





Agricultural Outlook and Situation Analysis Reports

Quarterly Agricultural Outlook Report July-September 2012

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

September, 2012

Prepared by

National Council of Applied Economic Research

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Highlights

The second quarterly report on agricultural outlook covering the period July–September 2012 has been prepared as the monsoon season of the year is drawing to a close. This year, rainfall deficiency in the first two months of the season was substantially below normal for the country as a whole but more intensely so for the northwestern and southern regions. As the season progressed, rainfall situation improved and at the end of September the overall deficiency is eight per cent below normal.

The first Advance Estimates (AE) put out by the Ministry of Agriculture place *kharif* foodgrain production at 117.18 million tonnes, about 10 million tonnes below the production in *kharif* 2011–12. Our own assessment presented in this report is slightly higher at 120 million tonnes as compared to the first AE. While production of soybean is estimated to be close to higher in 2012–13 than in the previous year, sugarcane production is expected to decline in the current year. In the case of three fruits and vegetables considered in this report, production of onion is expected to decrease as compared to the harvest in 2011–12 and remain stagnant in the case of banana and register a lower than trend growth in the case of potato. Milk production is also expected to register slower growth in the current year as compared to the trend growth rate.

The global scenario for the food commodities has also been affected by the adverse weather conditions. The estimates by FAO, USDA and other international agencies indicate decline in the world production of wheat, maize and coarse grains in 2012–13 as compared to the previous year. In the case of two commodities imported in large quantities by India, edible oils and pulses, the supply situation is expected to remain better or the same as in the previous year.

India's exports of rice, maize and wheat have been significant in 2011–12. During the period September 2011–12 to August 2012, the grain exports have exceeded 16.5 million tonnes including over 9.5 million tonnes of rice exports.

The sugar sector presents a scenario where international prices are softening while domestic prices are under upward pressure. The availability of stocks of sugar augments the expected decline in production this year.

This report is an attempt to provide a comprehensive review of the production and price conditions for the major food commodities for the country. We have expanded the contents of the report in this quarter with a review of the pattern of prices at the wholesale and retail level, in the wholesale markets of the consuming and production centres and retail prices in the four metros for selected commodities to point to the need for improved marketing efficiency to benefit both consumer and the producer of food. We hope that the report would be useful to the various stakeholders in the management of India's food economy. Any feedback on the report would be greatly appreciated to make these reports more useful.

Shashanka Bhide Project Leader and Senior Research Counsellor, NCAER On behalf of the Study Team (s.bhide@ncaer.org)





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The study team has benefitted from the support and guidance of a number of persons in the preparation of this report. Mr. Ashish Bahuguna, Secretary, Department of Agriculture and Cooperation, Ministry of Agriculture has provided leadership and guidance in the monthly briefings that were held at the Ministry of Agriculture in the past one quarter which were important inputs to this report. A number of senior officials in the government and also from the research community who participated in these meetings provided comments and suggestions on the analysis leading upto this report. Mrs. S. Bhavani, Prof. Ramesh Chand, Dr. Ashok Gulati have provided comments at the monthly briefings held in the Ministry which were valuable to the study team in the preparation of the report. Mr. Mukesh Khullar, Joint Secretary (Crops) and Mission Director for National Food Security Mission has provided guidance and support to the preparation of this report. Dr. B.Gangaiah, Adviser, Directorate of Economics and Statistics, Nodal Officer for the study has provided guidance and comments at various stages of this work. The support from DES in terms of data has been critical to the report. We have also used a number of reports on agricultural outlook prepared by different agencies in the preparation of this report.

Study Team

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Nidhi Nath Srinivas of Economic Times contributed to the outlook presented in the Oilseed and Vegetable Oils section in Chapter 4.

M.R. Subramani of Hindu Business Line has contributed to the analysis on Rice outlook in Chapter 4.



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PARTI

Overview

I.1 Backdrop

This is the second in the series of Quarterly Agricultural Outlook and Situation Analysis reports covering the period July–September 2012, under a study commissioned by the National Food Security Mission (NFSM), Ministry of Agriculture to NCAER. These reports aim to provide a comprehensive review and assessment of the output and price prospects for food commodities for India and the world. The report covers the main crop based food items: cereals (specifically rice, wheat and coarse grains), pulses, selected fruits and vegetables, sugarcane and edible oils. Milk is the only livestock product covered in the analysis for the present.

The three main outputs of the proposed work are:

- A Quarterly Agricultural Outlook Report that integrates the assessment of key indicators relating to agriculture with a focus on food sectors.
- Semi-annual Agricultural Outlook and Scenario Analysis Report which provides a longer term perspective for the food sector.
- Monthly briefings on the prevailing agricultural conditions at the Ministry of Agriculture.

The quarterly reports series has been operationalised and monthly briefings have also been held since November 2011. The first semi-annual medium-term outlook report is now under preparation.

The study has an Advisory Committee to provide broad guidance to the implementation of the study. The Committee comprises of Director General, NCAER, Dr Shekhar Shah as Chair, Dr Ashok Gulati, Chairman, Commission on Agricultural Costs and Prices, Prof. Ramesh Chand, Director, National Centre for Agricultural Policy (NCAP), New Delhi, Prof. Mahendra Dev, Director, Indira Gandhi Institute for Development Research (IGIDR), Mumbai, Mr Mukesh Khullar, Joint Secretary (Crops), Ministry of Agriculture and Mrs S. Bhawani, Principal Adviser, Ministry of Agriculture. Representative from FAO and DFID are Special Invitees to the Committee.

Dr B. Gangaiah, Adviser, Directorate of Economics and Statistics, Ministry of Agriculture is the Nodal Officer for the study.

In addition, a Technical Support Group comprising of key officers from different departments of the government and other experts will also interact with the study team to improve the work under the study.

This report is organised into five chapters. The first chapter provides an overview of the prospects for the food commodities covered in the study. In the second chapter, we provide an overview of the global supply and demand conditions and price trends to draw implications to the Indian markets. Chapter III, presents a discussion of the overall



While overall economic growth itself decelerated in 2012-13, agriculture's own growth may be slower because of the unevenly distributed monsoon rainfall this year.

domestic scenario for food sector. In Chapter IV, we provide a detailed analysis for the commodities selected in this study.

Chapter V provides concluding remarks.

I.2 Overview of Prospects

I.2.1 Output trends

The record foodgrain production of 257 million tonnes in 2011-12 followed a strong recovery of the sector in the previous year. The GDP from agriculture and allied sectors grew at 7 per cent in 2010-11 and 2.76 per cent in 2011-12. GDP from agriculture, comprising of crops and livestock only, rose by 7.8 per cent in 2010–11 and it is expected to register a growth of more than 2.5 per cent in 2011-12. For the seven year period covering 2005-06 to 2011-12, the agriculture and allied sectors registered an annual average growth rate of 3.7 per cent and for agriculture alone, growth would be 3.8 per cent if 2011–12 growth rate works out to 2.5 per cent. The desired long-term growth rate of 4 per cent from agriculture appears increasingly feasible if the appropriate conditions are available.

The growth rate of agriculture and allied sectors in Q1: 2012–13 is 2.9 per cent, lower than the growth rate in Q1: 2011-12 (Figure I.1). While overall economic growth itself decelerated in 2012–13, agriculture's own growth may be slower because of the unevenly distributed monsoon rainfall this year. The trends in annual growth rate of output of the sector are presented in Figure I.2.

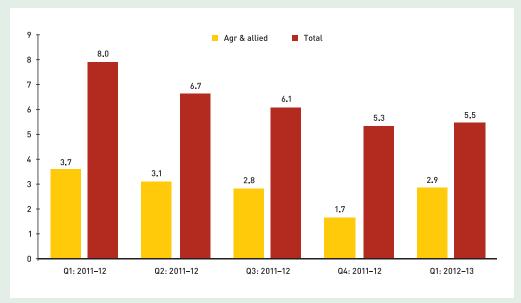
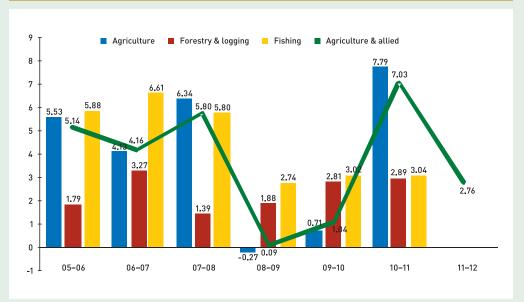


Figure I.1: Trends in Quarterly GDP Growth: % YOY

Figure I.2: Trends in Annual GDP Growth: % YOY



Although the overall volume of rainfall in the monsoon period was only 8 per cent below long period average, the quality of monsoon was poor: the deficiency during the peak sowing period of *kharif* crops was high leading to need for drought relief measures in some areas.

The availability of inputs such as fertilizers, pesticides and seeds was adequate during the season barring potato in West Bengal where seed material was reported to be in short supply.

The *kharif* harvest of most crops this year is expected to be lower than last year. While the *rabi* season harvest may offset some of the losses in *kharif*, weather conditions will remain critical in achieving a good *rabi* harvest.

In our report of April–June 2012, we had presented the production estimates for 2012–13 *kharif* based on the information on monsoon projections at the time. We now have the 1st Advance Estimates of *kharif* production for the major crops from the Ministry of Agriculture. We have also updated our assessment of production based on rainfall data up to the end of September 2012. The key findings are in Table I.1.

The kharif harvest of most crops this year is expected to be lower than last year. While the rabi season harvest may offset some of the losses in kharif, weather conditions will remain critical in achieving a good rabi harvest.





| Tahla I 1 | - Projection | of Kharif Prod | uction for M | ainr Crone. | 2012_13 |
|-----------|--------------|----------------|--------------|-------------|---------|

| 2011–12 Production: 4th Advance Estimate | 2012–13 Production: Quarterly AOR April–June 2012 | 2012–13 Current Forecast Q_AOR July– September 2012 | 2012–13 Production: 1st Advance Estimate | % Change of Col. 4 over Col.1 |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) | (2) | (3) | (4) | (5) |
| | Million tor | nnes | | |
| 91.53 | 82.3-86.6 | 84.0-85.1 | 85.59 | -6.5 |
| 16.22 | 15.1-16.3 | 15.5 | 14.89 | -8.2 |
| 10.05 | 8.1-9.8 | 9.0 | 6.6 | NA |
| 3.24 | 2.6-2.9 | 2.7 | 2.63 | NA |
| 2.75 | 2.4-2.6 | 2.2 | 3.22 | NA |
| 32.26 | 28.2-31.6 | 29.4 | 26.33 | -18.4 |
| 6.16 | 5.5-6.2 | 5.5-5.6 | 5.26 | -14.6 |
| 127.50 | 116.0-124.4 | 120.0 | 117.18 | -8.1 |
| 5.10 | 4.7-5.8 | 4.6 | 3.82 | -25.1 |
| 12.28 | 12.3-13.1 | 12.6 -12.7 | 12.62 | +2.8 |
| 357.7 | 347.2-356.2 | 333.5 - 336.0 | 335.33 | -6.3 |
| | Production: 4th Advance Estimate [1] 91.53 16.22 10.05 3.24 2.75 32.26 6.16 127.50 5.10 12.28 | Production: Production: 4th Advance Quarterly AOR Estimate April-June 2012 (1) (2) Million tor 91.53 82.3-86.6 16.22 15.1-16.3 10.05 8.1-9.8 3.24 2.6-2.9 2.75 2.4-2.6 32.26 28.2-31.6 6.16 5.5-6.2 127.50 116.0-124.4 5.10 4.7-5.8 12.28 12.3-13.1 | Production: 4th Advance Estimate Production: Quarterly AOR April-June 2012 Current Forecast Q_AOR July-September 2012 Million tonus 91.53 82.3-86.6 84.0-85.1 16.22 15.1-16.3 15.5 10.05 8.1-9.8 9.0 3.24 2.6-2.9 2.7 2.75 2.4-2.6 2.2 32.26 28.2-31.6 29.4 6.16 5.5-6.2 5.5-5.6 127.50 116.0-124.4 120.0 5.10 4.7-5.8 4.6 12.28 12.3-13.1 12.6-12.7 | Production: 4th Advance Estimate Production: Quarterly AOR April-June 2012 Current Forecast Q_AOR July-September 2012 Production: 1st Advance Estimate (1) (2) (3) (4) Million tonnes 91.53 82.3-86.6 84.0-85.1 85.59 16.22 15.1-16.3 15.5 14.89 10.05 8.1-9.8 9.0 6.6 3.24 2.6-2.9 2.7 2.63 2.75 2.4-2.6 2.2 3.22 32.26 28.2-31.6 29.4 26.33 6.16 5.5-6.2 5.5-5.6 5.26 127.50 116.0-124.4 120.0 117.18 5.10 4.7-5.8 4.6 3.82 12.28 12.3-13.1 12.6-12.7 12.62 |

Note: Detailed discussion of the projections in Section III.

The 1st Advance Estimates place production in *kharif* 2012 to be higher than in 2011–12 only in the case of soybean among the major crops. Coarse cereals are expected to show a decline of 5.93 million tonnes and rice 5.94 million tonnes. *kharif* pulses are projected to decline in 2012 by 0.9 million tonnes. Our own estimates place coarse cereal production in 2012 *kharif* higher than 1st Advance estimates. These are preliminary estimates but both the estimates indicate a decline in *kharif* production this year.

I.2.2 Price conditions

The overall WPI based annual inflation rate during April–August 2012 is lower at 7.4 per cent as compared to 9.6 and 8.9 per cent during 2010–11 and 2011–12. The decline in overall inflation rate in 2012 was brought about by non-food items primarily manufactured products. The annual rise in WPI for food articles remained in double digits during April–August 2012 on the back of high rates of increase in WPI for pulses, vegetables and oilseeds. In the case of milk which was a source of high food inflation in the last year, the increase in April–August 2012 was 9.8 per cent, only marginally below the 10 per cent mark.

Seasonal factors may provide some relief to the price situation but continued improvements in marketing infrastructure are crucial.

The recent price trends in some key commodity groups are presented in Figures I.3 below.

Figure I.3: Trends in WPI for Selected Food Commodities and Overall: % YOY 12 ■ WPI_all ■ Food products ■ Food articles 10 8 6 4 2 0 -2 = 80 ■ Fruits Pulses 60 40 20 0 -20 -40 -60 25 ■ Sugar Edib_oil Egg_Fsh_meat Milk 20 15 10 5 0 -5 -10 -15 Jul-11

-20

The relatively high rate of "stubborn" food inflation, even as overall inflation is declining is an added concern in view of the rising energy costs which affect cost of inputs such as fertilizers, operation of farm machinery and transportation of goods. Subsidies and higher support prices to offset these increasing input costs are not sustainable in the long-run. In the short term of next few months, going by the current trends food prices are likely to show rising tendency particularly in the case of pulses, sugar and livestock products such as eggs and meat. The deficiency in monsoon rainfall has reduced crop production further stirring the fires of food inflation.

Table 1.2 provides comparison of international price trends and price trends in the domestic market at the wholesale level.

| tem | WPI % Change YOY | | | | International Price % Change YOY | | | | | OY |
|---------------------|------------------|--------|--------|------------|----------------------------------|--------|--------|--------|--------|--------|
| | Apr 12 | May 12 | Jun 12 | Jul 12 | Aug 12 | Apr 12 | May 12 | Jun 12 | Jul 12 | Aug 12 |
| Food Price Index | 9.42 | 9.07 | 9.32 | 8.95 | 9.32 | | | | | |
| Food Articles | 10.92 | 10.63 | 10.91 | 10.06 | 9.14 | | | | | |
| Food Products* | 6.36 | 5.80 | 5.91 | 6.25 | 9.01 | | | | | |
| Cereals | 6.84 | 5.62 | 6.64 | 8.29 | 10.71 | | | | | |
| Rice | 5.98 | 4.89 | 7.46 | 10.12 | 10.29 | 16.97 | 22.35 | 17.00 | 5.89 | 0.05 |
| Wheat | 5.97 | 6.75 | 6.76 | 6.67 | 12.85 | -20.77 | -25.42 | -15.39 | 13.76 | 6.83 |
| Jowar | 8.38 | 1.43 | -8.37 | -11.60 | -9.63 | | | | | |
| Bajra | 11.08 | 6.10 | 10.84 | 15.73 | 19.75 | | | | | |
| Maize | 11.14 | 5.70 | 5.79 | 9.04 | 9.60 | -13.97 | -12.86 | -13.92 | 10.69 | 7.07 |
| Pulses | 27.53 | 17.40 | 12.49 | 11.39 | 13.49 | | | | | |
| Gram | 47.34 | 56.35 | 59.67 | 63.45 | 64.49 | | | | | |
| Tur | -11.32 | -5.17 | 1.03 | 10.03 | 21.54 | | | | | |
| | | | Sel | lected Oil | seeds | | | | | |
| Groundnut | 25.76 | 24.42 | 21.51 | 18.31 | 17.76 | 31.97 | -2.39 | -0.56 | 6.49 | -1.39 |
| Rapeseed & Mustard | 33.21 | 36.08 | 28.42 | 30.22 | 36.50 | | -12.64 | -15.78 | -13.24 | -9.95 |
| Soybean | 30.69 | 43.31 | 47.17 | 79.08 | 82.78 | 5.57 | 4.44 | 4.51 | 21.45 | 24.23 |
| /egetables | 61.85 | 49.90 | 50.12 | 24.11 | 9.98 | | | | | |
| Potato | 59.30 | 72.17 | 84.91 | 72.96 | 68.86 | | | | | |
| Onion | -11.03 | -8.05 | -9.46 | -9.81 | -20.67 | | | | | |
| -ruits | -15.34 | -6.07 | -4.93 | -0.15 | 1.14 | | | | | |
| Banana | -4.48 | 13.49 | 16.32 | 22.36 | 21.03 | 1.56 | -6.52 | -3.04 | 0.27 | -0.56 |
| Edible oils | 11.18 | 10.37 | 9.52 | 10.32 | 10.47 | | | | | |
| Groundnut oil | 25.78 | 24.68 | 19.65 | 18.06 | 17.76 | | | | | |
| R & M Oil | 23.55 | 21.22 | 19.34 | 18.81 | 16.01 | -9.87 | -12.64 | -15.78 | -13.24 | -9.95 |
| Palm oil | 11.80 | 10.77 | 9.08 | 9.69 | 7.12 | 3.00 | -9.82 | -13.78 | -7.84 | -11.16 |
| Bugar | 3.16 | 5.24 | 7.13 | 7.91 | 16.15 | -10.88 | -7.19 | -19.34 | -22.77 | -28.89 |
| Grain mill products | -0.54 | -0.62 | -0.48 | -0.41 | 2.74 | | | | | |
| Milk | 15.68 | 11.90 | 7.46 | 8.01 | 6.68 | | | | | |

Note: WPI is obtained from Office of Economic Adviser, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry website and International prices from International Monetary Fund website.

The projections for select commodities using simple time-series models that capture current dynamics of prices indicate significant increase in domestic prices of pulses, onion and sugar in the next three months. The prices of potato are expected to moderate as the

new harvest begins to arrive in the markets. The futures prices in the international markets also suggest that international prices are expected to moderate towards the end of this calendar year.

1.2.3 Global perspectives, trade and food availability

The overall world production of wheat and maize in 2012–13 is now expected to be much short of harvest in 2011–12. Adverse weather conditions in the US, Russia, Ukraine, Kazakhstan, Australia and Argentina have led to a lower production of wheat and maize. Output of rice is projected to be slightly higher than the output in 2011–12 and the supply of vegetable oils, sugar and dairy products is estimated to be higher. There was a sharp increase of six per cent in the food price index of FAO in July 2012 over the previous month, mainly on account of the increase in the price of cereals.

Export prospects for rice and wheat from India appear favourable given the high stocks with the government agencies and global demand. The likely drop in domestic sugar production implies that domestic prices may be more remunerative than export prices given the comfortable supplies in international markets.

The production of pulses in Canada, Myanmar and Australia is higher in 2012–13 than in the previous year and offsets some of the likely shortfall in India's *kharif* output. India imported 2.5-3 million tonnes of pulses in the last two years and this year also imports may reach the same level.

In the case of edible oils, global supply of vegetable oils as a whole is expected to be higher than in the previous year. Availability of Carry Over stocks from the previous year also provides adequate supplies. Given the high dependence of Indian consumer on imported edible oil, the adequate global supplies offset concerns due to the likely decline in the output of *kharif* oilseeds barring soybean.

The slow economic growth recovery in the advanced economies has also meant that demand for energy is also not rising as it did when the growth rates were high during the period leading up to the financial crisis of 2008. The demand for maize for bio-fuel has also been weak because of the dampened demand for oil and simultaneously rising price of maize because of lower production prospects. Consequently, diversion of maize to ethanol from the food chain would be less. In the longer term the use of grains for bio-fuel would also be affected by the rise of low cost shale gas as energy source in the US and Europe.

