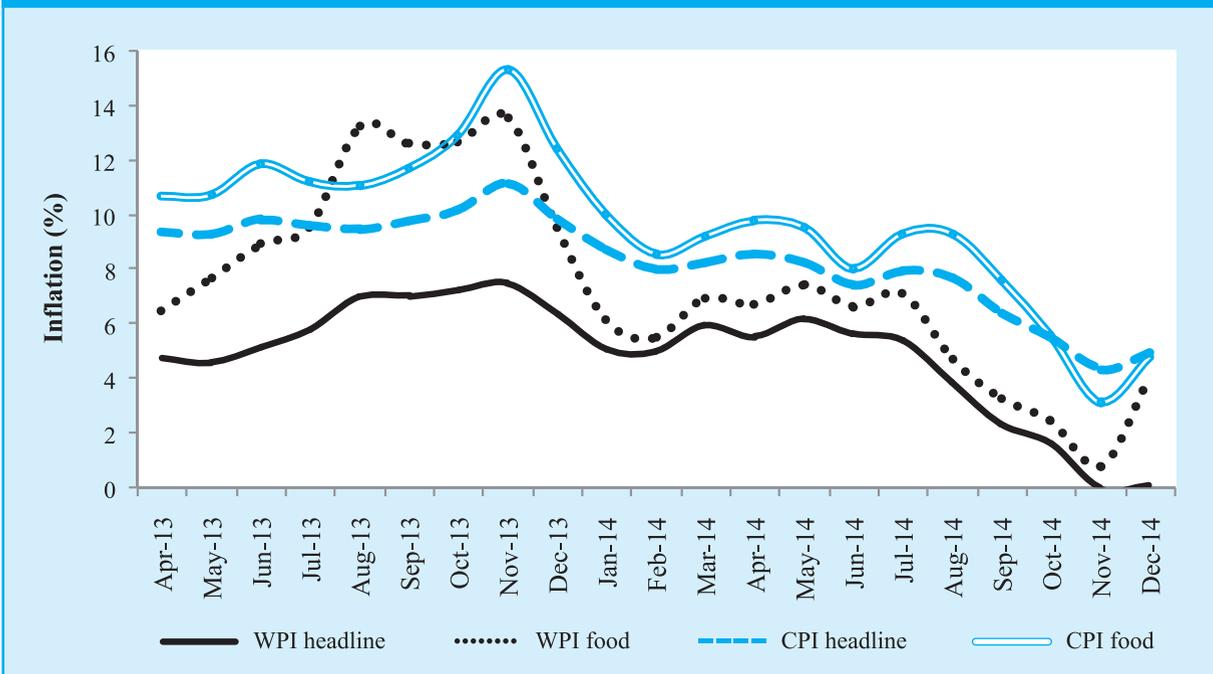
The CSO, Ministry of Statistics and Programme Implementation (MOSPI) has been, since January 2011, releasing separate rural, urban, and combined CPIs on monthly basis with base year (2010=100) for all-India and states/UTs. In addition to this, separate rural, urban, and combined Consumer Food Price Indices (CFPI) for all India were released from May 2014. The weighting diagram for the new CPI series was derived on the basis of average monthly consumer expenditure of an urban/rural household obtained from the Consumer Expenditure Survey data (2004-05) of 61st Round of the National Sample Survey (NSS). The CSO has revised the base year of the Consumer Price Index from 2010=100 to 2012=100 and the revised index numbers were released on 12 February 2015. The basket of items and weighting diagrams for the revised series have been prepared by using the Modified Mixed Reference period (MMRP) data of the Consumption Expenditure Survey, 2011-12 of the 68th Round of NSS.

wages were mostly reflected in high prices of protein items like, milk, eggs, meat, and fish and also fruits and vegetables.

5.5 During 2014-15, particularly in the third quarter, CPI food inflation declined considerably as compared to the previous year, partly on account of base effect, but also due to the seasonal softening of fruit and vegetable prices. Late arrival

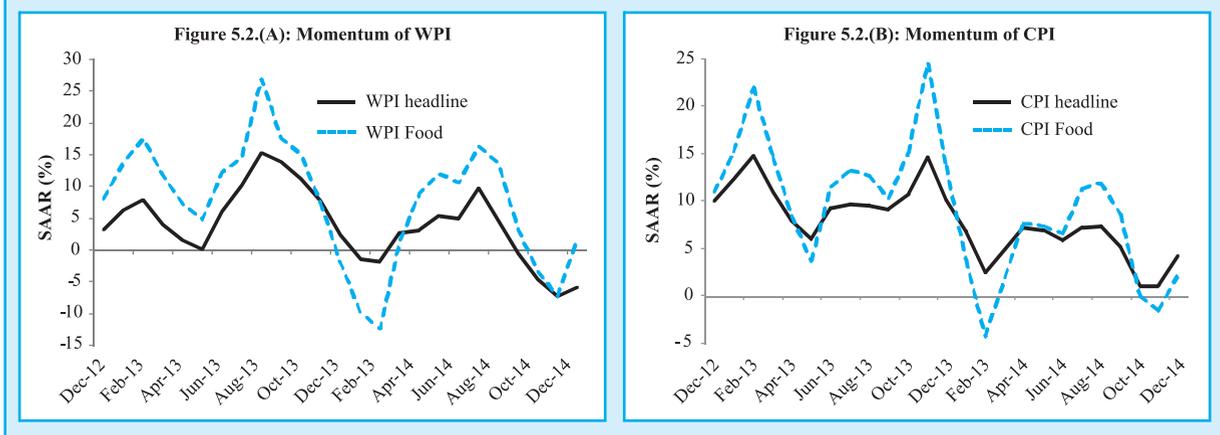
of the monsoon exerted some pressure on vegetable prices during June-August 2014, but the prices came down subsequently which helped significantly in the moderation of overall CPI inflation. CPI inflation in the fuel and light group registered consistent decline during 2014-15, touching 3.4 per cent in the third quarter following the sharp decline in international crude oil prices. Core inflation (non-food non-fuel) declined to 5.7 per cent in the third quarter of 2014-15 as against 8.1 per cent in the corresponding quarter of the previous year largely on account of the slack in economic activity. Housing and transport contributed to the significant decline in core inflation. Inflation in housing declined to 8 per cent in the third quarter of 2014-15, after remaining in double digits during 2012 and 2013. Inflation in the transport and communication sub-group under the miscellaneous category registered a significant decline of 1.8 per cent during the third quarter of 2014-15, in line with the continued easing of global crude oil prices. In the sub-category others, which largely includes services, inflation dropped to 8.5 per cent during the same period after experiencing double-digit inflation through 2012 and 2013. The overall trends in WPI and CPI inflation are shown in Figure 5.1.

Figure 5.1: Inflation in WPI and CPI



Source: DIPP, CSO

Figure 5.2: Momentum based on SAAR



5.6 Inflation momentum based on the seasonally adjusted annualized rate (SAAR), three month-on-three month (3m-o-3m) inched up in December 2014 after a sharp decline over the previous few months (Figure 5.2).

FACTORS CAUSING MODERATION IN INFLATION

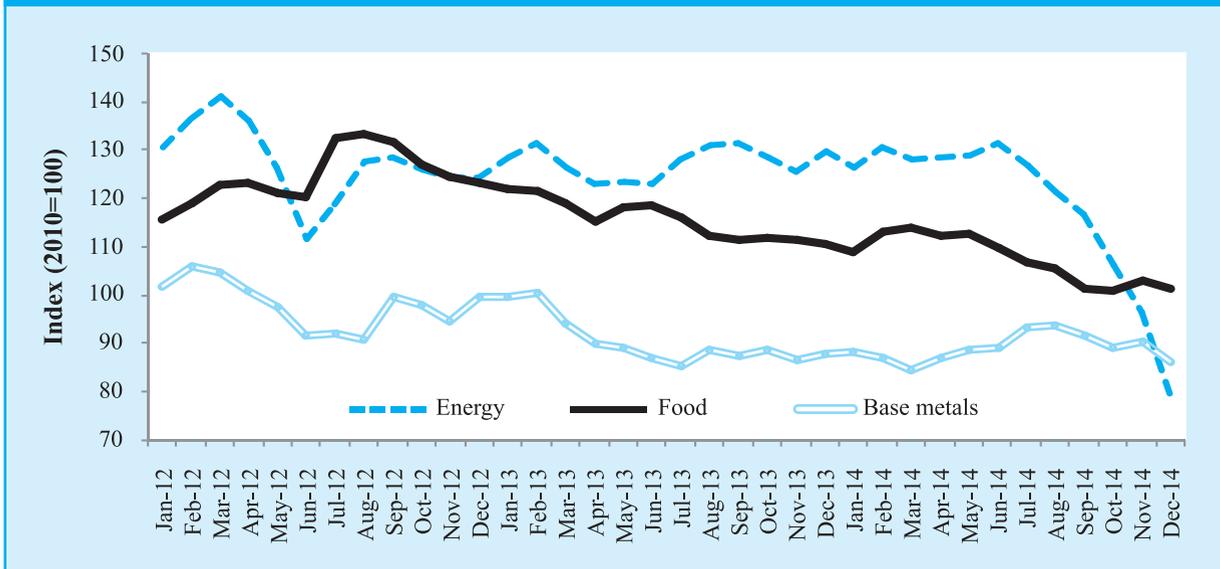
5.7 The decline in inflation during the year turned out to be much faster than was anticipated in the initial months of the year. Global factors, namely persistent decline in crude prices and softness in the global prices of tradables, particularly edible oils and even coal, helped moderate headline inflation. The tight monetary policy helped contain

demand pressures, creating a buffer against any external shock and keeping volatility in the value of the rupee under check. During the last one year, the rupee remained relatively stable vis-à-vis the currency of peer emerging countries, which too had sobering influence on inflation. Moderation in wage rate growth reduced demand pressures on protein-based items. Base effect also contributed to the decline in headline inflation.

