

# Agricultural Outlook and Situation Analysis Reports

## Quarterly Agricultural Outlook Report January-March 2014

Under the Project Commissioned by  
The National Food Security Mission  
Ministry of Agriculture

July, 2014



*Prepared by*

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## About the Project

The need for monitoring and analysis of emerging food scenarios is important for India both because of significant dependence of output on the monsoon rains and the fact that globally India is one of the major consumers of food crops influencing markets. Management of agriculture from a public policy perspective requires organisation of this information and analysis as inputs to policy making.

Against this backdrop the National Food Security Mission (NFSM), Ministry of Agriculture, commissioned a 3–Year study to National Council of Applied Economic Research (NCAER) in 2011–12 to bridge this important gap in analytical inputs for understanding the emerging agricultural scenarios both in the short-term of one or two quarters and also in the medium to longer term.

Accordingly, the agricultural outlook and situation analysis undertaken in this study refers to the main crop based food items: cereals (specifically rice, wheat, jowar, bajra, maize and overall coarse grains), pulses (gram, tur), selected fruits and vegetables (banana, potato, onion), sugarcane and edible oils (groundnut, rapeseed/ mustard, soybean). In addition the analysis also covers milk, one livestock product.

The three main outputs of the proposed work are:

1. A Quarterly Agricultural Outlook Report that integrates the assessment of key indicators relating to agriculture with a focus on food sectors. The reports will include assessment of the current situation on inputs, output and market conditions and also forecasts of key indicators for the full year based on models developed for the purpose.
2. A Semi-annual Agricultural Outlook Report which provides a longer term perspective for the food sector. These reports will present an analysis of alternative scenarios of output and consumption for the food crops taking into account the available information and based on the suitable economic models that permit longer term projections.
3. Monthly briefings on the prevailing agricultural conditions

## Implementation

NCAER has set up a study team to carry out the study.

An advisory committee has been formed to provide broad guidance to the implementation of the study. The Committee comprises of Dr Shekhar Shah, DG, NCAER as Chair, Dr Ashok Gulati, Chairman, Commission on Agricultural Costs and Prices, Prof. Ramesh Chand, Director, National Centre for Agricultural Policy (NCAP), New Delhi and Prof. Mahendra Dev, Director, Indira Gandhi Institute for Development Research (IGIDR), Mumbai. Representative from FAO and DFID are Special Invitees to the Committee meetings.

A Technical Support Group comprising of key officers from different departments of the government and experts has also been formed to interact with the study team to improve the work under the study.

## Preface

Significant fluctuations in monsoon rainfall continue to have a huge impact on Indian agriculture and its economy. In 2014, India already faces a deficit of over 40 per cent of normal rainfall for June, adversely affecting sowing operations in the *kharif* season. Rainfall deficiency is widespread across the country. While some of the losses in production may be offset by the second crop in winter, the growth rate of agriculture GDP is likely to be well below the 4.6 per cent achieved in 2013-14. Agriculture's strong performance in 2013-14 had helped support overall economic growth in 2013-14 as industrial output stagnated for the second year in a row.

The importance of a good agricultural harvest goes beyond its contribution to overall economic growth. Ensuring adequate supplies of food commodities is important for a large country like ours as sudden changes in demand leading to imports can have adverse price impacts. A modest harvest may raise food prices as the economy is just recovering from a period of persistently high food inflation. As this report points out, while food commodity prices are showing a tendency to rise, the overall increase in food inflation- the combination of food prices and food products in the WPI basket- is expected to be in the range of 3-4 per cent mainly because of the relatively high prices of the previous year. The delayed monsoon will worsen the risks of higher inflation.

Our review of global supply conditions for food commodities indicate the availability of adequate supplies, although the price of palm oil may be affected by the impact of the El Nino factor on palm oil crops in Malaysia and Indonesia.

This will be a year of challenge for farmers, the food industry and policy makers watching developments on the supply side of food chains. I hope that NCAER's quarterly reports will be useful in assessing the situation.

These NCAER Quarterly Outlook Reports have been prepared with the support of a grant from the Ministry of Agriculture. The study team at NCAER has made all efforts to pull together the available information to provide a comprehensive assessment of the short-term prospects for the food sector. The report also presents independent assessment of *kharif* season crop output and short term prices. The report reflects contributions by Shashanka Bhide (project leader), A. Govindan, V.P. Ahuja, Laxmi Joshi, Charu Jain and Himani Gupta at NCAER. We are grateful to the National Food Security Mission, Agriculture Ministry, for their support.

Shekhar Shah  
Director General

New Delhi  
July 2014



**ASHISH BAHUGUNA  
SECRETARY**



भारत सरकार  
कृषि मंत्रालय  
कृषि एवं सहकारिता विभाग  
Government of India  
Ministry of Agriculture  
Department of Agriculture & Cooperation

## **FOREWORD**

After a record harvest of foodgrains in 2013-14 aided by favourable monsoons, we have now encountered a sub-normal monsoon year. The scientific tools and methods available today gave warning of the likelihood of a weak monsoon, well in advance of the commencement of the new agricultural year. While the impact of a significant deficiency in rainfall during the current crop season cannot be completely avoided, there are varieties and agronomic practices that moderate the impact of late and below normal rainfall. Traditionally, farmers have also switched from one crop to others requiring less water when rains are delayed or fall short of normal. Nonetheless, sub-normal rainfall is a challenge to our economy, and more specifically to our farmers.

The overall setting for the current year has been positive in many respects, as the domestic and global economies are beginning to revive the growth momentum. The global stocks of food commodities have improved. In India, the total stock of rice and wheat with the government exceeded 65 million tones as on June 1, 2014, which is more than adequate to ensure comfortable grain supplies. This scenario, combined with adequate global supplies of commodities we typically import, will help moderate food price pressures.

The periodic review of food production, prices and international environment is valuable under such circumstances. The present quarterly report provides an assessment of the economy of the food sector, both domestic as well as global. The report highlights the challenges before us in ensuring adequate response to the growing conditions in the current kharif season. The report also points to the potential for offsetting the adverse impact in kharif with an improved performance in rabi.

It is hoped that the quarterly Agricultural Outlook Report (January-March, 2014) will turn out to be valuable to the various stakeholders in the sector.

New Delhi  
July 24, 2014

(Ashish Bahuguna)



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## Highlights

The nature of monsoon in terms of amount of rainfall received during the months of June-September and distribution of rainfall across regions of the country and over the four month period remains the most important determinant of annual agricultural harvest in the country. The expansion in irrigation coverage, development of high yielding varieties, increased use of fertiliser and other technological improvements have increased productivity of farm land but monsoon rains replenish irrigation water sources and where rainfall is the only source of water for cultivation, inadequate monsoon rains may also mean much lower planted area than normally possible. The monsoon rainfall during 2014 was predicted to be below the long period average (LPA). The extent of likely shortfall widened as more data became available to the weather forecasters. While June rainfall has turned out to be about 40 per cent below LPA, the overall deficit for the season is now projected at 7 per cent below LPA.

Region wise, the season rainfall is likely to be 85% of LPA over North-West India, 94% of LPA over Central India, 93% of LPA over South Peninsula and 99% of LPA over North-East India all with a model error of  $\pm 8\%$ . The monthly rainfall over the country as whole is likely to be 93% of its LPA during July and 96% of LPA during August both with a model error of  $\pm 9\%$ .

While the overall economy is poised to show improved performance in 2014-15, agricultural sector's growth is unlikely to be driving growth as it did in 2013-14.

The official expectation of overall GDP growth in 2014-15 is 5.4 per cent over the previous year. This exceeds the 4.7 per cent growth in 2013-14 and below 5 per cent growth in 2012-13 raising the potential recovery to higher growth rates in the medium term. The IMF and the World Bank have projected a growth rate of 5.4 per cent in 2014 and 5.7 per cent in 2014-15, respectively. The global demand conditions, dependent on adequate supply response, are also projected to improve in 2014 and 2015.

The kharif or summer season crop output, which accounts for about half of the foodgrains, is dependent on how the monsoon fares. Among the oilseeds, groundnut, soybean and sesamum are major kharif season commodities whose production prospects are affected. Although sugarcane is an irrigated crop, its planting would be affected by inadequate rainfall as even irrigation water resources are recharged by rains. For an economy seeking respite from high rate of food inflation, minimising the adverse impact of sub-normal rainfall conditions on food availability and prices is the key challenge in the short term.

Thus, the world supplies of major food commodities are expected to remain adequate to meet the requirements at the aggregate level. The supply-demand balances suggest that year-end stocks are likely to rise or remain unchanged in the case of wheat, maize, soybean, soy oil and sugar. They are projected to decline slightly in the case of rice.

Early assessment by some major international agencies points to a somewhat lower wheat production in the year 2014-15 with forecasts ranging from 697 to 702 million tonnes, 12 to 14 million tonnes down from the 2013-14 estimates, mainly due to more normal average yields after the very high levels of the previous year.

The first FAO forecast indicates that world rice production in 2014 could rise by a modest 0.8 per cent to 500.7 million tonnes (milled basis), as growth is likely to be dampened by falling world prices besides fears of a recurring El Niño event.

World production of coarse grains is forecast to fall marginally in 2014–15 reflecting an expected decline in planted area as producers respond to forecast falls in coarse grains prices, especially corn. Additionally, yields are assumed to fall from the above average yields achieved in many countries in 2013–14.

World oilseeds production is expected to remain more or less unchanged in 2014-15. World production of soybeans is forecast to rise with production rising in the three major producing countries, the United States, Brazil and Argentina. Palm oil production, however, may be adversely affected by the drought conditions in Malaysia and Indonesia early in 2014 and the El Niño weather pattern in the coming months.

In the case of pulses, although area sown is expected to increase in the major exporting countries, yields are expected to be lower. However, adequate carry-over stocks imply that supply will not be adversely affected.

World production of sugar and milk are projected to increase in 2014-15.

The price outlook for food commodities in 2014-15 is generally seen to be bearish, although in recent months, there has been some strengthening of prices of cereals and vegetable oils.

Overall, the current global agricultural outlook scenario is one of caution for India, a major exporter of rice, wheat, maize, and oil meal and importer of vegetable oils and pulses, especially in the context of concerns over the projected sub-normal rainfall and the El Niño factor.

Projections based on a 7 per cent below normal rainfall provide following assessment of India's output food commodities for kharif 2014-15 (all in million tonnes with the 3<sup>rd</sup> Advance Estimates for 2013-14 in parentheses in the case of foodgrains, oilseeds and sugarcane, and latest available estimates for other commodities):

Rice: 87.9-88.8 (92.0)  
Maize: 15.6-15.9 (17.5)  
Other coarse grains: 10.5 – 12.9 (13.8)  
Pulses: 5.9-6.0 (6.1)  
Groundnut: 4.0-5.6 (7.7)  
Soybean: 11.8-14.0 (12.0)  
Sugarcane: 341.9-345.9 (348.4)  
Potato (Total): 47.4 (46.4)  
Onion: 19.0 (19.3)  
Banana: 29.1 (27.6)  
Milk: 145.3 (139.7)

The projections indicate decline in kharif production for rice and maize, the two key cereals in the season, groundnut and soybean, sugarcane and onion. The extent of decline varies and would also depend on the actual conditions through the monsoon period.

The late season rains and rains in the post monsoon period would help in improving rabi season prospects. In the short run, implementation of contingency plans focusing on the supply of appropriate varieties of crops that can be planted late and have short duration and conserving moisture would help in maximising output from a rain deficient season.



## Acknowledgements and Study Team

The study team wishes to acknowledge the support and assistance received from a number of organisations and individuals. Mr. Ashish Bahuguna, Secretary, Department of Agriculture and Cooperation has provided encouragement and support for the work throughout the course of the study. He presided over numerous monthly briefings over the last two and a half years, which provided insights on various factors affecting outlook for the food sector. A number of officials from the Ministry and DES have provided data, opportunities for interaction and guidance in the course of the study. Mr. Sanjay Lohiya, Joint Secretary (Crops) has provided guidance on the course of the study. Officials in the National Food Security Mission and Directorate of Economics and Statistics, Ministry of Agriculture, have encouraged us in our work providing feedback and data whenever requested.

Prof. Ramesh Chand (NCAP), Prof. Mahendra Dev (IGIDR), Dr. Ashok Gulati (CACP) and Dr. Shekhar Shah (NCAER) have provided guidance as members of the Advisory Committee and Dr. Peter Kenmore (FAO) as Special Invitee to the Advisory Committee meetings. The Technical Support Group (TSG) set up for the study has included a number of officials and also other experts.

Reports of USDA, FAO and Department of Agriculture and Cooperation have been major sources of data and information for the report. We have used information and data from a number of other sources also. We have noted the specific references used for our assessment of outlook in the report.

A number of experts made presentations in the monthly briefings. We acknowledge their support as they shared their experience and knowledge on different aspects of assessment of agricultural outlook.

### **Study Team for the present report:**

Shashanka Bhide (Project Leader), A. Govindan, Laxmi Joshi, V.P. Ahuja, Charu Jain, Himani Gupta and Praveen Sachdeva.



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## Part I: Overview of the Domestic Agricultural Outlook

### Expectations of improved overall economic growth in 2014-15

Advance Estimate of National Income (revised) by the Central Statistical Office on May 30, 2014, estimates GDP growth in real terms at 4.7%, a modest increase over the 4.5% in 2012-13, bolstered by a significant growth in the agriculture and allied sector and some strengthening of activity in services. Agriculture, forestry and fishing sector registered 4.7% growth rate a dramatic improvement over the 2012-13 growth rate of 1.4%, thanks to favourable monsoon rains in 2013 (Figure I.1).

The IMF in its latest edition of the World Economic Outlook released in early April 2014 has forecast a higher growth rate of 5.4% for India in 2014 compared to 4.4% in 2013, supported by slightly stronger global growth, improving export competitiveness and implementation of recently approved investment projects. The World Bank projected an economic growth rate of 4.8% in fiscal year 2013-14 and 5.7% in 2014-15 for India on the back of a more competitive exchange rate and many large investments going forward.

### Agriculture bolsters overall performance of the economy in 2013-14

A favourable monsoon period, June-September, rains in 2013 resulted in higher production of most cereal grains, pulses, and oilseeds (with the exception of soybeans), cotton, and sugarcane (Figure I.2). This combined with estimated higher production of fruits and vegetables, livestock products (primarily milk), and forestry and fisheries has resulted in an overall agricultural and allied sector GDP growth rate estimate of 4.0% in Q1 and 5.0 percent in Q2 FY 2013-14 by the Central Statistical Office compared to 1.8 percent growth in Q1 and Q2 of FY 2012-13. Although, agricultural growth rate slowed to 3.7% in Q3, a significant increase in the rabi season wheat, rice, and pulse crops over the previous year bolstered Q4 agricultural growth rate to 6.3%, taking overall agricultural GDP growth rate in 2013-14 to the CSO's advance estimate of 4.7% compared to 1.4% in 2012-13.

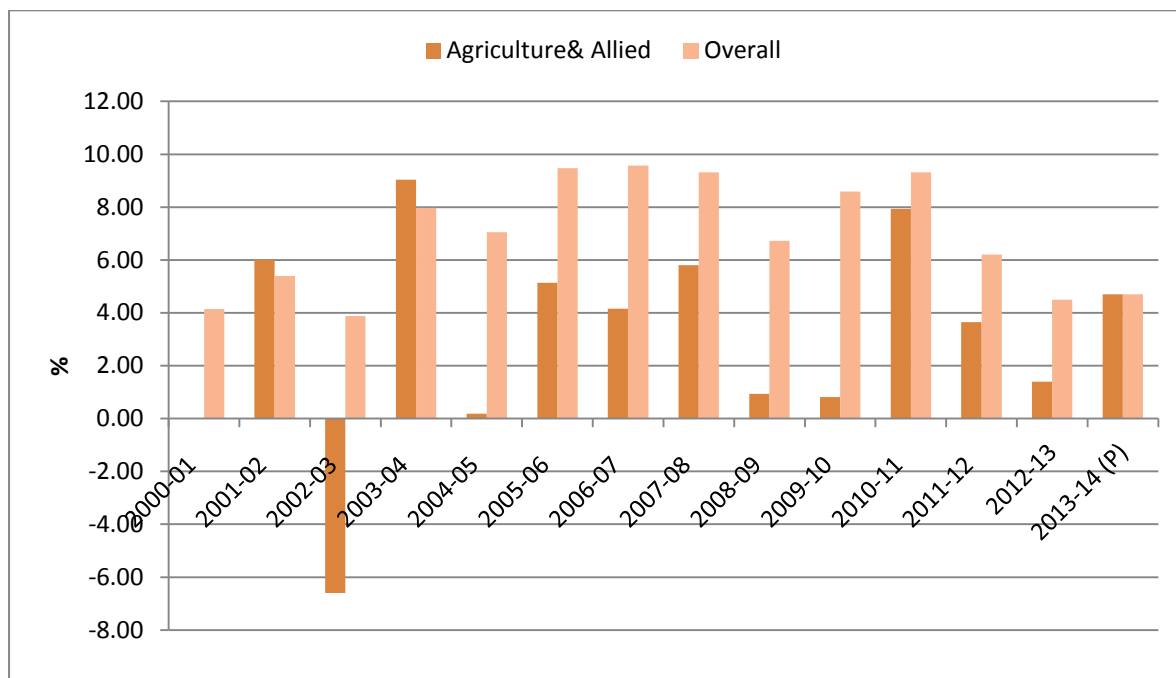
*An analysis of rainfall data and El Nino incidents over the past two decades shows that all El Nino years were not poor monsoon rainfall years and all poor monsoon rainfall years were not El Nino years*

### El Nino effect looms over 2014-15 agricultural outlook

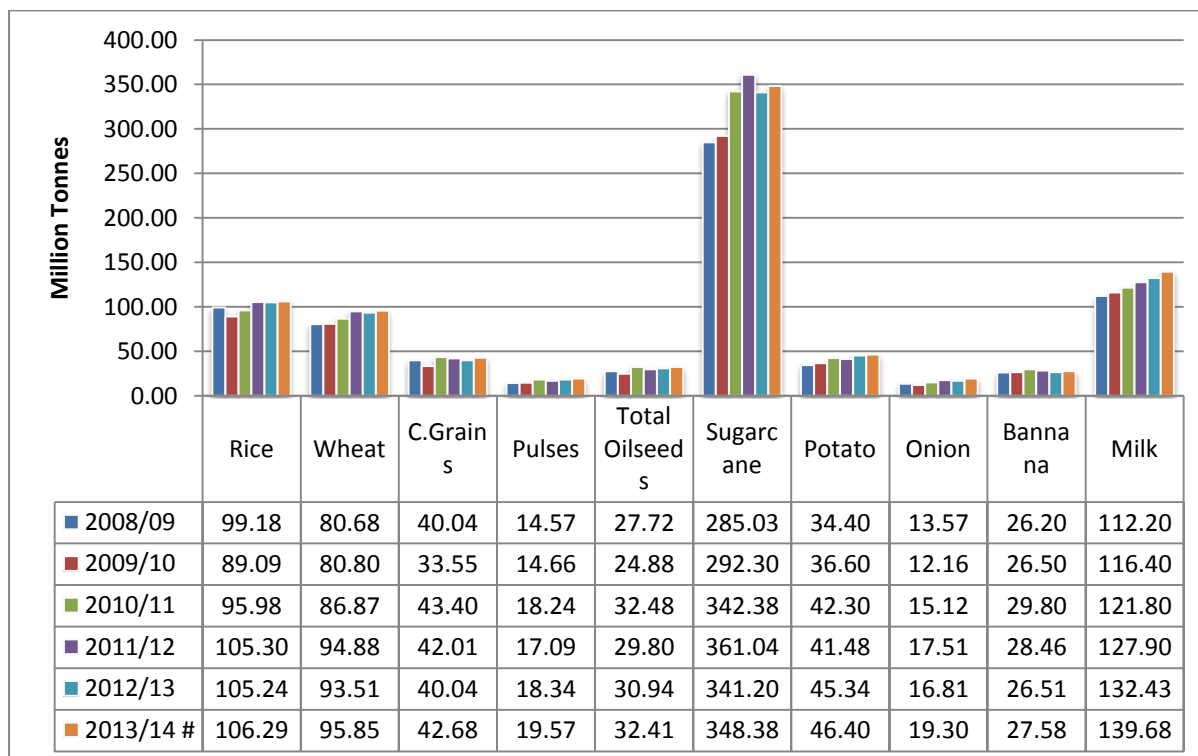
Most weather forecasting agencies predict a high probability of El Nino weather pattern developing this year. According to the Australian Bureau of Meteorology, the chance of an El Nino weather pattern developing over the Pacific Ocean as early as July exceeds 70%. El Nino results from the abnormal warming of ocean temperature and causes abnormal weather conditions around the world. In India, El Nino has been historically associated with poor rainfall and droughts. However, an analysis of rainfall data and El Nino incidents over the past two decades shows that all El Nino years were not poor monsoon rainfall years and all poor monsoon rainfall years were not El Nino years (Table I.1). For example in 1997 and 2006, which were El Nino years, monsoon season rainfall was normal or above normal, whereas 2000, 2001, and 2012, which were El Nino-free years, experienced significantly

below normal monsoon rains. The year 2009-10 saw the lowest monsoon rainfall in the recent two decades, was a ‘moderate El Nino year’. Therefore, there are other factors, besides El Nino, impacting monsoon performance.

**Figure I.1: GDP Growth – Agriculture& Allied vs. Overall**



**Figure I.2: Agricultural Production Trends**



# 3<sup>rd</sup> Advance Estimate for rice, wheat, coarse grains, pulses, oilseeds and sugar cane;

2<sup>nd</sup> Advance estimate for potato and onion; anticipated production for milk

The Indian Meteorological Department's (IMD) early season forecast for this year's monsoon is that rainfall is likely to be 95% of the long-period (50-year) average (LPA), which means below normal rainfall this monsoon season. The updated forecast of June 9 has further downgraded the monsoon outlook. Accordingly, rainfall over the country as a whole for the 2014 southwest monsoon season (June to September) is likely to be below normal (90-96% of LPA).

Quantitatively, monsoon season rainfall for the country as a whole is likely to be 93% of the long period average with a model error of  $\pm 4\%$ . Region wise, the season rainfall is likely to be 85% of LPA over North-West India, 94% of LPA over Central India, 93% of LPA over South Peninsula and 99% of LPA over North-East India all with a model error of  $\pm 8\%$ . The monthly rainfall over the country as whole is likely to be 93% of its LPA during July and 96% of LPA during August both with a model error of  $\pm 9\%$ .

The 5- category probability forecasts for the Seasonal (June to September) rainfall over the country as a whole by the IMD is given in Table I.2.

**Table I.1 El Nino and Rainfall Deficiency**

Year	Rainfall as % of Normal	Year	Rainfall as % of Normal
1992/93	92.4	2003/04	104.9
1993/94	99.3	2004/05 (\$1)	87.3
1994/95 (\$3)	110.2	2005/06	99.0
1995/96	100.0	2006/07 (\$1)	99.4
1996/97	102.4	2007/08	105
1997/98 (\$3)	102.1	2008/09	97.9
1998/99	104.6	2009/10 (\$2)	77.3
1999/00	96.0	2010/11	102.2
2000/01	92.4	2011/12	101.4
2001/02	91.7	2012/13	92.4
2002/03 (\$2)	80.8	2013/14	105.6
		2014/15*	93.0*

\*. Forecast by India Meteorology Department, June 2014

**Notes:** \$1= Weak El Nino: 2004-05 and 2006-07; \$2= Moderate El Nino: 2002-03 and 2009-10; \$3= Strong El Nino: 1994-95 and 1997-98

**Source:** <http://ggweather.com/enso/oni.htm>

**Table I.2: IMD Monsoon Rainfall Forecast 2014**

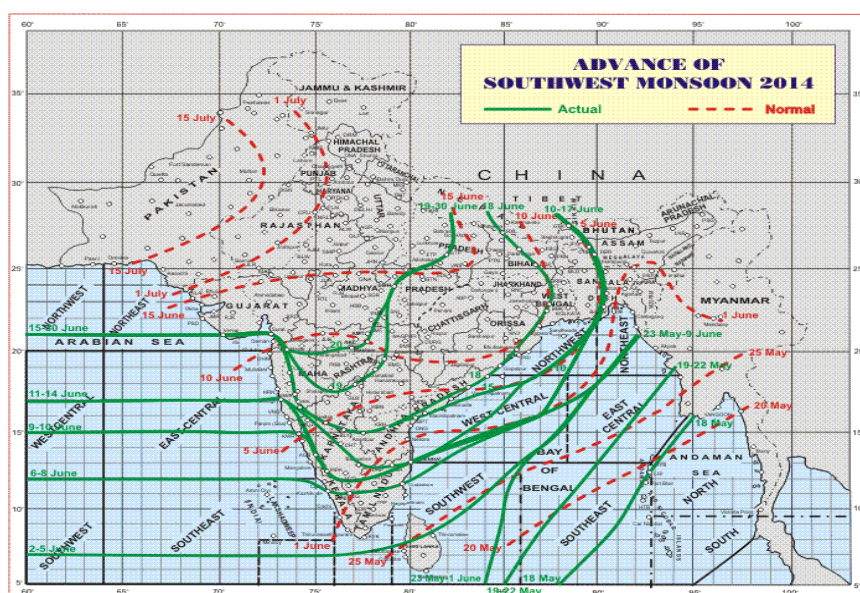
Category	Rainfall Range (% of LPA)	Forecast Probability %	Climatological Probability %
Deficient	< 90	33	16
Below Normal	90 - 96	38	17
Normal	96 - 104	26	33
Above Normal	104 - 110	3	16
Excess	> 110	0	17

Source: Indian Meteorological Office

### Monsoon performance poor in June 2104

The southwest monsoon arrived at the southern tip of India on June 6, five days behind the normal arrival date of June 1. It advanced northward in surges and covered most parts of south, east and central India by June 15 and has stalled. Typically by June 30, the monsoon should have advanced to cover almost the entire country (Figure I.3).

**Figure I.3: Advancement of monsoon in 2014 up to June 30**



Source: Indian Meteorology Department.