The exchange rate of the rupee influences competitiveness of Indian exports and also determines the price of imported commodities. Reversal of the weakness in rupee will make imports less expensive than otherwise and keep the prices of pulses and edible oils in check. This is also likely to keep the rise in the price of sugar in check as exports will become less competitive. Maintaining the value of the rupee in the short-term would be necessary to keep the food inflation in check in the short-term. If the exchange rate stays at Rs 50 per US dollar during the rest of the financial year, that would imply 4 per cent depreciation of the rupee with respect to dollar in the current year over the average of last year. The international price rise and rupee depreciation would be the cap for domestic price rise unless there are restrictions on imports.

I.2.4 Policy measures and food sector

The short-term prospects for the food sector are affected by both events such as the weather conditions and also policies related to pricing, trade, procurement or markets. The minimum support prices for *kharif* crops were raised by 15 per cent in 2012 over the



The exchange rate of the rupee influences competitiveness of Indian exports and also determines the price of imported commodities.
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previous year in the case of common rice and 20 per cent in the case of coarse grains and pulses. The oilseed Minimum Support Prices (MSPs) were increased by 30 per cent. The higher prices for coarse grains, pulses and oilseeds clearly point to the need for maintaining incentives to improve productivity and production of these crops. The higher MSPs would also mean higher market prices in general. Hence, the inefficiencies in the marketing system needs to be curbed and policy changes that increase competition in marketing are needed.

Attempts to bring down the large subsidy bill whether it is for petroleum products, fertilisers or food will have an impact on input prices to farmers or output prices for consumers unless there is greater efficiency in the supply system. Improvement in the productivity will be the only option to minimise the impact of reduction in subsidies.

The international supply-demand balance position and, exchange rate changes also have implications to domestic prices given the trade policy regime for commodities. In the case of pulses and oilseeds, where dependence on imports is high, our review points to stable global supply position in both these commodities. However, trade policies will need to remain positive to enable efficient trade. There is no information on stocks of these commodities with trade and there is a need to permit imports to ensure supplies.

In the case of sugar, global prices are expected to remain moderate and India's exports are not likely to be competitive, especially in view of strengthening rupee against US Dollar. Large stocks also imply that imports would not be necessary even if they are cheaper.

In the case of rice, even with lower production in the current year, large stocks with the government ensure adequate domestic supplies to meet demand. Global demand for rice is expected to remain at the same level as last year given the nearly same level of output in 2012–13 as in 2011–12 leading to incentives to export. Similar situation prevails in wheat where lower global production would require draw down of stocks.

In the case of onion, the supply-demand balance is tighter and increase in domestic prices may act as a check on exports. The current year's production is expected to be smaller than in 2011–12. In the case of potato, we expect an increase in production in 2012–13 as compared to 2011–12. However, the balance between supply and demand does not have the benefit of large stocks and prices show large fluctuations to bring about the balance, given inadequate cold storage facilities.

In Table I.3, we provide an assessment of supply-demand balance for major food commodities based on a number of assumptions and available information.

Table I.3: Food Balances for 2012-13: October 2012 (thousand tonnes)

| Item | Rice | Wheat | Maize | Pulses | Edible oil | Sugar | Onion | Potato |
|----------------------|--------|--------|---------|--------|------------|-------|-------|--------|
| A. The Supply side | | | | | | | | |
| Beginning stocks | 23000 | 19952 | 700 | 1800 | 500 | 7789 | 750 | 1400 |
| Production | 99500 | 93900 | 23000 | 16000 | 8300 | 24000 | 12600 | 44835 |
| Imports | 0 | 0 | 0 | 3000 | 9500 | 0 | 0 | 0 |
| Total supply | 122500 | 113852 | 23700 | 20800 | 18300 | 31789 | 13350 | 46235 |
| B. The Demand Side | | | | | | | | |
| Domestic consumption | 91200 | 83182 | 19141.5 | 19425 | 17979 | 22575 | 14700 | 42000 |
| Exports | 7000 | 5000 | 2500 | 0 | 0 | 2000 | 1000 | 1800 |
| Utilisation | 100500 | 89182 | 21642 | 19425 | 17979.15 | 24575 | 15700 | 43800 |
| C. Ending stocks | 22000 | 20770 | 2059 | 1375 | 320.85 | 7214 | -2350 | 2435 |

Notes: (1) Beginning stocks in the case of rice and wheat are stocks with the government; in the case of sugar, the data are from industry; in the case of maize, pulses, edible oils, onion and potato are arbitrary and obtained assuming that beginning stocks in 2011–12 were zero (2) Domestic consumption is assumed to be 5 per cent higher than the estimate for 2011–12 which in turn are our best estimates. (3) The negative ending stocks essentially imply pressure on supplies if current demand levels are to be met. (4) Imports and exports are our projections.

PART II

Global Situation and Outlook

II.1 General Trends

The sudden spurt in FAO food price index earlier in June this year by 6 per cent over May highlighted the interconnected markets across the globe and the need for monitoring of emerging scenario for timely policy actions. In this chapter, we review the available information on the global scenario for food commodities.

II.1.1 Production

The USDA has revised its 2012–13 forecasts of most agricultural commodities downward every month since its initial forecasts in May in response to deteriorating weather conditions in the U.S. and some other producing countries such as Russia, Ukraine, Kazakhstan, and Argentina. These revisions are shown in the Table II.1.

Table II.1: Changes in 2012-13 USDA Global Agricultural Production Forecast (million tonnes)

| | 2011-12 data | | 2012–13 data as on | | | | |
|----------------------|----------------|----------|--------------------|-----------|----------|----------|-------------------|
| | as on Sep 2012 | May 2012 | June 2012 | July 2012 | Aug 2012 | Sep 2012 | Over May 2012 (%) |
| Wheat | 695.0 | 677.6 | 672.1 | 665.3 | 662.8 | 658.7 | -2.8 |
| Rice | 465.3 | 466.4 | 466.5 | 465.1 | 463.2 | 464.2 | -0.5 |
| Maize | 876.7 | 945.8 | 949.9 | 905.2 | 849.0 | 841.1 | -11.1 |
| Total Coarse Grains | 1148.9 | 1228.0 | 1231.6 | 1183.6 | 1121.4 | 1113.3 | -9.4 |
| Soybean | 237.1 | 271.4 | 271.0 | 267.2 | 260.5 | 258.1 | -4.9 |
| Soybean oil | 42.2 | 43.7 | 43.6 | 43.3 | 42.4 | 42.3 | -3.2 |
| Soybean Meal | 178.5 | 185.0 | 184.8 | 183.5 | 179.2 | 179.1 | -3.2 |
| Total major oilseeds | 437.7 | 471.5 | 470.8 | 465.8 | 457.3 | 453.1 | -3.9 |
| Total major oils | 154.0 | 157.6 | 157.7 | 156.8 | 155.3 | 154.3 | -2.1 |

 $\textbf{\textit{Source}}{:} \ \mathsf{USDA} \ \ \mathsf{http://www.fas.usda.gov/psdonline/circulars/grain.pdf}$

Various international agencies, such as the Food and Agriculture Organization (FAO), International Grains Council (IGC), and the Australian Bureau of Agricultural and Resource Economics and Science (ABARES) have also revised their global production forecasts for various major agricultural commodities downward in recent months, reflecting worsening production situation in the U.S. and in some other countries. As a result, the production conditions for wheat and maize have particularly worsened since our June quarterly report. The latest forecasts of these agencies, along with their 2011–12 production estimates are shown in Table II.2.

The global production estimates for 2012–13 are now significantly lower than in 2011–12 in the case of wheat, maize, and coarse grains. The estimates are nearly stagnant for rice and higher in the case of soybean, total oilseeds, sugar and milk. Output of oils is projected to be at the same level as in 2011–12. Overall, supply conditions are not likely to be under stress because of relatively high beginning stocks of grains.



oilseed prices
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during the second
half of 2012,
particularly maize,
soybeans, and to
some extent wheat
and rice.

Global cereal and

Table II.2: Global Production Forecasts for Major Food Commodities (million tonnes)

| Table II.2: Global Produ | | | | 100/ |
|--------------------------|------------------|---------------------|---------------------|------------------|
| Commodity/ Year | FA0 ¹ | USDA ² | ABARES ³ | IGC ⁴ |
| | | Wheat | | |
| 2011–12 | 699.1 | 695.0 | 696.0 | 696.0 |
| 2012–13 | 663.3 | 658.7 | 665.0 | 662.0 |
| | | Rice | | |
| 2011–12 | 482.3 | 465.3 | NA | 464.0 |
| 2012–13 | 483.3 | 464.2 | NA | 466.0 |
| | | Maize | | |
| 2011–12 | 884.0 | 876.7 | 871.0 | 875.0 |
| 2012–13 | 864.0 | 841.1 | 834.0 | 838.0 |
| | , | All coarse grains | | |
| 2011–12 | 1165.7 | 1148.9 | 1144.0 | 1153.0 |
| 2012–13 | 1148.3 | 1113.3 | 1111.0 | 1114.0 |
| | | Total oilseeds | | |
| 2011–12 | 450.9 | 437.7 | 437.0 | NA |
| 2012–13 | NA | 453.1 | 453.1 | NA |
| | | Total veg oils | | |
| 2011–12 | 181.9 | 154.0 | NA | NA |
| 2012–13 | NA | 154.3 | NA | NA |
| | Sug | ar (Raw equivalent) | | |
| 2011–12 | 172.8 | 171.0 | 174.0 | NA |
| 2012–13 | NA | 174.5 | 177.8 | NA |
| | | Milk | | |
| 2011–12 | 730.1 | 527.1 | NA | NA |
| 2012–13 | 750.1 | 542.1 | NA | NA |
| | | | | |

II.1.2 Price trends

Following the adverse weather conditions in some of the major producing countries, price outlook has begun to reflect pressure on supplies. Global cereal and oilseed prices increased sharply during the second half of 2012, particularly maize, soybeans, and to some extent wheat and rice. Global markets witnessed an increased level of volatility with international maize, soybean, and wheat spot and future prices rising to record levels in recent weeks (Figure II.1 and Table II.3). The major factor adversely impacting global supply situation is the unprecedented dry weather combined with high temperatures in the soy-corn belt of the US mid-west, at a time when these crops were approaching critical growth stage. A further deterioration in crop situation due to unfavourable weather conditions in Russia, Black Sea Region, and Europe also contributed to supply concerns. Major commodities impacted are maize, soybeans and wheat with lesser impact on sugar and rice. However, after peaking in July-August, prices of most commodities have tended to decline in September 2012 as the extent of production shortfall was becoming clear and beginning year stocks are adequate in the short-term.

^{1.} http://www.fao.org/docrep/016/al992e/al992e00.pdf

^{2.} http://www.fas.usda.gov/psdonline/circulars/grain.pdf http://www.fas.usda.gov/psdonline/circulars/oilseeds.pdf

^{3.} http://www.igc.int/en/downloads/gmrsummary/gmrsumme.pdf

^{4.} http://adl.brs.gov.au/data/warehouse/agcomd9abcc004/agcomd9abcc004201209/AgCommodities2012.Vol2.No3_Ver1.0.0.pdf

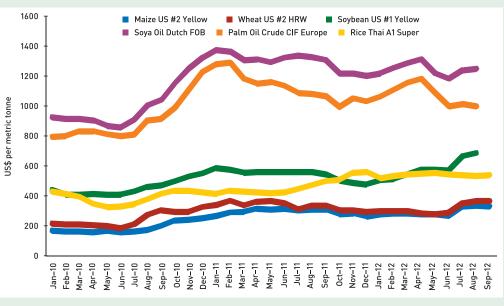


Figure II.1: Global Agricultural Commodity Price Trends

Source: FAO.

With the exception of Thailand, rice export prices in general eased in most countries during MY 2011–12. As the supply-demand balance sheet is expected to remain fairly comfortable in the coming year, rice prices are likely to remain fairly stable but high by historical standards.

Reflecting large carryover stocks in 2011–12 and higher production than consumption in 2012–13, world sugar prices are forecast to decline in 2012–13. According to ABARES⁵, the world indicator price for raw sugar (Intercontinental Exchange, nearby futures, no. 11 contract) is forecast to decline by around 20 per cent in 2012–13 to average US18 cents a pound (October to September).

II.1.3 Consumption

While the USDA and the IGC forecast a significant decline in global wheat consumption in 2012–13 (681 million tonnes from 694 million tonnes in 2011–12 by USDA and 679 million tonnes from 692 million tonnes by IGC), the FAO forecasts only a marginal decline in consumption from 691.1 million tonnes in 2011–12 to 686.5 million tonnes in 2012–13. Wheat feed use in 2012–13 is likely to fall below the previous season's exceptional high level but still remain above normal because of a continued tight maize supply situation. However, ABARES in its latest report forecasts a marginal increase in 2012–13 wheat consumption including feed use at 693 million tonnes, up by 2 million tonnes from the previous year.

World rice utilisation in 2012–13 is projected to remain on trend by all agencies, at 467.7 million tonnes by the USDA and 473.84 million tonnes by the FAO, and 465 million tonnes by the IGC.

Global maize utilisation is currently forecast to contract by one per cent to 856.7 million tonnes by the USDA, by one per cent to 866 million tonnes by the FAO, and by 2.6 per cent to 849 million tonnes by the IGC. This drop would be mainly on account of the



^{5.} http://adl.brs.gov.au/data/warehouse/agcomd9abcc004/agcomd9abcc004201209/AgCommodities2012.Vol2.No3_Ver1.0.0.pdf



| A | | D 1 0 | . 1104/14 | |
|---------|---------------|--------------|--------------|--|
| Table I | II 3. Futures | s Price Gill | ntes US\$/MT | |

| Commodity/ Date of Quote | | Delivery Month | | | | | | |
|--------------------------|---------|----------------|---------|---------|---------|---------|--|--|
| Soybean CBOT | Jul'12 | Aug'12 | Sep'12 | Nov'12 | Jan'13 | Mar'13 | | |
| 4-May-12 | 543.15 | 535.80 | 506.41 | 502.18 | | | | |
| 1-Jun-12 | 493.92 | 484.46 | 472.33 | 462.23 | | | | |
| 6-Jul-12 | 595.14 | 575.85 | 562.90 | 553.26 | | | | |
| 3-Aug-12 | | 608.56 | 601.02 | 598.45 | | | | |
| 7-Sep-12 | | | 636.31 | 638.05 | 637.78 | 617.57 | | |
| Wheat CBOT | Jul'12 | Sep'12 | Dec'12 | Mar'13 | May'13 | Jul' 13 | | |
| 4-May-12 | 223.95 | 229.37 | 238.09 | 246.27 | | | | |
| 1-Jun-12 | 224.96 | 231.76 | 241.31 | 249.12 | | | | |
| 6-Jul-12 | 290.73 | 296.24 | 301.94 | 305.98 | | | | |
| 3-Aug-12 | | 327.47 | 332.06 | 332.52 | | | | |
| 7-Sep-12 | | 325.09 | 332.53 | 336.39 | 336.02 | 319.21 | | |
| Maize CBOT | Jul'12 | Sep'12 | Dec'12 | Mar'13 | May'13 | Jul '13 | | |
| 4-May-12 | 244.18 | 210.72 | 206.39 | 211.01 | | | | |
| 1-Jun-12 | 217.11 | 202.65 | 200.78 | 205.11 | | | | |
| 6-Jul-12 | 292.60 | 272.92 | 272.82 | 275.58 | | | | |
| 3-Aug-12 | | 318.88 | 317.90 | 318.39 | | | | |
| 7-Sep-12 | | 312.97 | 314.75 | 315.93 | 314.45 | 309.33 | | |
| Soya oil CBOT | Jul'12 | Aug'12 | Sep'12 | Oct'12 | Dec'12 | Jan' 13 | | |
| 4-May-12 | 1182.77 | 1187.18 | 1191.59 | 1195.33 | | | | |
| 1-Jun-12 | 1071.22 | 1076.07 | 1081.14 | 1085.55 | | | | |
| 6-Jul-12 | 1174.39 | 1178.14 | 1182.55 | 1186.52 | | | | |
| 3-Aug-12 | | 1147.27 | 1152.56 | 1156.75 | | | | |
| 7-Sep-12 | | | 1236.12 | 1239.89 | 1249.13 | 1254.41 | | |
| Sugar LCE | Oct'12 | Dec'12 | Mar'13 | May'13 | Aug'13 | | | |
| 4-May-12 | 560.30 | 567.90 | 574.90 | | | | | |
| 1-Jun-12 | 529.60 | 534.10 | 545.00 | | | | | |
| 6-Jul-12 | 601.50 | 587.30 | 593.50 | | | | | |
| 2-Aug-12 | 609.60 | 588.80 | 591.10 | 589.0 | | | | |
| 7-Sep-12 | 556.30 | 555.10 | 549.00 | 550.60 | 549.70 | | | |
| | | | | | | | | |

Source: Moore Research Center, Inc. (www.mrci.com/ohlc/index.php)

United States, where the volume of maize for conversion into ethanol is forecast to fall significantly due to high maize prices and difficulty in obtaining supplies and remaining competitive. Overall utilisation of coarse grains in 2012–13 is forecast to decline by around one per cent.

Despite a marginal decline in global oilseed crush in 2012–13, vegetable oil consumption is forecast to increase albeit below trend level at around 155 million tonnes, reflecting growth in consumption in developing countries and continued strong industrial demand. This is to be achieved through a significant drawdown in stocks.

ABARES in its September report forecasts world sugar consumption to grow by 2 per cent in 2012–13 to around 172 million tonnes, due to both falling sugar prices and rising consumer incomes, particularly in developing countries.

II.1.4 Trade

There is a unanimity of opinion among various international agencies that world wheat trade will fall in 2012–13 vis-a-vis the previous year, but still relatively high, with forecasts ranging from 132 million tonnes to 136.5 million tonnes. This largely reflects a forecast of steep fall in the supply of wheat available for export in the Black Sea region and Argentina, which to some extent will be offset by larger exports from the Unites States, Canada, and India.

Global rice trade in MY 2012–13 is forecast to remain more or less unchanged from the 2011–12 level at around 35.5 million tonnes. A likely decline in exports from India due to lower production will be largely offset by higher exports from Thailand and Pakistan, Sufficient domestic availabilities should allow China, Egypt, Iran, and Nigeria to cut their purchases.

World coarse grain trade in 2012–13 is expected to shrink driven by significantly lower supplies of corn available for export from the United States. MY 2012–13 exports forecasts of coarse grains by various agencies range from 116.6 million tonnes (90.1 million tonnes of maize) by the USDA to 120 million tonnes by the FAO compared with USDA estimate of 128 million tonnes (100.3 million tonnes maize) and FAO estimate of 125.0 million tonnes in MY 2011–12.

Global trade in vegetable oils in MY 2012–13 is forecast to increase to 62 million tonnes from 60.1 million tonnes in MY 2011–12 driven largely by increased imports by India and China.

ABARES forecasts world sugar exports to increase by around 5 per cent in 2012–13 to around 56 million tonnes driven by an increase in sugar imports by the European Union. Supplies available for export are forecast to increase in Brazil, Mexico, Thailand, and Australia but decline in India.

II.1.5 Stocks and Stocks-to-Use Ratio

Consequent to the downward revision in the 2012/13 production forecast for wheat, corn and soybeans, 2012–13 carryover stocks into the next year are expected to decline and in most cases stocks-to-use ratios have deteriorated. This is likely to lead to increased price volatility in 2012–13.

According to USDA, 2012–13 ending wheat stocks are forecast to decline by 22 million tonnes from the previous year's level and the stocks-to-use ratio to dip to 26 per cent, the lowest since 2007–08. The FAO forecast of the 2012–13 stocks-to-use ratio is 25.1 per cent compared with 28.1 in 2011–12.

In the case of rice, USDA forecasts a marginal decline in stocks and stocks-to-use ratio for 2012–13 vis-a-vis 2011–12 but still one of the highest in recent years. However, FAO is more optimistic with a stocks-to-use ratio of 34.4 per cent, an increase over the 32.9 per cent in 2011–12.

In the case of coarse grains, 2012–13 USDA forecasts ending stocks to decline by almost 20 million tonnes from the 2011–12 ending stocks. The stocks-to-use ratio is expected to be 13.5 per cent, the lowest in recent years. FAO forecast of the stocks-to-use ratio is very close at 13.3 per cent compared with 15 per cent in 2011–12.

In the case of oilseeds, vegetable oils, and oil meals, USDA forecasts 2011–12 ending stocks and stocks-to-use ratios to decline to one of the lowest levels in the recent past.

World coarse grain trade in 2012-13 is expected to shrink driven by significantly lower supplies of corn available for export from the United States.

On the positive side, the likely global decline in grain and oilseed production from the earlier expected levels and the strengthening of global prices of wheat and corn should result in increased competitiveness of Indian wheat, corn, and soybean meal exports, which however will be somewhat affected by higher domestic prices and rupee appreciation against US Dollar.

Forecasted world sugar production higher than consumption in 2012–13 is expected to lead to higher ending world stocks of sugar, which according to ABARES will be nearly 6 million tonnes more than the previous year at 68.8 million tonnes, resulting in a stocks-to-use ratio of around 40 per cent, the highest since 2007–08.