Global inflation

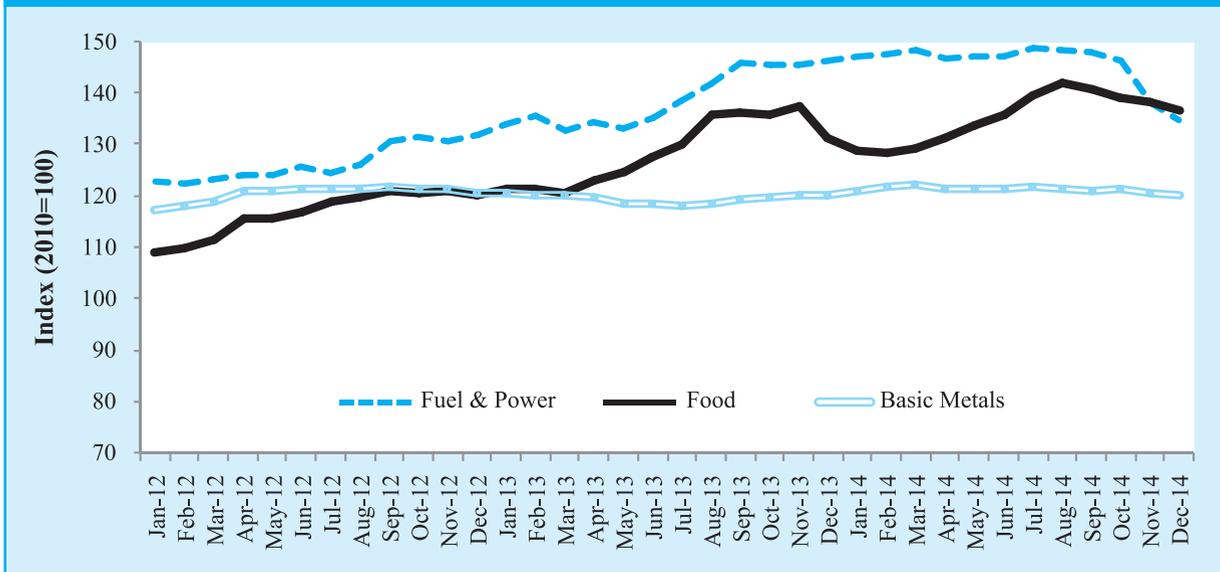
5.8 As per the World Bank Commodities Price Data (Pink Sheet), global commodity prices have shown a declining trend during 2014. The energy price index fell by 40 per cent from June 2014 to December 2014. The food index and base metal

Figure 5.3: Movement of World Bank Price Indices



Source: World Bank Pink Sheet

Figure 5.4: Movement of WPI (converted 2010=100)



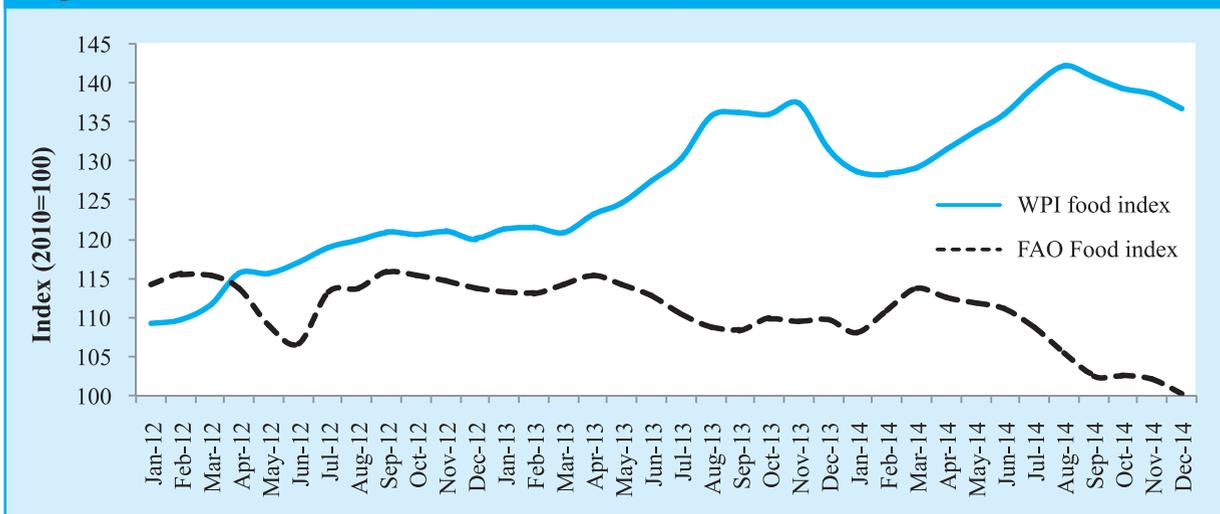
Source: DIPP

index declined by 8 per cent and 3 per cent respectively during the same period. The trend in world commodity prices is indicated in Figure 5.3.

5.9 As against the 40 per cent decline in global energy prices, the Indian energy price index measured in terms of WPI fuel and power declined by only 10 per cent during the period June – December 2014. Figure 5.4 charts the movement of the WPI price indices. Though international oil prices started declining from July 2014, there has been greater alignment of international and domestic prices after the deregulation of diesel in October 2014.

5.10 The Food and Agricultural Organization (FAO) food index shows that there has been a continuous decline in the food index since March 2014, mainly on account of abundant production as well as weakening demand. While the FAO food index declined by about 13 per cent during March-December 2014 following significant decline in dairy, cereal, oil and sugar prices, the Indian food index (WPI) increased by about 6 per cent during the same period. Figure 5.5 compares the domestic and FAO food indices. The difference between the domestic food and FAO food indices indicates that the domestic food

Figure 5.5: FAO vs WPI Food (converted 2010=100)



Source: FAO & DIPP

market is not integrated with the international market. The divergence in the domestic and international food prices stems from the various restrictions in domestic food and trade policy imposed to protect either farmers or consumers.

Moderating growth rate of wages

5.11 High growth rates in rural income/wages (Figure 5.6) triggered by substantial increases in minimum support prices (MSP) and the launch of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) created demand pressures on protein items and eggs, meat, and fish. The high wages also acted through increasing cost of production for agricultural commodities, thereby triggering a rise in MSPs. Since fruits and vegetables and allied agricultural activities draw from a common pool of labour, the higher wages-induced cost-push inflation was observed in the entire basket of food commodities. Prices of edible oils and pulses which are freely allowed to be imported remained subdued.

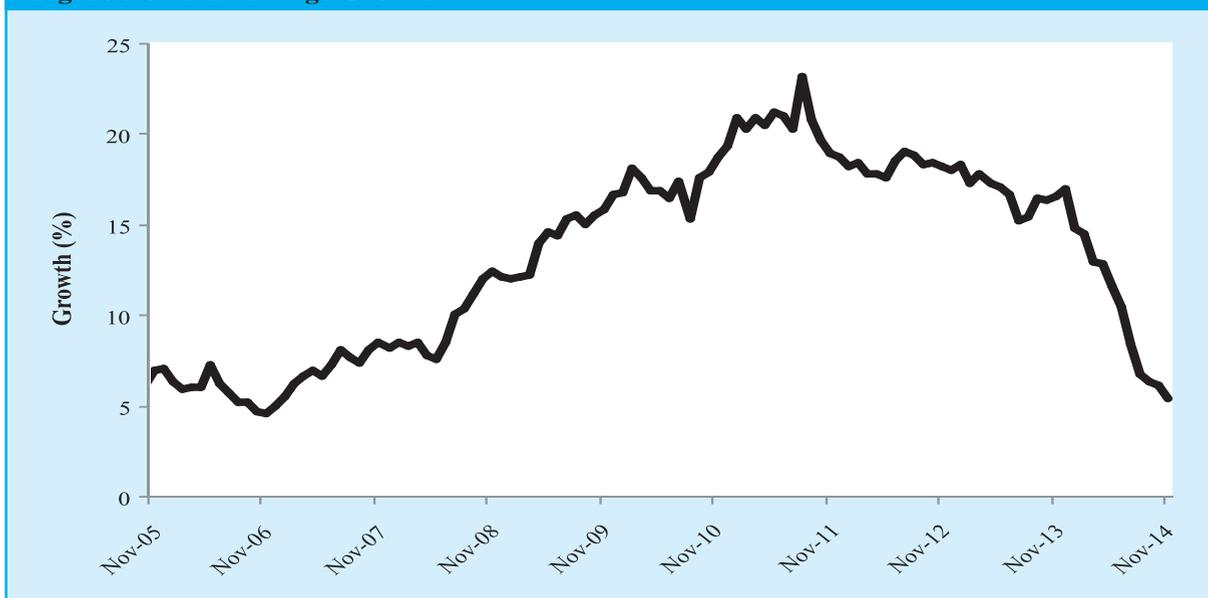
Measures taken by the Government to control inflation

5.12 The swift decisive steps taken by the government also helped control the stubbornly persistent inflation—particularly food inflation. The decline in inflation is found to be substantial in

commodities where the government had taken effective measures. The government took a series of measures to improve availability of food-grains and de-clog the distribution channel. Some of the major steps taken recently in this regard include:

- Allocation of additional 5 million tonnes of rice to below and above poverty line (BPL and APL) families in the states, pending implementation of the National Food Security Act (NFSA), and allocation of 10 million tonnes of wheat under open market sales for domestic market in 2014-15;
- Moderation in increases in the MSPs during the last and current season;
- Advisory to the states to allow free movement of fruits and vegetables by delisting them from the Agricultural Produce Marketing Committee (APMC) Act;
- Bringing onions and potatoes under the purview of the Essential Commodities Act 1955, thereby allowing state governments to impose stock limits to deal with cartelization and hoarding, and making violation of stock limits a non-bailable offence;
- Imposing a minimum export price (MEP) of US\$ 450 per MT for potatoes with effect from 26 June 2014 and US\$ 300 per MT for onions with effect from 21 August 2014.