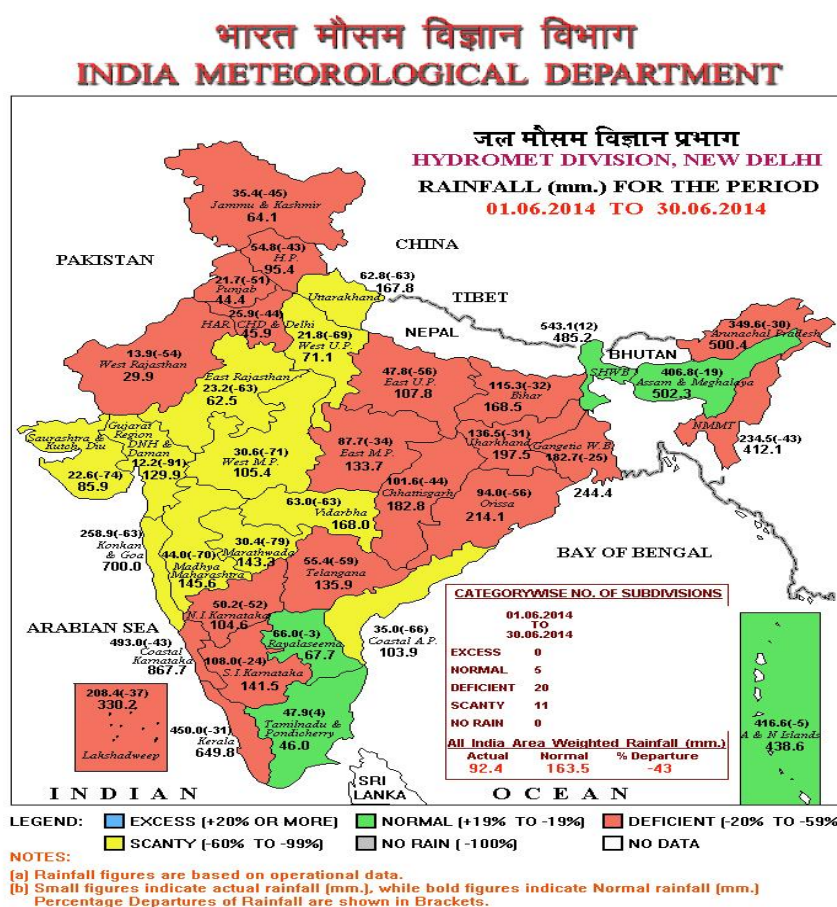
At the all India level, monsoon rainfall in June was 43% below LPA, the lowest first month of the monsoon season (June – September) in five years. Rainfall deficiency from LPA ranged from 27% in East and Northeast India to 60% in Central India (Table I.3). Last year rains were 34% above LPA in June with the monsoon arriving on the normal date of June 1 and covering half of the country by mid-June. In 2009, June registered a 47% below LPA rainfall and the June-September monsoon season was the driest in 37 years. However, according to weather experts, deficiency in the first month need not necessarily result in a monsoon failure. For example in 1926, the monsoon recorded its worst first-month shortfall at 48% of LPA in June, but the season ended at 7% above the LPA due to a late revival.

Table I.3: Seasonal Rainfall (in mm) from 1 June to 29 June, 2014

	Actual	Normal	Departure from Normal %
All India	88.5	155.4	-43
East & Northeast India	246.6	335.6	-27
Northwest India	30.3	64.3	-53
Central India	62.6	155.4	-60
South Peninsula	95.8	151.7	-37

Source: Indian Meteorological Office

Figure I.4: Cumulative rainfall June 1 to June 30 by rainfall subdivision



Source: Indian Meteorology Department.

Table I.4 shows our current forecast of the 2014-15kharif crops assuming 7% rainfall deficiency as forecast by the IMD using regressions analysis explained in respective commodity sections.



**Table I.4: 2013-14 Crop Forecasts (million tonnes)**

<b>Crop</b>	<b>2013-14 3<sup>rd</sup> Advance Estimate</b>	<b>NCAER Projection QAOR March 2014</b>	<b>2014-15 NCAER Projection</b>
Rice (kharif)	92.0	94.0-98.1	87.9-88.8
Rice (rabi)	14.3	12.0-12.7	NA
Rice Total	106.3	106.0-110.8	NA
Wheat	95.9	97.5	NA
Maize (kharif)	17.5	17.3-17.7	15.6-15.9
Maize (rabi)	6.7	6.4-6.5	NA
Maize Total	24.2	23.5-23.8	NA
Bajra	9.2	11.2-11.3	7.4-8.3
Jowar (kharif)	2.2	2.7-3.0	2.1-2.3
Jowar (rabi)	3.0	2.7-3.0	NA
Total jowar	5.3	5.4-6.0	NA
Other coarse grains (kharif)	2.3	2.3-2.6	1.2-2.0
Other coarse grain (rabi)	1.7	1.6-1.7	NA
Total other coarse grain	4.1	4.0-4.2	NA
Pulses (kharif)	6.1	6.2-6.7	5.9-6.0
Pulses (rabi)	13.5	13.0-13.2	NA
Pulses (total)	19.6	19.4-19.7	NA
Total foodgrain (kharif)	129.4	134.2-138.3	121.2-122.3
Total foodgrain (rabi)	135.0	133.7-134.0	NA
Total Foodgrains	264.4	267.9-272.3	NA
Groundnut (kharif)	7.7	5.6-5.9	4.0-5.6
Groundnut (rabi)	1.8	1.7-1.8	NA
Total groundnut	9.5	7.3-7.7	NA
Soybean	12.0	13.5-15.9	11.8-14.0
Sugarcane	348.4	353.8-356.0	341.9-345.9
Onion	19.3	18.3	19.0
Potato	46.4	44.8	47.4
Banana	27.6	30.9	29.1
Milk	139.7	138.1-138.6	145.3

*Note: The 2014Kharif production was derived based on two approaches: one in which trend growth rate, the monsoon deviation from the LPA and the incidence of El Nino in a year using a dummy variable and a cyclical trend variable in the case of sugarcane; in the case of rice and kharif pulses, a dummy variable is used for 2011-12, 2012-13 and 2013-14 and 2014-15 to reflect the rise in output that was not captured by the trend and may reflect some of the shifts in production across states besides productivity improvements. In the second approach, no El Nino effect was specifically captured but crop specific rainfall indices were used to assess output based on assumption regarding monsoon period rainfall. In the case of onion, potato, banana and milk on the second approach was used for estimation in which overall June-September rainfall was used as an explanatory variable rather than commodity specific rainfall index.*



## **Resurfacing of Food inflation**

Year-on-year headline inflation measured by Wholesale Price Index (WPI) strengthened to 6.01% in May from 5.2% in April 2014 and 4.58% a year ago. Food inflation, measured by the rise in WPI for food articles, rose to 9.5% in May from 8.64% the previous month and significantly higher than the 8.25% a year ago. However, the rise in inflation rate in May is also partly due to the sharp increase in prices that occurred during the period of September-December 2013 which kept the prices at a high level relative to the prices in the same period in previous year. The price change on the basis of 'month over month' comparison suggests that the momentum of rise in the price of food articles that occurred in May is slower than in May 2013. A reduction in the pace of month over month price increase can be expected to maintain the overall price rise at moderate level in the short term. While prices of most agricultural commodities, particularly wheat, sugar and vegetable oils declined in May from the April, potato and onion prices firmed up and rice and milk price inflation also continued to remain high (Table I.5, Figures I.5 and I.6). Pulse prices strengthened modestly. The main drivers of food inflation during September-December 2013, among the major food commodities, were rice, potato and onion.

Rice prices are still ruling high despite the fact that the increase in the MSP for the 2013-14 crop was a modest 4.8 percent, significantly below the 2012-13 increase of 15 to 16 percent and production was a record 106 million tonnes for the second consecutive year. This could be partly due to lower allocation of rice to the PDS, which averaged only 2.45 million tonnes per month in 2013-14 (Apr-Mar) against 2.72 million tonnes in 2012-13, leading to higher demand for private sector supplies. Significant purchases by the private sector at high prices may also have caused the prices to remain high. In the case of onion, the decline in the output in 2012-13 continued to exert pressures on supplies until the rabi harvest in 2013-14 began to ease supply-demand imbalance. Potato supplies in late 2013 came under pressure because of uneven rainfall in the eastern region, particularly West Bengal. However, the supply pressures eased as output from other regions began to arrive in the markets.

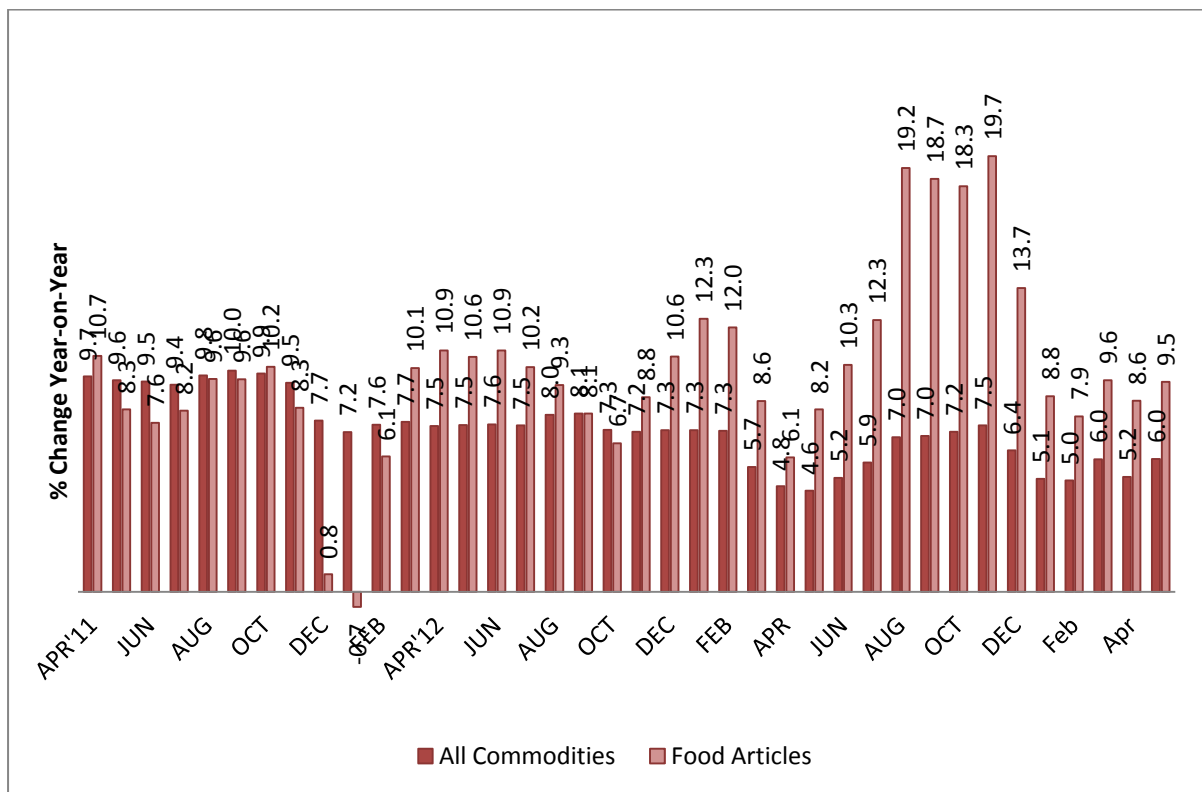
The likelihood of sub-normal rainfall in the monsoon period of the current year is also influencing price scenario as the stock levels of some of the perishable commodities such as fruits and vegetables remain low. Based on the normal trend and cyclical components of prices, the price rise in the short term of next 2-3 months is expected to be moderate. However, the expectations based on the impact of sub-normal monsoon can result in upward pressure on prices.

Two approaches were adopted for the short term projections of price inflation of major food items, which are summarized in Tables I.6 and I.7. A modest strengthening of food inflation is expected in coming months due to seasonal factors. The price increase is forecast to strengthen particularly in the case of pulses, potato and milk. In the case of onion, although prices are expected to be rising, as compared to the highs of previous year, the year on year price change is expected to be negative.

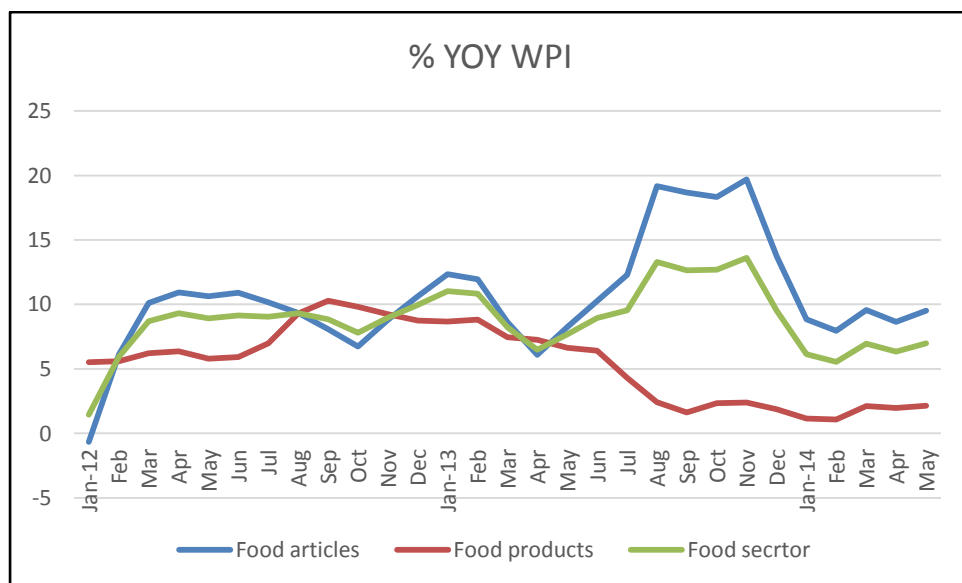
**Table I.5: Year-on-Year Inflation Trend in Major Food Commodities: WPI % change  
YOY**

Month/ year	Food articles	Rice	Wheat	Pulses	Potato	Onion	Milk	Veg oils	Sugar
Jan'12	-0.68	0.94	-3.42	11.01	-23.15	-75.62	12.33	9.43	2.54
Feb	6.12	1.53	-3.95	7.86	-2.22	-48.66	11.70	7.65	4.07
Mar	10.11	5.03	-0.58	10.10	18.43	-24.06	15.29	9.94	2.87
Apr	10.92	5.98	5.97	11.29	59.30	-11.03	15.68	11.18	3.16
May	10.63	4.89	6.75	16.77	72.17	-8.05	11.90	10.37	5.24
Jun	10.91	7.46	6.76	20.59	84.91	-9.46	7.46	9.52	7.13
Jul	10.17	9.95	6.44	28.57	73.24	-10.05	8.01	10.85	9.38
Aug	9.34	10.35	12.97	34.54	70.74	-20.71	6.68	10.91	16.91
Sep	8.06	12.58	18.87	28.98	52.45	-24.69	6.45	10.71	19.87
Oct	6.72	14.97	19.78	19.86	49.13	-9.12	6.35	9.38	18.88
Nov	8.80	15.28	23.25	18.77	67.85	16.55	6.18	9.76	15.48
Dec	10.63	17.10	22.63	16.25	58.03	72.79	6.15	9.20	9.84
Jan'13	12.35	17.77	21.87	15.89	73.10	125.17	4.52	7.54	10.09
Feb	11.95	17.75	21.81	13.95	50.14	182.36	4.52	7.04	10.49
Mar	8.63	17.56	19.35	10.84	15.80	110.74	4.42	3.60	9.35
Apr	6.08	17.09	13.55	10.52	-0.63	90.83	4.04	2.01	8.67
May	8.25	18.48	12.37	5.95	1.28	94.28	4.46	0.89	7.10
Jun	10.27	20.43	13.94	1.59	-8.38	114.76	4.08	0.07	6.93
Jul	12.29	21.15	13.64	-7.43	-6.13	146.43	3.02	-2.23	2.20
Aug	19.17	21.33	9.38	-14.70	-15.25	272.54	6.02	-2.86	-4.75
Sep	18.68	18.61	7.31	-13.42	-12.28	335.88	5.77	-2.72	-7.39
Oct	18.34	14.45	7.88	-10.72	0.17	293.29	5.64	-0.27	-8.21
Nov	19.69	14.99	7.01	-9.90	34.99	201.15	6.92	0.20	-7.73
Dec	13.73	13.52	7.64	-7.31	52.77	38.30	6.98	-0.87	-5.59
Jan'14	8.85	13.41	6.79	-7.12	16.00	0.47	7.22	-1.74	-5.53
Feb	7.94	13.65	6.61	-5.68	7.74	-27.50	8.78	-1.54	-6.67
Mar	9.57	12.56	6.18	-2.32	31.38	15.00	9.47	-0.14	-4.38
Apr	8.64	12.76	4.57	-0.77	31.56	-9.76	9.19	-0.54	-1.72
May	9.50	12.75	3.64	0.78	31.44	-2.83	9.57	-0.88	-1.98

**Figure I.5: Food Inflation Exceeds Overall Inflation Rate**



**Figure I.6 Pattern on WPI for Food Commodities and Products: % change Year- on-Year**



**Table I.6: Projected Wholesale Prices in Delhi Based on Harmonic Analysis: % Change Year on Year.**

Commodity	June-14	July-14	Aug-14
Wheat	4.3	4.3	4.3
Rice	5.5	5.5	5.5
Tur dal	3.6	3.5	3.4
Chana Dal	8.4	8.2	8.0
Urad Dal	4.2	4.1	4.1
Masur Dal	-12.9	-14.3	-15.3
Potato	1.1	2.7	4.4
Onion	-21.0	-23.1	-34.5
Sugar	-7.8	-6.1	-4.0
Soy oil 1/	18.7	19.7	20.3
Milk	8.5	8.4	8.4

*Note:* Projections do not take into account the likely effects of decline in output due to weak monsoon.

**Table I.7: Projected Wholesale Price Indices based on Time Series ARIMA model: % Change Year on Year.**

Commodity	Actual %YOY WPI		Projected %YOY			Actual % MOM WPI		Projected % MOM		
	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14
Rice	12.76	12.75	8.76	6.55	5.38	0.86	1.58	1.12	1.37	1.18
Wheat	4.57	3.64	2.53	3.22	3.61	-2.38	-2.25	0.19	1.35	1.41
Jowar	12.36	12.32	21.39	24.88	27.07	1.28	-0.67	3.26	2.38	-0.11
Bajra	-1.90	-3.11	-2.64	-1.66	3.83	0.58	0.00	-2.23	-0.32	1.67
Maize	-1.68	-5.06	-2.76	-2.09	-1.52	-0.36	-4.64	1.86	0.84	0.75
Gram	-14.18	-13.74	-14.52	-13.88	-8.80	-0.40	-0.60	-1.89	-1.59	1.86
Tur	0.66	1.32	4.54	8.04	9.11	0.28	0.66	1.19	1.84	1.47
Pulses	-0.77	0.78	3.83	6.73	11.32	1.62	0.86	1.31	1.40	2.00
Onion	-9.76	-2.83	-50.60	-60.14	-73.18	-1.31	8.53	1.71	5.97	9.27
Potatoes	31.56	31.44	19.64	15.95	22.37	17.96	19.23	13.50	5.73	1.59
Groundnut seed	-25.95	-22.14	-15.67	-9.61	-2.71	1.42	1.40	0.99	1.07	2.32
Rape Mustard seed	-0.96	0.59	5.03	8.20	12.59	-1.27	0.16	2.32	2.91	2.33
Soyabean	1.20	8.41	8.86	10.19	23.45	2.31	10.05	0.95	1.26	-1.20
Edible oils	-0.54	-0.88	2.16	4.62	5.53	-0.14	-0.34	0.31	1.50	1.70
Food articles	8.64	9.50	3.06	4.09	4.39	1.79	2.30	4.10	4.32	6.14
Food products	1.98	2.15	5.38	4.18	1.18	0.59	0.47	-1.26	-1.14	-2.19
Food sector	5.91	6.49	4.01	4.13	3.07	1.30	1.55	1.90	2.08	2.72

Notes: (1) Projections do not take into account the likely effects of decline in output due to weak monsoon.(2) The price changes in the case of WPI for ‘food products’ is calculated as weighted average of food articles and food products, the weights based on wholesale price index weights.

## Supply –Demand Balance Summary:

Part IV of the report discusses the short term scenario for specific food commodities. Summary of the scenario that is developing in the supply-demand balance sheet of the food commodities is summarised in Table I.8.

**Table I.8: Food Balance Sheet (million tonnes)**

Item/	Rice	Wheat	Maize	Pulses	Edible oils	Sugar	Onion	Potato
Marketing year	2014-15	2014-15	2014-15	2014-15	2014-15	2014-15	2014-15	2014-15
Beginning stocks	21.0	17.8	1.5	2.0	2.6	7.5	0.7	2.5
Production	102.0	95.9	22.0	16.8	9.0	24.0	19.0	47.4
Imports	0.0	0.0	0.0	4.0	11.0	0.0	0.0	0.0
A. Total supply	123.0	113.7	23.5	22.8	22.6	31.5	19.7	49.9
Exports	8.0	3.0	3.0	0.2	0.1	2.0	1.0	0.3
Domestic use	97.0	91.7	19.9	20.6	21.0	25.0	18.2	46.8
B. Utilisation	105.0	94.7	22.9	20.8	21.1	27.0	19.2	47.0
C. Closing stocks	18.0	19.0	0.6	2.0	1.5	4.5	0.5	2.8

**Note:** The stocks in the case of commodities other than rice, wheat and sugar are notional and provided only to indicate the overall price or quantity adjustments needed to obtain supply-demand balance. In the case of rice and wheat stocks are government stocks and in the case of sugar, stocks are those with the industry.

## Part II: Overview of the Global Food Outlook

### Modest revival in global economy

According to the latest IMF World Economic Outlook report, global economic activity has broadly strengthened and is expected to improve further in 2014–15, with much of the impetus coming from advanced economies. Global growth is projected to strengthen from 3 per cent in 2013 to 3.6 per cent in 2014 and 3.9 per cent in 2015. In emerging market and developing economies, growth is projected to pick up gradually from 4.7 per cent in 2013 to about 5 per cent in 2014 and 5.25 per cent in 2015.

According to WTO, a modest trade growth is anticipated in 2014 and 2015 following two-year slump. World trade is expected to grow by a modest 4.7% in 2014, more than double the 2.1% increase in 2013 and at a slightly faster rate of 5.3% in 2015. The trade forecast for 2014 is premised on an assumption of 3.0% growth in world GDP growth at market exchange rates, while the forecast for 2015 assumes output growth of 3.1%.

FAO estimates 2013 food import bill to decline by 3% to US\$ 1.15 trillion, with cereals, sugar, vegetable oils and tropical beverages falling, but dairy, meat, and fish remaining firm. The import bills for LDCs and Low Income Food Deficit Countries (LIFDCs) has remained stable. Among major traded agricultural commodities, wheat and sugar trade is expected to decline in 2014 whereas coarse grain and oilseed exports are forecast to increase in terms of both volume and value.

### Global Agricultural Outlook

#### Production further up

Since our last Quarterly Outlook Report (March 2014) there have been some further upward revisions in 2013-14 global production of most commodities by most agencies (Table II.1). 2013-14 thus turned out to be a record or near record production year for most agricultural commodities, making food markets more balanced and less volatile than in recent years.

Early assessment by some international agencies such as the FAO, IGC, and USDA points to a somewhat lower wheat production in the year 2014-15 with forecasts ranging from 697 to 702 million tonnes, 12 to 14 million tonnes down from the 2013-14 estimates, mainly due to more normal average yields after the very high levels of the previous year. Among major exporting countries, a significant drop is forecast in Canada due to reduced planting in response to lower prices. The USDA's first forecast shows a 4.5 million decline in US wheat production to 53.4 million tonnes, the lowest since 2006-07, due to adverse weather in Hard Red Winter wheat growing areas. Australian wheat production is also forecast to decline driven by a likely fall in yield from the above average yield in 2013–14 due to drier conditions. Yields are expected to fall from the relatively high levels in 2013 in the CIS region, which may result in lower production

*Since our last Quarterly Outlook Report (March 2014) there have been some further upward revisions in 2013-14 global production of most commodities by most agencies. 2013-14 thus turned out to be a record or near record production year for most agricultural commodities, making food markets more balanced and less volatile than in recent years.*

mostly in Ukraine. The potential impact of political tensions in the Black Sea region also remains uncertain. In the EU, overall prospects are good and production could increase somewhat. China expects to top slightly last year's bumper harvest, owing to higher plantings. However, IGC is forecasting a lower wheat production for China. Although initial official forecasts point to a record production in India, the optimism stymied somewhat by unseasonal rains during crop maturing stage.

A number of meteorological forecasters have indicated the possibility of an *El Niño* weather phenomenon developing this year. However, and as always, these forecasts remain tentative and the implications for crop output are not definitive. According to the first FAO forecast, world rice production in 2014 could rise by a modest 0.8 per cent to 500.7 million tonnes (milled basis), as growth is likely to be dampened by falling world prices besides fears of a recurring El Niño event. In the southern hemisphere countries, where the 2014 season crops are approaching the harvest stage, production is seen rising in Brazil, Indonesia and Madagascar, while drought problems are anticipated to depress output in Australia, Peru, Sri Lanka and Tanzania. In the northern hemisphere, where crops are soon to be planted, prospects point to growth in China, India, Myanmar, the Philippines and the United States, while the removal of price support in Thailand may prompt farmers in the country to reduce plantings and production. The USDA's first forecast of the 2014-15 rice production is a record 480.7 million tonnes, 4.6 million tonnes more than in 2013-14.

World production of coarse grains is forecast to fall marginally in 2014–15 reflecting an expected decline in planted area as producers respond to forecast falls in coarse grains prices, especially corn. Additionally, yields are assumed to fall from the above average yields achieved in many countries in 2013–14. Regarding early production prospects for coarse grains by FAO, conditions in southern hemisphere countries are mixed. The outlook is generally favourable in southern Africa, where plantings have already taken place. In South Africa, maize production could increase somewhat, on an expected yield recovery. In Southern America, conditions are positive in Argentina but production of the first maize crop in Brazil could be adversely affected by unfavourable weather. USDA first forecast of total coarse grain production for 2014-15 is for a 1% decline to 1,257.2 million tonnes, although maize production is forecast to remain unchanged from the 2013-14 level at 979 million tonnes. However, preliminary projection by IGC places 2014-15 maize production at 950 million tonnes, a 2% decline over 2013-14 as yields retreat from the previous year's exceptional results.



**Table II.1: Global Production Forecasts for Major Food Commodities (Million Tonnes)**

	<b>FAO</b>	<b>USDA</b>	<b>IGC</b>	<b>ABARES</b>
<b>Wheat</b>				
2012-13	659.9	657.3	655.0	655.0
2013-14	716.1	714.0	709.0	707.0
2014-15	702.0	697.0	697.0	711.0
<b>Rice</b>				
2012-13	491.3	471.6	470.1	NA
2013-14	496.6	476.1	473.6	NA
2014-15	500.7	480.7	NA	NA
<b>Maize</b>				
2012-13	875.2	868.8	861.0	863.0
2013-14	1009.6	979.0	965.0	966.0
2014-15	NA	979.1	950.0	957.0
<b>All coarse grains</b>				
2012-13	1156.2	1138.1	1135.0	1131.0
2013-14	1308.3	1269.0	1264.0	1258.0
2014-15	NA	1257.2	1238.0	1229.0
<b>Total oilseeds</b>				
2012-13	481.5	474.4	NA	474.0
2013-14	502.5	503.0	NA	502.0
2014-15	NA	515.2	NA	502.0
<b>Total veg oils</b>				
2012-13	190.2	160.5	NA	161.0
2013-14	199.3	169.2	NA	169.0
2014-15	NA	174.9	NA	173.0
<b>Sugar (Raw equivalent)</b>				
2012-13	179.6	176.0	NA	183.6
2013-14	180.2	174.8	NA	182.3
2014-15	NA	NA	NA	182.7
<b>Milk</b>				
2012-13	765.6	544.6	NA	NA
2013-14	780.3	552.1	NA	NA
2014-15	NA	566.6	NA	NA

ABARES forecasts world oilseeds production to remain more or less unchanged in 2014-15. World production of soybeans is forecast to rise by 2 per cent to a record with production forecast to rise in the three major producing countries, the United States, Brazil and Argentina. Early indication from the United States is for an increase in soybean area in 2014-15, partly offsetting reduced plantings of wheat and corn supported by higher relative returns for producers. USDA's initial forecast is for a 2.4% increase in total oilseed production at 515.2 million tonnes with most of the increase in soybeans, forecast at a record 300 million tonnes. In contrast, world canola production is forecast to fall by 3 to 4% with average yields likely to fall short of this season's record. Production is forecast to fall in Canada, China and Australia. World sunflower seed production is forecast to fall by 5 to 8 per cent, with yields expected to fall from the above average yields achieved in major producing countries in 2013-14.