II.1.6 Implications for India

Although recent global developments per se are unlikely to have serious negative repercussions on major domestic staple (rice and wheat) supply and price situation in India, high global prices of soybean oil and exchange rate uncertainty could impact domestic prices as India is a major importer of vegetable oils. On the positive side, the likely global decline in grain and oilseed production from the earlier expected levels and the strengthening of global prices of wheat and corn should result in increased competitiveness of Indian wheat, corn and soybean meal exports, which however will be somewhat affected by higher domestic prices and rupee appreciation against US Dollar.

The recent PSU tenders for wheat exports from government stocks fetched good response and much higher price quotes (\$300 to \$310 per tonne) than the minimum export price established by the government (\$228 per tonne). CBOT future price quotes indicates further strengthening of wheat prices through January 2013. Therefore the government should not rush to export the entire allocated wheat in one go but should wait for higher prices in coming months. Private wheat exports are also likely to increase in response to strengthening of global prices. Consequently, wheat exports in MY 2012–13 could increase from our earlier forecast of 1 million tonnes to 5 million tonnes, including 2 million tonnes from government inventory.

Corn exports are also likely to respond positively to higher global prices but will be constrained by stagnant production and high domestic prices. Higher global prices would translate in to higher domestic corn and soybean meal prices, making Indian feed prices costlier and pushing costs for domestic poultry and dairy products.

Indian rice prices remained competitive vis-a-vis other exporters such as Thailand, Vietnam and Pakistan in MY 2011–12. This has resulted in a record or near record exports of rice, estimated at over 8 million tonnes in MY 2011–12. However, an anticipated 4 to 5 million tonnes decline in 2012–13 rice production due to uneven monsoon rains and higher cost of production due to increase in fuel and labour costs could make Indian rice exports less competitive in MY 2012–13, resulting in lower exports.

A decline in pulse production due to uneven rains in some parts of India could result in increased import demand and push up global pulse prices despite larger production in major exporting countries such as Canada and Myanmar.

Likely lower global sugar prices combined with lower domestic sugar production and higher prices is likely to make Indian sugar exports less competitive in MY 2012–13, resulting in lower exports.

II.2 Global Commodity Trends

II.2.1 Wheat

World wheat production to fall in 2012-13

Global wheat production in MY 2012–13 is forecast to decline to the lowest level since 2007–08 with most recent forecasts by various international agencies ranging from 659 to 665 million tonnes (Table II.2), 24 million tonnes or 5.2 per cent below the 2011–12 production. Most of the decline is expected to be in the Black Sea exporting countries of the Russian Federation, Ukraine, and Kazakhstan, Argentina, European Union, and Australia due to adverse weather conditions, partly offset by higher production in India, the United States, and Canada. Table II.4 shows 2012–13 wheat production forecasts by major producing countries compared to the previous years.

Table II.4: Wheat Production by Major Producing Countries

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 Sep | % Change | | |
|---------------|---------|-----------------------|---------|---------|-------------|----------|--|--|
| | | Million metric tonnes | | | | | | |
| Argentina | 11.0 | 12.0 | 16.7 | 15.0 | 11.5 | -23.3 | | |
| Australia | 21.4 | 21.8 | 27.9 | 29.5 | 26.0 | -11.9 | | |
| Brazil | 5.9 | 5.0 | 5.9 | 5.8 | 5.0 | -13.8 | | |
| Canada | 28.6 | 26.8 | 23.2 | 25.3 | 27.0 | 6.9 | | |
| China | 112.5 | 115.1 | 115.2 | 117.9 | 118.0 | 0.1 | | |
| Egypt | 8.0 | 8.5 | 7.2 | 8.4 | 8.5 | 1.2 | | |
| EU-27 | 151.1 | 138.8 | 135.9 | 137.4 | 132.4 | -3.7 | | |
| India | 78.6 | 80.7 | 80.8 | 86.9 | 93.9 | 8.1 | | |
| Iran | 8.0 | 13.5 | 15.0 | 13.5 | 14.0 | 3.7 | | |
| Kazakhstan | 12.5 | 17.1 | 9.6 | 22.7 | 10.5 | -53.8 | | |
| Pakistan | 21.0 | 24.0 | 23.9 | 24.2 | 23.0 | -5.0 | | |
| Russia | 63.8 | 61.8 | 41.5 | 56.2 | 39.0 | -30.6 | | |
| Turkey | 16.8 | 18.5 | 17.0 | 18.8 | 15.8 | -16.2 | | |
| Ukraine | 25.9 | 20.9 | 16.8 | 22.1 | 15.5 | -29.9 | | |
| Uzbekistan | 6.0 | 6.2 | 6.5 | 6.3 | 6.7 | 6.3 | | |
| United States | 68.0 | 60.4 | 60.1 | 54.4 | 61.7 | 13.5 | | |
| Others | 43.8 | 55.2 | 48.7 | 50.6 | 50.3 | -0.6 | | |
| World Total | 682.8 | 686.2 | 651.9 | 695.0 | 658.7 | -5.2 | | |

Source: USDA.

Consumption, stocks, and trade to decline...

Global consumption is expected to decline by around 14 million tonnes in 2012–13 following record consumption in 2011–12, with gains in food use more than offset by a fall in feed demand. Nevertheless, feed use is expected to remain high, particularly in the United States and China as a result of forecast higher prices of substitute feed grains such as corn. World wheat stocks are forecast to recede from the 2011–12 peak by 22 million tonnes to offset the decline in output, and wheat stocks-to-use ratio is also expected to decline to one of the lowest levels in recent years (Table II.5 and Figure II.2).



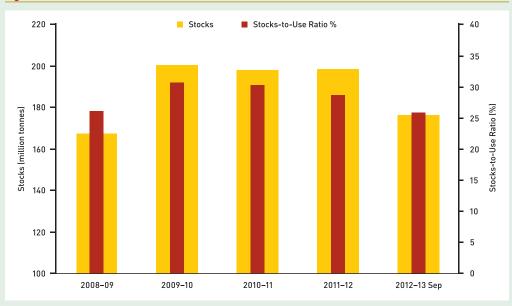


Table II.5: Global Supply and Use of Wheat (million tonnes)

| | Production | Total Supply | Trade | Total Use | Ending Stocks | Stocks -to- Use Ratio (%) |
|-----------|------------|--------------|--------|-----------|---------------|------------------------------|
| 2010–11 | 651.90 | 852.45 | 132.48 | 654.50 | 197.95 | 30.2 |
| 2011–12 | 695.04 | 892.99 | 154.64 | 694.35 | 198.64 | 28.6 |
| 2012–13 F | 658.73 | 857.37 | 134.83 | 680.66 | 176.71 | 26.0 |

Source: http://www.usda.gov/oce/commodity/wasde/latest.pdf

Figure II.2: Wheat: Stocks-to-Use Ratio



Source: www.fas.usda.gov/psdonline/circulars/grain.pdf

USDA forecasts world wheat trade in 2012–13 to decline by almost 13 per cent to 134.8 million tonnes from the near record 154.6 million tonnes in 2011–12. This largely reflects expected fall in the supply of wheat available for export in the Black Sea region. Total wheat exports from the Russian Federation are forecast to fall by more than 60 per cent to 8 million tonnes. In Ukraine and Kazakhstan, exports are forecast to fall by 26 per cent and 36 per cent to around 4 million tonnes and 7 million tonnes, respectively. Lower production is expected to reduce exports from Argentina by around 55 per cent in 2012–13 to 5.5 million tonnes. Exports of wheat from the United States and Canada are forecast to increase by 14 per cent and 11 per cent to around 33 million tonnes and 19 million tonnes, respectively, reflecting expected higher production. India, although not typically a regular exporter of wheat, is projected to export around 4.5 million tonnes of wheat in 2012–13 due to large wheat stocks with the government.

... Prices to remain firm

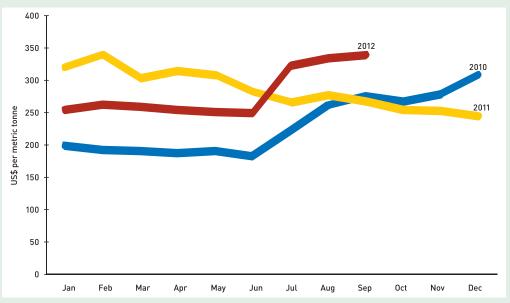
Global wheat prices started strengthening since July 2012 on reports of dry weather conditions in major growing regions of the U.S. and Black Sea Region (Figure II.3). Prices are expected to remain firm in 2012–13, reflecting lower production and reduced stocksto-use ratio. CBOT September delivery wheat future price quote strengthened from \$229 per tonne in early May to \$325 in early September (Table. II.3). Looking ahead, wheat futures for September 2012 through March 2013 delivery remain considerably above their levels in the corresponding period last year.

Table II.6: Wheat Exports (million tonnes)

| · | 2011–12 | 2012-13 F | % Change |
|----------------------------------|---------|-----------|----------|
| World | 154.6 | 134.8 | -12.8 |
| Major Exporters | 98.6 | 96.2 | -2.4 |
| United States | 28.6 | 32.7 | 14.4 |
| Argentina | 12.1 | 5.5 | -54.5 |
| Australia | 24.0 | 21.0 | -12.5 |
| Canada | 17.5 | 19.5 | 11.4 |
| EU-27 | 16.4 | 17.5 | 6.7 |
| Major Importers | 7.5 | 5.9 | -21.4 |
| Brazil | 2.0 | 1.5 | -25.0 |
| China | 1.0 | 1.0 | 2.0 |
| Selected Mideast | 1.3 | 0.8 | -37.4 |
| N. Africa | 0.5 | 0.3 | -31.3 |
| Pakistan | 1.1 | 0.8 | -27.3 |
| Southeast Asia | 0.6 | 0.6 | 1.8 |
| Selected Other countries/ groups | | | |
| India | 0.9 | 4.5 | 429.4 |
| FSU-12 | 38.9 | 19.6 | -49.6 |
| Russia | 21.6 | 8.0 | -63.0 |
| Kazakhstan | 11.0 | 7.0 | -36.4 |
| Ukraine | 5.4 | 4.0 | -26.5 |

Source: http://www.usda.gov/oce/commodity/wasde/latest.pdf

Figure II.3: Wheat Price US SRW #2 FOB Gulf Ports



Source: sitesources.worldbank.org/.../PINK DATA.XLs



The overall
assessment for
2012–13, rice
production by
various international
agencies is
essentially one of
unchanged output
level as compared to
the previous year's
record level.

Larger carryovers in the five leading exporters – which account for more than 80 per cent of the world's shipments of rice – will continue to shape global carryovers in 2012–13 and in the future.

II.2.2 Rice

Production to remain almost unchanged

The overall assessment for 2012–13, rice production by various international agencies is essentially one of unchanged output level as compared to the previous year's record level. Latest FAO forecast of the 2012–13 production, typically higher than forecasts by other agencies, is 483.5 million tonnes compared with 482.4 million tonnes in 2011–12. USDA September forecast of 2012–13 production is 464.2 million tonnes and IGC's at 466 million tonnes, compared with their 2011–12 estimate of 465.3 million tonnes and 464.0 million tonnes, respectively. A decline in rice production in a number of Asian countries, including India, Sri Lanka, and Myanmar, mostly as a result of unfavourable weather conditions is likely to be offset by larger crops in China, Indonesia, Thailand, and the United States.

Table II.7: Rice Production by Major Producing Countries

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13Sep | % Change | | | |
|---------------|---------|-----------------------|---------|---------|------------|----------|--|--|--|
| | | Million metric tonnes | | | | | | | |
| Bangladesh | 31.2 | 31.0 | 31.7 | 34.0 | 34.1 | 0.3 | | | |
| Brazil | 8.6 | 7.9 | 9.3 | 7.9 | 7.8 | -0.9 | | | |
| Burma | 11.2 | 11.6 | 10.5 | 10.8 | 10.8 | -0.6 | | | |
| Cambodia | 4.0 | 4.1 | 4.2 | 4.3 | 4.5 | 5.4 | | | |
| China | 134.3 | 136.6 | 137.0 | 140.7 | 143.0 | 1.6 | | | |
| Egypt | 4.7 | 4.6 | 3.1 | 4.3 | 4.5 | 5.9 | | | |
| India | 99.2 | 89.1 | 96.0 | 104.3 | 98.0 | -6.1 | | | |
| Indonesia | 38.3 | 36.4 | 35.5 | 36.5 | 36.9 | 1.1 | | | |
| Japan | 8.0 | 7.7 | 7.7 | 7.6 | 7.4 | -3.8 | | | |
| South Korea | 4.8 | 4.9 | 4.3 | 4.2 | 4.3 | 1.8 | | | |
| Pakistan | 6.9 | 6.8 | 5.0 | 6.5 | 6.7 | 3.1 | | | |
| Philippines | 10.8 | 9.8 | 10.5 | 10.7 | 11.0 | 2.8 | | | |
| Sri Lanka | 2.2 | 2.7 | 2.5 | 3.3 | 3.0 | -9.4 | | | |
| Thailand | 19.9 | 20.3 | 20.3 | 20.5 | 21.1 | 2.9 | | | |
| Vietnam | 24.4 | 25.0 | 26.4 | 26.7 | 26.9 | 0.5 | | | |
| United States | 6.5 | 7.1 | 7.6 | 5.9 | 6.3 | 6.5 | | | |
| Others | 33.7 | 35.9 | 37.9 | 37.1 | 38.1 | 2.6 | | | |
| World Total | 448.7 | 441.4 | 449.5 | 465.3 | 464.2 | -0.2 | | | |

Source: USDA.

Consumption up, stocks and trade to be marginally down

World rice consumption in 2012–13 is projected to remain on trend by all agencies, at 467.7 million tonnes by the USDA and 474 million tonnes by the FAO, and 465 million tonnes by the IGC, mostly driven by population growth. Most of the increase in consumption increase is expected to be in China and India, the two most populous countries in the world, where rice is the major staple.

Global 2012–13 ending stocks are forecast to decline marginally to around 102 million tonnes from a record 105.7 million tonnes in 2011/12, still one of the highest (Table 2.4). Larger carryovers in the five leading exporters – which account for more than 80 per cent of the world's shipments of rice – will continue to shape global carryovers in 2012–13 and in the future. This applies particularly to India and Thailand, with India's inventories expected to exceed 23 million tonnes in the year ending September 30, 2012.

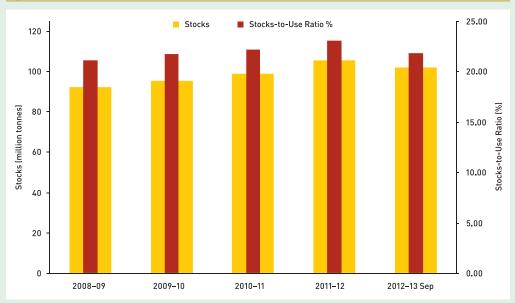
Table II.8: Global Supply and Use of Rice (million tonnes)

| | Production | Total Supply | Trade | Total Use | Ending Stocks | Stocks -to- Use Ratio (%) |
|-----------|------------|--------------|-------|-----------|---------------|------------------------------|
| 2010–11 | 449.50 | 544.67 | 34.84 | 445.96 | 98.71 | 22.1 |
| 2011–12 | 465.30 | 564.01 | 35.46 | 458.28 | 105.72 | 23.1 |
| 2012–13 F | 464.20 | 569.92 | 36.03 | 467.69 | 102.23 | 21.9 |

Source: http://www.usda.gov/oce/commodity/wasde/latest.pdf

High global rice demand combined with lower stocks is likely to keep 2012–13 stocks-to-use ratio somewhat lower at a forecasted 22 per cent compared with 23 per cent in the previous year (Figure II.4).

Figure II.4: Rice: Stocks-to-Use Ratio



Source: www.fas.usda.gov/psdonline/circulars/grain.pdf

Global rice trade in MY 2012–13 is forecast to remain more or less unchanged from the 2011–12 level at around 35.5 million tonnes. Any decline in exports from India due to lower production will be largely offset by higher exports from Thailand and Pakistan. Sufficient domestic availabilities should allow China, Egypt, Iran, and Nigeria to cut their imports.





As the supplydemand balance sheet is expected to remain fairly comfortable in 2012–13, rice prices are likely to remain fairly stable but high by historical standards. Table II.9: Rice Imports & Exports (million metric tonnes)

| | 2011–12 | | 2–13 | % Ch | % Change | |
|---------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Imports | Exports | Imports | Exports | Imports | Exports | |
| 33.8 | 35.46 | 33.21 | 36.03 | -1.7 | 1.6 | |
| 1.28 | 28.47 | 1.37 | 29.19 | 7.3 | 2.5 | |
| 0.62 | 3.22 | 0.62 | 3.19 | 0.0 | -0.9 | |
| 0 | 8 | 0 | 7 | * | -12.5 | |
| 0.06 | 3.75 | 0.05 | 4 | -16.7 | 6.7 | |
| 0.2 | 6.5 | 0.3 | 8 | 50.0 | 23.1 | |
| 0.4 | 7 | 0.4 | 7 | 0.0 | 0.0 | |
| 13.17 | 1.15 | 13.1 | 0.89 | -0.5 | -22.6 | |
| 0.75 | 0.9 | 0.75 | 0.6 | 0.0 | -33.3 | |
| 1.3 | 0.22 | 1.4 | 0.24 | 7.7 | 9.1 | |
| 1.5 | 0 | 1.45 | 0 | -3.3 | * | |
| 2.5 | 0 | 2.3 | 0 | -8.0 | * | |
| 1.5 | 0 | 1.5 | 0 | 0.0 | * | |
| 4.25 | 0.02 | 4.33 | 0.02 | 1.9 | 0.0 | |
| | | | | | | |
| 0 | 0.6 | 0 | 0.6 | * | 0.0 | |
| 1.53 | 0 | 1.47 | 0 | -3.9 | * | |
| 1.5 | 0.5 | 1.3 | 0.6 | -13.3 | 20.0 | |
| 0.8 | 0.6 | 0.75 | 0.6 | -6.3 | 0.0 | |
| 0.7 | 0.2 | 0.7 | 0.2 | 0.0 | 0.0 | |
| 0.73 | 0 | 0.75 | 0 | 2.7 | * | |
| 0.6 | 0 | 0.4 | 0 | -33.3 | * | |
| | 201 Imports 33.8 1.28 0.62 0 0.06 0.2 0.4 13.17 0.75 1.3 1.5 2.5 1.5 4.25 0 1.53 1.5 0.8 0.7 0.73 | 2011-12 Imports Exports 33.8 35.46 1.28 28.47 0.62 3.22 0 8 0.06 3.75 0.2 6.5 0.4 7 13.17 1.15 0.75 0.9 1.3 0.22 1.5 0 0.5 0.02 0 1.5 0 0.6 1.53 0 0.6 1.53 0 0.5 0.8 0.6 0.7 0.2 0.73 0 0 | Imports Exports Imports 33.8 35.46 33.21 1.28 28.47 1.37 0.62 3.22 0.62 0 8 0 0.06 3.75 0.05 0.2 6.5 0.3 0.4 7 0.4 13.17 1.15 13.1 0.75 0.9 0.75 1.3 0.22 1.4 1.5 0 1.45 2.5 0 2.3 1.5 0 1.5 4.25 0.02 4.33 0 0.6 0 1.53 0 1.47 1.5 0.5 1.3 0.8 0.6 0.75 0.7 0.2 0.7 0.73 0 0.75 | Imports Exports Imports Exports 33.8 35.46 33.21 36.03 1.28 28.47 1.37 29.19 0.62 3.22 0.62 3.19 0 8 0 7 0.06 3.75 0.05 4 0.2 6.5 0.3 8 0.4 7 0.4 7 13.17 1.15 13.1 0.89 0.75 0.9 0.75 0.6 1.3 0.22 1.4 0.24 1.5 0 1.45 0 2.5 0 2.3 0 1.5 0 1.5 0 4.25 0.02 4.33 0.02 0 0.6 0 0.6 1.53 0 1.47 0 1.53 0 1.47 0 1.53 0 1.47 0 1.53 0 1.47 | Description Description | |

Source: http://www.usda.gov/oce/commodity/wasde/latest.pdf

1. U.S., India, Pakistan, Thailand, and Vietnam. 2. Brazil, Indonesia, Hong Kong, Cote d'Ivoire, Nigeria, Philippines, selected Middle East, and the EU-27. 3. Trade excludes intra-trade. 4. Includes Iran, Iraq, and Saudi Arabia. 5. Central American and Caribbean countries.

Note: Aggregate of local marketing years World imports and exports may not balance due to differences in some countries.

With the exception of Thailand, rice export prices in major exporting countries generally declined in 2011–12, reflecting ample supplies. As the supply-demand balance sheet is expected to remain fairly comfortable in 2012–13, rice prices are likely to remain fairly stable but high by historical standards. Ample stocks in major exporting countries will have a bearish influence on prices in 2012–13. Nevertheless, the outlook for prices will remain uncertain as it is unclear when, and at what price, the Thai government will eventually release the stocks that it has accumulated under rice mortgage programme and whether the Indian government will continue to permit unrestricted exports of non-basmati rice in the context of lower production and the enhanced needs of rice for implementing the National Food Security Act.