Figure 5.6: Rural Wage Growth



Source: Labour Bureau

5.13 For keeping food inflation low in a sustainable manner, more radical measures will have to be taken to revamp agriculture- and food-sector production, storage, marketing, and distribution – including the public distribution system (PDS) and NFSA.

HOUSEHOLD INFLATION EXPECTATIONS

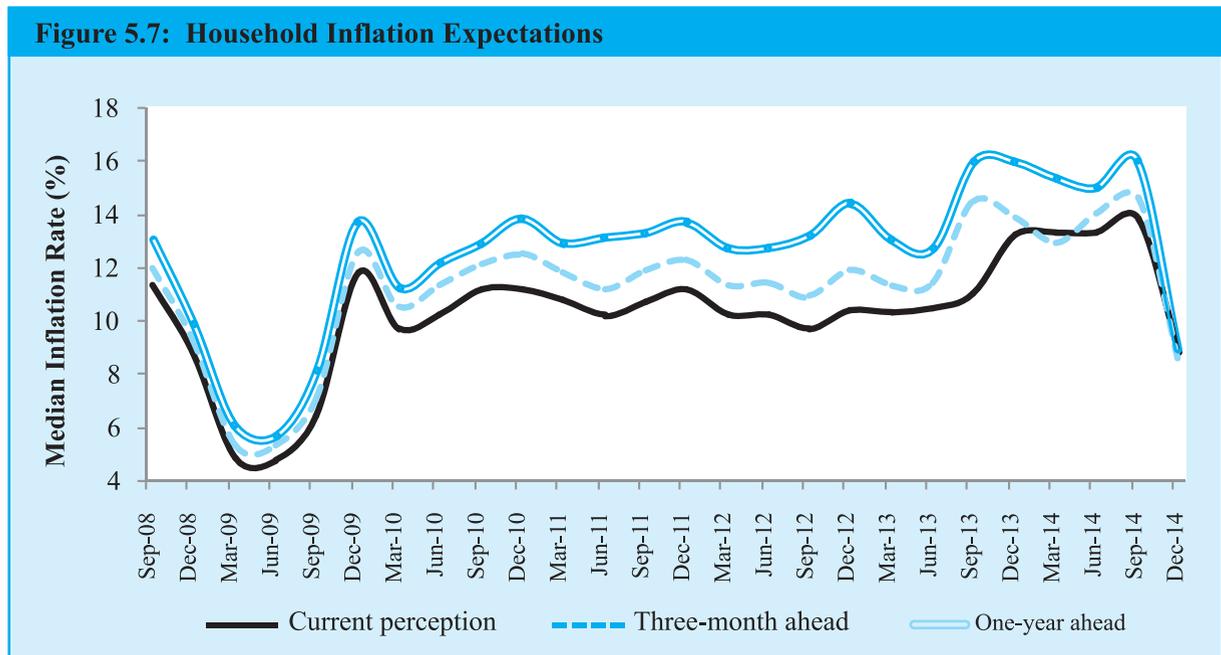
5.14 Since September 2005, the RBI has been conducting quarterly inflation expectation surveys of households. The results of the latest survey covering 5000 urban households across 16 cities were released in December 2014. The survey captures the inflation expectations for the next three-month and one-year period. The current inflation perceptions and inflation expectations have moderated in the latest round (Figure 5.7).

5.15 As can be seen from Figure 5.7, median inflation expectations over the next three months and one year have corrected sharply during the latest survey (December 2014) to 8.3 per cent from 14.6 per cent and to 8.9 per cent from 16 per cent in the previous quarter respectively. The sharp correction in expectations in the latest round (38th round) and the general deviation from actual inflation figures indicate excessive pessimism reflected in the household inflation expectation surveys.

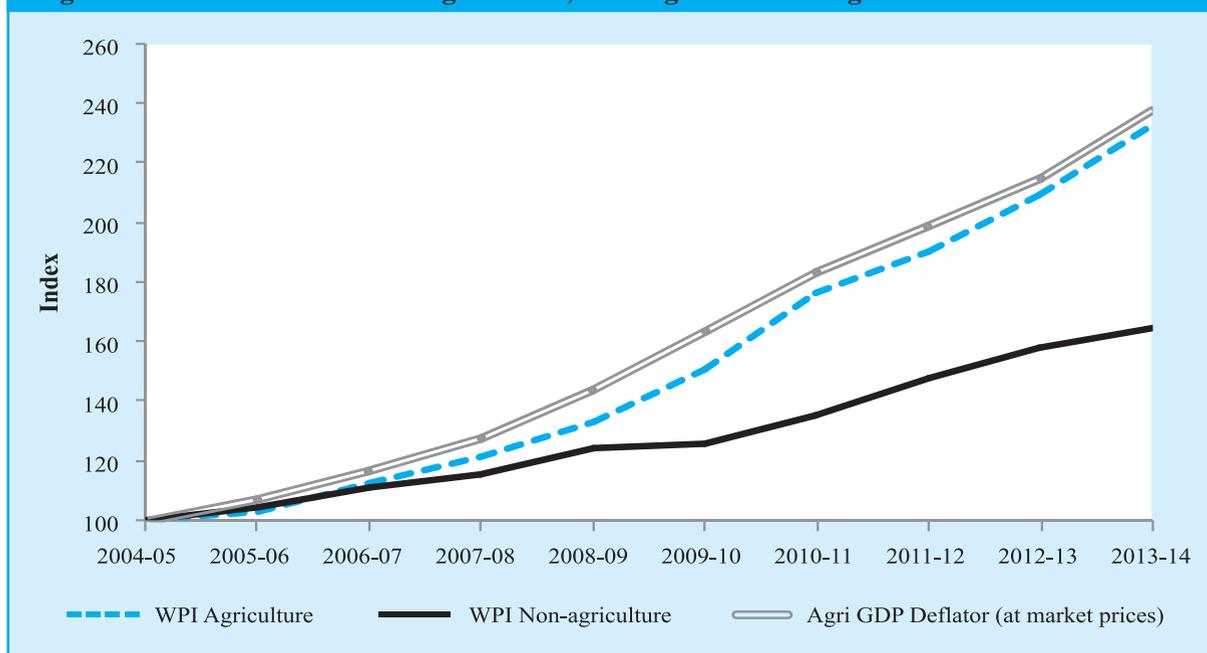
5.16 The upside risk to this outlook emanates from the fact that crude oil prices will have to bottom out from these levels, though it is unlikely that they will flare up in a short space of time. Also, the lower acreage in oilseeds and pulses during the current rabi harvesting season could create supply pressures. Given the capacity constraints in warehousing and cold-storage, seasonal commodities may also add to the inflation risk.

AGRICULTURE AND FOOD MANAGEMENT

5.17 The agriculture sector registered an annual growth of 3.8 per cent in value added in the decade since 2004-05 on the back of increase in real prices (31 per cent during 2004-05 to 2011-12). The committee set up by the Ministry of Agriculture under the chairmanship of S. Mahendra Dev to come up with updated methodology to compute terms of trade between agriculture and non-agriculture has observed that, during 2004-05 and 2013-14, terms of trade have become favourable for agriculture. The ratio of WPI agriculture to WPI non-agriculture has also risen steeply after 2005-06 (Figure 5.8).



Source: RBI.

Figure 5.8: Movement of WPI Agriculture, Non-Agriculture & Agri GDP Deflator

Source: DIPP, CSO.

5.18 A rising concern in recent times has been the high level of food inflation, seasonal and short-term price spikes in some commodities like onions, tomatoes, and potatoes which have become more frequent, more severe, and more lasting, hurting consumers and causing economic instability. A strategy of price-led growth in agriculture is, therefore, not sustainable; also the room for increasing production through raising cropped area

is virtually non-existent. Hence the strategy for growth in agriculture has to rely more on non-price factors, viz., yield and productivity.