A severe drought in January and February this year is threatening supplies of palm oil from Indonesia and Malaysia, the world's biggest producers. According to some experts, palm oil production during the peak harvesting season July – September will not be as high as previous years because of the drought. Furthermore, the expected El Nino weather pattern usually results in below-average rainfall in the main palm oil producers, cutting yields and production as palm is among the most-vulnerable crops to El Nino weather. However, USDA first forecast of 2014-15 palm oil production is for a 6% increase at a record 62.4 million tonnes. USDA forecast of total vegetable oil production for 2014-15 is also a record 174.9 million tonnes including 46.3 million tonnes of soybean oil, up 3.3% from the 2013-14 level.

Regarding pulse production outlook in major exporting countries, Canadian dry pea planted area for 2014-15 is officially forecast to increase by 1.5 million hectares, up nearly 10% from 2013-14 because of higher returns relative to other crops and continued recognition of the benefits of dry peas as a part of a crop rotation plan. However, a return to trend yields is expected to cause production to fall by 10% to 3.5 million tonnes. The USDA March Prospective Planting report showed that US sown area to dry peas for 2014-15 is forecast by the USDA at a near record 0.95 million acres, up 8% from 2013-14.

Area planted to lentil in Canada is expected to rise to 1.1 million hectares, due to competitive returns relative to other crops. However, a lower yield forecast is expected to cause production to fall by 8% to 1.7 Mt. The USDA March Prospective Planting report showed that intended US area seeded to lentils for 2014-15 is forecast by the USDA at 0.3 million acres, down 12% from 2013-14 due to lower area seeded in Montana.

For 2014-15, the area seeded to chickpeas in Canada is forecast to fall from 2013-14 because of higher carry-in stocks and a continuing decline in prices from the records set in 2011-12. As a result, production is expected to fall sharply to 130,000 tonnes. However, supply is forecast to rise from last year due to the large carry-in stocks. Prospective plantings of US chickpea area for 2014-15 is forecast by the USDA at a record 200,000 acres, up 1% from 2013-14.

Pulse production in Myanmar in MY 2014-15 is forecast at 5.2 million tonnes, up 1.2% per cent on top of a 7% increase in production in 2013-14 at 5 million tonnes due to a likely increase in planted area.

ABARES forecasts world sugar production to increase modestly in 2014–15 to 182.7 million tonnes from 182.3 million tonnes in 2013-14, in response to forecast higher world demand. Higher productions forecast for Brazil, Thailand, China, Mexico and Australia.

In 2014–15 milk production in the major dairy exporting countries is forecast to increase in response to higher farm gate prices, lower feed grain prices and improving milk yields. Milk production in the emerging economies of India, China and Brazil is projected to increase, reflecting growing domestic demand for dairy products, improving milk yields and increasing investment in their dairy sectors.

## **Consumption growth modest**

While IGC and ABARES forecasts a marginal increase in wheat consumption in 2014-15 to around 700 million tonnes, USDA's initial forecast is for a modest decline in consumption as maize continues to displace wheat in feed rations in some countries.

Global maize consumption is expected to climb at a weaker rate than last year with slower growth in feed demand. Total coarse grains consumption is forecast to rise by about 1 per cent in 2014–15 to around 1.2 billion tonnes, largely the result of an increase in the use of coarse grains for feed driven by lower prices and higher demand. Corn used for ethanol in the United States in 2014-15 is unchanged from the record level in 2013-14.

Rice consumption is forecast to grow at the trend level to reach a record 482 million tonnes in 2014-15. Most of the increase will be in China and India.

USDA forecasts a 2.4% increase in world oilseed crush at 424 million tonnes, with most of the increase confined to soybeans. Global vegetable oil consumption is also forecast to increase by 4% to around 173 million tonnes with most of the increase in China, India, and Indonesia (industrial use of palm oil). The largest increase will be in palm oil followed by soybean oil.

## **Trade outlook mixed**

Wheat trade is placed lower, year on year basis, in 2014-15, mostly because of likely reduced needs in China. Exports from the European Union, Canada, and the United States are forecast to decline somewhat whereas exports from Australia is likely to increase marginally. Kazakhstan, Russia, and Ukraine's exportable supplies are projected to be little changed.

Global rice trade is forecast to increase marginally with Thailand likely to emerge as the largest exporter replacing India. Larger shipments to Indonesia, the Philippines and Nigeria are forecast to support higher rice trade, while China's purchases will again be substantial.

With lower prices, world maize demand has surged, with IGC forecasting global trade to reach record level, although USDA is forecasting a modest decline in maize trade with less demand coming from China and Mexico.

Global import demand for soybeans is forecast to rise, driven by China, the EU, Thailand, and Vietnam. Global trade for soybean meal expands, driven by demand in the EU, while India boosts demand for soybean oil. World trade in canola and sunflower seed is forecast to decline marginally.

## **Most commodity stocks up**

Despite a lower global production in 2014-15, ending wheat stocks are forecast to remain unchanged or increase modestly due to a decline in consumption and exports. A decline in the United States and Canada is expected to be mostly offset by gains in the EU and Russia.

Global increase in rice consumption is forecast to outstrip increase in production, which could result in a marginal decline in 2014-15 ending stocks of rice. Most of the decline will be confined to India, China, and Indonesia.

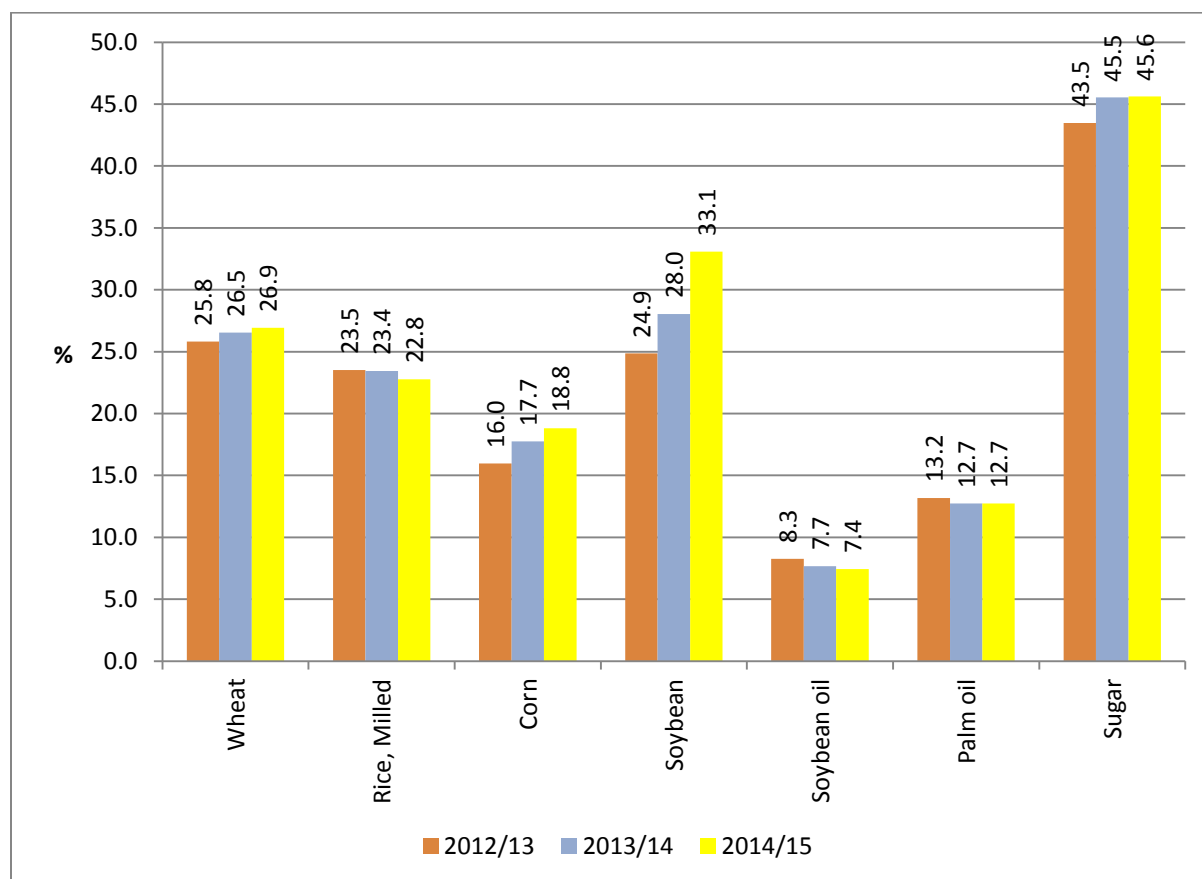
Global maize ending stocks in 2014-15 are forecast to increase to record levels, attributable mostly to the United States, where stocks according to USDA are forecast to surge to the highest-level in 9 years.

USDA forecasts global soybean ending stocks in 2014-15 to increase by nearly 35 per cent. With production gains outpacing consumption growth, the surplus is expected to replenish stocks. Most of the increase in stocks will be in the U.S. and South America. End 2014-15 Soybean oil stocks are forecast to remain more or less unchanged from the previous year's level. With production outpacing consumption, palm oil stocks by the end of 2014-15 are expected to increase somewhat.

World sugar stocks are forecast to increase further in 2014–15 reflecting large carry-over stocks from the previous years.

Stocks-to-use ratio of most commodities, with the exception of rice and soybean oil, is forecast to show a modest increase in 2014-15 (Figure II.1)

**Figure II.1: Stocks-to-Use Ratio of Major Agricultural Commodities**



Source: USDA and ABARES (sugar)

## Price trends mixed

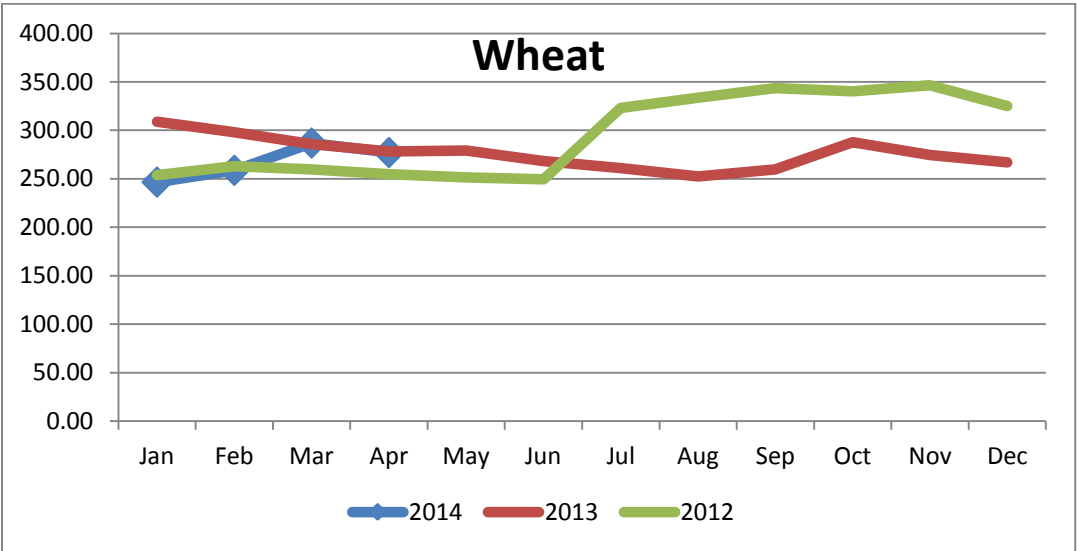
Most commodity prices, with the exception of palm oil and soybean meal, were significantly below a year-ago prices in recent months (Figure II.2). A record cereal crop in 2013-14 helped to improve the global supply situation, weighing on the international prices of wheat and maize. However, there has been some strengthening of cereal prices in March stemmed from a surge in wheat and maize prices reflecting a strong pace in grain imports, growing concerns over the effect of continued dryness in the south-central United States on winter wheat crops, unfavourable weather in parts of Brazil and geopolitical tensions in the Black Sea region.

Prices for soybeans since the beginning of 2014 have been tracking closely the 2013 price trend. Palm oil prices in recent months has strengthened and exceeded year-ago prices due to strong global import demand, including for biodiesel production, and concerns about the impact of drought and likely El Nino on production outlook. Sugar prices fell in 2013 for a third successive year, undermined by a third successive season of production exceeding consumption, and the prospect of a similar fourth year. However, the pace of price decline has

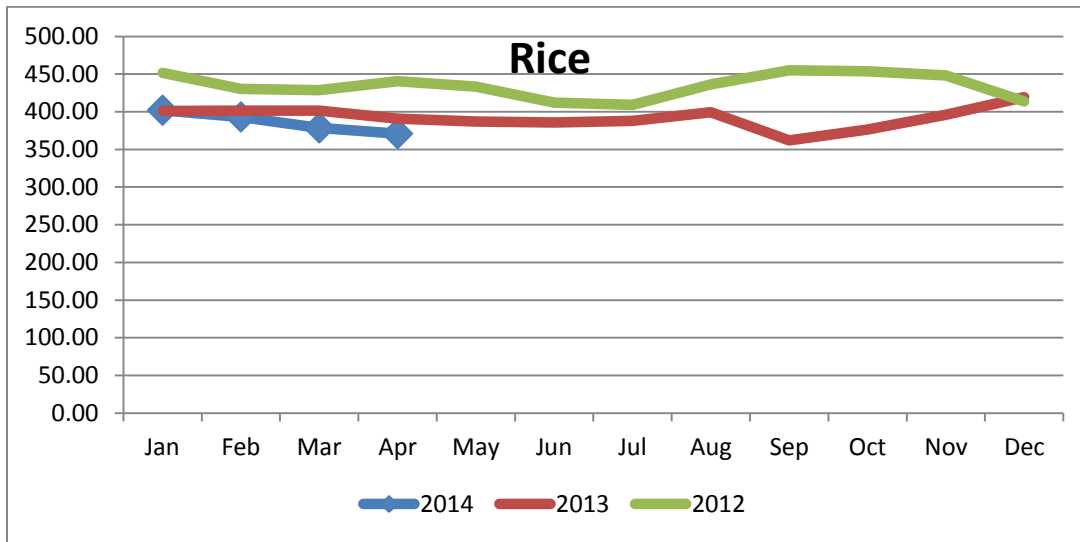
slowed in recent months. Prices might have fallen further had Brazilian mills not turned more of their bumper cane crop into ethanol. Furthermore, consumption has proved more resilient than many expected, prompting some downgrades later in the year of estimates for the production surplus in 2013-14.

The FAO Food Price Index averaged 212.8 points in March 2014, up 4.8 points, or 2.3%, from February and the highest level since May 2013, largely driven by unfavourable weather conditions affecting some crops and geopolitical tensions in the Black Sea region. All the other commodity price indices, with the exception of Dairy Price Index, registered gains, with sugar and cereals increasing the most.

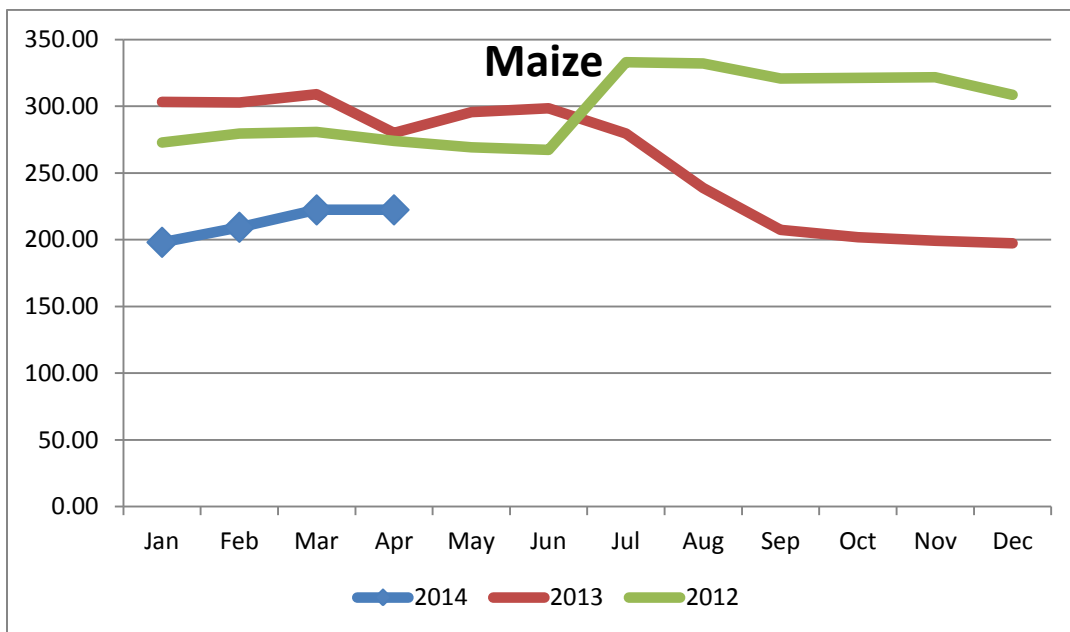
**Figure II.2a: Global price trend of major commodities (US\$/Metric Tonne): wheat**



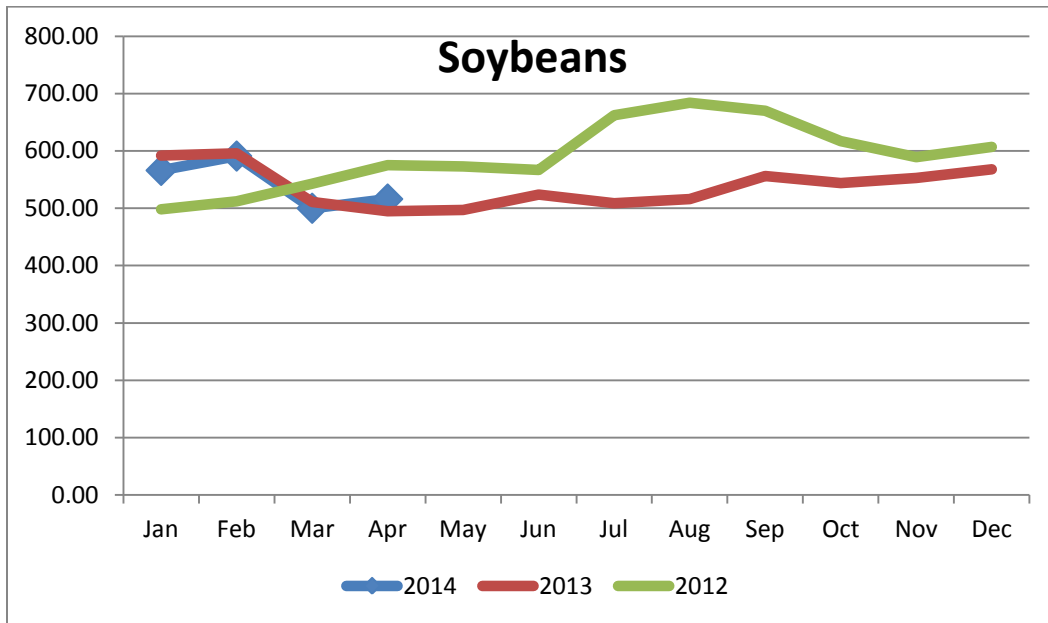
**Figure II.2b: Global price trend of major commodities (US\$/Metric Tonne): rice**



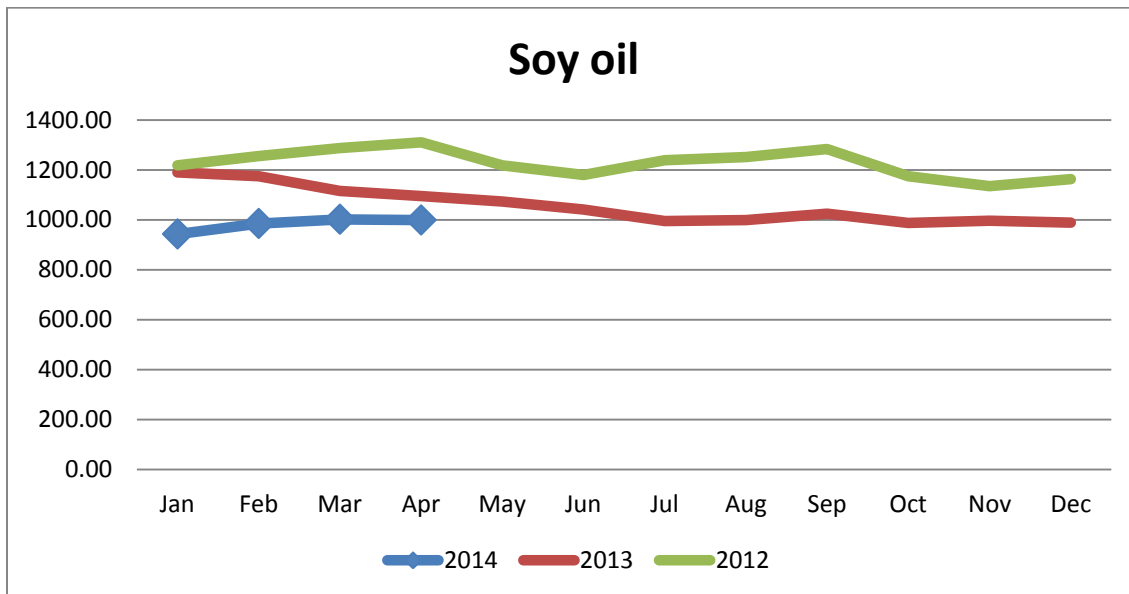
**Figure II.2c: Global price trend of major commodities (US\$/Metric Tonne): maize**



**Figure II.2d: Global price trend of major commodities (US\$/Metric Tonne): soybeans**

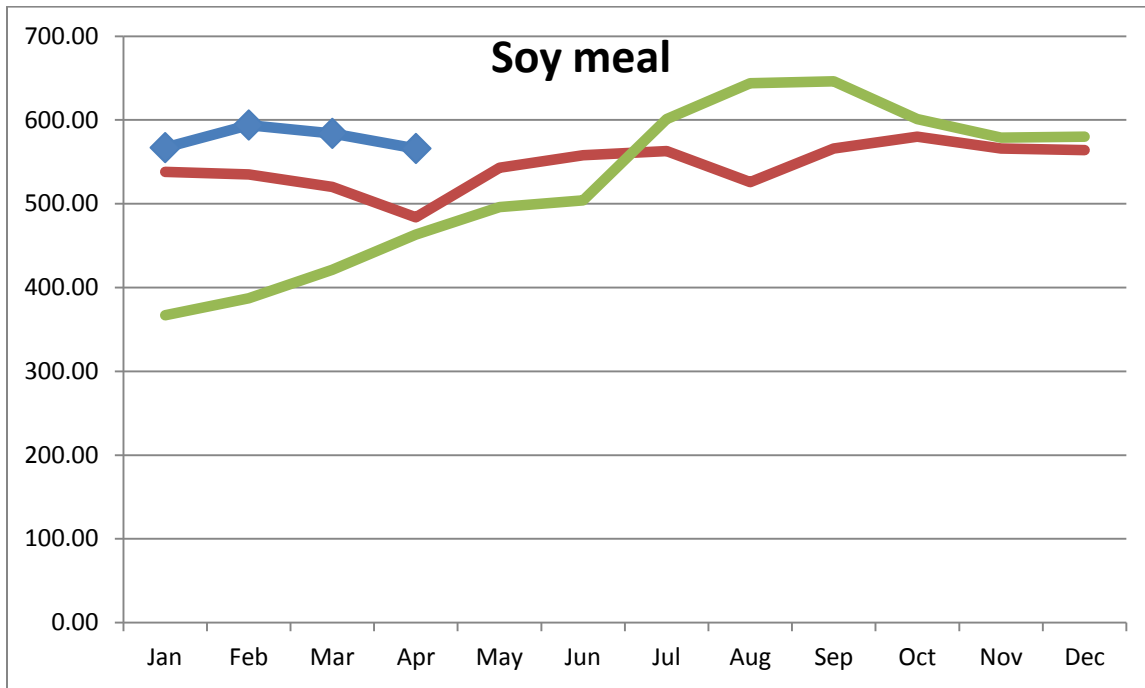


**Figure II.2e: Global price trend of major commodities (US\$/Metric Tonne): soy oil**

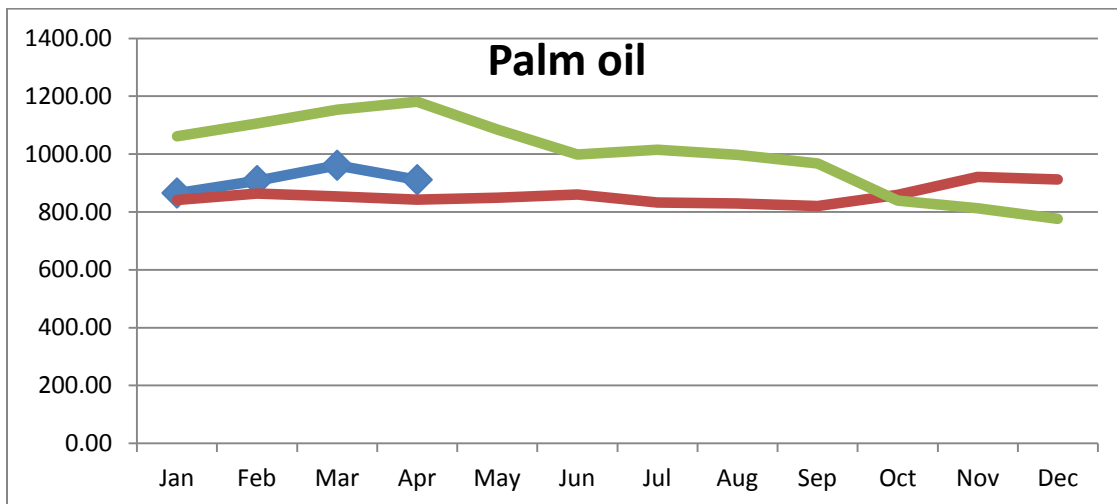




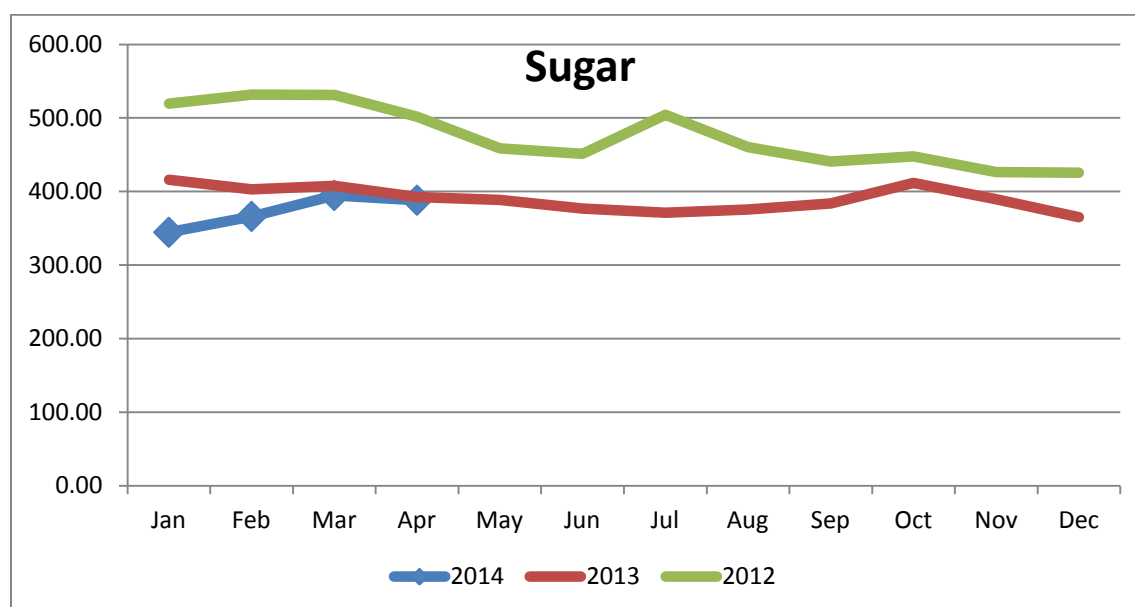
**Figure II.2f: Global price trend of major commodities (US\$/Metric Tonne): soy meal**



**Figure II.2g: Global price trend of major commodities (US\$/Metric Tonne): palm oil**



**Figure II.2h: Global price trend of major commodities (US\$/Metric Tonne): sugar**



### **Price outlook generally bearish for 2014-15**

World Bank in its April 2014 report projects agricultural commodity prices to decline 1 per cent in 2014. Food commodities prices are expected to decline by 3.3 per cent while edible oils and meals and other food items are not expected to change much. The largest declines among food commodities will be in the grains group with maize and rice down 13.3 and 15 per cent, respectively although wheat prices will remain virtually unchanged. While edible oils and meals will change little at the aggregate, palm oil and soybeans are expected to increase 3.9 and 2.2 per cent while soybean oil and soybean meal will decline about 2.5 per cent each.