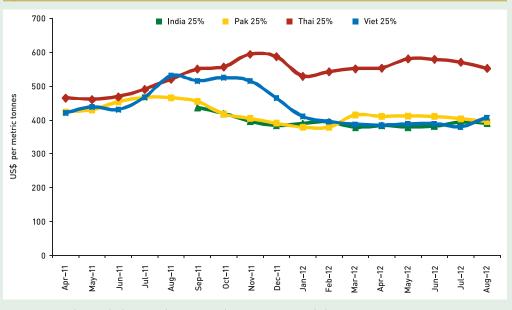


Figure II.5: Global Rice Export Price Trends

Source: www.fao.org/economic/est/publications/rice-publications/the-fao-rice-price-update/en/

II.2.3 Coarse grains

Production forecasted to decline

Belying initial expectations of a record coarse grain production generated by increased planting, world coarse grains production in 2012–13 is forecast to decline by around 3 per cent, with forecasts by various international agencies ranging from 1.11 to 1.14 billion tonnes (Table II.10). Most of this decline of 36 million tonnes is confined to maize, mostly in the United States, resulting from hot and dry weather conditions during critical crop growth stages. However, expected higher production in Argentina, Mexico, China, and Canada is expected to partly offset production declines in the U.S., Ukraine, Russia, EU, and India.

2012–13 world maize production is forecast by various agencies in the range of 833 to 855 million tonnes, about 4 per cent decline over the 2011–12 production. In the United States, maize production is forecast to fall by 13 per cent in 2012–13 to 272 million tonnes, reflecting a substantial fall in yields and a high rate of crop abandonment due to drought. However, in South America in general and in Argentina in particular, favourable corn prices ahead of the 2012–13 planting window (starting September 2012) and the Argentinean government's announcement in July 2012 of a 15 million tonne export quota is expected to encourage producers to increase the area planted to corn.

Among other coarse grains, 2012–13 world sorghum (jowar) production is forecast to increase by around 7.5 per cent to 58.7 million tonnes (mostly in Argentina, Sudan, Brazil and Mexico), barley, oats, and rye production almost unchanged at 133 million tonnes, 22 million tonnes, and 13 million tonnes, respectively.





Table II.10: Coarse Grain Production by Major Producing Countries

| | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13Sep | % Change |
|---------------|---------|---------|------------------|---------|------------|--------------|
| | | M | Iillion metric t | onnes | | over 2011-12 |
| Argentina | 19.6 | 30.2 | 33.3 | 29.7 | 39.1 | 31.5 |
| Australia | 12.3 | 10.9 | 11.8 | 13.2 | 12.6 | -4.9 |
| Brazil | 53.5 | 58.4 | 60.4 | 75.6 | 73.5 | -2.8 |
| Canada | 27.2 | 22.5 | 22.3 | 21.8 | 24.7 | 13.1 |
| China | 172.4 | 169.8 | 183.4 | 199.7 | 207.0 | 3.7 |
| Ethiopia | 9.0 | 8.0 | 10.5 | 11.4 | 10.9 | -4.4 |
| EU-27 | 162.1 | 155.0 | 140.2 | 146.7 | 141.9 | -3.3 |
| India | 39.6 | 33.9 | 43.4 | 42.1 | 37.6 | -10.6 |
| Indonesia | 8.7 | 6.9 | 6.8 | 8.9 | 8.5 | -4.5 |
| Mexico | 32.3 | 27.3 | 29.3 | 25.0 | 29.0 | 15.8 |
| Nigeria | 26.7 | 23.3 | 23.3 | 23.8 | 24.0 | 0.9 |
| Russia | 40.9 | 31.8 | 16.4 | 32.8 | 27.9 | -15.1 |
| South Africa | 13.1 | 13.9 | 11.3 | 12.0 | 14.0 | 16.4 |
| Turkey | 10.4 | 11.2 | 10.2 | 11.3 | 10.2 | -9.8 |
| Ukraine | 26.3 | 24.1 | 21.4 | 33.3 | 29.1 | -12.8 |
| United States | 325.9 | 348.8 | 330.2 | 323.7 | 284.7 | -12.0 |
| Others | 133.0 | 136.6 | 143.8 | 137.8 | 138.9 | 0.7 |
| World Total | 1112.8 | 1112.6 | 1097.9 | 1148.9 | 1113.3 | -3.1 |

Source: USDA.

Consumption and trade to decline, prices to soar

USDA forecasts global coarse grain consumption to decline marginally to 1,133 million tonnes in 2012–13 from the record consumption of 1,142 million tonnes the previous year, with most of the decline confined to maize in the United States. World corn use is forecast to fall by around 1 per cent to 857 million tonnes, with a 7 per cent decline in the United States, largely offset by higher consumption in China and South America. Barley consumption forecast at 135 million tonnes in 2012–13 is marginally lower than the previous year's level, whereas sorghum consumption at 59 million tonnes is 3 million tonnes more than in 2011–12.

In contrast to recent years, which saw very rapid growth in consumption from the industrial sector, mainly for the manufacture of fuel ethanol in the US, world demand in 2012–13 will be driven mainly by increased animal feed use. A decline in lower-grade wheat supplies from the Black Sea Region and strong meat demand across many countries in Latin America, Asia and Africa is expected to lift feed use. Reflecting higher prices and reduced availability, the use of corn in ethanol production in the U.S. is forecast to decline significantly, with the mandatory ethanol use in transportation fuel to be met from large draw down in stocks.

World coarse grain trade in 2012–13 is projected to decline by almost 9 per cent to 117 million tonnes from the record 2011–12 exports of 128 million tonnes, with most of the decline in maize forecast at 91 million tonnes, down 11 per cent from the previous year's level. With the U.S. coarse grains exports forecast to fall by about 10 per cent in 2012–13 (U.S. maize exports down by 13 per cent to 33.5 million tonnes), major southern hemisphere exporting countries, such as Argentina and Brazil, are expected to meet growing strong Asian demand for coarse grain imports.

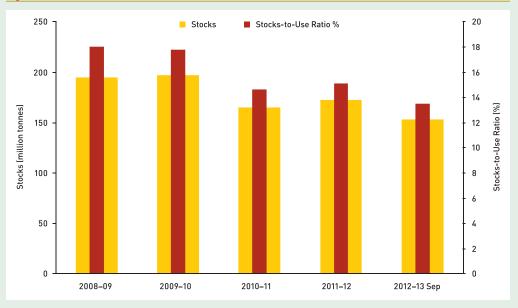
Table II.11: Global Supply and Use of Coarse Grains (million tonnes)

| | Production | Total Supply | Trade | Total Use | Ending Stocks | Stocks -to- Use Ratio (%) |
|-----------|------------|--------------|----------|-----------|---------------|------------------------------|
| 2010–11 | 1,097.95 | 1,295.23 | 116.46 | 1,129.95 | 165.28 | 14.6 |
| | (830.77) | (1068.01) | (91.46) | (848.97) | (127.58) | (15.0) |
| 2011–12 | 1,148.89 | 1,314.17 | 129.81 | 1,141.55 | 172.62 | 15.1 |
| | (876.68) | (1106.53) | (102.27) | (864.66) | (139.60) | (16.1) |
| 2012–13 F | 1,113.32 | 1,285.94 | 116.77 | 1,133.00 | 152.94 | 13.4 |
| | (841.06) | (1071.67) | (91.01) | (856.70) | (123.96) | (14.5) |

Note: Figures in parentheses show corresponding corn data. **Source**: http://www.usda.gov/oce/commodity/wasde/latest.pdf

The supply and demand outlook for coarse grains in general and maize in particular is projected to remain tight in 2012–13, leading to a draw down in stocks (153 million tons total coarse grains including 124 million tonnes of maize). Consequently, stocks-to-use ratio is projected to deteriorate leading to increased price volatility.

Figure II.6: Coarse Grains Stocks-to-Use Ratio



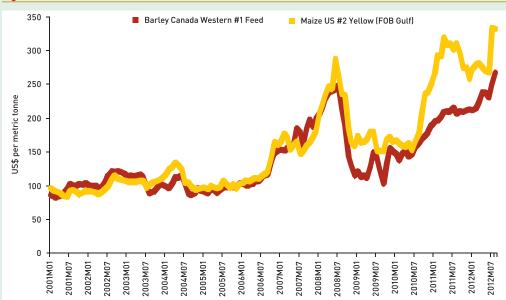
 $\textbf{\textit{Source}}: www.fas.usda.gov/psdonline/circulars/grain.pdf$

Global corn prices started zooming since July 2012, when news about the U.S. mid-west drought started appearing. Between July and September 2012, indicative U.S. #2 yellow corn export price (FOB Gulf ports) increased by about 24 per cent reaching a record high of \$332 per tonne CBOT future price quotes points towards strong corn prices though January 2013.





Figure II.7: International Coarse Grain Price Trends



Source: World Bank.

II.2.4 Pulses

Production and Prices

Global pulse production

World pulse production has grown only modestly compared with other crops in recent years, while the population which depends on pulse protein in developing countries continues to rise. The higher biological and price risk involved in pulse cultivation combined with higher and assured return from other crops such as wheat, rice, maize, and oilseeds is the main cause for the slower growth in pulse production. A changing diet in many developing countries in favour of livestock proteins from plant proteins has also contributed to the stunted growth of pulse production.

According to FAO statistics, global pulse production in 2010–11 (the latest year for which global data are available) was 67.2 million tonnes, which included 10.2 million tonnes of dry peas (mattar), 10.9 million tonnes of chickpeas (chana, including kabuli chana), 4.6 million tonnes of lentils (masur), 23.2 million tonnes of dry beans, 5.5 million tonnes of cowpeas, 3.7 million tonnes of pigeon peas (tur or arhar), 4.3 million tonnes of broad beans, and 4.4 million tonnes of other pulses.

Although, there are several large and small pulse producing countries, major pulse exporting countries are Canada, Myanmar, United States, France, Turkey, and Mexico (Figure II.8). The most widely traded pulse crops are dry peas, lentils, urd (black matpe), mung (mung beans), pigeon peas and chickpeas. Global pulse production by type is shown in Figure II.9.

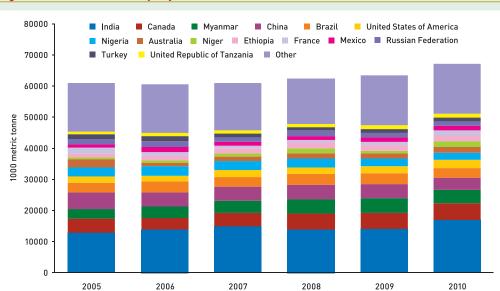
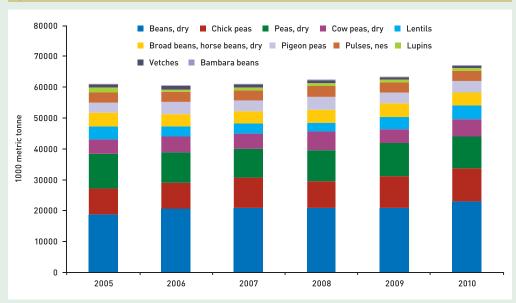


Figure II.8: Pulse Production by Major Countries





Although global production forecasts for 2012–13 are not available, country reports for major producing/exporting countries such as Canada, Australia, Myanmar, and the United States shows a significant increase in production in these countries.

Total pulse production in Canada in 2012–13 is forecast at around 5 million tonnes (dry peas 3.1 million tonnes, lentil 1.6 million tonnes, chick pea 120,000 tonnes, and dry beans 242,000 tonnes), an increase of 28 per cent over the previous year's level, with most of the increase in dry peas⁶. Export prices of dry peas are forecast to decline to \$265 per tonne (\$310 in 2011–12), \$425-455 per tonne for lentils (\$470) and \$755-785 per tonne for chickpeas (\$830).

Although global production forecasts for 2012–13 are not available, country reports for major producing/exporting countries such as Canada, Australia, Myanmar, and the United States shows a significant increase in production in these countries.



^{6.} http://www.agr.gc.ca/pol/mad-dam/index_e.php?s1=pubs&s2=spec&s3=php&page=spec_2012-08-13#alt



Thus, overall pulse supply situation from major exporting countries in 2012–13 is expected to be larger, which should more than compensate the decline in India's fall harvested pulse production and help to keep global prices somewhat lower from the previous year's level.

Australian farmers are poised to shatter the country's chickpea production record, which could put pressure on Canadian yellow pea prices this winter. Planting reports from Australia shows a 19 per cent increase in pulse planted area in 2012 over the previous year, with most of the increase in Desi chickpeas (up 107 per cent), Kabuli chickpeas (up 57 per cent) and Dun peas (up 8 per cent). Weather has generally been favourable for pulse crops. Assuming 2011–12 yield level, this should result in a production of around 850,000 tonnes of Desi chickpeas, 130,000 tonnes of Kabuli chick peas and 330,000 tonnes of Dun peas. Most of this will find its way into the export market, particularly India, where the fall-harvested crop is expected to be lower, putting pressure on competing crops such as yellow peas from Canada and the U.S.

US dry pea harvested area in 2012–13 is forecast by trade sources at 240,000 hectares, up 70 per cent from 2011–12. Assuming normal yields and abandonment, US dry pea production is forecast at 500,000 tonnes, double the output in 2011–12. In 2012–13. US lentil harvested area is forecast at 200,000 hectares, up over 20 per cent from 2011–12, with production, mostly green types, forecast 300,000 tonnes, 30 per cent above 2011–12 level. US dry bean production is expected to rise by nearly 40 per cent to 1.1 million tonnes. This is expected to pressure US and Canadian dry bean prices downward in 2012–13. US chickpea harvested area is forecast at 73,000 hectares, up 36 per cent from 2011–12. Assuming normal yields and abandonment, US chickpea production is forecast by trade sources at 120,000 tonnes, up 24 per cent from 2011–12.

Myanmar's 2012–13 pulse production is forecast at 4.7 million tonnes, up 5.5 per cent from 4.5 million tonnes in 2011–12 due to an increase in planted area. Many farmers are opting for pulses cultivation during the dry season instead of rice, as returns are more favourable. In MY 2011–12, Myanmar produced 4.5 million tonnes of pulses, up 5.0 per cent from MY 2010–2011 due to a shift in planted area from summer rice to pulses. However, due to unusual rainfall during planting and harvest time, average yield got reduced by 8 per cent. In 2012–13 Myanmar's pulse exports are forecast to reach 1.4 million tonnes, an increase of 17 per cent over 2011–2012 due to larger supplies.

Mexico's 2012–13 pulse production is forecast at 830,000 tonnes, an increase of 30 per cent over the previous year's drought reduced output. Exports are forecast at 20,000 tonnes, lower than in 2011–12. During 2012, lentil production in Turkey is forecast at 450,000 tonnes compared with estimated 400,000 tonnes in 2011.

Thus, overall pulse supply situation from major exporting countries in 2012–13 is expected to be larger, which should more than compensate the decline in India's fall harvested pulse production and help to keep global prices somewhat lower from the previous year's level.

II.2.5 Oilseeds, Vegetable Oils, and Oil Meals

South America to bolster higher world oilseed production...

USDA forecasts 2012–13 world production of major oilseeds at 453.1 million tonnes, which although significantly lower than its initial forecast of 471.5 million tonnes, is 3.5 per cent higher than the 2011–12 production and close to the record production of 456.7 million tonnes in 2010–11 (Table II.12). World soybean production is forecast at 258.1 million tonnes, about 9 per cent higher than the 2011–12 output, despite a 14 per cent

^{7.} http://www.pulseaus.com.au/pdf/Australian%20Pulse%20Crop%20Forecast/2012/Australian%20Pulse%20Crop%20Forecast%20July%2030%202012.pdf

^{8.} http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20 Annual_Rangoon_Burma%20-%20Union%20of_3-9-2012.pdf

decline in U.S. production, forecast at 71.7 million tonnes as result of drought conditions in the mid-west. This year's shortfall in U.S. soybean supplies will prompt farmers throughout South America to grow record – large crops, more than offsetting the U.S. shortfall.

Global rapeseed and groundnut production are forecast to increase marginally to 61.3 and 35.4 million tonnes, respectively, whereas sunflower seed production is forecast to decline by 4 million tonnes to around 35 million tonnes. Prolonged summer heat and dryness in Ukraine, Russia, Kazakhstan, and Eastern Europe substantially impaired sunflower pollination this year leading to lower output. Higher rapeseed production is supported by a larger Canola crop in Canada.

... Larger palm oil production to offset decline in sunflower seed oil output

2012–13 total vegetable oil production is forecast at 154.3 million tonnes, almost unchanged from the 2011–12 level. A significant decline in sunflower seed oil production will be more than offset by a larger palm oil production, whereas soybean oil production is currently forecast to remain unchanged from the 2011–12 production of 42.2 million tonnes. Palm oil production in Indonesia is forecast to increase by 1.6 million tonnes to 27 million tonnes, and in Malaysia by 500,000 tonnes to 18.5 million tonnes, both records. However, there is a risk of a return of El Nino pattern, which could cause a hot dry weather in Indonesia and Malaysia hampering palm oil production. However, the most recent data show the risk is receding.

Oil meal production to remain unchanged

USDA current forecast points towards an unchanged world oil meal production level in 2012–13 vis-a-vis the previous year. A decline in U.S. soymeal production is expected to be offset by increased production from Argentina and China. India's soymeal production is forecast to increase marginally (Table II.13).

A significant decline in sunflower seed oil production will be more than offset by a larger palm oil production, whereas soybean oil production is currently forecast to remain unchanged from the 2011–12 production of 42.2 million tonnes.





| Table II.12: World Oilseed, Oil and Meal Production by Major Type (million tonnes) | | | | | | | | | |
|------------------------------------------------------------------------------------|---------|---------|---------|---------|-------------|--|--|--|--|
| | 2008-09 | 2009-10 | 2010-11 | 2011–12 | Sep 2012-13 | | | | |
| Dilseed | | | | | | | | | |
| Dilseed Copra | 5.9 | 5.9 | 6.0 | 5.5 | 5.7 | | | | |
| Dilseed Cotton seed | 41.1 | 38.9 | 43.6 | 46.5 | 43.0 | | | | |
| Dilseed Palm Kernel | 11.8 | 12.2 | 12.6 | 13.1 | 13.8 | | | | |
| Dilseed Peanut | 35.1 | 33.7 | 36.0 | 35.3 | 36.4 | | | | |
| Oilseed Rapeseed | 57.8 | 61.0 | 60.6 | 60.9 | 61.3 | | | | |
| Oilseed Soybean | 211.6 | 261.1 | 264.7 | 237.1 | 258.1 | | | | |
| Dilseed Sunflower seed | 33.5 | 32.2 | 33.3 | 39.2 | 34.8 | | | | |
| Total | 396.7 | 445.0 | 456.7 | 437.7 | 453.1 | | | | |
| /egetable oil | | | | | | | | | |
| Dil Coconut | 3.5 | 3.6 | 3.8 | 3.6 | 3.5 | | | | |
| Dil Cotton seed | 4.8 | 4.6 | 5.0 | 5.3 | 5.1 | | | | |
| Dil Olive | 2.8 | 3.1 | 3.3 | 3.3 | 2.9 | | | | |
| Dil Palm | 44.0 | 45.9 | 48.0 | 50.0 | 52.3 | | | | |
| Dil Palm Kernel | 5.2 | 5.5 | 5.6 | 5.8 | 6.1 | | | | |
| Dil Peanut | 5.1 | 4.7 | 5.1 | 5.2 | 5.2 | | | | |
| Dil Rapeseed | 20.6 | 22.4 | 23.6 | 24.0 | 23.8 | | | | |
| Dil Soybean | 35.9 | 38.8 | 41.3 | 42.2 | 42.3 | | | | |
| Oil Sunflower seed | 12.0 | 12.1 | 12.2 | 14.7 | 13.1 | | | | |
| - Fotal | 133.8 | 140.8 | 147.8 | 154.0 | 154.3 | | | | |
| Oil meal | | | | | | | | | |
| Meal Copra | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | | | | |
| Meal Cotton seed | 14.3 | 13.8 | 14.8 | 15.7 | 15.2 | | | | |
| Meal Fish | 5.1 | 4.3 | 4.6 | 4.7 | 4.7 | | | | |
| Meal Palm Kernel | 6.1 | 6.5 | 6.6 | 6.9 | 7.3 | | | | |
| Meal Peanut | 6.2 | 5.8 | 6.2 | 6.4 | 6.3 | | | | |
| Meal Rapeseed | 30.8 | 33.6 | 35.1 | 36.0 | 35.6 | | | | |
| Meal Soybean | 151.8 | 165.0 | 174.8 | 178.5 | 179.1 | | | | |
| Meal Sunflower seed | 12.8 | 13.0 | 13.0 | 15.5 | 14.1 | | | | |
| | 228.8 | 243.8 | 257.2 | 265.6 | 264.2 | | | | |

| | 2008-09 | 2009–10 | 2010-11 | 2011–12 | Sep 2012-13 |
|---------------|---------|---------|---------|---------|-------------|
| Oilseed | | | | | |
| Brazil | 60.31 | 71.42 | 79.23 | 70.2 | 83.72 |
| United States | 89.2 | 98.9 | 100.38 | 91.32 | 81.96 |
| Argentina | 35.51 | 57.94 | 54.22 | 45.68 | 60.51 |
| China | 58.12 | 57.84 | 58.1 | 57.78 | 55.6 |
| India | 33.4 | 32.37 | 34.77 | 35.52 | 34.58 |
| Other | 120.16 | 126.48 | 130.01 | 137.16 | 136.69 |
| Total | 396.69 | 444.96 | 456.71 | 437.65 | 453.06 |
| Vegetable oil | | | | | |
| Indonesia | 23.69 | 25.59 | 27.27 | 29.25 | 31.06 |
| China | 16.11 | 17.88 | 19.02 | 20.74 | 21.06 |
| Malaysia | 19.43 | 19.94 | 20.38 | 20.18 | 20.79 |
| EU-27 | 15.48 | 16.71 | 16.63 | 16.69 | 15.97 |
| United States | 9.67 | 10.07 | 9.78 | 10.1 | 9.12 |
| Argentina | 7.35 | 7.69 | 8.79 | 8.3 | 8.91 |
| Brazil | 6.78 | 7.14 | 7.78 | 7.87 | 7.81 |
| Other | 35.25 | 35.74 | 38.12 | 40.91 | 39.63 |
| Total | 133.75 | 140.75 | 147.78 | 154.03 | 154.33 |
| Oil meal | | | | | |
| China | 49.13 | 55.67 | 60.43 | 65.85 | 68.28 |
| United States | 37.72 | 40.07 | 38.06 | 39.74 | 35.02 |
| Argentina | 25.89 | 27.98 | 31.07 | 29.6 | 31.58 |
| Brazil | 25.78 | 27.22 | 29.63 | 29.91 | 29.74 |
| EU-27 | 25.75 | 26.91 | 26.5 | 26.01 | 25.37 |
| Other | 64.56 | 65.97 | 71.5 | 74.45 | 74.18 |
| Total | 228.84 | 243.82 | 257.19 | 265.56 | 264.16 |

Consumption, Trade and Prices

Despite a forecasted 15 million tonne increase in total major oilseed production in 2012-13, global oilseed use is expected to fall marginally to 388 million tonnes (Table II.14) due to lower carry-over stocks. Ending stocks are forecast to decline further in 2012–13. As a result, stocks-to-use ratio is expected to decline marginally to 15.6 per cent in 2012-13 from 16.0 per cent in the previous year, but significantly from the 2010-11 estimates of 21.8 per cent.





likely to shift more

towards palm oil in

2012-13, giving

support to world

palm oil prices.