OVERVIEW OF THE AGRICULTURAL SECTOR

5.19 According to the new series of national income released by the CSO, at 2011-12 prices the share of agriculture in total GDP is 18 per cent

Table 5.3 : Agriculture Sector – Key indicators (per cent at 2011-12 prices)

Sl. No.	Item	2011-12	2012-13	2013-14	2014-15
1	Growth in GDP in agriculture & allied sectors	-	1.2	3.7	1.1
	Share of agriculture & allied sectors in total GDP	18.4	18.0	18.0	
	Crops	12.0	11.7	11.8	
	Livestock	4.0	4.0	3.9	
	Forestry and logging	1.6	1.5	1.4	
	Fishing	0.8	0.8	0.9	
2	Share of agriculture & allied Sectors in total GCF	8.6	7.7	7.9	N.A.
	Crops	7.4	6.5	6.6	
	Livestock	0.8	0.7	0.7	
	Forestry and logging	0.1	0.1	0.1	
	Fishing	0.4	0.4	0.5	
3	GCF in agriculture & allied Sectors as per cent to GDP of the sector (at current 2011-12 prices)	18.3	15.5	14.8	

Source : CSO.

Note : GCF is Gross Capital Formation.

in 2013-14. As against a growth target of 4 per cent for agriculture and allied sectors in the Twelfth Plan, the growth registered in the first year at 2011-12 prices was 1.2 per cent, 3.7 per cent in 2013-14, and 1.1 per cent in 2014-15 (Table 5.3).

AREA, PRODUCTION, AND YIELD

5.20 Table 5.4 gives area, production, and yield figures for different crops in 2013-14. In 2013-14, total foodgrain production has been estimated at 265.6 million tonnes as per the second Advance Estimates (AE), which is higher by 8.5 million tonnes than the 2012-13 production and 22.1 million tonnes than average foodgrain production during the last five years.

5.21 As per the 2nd Advance Estimates for 2014-15, total foodgrains production in the country is estimated at 257.07 million tonnes which is the fourth highest quantity of annual foodgrains production in the country. It may be noted that despite deficiency of 12% in the monsoon rainfall during the year, the loss in production has been

restricted to just around 3% over the previous year and has exceeded the average production during the last five years by 8.15 million tonnes.

5.22 As compared to last year's production of 265.57 million tonnes, current year's production of foodgrains is lower by 8.5 million tonnes. This decline has occurred on account of lower production of rice, coarse, cereals and pulses due to erratic rainfall conditions during the monsoon season-2014.

5.23 To improve resilience of the agricultural sector and bolster food security—including availability and affordable access—our strategy for agriculture has to focus on improving yield and productivity. Though yield/productivity in foodgrains and pulses has increased post-2000, the yield gaps vis-à-vis other countries are wide and even within different states yields vary widely, showing that there are possibilities of raising production by increasing yield of most of the crops without necessarily increasing prices (Table 5.5).

Table 5.4 : Area, Production, and Yield (2013-14*)

(Area: million ha; Prod.: million tonnes; Yield: kg/ha)

Group/commodity	Area	Per cent change in area	Production	Per cent change in production	Yield	per cent change in yield
Foodgrains^a	126.0	4.3	264.8	3.0	2101	-1.3
Rice	43.9	2.7	106.5	1.3	2424	-1.5
Wheat	31.2	4.0	95.9	2.6	3075	-1.3
Jowar	5.8	-6.1	5.4	1.7	850	-8.2
Maize	9.4	8.3	24.4	9.2	2566	-0.7
Bajra	7.9	8.0	9.2	5.5	1198	2.9
Pulses	25.2	8.3	19.3	5.3	764	-3.2
Gram	10.2	20.3	9.9	12.3	967	-6.7
Tur	3.9	0.0	3.3	9.7	848	9.2
Oilseeds	28.5	7.6	32.9	6.4	1153	-1.3
Groundnut	5.5	17.6	9.7	105.8	1750	75.9
Rapeseed and mustard	6.7	4.7	8.0	-0.5	1188	-5.9
Cotton^b	11.7	-2.3	36.7	7.2	532	9.4
Sugarcane	5.0	0.0	350.0	2.6	70	0.0

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation.

Notes : *Fourth AE.

^a Includes cereals, coarse cereals, and pulses.

^b Bales of 170 kg.

Table 5.5 : Average, Maximum, and Minimum Yield of Major Crops 2013-14

Crops	Yield (kg/ha)		
	All-India average	Maximum	Minimum
Rice	2416	Punjab (3952)	Madhya Pradesh (1474)
Wheat	3145	Punjab (5017)	Andhra Pradesh (500)
Maize	2676	Tamil Nadu (5372)	Assam (898)
Jowar	957	Andhra Pradesh (1661)	West Bengal (280)
Gram	960	Andhra Pradesh (1439)	Tamil Nadu (653)
Tur	813	Bihar (1667)	Andhra Pradesh (542)
Groundnut	1764	Gujarat (2668)	Himachal Pradesh (600)
Rapeseed & Mustard	1185	Gujarat (1723)	Tamil Nadu (241)
Soyabean	1012	Andhra Pradesh (1612)	Uttar Pradesh (577)
Sugarcane	70522	West Bengal (114273)	Jammu & Kashmir (1000)
Cotton#	510	Punjab (750)	Maharashtra (358)

Source : Directorate of Economics & Statistics, Department of Agriculture & Cooperation

Note : # Thousand bales of 170 kg each.

5.24 An inverse relationship is noticed between increase in yield over time and the average cost of production of various crops in real terms. For example, for rabi crops a 10 per cent increase in yield resulted in a 2.1 per cent to 8.1 per cent decline in the average cost of production of various crops in real terms. (Price Policy for Kharif Crops, February 2014, pp. 67—69, CACP). This clearly points towards the fact that productivity increases, especially in low productivity states/regions, can significantly contribute towards reducing cost-push food inflation.

5.25 Yield is contingent upon several factors like variety and quality of seeds, soil quality, irrigation—including quality of water—fertilizers—including their proportion—pesticides, labour, and extension services. Prices received by farmers and the certainty or assurance of getting a particular price also incentivize farmers to take to a particular crop and use quality inputs in its cultivation. The status of some of these factors in India is described in the following paragraphs.

DRIVERS OF GROWTH

Agricultural Research and Education

5.26 The Indian Council of Agricultural Research (ICAR) is engaged in developing new crop

varieties with specific traits that improve yield and nutritional quality along with tolerance / resistance to various biotic and abiotic stresses. Besides, it matches crop production and protection technologies to target agro-ecologies. A total of 104 varieties of different crops were released for different agro-ecological niches. To ensure effective seed chain for making quality seed available to farmers, 11,835 tonnes of breeder seeds of recommended varieties of different field crops were developed. The adoption of improved varieties and crop management technologies has resulted in enhancement of production and productivity of cereals, pulses, and other field crops.

5.27 While greater outlay on applied research, education, and extension will result in more assured outcome in terms of reduction in average cost and increase in average yield/productivity, and growth, the paradigm shift in yield/productivity required for the second green revolution can be achieved, with greater outlay on basic research by creating research institutions on the pattern of Indian Institutes of Technology (IIT) and Indian Institutes of Sciences (IIS). It is imperative to make Indian agricultural growth science-led by shedding 'technology fatigue'. Budget 2014-15 provided for the establishment of two institutes of excellence

in Assam and Jharkhand with an initial sum of ₹ 100 crore.

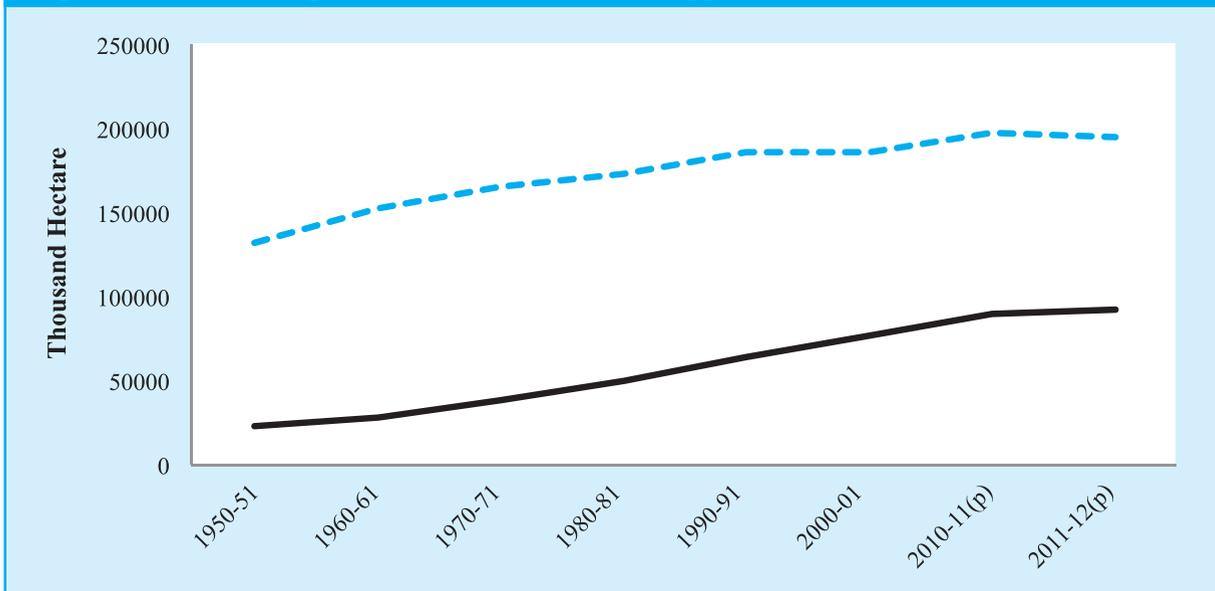
Agricultural Extension

5.28 The NSSO 70th round survey indicates that about 59 per cent of farmers do not get much technical assistance and know-how from government-funded farm research institutes or extension services. So they have to rely on progressive farmers, media, and private commercial agents such as dealers of farm inputs like seeds, fertilizers, and pesticides for technical information. To ensure last-mile connectivity, extension services need to be geared up to address emerging technological and information needs. Effectiveness of the lab-to-farm programme can be improved by leveraging information technology and e- and mobile (m-) applications, participation of professional NGOs, etc. The Budget 2014-15 allocation of Rs100 crore to Kisan TV for disseminating real-time information to farmers regarding new farming techniques, water conservation, organic farming, etc. will partly make up for the existing adverse ratio of one extension worker for every 800 to 1000 farmers and provide farmers a direct interface with agricultural experts.