The latest ABARES forecasts of commodity prices, which are somewhat at variance with the World Bank forecast for some commodities, are given below:

- The world wheat indicator price (US No. 2 hard red winter, fob Gulf) is forecast to average US\$285 a tonne in 2014–15. While the forecast average price for 2014–15 is 7 per cent lower than the forecast for 2013–14, the difference largely reflects relatively high prices during the first half of 2013–14.
- The world coarse grains indicator price (US No. 2 yellow corn, fob Gulf) is forecast to remain largely unchanged in 2014–15 at US\$214 a tonne. Large carry-over stocks are forecast to keep world supplies high despite an expected fall in world production.
- The world oilseeds indicator price (US soybeans, fob Gulf) is forecast to decline by 5 per cent in 2014–15 to US\$500 a tonne, driven by record soybean production and rising world stocks. A decline in soybean prices is expected to place downward pressure on other oilseed prices. The world canola indicator price (Europe rapeseed, fob Hamburg) is forecast to fall by 2 per cent to US\$490 a tonne.
- The world sugar indicator price is forecast to ease further in 2014–15, to average around US15 cents a pound (\$330 per tonne) as the world sugar balance remains in surplus.

- In 2014–15 whole milk powder and skim milk powder prices are forecast to increase by a further 2 per cent to average US\$5220 a tonne and US\$4815 a tonne, respectively. World prices for cheese and butter are forecast to increase by around 3 per cent and 2 per cent to average US\$4920 a tonne and US\$4665 a tonne, respectively.

Among major traded pulses, the average price of Canadian dry peas is officially projected to fall from 2013-14 level of C\$250 - 280 to C\$240-270 per tonne due to similar supply and expectations for large carry-out stocks for the second straight year. The forecast price is significantly below the average 2012-13 price of C\$340 per tonne.

Canadian lentil pulses in 2014-15 are expected to strengthen somewhat to C\$ 395 to 425 per tonne from C\$380 to 410 per tonne in 2013-14 but significantly below the average 2012-13 price of C\$440 per tonne.

Canadian chickpea prices are also forecast to improve in 2014-15 to C\$570-600 per tonne from 550-580 in 2013-14 but below the average price of \$690 per tonne in 2012-13

CBOT future price quotes (Table II.2) generally support the price outlook scenario for various commodities discussed above.

**Table II.2: CBOT Futures Price Quotes US\$/MT**

Commodity/ Date of Quote	\$ per Metric Tonne								
	Nov'13	Jan'14	14-Mar	14-May	14-Jul	14-Aug	14-Sep	14-Nov	15-Jan
<b>Soybean CBOT</b>									
7-Feb-14			489.2	484.1	476.9	459.7	431.6	412.2	413.9
7-Mar-14			535.5	535.6	523.5	504.5	461.3	436.2	437.6
4-Apr-14				541.5	534.6	505.0	461.9	444.0	445.8
2-May-14				544.1	540.4	517.0	470.9	449.2	451.2
<b>Wheat CBOT</b>	<b>13-Dec</b>	14-Mar	14-May	14-Jul	14-Sep	14-Dec	15-Mar	15-May	
7-Feb-14		212.2	212.8	214.5	217.5	222.2	225.7		
7-Mar-14		237.5	240.3	242.1	244.8	249.1	251.2		
4-Apr-14			246.1	248.6	251.8	256.6	260.5	263.3	
2-May-14			260.1	263.1	266.1	271.1	275.3	277.4	
<b>Maize CBOT</b>	<b>13-Dec</b>	14-Mar	14-May	14-Jul	14-Sep	14-Dec	15-Mar	15-May	15-Jul
7-Feb-14		174.9	177.2	179.3	179.9	181.1	184.6	186.9	188.2
7-Mar-14		189.4	192.5	194.1	191.9	190.8	193.0	195.1	196.1
4-Apr-14			197.5	199.8	199.6	199.5	202.0	203.9	205.5
2-May-14			194.5	196.6	195.4	194.5	197.6	200.1	202.3
<b>Soya oil CBOT</b>	<b>13-Dec</b>	<b>14-Jan</b>	14-Mar	14-May	14-Jul	14-Aug	14-Sep	14-Oct	14-Dec
7-Feb-14			850.1	857.1	863.8	864.6	863.1	857.4	857.4
7-Mar-14			972.0	977.1	979.7	974.7	964.1	948.4	947.3
4-Apr-14				916.5	920.9	916.0	909.4	900.4	901.5
2-May-14				910.3	915.1	914.7	909.6	900.4	901.7
<b>Sugar LCE</b>	<b>13-Dec</b>	<b>14-Mar</b>	14-May	14-Aug	14-Oct	14-Dec	15-Mar	15-May	
7-Feb-14			436.5	445.4	453	460.9	469.8		
7-Mar-14			475.4	486.3	493.9	500.6	509		
4-Apr-14			463.9	476.3	483.2	491.2	500		
2-May-14				470.5	476.1	486.9	497.8	502.7	

Source: Moore Research Centre, Inc. [www.mrci.com/ohlc/index.php](http://www.mrci.com/ohlc/index.php)

## Implications for India

The current global agricultural outlook scenario is one of caution for India, a major exporter of rice, wheat, maize, and oil meal and importer of vegetable oils and pulses, especially in the context of concerns over the projected sub-normal rainfall and the El Nino factor.

The declining global prices for rice following continued build up in Thai rice stocks and its declining prices are likely to pose increased competition for Indian rice in coming months. According to most sources, Thailand is likely to replace India as the world's largest rice exporter in 2014. While India's shipments of the basmati variety are likely to remain steady in 2014, total rice exports could drop due to the slide in exports of non-basmati rice. The strengthening of Indian rupee against the US dollar also will have a negative impact on Indian rice exports. The imposition of a 110 per cent import duty on rice last year by Nigeria, a major importer of the grain from India, could further hamper exports from India.

Indian wheat mainly competes with US SRW wheat gulf and Black sea milling wheat in the international market. With the international prices firming up in recent months following concerns about U.S. wheat production outlook due to unfavourable weather and the on-going political crisis between Ukraine and Russia, there has been a fresh window of opportunity for Indian wheat exports. However, this is unlikely to continue for long due to pressure from a near record global wheat production and India will have to brace for increased competition in coming months. Furthermore, a significant decline in government wheat procurement in 2013-14 and resultant decline in wheat stocks could make the government more cautious about export allocation.

Export outlook for Indian maize continues to remain sluggish driven by a large increase in global exportable surplus due to a record production and significantly lower prices vis-a-vis previous years. Currently, Indian maize is barely competitive in the global market due to weak international prices with no significant improvement in sight in the near future.

Although global soybean meal exports are forecast to increase along the trend line, India's soybean meal exports will continue to face increased competition in 2014-15 because of strong domestic prices and higher production in other major exporting countries. Growing Argentine crush, in contrast to minimal increases in other exporting countries, will allow Argentina to capture two-thirds of the forecast export growth.

India's competitiveness in the international sugar market will continue to be tempered by lower production, high domestic prices and increasing sugarcane prices in the context of rising global production and record stocks leading to declining international prices. Although exports, particularly of raw sugar, were looking up following the government decision to grant an export subsidy of Rs. 3,300 per tonne, the recent reduction in the export subsidy to Rs. 2,277 per tonne is likely to impact the competitiveness of Indian sugar in the global market. The changing government policies could also impact the credibility of Indian sugar exporters in the global market.

Lower prices and reduced premium vis-à-vis palm oil is expected to result in larger Indian soybean oil imports replacing palm oil

Likely higher domestic production of *rabi* pulses in India and expected lower international prices for pulses, particularly dry peas in Canada, should help to contain any price increase in pulses.

## NOTE

Most recent detailed country by country analysis of the commodity situation and outlook are available in the following reports:

### **Food and Agriculture Organization of the United Nations**

FAO Cereal Supply and Demand Brief – May 2014

<http://www.fao.org/worldfoodsituation/csdb/en/>

Food Outlook, May 2014

<http://www.fao.org/docrep/019/I3751E/I3751E.pdf>

Oil Crops Monthly Price and Policy Update, May 2014

[http://www.fao.org/fileadmin/templates/est/COMM\\_MARKETS\\_MONITORING/Oilcrops/Documents/MPPU\\_May\\_14.pdf](http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Oilcrops/Documents/MPPU_May_14.pdf)

International Commodity Prices

[www.fao.org/economic/est/statistical-data/est-cpd/en/](http://www.fao.org/economic/est/statistical-data/est-cpd/en/)

### **United States Department of Agriculture – Foreign Agricultural Service**

Grain: World Markets and Trade May 2014

<http://apps.fas.usda.gov/psdonline/circulars/grain.pdf>

Oilseeds: World Market and Trade May 2014

<http://apps.fas.usda.gov/psdonline/circulars/oilseeds.pdf>

### **Agriculture and Agri-Food Canada**

Canada-Outlook for Principal Field Crops April 2014

[http://www5.agr.gc.ca/resources/prod/doc/misb/mag-gam/fco-ppc/fco-ppc\\_2014-04-17\\_eng.pdf](http://www5.agr.gc.ca/resources/prod/doc/misb/mag-gam/fco-ppc/fco-ppc_2014-04-17_eng.pdf)

### **International Grains Council**

Grain Market Report, April 2014

<http://www.igc.int/en/downloads/gmrsummary/gmrsumme.pdf>

### **ABARES**

Agricultural Commodities Outlook, March 2014

[http://data.daff.gov.au/data/warehouse/agcomd9abcc004/agcomd9abcc004201403/AgCommodities2014.No1\\_Ver1.1.0\\_lr.pdf](http://data.daff.gov.au/data/warehouse/agcomd9abcc004/agcomd9abcc004201403/AgCommodities2014.No1_Ver1.1.0_lr.pdf)



### Part III. The Setting for Commodity Specific Analysis

The short term outlook for agricultural production in the current year of 2014-15 is conditioned by the monsoon rainfall conditions. Kharif production is particularly influenced by rainfall during June-September period, while rabi season prospects are relatively insulated from poor monsoon depending on late season rains which may recharge the irrigation water sources. The actual rainfall in June has been at 43 per cent below the long period average in June the current year. The deficiency is greater in the current year as compared to the experience in 2012-13 when June rainfall deficiency was 28 per cent below the normal. The deficiency was even more severe in 2002-03 at 54 per cent below the long period average (LPA). The latest projections of monsoon period rainfall by the India Meteorology Department place the likely deficit at 7 per cent of (LPA). To contain the overall deficit at 7 per cent of the normal, revival of the monsoon in the remaining three months would be essential.

The regional pattern of rainfall during the month of June highlights the extensive nature of rainfall deficiency in the current year. Barring the sub-divisions of South Interior Karnataka, Kerala, Rayalaseema, Eastern Madhya Pradesh and Bihar all the other rainfall sub-divisions of the country received deficient or scanty rainfall.

The projections presented in Part I of the report point to the extent of likely decline in output for the kharif season of 2014-15 over the harvested levels in the previous year. While the contingency plans implemented by the government through the kharif and rabi seasons are expected to provide guidance and support for measures to minimize the adverse effects of rainfall deficiency on production, the effectiveness of these measures would also be affected by the investments in expanding irrigated area, research, infrastructure and farm machinery over the years. Flow of institutional credit to agriculture has also improved significantly in the recent decade, providing relatively cheaper credit to the farmers than the market.

In contrast to the uncertain domestic production scenario for the year, the global outlook for agriculture is expected to remain satisfactory as supply position has been strengthened by the favourable harvest in 2013. Although international geo-political risks in terms of conflicts in the Black Sea region and Iraq remain significant, with consequent impact on energy prices the prices of rice, wheat, maize and sugar are expected to remain under downward pressure in the international markets in the current year. In the case of edible oils, although palm oil prices may see upward pressures, soybean oil is expected to provide relief on account of strong production performance in the other major producing countries. Pulses supply in the international markets is expected to maintain price levels seen in the previous year.

The data available for the storage levels of 85 major water reservoirs indicates that the situation upto June 26, showed nearly the same situation as in the previous year at the same time and

**The actual rainfall in June has been at 43 per cent below the long period average in June the current year. The deficiency is greater in the current year as compared to the experience in 2012-13 when June rainfall deficiency was 28 per cent below the normal. The deficiency was even more severe in 2002-03 at 54 per cent below the long period average (LPA).**

above the 'normal' or 'previous 10 years' average' level<sup>1</sup>. In comparison, the storage level in the first week of July 2012 was well below the 'normal' for that point in time. The pickup in monsoon rains in July onwards, therefore, would be crucial for supporting sowing activities in kharif.

The price environment for crop output is mixed from producers' perspective in terms of market signals as year-on-year price rise has dropped to single digit rates or turned negative for a number of kharif crops in the period preceding the sowing season. This has indeed followed a year when the price increase was significant. The Minimum Support Price (MSP) for the kharif crops in 2014-15 have also increased at nominal rates of 3.8 per cent in the case of rice, 1.2 per cent for arhar, remained unchanged for maize over the previous year. There has been no change in the MSP for soybean and groundnut in 2014-15. The measures needed to rein in food inflation have now been effected at the supply end of market.

The WPI for urea and DAP has remained unchanged or declined since January 2013. Price of diesel, however, has increased by about 15 per cent in the first five months of 2014 over the same period in the previous year. The consumer price index for agricultural labour, an indicator of pressure on agricultural wage rate, rose by about 8 per cent during April-May 2014 over the same period in the previous year. In other words, on the input front, increase in energy and labour costs is expected to be significant while the prices of key nitrogen fertilisers have remained subdued.

The international price scenario has been projected to be one of stable to moderate increases for the food commodities. In this context, accessing international markets for supplies to supplement domestic supplies where required would be feasible.

The fiscal implications of maintaining the price line on fertilisers have become acute: the subsidy on fertilisers reached Rs 68,000 crore in 2013-14, about Rs 3400 per hectare of area sown during the year. The subsidy on account of managing the government operations in foodgrains reached Rs 92,000 crore in 2013-14. While continuation of these subsidies even at the present level would imply severe constraints on investment spending by the government, sudden reduction in subsidies by raising input prices to the producers or foodgrain prices to the consumers may affect investment spending by the farmers. In the short-term, therefore, subsidy reduction options should also consider measures that can stimulate private investments in agriculture in order to sustain output growth of the sector.

The availability of key inputs such as fertiliser, quality and certified seeds, and farm credit is reported to be adequate in major crops<sup>2</sup>.

The prospects for the food sector in the short term are conditioned by the need to maximize domestic production given the likelihood of less than normal rainfall in the monsoon season of the current year. Favourable global supply conditions in the key commodities and availability of significant stocks of foodgrain with the government provide a framework to manage the shortfalls emerging from a deficient monsoon rainfall in the current year.

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<sup>1</sup> Minutes of the Meeting of the Crop Weather Watch Group held on 26 June 2014.  
<http://agricoop.nic.in/ncfcweather/Minutes-27-June-2014.pdf>

<sup>2</sup> The National Conference on Agriculture for Kharif  
Campaign <http://pib.nic.in/newsite/PrintRelease.aspx?relid=104338>



## Policies

A summary of the policy initiatives on agriculture and related sectors taken during the past quarter is provided in Table III.1.

**Table III.1: Agri- Policy Developments during January 2014 to June 2014**

Sl. No.	Product	Date/ Month	Policy Instrument	Details
1	Pulses	31/03/14	DGFT Notification	The prohibition on export of pulses extended till further orders. This prohibition will not apply to Kabuli Chana and 10,000 tonnes of organic pulses and lentils.
Remarks: To improve supplies in the domestic market.				
2	Rice, Oilseeds, Edible oils	09/01/14	Department of Consumer Affairs Order under the Essential Commodities Act	Edible Oil, Oilseeds, Rice Exempted from Stock Holding Limit Under the Essential Commodities Act
Comment: To facilitate management of export operations.				
3	Sugar	06/02/14	CCEA Decision	The fair and remunerative price of sugarcane payable by sugar mills for 2014-15 sugar season established at Rs. 220/- per quintal linked to a basic recovery rate of 9.5 per cent. This shall be subject to a premium of Rs. 2.32 per quintal for every 0.1 percentage point increase in recovery above that level.
Remarks: To provide a support and incentive price to sugar farmers.				
4	Sugar	12/2/14	CCEA	The incentive towards marketing and promotion services for raw sugar production for the period beginning from April 1 and ending on May 31 reduced to Rs 2,277 per tonne from Rs. 3,300 per tonne for February – March on February 12 but was restored to Rs. 3,300 per tonne in June.
Remarks: To encourage exports.				

Sl. No.	Product	Date/ Month	Policy Instrument	Details
5	Sugar	23/06/14	Minister statement	Import duty on sugar to be increased to 40% from 15%
Remarks: To help sugar sector.				
6	Onion	17/06/14	DGFT Notification	Minimum Export Price of onion abolished in Mach but re-established to \$300 per tonne.
Remarks: To improve supplies in the domestic market and contain price rise				
7	Potato	26/06/14	DGFT Notification	Minimum Export Price established at \$450 per tonne.
Remarks: To improve supplies in the domestic market.				
8	Onion	12/03/14	DGFT Notification	Quantitative restrictions on onion exports removed.
Remarks: To facilitate exports				
9	Vegetable oil	30/04/14	DGFT Notification	Export of edible oils in branded consumer packs of up to 5 Kg is permitted with a Minimum Export Price of USD 1100 per MT
Remarks: To facilitate exports.				
10	Kharif food grains		CCAЕ Decision	Minimum support price for 2014-15 established...
Remarks: To support farm prices				

## Part IV: Commodity Outlook Assessment

### IV.1. Rice

#### IV.1.1 El Nino concern over production outlook

The likelihood of an El Niño development and the IMD forecast of a below normal rainfall this year is likely to impact 2014-15 kharif rice production outlook. Most weather forecasters are predicting that the chance of El Niño developing this year is now quite high, with a 70 per cent chance of El Niño during the Northern Hemisphere summer, and an 80 per cent chance during the fall and winter. In 2009, which was a moderate El Nino year, monsoon season rainfall (June-September) dropped about 23% below normal and kharif rice production declined by about 8 million tonnes from the previous year's level. In 2006, which was also an El Nino year albeit weak, rainfall was almost normal and kharif rice production in fact increased by 2 million tonnes from the previous year's level. In 2004, which was again a weak El Nino year, monsoon rains were about 13% below normal and rice production fell by 6.5 million tonnes. The impact of El Nino was more serious in 2002, when monsoon season precipitation was 19% below normal and 2002-03 rice production dropped by a massive 17.5 million tonnes from the previous year's level. Table IV.1.1 shows the years of El Nino, the monsoon season rainfall, and kharif season rice production.

***Even in the absence of El Nino rainfall could be below normal and all El Nino years need not necessarily be poor monsoon years, although there is a higher occurrence of below normal precipitation in an El Nino year***

**Table IV.1.1: El Nino Status, Rainfall Deviation and Rice Production**

	<b>El Nino Status</b>	<b>Rainfall % Deviation from Normal</b>	<b>Kharif Rice Production MMT</b>
2000-01	No	-7.60	72.78
2001-02	No	-8.33	80.52
2002-03	Moderate	-19.15	63.08
2003-04	No	4.94	78.62
2004-05	Weak	-12.73	72.23
2005-06	No	-1.00	78.27
2006-07	Weak	-0.63	80.17
2007-08	No	5.01	82.66
2008-09	No	-2.13	84.91
2009-10	Moderate	-22.69	75.92
2010-11	No	2.19	80.65
2011-12	No	1.40	92.78
2012-13	No	-7.00	92.37
2013-14	No	6.00	92.00

It thus appears from the above table that even in the absence of El Nino rainfall could be below normal and all El Nino years need not necessarily be poor monsoon years, although there is a higher occurrence of below normal precipitation in an El Nino year. Perhaps the timing of the onset of El Nino and its duration are more critical impacting monsoon rains and crop production. The expansion of irrigation coverage and adoption of improved cultivation practices by farmers under the NFSM, BGREI, and RJVY should help to moderate the impact of El Nino. Formulation and effective implementation of contingency plans comprising of judicious use of available irrigation water, timely supply of seeds even when replanting is required, better agronomic practices to conserve available soil moisture should help in reducing production losses. Furthermore, with proper planning, a decline in kharif rice production could be partly offset by increasing production in the rabi season.

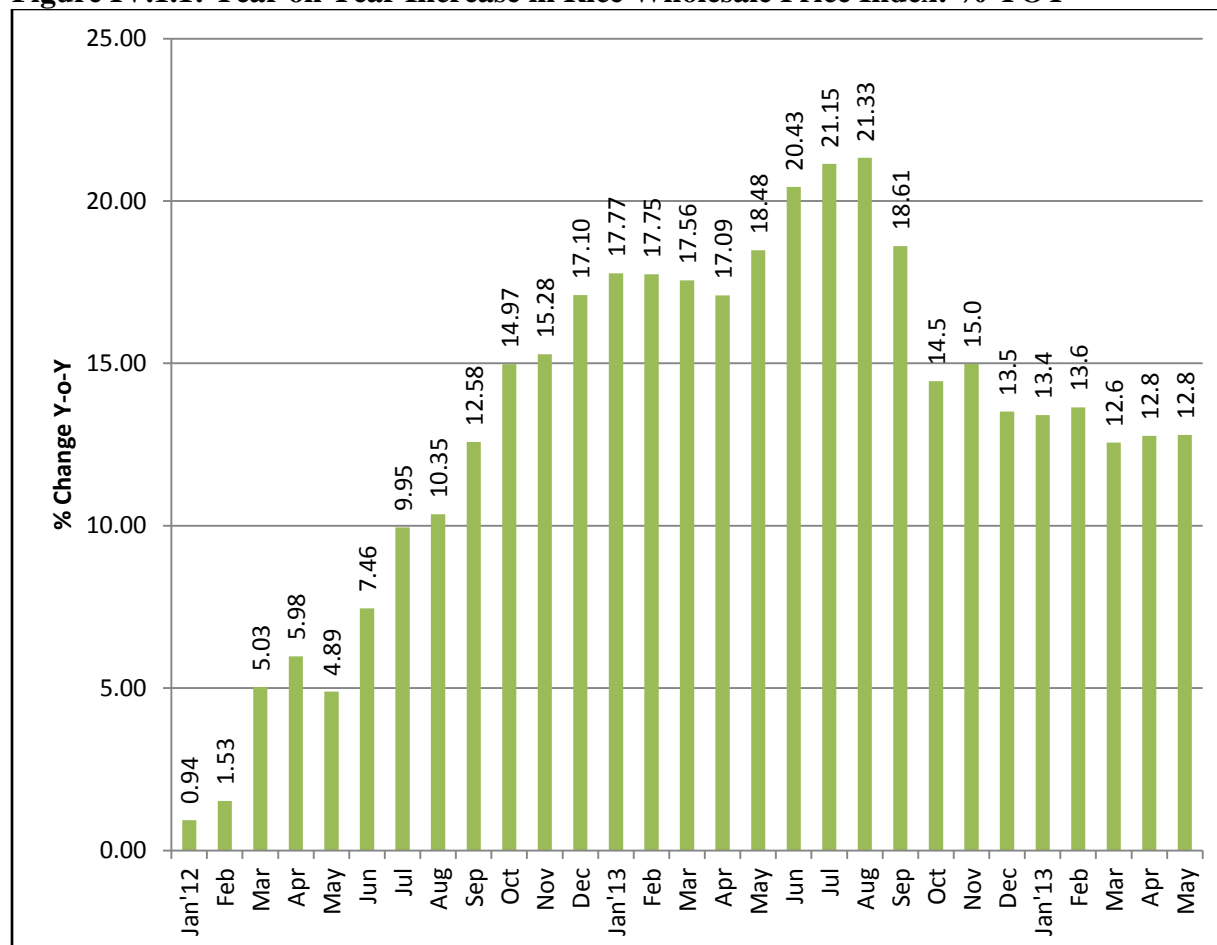
A linear regression fitted with kharif rice production as a dependent variable and rainfall deviation from normal (%), trend, and El Nino years and NFSM years (represented by dummy variables) as exogenous variables gives 2014-15 kharif rice production forecast of 88 million tonnes. With a rabi production of 14 million tonnes, total MY 2014-15 rice production may reach 102 million tonnes.