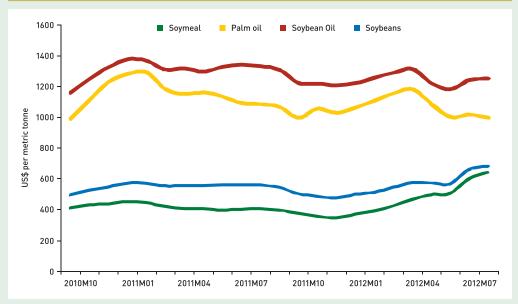
Table II.14: Global Supply and Use of Oilseeds, Vegetable Oils, and Oilmeals

| | Production ¹ | Total Supply | Trade | Total Use | Ending Stocks | Stocks -to- Use Ratio (%) |
|----------------|-------------------------|--------------|--------|-----------|---------------|------------------------------|
| Oilseeds | | | | | | |
| 2010–11 | 456.71 | 531.22 | 109.21 | 377.73 | 82.17 | 21.75 |
| 2011–12 Est | 437.65 | 519.82 | 108.31 | 391.31 | 62.72 | 16.03 |
| 2012–13 Sep | 453.06 | 515.78 | 111.33 | 388.24 | 60.40 | 15.56 |
| Vegetable Oils | | | | | | |
| 2010–11 | 147.78 | 161.47 | 59.97 | 144.71 | 13.83 | 9.56 |
| 2011–12 Est | 154.03 | 167.87 | 63.15 | 150.64 | 14.19 | 9.42 |
| 2012-13 Sep | 154.33 | 168.52 | 64.34 | 154.65 | 11.54 | 7.46 |
| Oilmeals | | | | | | |
| 2010–11 | 257.19 | 265.51 | 77.49 | 250.99 | 10.65 | 4.24 |
| 2011–12 Est | 265.56 | 276.21 | 79.94 | 261.39 | 11.24 | 4.30 |
| 2012–13 Sep | 264.16 | 275.4 | 79.87 | 263.61 | 8.75 | 3.32 |

Major oilseeds which include soybeans, rapeseed, sunflower, cottonseed, groundnut, and palm kernel. Source: www.usda.gov/oce/commodity/wasde/

Global vegetable oil supply situation in 2012–13, although adequate to meet the growing consumption requirement estimated at 154.7 million tonnes, would leave a much lower carry over stocks than in the previous year (Table II.14). Population growth and rising incomes in developing countries (especially China and India) as well as sustained growth in industrial demand should result in increased oilseed use in 2012–13. Stocks-to-use ratio is projected at 7.5 per cent, the lowest in recent years, making vegetable oil prices, particularly soybean oil prices, more volatile in 2012–13. However, palm oil prices are expected to remain bearish because of larger carry over stocks, expected larger production, and reduced demand from China and European Union. Because of likely higher prices for soybean oil and sunflower seed oil, the import by India, one of the world's largest importers of vegetable oils, is likely to shift more towards palm oil in 2012–13, giving support to world palm oil prices.

Figure II.10: Indicative Oilseed, Veg oil, and Oilmeal Prices



Note: 2010M10=October 2010 etc.

II.2.6 Sugar

Production up

ABARES forecasts world sugar production to increase by 3.8 million tonnes in 2012–13 to a record of around 178 million tonnes (raw value). Increased production is forecast for Brazil, China, Mexico, Thailand, Australia, and the United States. In contrast, production of beet sugar in Europe is expected to be lower, reflecting an assumed return to average yields following the above average yields of 2011–12. Indian sugar production is also forecast to decline from last year's record production by around 2.0 million tonnes to 24.0 million tonnes (raw value) due to an expected decline in sugarcane production and productivity in response to uneven rainfall distribution in major growing regions. Some industry sources argue that even the Brazilian sugar production could remain more or less unchanged from the 2011–12 level despite an increase in cane production, as the Brazilian government is likely to announce an increase in the amount of anhydrous ethanol mixed into gasoline to 25 per cent from the present 20 per cent, which could gobble up an additional 25 million tonnes sugarcane production.

USDA in its May 2012 report had forecasted 2012–13 sugar production⁹ at 174 million tonnes (raw value) up 2 per cent from the previous year (Table II.15). It had forecasted another record sugar production for India assuming normal weather, an assumption which went wrong. As a result and due to production changes in other countries, it is likely to revise its sugar production forecast in its next report due in November 2012.

Table II.15: Trends in Global Sugar Production (Raw value) (million metric tonnes)

| | 2009-2010 | 2010-2011 | 2011-2012 | 2012-2013 ¹ |
|---------------|-----------|-----------|-----------|------------------------|
| Brazil | 36.4 | 38.35 | 36.15 | 37.8 |
| India | 20.637 | 26.574 | 28.83 | 29.75 |
| EU-27 | 16.687 | 15.667 | 17.461 | 15.79 |
| China | 11.429 | 11.199 | 12.324 | 13.065 |
| Thailand | 6.93 | 9.663 | 10.415 | 10.85 |
| United States | 7.224 | 7.104 | 7.521 | 7.779 |
| Mexico | 5.115 | 5.495 | 5.194 | 5.448 |
| Russia | 3.444 | 2.996 | 5.5 | 5.05 |
| Australia | 4.7 | 3.7 | 3.9 | 4.5 |
| Pakistan | 3.42 | 3.92 | 4.32 | 4.12 |
| Other | 37.531 | 36.974 | 39.352 | 40.301 |
| Total | 153.517 | 161.642 | 170.967 | 174.453 |

1. May 2012 Forecast, likely to be revised in November 2012 report. *Source*: USDA.

Consumption, stocks and trade to increase, prices to fall

According to ABARES, world sugar consumption is forecast to grow by 2 per cent in 2012–13 to around 172 million tonnes. The forecast increase is due to both falling sugar prices and rising consumer incomes, particularly in developing countries. Nevertheless, this forecast consumption growth is lower than the average of 2.4 per cent in the 10 years ending 2010–11.

World sugar exports are forecast to increase by around 5 per cent to 56.1 million tonnes, driven by larger imports by European Union and Indonesia. Most of the exports will be from Brazil, Thailand, Mexico, Australia, and India. However, sugar exports from India are forecast to decline due to likely lower production.

World sugar exports

are forecast to increase by around 5 per cent to 56.1 million tonnes, driven by larger imports by European Union and Indonesia.

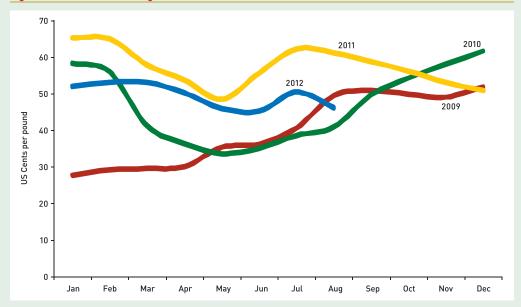
^{9.} http://www.fas.usda.gov/psdonline/circulars/Sugar.pdf



Forecast of higher world sugar production than consumption in 2012–13 is expected to lead to higher world closing stocks of sugar by nearly 6 million tonnes to 68.8 million tonnes. If realised, this will increase the stocks-to-use ratio by 2.9 percentage points to around 40 per cent, the highest since 2007–08, but still slightly below the average of 41 per cent in the 10 years to 2010–11.

World sugar prices show a declining trend in recent months (Figure II.11) and are forecast to decline further reflecting large carry over stocks in 2011–12 and higher production than consumption in 2012–13.

Figure II.11: International Sugar Price Trends



Source: World Bank.

II.2.7 Milk

Production

Likely lower farm gate milk prices and higher world feed ingredient prices in 2012–13 are likely to constrain growth in world milk production in most major dairy producing countries during 2013. Among major producers/exporters, the European Union milk production is forecast to increase by one per cent, United States by 1.4 per cent, and New Zealand virtually unchanged. Indian milk production is projected to grow at less than the trend line growth rate due to scarcity of fodder and high feed prices.

USDA estimates 2012 global milk production at 542 million tonnes, (464 million tonnes of cow milk and 78 million tonnes of other milk, mostly buffalo milk in India) (Table II.16).

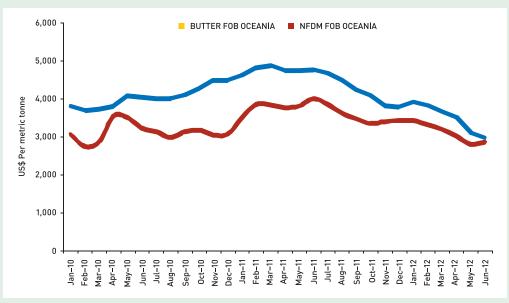
Table II.16: Milk Production by Major Producing Countries (million tonnes)

| | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
|---------------|--------|--------|--------|-------|-------|-------|--------|--------|--------|
| EU-27 | 135.47 | 138.22 | 140.00 | 4.02 | 4.02 | 4.02 | 139.49 | 142.24 | 144.02 |
| United States | 87.47 | 88.57 | 90.98 | Х | Х | Х | 87.47 | 88.57 | 90.98 |
| India | 50.30 | 52.50 | 55.00 | 66.70 | 69.00 | 72.00 | 117.00 | 121.50 | 127.00 |
| China | 29.30 | 30.70 | 32.35 | 1.23 | 1.28 | 1.34 | 30.53 | 31.98 | 33.69 |
| Russia | 31.85 | 31.74 | 32.10 | Х | Х | Х | 31.85 | 31.74 | 32.10 |
| Brazil | 29.95 | 30.61 | 31.30 | Х | Х | Х | 29.95 | 30.61 | 31.30 |
| New Zealand | 17.17 | 18.97 | 19.87 | Х | Х | Χ | 17.17 | 18.97 | 19.87 |
| Argentina | 10.60 | 11.99 | 12.83 | Х | Х | Х | 10.60 | 11.99 | 12.83 |
| Mexico | 11.03 | 10.74 | 10.81 | 0.17 | 0.17 | 0.15 | 11.20 | 10.91 | 10.97 |
| Ukraine | 10.98 | 10.80 | 10.55 | 0.27 | 0.30 | 0.33 | 11.25 | 11.10 | 10.88 |
| Other | 27.83 | 27.67 | 28.32 | 0.02 | 0.02 | 0.02 | 27.85 | 27.69 | 28.34 |
| Total | 441.96 | 452.51 | 464.11 | 72.41 | 74.78 | 77.88 | 514.37 | 527.29 | 541.99 |

Source: USDA.

After a year of high dairy commodity prices in 2011, prices displayed a decline during 2012 (Figure II.12) due to increased world supplies. This price trend is expected to influence, among other factors, the processing of milk into dairy commodities. Despite a forecast slowing in the growth of global milk production in 2012–13, expanded milk production in major dairy exporting countries will increase exportable supplies of dairy products in 2012–13. Larger supply along with anticipated slower economic growth will put downward pressure on world prices in 2012–13 with world dairy prices averaging lower in 2012–13.

Figure II.12: Indicative Export Price of Dairy Products



Source: FAO.





In a recent report titled, "Global Dairy Outlook: Show me the Money," Rabobank¹⁰ says that the global dairy market will offer strong growth prospects in the coming five years, but the uneven spread of this market expansion and an era of elevated pricing will create as many challenges as opportunities for key players along the dairy supply chain. Growth will be highly skewed to emerging markets, with countries like China, India and South East Asia expected to account for more than 80 per cent of market volume growth, while western markets continue to mature. Rabobank forecasts that solid market growth, supply constraints and a structural shift in the costs of producing milk will sustain high milk and dairy commodity prices over the medium term. But this won't translate to increased profits for all.

^{10.} https://www.rabobankamerica.com/content/documents/news/2012/Rabobank_Issues_Report_on_Global_Dairy_Industry.pdf

PART III

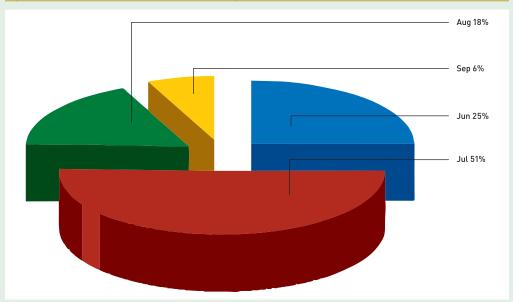
The Overall Domestic Food Sector Output, Demand and Price Scenario

III.1 The Monsoon and Crop Sowing Patterns

The somewhat unusual pattern of monsoon this year is characterised by its late arrival and also late withdrawal besides the uneven distribution over the monsoon months and across regions. The rainfall received in June was 30 per cent below the long period average (LPA) or normal, which on a cumulative basis improved over the months reaching a figure of just 8 per cent below normal by September 30, the end of monsoon season, almost coinciding the first forecast of the overall monsoon rainfall by the Indian Meteorology Department. While the overall rainfall has inched towards 'normal' level, because of the significant initial deficiency, sowing of the *kharif* crops was adversely affected. The significant deficiency in the southern peninsula, western and north-western regions has also affected production prospects of crops grown in those regions. While the deficiency in rainfall during the months of June and July was made up by late rains, the adverse impact on crop area sown and yields could not be fully offset.

Based on the information available from the website of Indian Meteorology Department, we have provided a brief description of the temporal and spatial pattern of rainfall during this year's monsoon in Box III.1.

Figure III.1: Area Planted Under all Crops during the Kharif Season, Normal: % of total Area Planted



Source: Based on data on progressive planting of crops available in Weekly Weather Watch Reports of Ministry of Agriculture. The distribution across months is based on 'average' for recent few years.

While the deficiency in rainfall during the months of June and July was made up by late rains, the adverse impact on crop area sown and yields could not be fully offset.





During the sowing and growth period of *kharif* crops, June and July remain the most critical. As illustrated in Figure III.1, 25 per cent of the crop area in *kharif* is sown in June and another 51 per cent in July. Some area is brought under crops in August and September also but their shares are 18 per cent and 6 per cent.

If rains are deficient in June and July, there is much disruption in crop sowing or planting schedule leading to less than ideal planting in terms of optimum output.

Box III.1: Monsoon 2012

The south west monsoon season extends from June to September and brings three-quarters of India's annual rainfall. Indian monsoon is characterized by large spatial-temporal variability on various scales. The pattern of variability in every year seems unique. The normal date of onset of SW monsoon over Kerala is June 1, with an average deviation of 8 days. Moving in a north/north westerly direction, monsoon covers almost the entire country by July 1. There is large variability in the dates of advance of monsoon over different regions and also the amount and distribution of rainfall which has a direct bearing on the sowing operations of *kharif* crops over many regions of India. The normal monsoon withdrawal date from north-west India is September 1 but leaves the southern tip of India only by early December. Rains during September 30 through December 31, mostly confined to south eastern India is called North East monsoon.

This year, the monsoon set in over Kerala on June 5. However, due to its sluggish progress, there was a lag of nearly 2 weeks for the monsoon rainfall to start over the west central and parts of east Uttar Pradesh from normal dates. Furthermore, there was break in the monsoon activity during June 25 to 29.

Rainfall during July was also significantly below normal in most parts of the country (Figure BIII.I and BIII.2) adversely impacting planting of most *kharif* crops. The delayed arrival and a lower frequency of the formation of principal rain bearing cyclonic weather systems (lows and depressions) over the Indian seas of Bay of Bengal and Arabian Seas during the current season were cited to be the main contributing factor for the deficit rainfall distribution observed over the country during the first half of the monsoon season. Cumulative rainfall during June 1 to August 1 was 19 per cent below the LPA for the country as a whole, with rainfall deficiency the highest at 38 per cent in north west India, 15 per cent in central India, and 23 per cent in south peninsular India with only north east India recording marginally below normal rains (-11 per cent). The country faced the threat of a serious drought. The government machinery started gearing up to face the situation by launching contingency plans to ensure that seeds are available to farmers and adequate fodder is supplied for livestock, as well as prioritising drinking water from low-level reservoirs.