Irrigation

5.29 The central government initiated the Accelerated Irrigation Benefit Programme (AIBP) in 1996-97 for the completion of incomplete irrigation schemes. Under the AIBP, ₹ 67,195.47 crore of central loan assistance (CLA)/grant has been released up to 31 December 2014. An irrigation potential of 85.03 lakh ha is reported to have been created under the AIBP by states from major / medium / minor irrigation projects till March 2013. The Command Area Development Programme has also been amalgamated with the AIBP to reduce the gap between irrigation potential that has been created and that is utilized. Suggestions for a National Water Grid for transferring water from water surplus to water deficit areas have been made from time to time. In spite of these schemes, Indian agriculture is still heavily rainfall dependent with just 35 per cent of total arable area being irrigated, and distribution of irrigation across states is highly skewed. Focus on micro-irrigation systems like drips and sprinklers would significantly increase water-use efficiency and productivity. The wide gap between gross cropped area and gross irrigated area which has not improved much since the First Five Year Plan period needs to be bridged for increasing productivity, production, and resilience (Figure 5.9).

Figure 5.9: Gross Irrigated Area vis-a-vis Gross Cropped Area



Source: Department of Agriculture & Cooperation (DAC).

Seeds

5.30 Seed is the basic input for enhancing agricultural production and productivity. Efficacy of all other agricultural inputs such as fertilizers, pesticides, and irrigation as well as impact of agro-climatic conditions is largely determined by the quality of the seed used. It is estimated that the quality of seed accounts for 20-25 per cent of agricultural productivity. An overall requirement of 343.55 lakh quintals of certified/quality seeds for 2014-15 (kharif and rabi) is estimated by the states. Against this, 351.76 lakh quintals of certified/quality seed is available. An overall surplus of 8.21 lakh quintals seed is thus available for 2014-15. During 2014-15, there has been shortfall in the availability of certified/quality gram, lentil, pea, soyabean, and potato seeds. Given our import dependence on oils and pulses and susceptibility of potato to inflation, steps are necessary to avoid shortages of certified seeds of these commodities. Given the lack of evidence on negative consequences from Bt and other genetically modified (GM) crops, and the significant potential productivity, food security, and sustainability benefits, the corresponding regulatory frameworks and their implementation deserve rethinking.

Fertilizers

5.31 The following major initiatives were taken in the fertilizer policy of the government in 2014-15: (i) Notification of the Modified New Pricing Scheme (NPS-III) for existing urea units on 2 April 2014 in order to address the issue of under-recoveries of the existing urea units on account of freezing of fixed cost at the 2002-03 level. The modified policy has been implemented for a period of one year from the date of notification. (ii) Further, the government had notified the New Investment Policy 2012 on 2 January 2013 to facilitate fresh investment in the urea sector to make India self-sufficient. The amendment to New Investment Policy – 2012 has been notified by the Department of Fertilizers on 7 October 2014. As against the targets for domestic production of 89.68 lakh tonnes and 33.51 lakh tonnes for nitrogen and phosphate for April-November 2014,

actual production was 82.86 lakh tonnes and 25.05 lakh tonnes respectively.

Credit

5.32 The following measures have been taken for improving agricultural credit flow and bringing down the rate of interest on farm loans: (i) Agricultural credit flow target for 2013-14 was fixed at ₹ 7,00,000 crore and achievement was ₹ 7,30,765 crore (Provisional), as against ₹ 6,07,375 crore in 2012-13. Agricultural credit flow target for 2014-15 has been fixed at ₹ 8,00,000 crore against which achievement has been ₹ 3,70,828.60 crore (Provisional) up to 30 September, 2014. (ii) Farmers have been availing of crop loans up to a principal amount of ₹ 3,00,000 at 7 per cent rate of interest. The effective rate of interest for farmers who promptly repay their loans is 4 per cent per annum during 2014-15. (iii) In order to discourage distress sale of crops by farmers, the benefit of interest subvention has been made available to small and marginal farmers having Kisan Credit Cards for a further period of up to six months (post-harvest) against negotiable warehouse receipts (NWRs) at the same rate as available to crop loan. Other farmers have been granted post-harvest loans against NWRs at the commercial rates. (iv) From 2014-15, in order to provide relief to farmers on occurrence of natural calamities, interest subvention of 2 per cent will continued to be available to banks for the first year on the restructured loan amount on account of natural calamities and such restructured loans will attract normal rate of interest from the second year onwards as per the policy laid down by RBI.

5.33 The Interest Subvention Scheme for short-term production credit (crop loans) which was started by the Government of India in 2006-07 was extended to private-sector banks from 2013-14. Presently the total number of loan accounts stands at 5.72 crore. Studies conducted by the RBI and National Bank for Agriculture and Rural Development (NABARD) indicate that the crop loans are not reaching intended beneficiaries and there are no systems and procedures in place at several bank branches to monitor the end-use of funds. Also, although overall credit flow to the

agriculture sector has increased over the years, the share of long-term credit in agriculture or investment credit declined from 55 per cent in 2006-07 to 39 per cent in 2011-12. According to NSSO 70th round data, as much as 40 per cent of the finances of farmers still comes from informal sources, despite an increase in the flow of institutional credit to agriculture in recent years. Usurious moneylenders account for a 26 per cent share of total agricultural credit.

5.34 Inadequate targeting of beneficiaries and monitoring/supervision of the end-use of short-term crop loans for which interest subvention scheme is applicable and decline in long-term/investment credit to agriculture are issues that need to be addressed on priority basis.

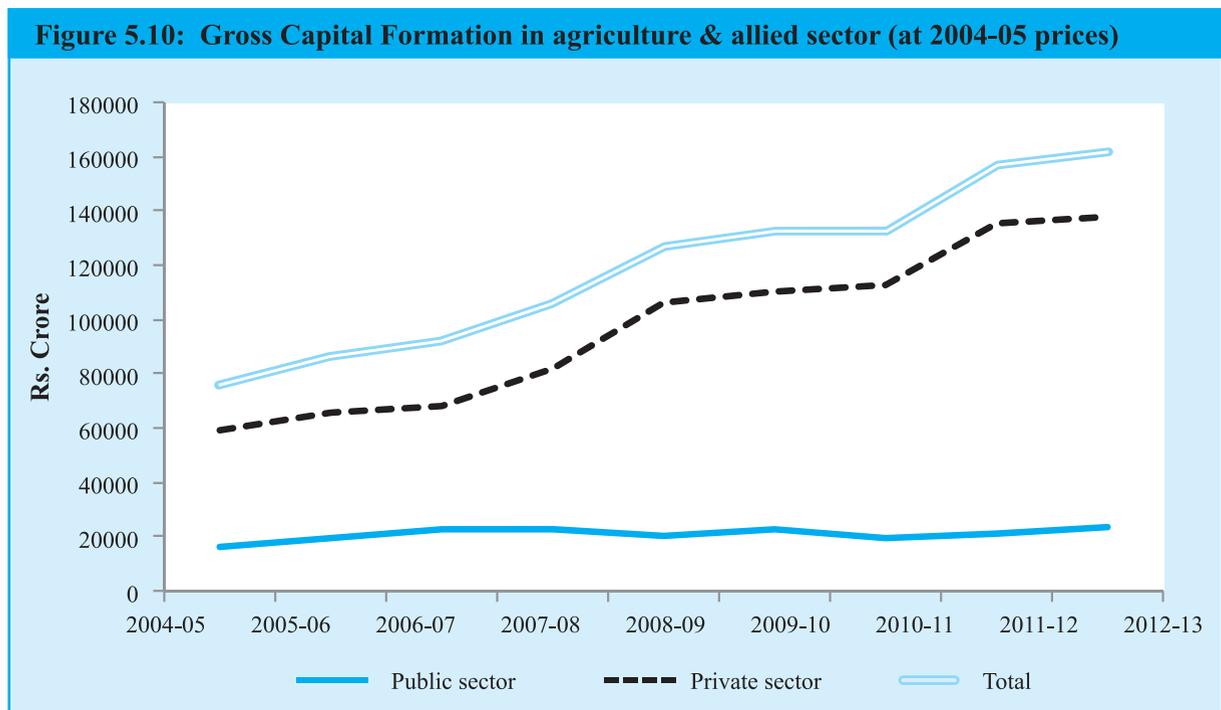
Mechanization

5.35 Agricultural mechanization increases productivity of land and labour by meeting timeliness of farm operations and increases work output per unit time. Besides its paramount contribution to the multiple cropping and diversification of agriculture, mechanization also enables efficient utilization of inputs such as seeds, fertilizers, and irrigation water. Although India is one of the top countries in agricultural production,

the current level of farm mechanization, which varies across states, averages around 40 per cent as against more than 90 per cent in developed countries. Farm mechanization in India has been growing at a rate of less than 5 per cent in the last two decades. The main challenges to farm mechanization are, first, a highly diverse agriculture with different soil and climatic zones, requiring customized farm machinery and equipment and, second, largely small landholdings with limited resources. Credit flow for farm mechanization is less than 3 per cent of the total credit flow to the agriculture sector. A dedicated Sub-Mission on Agricultural Mechanization has been initiated in the Twelfth Plan, with focus on spreading farm mechanization to small and marginal farmers and regions that have low farm power availability.