The 3<sup>rd</sup> Advance Estimate of 2013-14 crop production pegs rice production at a record 106.3 million tonnes (92.0 million tonnes kharif and 14.3 million tonnes in rabi), an increase of one million tonnes over the 2012-13 final production estimate.

#### ***IV.1.2 Consumption growth higher***

Year-on-year wholesale price index-based rice inflation, after peaking over 21 per cent in August 2013, has shown signs of easing, declining to 12.6 per cent in March and 12.8 per cent in May 2014 (Figure IV.1.1). However, it is unclear why rice prices are still ruling so high despite the fact that the increase in the MSP for the 2013-14 crop was a modest 4.8 per cent, significantly below the 2012-13 increase of 15 to 16 per cent and production was a record 106 million tonnes for the second consecutive year. This could be partly due to lower allocation of rice to the PDS, which averaged only 2.45 million tonnes per month in 2013-14 (Apr-Mar) against 2.72 million tonnes in 2012-13. Increased buying by private trade also could be a factor.

**Figure IV.1.1: Year on Year Increase in Rice Wholesale Price Index: % YOY**



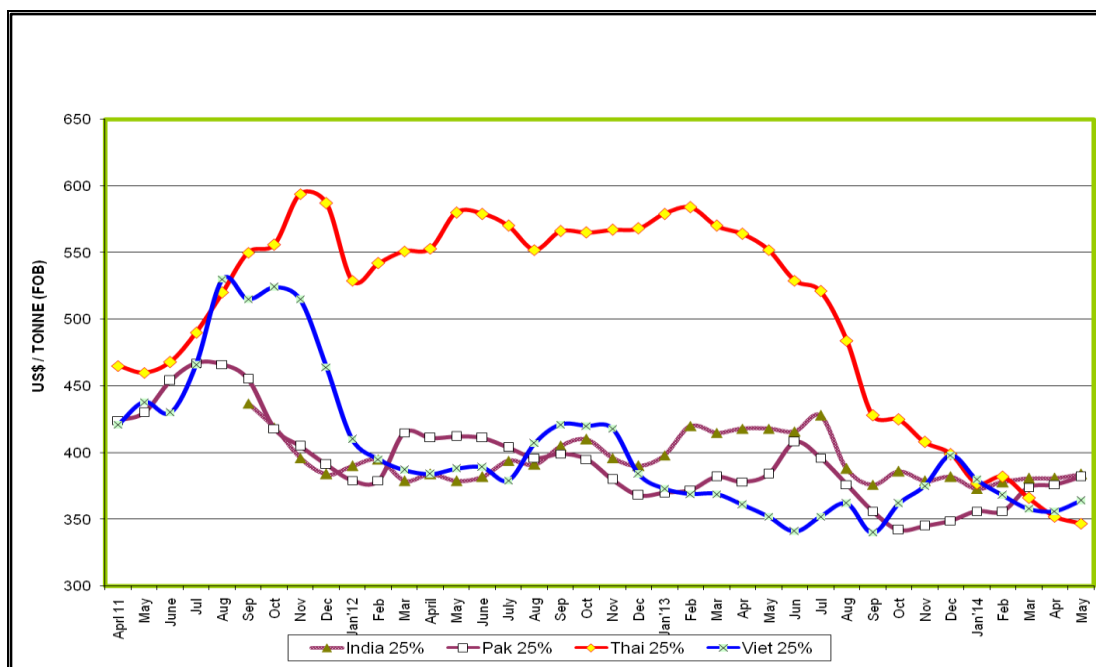
Despite higher prices, rice consumption based on the food balance sheet analysis is estimated to have increased by around 5 per cent in MY 2013-14 to around 100 million tonnes. However, this consumption estimate includes the change in private-held stocks for which separate estimates are not available. Apparently there has been a build-up in private rice stocks in 2013-14 considering the record production and a significant drop in procurement. Rice consumption in MY 2014-15 is forecast to decline marginally due to a likely decline in production.

#### ***IV.1.2 Exports decline***

India's rice exports could dip sharply in MY 2013-14 and CY 2014 and India may not retain its top-most rice exporter position due to stiff competition from Southeast Asian producers (Figure IV.1.2). Record global rice production, a continued build up in Thai rice stocks and its declining prices are likely to pose increased competition for India's high quality non-basmati rice exports in 2014. Thailand government has been selling larger quantities of rice from state warehouses at

low prices to private traders. As per trade reports Thailand is offering 5 per cent broken variety at \$360-\$380 a tonne, free on board compared with similar varieties of rice offered at \$395 a tonne in Vietnam, \$420 a tonne in India and \$430 a tonne in Pakistan. The imposition of 110% import duty (10% import duty rate + a levy of 100%) by the Nigerian government also had a negative impact on Indian non-basmati rice exports to Nigeria, an important export market for Indian rice. Stringent quality standards set by Iran in the recent months is also hurting exports. According to trade sources, although India's shipments of the basmati variety could remain steady or increase in 2014 at over 4 million tonnes, total rice exports could drop to 8 million tonnes due to the slide in exports of non-basmati rice. The situation could continue in MY 2014-15, especially in the likelihood of lower Indian production, a possible higher support price for paddy in MY 2014-15 and a further strengthening of Indian rupee against US dollar.

**Figure IV.1.2: Rice Export Price – India vis-a-vis International**



Source: FAO

**Table IV.1.2: Government operations in Rice**

Marketing Year (Oct-Sep)	Govt Procurement Million Tonnes	MSP for Paddy Rs. Per tonne		PDS Monthly Offtake Million Tonnes *	PDS Issue Price for Milled Rice Ts. Per tonne			Beginning Stocks Million tonnes
		Common	Grade A		APL Grade A	BPL	AAY	
2002/03	16.4 (22.8)	5,500	5,800	2.175	8,300	5,650	3,000	15.8
2003/04	22.9 (25.8)	5,500	5,800	2.092	8,300	5,650	3,000	5.2
2004/05	24.7 (29.7)	5,600	5,900	1.733	8,300	5,650	3,000	6.1
2005/06	27.6 (30.1)	5,700	6,000	2.000	8,300	5,650	3,000	4.8
2006/07	25.1 (26.9)	6,200	6,500	2.067	8,300	5,650	3,000	6.0
2007/08	28.7 (29.7)	7,450	7,750	2.100	8,300	5,650	3,000	5.5
2008/09	34.1 (34.4)	9,000	9,300	2.058	8,300	5,650	3,000	7.9
2009/10	31.4 (35.2)	10,000	10,300	2.300	8,300	5,650	3,000	15.3
2010/11	34.2 (35.6)	10,000	10,300	2.494	8,300	5,650	3,000	18.4
2011/12	35.0 (33.2)	10,800	11,100	2.677	8,300	5,650	3,000	20.4
2012/13	34.0 (32.3)	12,500	12,800	2.719	8,300	5,650	3,000	23.4
2013/14	29.5 (28.0) #	13,100	13,450	2.450	8,300	3000**	3000**	23.1

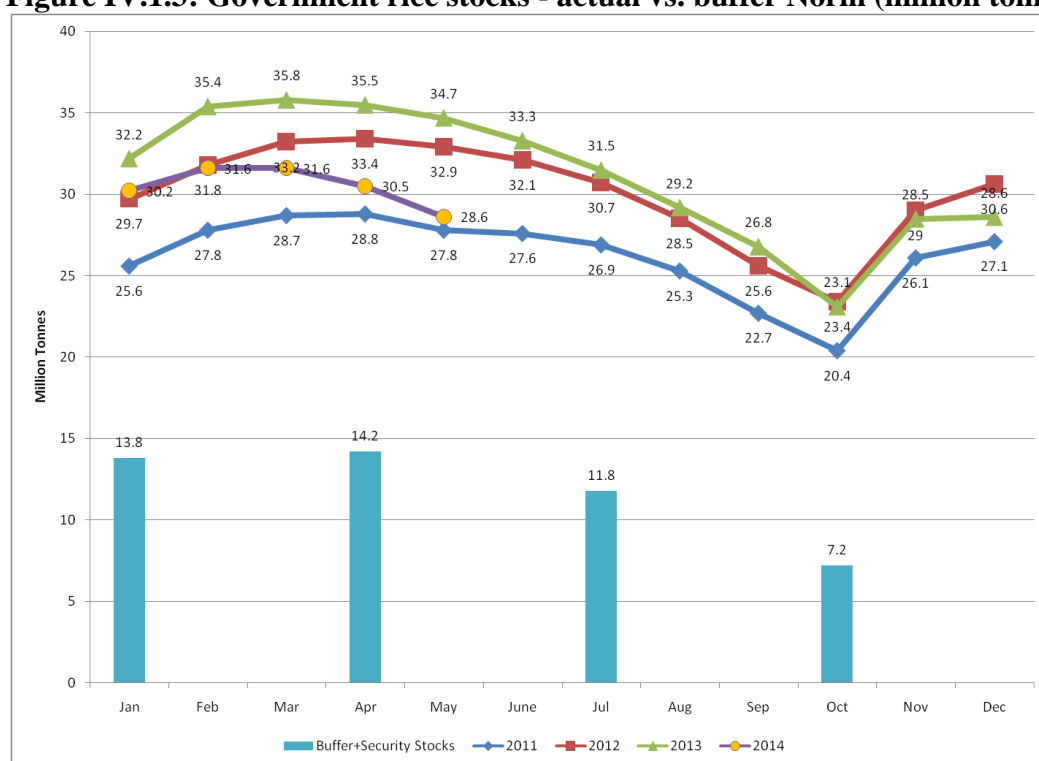
\* Fiscal year basis \*\* Under NFSA # Estimate

Note: Figures in parentheses % of production

#### IV.1.4 Stocks

Government rice stocks (including rice equivalent of un-milled paddy rice) on June 1, 2014, stood at 28.6 million tonnes compared to 34.7 million tonnes a year ago, nonetheless significantly above the government's desired minimum buffer stock plus security reserve level (Figure IV.1.3). The drop in stocks was mainly due to a significant decline in rice procurement in MY 2013-14 projected at 29.5 million tonnes from 34 million tonnes in MY 2012-13. Stocks are forecast to decline to below 20 million tonnes by the end of MY 2013-14 on October 1, 2014, compared to 23.1 million tonnes on October 1, 2013. If production turns out to be lower due to poor monsoon rainfall, year-end stocks with the government would decline further because of procurement in 2014-15 being lower than the MY 2013-14 procurement.

**Figure IV.1.3: Government rice stocks - actual vs. buffer Norm (million tonnes)**



**Table IV.1.3: Supply and Demand Balance for Rice (1000 Tonnes)**

Rice	2011-12	2012-13	2013-14 E	2014-15 F
	Oct-Sep	Oct-Sep	Oct-Sep	Oct-Sep
Production	105,300	105,240	106,290	102,000
Beginning Stocks	20,360	23,370	23,100	21,000
Imports	0	0	0	0
<b>Total Supply</b>	<b>125,660</b>	<b>128,610</b>	<b>129,390</b>	<b>123,000</b>
Exports	10,400	10,000	8,000	8,000
Food Use	89,890	93,010	97,790	95,000
Seed, Feed, Waste, Other	2,000	2,500	2,600	2,000
Total Use	91,890	95,510	100,390	97,000
Ending Stocks	23,370	23,100	21,000	18,000
<b>Total Distribution</b>	<b>125,660</b>	<b>128,610</b>	<b>129,390</b>	<b>123,000</b>
Stocks to Use Ratio %	25	24	21	19
<b>Government Rice Operations</b>				
	2011-12	2012-13 Oct	2013-14 E	2014-15 F
	Oct-Sep	Sep	Oct-Sep	Oct-Sep
Beginning Stocks	20,360	23,370	23,100	21,000
Imports	0	0	0	0
Procurement	35,000	34,000	29,500	28,000
<b>Total Availability</b>	<b>55,360</b>	<b>57,370</b>	<b>52,600</b>	<b>49,000</b>
Offatke 1/	31,990	34,270	31,600	31,000
Exports	0	0	0	0
Ending Stocks	23,370	23,100	21,000	18,000
<b>Total Distribution</b>	<b>55,360</b>	<b>57,370</b>	<b>52,600</b>	<b>49,000</b>

Note: Stocks are only government stocks. Total use is the residual and includes private stocks change. E- Estimate; F- Forecast. 1/ Residual, includes PDS and other programs +storage losses



## **Assessment**

The likelihood of an El Niño development later in the season, the IMD forecast of a below normal rainfall this year and a significant deficiency in monsoon rains during the early phase of the monsoon season are likely to negatively impact 2014-15 rice production. Formulation and effective implementation of contingency plans should help in reducing production losses. A decline in kharif rice production could be partly offset by increasing production in the rabi season with proper planning. Rice prices are ruling high despite the two bumper crops in succession. The increase in the MSP for the 2013-14 crop was also modest. Comfortable rice stocks with the government and the government decision to allocate additional 5 million tonnes of rice through the PDS should help to contain rice price. India's rice exports may drop in MY 2013-14 and in MY 2014-15 due to stiff competition in international market.

Taking into account a deficiency of 7 per cent of the normal or long period average rainfall, our assessment is that kharif rice production in 2014 would be 3-4 million lower than the estimated 92 million tonnes in the previous year. Rice stock with the government on June 1 was 28.6 million tonnes, lower than the stock on June 1 in 2013 but well above the minimum buffer stock plus security reserve level. Even with lower level of procurement in 2014, the overall supply position of rice is adequate to meet the requirements for the year.

## **IV. 2. Wheat**

### ***IV.2.1. Production a record in 2014***

Late monsoon season rains in most wheat growing regions last year, particularly in Madhya Pradesh, Rajasthan and Bihar replenished soil moisture providing a favourable planting condition for wheat. However, excessive late winter rains in some important wheat growing states such as Madhya Pradesh caused localized crop damage which at one stage was highly exaggerated in the absence of actual crop cutting data. Government's latest production estimate (3<sup>rd</sup> Advance Estimate), however, pegs 2014 wheat production at a record 95.9 million tonnes, 2.4 million tonnes more than in 2013. The increase in production in 2014 was both due to an increase in planted area, up 0.6 million hectares at 30.6 million hectares, and an increase in yield at 3,134 kg/ha compared to 3,116 kg/ha the previous year.

The trend in domestic procurement of wheat in MY 2014-15 supports the higher production estimate, which is almost 2.5 million tonnes ahead of procurement during the corresponding period of MY 2013-14 (Table IV.2.1). Even states like Madhya Pradesh, where wheat crop had reportedly suffered heavy losses due to untimely rains, have registered significant increase in procurement.

**Table IV.2.1: Progressive Procurement of Wheat MY 2014-15 (Million Tonnes)**

	<b>MY 2013-14</b>	<b>2013-14 1/</b>	<b>2014-15 1/</b>
Punjab	10.89	10.87	11.59
Haryana	5.87	5.87	6.49
Uttar Pradesh	0.68	0.67	0.36
Madhya Pradesh	6.34	6.32	7.09
Rajasthan	1.27	1.22	1.82
Other	0.04	0.02	0.02
All India	25.09	24.97	27.37

1/ As on May 30.

#### ***IV.2.2 Consumption up***

Based on food balance sheet analysis, wheat consumption in MY 2013-14 is estimated to have increased significantly due to larger availability of wheat in the open market following lower wheat procurement by the government, despite lower offtake through the PDS (Table IV.2.2). The monthly offtake of wheat from government stocks for PDS, open market sale, and other welfare programs (excluding exports) averaged 2.35 million tonnes per month in 2013-14 against 2.51 million tonnes in 2012-13. Although the government had allocated 10 million tonnes of wheat for Open Market Sale (OMS) at subsidized rates, only 6.1 million tonnes were lifted in MY 2014-15 against 7 million tonnes in MY 2013-14.

**Table IV.2.2: Govt. Operations in wheat**

Marketing Year (Apr-Mar)	MSP Rs. per tonne	Govt Procurement Million Tonnes	PDS Monthly Offtake Million tonnes *	PDS Issue Price			Beginning Stocks Million Tonnes
				APL	BPL	AAY	
2002/03	6,200	19.0 (26.1)	2.21	6,100	4,150	2,000	26.0
2003/04	6,300	15.8 (24.0)	2.03	6,100	4,150	2,000	15.6
2004/05	6,300	16.8 (23.3)	1.41	6,100	4,150	2,000	6.9
2005/06	6,400	14.8 (21.6)	1.39	6,100	4,150	2,000	4.1
2006/07	6,500	9.2 (13.3)	0.99	6,100	4,150	2,000	2.0
2007/08	8,500	11.1 (14.6)	1.02	6,100	4,150	2,000	4.7
2008/09	10,000	22.7 (28.9)	1.24	6,100	4,150	2,000	5.8
2009/10	10,800	25.3 (31.4)	1.87	6,100	4,150	2,000	13.4
2010/11	11,000	22.5 (25.9)	1.93	6,100	4,150	2,000	16.1
2011/12	11,700	28.3 (32.0)	2.02	6,100	4,150	2,000	15.3
2012/13	12,850	38.1 (40.1)	2.51	6,100	4,150	2,000	20.0
2013/14	13,500	25.1 (27.1)	2.35	6,100	2,000**	2,000**	24.2
2014/15	14,000	27.5 (28.7)					17.8

\* On Fiscal Year (Apr-Mar) basis and includes open market sale.

PDS = Public Distribution System; APL = Above Poverty Line

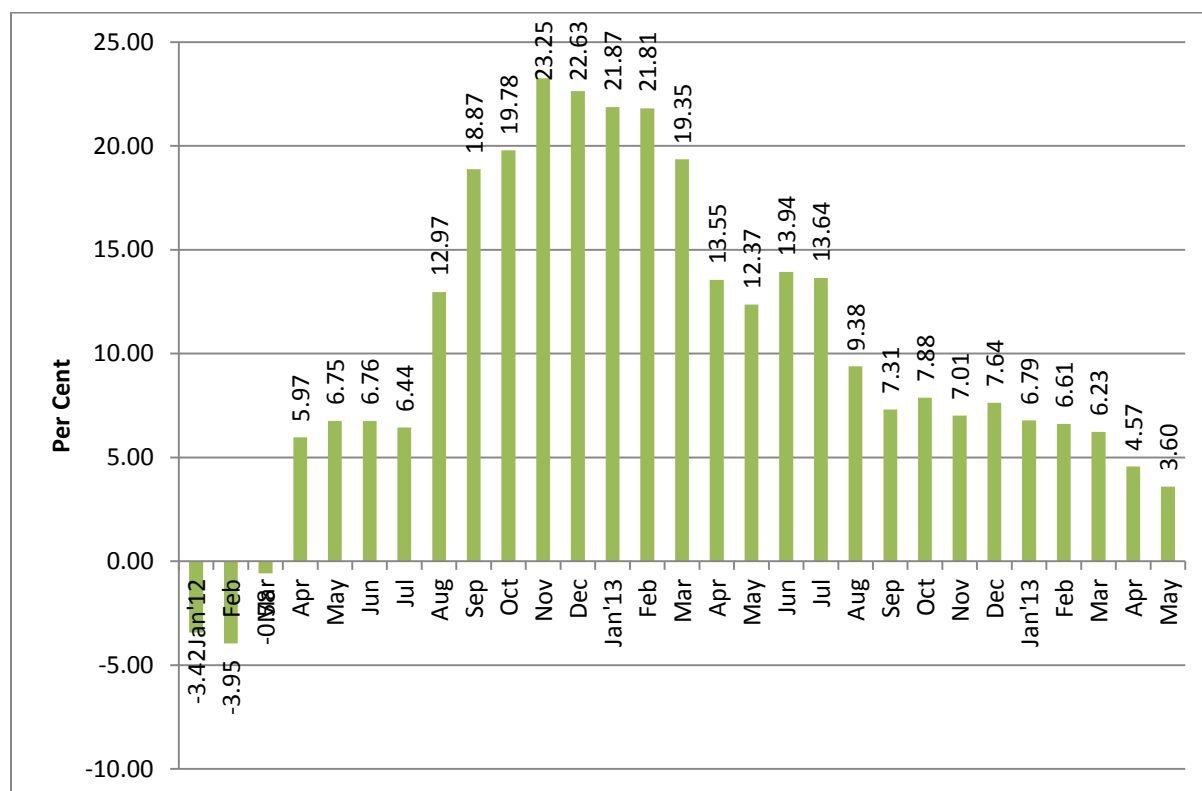
BPL = Below Poverty Line; AAY = *Antyodaya Anna Yojana* (Poorest of the Poor)

Figures in parenthesis show government procurement as per cent of production.

### IV.2.3 Wheat price inflation moderates

Year-on-year wheat price inflation measured by wholesale price index further weakened in recent months, declining to around 3.6 in May 2014 compared to over 12.3 per cent a year ago (Figure IV.2.1) reflecting larger wheat availability in the open market. The government decision to release 10 million tonnes of wheat in the open market and larger availability of wheat in the open market following lower government wheat procurement by the government helped to keep prices under check. A record wheat harvest in 2014 and a modest increase in the MY 2014-15 government support price from Rs. 13,500 in MY 2013-14 to Rs. 14,000 per tonne and lower exports outlook would moderate wheat prices in 2014-15.

**Figure IV.2.1: Wheat Price Inflation: WPI (%YOY)**

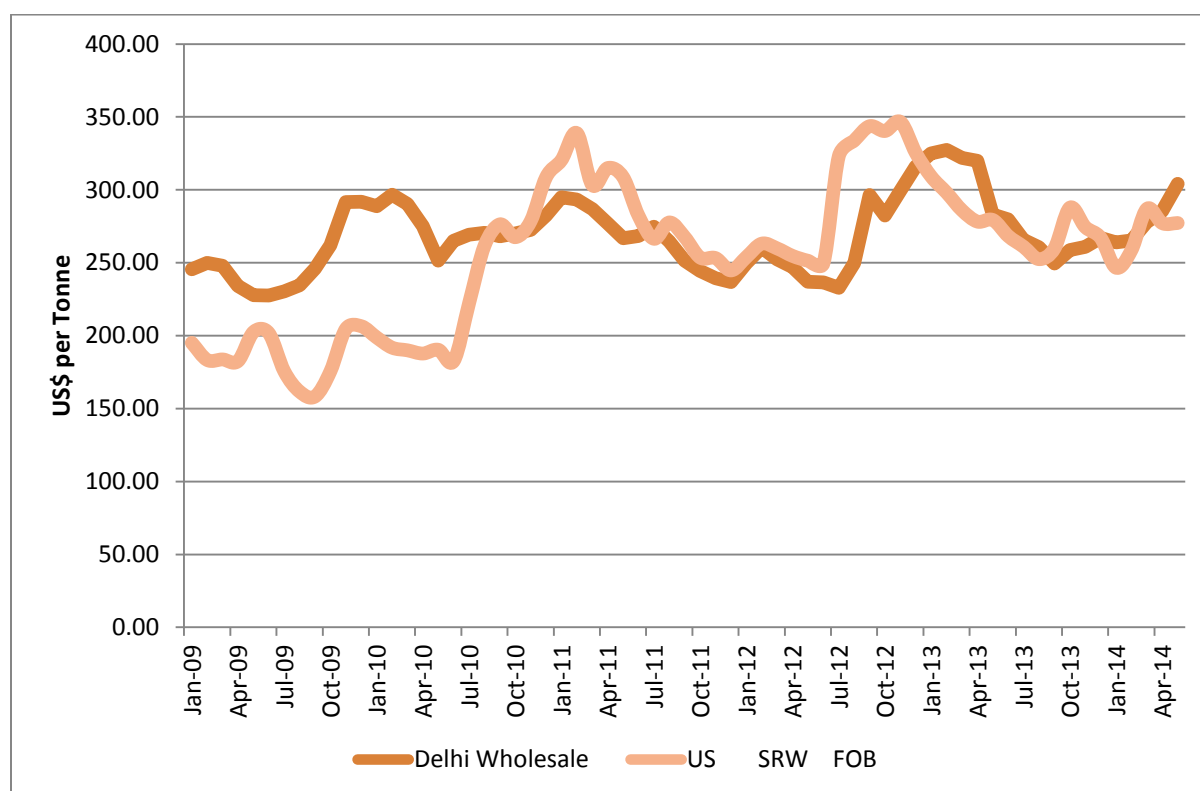


#### IV.2.4 Export outlook bleak

The downward revision in the government MEP from \$300 per tonne to \$260 per tonne effective October 30, 2013, combined with a strengthening of global wheat prices (Figure IV.2.2) in response to Ukraine crisis and U.S. weather developments in the wheat belt resulted in a pickup in wheat exports from government stocks in recent months. Of the two million tonnes of export quota announced in April 2013, government agencies shipped around 1.6 million tonnes of wheat through March 2014. Exports during April 2013 to March 2014 on government account totalled about 2.7 million tonnes, including carry forward from the 2012-13 export allocation of 4.5 million tonnes. Total wheat exports including private trade exports in 2013-14 including wheat flour (wheat equivalent) were around 6 million tonnes.

Wheat exports in MY 2014-15 will continue to face increased competition from near record global production, particularly in the Black Sea region which directly competes with Indian wheat. The strengthening of Indian rupee against U.S. dollar, lower wheat stocks with the government and concerns about poor monsoon this year and its impact on crop production might discourage wheat export allocation from government stocks in 2014-15. However, limited wheat exports on private account are likely to continue, particularly to neighbouring countries such as Bangladesh as long as there is parity of Indian wheat with global wheat prices. Currently we forecast MY 2014-15 wheat exports at 3 million tonnes.