However, belying predictions by various national and international weather agencies, copious rains fell over most parts of the country in August and most of September, bringing the cumulative national rainfall deficiency from as high as 42 below LPA in mid-June to a low deficiency of 8 per cent below LPA by September 30, the end of the monsoon season (Figure III.3). The late revival has alleviated the situation in much of the country with just a few states still suffering dry conditions. The following summary shows cumulative rainfall by September 26 and its variation from the LPA over the four homogeneous regions:

| Regions | Actual Rainfall | Normal Rainfall | % Departure from LPA |
|------------------------|-----------------|-----------------|----------------------|
| North India | 568.8 | 608.5 | -6.5 |
| Central India | 930.3 | 959 | -3 |
| South Penensula | 619.8 | 691.2 | -10.3 |
| East & Northeast India | 1263.9 | 1403.3 | -9.9 |
| Country as a whole | 811.3 | 869.4 | -6.7 |

Figure BIII.1: Weekly Rainfall Departure from LPA (%)

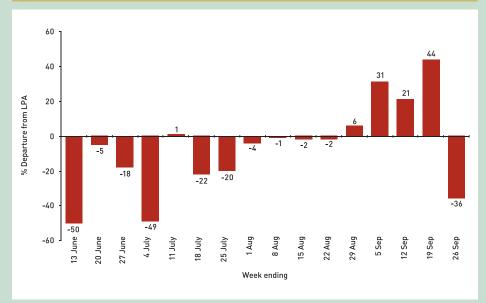


Figure BIII.2: Weekly Cumulative Rainfall Departure from Long Period Average (LPA)







| S. No. | State/ Union Territory | Meteorological Sub-divisions | Actual (mm) | Normal (mm) | Departure from normal (%) |
|-----------|------------------------|------------------------------------|----------------|----------------|---------------------------|
| 1. | Andhra Pradesh | Coastal AP | 630.6 | 555.2 | 13.58 |
| 2. | Andhra Pradesh | Rayalseema | 327.3 | 377.9 | -13.39 |
| 3. | Andhra Pradesh | Telengana | 768.7 | 735.7 | 4.49 |
| 4. | Arunachal Pradesh | Arunachal Pradesh | 1742.1 | 1723.9 | 1.06 |
| 5. | Assam & Meghalaya | Assam & Meghalay | 1707.8 | 1757.2 | -2.81 |
| 6. | Bihar | Bihar | 813.6 | 1002.5 | -18.84 |
| 7. | Chhattisgarh | Chhattisgarh | 1224.1 | 1134 | 7.95 |
| 8. | Gujarat | Gujarat Region | 648.5 | 887.8 | -26.95 |
| 9. | Gujarat | Saurashtra & Kutch | 305.8 | 467.4 | -34.57 |
| 10. | Haryana (including | Same as in Col. 2 | 283 | 461.6 | -38.69 |
| | Chandigarh and Delhi) | | | | |
| 11. | Himachal Pradesh | Himachal Pradesh | 697.3 | 816.7 | -14.62 |
| 12. | Jammu & Kashmir | Jammu & Kashmir | 557 | 529.8 | 5.13 |
| 13. | Jharkhand | Jharkhand | 934.8 | 1065.2 | -12.24 |
| 14. | Karnataka | Coastal Karnataka | 3074.8 | 3041.6 | 1.09 |
| 15. | Karnataka | North Interior Karnataka | 308.7 | 480.6 | -35.77 |
| 16. | Karnataka | South Interior Karnataka | 478.6 | 636.1 | -24.76 |
| 17. | Kerala | Kerala | 1541.3 | 1995.4 | -22.76 |
| 18. | Maharashtra & Goa | Konkan & Goa | 2805.6 | 2870.4 | -2.26 |
| 19. | Madhya Pradesh | West MP | 994.1 | 865.6 | 14.85 |
| 20. | Madhya Pradesh | East MP | 1021.4 | 1040.5 | -1.84 |
| 21. | Maharashtra | Madhya Maharashtra | 535.7 | 705.8 | -24.10 |
| 22. | Maharashtra | Vidarbha | 1028.6 | 941.6 | 9.24 |
| 23. | Maharashtra | Marathwada | 455.4 | 662.8 | -31.29 |
| 24. | Nagaland, Manipur, | galand, Manipur, Same as in Col. 2 | | 1463 | -31.87 |
| | Mizoram, and Tripura | | | | |
| 25. | Orissa | Orissa | 1140.2 | 1129.9 | 0.91 |
| 26. | Punjab | Punjab | 266 | 485.2 | -45.18 |
| 27. | Rajasthan | East Rajasthan | 677.7 | 611.2 | 10.88 |
| 28. | Rajasthan | West Rajasthan | 296.4 | 261.9 | 13.17 |
| 29. | West Bengal & Sikkim | Sub Himalayan | 2077 | 1953.9 | 6.30 |
| | | WB & Sikkim | | | |
| 30. | Tamil Nadu and | Tamil Nadu and | 213.4 | 298.6 | -28.53 |
| | Puducherry | Puducherry | | | |
| 31. | Uttar Pradesh | East U.P. | 804.6 | 883.2 | -8.90 |
| 32. | Uttar Pradesh | West U.P. | 549 | 760.3 | -27.79 |
| 33. | Uttarakhand | Uttarakhand | 1121.9 | 1216.9 | -7.81 |
| 34. | West Bengal | Gangetic West Bengal | 949.1 | 1131.6 | -16.13 |
| Unio | n Territories | | | | |
| 1. | Andaman & Nicobar | Andaman & Nicobar | 1990.6 | 1614.9 | 23.26 |
| 2. | Lakshadweep | Lakshadweep | 1147.1 | 973.7 | 17.81 |

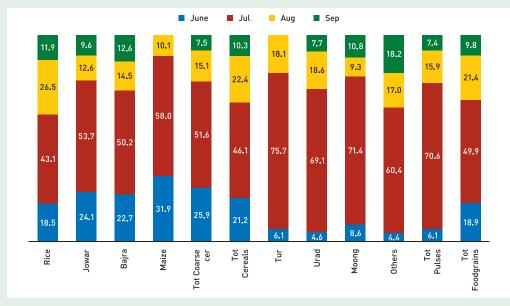
As far as spatial distribution of rains is concerned, most parts of north west India, parts of peninsular India and northern India received significantly below normal rainfall during most of the season. Towards the end of the monsoon season, rainfall was excess/normal in 243 and deficient in 13 out of 36 meteorological sub-divisions. (Actual: 819.5 mm, Normal or LPA: 866.9 mm, and Departure: -8 per cent). The sub-division-wise cumulative rainfall up to September 30 is shown in Table BIII.2.

Although the 2012 monsoon season was generally free from floods, Assam experienced serious flooding more than once during this year's monsoon season.

Note: Most of the material in this box is based on information obtained from the website of Indian Meteorology Department.

Dominance of July as the planting season has been clearly brought out in Figure III.2. The importance of August is greater for rice than in the case of all *kharif* crops. In the case of coarse cereals, relatively larger area is planted in July as compared to rice. But in the case of *kharif* pulses, 70 per cent of their total area is sown in July with June being less important. Some of these differences across crops also arise because of the variations in the onset of monsoon in different regions.

Figure III.2: Foodgrain Area Planted during the Kharif Season, Normal: % of total Area Planted

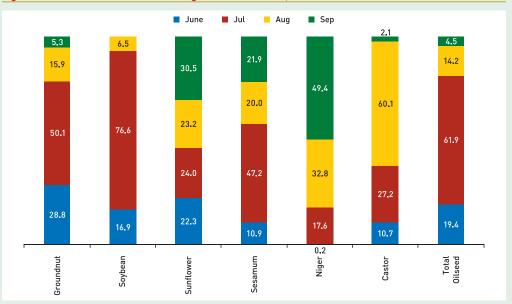


In the case of oilseeds, the July sowing is dominated by Soybean and groundnut (Figure III.3). Sunflower and sesamum are more evenly distributed in terms of their sowing during the monsoon months. Niger and castor have large areas sown in August or September rather than June and July.

In the case of coarse cereals, relatively larger area is planted in July as compared to rice. But in the case of kharif pulses, 70 per cent of their total area is sown in July with June being less important.

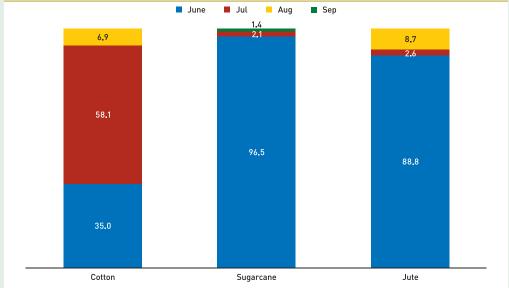


Figure III.3: Oilseed Area Planted during the Kharif Season, Normal: % of total Area Planted



Among the commercial crops, sugarcane and jute are sown or planted mainly in June and cotton is seeded in both June and July (Figure III.7).

Figure III. 4: Area Planted under Selected Commercial Crops during the Kharif Season, Normal: % of total Area Planted



The different periods of sowing for different crops during the monsoon period helps us to better understand the impact of deficiency in rainfall in different months. Monitoring of area planted under different crops by the various Directorates of Crops in the Ministry of Agriculture as reported in the Weekly Weather Watch Reports provides one assessment of crop production during the crop season. The data up to September 7, 2012 on crop area sown under different crops and the average yields of crops for the three years 2009–10, 2010–11 and 2011–12, provide one assessment of the crop output for *kharif* 2012. These estimates are presented in Table III.2.

The major shortfall in output as compared to 2011–12 is in coarse grains and the crops where there is likely to be output increase are soybean and sugarcane. In the case of soybean, the rainfall conditions in crop growing regions were favourable and area has not been affected. In the case of sugarcane, because of its extensive irrigation coverage, initial plantings were carried out but when the rainfall deficiency was extended, crop yields are not expected to hold at the average of recent three years. While crop area assessment provides one critical part of the output estimation, assessment of yields is also necessary. We also provide alternative assessment of production of *kharif* crops in 2012–13 from both official estimates and our own analysis.

Table III.1: Estimated Kharif Output based on Progressive Planting during 2012 for Major Food Crops

| Kharif Crop | Average area sown in <i>kharif</i> | Area sown till Sep 7, 2012 | Likely addition to area by end Sep 2012 | Likely area by end Sep 2012 | TE 2011-12 Yield | 2012–13 est Kharif production based on TE 11–12 YLD | 2012–13 est Kharif production % change over 2011–12 |
|----------------------|------------------------------------------|----------------------------------|--------------------------------------------------|--------------------------------------|---------------------|--------------------------------------------------------------|--------------------------------------------------------|
| | Lakh ha | Lakh ha | Lakh ha | Lakh ha | Kg/ha | Mill tonnes | % |
| Rice | 391.1 | 356.07 | 34.8 | 390.9 | 2136.2 | 83.50 | -8.77 |
| Jowar | 32.88 | 23.92 | 2.4 | 26.3 | 1066.7 | 2.80 | -13.45 |
| Bajra | 92.7 | 60.64 | 8.7 | 69.4 | 985.3 | 6.84 | -31.98 |
| Maize | 70.64 | 73.37 | 0.0 | 73.4 | 2075.9 | 15.23 | -6.10 |
| Total Coarse cereals | s 218.58 | 173.85 | 12.2 | 186.1 | 1385.3 | 25.78 | -20.09 |
| Total Cereals | 609.68 | 529.92 | 47.1 | 577.0 | 1894.3 | 109.3 | -11.72 |
| Tur | 37 | 36.17 | 0.0 | 36.2 | 674.3 | 2.44 | -1.03 |
| Total Pulses | 109.75 | 98.25 | 6.1 | 104.3 | 508.9 | 5.31 | -13.82 |
| Total Foodgrains | 719.43 | 628.17 | 53.1 | 681.3 | 1669.4 | 113.74 | -12.47 |
| Groundnut | 49.94 | 37.91 | 2.0 | 39.9 | 1123.0 | 4.48 | -12.13 |
| Soybean | 92.11 | 106.94 | 0.0 | 106.9 | 1185.0 | 12.67 | 27.17 |
| Sugarcane | 47.36 | 52.88 | 0.5 | 53.4 | 70316.4 | 375.42 | 4.96 |

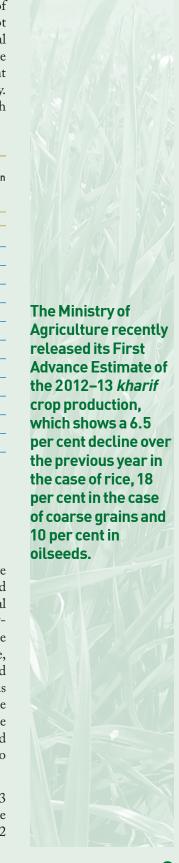
Note: Estimates are based on the data available in Weekly Weather Watch Reports of the Ministry of Agriculture.

III.2 Production Scenario for the Food Sector

Significant decline in *kharif* production...

After two years of record performance, primarily due to good weather and supportive government policy measures, India's 2012–13 production of most *kharif* crops is expected to decline significantly, due to uneven distribution of monsoon rainfall across geographical area and during the growing season. While most of the decline is confined to the poorly-irrigated coarse grain and pulse crops, rice production also suffered to a lesser extent due to late arrival and poor distribution of rains during June and July, the peak planting time, in major growing states. However, excellent and well distributed rains in August and September helped to reduce these losses. Among oilseeds, soybean planting and yields benefited from good rains in the major growing regions of central India, and high price realisation by farmers for their crop last year. However, groundnut production suffered the most from a prolonged dry weather in the major growing states of Gujarat, Karnataka, and Maharashtra. Although sugarcane planted area increased marginally, yield is expected to decline in the major growing state of Maharashtra and Karnataka.

The Ministry of Agriculture recently released its First Advance Estimate of the 2012–13 *kharif* crop production, which shows a 6.5 per cent decline over the previous year in the case of rice, 18 per cent in the case of coarse grains and 10 per cent in oilseeds. Table III.2



The current forecast of the Q AOR Jul-September 2012 projects higher output of coarse cereals, pulses, groundnut, and overall foodgrains in kharif than the 1st AE. However, in comparison to the harvest of 2011-12, the 2012-13 kharif output would be lower for all the major food crops.

shows 2012–13 *kharif* production estimate (1st Advance Estimate) along with the 2011–12 estimate (4th Advance Estimate). The 1st AE is very close to the present forecast obtained using a simple regression equation incorporating rainfall data and trend. The forecast provided in the April–June 2012 report also provided production estimates close to the 1st AE for *kharif* 2012 as the rainfall deviation was assumed to be 10 per cent below LPA. However, an assessment provided at the end of July based on actual rainfall conditions upto 3rd week of August and assumptions relating to rainfall in August and September were more pessimistic than the 1st AE. For comparison purpose, these forecasts are shown in Table III.2. In general, the experience demonstrates that assumptions regarding rainfall conditions are critical in assessing crop output.

The current forecast of the Q_AOR Jul-September 2012 projects higher output of coarse cereals, pulses, groundnut, and overall foodgrains in *kharif* than the 1st AE. However, in comparison to the harvest of 2011–12, the 2012–13 *kharif* output would be lower for all the major food crops.

| Crop | Quarterly AOR April- June 2012 | Revised Assessment July 31, 2012 | Current Forecast Q_AOR July- September 2012 | 2012-13 1st Advance Estimate | 2011–12 4th Advance Estimate | % Change of Col. 5 over Col. 6 |
|---------------------------------------------|--------------------------------------|----------------------------------------|------------------------------------------------------|------------------------------------|------------------------------------|--------------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Rice | 82.3 – 86.6 | 78.0 – 80.0 | 84.0 - 85.1 | 85.59 | 91.53 | -6.5 |
| Maize | 15.1 – 16.3 | 13.4 – 14.1 | 15.5 | 14.89 | 16.22 | -8.2 |
| Bajra | 8.1 – 9.8 | 4.3 - 6.0 | 9.0 | 6.0 | 10.05 | -40.3 |
| Jowar | 2.6 – 2.9 | 2.0 – 2.3 | 2.7 | 2.63 | 3.24 | -18.8 |
| Other coarse grains | 2.4 – 2.6 | 2.4 – 2.5 | | | | |
| | 2.2 | 2.22 | 2.75 | -19.3 | | |
| Total coarse grains | 28.2 – 31.6 | 22.1 – 24.9 | 29.4 | 26.33 | 32.26 | -18.4 |
| Pulses | 5.5 – 6.2 | 3.7 – 4.4 | 5.5 – 5.6 | 5.26 | 6.16 | -14.6 |
| Total <i>Kharif</i> foodgrain 116.0 – 124.4 | | 103.8 – 109.3 | | | | |
| | 120.0 | 117.18 | 127.50 | -8.1 | | |
| Groundnut | 4.7 - 5.8 | 3.7 – 4.1 | 4.6 | 3.82 | 5.10 | -25.1 |
| Soybean | 12.3 – 13.1 | 10.7 – 11.4 | 12.6 – 12.7 | 12.62 | 12.28 | +2.8 |
| Sugarcane | 347.2 – 356.2 | NA | 333.5 – 336.0 | 335.33 | 357.7 | -6.3 |

Sources: Ministry of Agriculture & NCAER.

Notes: Forecast presented in Col. 2 was provided in the first quarterly outlook report of April-June 2012 based on the assumption that overall monsoon would bring rainfall at normal or 10 per cent below normal. Forecast in Col. 3 was presented on July 31, 2012 based on the actual rainfall deficiency in June and assumption of 20% deficiency in July and 20–30% deficiency in August and September. The current assessment in Col. 4 is based on the actual rainfall upto August 27 and an assumed deficiency of 10% in September.

... output decline to be marginally offset by higher *Rabi* production

Late monsoon season rains across most parts of the country should provide favourable planting conditions for the mostly irrigated *rabi* or winter season crops, which include wheat, small quantities of rice and coarse grains, chick peas, masur and rapeseed/mustard. These rains helped to replenish water levels in irrigation dams and wells. Water level in 84 major reservoirs in the country for the week ending September 29, was 75 per cent of the Full Reservoir Level (FRL), a significant improvement over the past weeks, although below last year's level at this point of time (87 per cent). Because of the decline in *kharif* season crop production, the government is making special efforts to increase *rabi*

production which include adequate and timely supply of fertilizers and seeds and increased extension activities to make farmers aware of better agronomic practices to take advantage of the residual soil moisture. However, the recent hike in diesel prices by Rs 5 per litre has led to increased cost of production, particularly in the irrigated wheat. Higher diesel cost would also increase cost of transportation and therefore impact marketing margins.

Given the prevailing higher prices for oilseeds and pulses vis-a-vis wheat, the possibility of a no or marginal increase in the wheat support price for the 2013 crop because of large stocks held by the government, and high fuel costs due to the recent hike in government administered diesel price may prompt farmers in Rajasthan, Madhya Pradesh and Gujarat to shift some area from wheat to less irrigation intensive rapeseed and pulses. The chick pea – wheat price ratio based on wholesale price index currently is 1.54 against 1.04 a year ago and 1.07 vs. 0.88 for rapeseed. However, in the major producing states of Uttar Pradesh, Punjab, and Haryana, where the wheat crop is mostly irrigated, no significant shift in acreage from wheat to other competing crops is likely. Assuming normal weather conditions 2013 wheat production (with 2012 production in parentheses) is expected to remain at around 90 million tonnes (93.9 million tonnes), *rabi* season rice at around 13.5 million tonnes (12.8 million tonnes), *rabi* season pulses at around 11.5 million tonnes (11.1 million tonnes), and rapeseed production at 7.5 million tonnes (6.8 million tonnes). These projections are based on patterns of output in the recent years.

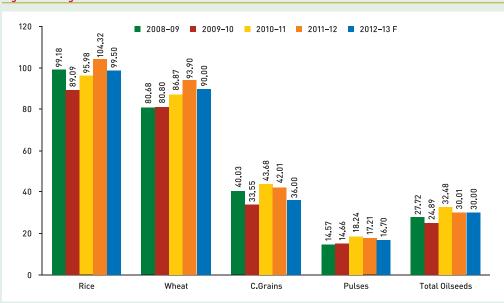


Figure III.5: Agricultural Production Trends

Source: Ministry of Agriculture, Gol for data upto 2011/12 & NCAER estimates for 2012–13.

III.3 Consumption, Trade, Stocks, and Price Situation

Despite a declining trend in the per capita consumption of cereals and pulses, total consumption is rising due to increasing population. The recent significant increase in rice, wheat, and sugarcane production outstripped the annual consumption requirements of cereals and sugar and led to a build up of stocks.

However, there is a widening gap in the demand and domestic supply of pulses, vegetable oils, milk and milk products, and meat and meat products. To meet the supply demand

Assuming normal weather conditions 2013 wheat production (with 2012 production in parentheses) is expected to remain at around 90 million tonnes(93.9 million tonnes), rabi season rice at around 13.5 million tonnes (12.8 million tonnes), rabi season pulses at around 11.5 million tonnes (11.1 million tonnes), and rapeseed production at 7.5 million tonnes (6.8 million tonnes). These projections are based on patterns of output in the recent years.



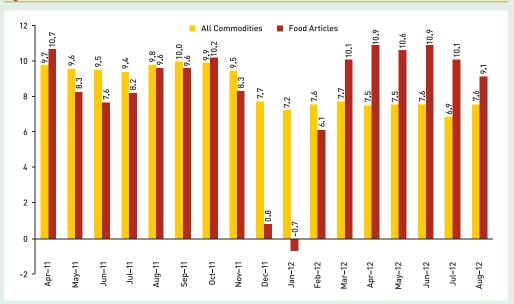
gap, large imports have become necessary in the case of basic food items such as pulses and vegetable oils. In the Oct-Sep vegetable oil marketing year 2011–12, India imported around 9.6 million tonnes of vegetable oils and is forecast to import over 10 million tonnes in 2012–13 due to lower domestic production. Over a span of a decade ending 2011–12, India's vegetable oil imports have doubled. Pulses imports in 2011–12 marketing year (Apr-Mar) are expected to reach 2.8 million tonnes against 2.3 million tonnes in 2010–11. Imports in 2012–13 are likely to be over 3 million tonnes. The government's tariff and sanitary restrictions, however, do not permit significant imports of milk and meat products, and their prices may continue to remain high.

The large buildup of rice and wheat stocks and a lack of adequate storage facilities have prompted the government to allow exports of wheat and rice since September 2011, after a gap of about three years. Indian white rice has remained competitive in the world market throughout MY 2011–12, which resulted in significant exports in 2011–12, estimated at around 8.5 million tonnes. Because of the expected decline in 2012–13 rice production, exports are likely to decline to 7 million tonnes. Indian wheat was not competitive in the international market until June this year. However, a sharp increase in global prices following dry weather conditions in major exporting countries such as Ukraine, Russia, and the United States, resulting in lower production, has made Indian wheat exports feasible even without government subsidies. The government has allocated 2 million tonnes of wheat for exports from its stocks to various government trading companies. Additionally, private trade is also exporting wheat. According to trade sources, wheat exports in 2012–13 are likely to reach 4 million tonnes. High global corn prices have helped India's exports of maize in 2011–12 and perhaps will do so in 2012–13 also.