GCF in Agriculture and Allied Sectors

5.36 The GCF in agriculture and allied sectors relative to agri-GDP in this sector has shown an improvement from 13.5 per cent in 2004-05 to 21.2 per cent in 2012-13 at 2004-05 prices (Figure 5.10). Given the vast investment needs of the sector, greater public investment would only help increase private investment.



Source: DAC.

MAJOR SCHEMES OF THE GOVERNMENT

Rahtriya Krishi Vikas Yojana (RKVY)

5.37 The government has approved continuation of the RKVY scheme during the Twelfth Plan whereby RKVY funding will be routed into three components, viz. production growth, infrastructure & assets, & sub-schemes and flexi-fund. The proposed allocation for implementation of this scheme during 2015-16 is ₹ 18,000 crore. In view of the need to increase capital formation and get higher returns on investments, states are at liberty to spend up to 100 per cent of total outlay in the infrastructure and asset creation component.

The National Food Security Mission

5.38 The National Food Security Mission (NFSM) is being implemented with the new target of additional production of 25 million tonnes of foodgrains comprising 10 million tonnes rice, 8 million tonnes wheat, 4 million tonnes pulses, and 3 million tonnes coarse cereals by the end of the Twelfth Five Year Plan (2016-17). The revamped NFSM is being implemented from 2014-15 in 619 districts of 28 states. In addition to rice, wheat and pulses, crops like coarse cereals and commercial crops (sugarcane, cotton, and jute) have been included since 2014-15. Promotion of farmer producer organizations (FPOs), value addition, dal mill, and assistance for custom hiring charges have also been undertaken under the Mission. The pulses component has been allocated fifty per cent of total funds under the NFSM in order to increase their production. To promote the use of bio-fertilizers, subsidy on bio-fertilizer has also been enhanced from ₹ 100 per ha to ₹ 300 per ha.

Mission for Integrated Development of Horticulture (MIDH)

5.39 With effect from 2014-15, the Mission for Integrated Development of Horticulture (MIDH) has been operationalized by bringing all ongoing schemes on horticulture under a single umbrella. Production and distribution of quality planting material, productivity improvement measures through protected cultivation, use of micro-

irrigation, adoption of integrated pest management and integrated nutrient management along with creation of infrastructure for post-harvest management and marketing are focus areas of the MIDH.

SUSTAINABILITY AND ADAPTABILITY

5.40 Concerns have been raised for quite some time about non-sustainability of the present cropping pattern and use of water resources. The following initiatives announced in Budget 2014-15 have brought the issue of sustainability and climate adaptation to the forefront:

- **The Pradhan Mantri Krishi Sinchayee Yojana** with allocation of ₹ 1000 crore.
- **Neeranchal**, a new programme with an initial outlay of ₹ 2142 crore in 2014 to give additional impetus to watershed development in the country,
- **The National Adaptation Fund for Climate Change**, with an initial sum of ₹ 100 crore, and
- A scheme to provide, in mission mode, **a soil health card to every farmer**, with an allocation of ₹ 100 crore. An additional amount of ₹ 56 crore has been allocated to set up 100 mobile soil-testing laboratories across the country.

ALLIED SECTORS: ANIMAL HUSBANDRY, DAIRYING, AND FISHERIES

5.41 Indian agricultural system is predominantly a mixed crop-livestock farming system, with the livestock segment supplementing farm incomes by providing employment, draught animals, and manure. India ranks first in milk production, accounting for 17 per cent of world production. During 2013-14, milk production peaked at 137.69 MT, thus becoming an important secondary source of income for 70 million rural households engaged in dairying. The average year-on-year growth rate of milk, at 4.18 per cent vis-à-vis the world average of 2.2 per cent, shows sustained growth in availability of milk and milk products for the growing population.

5.42 In the poultry segment, the government’s focus, besides framing suitable policies for enhancing commercial poultry production, is on strengthening the family poultry system, which addresses livelihood issues. Egg production was around 73.89 billion in 2013-14, while poultry meat production was estimated at 2.68 MT.

5.43 Fisheries constitute about 1 per cent of the GDP of the country and 4.75 per cent of agriculture GDP. The total fish production during 2013-14 was 9.58 MT, an increase of 5.96 per cent over 2012-13. Fish production during the first two quarters of 2014-15 has also shown an increasing trend and is estimated at 4.37 MT (Provisional).

5.44 For sustainable and continuous growth of the livestock sector by emulating the success achieved in the dairy and poultry sectors, across species and regions, the National Livestock Mission has been launched in 2014-15 with an approved outlay of ₹ 2,800 crore during the Twelfth Plan. This Mission is formulated with the objective of sustainable development of the livestock sector, focusing on improving availability of quality feed and fodder, risk coverage, effective extension, improved flow of credit, and organization of livestock farmers / rearers. Given the high contribution of protein items in inflation,

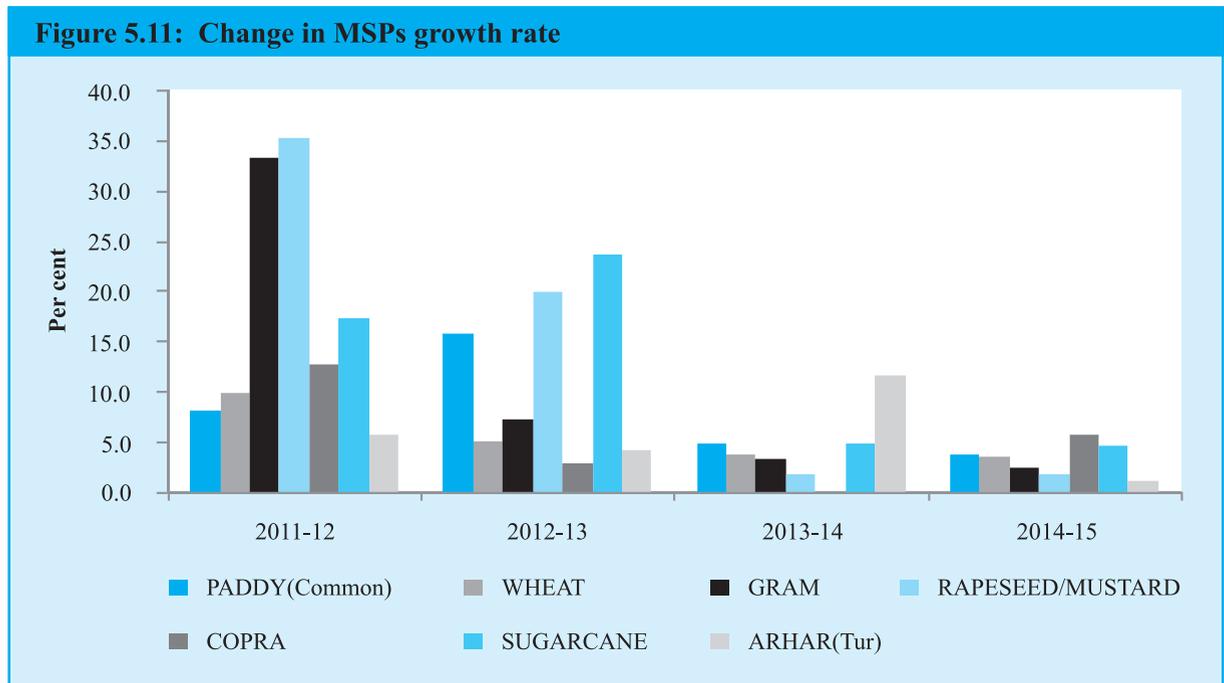
the growth rate of this sector has to match the rising demand reflected in increasing share of these items in consumption expenditure.

FOOD MANAGEMENT

5.45 The principal policy objective of food management is to ensure food security, particularly for the vulnerable, through timely and efficient procurement and distribution of foodgrains. This involves procurement of foodgrains from farmers at remunerative prices, building up and maintenance of buffer stocks, storage, movement, and distribution of foodgrains to consumers at affordable prices and stability of foodgrain prices. The price instruments used are MSP and central issue price (CIP).

Price Policy for Agricultural Produce

5.46 As mandated, the Commission for Agricultural Costs and Prices (CACP) recommends MSPs at national level for twenty-three crops, but effectively price support operates primarily in wheat and rice and that too in selected states. This creates incentive structures highly skewed in favour of wheat and rice. While the country is dependent on imports for pulses and oilseeds (edible oils), their prices often fall below the MSP as there is no effective price support.



Source: Commission for Agricultural Costs & Prices (CACP).

Since 2012-13, the growth of MSPs of various crops has been the moderate (Figure 5.11).