**Figure IV.2.2 Indian Wholesale Wheat Price vis-à-vis US SRW Wheat Price FOB**



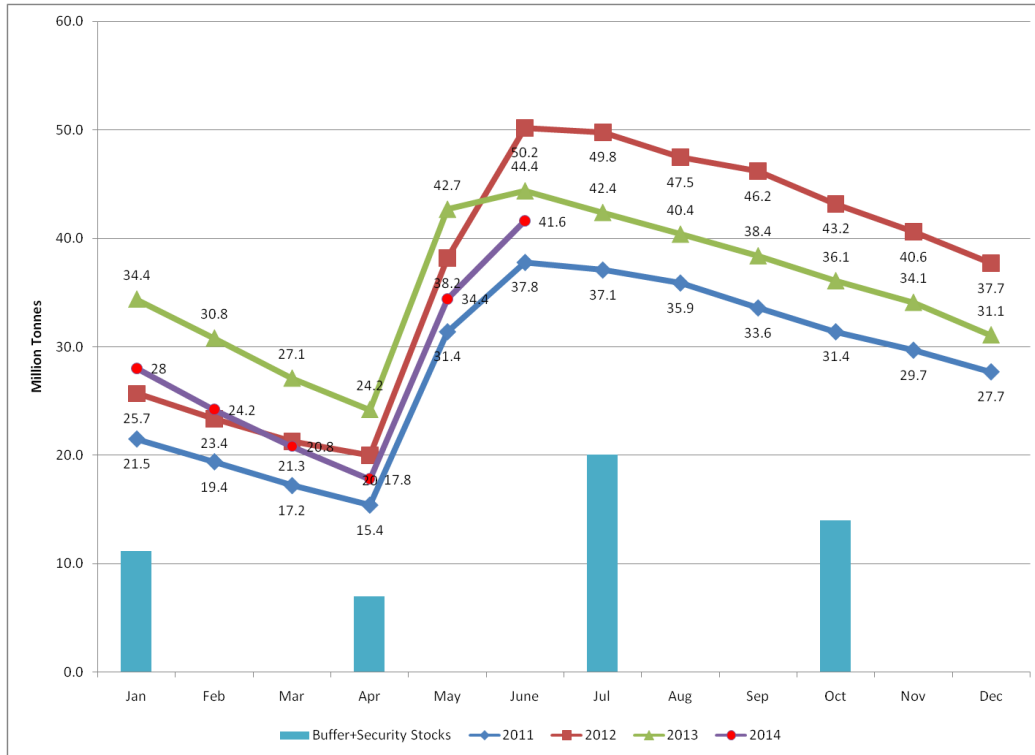
Source: US Price – World Bank; Indian Price- Department of Consumer Affairs

*Note: US SRW has typically sells at a premium over Indian wheat. Indian FOB price will be higher than the indicated Delhi wholesale price by around \$40 per tonne on account of transportation cost and other handling charges.*

### **IV.2.5 Stocks lower**

Following a steep decline in government wheat procurement in MY 2014-15, government wheat stocks declined to 17.8 million tonnes on April 1, 2014, compared to 24.2 million tonnes on April 1, 2013 (Figure IV.2.3). Stocks on June 1, 2014, were 41.6 million tonnes compared with 44.4 million tonnes a year ago and are forecast to increase marginally to 19 million tonnes by the end of MY 2014-15 on April 1, 2015 due to larger procurement and lower export allocations. The supply demand balances for wheat with forecast for MY 2014-15 are summarised in Table IV.2.3.

**Figure IV.2.3 Government Wheat Stocks-Actual Vs Buffer Norms (million tonnes)**



**Table IV.2.3: Supply and Demand Balance for Wheat (1000 metric tonnes)**

	2011-12 Apr-Mar	2012-13 Apr-Mar	2013-14E Apr-Mar	2014-15F Apr-Mar
Production	86,870	94,880	93,510	95,850
Beginning Stocks	15,364	19,952	24,207	17,834
Imports	2	0	0	0
<b>Total Supply</b>	<b>102,236</b>	<b>114,832</b>	<b>117,717</b>	<b>113,684</b>
Exports	872	6,800	6,000	3,000
Food Use	76,200	78,332	87,883	86,684
Seed, Feed, Waste, Other	5,212	5,500	6,000	5,000
Total Use	81,412	83,832	93,883	91,684
Ending Stocks	19,952	24,207	17,834	19,000
<b>Total Distribution</b>	<b>102,236</b>	<b>114,832</b>	<b>117,717</b>	<b>113,684</b>
Stocks to Use Ratio %	25	29	19	21
<b>Government Wheat Operations Balance Sheet</b>				
<b>Govt Wheat Operation</b>	2011-12 Apr-Mar	2012-13 Apr-Mar	2013-14E Apr-Mar	2014-15F Apr-Mar
Beginning Stocks	15,364	19,952	24,207	17,834
Imports	0	0	0	0
Procurement	28,335	38,148	25,092	27,500
Total Availability	43,699	58,100	49,299	45,334
PDS & other Offtake and losses	23,647	30,920	28,818	25,834
Exports	100	2,973	2,647	500
Total Distribution	23,747	33,100	29,300	30,000
Ending Stocks	19,952	24,207	17,834	19,000

Estimate; F – Forecast

Note: Stocks are government stocks. Total use is residual and would include private stocks change.

Source: Food Corporation of India, Directorate of Economics and Statistics, NCAER Estimate

## Assessment

A record wheat harvest in 2014, a modest increase in the MY 2014-15 government support price and lower exports outlook should help to keep wheat prices under check in 2014-15. Wheat exports in MY 2014-15 will continue to face increased competition from near record global production. The strengthening of Indian rupee against U.S. dollar, lower wheat stocks with the government and concerns about poor monsoon this year and its impact on crop production may discourage wheat export allocation from government stocks in 2014-15. Wheat stocks are forecast to increase marginally by the end of MY 2014-15. To offset the decline in kharif food grain production, special efforts need to be made to increase 2015 wheat production through proper planning.

## IV. 3. Coarse Grains

### *IV.3.1 Deficient rainfall to impact 2014-15 production*

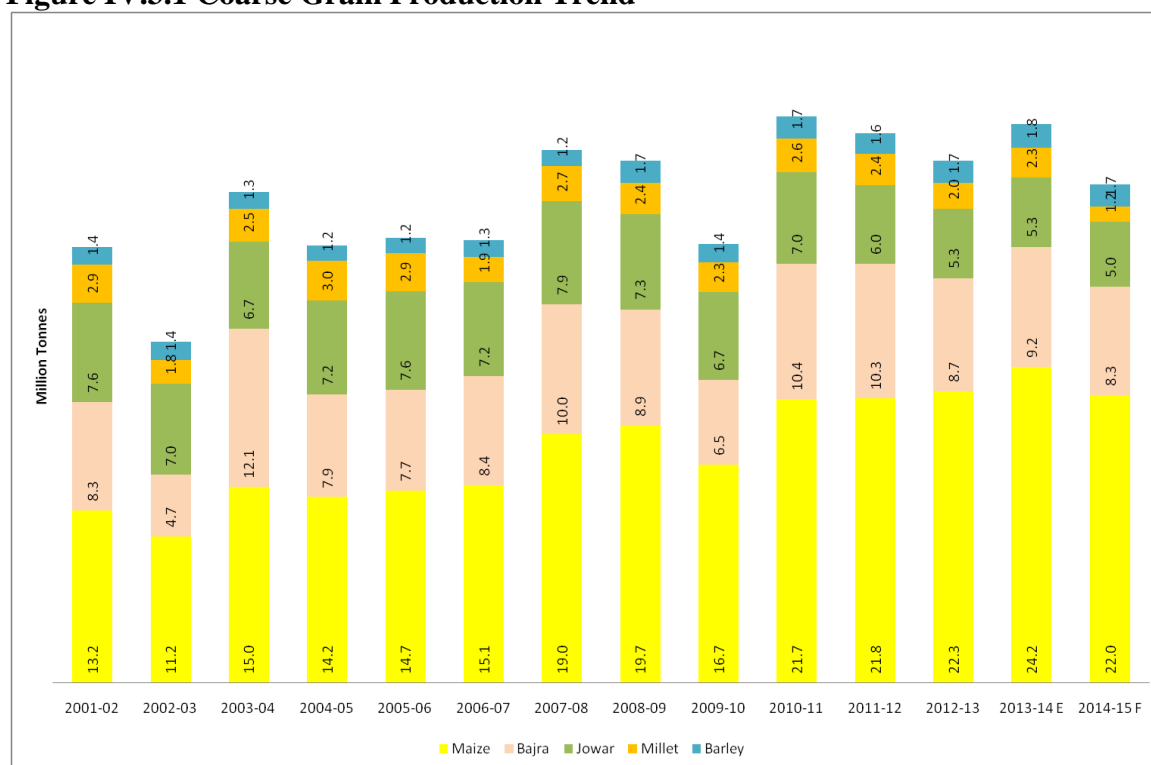
The late arrival of the monsoon and the likely below normal rainfall this year as forecast by the IMD is likely to negatively impact the mostly rain-fed kharif coarse grain crop. Taking into account the rainfall scenario and past trends, kharif coarse grain production in 2014-15 is projected at 27.4 million tonnes, compared to 31.2 million tonnes in 2013-14. The 2014-15 forecast by crop with 2013-14 production within parentheses in million tonnes are: kharif maize - 15.6 (17.5); bajra – 8.3 (9.2); jowar – 2.3 (2.2); other – 1.2 (2.3). The decline in kharif coarse grain can be partly offset by increasing rabi season output, particularly maize. Assuming normal rabi season production of maize and jowar, we forecast 2014-15 maize production at 22 million tonnes and jowar at 5 million tonnes.

The government's 3<sup>rd</sup> AE pegs 2013-14 coarse grain production at a near record 42.7 million tonnes including 31.2 million tonnes of kharif and 11.4 million tonnes of rabi. The late monsoon rains last year provided a favourable planting condition for *rabi* coarse grains, which include mostly maize and some jowar and barley, resulting in near record rabi maize production.

Coarse grain production has shown a mixed trend over the past years. With the exception of maize, most other coarse grains have become neglected crops due to lower productivity and profitability, wide year-to-year fluctuations in yields due to its dependence on monsoon rains and lack of an effective price support mechanism unlike that for wheat and rice. Competition from commercial crops such as soybeans and cotton has caused erosion in planted area under most of these crops. However, maize has been an exception as increasing demand from the growing feed and starch industry, increased use of hybrid seeds and increasing export demand gave a fillip to production, which has registered a steady growth over the past few years (Figure IV.3.1).



**Figure IV.3.1 Coarse Grain Production Trend**

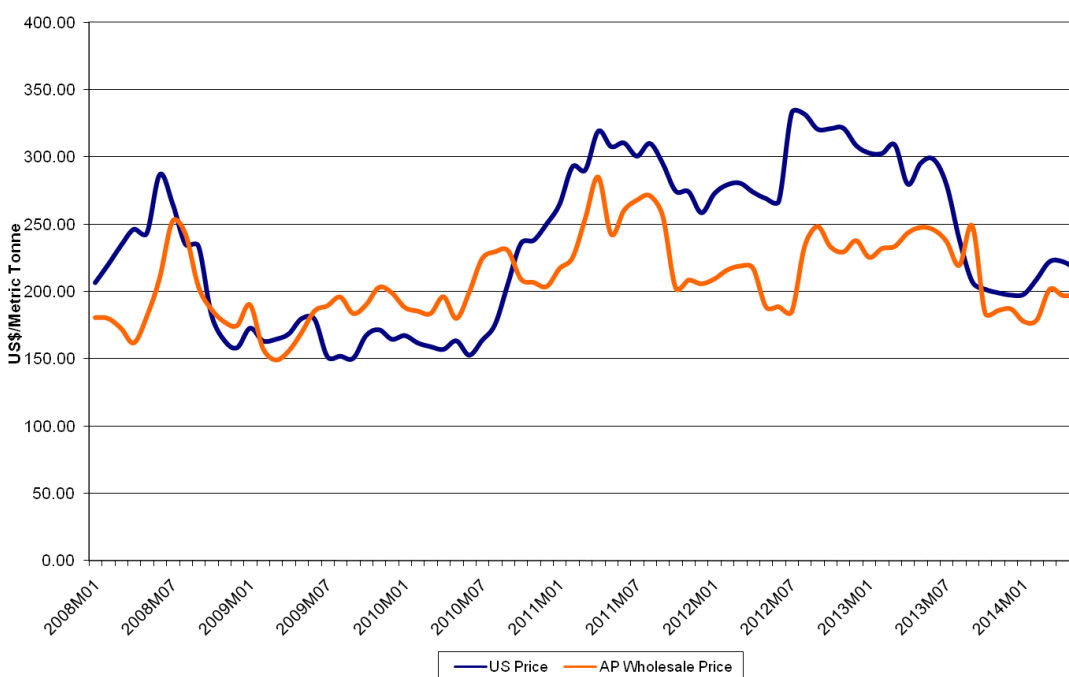


### IV.3.2 Consumption, Trade and Price

The demand for coarse grains as a food source is shrinking as, with increasing income and larger availability of wheat and rice though the PDS, consumers are shifting from inferior grains to superior grains. Although food use of maize has shrunk, there has been a significant increase in the non-food usage of corn – mainly for feed and starch and starch derivatives in recent years. According to industry sources almost two-third of annual maize production goes for feed use and about 16 per cent for industrial use mainly starch. A growing poultry sector is generating increased demand for maize for feed use.

Maize prices have declined sharply since the beginning of the 2013-14 marketing year reflecting higher production and lower international prices. Although the MSP for maize was set at Rs. 13,100 per tonne for MY 2013-14, prices in some major producing areas have dipped below the support level, leading to increased government maize procurement. Government agencies have so far procured about 1 million tonnes of maize mostly in Karnataka and Andhra Pradesh. Indian domestic prices after remaining somewhat above the global price for some time has fallen below the global prices (Figure IV.3.2) facilitating larger exports, mostly to neighbouring countries. However, the appreciation of Indian rupee against U.S. dollar has been a negative factor impacting exports. Total MY 2013-14 exports are now estimated at 3.5 million tonnes compared to 4.8 million tonnes in MY 2012-13. A likely decline in maize production in 2014-15 and likely higher prices could result in lower exports, currently forecast at 3 million tonnes.

**Figure IV.3.2: Maize price comparison – India vs. U.S**



Source: World Bank and Agricultural Marketing Information Network, Ministry of Agriculture

On a fiscal year basis, Indian maize exports in 2013-14 were around 3.9 million tonnes compared to 4.8 million tonnes in 2012-13. Major destinations were Indonesia, Malaysia, Vietnam, and Bangladesh, and Nepal (Table IV.3.1)

**Table IV.3.1: Maize exports by destination (Apr-Mar), Metric Tonne**

	<b>2012-2013</b>	<b>2013-2014</b>
Indonesia	1,568,997	1,002,350
Malaysia	966,623	897,141
Vietnam	1,277,381	856,495
Bangladesh	109,305	510,430
Nepal	141,691	194,986
Taiwan	394,285	165,812
China	45,941	55,483
UAE	72,393	54,217
Singapore	43,086	45,216
Yemen	29,699	34,837
Oman	33,338	27,098
Other	93,205	85,917
<b>TOTAL</b>	<b>4,775,944</b>	<b>3,929,982</b>

**Table IV.3.2 Demand Supply Balance Sheet for Maize ('000 tonnes)**

<b>(Oct-Sep)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14 E</b>	<b>2014-15 F</b>
Opening stocks	600	600	550	1,500
Production	21,760	22,260	24,190	22,000
Imports	3	10	0	0
Domestic Availability	22,363	22,870	24,740	23,500
Exports	4,600	4,800	3,500	3,000
Domestic Utilisation	17,163	17,520	19,740	19,900
Closing Stocks	600	550	1500	600

## **Assessment**

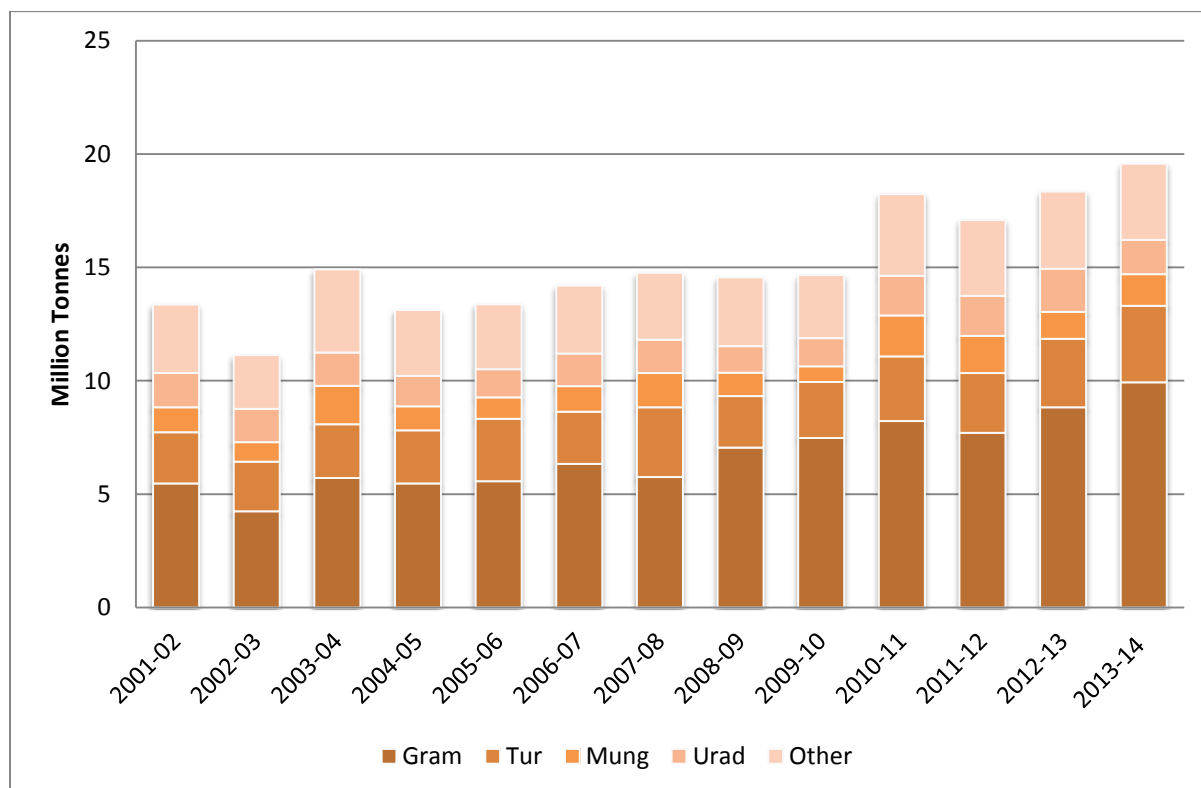
The late arrival of the monsoon and the likely below normal rainfall this year, are likely to negatively impact the mostly rain-fed kharif coarse grain crop. A growing poultry sector is generating increased demand for maize for feed use. Maize prices have declined sharply, below the MSP in some markets, since the beginning of the 2013-14 marketing year reflecting higher production and lower international prices. However, a likely decline in maize production in 2014-15 could result in higher prices in MY 2014-15. Exports may not increase relative to last year as global supplies are at a high level. Assessment provided in this report places kharif coarse grain production at 27.4 million tonnes, a drop of 3.8 million tonnes compared to the previous year.

## IV.4 Pulses

### IV.4.1 Production forecast to decline

The forecasted 7% deficiency in the 2014 monsoon from the LPA and the slow progress of monsoon in to major producing regions of central and western India are likely to negatively impact 2014 kharif pulse production. A regression analysis with % deviation of rainfall from the LPA, a trend variable, and a dummy variable to capture the impact of the NFSM for pulses as exogenous variables gives a forecast of 5.8 million tonnes of pulses, compared to 6.3 million tonnes in 2013-14. However, the decline could be much higher if monsoon fails in the major pulse belt. In 2009 which was one of the worst drought years in recent years, kharif pulse production had declined to 4.2 million tonnes. Assuming a normal rabi pulse crop of around 11 million tonnes, MY 2014-15 pulse production is forecast at 16.8 million tonnes against the government's 3<sup>rd</sup> AE of 19.6 million tonnes in 2013-14, which was a record. Most of the increase in pulse production in 2013-14 was in gram (Figure IV.4.1).

**Figure IV.4.1: Trend in Pulse Production by Type**



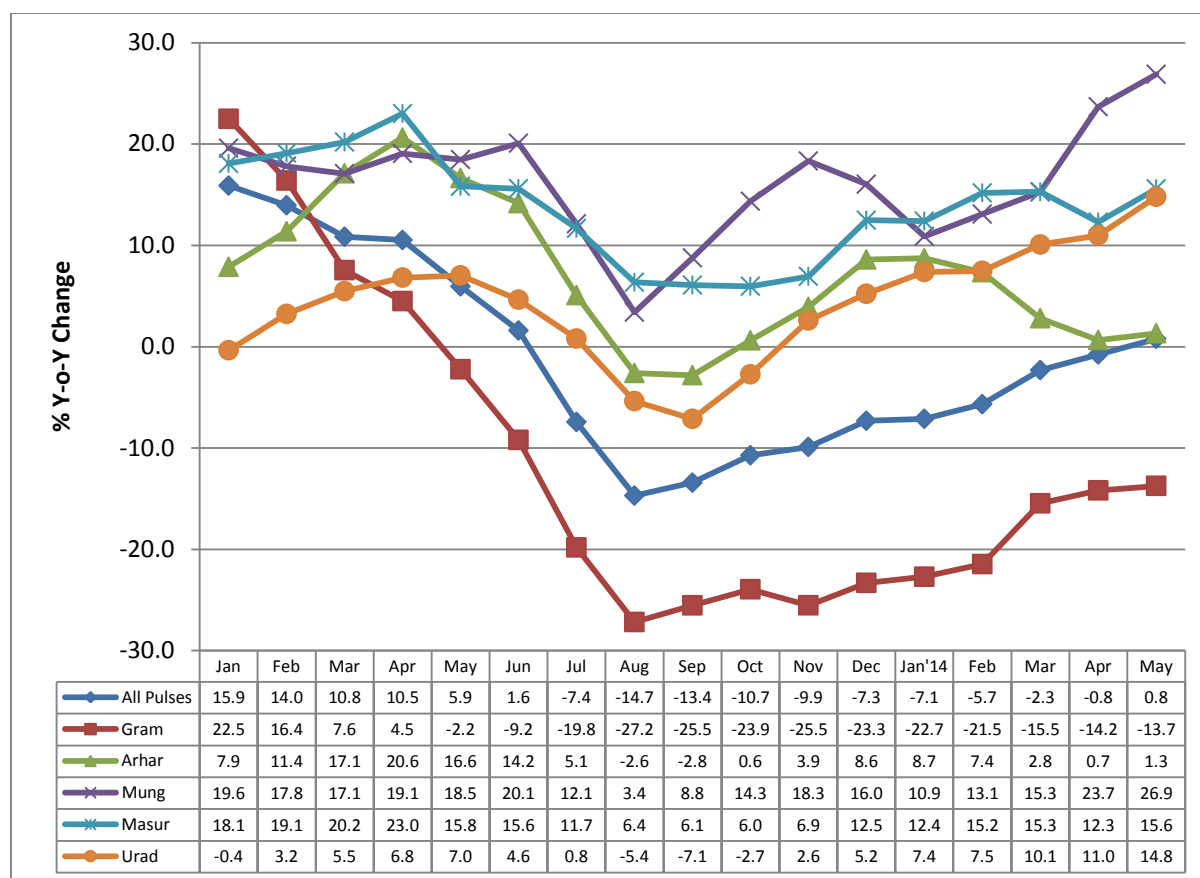
#### ***IV.4.2 Consumption, Trade and Price***

Higher production combined with larger imports has resulted in a marginal increase in pulse consumption estimated at around 50 grams per day in 2013-14 compared to less than 40 grams in earlier years. Larger imports of dry peas in recent years due its lower price have resulted in its increased share in the domestic pulse consumption. However consumption is forecast to decline in 2014-15 due to likely lower production which may not be fully offset by imports.

Thanks to larger domestic production, pulse imports in 2013-14(Apr-Mar) declined marginally to 3.6 million tonnes from 4.0 million tonnes in 2012-13, with most of the decline in chickpeas. However, there was a significant increase in imports of lentils. Pigeon pea imports (whole) in 2013-14 were 466,000 tonnes compared to 506,000 tonnes (in split form) in 2012-13. Imports are forecast to increase to around 4 million tonnes in 2014-15 due to a likely decline in production.

Domestic price inflation for pulses as a group measured by Wholesale Price Index remained in the negative territory during July 2013 through April 2014, but moved into the positive territory in May largely due to increasing prices of mung and urad (Figure IV.4.2). Price inflation of pulses as a group is likely to remain high due to possible decline in 2014 kharif pulse production.

**Figure IV.4.2. Wholesale Price Inflation Trend in Pulses (% change in 2013 over 2012)**



**Table IV.4.1. Demand and Supply Balance Sheet for Pulses (000 tonnes)**

Total pulses	2011-12	2012-13	2013-14	2014-15F
Production	17,090	18,340	19,570	16,800
Imports	3,500	4,000	3,600	4,000
Total supply	20,590	22,340	23,170	20,800
Total Export	175	203	200	150
Domestic Use	20,415	22,137	22,970	20,650
Total utilization	20,590	22,340	23,170	20,800
% imports to production	20.5	21.8	18.4	23.8

## Assessment

Deficient and the slow progress of monsoon in 2014 in to major producing regions of central and western India are likely to negatively impact 2014 kharif pulse production. Assessment presented in this report gives a forecast of 5.8 million tonnes of kharif pulses, compared to 6.3

million tonnes in 2013-14. To offset the likely decline in kharif pulse production concerted efforts should be made to increase rabi pulse production. Domestic price inflation for pulses as a group measured by Wholesale Price Index remained in the negative territory during July 2013 through April 2014, but moved into the positive territory recently largely due to increasing prices of mung and urad. Price inflation of pulses is likely to remain high due to possible decline in 2014 kharif pulse production and could result in larger imports.

## **IV.5 Oilseed and vegetable oils**

### **IV.5.1 Kharif oilseed production under stress...**

Early season forecast of production based on alternative approaches gave a forecast of 4-5.6 million tonnes of kharif groundnut and 11.8-14 million tonnes of soybeans in 2014. However, a slow progress of the monsoon into major kharif oilseed growing regions of West Madhya Pradesh (soybean), Gujarat (groundnut), Rajasthan and north Maharashtra (soybeans) has caused a significant rainfall deficiency through mid-July, slowing oilseed planting operations. The window of opportunity for planting kharif oilseed crops in this region is narrowing, and if the rainfall deficiency continues through July that could result in a drastic reduction in the production of soybeans and groundnut. Hence a revival of monsoon in the next few weeks is critical. According to soybean industry sources, even if monsoon revives, soybean production this year is likely to be 11 million tonnes, the lowest since 2009.

Under more or less similar rainfall conditions in 2009, kharif groundnut production was about 3.9 million tonnes and soybean production was about 10 million tonnes. A decline in kharif season oilseed production could be partially offset by increased rabi oilseed production which include mostly rapeseed/mustard and some peanut, provided late season monsoon season rainfall improves leaving adequate soil moisture for planting and winter rains are also adequate.

The government's 3<sup>rd</sup> AE pegs 2013-14 total nine oilseed production at 32.4 million tonnes, compared to 30.9 million tonnes in 2012-13. While groundnut production climbed to a record high of 9.47 million tonnes, untimely rains at harvest season resulted in a significant decline in soybean production to 11.95 million tonnes from the 2012-13 record production of 14.67 million tonnes. Mustard/rapeseed production also declined marginally to 7.83 million tonnes this rabi season from 8.03 million tonnes the previous year due to adverse weather conditions.

### **Vegetable oil production likely to dip...**

The likely decline in oilseed production in MY 2014-15 will lead to a significant decline in vegetable oil production currently forecast at around 9 million tonnes compared to 10 million tonnes in 2013-14, with most of the decline likely to be confined to groundnut oil and soybean oil. Total vegetable oil production includes around 1.3 million tonnes of other solvent extracted oils such as rice bran oil. If the monsoon fails to pick up in central and western India in the next two to three weeks, there could be a further decline in vegetable oil production.