Government wheat and rice stocks rose sharply following record procurement of wheat and rice by government agencies at the support price in recent years, peaking 82.4 million tonnes (50.2 million tonnes of wheat and 32.1 million tonnes of rice) on June 1, 2012. Although, stocks have declined since then reaching 71.8 million tonnes (46.2 million tonnes of wheat and 25.6 million tonnes of rice) on September 1, 2012, it is significantly above the government's desired level of stocks needed for distribution through the Public Distribution Stocks (PDS). With sugar production outstripping consumption requirement and exports in 2010–11 and 2011–12, sugar stocks have risen to an estimated 7.8 million tonnes on September 30, 2012. Despite a decline in sugar cane production in 2012–13, stocks are projected to remain high although exports will be difficult because of prevailing lower global prices of sugar.

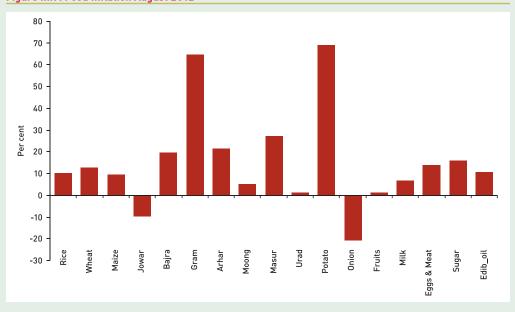
India's headline wholesale price index-based year-on-year inflation for all commodities has been around 7.5 per cent over the past several months (Figure III.6). Inflation of food articles since March this year, however, was hovering at over 10 per cent, easing marginally to 9.1 per cent in August 2012, but below the high levels of 16 to 20 per cent in 2010 and early 2011. Most of the increase in food inflation in August was due to higher prices of pulses (particularly chana), potato, bajra, and sugar (Figure III.7).

Figure III.6: Food Inflation vs Overall Inflation



Prices of vegetable oils, particularly soybean oil will remain volatile during the next few months mainly due to changing international supply position. Despite a decline in domestic production, a large dry peas crop in Canada, chickpeas in Australia, and traditional pulse crops in Myanmar which are major suppliers of pulses to India, may help to moderate pulse prices. Milk and meat prices are also likely to remain high due to increasing domestic demand spurred by growing consumer income combined with increasing feed cost. Although international prices of milk and milk products have declined, India's import policy is restrictive on these products.

Figure III.7: Food Inflation August 2012



Prices of vegetable oils, particularly soybean oil will remain volatile during the next few months mainly due to changing international supply position.





PART IV

Commodity Outlook Assessment

IV.1 Rice

Production

Rice production reached record 104.3 million tonnes in 2011–12, an increase of seven million tonnes over the previous year. In the current year, due to the below normal rainfall in June and July, the main sowing months for the *kharif* season in large parts of the country, the production is likely to be lower.

A major share of the rice is cultivated during the *kharif* season (planted in June-July and harvested in October-January), mostly under rain-fed conditions with lower yields. A small share of rice is grown in the *rabil* summer season under assured irrigation resulting in higher yields. In 2011–12, the *kharif* harvest accounted for 88 per cent of total rice production.

Sowing of rice crop in *kharif* this year received a setback due to late arrival and erratic performance of the monsoon rains in several parts of the country. The significant deficiency in rainfall in June-July period in several parts of the country is illustrated in Table IV.1.

Table IV.1: Distribution of Kharif Rice Production across States and Pattern of Rainfall in June–July 2012

| % share of States | s in All India (2011–12) | Rainfall (% deviation from previous year) | | |
|-------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Area | Production | Jun'12 | Jul'12 | |
| 12.42 | 14.24 | -28.0 | 9.5 | |
| 13.53 | 13.44 | -80.2 | 20.1 | |
| 9.31 | 12.35 | 57.5 | -2.7 | |
| 6.41 | 10.11 | -89.5 | -28.7 | |
| 7.59 | 6.90 | -54.5 | 0.9 | |
| 4.58 | 6.61 | -25.7 | -9.8 | |
| 8.58 | 5.78 | -25.4 | 12.1 | |
| 9.13 | 5.57 | 8.1 | 33.3 | |
| 3.17 | 3.87 | -12.1 | -39.6 | |
| 4.93 | 3.84 | 102.7 | 22.9 | |
| 2.81 | 3.60 | -91.5 | -41.0 | |
| 3.85 | 3.28 | -54.2 | 52.7 | |
| 86.31 | 89.60 | | | |
| 13.69 | 10.40 | | | |
| 100 | 100 | -27.6 | -24.4 | |
| | Area 12.42 13.53 9.31 6.41 7.59 4.58 8.58 9.13 3.17 4.93 2.81 3.85 86.31 13.69 | Area Production 12.42 14.24 13.53 13.44 9.31 12.35 6.41 10.11 7.59 6.90 4.58 6.61 8.58 5.78 9.13 5.57 3.17 3.87 4.93 3.84 2.81 3.60 3.85 3.28 86.31 89.60 13.69 10.40 | Area Production Jun'12 12.42 14.24 -28.0 13.53 13.44 -80.2 9.31 12.35 57.5 6.41 10.11 -89.5 7.59 6.90 -54.5 4.58 6.61 -25.7 8.58 5.78 -25.4 9.13 5.57 8.1 3.17 3.87 -12.1 4.93 3.84 102.7 2.81 3.60 -91.5 3.85 3.28 -54.2 86.31 89.60 13.69 10.40 | |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of unirrigated area under the crop in the sub-division. The rainfall at the all India level is the unirrigated crop area based weighted sum of sub-divisions



Despite an increase in late planting, good rains in August and September helped increase planted area. But up to September 21, 2012 the planted area was lower at around 1.7 million hectares as compared to last year's level at this time of the year. However, it is still well above normal or average for the recent few years, with most of the decline confined to Haryana, Andhra Pradesh, Karnataka, Gujarat, and Tamil Nadu. The first advance estimate put out by the Agriculture Ministry on September 24 pegs *kharif* production for 2012–13 at 85.59 million tonnes against 91.53 million tonnes in 2011–12 *kharif*, a decline of 6.5 per cent.

Rabi rice production is mostly confined to West Bengal, Andhra Pradesh, and Tamil Nadu. No significant increase in *rabi* rice production is possible at least in the short-term due to agro climatic constraints primarily availability of water in regions where other climatic conditions are favourable. The largest *rabi* rice production ever reached was 15.3 million tonnes in 2010–11 and has ranged from 13.2 to 15.3 million tonnes in recent years (Figure IV.1). Although good rains in August and September augur well for a good *rabi* production in 2012–13, given the overall deficiency, it is unlikely to exceed 14.0 million tonnes, giving total 2012–13 rice production of 99.5 million tonnes.

120 Kharif 100 80 Million Tonnes 60 40 20 2012-13F 2001-02 2002-03 2007-08 2009-10 2011-12 2003-04 2005-06

Figure IV.1: Trends in Rice Production

Source: Ministry of Agriculture, Gol for data upto 2011–12 & NCAER Estimates for 2012–13.

Consumption, Trade, and Price

Despite larger rice production in MY 2011–12, open market rice prices have remained high, as government procured most of the marketable surplus at the support price (Table IV.1). On year-on-year basis, rice wholesale prices in 2012 have remained well above the 2011 level, mainly due to the government purchases at the MSP which increased in MY 2012–13 by 15 per cent over the previous year.

Operation of PDS and open market sale of grain from the government stocks would remain a strategy open to keep prices under check in the scenario when current year's production is lower. The average monthly offtake of rice through the PDS in 2011–12 was around 2.7 million tonnes.

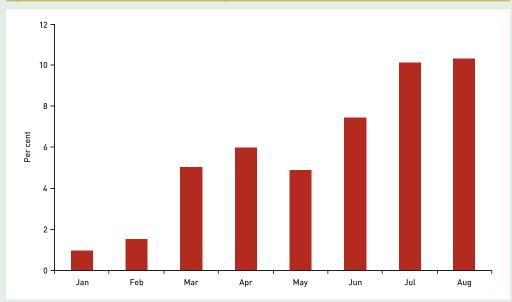


Figure IV.2: Rice Wholesale Price Index Change 2012 Over 2011

The subsidy on account of government operations in foodgrain is coming under greater pressure because of the increase in overall fiscal deficit. Measures to control subsidy will involve relating consumer prices and economic cost to the government, besides eliminating leakages from the supply and distribution chain.

After removal of the ban on exports of non-Basmati rice effective September 9, 2011, non-Basmati rice has become very competitive in the global market. MY 2011–12 exports are now projected at over 8.5 million tonnes. Some trade sources estimate experts even higher at around 10 million tonnes. Due to expected decline in rice production and higher production cost, MY 2012–13 exports are forecast to decline to 7 million tonnes, including around 2.5 million tonnes of Basmati rice.

Stocks

Rice stock with the government agencies was 20.4 million tonnes on October 1, 2011, four times the government's desired October 1 minimum buffer stock level of 5.2 million tonnes and the stock is projected to reach around 23 million tonnes on October 1, 2012. The difference between the buffer and actual stock is rising, the operational requirement of stocks may also be rising with the increase in the requirements of PDS (Figure IV.3).

Taking into account the decline in production, reduced exports and higher distribution from government food stocks, we have calculated the food balance sheet for rice for 2012–13. The year-end stock for 2012–13 are still high at 22 million tonnes leaving scope for exports if the international market remains attractive (Table IV.2).

Measures to control subsidy will involve relating consumer prices and economic cost to the government, besides eliminating leakages from the supply and distribution chain.

Taking into account the decline in production, reduced exports and higher distribution from government food stocks, we have calculated the food balance sheet for rice for 2012-13. The year- end stock for 2012-13 are still high at 22 million tonnes leaving scope for exports if the international market remains attractive.

Figure IV.3: Government Rice Stocks vs. Desired Minimum Buffer Stocks

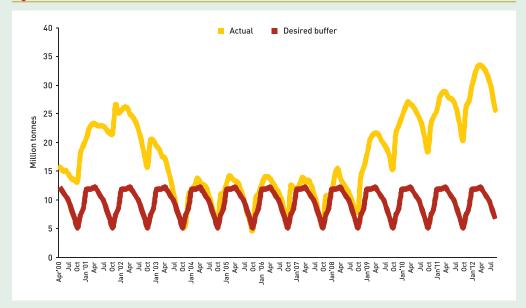


Table IV.2: Supply and Demand Balance for Rice

| | 2009-10 | 2010-11 | 2011–12 | 2012-13F |
|---------------------------|---------|---------|---------|----------|
| | Oct-Sep | Oct-Sep | Oct-Sep | Oct-Sep |
| Rice | | | | |
| Area | 41920 | 42860 | 44389 | 42800 |
| Yield | 2125 | 2239 | 2350 | 2325 |
| Production | 89090 | 95980 | 104320 | 99500 |
| Beginning Stocks | 15349 | 18444 | 20359 | 23000 |
| Imports | 0 | 0 | 0 | 0 |
| Total Supply | 104439 | 114424 | 124679 | 122500 |
| Exports | 2100 | 2800 | 8500 | 7000 |
| Food Use | 81895 | 89065 | 90879 | 91200 |
| Seed, Feed, Waste, Other | 2000 | 2200 | 2300 | 2300 |
| Total Use | 83895 | 91265 | 93179 | 93500 |
| Ending Stocks | 18444 | 20359 | 23000 | 22000 |
| Total Distribution | 104439 | 114424 | 124679 | 122500 |
| Stocks to Use Ratio % | 22 | 22 | 25 | 24 |
| Government Rice Operation | | | | |
| Beginning Stocks | 15349 | 18444 | 20359 | 23000 |
| Imports | 0 | 0 | 0 | 0 |
| Procurement | 32124 | 34196 | 35000 | 33000 |
| Total Availability | 47473 | 52640 | 55359 | 56000 |
| PDS Offatke | 29029 | 32281 | 32359 | 34000 |
| Exports | 0 | 0 | 0 | 0 |
| Un accounted | 0 | 0 | 0 | 0 |
| Ending Stocks | 18444 | 20359 | 23000 | 22000 |
| Total Distribution | 47473 | 52640 | 55359 | 56000 |
| | | | | |

IV.2 Wheat

Production

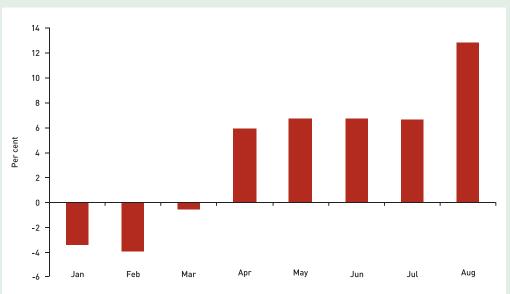
India harvested a record wheat crop of 93.9 million tonnes in 2012 (MY 2012–13). The 2012 production was 8 per cent above the 2011 production. Favourable weather conditions helped raise acreage and yield of the crop in the current year. The hike in the government's minimum support price (MSP) provided the economic incentive to farmers to raise production. Wheat yield in 2012 was a record 3,150 kg/hectare, a quantum jump over the 2011 yield of 2,990 kg/hectare.

Late monsoon season rains across most parts of the country this year are expected to replenish soil moisture providing a favourable planting condition for the 2013 wheat crop. These rains have also helped to replenish water levels in irrigation dams and wells. Because of the decline in *kharif* season crop production, the government is placing special emphasis on increasing *rabi* production, including wheat. However, the recent hike in diesel prices should lead to increased cost of production, particularly since most of wheat crop is irrigated, prompting some farmers, particularly in sub-optimally irrigated areas, to switch to competing crops such as chana or rapeseed/mustard. Assuming normal winter rains and favourable weather conditions through the growing season 2013 wheat production may reach 90 million tonnes.

Consumption, Trade, and Price

Overall wheat consumption including food, feed, seed, waste, and other uses (residual consumption) in MY 2012–13 is forecast to increase marginally. Wheat availability in the open market has shrunk as government procured 10 million tonnes more wheat under price support operation in MY 2012–13 over the MY 2011–12 level, against a production increase of 7 million tones. Reflecting the shortage of wheat in the open market, wheat prices, measured by Wholesale Price Index, has shown a steady year-on-year increase since April 2012 reaching around 13 per cent in August (Figure IV.4).



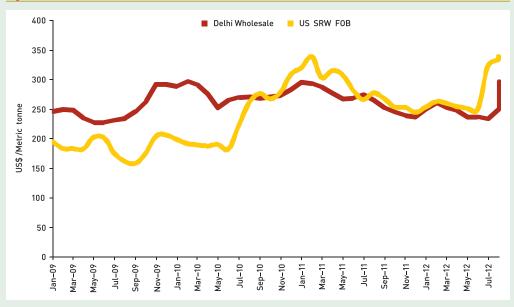




Even with a likely higher offtake of wheat in 2012-13. and 2 to 3 million tonnes of wheat exports from government stocks, April 1, 2013, stocks are projected at 28 million tonnes. The food balance sheet calculations point to the potential for exports as the year end stocks remain 28 million tonnes.

After the ban on wheat exports was lifted in September 2011, Indian wheat exports remained highly non-competitive up to June 2012 despite the government allocating 2 million tonnes of wheat from its stocks to government parastatal such as the State Trading Corporation of India (STC) for exports at a minimum export price of \$ 228 per tonne. However, reports of sharp decline in global wheat production in major exporting countries such as Ukraine, Russia, and the United States, gave a fillip to Indian wheat exports leading to increased global interest in Indian wheat. India wheat is currently fetching over \$300 per tonne, nevertheless, below the government's current economic cost of Rs 18,225 (\$345). However, a steep increase in domestic wheat prices in recent months and appreciation of Indian rupee against US Dollar could make Indian private wheat exports less competitive (Figure IV.5). MY 2012–13 (Apr-Mar) exports are currently forecast at 4 million tonnes.

Figure IV.5: Indian Wholesale Wheat Price vis-a-vis US SRW Wheat Price FOB



Source: US Price - World Bank; Indian Price: http://fcainfoweb.nic.in/pms/Average1_web.aspx
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.

Stocks

Wheat stocks with the government were 20 million tonnes on April 1, 2012, compared with 15.4 million tonnes a year ago, but below the record April 1 stocks of 26 million tonnes in 2002. With a higher procurement (38.1 million tonnes) this year, government wheat stocks peaked to 50.2 million tonnes on June 1, 2012, aggravating the grain storage problem. The difference between the actual stock and buffer norms is rising just as in the case of rice (Figure IV.6).

Even with a likely higher offtake of wheat in 2012–13, and 2 to 3 million tonnes of wheat exports from government stocks, April 1, 2013, stocks are projected at 28 million tonnes. The food balance sheet calculations point to the potential for exports as the year end stocks remain 28 million tonnes (Table IV.3).

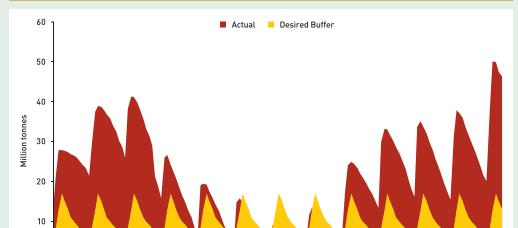


Figure IV.6: Government Wheat Stocks - Actual vs. Buffer Norm (million tonnes)

0

| | 2009–10 | 2010-11 | 2011–12 | 2012-13 F |
|--------------------------|---------|---------|----------|-----------|
| NAD . | Apr-Mar | Apr-Mar | Apr-Mar | Apr-Mar |
| Wheat | | | | |
| Area | 27,750 | 28,460 | 29,069 | 29,822 |
| Yield | 2,907 | 2,839 | 2,988 | 3,149 |
| Production | 80,680 | 80,800 | 86,870 | 93,900 |
| Beginning Stocks | 13,429 | 16,125 | 15,364 | 19,952 |
| Imports | 220 | 270 | 25 | 0 |
| Total Supply | 94,329 | 97,195 | 1,02,259 | 1,13,852 |
| Exports | 60 | 70 | 750 | 4,000 |
| Food Use | 73,700 | 75,000 | 76,200 | 76,352 |
| Seed, Feed, Waste, Other | 4,444 | 6,761 | 5,357 | 5,500 |
| Total Use | 78,144 | 81,761 | 81,557 | 81,852 |
| Ending Stocks | 16,125 | 15,364 | 19,952 | 28,000 |
| Total Distribution | 94,329 | 97,195 | 1,02,259 | 1,13,852 |
| Stocks to Use Ratio % | 21 | 19 | 24 | 34 |
| Govt Wheat Operation | | | | |
| Beginning Stocks | 13,429 | 16,125 | 15,364 | 19,952 |
| Imports | 0 | 0 | 0 | 0 |
| Procurement | 25,382 | 22,514 | 28,334 | 38,100 |
| Total Availability | 38,811 | 38,639 | 43,698 | 58,052 |
| PDS Offtake | 22,384 | 23,067 | 24,267 | 28,000 |
| Exports | 0 | 0 | 250 | 2,000 |
| Unaccounted | 302 | 208 | -771 | 52 |
| Total Distribution | 22,384 | 23,067 | 24,517 | 30,052 |
| Ending Stocks | 16,125 | 15,364 | 19,952 | 28,000 |



Assuming a normal production of coarse grains during the rabi season, which include smaller quantities of maize. jowar, and barley, total 2012-13 coarse grain production is likely to be 36.4 million tonnes compared with 42 million tonnes in 2011-12.

IV.3 Coarse Grains

Production

India's coarse grain crops are mainly grown under rain-fed conditions and that leads to significant year-to-year production variation depending on rainfall received during the monsoon season in the case of *kharif* crops or winter season in the case of *rabi* crops. With the exception of some jowar, maize, and barley, a major share of coarse grain crops, 77 per cent, is produced in the *kharif* season.

Erratic monsoon rains in major coarse growing states of Rajasthan, Gujarat, Maharashtra, and Karnataka has resulted in a significant decline in 2012–13 *kharif* coarse grain production. Statewise distribution of production of coarse grains and the rainfall pattern in June-July 2012 is summarised in Table IV.4.

Assuming a normal production of coarse grains during the *rabi* season, which include smaller quantities of maize, jowar, and barley, total 2012–13 coarse grain production is likely to be 36.4 million tonnes compared with 42 million tonnes in 2011–12. The 2012–13 production with 2011–12 in parentheses in million tonnes are: maize - 20 (21.57), jowar 6.0 (6.0); bajra - 6.60 (10.05); barley - 1.6 (1.6); and millet 2.22 (2.75).

Government's First Advance Estimate places 2012–13 *kharif* coarse grain production at 26.33 million tonnes, compared with 32.26 million tonnes in 2011–12, with most of the decline confined to bajra and jowar. The 2012–13 *kharif* coarse grain production by type with the 2011–12 production in parentheses in million tonnes are: maize - 14.89 (16.22); bajra - 6.60 (10.05); jowar - 2.63 (3.24); ragi - 1.65 (2.01); and small millet - 0.57 (0.74). The production estimates are also summarised in Figure IV.7.