Procurement

5.47 To enhance efficiency of procurement and public distribution and to extend the benefits of MSP to local farmers, the Decentralized Procurement (DCP) scheme has been adopted by some state governments. The central government is urging all state governments to adopt the DCP scheme so that costs of distribution can be saved and outreach of price support mechanism to the farmers in hitherto weaker areas can be improved. To overcome the problem of gaps in the flow of information about procurement operations on day-to-day basis, an Online Procurement Monitoring System (OPMS) has been evolved for reporting and monitoring on a daily basis, procurement operations for wheat, paddy, and coarse grains in the country.

5.48 Two decisions that will impact procurement and stocks of rice and wheat from kharif marketing season (KMS) 2014-15 and rabi marketing season (RMS) 2015-16 are: (a) To limit procurement from states that are declaring bonus

over and above the MSP to the extent of targeted PDS (TPDS)/other welfare schemes (OWS) requirements (In the case of non-DCP states declaring bonus, the FCI will not take part in MSP operations in those states.) and (b) To cap the percentage of levy on rice at 25 per cent.

5.49 This decision has successfully led to dropping of the practice of giving bonus over and above MSP for paddy in states like Chhattisgarh and Madhya Pradesh in KMS 2014-15 and it is expected that the state governments of Madhya Pradesh and Rajasthan will avoid giving bonus for wheat also in RMS 2015-16 in view of this policy. The procurement levels in KMS 2014-15 are lower in both Chhattisgarh and Madhya Pradesh as compared to the previous year and there is re-emergence of competition in the market. Table 5.6 gives procurement, off-stake and stock figures from 2003.

Buffer Stocks

5.50 The buffer norms for foodgrains in the central pool which were in existence since April 2005 have been revised in the backdrop of increased off-take of foodgrains under the TPDS in the last few years and with the coming into force

Table 5.6 : Public Distribution System: Procurement, Off-Take, and Stocks

(million tonnes)

Year	Procurement			Off-take			Stocks		
	Rice	Wheat	Total	Rice	Wheat	Total	Rice	Wheat	Total
2003-04	22.9	15.8	38.7	25.0	24.3	49.3	13.1	6.9	20.7
2004-05	24.7	16.8	41.5	23.2	18.3	41.5	13.3	4.1	18.0
2005-06	27.6	14.8	42.4	25.1	17.2	42.3	13.7	2.0	16.6
2006-07	25.1	9.2	34.3	25.1	11.7	36.8	13.2	4.7	17.9
2007-08	28.7	11.1	39.9	25.2	12.2	37.4	13.8	5.8	19.8
2008-09	34.1	22.7	56.8	24.6	14.9	39.5	21.6	13.4	35.6
2009-10	32.0	25.4	57.4	27.4	22.4	49.7	26.7	16.1	43.3
2010-11	34.2	22.5	56.7	29.9	23.1	53.0	28.8	15.4	44.3
2011-12	35.0	28.3	63.4	32.1	24.2	56.3	33.4	20.0	53.4
2012-13	34.0	38.2	72.2	32.6	30.1	62.8	35.5	24.2	59.8
2013-14	31.3	25.1	56.4	29.2	28.2	57.4	30.6	17.8	49.5
2014-15*	16.2	28.0	44.2	4.5	3.8	8.3	23.5	37.3	61.6

Source : Ministry of Food, Consumer Affairs and Public Distribution, Government of India. Note: * as on 9.1.2015.

Table 5.7: Revision in Buffer Stock Norms (in million tonnes)

As on	Existing since April 2005	Revised
1 April	21.2	21.04
1 July	31.9	41.12
1 Oct.	21.2	30.77
1 Jan.	25.0	21.41

of the NFSA with effect from 5 July 2013. The revised buffer norms are shown in Table 5.7.

5.51 As against the buffer stock norm of 21.41 million tonnes of rice and wheat (as on 1 January of each year), total central pool stocks were 61.6 million tonnes as on 1 January 2015. Considering that the economic cost to the FCI for acquiring, storing, and distributing foodgrains is about 40-50 per cent more than the procurement price, the locked in extra stocks, particularly for the last five years in a row, reflect flaws in the food policy. This has also resulted in high cereal inflation despite bumper produce and overflowing stocks.

Economic Cost of Foodgrains to the FCI

5.52 The economic cost of foodgrains consists of three components, namely the MSP including central bonus, if applicable, as the price paid to farmers, procurement incidentals, and the cost of distribution. The economic cost for both wheat and rice witnessed significant increase during the last few years due to increase in MSPs and proportionate increase in incidentals as well as other costs as depicted in Table 5.8.

5.53 High economic cost necessitated a detailed review of the open-ended procurement policy, especially in states that offer high bonus on top of MSP and those that impose high taxes and statutory levies, as well as stocking and distribution policies. In this regard, the government set up a High Level Committee (HLC) in August 2014 under the chairmanship of Shri Shanta Kumar to suggest inter-alia restructuring or unbundling of the FCI with a view to improving its operational efficiency and financial management. The gist of its main recommendations is given in Box 5.2.

Open Market Sale Scheme (Domestic)

5.54 The FCI on behalf of the government has been undertaking sale of wheat at predetermined prices/reserve prices in the open market from time to time to enhance market supply of foodgrains; to exercise a moderating influence on open market prices and to offload surplus stocks. Under the Open Market Sale Scheme (Domestic), during the year 2014-15, 100 lakh tonnes of wheat has been allocated for sale in the domestic market. Deviating from the earlier practice, this year the government has adopted a policy of differential prices to encourage sale of older stock first. The government is consciously keeping the reserve price above MSP, but reasonably below the acquisition cost or economic cost of wheat, so that the buyers remain attracted to purchase of wheat from the mandis during the harvest season and the market remains competitive. At the same time the market price in the lean season does not increase much and inflation remains under check.

Table 5.8 : Economic Cost of Rice and Wheat

(₹/quintals)

Year	2010-11	2011-12	2012-13	2013-14(Prov.)	2014-15 (RE)
Rice					
Pooled cost of food grains	1446.53	1512.20	1633.83	1788.96	1925.52
Procurement incidentals	313.09	350.00	383.76	435.13	462.13
Distribution cost	223.49	260.74	287.28	374.26	430.26
Economic cost	1983.11	2122.94	2304.87	2598.35	2817.91
Wheat					
Pooled cost of food grains	1064.32	1119.18	1219.41	1273.57	1346.64
Procurement incidentals	212.38	235.68	263.35	331.81	339.00
Distribution cost	217.65	240.39	269.81	326.87	361.92
Economic cost	1494.35	1595.25	1752.57	1932.25	2047.56

Box 5.2 : Recommendations of High Level Committee on restructuring FCI**On procurement related issues:**

- The FCI should hand over all procurement operations of wheat, paddy, and rice to states that have gained sufficient experience in this regard and have created reasonable infrastructure for procurement. The FCI will accept only the surplus (after deducting the needs of the states under the NFSA) from these state governments (not millers) to be moved to deficit states. The FCI should move on helping those states where farmers suffer from distress sales at prices much below MSP, and which are dominated by small holdings.
- Centre should make it clear to states that in case of any bonus being given by them on top of MSP, it will not accept grains under the central pool beyond the quantity needed by the state for its own PDS and OWS.
- The statutory levies including commissions need to be brought down uniformly to 3 per cent, or at most 4 per cent of MSP, and this should be included in the MSP itself (states losing revenue due to this rationalization of levies can be compensated through a diversification package for the next three-five years);
- The Government of India must provide better price support operations for pulses and oilseeds and dovetail their MSP policy with trade policy so that their landed costs are not below their MSP.
- Cash transfers in PDS should be gradually introduced, starting with large cities with more than 1 million population; extending it to grain surplus states; and then giving deficit states for the option of cash or physical grain distribution.

On PDS- and NFSA-related issues:

- Given that leakages in the PDS range from 40 to 50 per cent, the GoI should defer implementation of the NFSA in states that have not done end to end computerization; have not put the list of beneficiaries online for anyone to verify; and have not set up vigilance committees to check pilferage from PDS.
- Coverage of population should be brought down to around 40 percent.
- BPL families and some even above that they be given 7kg/person.
- On central issue prices, while Antyodaya households can be given grains at ₹ 3/2/1/kg for the time being, but pricing for priority households must be linked to MSP.

On stocking and movement related issues:

- FCI should outsource its stocking operations to various agencies.
- Covered and plinth (CAP) storage should be gradually phased out with no grain stocks remaining in CAP for more than 3 months.
- Silo bag technology and conventional storages wherever possible should replace CAP.

On Buffer Stocking Operations and Liquidation Policy:

- DFPD/FCI have to work in tandem to liquidate stocks in OMSS or in export markets, whenever stocks go beyond the buffer stock norms. A transparent liquidation policy is the need of hour, which should automatically kick-in when FCI is faced with surplus stocks than buffer norms.
- Greater flexibility to FCI with business orientation to operate in OMSS and export markets is needed.

On direct subsidy to farmers: Farmers be given direct cash subsidy (of about Rs 7000/ha) and fertilizer sector can then be deregulated.

On end to end computerization:

- The HLC recommends total end-to-end computerization of the entire food management system, starting from procurement from farmers, to stocking, movement, and finally distribution through the TPDS.

On the new face of the FCI:

- The new face of the FCI will be akin to an agency for innovations in the food management system with the primary focus of creating competition in every segment of the foodgrain supply chain, from procurement to stocking to movement and finally distribution under the TPDS, so that overall costs of the system are substantially reduced and leakages plugged and it serves a larger number of farmers and consumers.