### **IV.5.2 Consumption and Price**

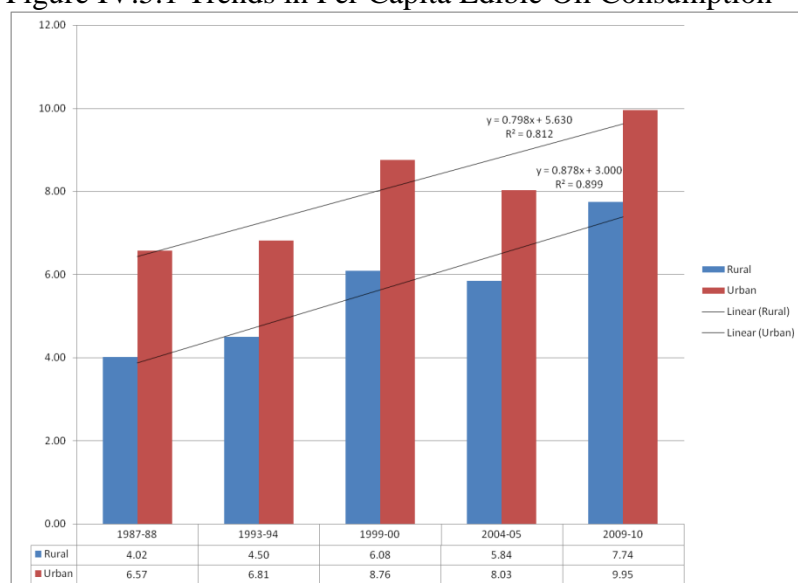
With the growing population, changing demographic pattern and rising per capita income per capita consumption of edible oils is projected to increase over the medium term. India's current per capita edible oil consumption at around 15 kg still remains far below the world average per capita consumption of around 23 kg.

Based on National Sample Survey (NSS) consumption expenditure survey data, edible oil consumption has shown a steady upward trend both in rural and urban households with per



capita consumption increasing from 4 kg to 7.7 kg/year in rural areas and from 6.6 kg to 10 kg in urban households during 1987-88 to 2009-10 (Figure IV.5.1).

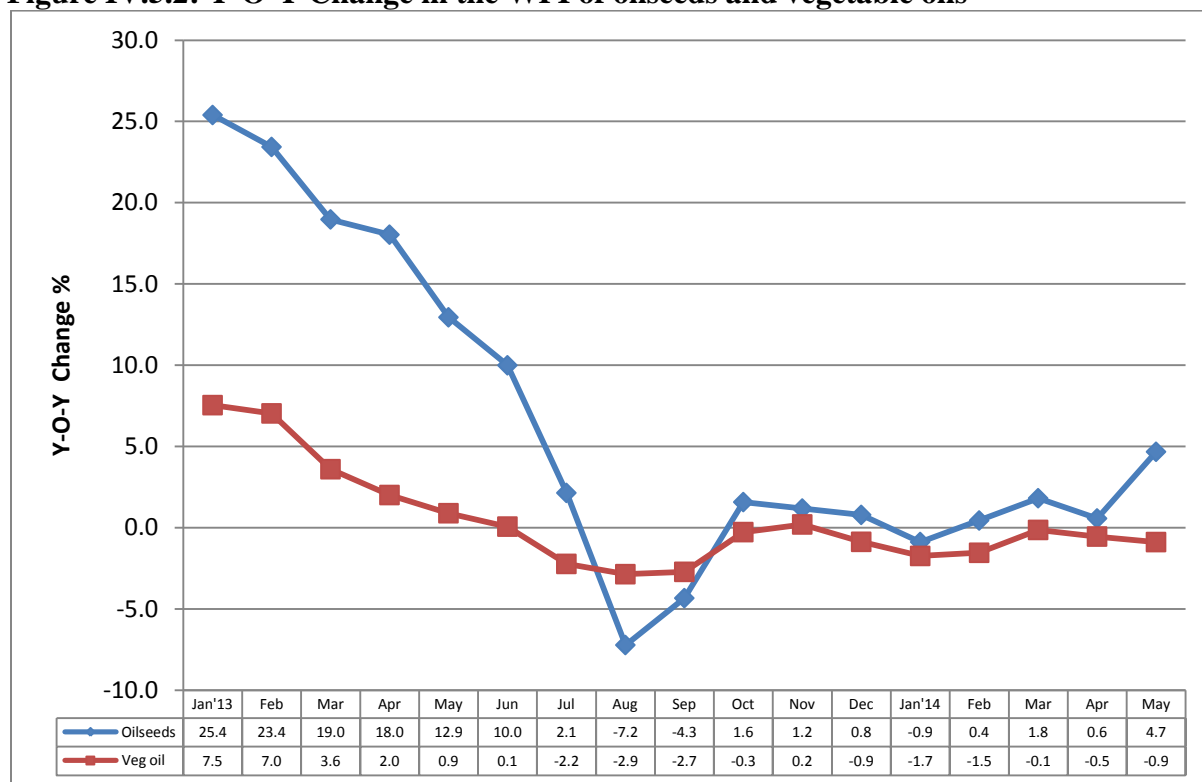
Figure IV.5.1 Trends in Per Capita Edible Oil Consumption



The composition of oils in the consumption basket has changed sharply over the past two decades with the emergence of palm and soybean as the major oils consumed due to larger imports supported by lower international prices. Palm oil will continue to be the most widely consumed edible oil in India due to its blending versatility with other edible oils and competitive prices, followed by soybean oil and rapeseed oil.

Oilseed and vegetable oil price inflation measured by the Wholesale Price Index has declined sharply since July 2013 following a bumper groundnut and rapeseed crop harvests and large imports of vegetable oils (Figure IV.5.2). Since December 2013, vegetable oil price inflation has remained in the negative territory. However, oilseed and vegetable oil price inflation is likely to strengthen in coming months due to poor monsoon rains in major growing regions and a likely significant decline in production. However, larger vegetable oil imports should help to moderate the price rise.

**Figure IV.5.2: Y-O-Y Change in the WPI of oilseeds and vegetable oils**



### IV.5.3 Trade

Vegetable oil imports are forecast to increase sharply in MY 2014-15 in order to bridge the likely larger gap between domestic production and consumption. Currently we forecast imports at 11 million tonnes against estimated 10.5 million tonnes in MY 2013-14. However, imports in MY 2014-15 could increase further if monsoon fails in the oilseed growing region and rabi season oilseed production, mostly rapeseed also gets affected.

Data compiled by the Solvent Extractors' Association (SEA) show vegetable oil imports during November 2013 to May 2014 at around 6.1 million tonnes marginally higher than during the corresponding period of 2012-13. However, there has been a significant increase in the share of soybean oil in the import basket this marketing year following a narrowing of the margin between palm oil and soybean oil prices in the global market. There has also been a significant increase in the imports of sunflower seed and rapeseed oil this marketing year.

### Assessment

A slow progress of the monsoon into major kharif oilseed growing regions of West Madhya Pradesh (soybean), Gujarat (groundnut), Rajasthan and north Maharashtra (soybeans) has caused a significant rainfall deficiency through mid-July, slowing oilseed planting operations. Based on present assessment of sub-normal rainfall during June-September period this year, we place

production of 4-5.6 million tonnes of kharif groundnut and 11.8-14 million tonnes of soybeans in 2014. However, a revival of monsoon in the next few weeks is critical. The likely decline in oilseed production in MY 2014-15 will also imply decline in vegetable oil production currently forecast at around 9 million tonnes compared to 10 million tonnes in 2013-14, with most of the decline likely to be confined to groundnut oil and soybean oil. Total vegetable oil production includes around 1.3 million tonnes of other solvent extracted oils such as rice bran oil. India imported about 10.5 million tonnes of vegetable oil in MY 2013-14. In the current marketing year, imports of 11 million tonnes are likely. The larger imports which should help to moderate the likely price rise.

The decline in kharif harvest could be partly offset by increasing rabi oilseed production provided planting and growth conditions are favourable.

## **IV.6 Sugarcane and Sugar**

### **IV.6.1 No significant decline in production likely**

The 7% deficiency in monsoon rains as predicted by the IMD is unlikely to have a significant negative impact on 2014-15 sugarcane production. Based on a regression model we project a forecast of 346 million tonnes of sugarcane for 2014-15. However, much will depend on the spatial and temporal distribution of rainfall. It is worth mentioning that in 2012-13, when the country experienced a rainfall deficiency of significant magnitude, sugarcane production was 341 million tonnes.

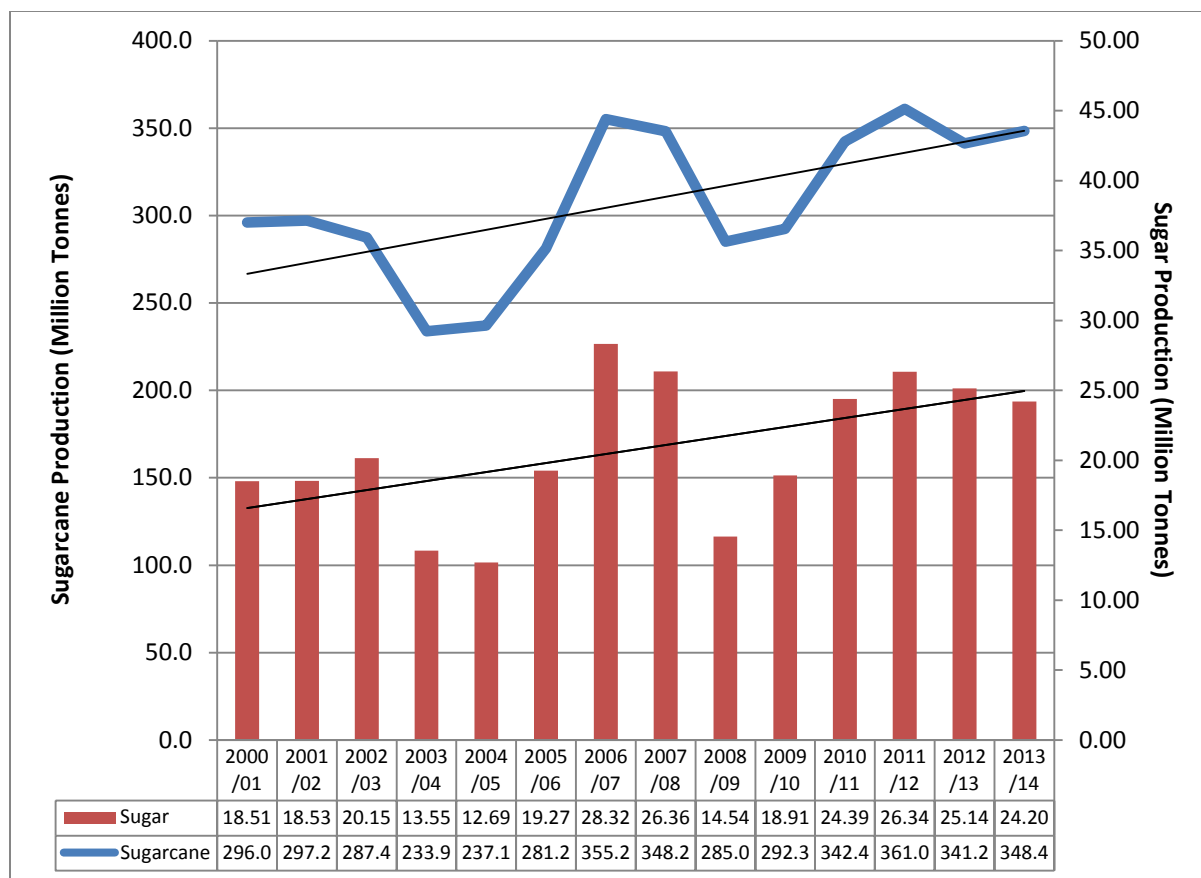
The government's 3<sup>rd</sup> Advance Estimates of agricultural production released in mid-May, upped 2013-14 sugarcane production to 348.4 million tonnes from the 2<sup>nd</sup> AE of 346 million tonnes, a 7 million tonnes increase over the 2012-13 production. The sugarcane sown area in 2013-14 is tentatively placed at 4.87 million hectares compared to 5.01 million hectares in 2012-13. The marginal decline in planted area in 2013-14 was more than offset by higher yield estimated at 71.5 tonnes per hectare compared to 67 tonnes per hectare in 2012-13. The record sugarcane production was 361 million tonnes in 2011-12, when both the area and yield was a record 5.04 million hectares, 71.7 tonnes per hectare, respectively. The average sugar recovery rate in recent years has averaged about 10.22 per cent.

#### **Sugar production to decline marginally**

Sugar production during the 2013-14 marketing year got off to a slow start due to sugarcane pricing uncertainty in the major sugarcane growing states of Uttar Pradesh and Maharashtra. According to Indian Sugar Mills Association (ISMA) sugar production in MY 2013-14 through mid-May was 23.9 million tonnes with most sugar mills except a few in Tamil Nadu closing operations. Total MY 2014-15 sugar production is expected to be 24.2 million tonnes, close to our forecast of 24 million tonnes, against 2013-14 production of 25.1 million tonnes. Up to 15<sup>th</sup> May, the sugar mills in Maharashtra have produced almost similar quantity of sugar as in the previous year, whereas the mills in Uttar Pradesh produced about 1.0 million tonnes less and mills in Karnataka produced over 7 lakh tonnes more. In Tamil Nadu, the production at 1.15 million tonnes is significantly lower than last year's 1.6 million tonnes but with 20 mills still in operation some additional production is expected. Due to the initial uncertainty about sugarcane pricing and delayed sugar milling operation, there has been increased diversion of sugarcane to the production of gur and khandasari. With 2014-15 sugarcane production forecast close to the 2013-14 level, sugar prices improving in recent months and the government providing additional credit to sugar mills to pay off cane arrears to farmers, sugar production in 2014-15 is forecast more or less unchanged from the 2013-14 level of 24.2 million tonnes.

Sugarcane and hence sugar production in India is characterized by a well-marked cycles of three to four years as farmers and sugar mills respond to sugarcane prices. However, this cyclical movement has become less conspicuous in recent years (Figure IV. 6.1).

**Figure VI.6.1: Sugarcane and Sugar Production Trend**

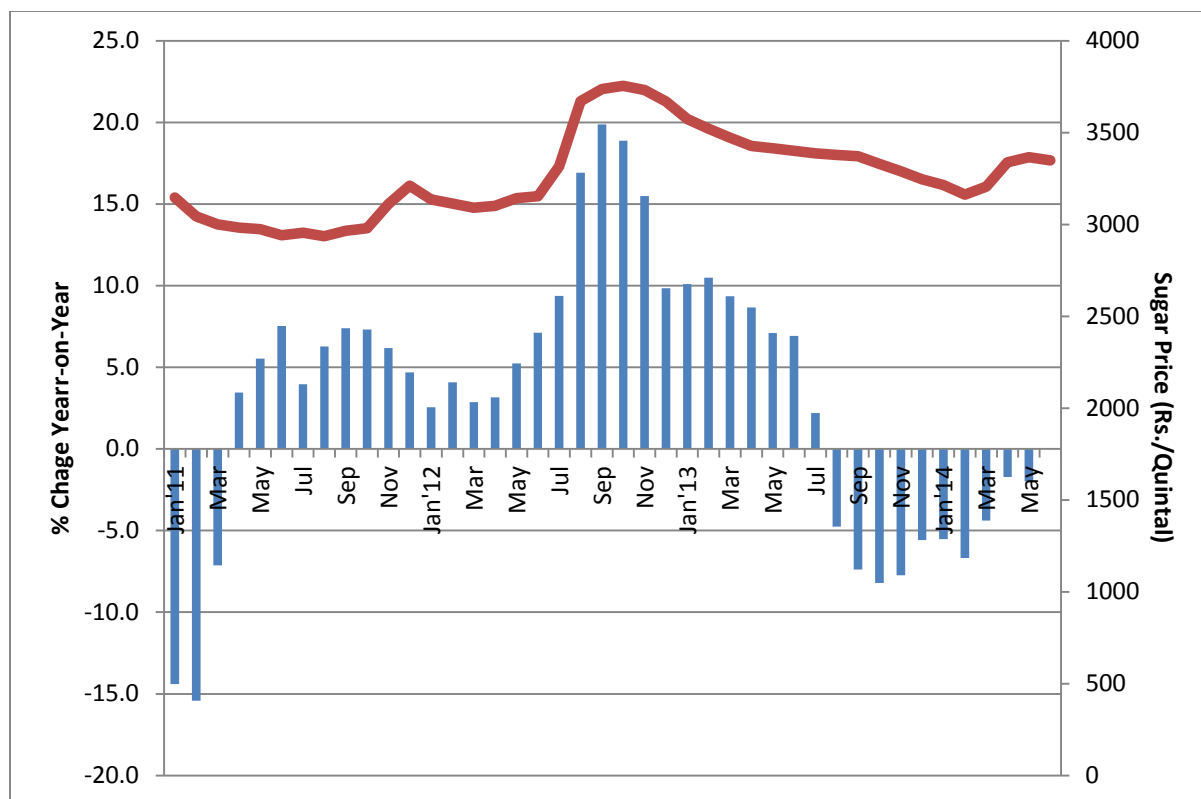


## IV.6.2 Consumption

The sugar industry estimates that the current total annual consumption (absorption) of sugar in the country, including by households, bulk buyers, and others, is roughly 23 to 23.5 million tonnes, which on a per capita basis works out at about 19 kilograms, well below the global per capita consumption of 24 kilograms. However, In addition to sugar, Indians consume on an average about 5 kg of gur per year, although the use of sugarcane to produce gur and hence production and consumption of gur is steadily declining over the years. Almost two-third of the sugar consumption is believed to be by bulk consumers. Demand growth has slowed in recent years, but underlying population and economic growth should see demand growth return to higher levels.

Reflecting high production and large stocks of sugar both domestically and globally, sugar prices have shown a downward trend in recent months. Year-on-year sugar price inflation measured by Wholesale Price Index entered into a negative territory since August 2013 (Figure IV.6.2). A likely near record production in MY 2013-14 and high carry in stocks will continue to keep prices under pressure unless significant exports take place. The recent government decision to increase import duty on sugar to 40% from 15% combined with restoration of export subsidy on raw sugar to Rs. 3,300 per tonne up to September 2014 has caused a spurt in sugar prices.

**Figure IV.6.2: All India Sugar Price and Year-on-Year Change in WPI of Sugar**



Source: Department of Civil Supplies and Office of Economic Advisor.  
 Note: Price data – Delhi wholesale price.

### IV.6.3 Stocks

ISMA estimates 2013-14 season beginning stocks of sugar at 9.3 million tonnes compared to around 6.0 million tonnes in 2012-13. With increase in consumption and exports combined with lower production, MY 2013-14 ending stocks on September 30, 2014 are projected at 7.5 million tonnes.

### IV.6.4 Trade

Due to lack of parity with international prices and weak global demand for white sugar, India’s sugar exports in MY 2012-13 are reported to have dipped to around 1.0 million tonnes, all white sugar compared to around 4 million tonnes exported in MY 2011-12. Indian sugar mills are increasingly turning towards raw sugar exports in MY 2013-14 to cash in on the demand for raws in the world market. According to trade sources, in MY 2013-14 India is likely to export about 2 million tonnes of sugar, mostly raw. Similar exports are likely in MY 2014-15 provided the government continue to provide an export subsidy to make Indian sugar competitive in the global market.

Sugar mills/merchant importers-exporters are free to import sugar including raw sugar as per their commercial prudence subject to payment of customs duty. Due to higher domestic prices, some imports, estimated by trade at 700,000 tonnes, mostly raw sugar cross-border trade from Pakistan, took place in MY 2012-13. In order to discourage imports of sugar, the basic customs duty on sugar import was raised from 10% to 15% with effect from July 8, 2013. This has discouraged imports in MY 2013-14. A further upward revision in import duty to 40% recently will make imports unviable for refiners in India in MY 2014-15.

## Policy developments

To improve the cash flow of sugar mills, the government recently decided to give them up to Rs 4,400 crore in extra interest-free loans, hike import duty to 40 per cent from 15 per cent, extend export subsidy of Rs 3,300 per tonne applicable to raw sugar till September and raise mandatory ethanol blending with petrol to 10 per cent from the existing 5 per cent.

**Table IV.6.1: Sugar Supply Demand Balance Sheet (million tonnes)**

	2012-13	2013-14	2014-15 F
Beginning stocks	6.13	9.30	7.50
Production	25.10	24.20	24.00
Imports	0.70	0.20	0.00
Total Supply	31.93	33.70	31.50
Exports	1.00	2.00	2.00
Domestic Consumption	22.63	24.20	25.00
Ending stocks	9.30	7.50	4.50

*Source:* NCAER Estimate and forecast

## Assessment

There is unlikely to be a significant decline in sugarcane and sugar production in MY 2014-15 despite poor monsoon rains as the crop is mostly irrigated. With 2014-15 sugarcane production forecast close to the 2013-14 level, sugar prices improving in recent months and the government providing additional credit to sugar mills to pay off cane arrears to farmers, sugar production in 2014-15 is forecast more or less unchanged from the 2013-14 level or marginally higher. Reflecting high production and large stocks of sugar both domestically and globally, sugar prices have shown a downward trend in recent months. The recent government decision to increase import duty on sugar to 40% from 15% combined with restoration of export subsidy on raw sugar to Rs. 3,300 per tonne up to September 2014 has caused a spurt in sugar prices. However, a likely near record production in MY 2013-14 and high carry in stocks will continue to keep prices under check. We have retained export projections of 2 million tonnes, at the same level as in the previous year.

## IV.7 Fruits and Vegetables: Potato, Onions and Banana

Although production of fruits and vegetables is increasing at a higher rate than in the case of the main staple crops such as rice and wheat, variability of production is also greater in these crops. The annual growth rates frequently exceed 10 per cent on the upside or on the decline. For instance, when the annual growth rates are truncated to 10 per cent, the average growth rate of production drops to half or even lower in the case of potato, onion and banana (Table IV.7.1).

Table IV.7.1. Trends in Area, Yield and Production in Potato, Onion and Banana

Year	Potato			Onion			Banana		
	Area (Th ha)	Yield (kg.ha)	Production (Th tonnes)	Area (Th ha)	Yield (kg.ha)	Production (Th tonnes)	Area (Th ha)	Yield (kg.ha)	Production (Th tonnes)
2005-06	1.40	17058	23.9	0.66	13118	8.7	423.6	28575	12105
2006-07	1.48	14943	22.2	0.70	12655	8.9	477.2	34802	16609
2007-08	1.55	18331	28.5	0.70	12974	9.1	532.5	33141	17647
2008-09	1.83	18810	34.4	0.83	16260	13.5	709.0	36977	26217
2009-10	1.84	19951	36.6	0.76	16079	12.2	770.3	34363	26470
2010-11	1.86	22724	42.3	1.06	14211	15.1	830.5	35858	29780
2011-12	1.91	21717	41.5	1.09	16064	17.5	797.0	35703	28455
2012-13	1.99	22784	45.3	1.05	16010	16.8	776.0	34161	26509
2013-14	2.02	22970	46.4	1.22	15859	19.3	796.0	34673	27600
Average annual rate of growth (%): 2006-07 to 2013-14									
Average	4.8	4.3	9.2	8.9	2.9	11.7	8.7	2.8	12.3
Average truncating annual growth rates to +/- 10%	3.8	0.8	4.8	3.2	3.0	3.9	5.3	1.2	3.8

**Source:** National Horticulture Board website: [www.nhb.gov.in](http://www.nhb.gov.in).

**Note:** The data for 2013-14 is 2<sup>nd</sup> Advance Estimates.

In all the three major cases of fruits and vegetables covered in this section, the average annual rate of increase in production in the recent eight years exceeded 10 per cent. In all the cases, area under the respective crops increased sharply indicating increased profitability of these crops over the other crops and also availability of suitable varieties in different regions. However, the increase in crop area has come in steep increase in one or two years: 2008-09 in the case of potato, 2007-08 and 2010-11 in the case of onion and 2008-09 also in the case of banana. An important feature of the pattern of production of these crops is also the impact of monsoon rainfall conditions which influence availability of water for irrigation for these crops. In 2009-10, when the monsoon rainfall turned out to be in deficit relative to LPA, production of onions declined but production of potato and banana did not decrease. In 2012-13, again a year in which the monsoon rains fell short of LPA, production of onion and banana fell but not potato. The impact of rainfall appears to be more evident in the case of onion relative to potato and banana.



In the case of onions, area declined in both 2009-10 and 2012-13, years of weak monsoon, relative to the previous year but in the case of potato and banana, area increased or remained the same as the previous year. Crop yield also declined in the case of onion and banana in 2009-10 and 2012-13 but not in potato. If there are rains in the later part of the monsoon season or in winter, the rabi crop may not be affected by the rainfall deficit in the early part of the monsoon period. Potato is essentially rabi crop and in the case of onion, crop is grown in both the seasons. In the case of banana, harvesting is year round and therefore, there may be some possibility of improving production in the post monsoon period.

Based on trend growth rates and the impact of projections of monsoon period rainfall of 93 per cent of LPA, the assessment of projected output for the three key horticultural commodities in 2014-15 is as follows:

Potato: 47.4 million tonnes

Onion: 19.0 million tonnes

Banana: 29.1 million tonnes

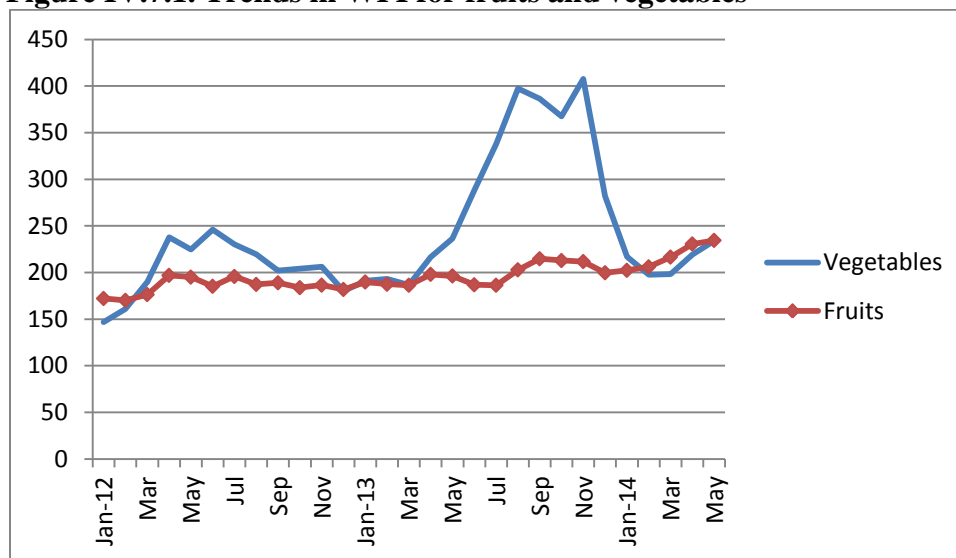
The projected 2014-15 output of onion is lower than in 2013-14 but output of potato and banana is projected to be higher in 2014-15 by 2.2 per cent and 5.4 per cent, respectively. The growth rates are well below the average growth rates of the recent eight years.