Higher procurements have lead to stocks exceeding the buffer norms, which FCI is forced to carry over to the next year.

Food Subsidy

5.55 Provision of minimum nutritional support to the poor through subsidized foodgrains and ensuring price stability in different states are the twin objectives of the food security system. In fulfilling its obligation towards distributive justice, the government incurs food subsidy. The programme covers over 65 million BPL households serviced through 4, 50,000 fair price shops. While the economic cost of wheat and rice has continuously gone up, the issue price has been kept unchanged since 1 July 2002. On account of implementation of the NFSA, the CIP has further gone down for the APL and BPL categories. The government, therefore, continues to provide large and growing amounts of subsidy on foodgrains for distribution under the TPDS/NFSA and other nutrition-based welfare schemes and open market operations. The food subsidy bill has increased substantially in the past few years putting severe strain on the public exchequer (**Table 5.9**).

Storage

5.56 The total capacity available for storage of foodgrains as on 30 November 2014 was 727

lakh MT, comprising covered godowns of 567 lakh MT capacity and cover and plinth (CAP) facilities of 160 lakh MT capacity. The existing warehousing facility is limited not only in terms of capacity but also to certain crops. The stockholding capacity has not kept pace with the increase in production and demand for a long time. Considering that 160 lakh MT capacity is only CAP, which cannot be treated as scientific storage, public agencies do not have warehouses for proper storage of even half of the wheat and rice procured by them. In the wake of persistent seasonal inflation in perishables like fruits and vegetables, there was no effective strategy to control the inflation on a sustainable basis. Cold storage capacity for all type of food items is just 29 MT (Planning Commission 2012). The production of potato alone is about 35 MT. Cold storage facility is available for only 10 per cent of fruits and vegetables produced in India (Planning Commission 2011). The allocation of ₹ 5000 crore for developing scientific warehousing in Budget 2014 can create additional storage capacity of 16 MT. Policies to promote private investment in scientific storage are important to bridge the gap between the requirement and availability of scientific storage capacity.

AGRI-MARKETING REFORMS

5.57 Box 5.3 gives recent initiatives in agri-marketing. Recognizing the need for setting up a national market the 2014-15 Budget stated that the central government would work closely with state governments to reorient their respective APMC Acts to provide for establishment of private market yards/private markets. The Budget also announced that the state governments would also be encouraged to develop farmers markets in town areas to enable them to sell their produce directly.

COMMODITY FUTURES MARKET

5.58 Currently 43 of the 113 commodities that are notified for futures trading are actively traded in 4 national exchanges and 6 commodity-specific exchanges. Share of agricultural commodities in the total turnover was 18.37 per cent in 2014-15

Table 5.9 : Quantum of Food Subsidies Released

Year	Food subsidy (₹ in crore)	Annual growth (%age)
2005-06	23071.00	-10.39
2006-07	23827.59	3.28
2007-08	31259.68	31.19
2008-09	43668.08	39.69
2009-10	58242.45	33.37
2010-11	62929.56	8.05
2011-12	72370.90	15.00
2012-13	84554.00	16.83
2013-14	89740.02	6.13
2014-15	107823.75*	20.15

Source : Department of Food and Public Distribution.

Note : * Figures up to 9 January 2015.

Box 5.3 : Recent Initiatives in Agricultural Marketing

- (i) The Department of Agriculture (DAC) has issued a comprehensive advisory to states to go beyond the provisions of the Model Act and declare the entire state a single market with one licence valid across the entire state and removing all restrictions on movement of agricultural produce within the state.
- (ii) In order to promote development of a common national market for agricultural commodities through e-platforms, the department has approved ₹ 200 crore for a central-sector scheme for Promotion of National Agricultural Market through Agri-Tech Infrastructure Fund (ATIF) to be implemented during 2014-15 to 2016-17. Under the scheme, it is proposed to utilize the ATIF for migrating towards a national market through implementation of a common e- platform for agri-marketing across all states.
- (iii) On the request of the central government, a number of state governments have exempted the marketing of fruits and vegetables from the purview of the APMC Act. The NCT of Delhi has taken the initiative in this direction by issuing a notification on 2 September 2014, ending the regulation of fruits and vegetables outside redefined market yard/ sub-yard area of the APMC, MNI, Azadpur, APMC, Keshopur, and APMC Shahdara. The Small Farmers Agribusiness Consortium (SFAC) has taken the initiative for developing a kisan mandi in Delhi with a view to providing a platform to FPOs for direct sale of their produce to prospective buyers totally obviating or reducing unnecessary layers of intermediation in the process. They plan to scale their activities in other states based on the outcome of the experience of the Delhi kisan mandi.

Source : DAC.

(up to December 2014), with food items (refined soya oil, soyabean, chana, coriander and rapeseed/ mustard seed) contributing 50.01 per cent of it. The remaining (81.63 per cent) turnover was contributed by bullion, metals, and energy contracts. A committee set up by the Ministry of Finance, which submitted its report in April 2014 has observed that hedging efficiency of the commodity futures markets is low. In order to ensure that forward markets in commodities are well regulated and the Indian commodity futures market is compliant with international regulatory

requirements, the regulatory framework for the commodity futures market needs to be strengthened at the earliest.

TRADE POLICY

5.59 Trade Policy in respect of agricultural commodities is changed from time to time in response to domestic availability and price situation. The basic customs duty (BCD) in some agri-products was reduced / removed to encourage domestic manufacture of value added products, generate employment, and make exports competitive. To combat undervaluation and protect the interests of domestic farmers and industry, the BCD of some agri-products like sugar and edible oils was raised. The duty on sugar was increased from 15 per cent to 25 per cent vide Customs Notification dated 21 August 2014 and duty on import of crude and refined edible oils raised from 2.5 per cent to 7.5 per cent and 10 per cent to 15 per cent respectively, vide custom notification dated 24 December 2014.

5.60 There is an increasing demand for opening up of the export of pulses which would incentivize farmers to invest in pulse cultivation and for a reasonable duty structure to be devised to contain excessive import. Further, a pre-announced import duty structure will bring stability in domestic edible oil prices leading to increase in production of oil seed/palm. This will also result in reduced incidence of prices falling below MSPs of oilseeds requiring procurements by government agencies.

5.61 The following policy changes were made in recent years to benefit farmers and to incentivize the development of the agro-processing sector and enhance farm productivity:

- export of edible oils in branded consumer packs of up to 5 kg was permitted with an MEP of US\$ 1100 per MT vide Director General of Foreign Trade's notification dated 30 April 2014.
- export of kabuli chana and 10,000 MT of organic pulses per annum has been allowed.

- since 2011, exports of rice and wheat have been permitted.
- since February 2013 processed and/or value-added agricultural products have been exempted from export restrictions /bans even if their base produce is subject to an export ban.
- free export of cotton is permitted.

5.62 The import policy for agriculture is often considered as a price support and price stabilization tool. Increase in tariffs is recommended for agricultural products in response to decline in prices on an ad hoc basis. Reform is required in the import policy of agricultural products. The applied tariffs for imports should be linked in a countercyclical manner with international prices so that the landed prices of imported commodities fall within a known range. This would protect farmers from adverse impact of steep fall in commodity prices and facilitate long-term investment in agriculture. While the trade policy regime should be stable, it should also be nimble to quickly respond to the changed export duty structure of the exporting countries aimed at pushing value-added products by neutralizing our duty differential between raw material and finished product.

AGRICULTURE TRADE

5.63 India has emerged as a significant agri-exporter in a few crops, viz. cotton, rice, meat, oil meals, pepper, and sugar. As per the World Trade Organization's Trade Statistics, the shares of India's agricultural exports and imports in world trade in 2013-14 were 2.69 per cent and 1.31 per cent respectively. Agricultural exports as a percentage of agricultural GDP have increased from 9.10 per cent in 2008-09 to 14.05 per cent in 2013-14. During the same period, agricultural imports as a percentage of agricultural GDP also increased from 3.94 per cent to 5.50 per cent.

OUTLOOK AND CHALLENGES AHEAD

5.64 The inflation is not expected to rise significantly from the current levels, since:

- a) The oil prices are expected to remain benign in the coming months on account of weak global demand and increased supplies.
- b) Global commodity prices, both spot and futures have generally been declining. Global commodity prices are expected to remain weak in 2015 due to low international demand and comfortable supply.
- c) Factors like high rural wages, higher level of MSP, and rise in input cost have been instrumental for elevated inflation in the last few years. At present, growth of all these drivers have been slowed down considerably and this could result in keeping food inflation within limits.

5.65 Agriculture and Food sector needs huge investment in research, education, extension, irrigation, fertilizers, and laboratories to test soil, water and commodities, warehousing, cold-storage. Rationalisation of subsidies and better targeting of beneficiaries would generate part of the resources for public investment. There are wide differences in the yields within states. Even the best of the states have much lower yield in different crops when compared to the best in the world. This provides ample opportunity to increase production by bridging the yield-gap to the extent feasible within the climatic zone.

5.66 The focus of public expenditure for agriculture so far has been on provision of subsidies (public expenditure in agriculture is only one-fourth of expenditure towards food and fertilizer subsidies, CACP Kharif report 2014-15) and it is time it shifted towards investments to boost productivity. Recommendations of Shanta Kumar Committee provide useful suggestions for the future road-map of food-policy. Every effort should be made to bring states on board for creating national common market for agricultural commodities.