### **Expectations of weak monsoon put pressure on prices**

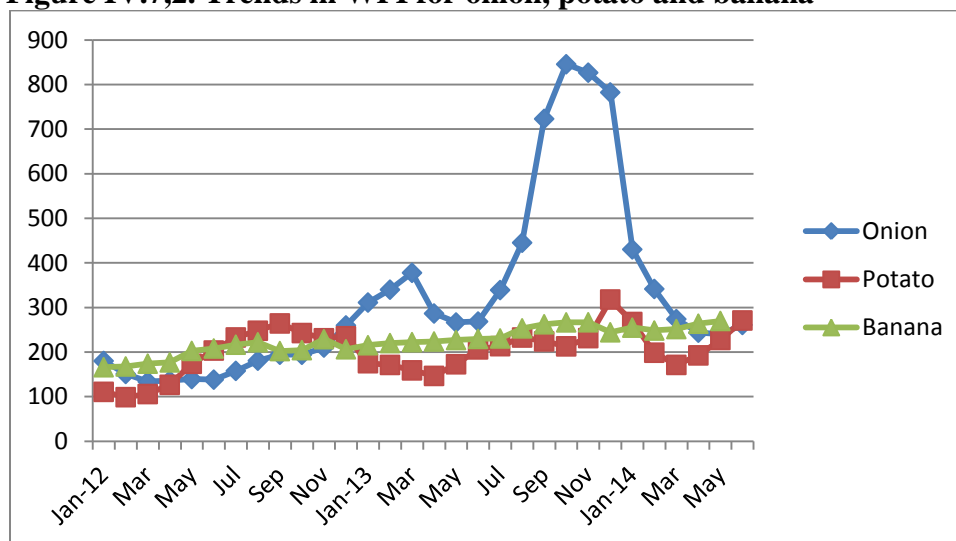
Although the year 2013-14 (April-March) was one of good monsoon, the period before the harvest of kharif crops saw sharp increase in the price of vegetables. The monthly average WPI for vegetables shot up from 225 in April 2013 to 400 in August 2013 and remained between 350 and 400 upto December 2013 before dropping steeply upto March 2014. The WPI for fruits has remained steady during April 2013 to January 2014, after which it has shown an upward movement.

The steep rise in the WPI for vegetables upto December 2013 in 2013-14 was reflected in the price behaviour of onions. The price of potatoes was relatively steady during this period. The sharp increase in prices from May onwards, therefore, is a reflection of the tightening of supplies available from the previous harvest and expectations of prospects of the next crop based on indications of monsoon. In this sense, the indications that monsoon this year would be below normal also led to upward pressure on prices, particularly that of onions. The retail price of onions rose from Rs 21 per kg at the end of April 2014 to Rs 26 per kg by the end of May and Rs 32 per kg by the end of June, an increase of 50 per cent over a three month period. The prices are well below the astronomical levels of Rs 70 per kg at the end of October 2013 but clear signals of the declining stocks and the impact of weak monsoon on kharif production.

**Figure IV.7.1. Trends in WPI for fruits and vegetables**



**Figure IV.7.2. Trends in WPI for onion, potato and banana**

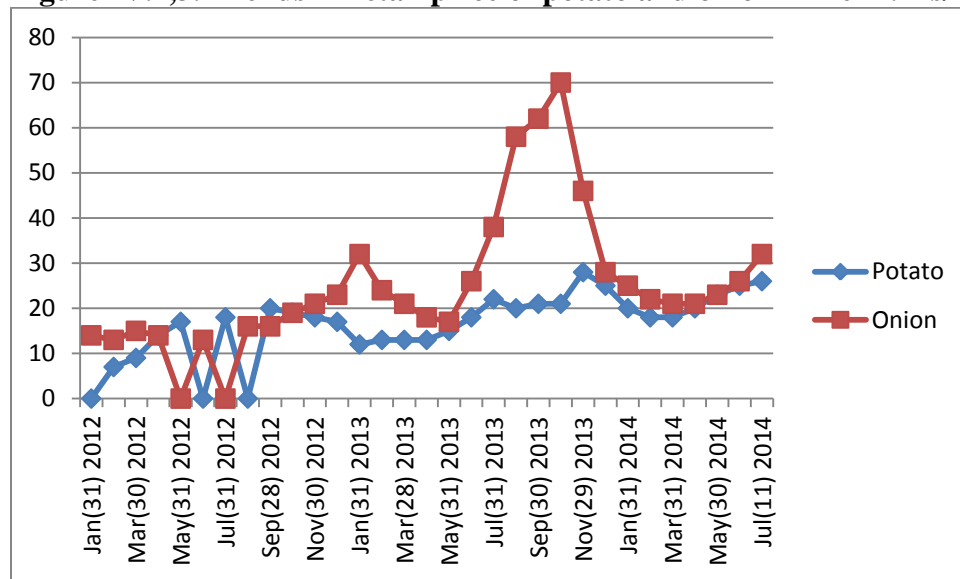


In the case of potato, the volatility in prices is less pronounced than onions. However, the production growth of less than the average trend rate in 2013-14 leads to supply side pressures, in terms of declining stocks as the year progresses towards the next harvest. The month end price of potatoes rose from Rs 18 per kg in February to Rs 27 per kg in June, an increase of 50 per cent over four months.

For stabilisation of prices, steady supplies of the commodities to the markets would help but pressure on prices is likely to remain until the new crop comes to the market towards the end of September. While output of potatoes is expected to be less affected by the weak monsoon than onions, the increase in output over the previous year may be lower than the trend level. In both the cases, projections based on past trends and seasonal patterns suggest that year on year rates of price rise in the short term would be moderate in the case of onions and potatoes. However,

adverse conditions in the early part of the monsoon may raise the rates of price rise until the reinforcement of supplies can be achieved through the next harvest. The restrictions on exports and stock holding may increase availability of commodities in the market in the short term but price adjustment would also be needed to balance the supply-demand pressures.

**Figure IV.7.3. Trends in retail price of potato and onion in Delhi: Rs/ kg, month-end prices**



Source: Website of Department of Consumer Affairs

The price trends in the case of bananas are more moderate than in the case of onions or potatoes in the recent months. In Delhi, as per the data available from Directorate of Economics and Statistics, Ministry of Agriculture, the retail price of banana (FAQ variety) remained at Rs 40 per dozen during Jan-March 2014 and rose to Rs 50 per dozen during April-June 2014, an increase of 25 per cent over five month period. As production of banana is on a year round basis, the supply channels are more effective in meeting the reduction in output in one region in particular periods within a year. In the perishable commodities space the need for appropriate storage, transport and processing infrastructure is becoming more intense as demand for nutritious food is increasing faster than the staple food. The price signals should also translate into increased productivity on the farm.

### Assessment

The projected 2014-15 output of onion is lower than in 2013-14 but output of potato and banana is projected to be higher in 2014-15 by 2.2 per cent and 5.4 per cent, respectively. The growth rates are well below the average growth rates of the recent eight years. Onion and potato prices in the recent months have shown a tendency to increase sharply. The increase is a reflection of anticipation of the adverse impact of monsoon on fruits and vegetables as well. However, the present price levels are well below the highs in the mid- 2013, especially in the case of onions. While ensuring fair competition in the markets is necessary to minimise excessive stocking in anticipation of lower supplies, augmenting supplies through access to imports would be necessary to meet the growing demand for fruits and vegetables in the short term.

## **IV. 8 Milk**

India's milk production is estimated to have reached 140 million tonnes in 2013-14, a new peak for the sector. The annual average growth rate of milk production for the period 2006-07 to 2013-14 is 4.7 per cent. The per capita availability of milk has now reached 308 grams per day as against the availability of 220 grams per day in 2000-01.

Production of milk requires feed and fodder. Deficiency of feed and fodder alone accounts for significant part of low productivity of milch animals in the country. Normal or better than normal rainfall leads to comparatively better availability of feed and fodder. As the favourable monsoon of 2013-14 aided the rise in milk production in 2013-14 by 5.74 per cent over the previous year, deficiency in rainfall in the current monsoon period may dampen the growth of milk production in the current year. Both 2009-10 and 2012-13, two recent years in which rainfall during the monsoon period was below the long period average, the annual growth rate of milk production dropped to 3.7 and 3.5 per cent, respectively as compared to the average of 4.7 per cent for the period 2006-07 to 2013-14. With the weather office predicting less rain than normal rainfall in every other part of the country, except for the Northeast during current monsoon period, milk production is likely to suffer in the current year. The milk production in 2014-15 can, therefore, be expected to see lower annual growth than in the average growth rate of 4.7 per cent.

Milk procurement by the cooperative network, accounting for 9 per cent of total milk production in the country, increased to 12.0 million tonnes in 2012-13 as compared to 10.5 million tonnes in 2011-12. Thus, milk marketing has continued to expand to meet the growing demand even in the years of slower growth in production. The private sector dairy farms and also dairy industry have also seen significant growth.

Cooperatives and private processors must engage with the producers and service providers of feed, nutrition, genetics and animal health care and help farmers to contain loss in milk production this summer.

### **Consumption and Prices**

With milk production in India increasing by almost 75 per cent between 2000-01 and 2013-14, well above the increase in population, per capita availability has increased by 40% during the same period.

In a developing country like India, dairy products have a high income elasticity of demand than most other food items including meat and fish. There remains significant potential for increased demand for dairy products because per capita consumption is still very low as compared to the developed world.

Household consumption expenditure on milk and milk products in India has increased from 14.3% of per capita total monthly expenditure to 16.1% during the period 1990-91 to 2009-10 in rural areas and the same has increased from 17.4% to 19.1% in urban areas during the same period. As against this per capita monthly consumption expenditure on meat, egg & fish has

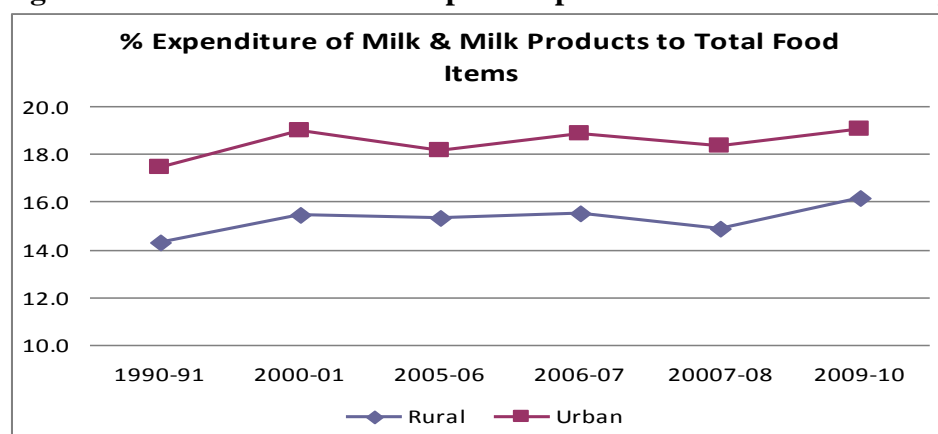
increased from 5.3% to 6.5% in rural areas. There is practically no increase in the per capita monthly consumption expenditure on meat, egg & fish in urban areas during the same period.

**Table IV.8.1. Per capita monthly consumption expenditure of milk and milk products in India since 1990-91(in Rs)**

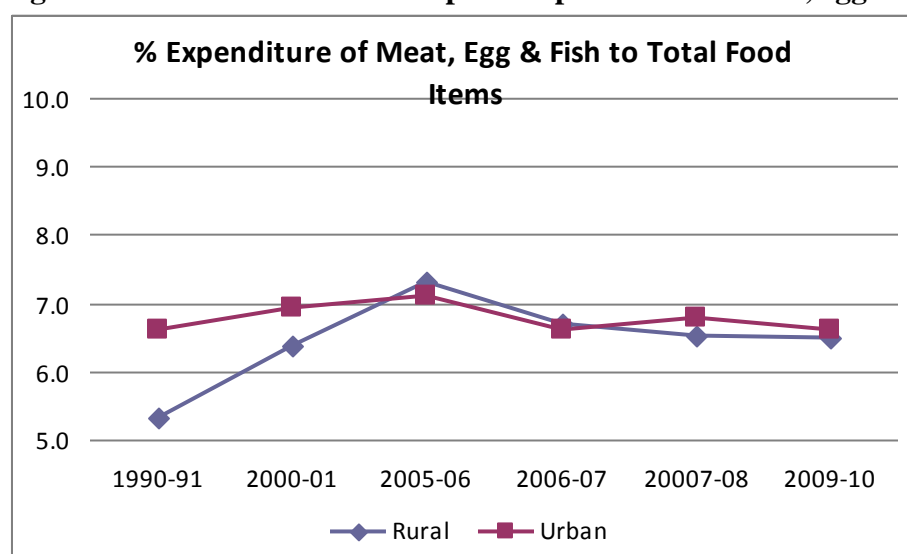
<b>Year/ Item Group</b>	<b>1990-91</b> (NSS 46 <sup>th</sup> Round)	<b>2000-01</b> (NSS 56 <sup>th</sup> Round)	<b>2005-06</b> (NSS 62 <sup>th</sup> Round)	<b>2006-07</b> (NSS 63 <sup>th</sup> Round)	<b>2007-08</b> (NSS 64 <sup>th</sup> Round)	<b>2009-10</b> (NSS 66 <sup>th</sup> Round)
<b>Rural</b>						
Milk & milk products	19.04 (14.3)	42.97 (15.4)	50.94 (15.3)	56.32(15.5)	60.18(14.9)	80.16(16.1)
Meat, egg & Fish	7.08(5.3)	17.78(6.4)	24.31(7.3)	24.32(6.7)	26.31(6.5)	32.26(6.5)
<b>Total food items</b>	<b>133.34</b>	<b>278.57</b>	<b>333.15</b>	<b>363.42</b>	<b>404.33</b>	<b>497.09</b>
<b>Urban</b>						
Milk & milk products	32.37(17.4)	75.90(18.9)	84.94(18.2)	97.49(18.8)	106.64(18.3)	138.71(19.1)
Meat, egg & Fish	12.27(6.6)	27.71(6.9)	33.28(7.1)	34.20(6.6)	39.47(6.8)	48.03(6.6)
<b>Total food items</b>	<b>185.77</b>	<b>400.57</b>	<b>467.82</b>	<b>517.25</b>	<b>582.43</b>	<b>727.49</b>

\*brackets indicate per centage of expenditure

**Figure IV.8.1. Trends in consumption expenditure on milk and milk products**



**Figure IV.8.2. Trends in consumption expenditure on meat, eggs and fish**



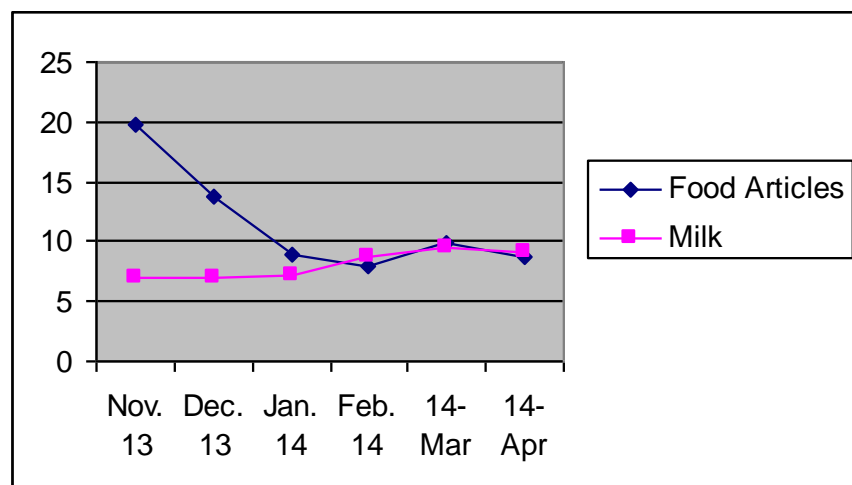
Milk prices have continued to show strong upward trend in 2014. Annual year on year rate of in the WPI for milk in April 2014 stood at 9.19% versus 8.64% in food articles. Decline in overall rate of food inflation will require milk prices also to moderate to less than 5 per cent.

The dairy product prices have increased at a slower pace than the milk prices. Stable prices of milk powder appear to have helped maintain moderate price line in the case of dairy products. Competitive international market may also have helped in maintaining stable prices in the case of dairy products. However, the prices fodder, a key input to milk production, have shown sharp increase year-on-year basis, throughout the last six months. In the case of oilcake the prices have remained stable, reflecting the competitive international market for oil meal. The sector, while facing a strong demand, has to balance the input use to improve productivity and also retain competitiveness vis-à-vis the international markets

**Table IV.8.2. Trend of rate of WPI inflation in output and feed prices in the dairy sector and comparison with WPI trends in food articles: November 2013-May 2014**

	Nov. 13	Dec. 13	Jan. 14	Feb. 14	March 14	April 14	May 14
Food Articles	19.69	13.73	8.85	7.94	9.90	8.64	9.50
Milk	6.92	6.98	7.22	8.78	9.47	9.19	9.57
Dairy Products	3.07	4.27	5.40	5.68	5.68	6.13	6.57
Milk Powder	-3.01	-3.01	-3.01	-3.01	-3.01	-1.36	0.33
Butter	4.91	5.03	6.01	6.35	6.35	7.63	6.58
Fodder	14.40	17.18	18.02	21.45	26.52	16.75	13.84
Oilcakes	4.18	3.20	1.17	-1.60	-0.09	-4.07	-3.33

**Figure IV.8.3. Trend of rate of WPI inflation in milk versus food articles: November 2013-May 2014**



In the international markets, there was a significant fall in dairy prices as reflected in the drop in the FAO Dairy Price Index which was down by 6.3 per cent in April over March 2014. It was primarily because of (1) the unusually extended season in New Zealand, which has caused a sudden rise in the availability of milk products for export and also (2) because of the reduced purchases by China (WMP and SMP) and the Russian Federation (butter).

## Trade

India a very small player in the world dairy market with less than 2% share in world exports. Trade in the Indian dairy products has expanded in recent years as a result of the lifting of ban on exports and also as a result of improved processing and shipping technologies. India exports SMP, Casien, Ghee, butter, whole milk powder and panir (cottage cheese). SMP and Casein are in good demand globally. India exported about 100,000 MT of skimmed milk powder (SMP) and SMP equivalent of casein during 2012-13.

Major destinations for Indian dairy export are Bangladesh, Middle East, US and Egypt. Though India has competitive advantage in the form of cost of milk production and proximity to milk deficit markets, significant growth in its domestic consumption has limited its surplus for export.

Only about 1/4<sup>th</sup> of milk produced in India is processed. Processing of milk will help diversifying market for India's dairy sector and help in achieving growth for the sector in the longer term.

FAO estimates that during 2014 Asian region, particularly China, the Islamic Republic of Iran, Indonesia and the Philippines will continue to be the main importers of milk products. The principal importers that could see growth are Algeria, South Africa and Ghana. Saudi Arabia, the United Arab Emirates, Japan, Singapore, Malaysia and Thailand will remain important markets, but the level of their imports may not change markedly.

## **Assessment**

Monsoon rainfall in the country is expected to be below normal in most parts of the country impacting production of feed and fodder. Milk prices at the producer level should provide adequate incentives for increasing production in the face of input price rise. The recent trends in production show that while rate of increase in production may decline from its average for the recent years, positive growth in production can be expected because of the other productivity improving developments in the livestock sector. In the post monsoon, expected seasonal improvement in production will help stabilise prices.



## Part V Summary and Conclusions

### Recovery in economic growth

Improvement in overall growth conditions has been projected both in 2014-15 in the domestic economy and globally. However, some of the downward risks to these projections have emerged as the year has progressed. Most important challenge for the economy would be to mitigate the adverse impact of the sub-normal rainfall in the current monsoon period of June-September 2014. The kharif or summer season crop output, which accounts for about half of the foodgrains, is dependent on how the monsoon fares. Among the oilseeds, groundnut, soybean and sesamum are major kharif season commodities whose production prospects are affected. Although sugarcane is an irrigated crop, its planting would be affected by inadequate rainfall as even irrigation water resources are recharged by rains. For an economy seeking respite from high rate of food inflation, minimising the adverse impact of sub-normal rainfall conditions on food availability and prices is the key challenge in the short term.

***For an economy seeking respite from high rate of food inflation, minimising the adverse impact of sub-normal rainfall conditions on food availability and prices is the key challenge in the short term.***

The official expectation of overall GDP growth in 2014-15 is 5.4 per cent over the previous year. This exceeds the 4.7 per cent growth in 2013-14 and below 5 per cent growth in 2012-13 raising the potential recovery to higher growth rates in the medium term. The IMF and the World Bank have projected a growth rate of 5.4 per cent in 2014 and 5.7 per cent in 2014-15, respectively. The global demand conditions, dependent on adequate supply response, are also projected to improve in 2014 and 2015.

### Global outlook

Following the recovery in global demand conditions, a modest trade growth is also anticipated in 2014 and 2015. World trade is expected to grow by a modest 4.7% in 2014, more than double the 2.1% increase in 2013 and at a slightly faster rate of 5.3% in 2015. World GDP growth of 3 per cent in 2014 and 3.1 per cent in 2015 is expected to revive trade growth in those years.

Early assessment by some major international agencies points to a somewhat lower wheat production in the year 2014-15 with forecasts ranging from 697 to 702 million tonnes, 12 to 14 million tonnes down from the 2013-14 estimates, mainly due to more normal average yields after the very high levels of the previous year.

According to the first FAO forecast, world rice production in 2014 could rise by a modest 0.8 per cent to 500.7 million tonnes (milled basis), as growth is likely to be dampened by falling world prices besides fears of a recurring El Niño event.

World production of coarse grains is forecast to fall marginally in 2014-15 reflecting an expected decline in planted area as producers respond to forecast falls in coarse grains prices,

especially corn. Additionally, yields are assumed to fall from the above average yields achieved in many countries in 2013–14.

World oilseeds production is expected to remain more or less unchanged in 2014-15. World production of soybeans is forecast to rise with production rising in the three major producing countries, the United States, Brazil and Argentina. Palm oil production, however, may be adversely affected by the drought conditions in Malaysia and Indonesia early in 2014 and the El Nino caused weather pattern in the coming months.

In the case of pulses, although area sown is expected to increase in the major exporting countries, yields are expected to be lower. However, adequate carry over stocks imply that supply will not be adversely affected.

World production of sugar and milk are projected to increase in 2014-15.

Thus, the world supplies of major food commodities are expected to remain adequate to meet the requirements at the aggregate level. The supply-demand balances suggest that year-end stocks are likely to rise or remain unchanged in the case of wheat, maize, soybean, soy oil and sugar. They are projected to decline slightly in the case of rice.

The price outlook for food commodities in 2014-15 is generally seen to be bearish, although in recent months, there has been some strengthening of prices of cereals and vegetable oils.

Overall, the current global agricultural outlook scenario is one of caution for India, a major exporter of rice, wheat, maize, and oil meal and importer of vegetable oils and pulses, especially in the context of concerns over the projected sub-normal rainfall and the El Nino factor.

## **Challenge of the deficient monsoon rainfall in 2014-15**

Agricultural production in 2013-14 registered record level of foodgrain output, aided by favourable monsoon period rainfall leading to an overall agricultural and allied sector GDP growth rate of 4.6% in the year. This buoyant agricultural output performance combined with the growth of services sector offset the stagnant industrial sector in generating overall income growth in the economy.

Predictions of a sub-normal rainfall in the current year provided by several meteorological forecasting agencies have been accurate as the deficiency in the month of June has exceeded 40 per cent of its long period average. The El Nino effect known to result in deficient rainfall in some years, has also been at work this year. The Indian Meteorological Department's (IMD) early season forecast for this year's monsoon is that rainfall is likely to be 95% of the long-period (50-year) average. The updated forecast of June 9 has further downgraded the monsoon outlook. Accordingly, rainfall over the country as a whole for the 2014 southwest monsoon season (June to September) is likely to be below normal (90-96% of LPA). Quantitatively, monsoon season rainfall for the country as a whole is likely to be 93% of the long period average with a model error of  $\pm 4\%$ . Region wise, the season rainfall is likely to be 85% of LPA over North-West India, 94% of LPA over Central India, 93% of LPA over South Peninsula and 99% of LPA over North-East India all with a model error of  $\pm 8\%$ . The monthly rainfall over the

country as whole is likely to be 93% of its LPA during July and 96% of LPA during August both with a model error of  $\pm 9$  %.

Projections based on a 7 per cent below normal rainfall provide following assessment of output for kharif 2014-15:

All in million tonnes with the 3<sup>rd</sup> Advance Estimates for 2013-14 in parentheses in the case of foodgrains, oilseeds and sugarcane, and latest available estimates for other commodities :

Rice: 87.9-88.8 (92.0)  
Maize: 15.6-15.9 (17.5)  
Other coarse grains: 10.7 – 12.6 (13.8)  
Pulses: 5.9-6.0 (6.1)  
Groundnut: 4.0-5.6 (7.7)  
Soybean: 11.8-14.0 (12.0)  
Sugarcane: 341.9-345.9 (348.4)  
Potato (Total): 47.4 (46.4)  
Onion: 19.0 (19.3)  
Banana: 29.1 (27.6)  
Milk: 145.3 (139.7)

The projections indicate decline in kharif production for rice and maize, the two key cereals in the season, groundnut and soybean, sugarcane and onion. The extent of decline varies and would also depend on the actual conditions through the monsoon period.

The late season rains and rains in the post monsoon period would help in improving rabi season prospects. The developmental efforts in terms of supply of good quality seeds to the farmers and expansion of irrigation facilities over the years would help in reducing the adverse impact of weak monsoon this year. In the short run, implementation of contingency plans focusing on the supply of appropriate varieties of crops that can be planted late and have short duration and conserving moisture would help in maximising output from a rain deficient season.

## **Supply, demand and prices**

In the case of rice and wheat, the two main staple foods in the country, availability of adequate stocks with the government has provided a security against shortfall in production and also sharp increase in prices. As the annual increase in demand due to population and income growth are expected to be about 2 per cent or less than 5 million tonnes, the available stock of rice and wheat at the end of the 2014-15 marketing year is expected to be more than 35 million tonnes.

An important dimension of Indian agricultural system is the potential for raising two crops during the year in many regions. A favourable rabi harvest can harvest some of the losses in the kharif season.

The availability of pulses and vegetable oils in the international markets will offset the decline in domestic production.

In the case of vegetables, production of onion and potato is expected to be slightly better than in the previous year but below the trend increase. The same pattern is likely in the case of banana and milk.

While the MSPs for the major kharif crops in 2014-15 announced by the government are moderately higher or unchanged as compared to the previous year. However, the market prices would respond to the tightening of the supplies because of the likely impact of weak monsoon. Short term projections for the next 2-3 months indicate increase in WPI for main food commodities such as cereals, pulses, onion and sugar at less than 5 per cent but the recent trend pattern is one of strengthening prices. In this context, efforts to protect output level and ensure access to supplies including imports would reduce the sharp increase in food prices.