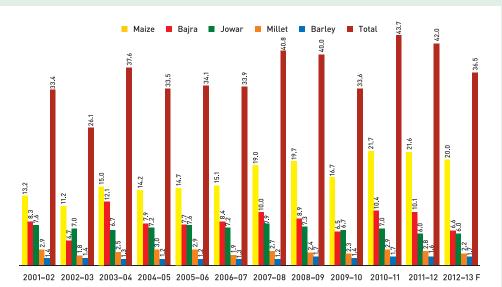


Figure IV.7: Trend Pattern in Kharif Coarse Grain Production (million tonnes)

Table IV.4: Distribution of Area, Production and Yield of Coarse Grains by States (2011–12) and Rainfall

in June-July 2012

| in June-July 2012 Crop/ State | % share of | States in All India | Painfall (% deviation | from previous year |
|----------------------------------|------------|---------------------|-----------------------|--------------------|
| Crop/ State | Area | Production | Jun'12 | Jul'12 |
| Maize | 71100 | Troduction | 341112 | 34t 12 |
| Karnataka | 15.6 | 19.0 | -42.0 | -38.9 |
| Andhra Pradesh | 9.9 | 17.4 | 60.1 | -5.9 |
| Maharashtra | 9.6 | 10.7 | 4.2 | -24.7 |
| Rajasthan | 12.0 | 7.7 | -86.3 | -20.9 |
| Tamil Nadu | 3.5 | 7.3 | -25.7 | -9.8 |
| Bihar | 6.9 | 7.0 | -54.5 | 0.9 |
| UP | 9.0 | 6.1 | -82.7 | 23.4 |
| MP | 9.9 | 6.0 | -72.8 | 17.0 |
| Gujarat | 5.8 | 3.6 | 116.7 | -65.8 |
| Major states | 82.2 | 84.7 | | 00.0 |
| Others | 17.8 | 15.3 | | |
| All India | 100.0 | 100.0 | -58.0 | 1.5 |
| Jowar | .55.0 | | 00.0 | |
| Maharashtra | 51.6 | 44.3 | 4.4 | -15.7 |
| Karnataka | 18.2 | 20.6 | -31.0 | -38.0 |
| MP | 6.2 | 10.2 | -71.5 | 19.3 |
| Rajasthan | 8.8 | 6.8 | -85.9 | -25.0 |
| Andhra Pradesh | 4.4 | 6.2 | 49.4 | -5.2 |
| Tamil Nadu | 4.4 | 5.1 | -25.7 | -9.8 |
| UP | 3.0 | 3.5 | -85.5 | 26.9 |
| Major states | 96.7 | 96.7 | | 2017 |
| Others | 3.3 | 3.3 | | |
| All India | 100 | 100.0 | -24.8 | -12.5 |
| Bajra | | 10010 | 2.110 | .2.0 |
| Rajasthan | 57.5 | 41.4 | -83.2 | -41.8 |
| UP | 10.2 | 16.2 | -91.2 | 34.0 |
| Gujarat | 9.2 | 14.1 | 137.8 | -61.3 |
| Haryana | 6.6 | 11.7 | -91.5 | -41.0 |
| Maharashtra | 9.6 | 8.3 | -3.4 | -28.4 |
| MP | 2.1 | 3.4 | -71.1 | 19.9 |
| Major states | 95.2 | 95.2 | 71 | 17.7 |
| Others | 4.8 | 4.8 | | |
| All India | 100 | 100 | -49.1 | -30.0 |
| Coarse grains | 100 | 100 | 47.11 | 00.0 |
| Rajasthan | 26.1 | 16.7 | -84.4 | -35.8 |
| Karnataka | 13.3 | 16.4 | -28.8 | -38.7 |
| Maharashtra | 19.5 | 14.2 | -14.0 | -100 |
| Andhra Pradesh | 4.8 | 10.1 | 53.2 | -3.6 |
| UP Tradesir | 7.7 | 8.4 | -83.5 | 24.4 |
| MP | 6.7 | 5.9 | -74.4 | 13.8 |
| Gujarat | 5.7 | 5.8 | 176.9 | -54.5 |
| Tamil Nadu | 3.0 | 5.6 | -25.7 | -9.8 |
| Bihar | 2.4 | 3.7 | -54.5 | 0.9 |
| Haryana | 2.6 | 3.3 | -91.5 | -41.0 |
| Major states | 91.8 | 90.2 | 71.5 | 71.0 |
| Others | 8.2 | 9.8 | | |
| All India | 100.0 | 100.0 | -34.7 | -39.0 |
| Attillula | 100.0 | 100.0 | -54.7 | 37.0 |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of unirrigated area under the crop in the sub-division. The rainfall at the all India level is the unirrigated crop area based weighted sum of sub-divisions. In the case of coarse grains, the all-India rainfall is area based weighted average of state-wise rainfall.



Industrial use of maize is also increasing. However, the slowdown in the global economy may reduce the demand for starch (produced using maize), mainly used by the textile industry.

Consumption, Trade, and Price

The major use of coarse grains remains as food and feed. In the case of maize, about 40 per cent of total production is used as livestock feed primarily for poultry. Another 1.2 million tonnes of maize is used by the starch industry.

High maize and soybean prices (major feed ingredients) in recent years resulted in high prices for livestock feed contributing to high prices of milk and meat products.

Industrial use of maize is also increasing. However, the slowdown in the global economy may reduce the demand for starch (produced using maize), mainly used by the textile industry.

A lower production, a significant increase in the support price for maize and large exports spurred by high international prices will keep maize and other coarse grain prices high in 2012–13.

Maize prices remained firm in MY 2011–12 on strong domestic and international demand. Prices have further strengthened in 2012–13 due to lower global production. The average maize price at the indicative Nizamabad market in August 2012 was Rs 15,630 per tonne compared to Rs 14,040 a month ago and Rs 12,600 a year ago. \cdot

According to private trade sources, maize exports in MY 2011–12 are nearing 4 million tonnes. Exports are likely to decline in MY 2012–13 due to lower production and increasing domestic prices both in rupee and US dollar terms.

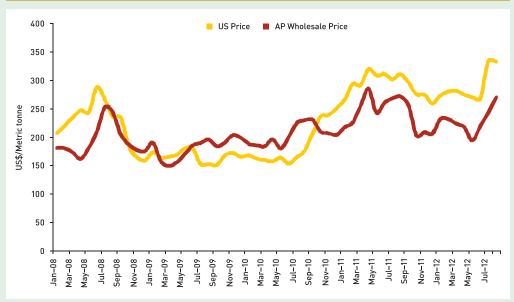


Figure IV.8: Maize Price Comparison US vs. India (US\$/tonne)

IV.4 Pulses

Production

Pulse production registered a record high 18.2 million tonnes in 2010–11 then declining to 17.2 million tonnes in 2011–12. The yield of pulses has remained stagnant in the recent years leading to renewed focus on research investments on productivity improvements.

2012–13 *kharif* pulse production has suffered due to uneven rainfall distribution during the monsoon season in major producing states of Rajasthan, Maharashtra, and Karnataka. A decline in planted area, combined with lower yields caused *kharif* production to decline to 5.26 million tonnes this year (1st advance estimate) from 6.16 million tonnes last year. *Kharif* Pulses contributed 36 per cent of annual production of pulses in 2011–12.

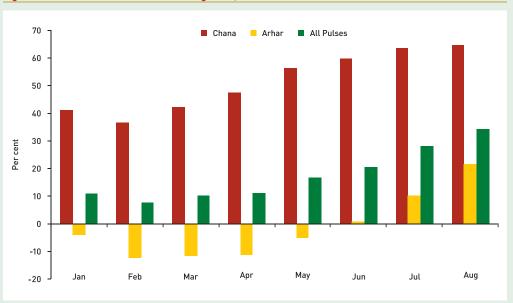
Under normal weather conditions, *rabi* pulse production, which include mostly chana and masur, in 2012–13 is expected to come at 11.5 million tonnes, taking total 2012–13 pulse production to close to 17 million tonnes.

In order to give a boost to pulse production, the government this year increased significantly the MSP for *kharif* pulses. MSP for Arhar (Tur) was raised to Rs 3,850 per quintal and of Mung to Rs 4,400 per quintal for the 2012–13 season, marking an increase of Rs 650 per quintal and Rs 900 per quintal respectively, a record increase. Similar increases are expected for *rabi* pulses, which include mostly gram and masur.

Consumption, Trade, and Price

India is dependent on imports to meet its consumption demand. Imports in 2011–12 were about 2.8 million tonnes and production was 17.21 million tonnes. The production in 2011–12 was marginally lower than in 2010–11 and the increase in WPI for pulses in 2010–11 and 2011–12 was lower at less than 3 per cent despite the lower harvest, but this year, there has been a sharp increase in the prices indicating rising imbalance between supply and demand. The decline in 2011–12 *rabi* production and this year's *kharif* production, combined with a significant increase in the MSP for *kharif* pulses, have contributed to the price increase. Most of the increase in pulse prices this year was in chana (Figure IV.9).

Figure IV.9: Trend in Pulses WPI: % Change YOY, 2012 Over 2011



2012-13 kharif
pulse production has
suffered due to
uneven rainfall
distribution during
the monsoon season
in major producing
states of Rajasthan,
Maharashtra, and
Karnataka.

Of the three major oilseeds, production of groundnut is more volatile subject to variations in rainfall. Variations in rainfall, therefore has a strong impact on

oilseed production, as most oilseeds are

grown under non-

irrigated conditions.

IV.5 Oilseeds and Vegetable Oils

IV.5.1 Overall edible oilseed and oils scenario

Production trends

The area under nine major oilseeds comprising groundnut, sesamum, soybean, sunflower, safflower, niger seed, castor seed, rapeseed and mustard and linseed has ranged between 26 to 28 million hectares in the five year period 2004–05 to 2011–12. This plateau followed recovery from a decline in the area between 1998–99 and 2002–03 (Figure IV.10). Out of the 27.2 million hectares under total nine oilseeds in 2011–12, 22 million hectares were covered by groundnut, rapeseed mustard, and soybean. These three oilseeds, therefore, are the dominant among the nine.

Along with area increase, average yield also increased during this period. Much of the increase in area during 2004–05 to 2011–12 has indeed come from soybean. The area under groundnut has declined from 6.6 million hectares in 2004–05 to 5.2 million hectares in 2011–12. Area under rapeseed-mustard has declined from 7 million in 2004–05 to 6.3 million hectares in 2011–12. Area under soybean was 10.2 million hectares in 2011–12 up from 7.6 million in 2004–05. Figure IV.10 provides an illustration of the rise in area and yield in the case of 9 major oilseeds.



Figure IV.10: Trends in Area Under Nine Major Oilseeds (million hectares)

Of the three major oilseeds, production of groundnut is more volatile subject to variations in rainfall. Variations in rainfall, therefore has a strong impact on oilseed production, as most oilseeds are grown under non-irrigated conditions. In 2009–10, when the monsoon conditions were unfavourable, production of groundnut and rapeseed-mustard declined whereas soybean production was stagnant.

A poor start to the monsoon put a question mark over the output of *kharif* crops this year. But good late August-early September rains led to a sharp recovery. The deficit in rainfall narrowed substantially and even turned into excess in some regions. Mid-September deficit in East MP was -1 per cent, West MP was excess of 16 per cent, Vidarbha was in

an excess of 10 per cent and Marathwada region had a deficit of 30 per cent. The all India deficit has narrowed from 29 per cent at the beginning of the season to about 8 per cent on September 30.

The first Advance Estimates of production by the Ministry of Agriculture has indicated a sharp decline in *kharif* groundnut production from 5.1 million tonnes in 2011–12 to 3.8 million tonnes in 2012–13. The *kharif* output for the nine major oilseeds is projected to decrease by 2 million tonnes. Only soybean production is expected to increase marginally by 0.4 million tonnes because of improved rainfall situation by July mainly in Madhya Pradesh. If the *rabi* season harvest is favourable, some of the shortfall in *kharif* may be offset. The requirement of imported oil will increase in the current year as compared to 2011–12.

Demand and imports

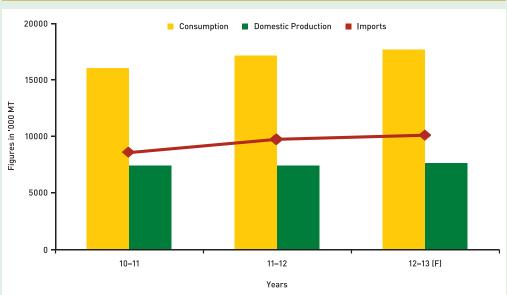
India meets 60 per cent of its edible oil requirements through imports. Global supplies of edible oil are expected to be adequate because of increased supplies of palm oil and soybean oil and would offset the decline in India's production of edible oil.

India is the second largest consumer and importer of edible oil after China. Its annual consumption of 17-18 million tonnes relies extensively on imports.

With the domestic edible oil consumption growing at a healthy pace of 5.5-6 per cent per annum and the domestic oil production remaining stagnant, India's dependence on oil import is increasing steadily. For the crop year 2011–12 (Oct-September), the country produced 6.80 million tonnes of oil against the consumption requirement of 16.2 million tonnes. The 9.5-million-tonne gap was met through imports. Palm oil constituted around 74.5 per cent of the total imports, with soya oil's share at 12 per cent. Other oils imported include Sunflower seed oil and Canola.

In 2012–13 also, the share of palm is expected to be a robust 80 per cent because of the large price disparity between the soybean oil and palm oil in the international market.

Figure IV.11: Demand and Supply Gap of Edible Oils



With the domestic edible oil consumption growing at a healthy pace of 5.5-6 per cent per annum and the domestic oil production remaining stagnant, India's dependence on oil import is increasing steadily.

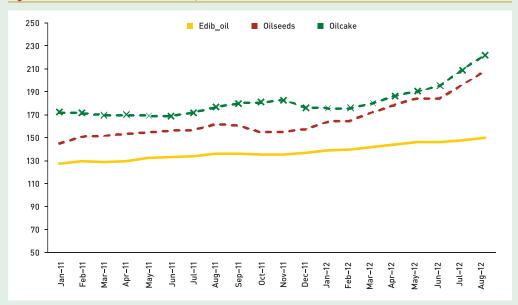


In Madhya Pradesh and Maharashtra, trade sources estimate a 3 per cent yield increase over previous year. However, this will be partly offset by an estimated 13 per cent lower yields in Rajasthan due to poor rainfall distribution.

Price trends

The wholesale price index for edible oils is showing slower increase in recent months as compared to oilseed and oilseed cake indices (Figure IV.12). Oilseed cake prices are presently driving oilseed prices..

Figure IV.12: Trends in WPI for Oilseed, Oilcake and Edible Oils



IV.5.2 Soybean

Production

The state of Madhya Pradesh accounted for 55 per cent of area sown under soybean in 2011–12, with Maharashtra and Rajasthan accounting for 38 per cent (Table IV. 3).

Table IV.5: Soybean Area and Production Across States in 2011-12

| State | Area (Thous ha) | Production (Thous tonnes) | Area % to all India | Production % to all India |
|----------------|--------------------|------------------------------|------------------------|------------------------------|
| Andhra Pradesh | 126 | 187 | 1.24 | 1.52 |
| MP | 5655 | 6272 | 55.44 | 50.99 |
| Maharashtra | 3069 | 4025 | 30.09 | 32.72 |
| Rajasthan | 897 | 1385 | 8.79 | 11.26 |
| Major states | 9747 | 11869 | 95.56 | 96.49 |
| Other states | 453 | 431 | 4.44 | 3.51 |
| All India | 10200 | 12300 | 100.00 | 100.00 |

Source: Directorate of Economics and Statistics, Government of India.

Despite considerable variation in rainfall in this year's monsoon season across regions, Madhya Pradesh and parts of Maharashtra have done better with respect to area sown due to favourable rainfall distribution. Higher domestic prices for soybean at planting time also contributed to increased acreage.

Good rainfall has also improved yields prospects. In Madhya Pradesh and Maharashtra, trade sources estimate a 3 per cent yield increase over previous year. However, this will be partly offset by an estimated 13 per cent lower yields in Rajasthan due to poor rainfall distribution.

Following is a comparison of prices at the time of sowing between this year and last year:

| | Prices (Rs/ Tonno | Prices (Rs/ Tonne) Prior to sowing | | |
|-------------|-------------------|------------------------------------|--|--|
| | 2011 | 2012 | | |
| MP | Rs 21,000.00 | Rs 40,500.00 | | |
| Maharashtra | Rs 20,000.00 | Rs 41,000.00 | | |
| Rajasthan | Rs 20,000.00 | Rs 41,000.00 | | |

These prices were well above the 2012–13 MSP for soybeans at Rs 22000 per tonne.

According to government's first advance estimates, India is likely to produce 12.62 million tonnes soybean in 2012–13 compared with 12.3 million tonnes in 2011–12, against 11 to 11.8 million tonnes by trade and other analysts.

Figure IV.13: Area under Soybean in the Major Producing States (thousand hectares)

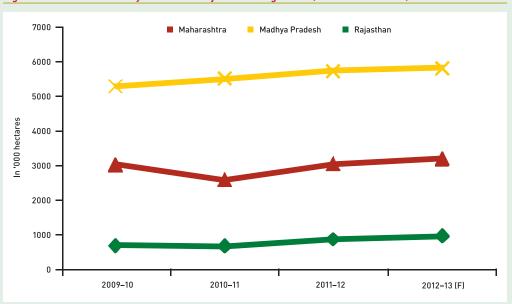


Figure IV.14: Soybean Yield per Hectare in Major Producing States (Kg/ha)

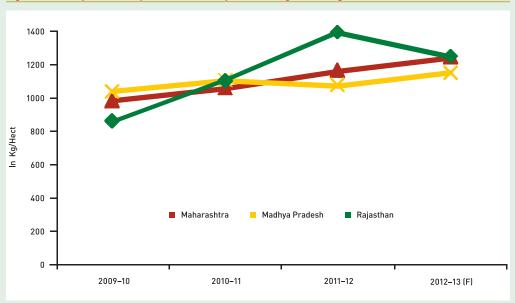
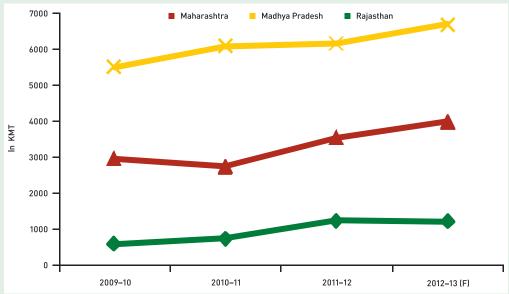




Figure IV.15: Soybean Production in Major Producing States (thousand tonnes)



Processing margins

Soybean processors can look forward to a good season as high overseas demand for meal as well as demand from local dairy and poultry industry will keep it a seller's market. The crush spread – the difference between the cost of a tonne of beans and the value of the meal and oil it can produce – is expected to more than double as compared to the average of the past nine years.

Given the tight global meal stocks and lower production in 2012–13, there is likely to be good demand for Indian soybean meal in the international market. Farmers are expected to sell off their crop just after harvest to take advantage of prevailing high market prices.

This would require Indian crushers to run at full steam in the main crushing period of October-December. The market is anticipating record crush of soybean, which may touch 1.5 million tonnes a month during November, December and January, resulting in higher domestic soybean oil production.

Using the current future prices of soybeans and refined soy oil on NCDEX for Oct/Nov/Dec 2012 delivery and using cash FAS prices for meal for Nov/Dec at \$550 FOB, crushers will be getting a net margin of approximately \$10/tonne of soybean for October, November, and December.

Assuming strong overseas demand and competitive prices for Indian soya meal, soya meal exports are likely to increase by 2 per cent to 5.5 million tonnes in 2012–13.

In 2011–12, approximately 8.7 million tonnes of soybeans was crushed, producing 7.2 million tonnes of soya meal. Domestic feed industry consumed roughly 3 million tonnes and around 4.2 million tonnes were exported during October 2011 to September 2012.

Prices

The global scenario

Soybean prices have been on a roller coaster for last six months in international as well as domestic markets. Soybeans and soybean meal gained the most this year among the 24 commodities tracked by the Standard & Poor's GSCI Index, outpacing gains in global equities and U.S. Treasuries.

The upside rally in international soybean prices, from November 2011 till April 2012, was largely due to crop concerns in other two major producing countries – Brazil and Argentina. Dry weather conditions in the US, the largest soybean producing country, led to heightened worries over supplies of the oil crop in June-July.

However, since then prices have cooled off considerably. Estimates for US soybean production have now been increased while farmers in South America also geared up for a large crop.

Farmers in Brazil's grain belt also jump – started planting after early showers set the scene for what is expected to be a bumper corn and record soya crop.

Slowing European demand for biodiesel also took some pressure off demand.

At the same time, China is likely to reduce soya purchases as it will carry on selling soybean reserves well into 2013 to contain food inflation and ease tight supplies. China is the world's biggest importer of soybeans. It buys most of them from the US, Brazil, and Argentina.

In addition to soya oil, palm oil prices have also corrected sharply. Malaysian palm oil futures tumbled on September 24 to their lowest in two years hurt by rising inventories and drop in US soybean prices. Palm oil prices will fall further this year as slowing economic growth reins in demand for biofuel, leading to higher stocks in top producers Indonesia and Malaysia.

Domestic prices

Domestic prices have a high correlation with international price trends. The CBOT and the NCDEX futures prices are also seen to be highly correlated. For soybean oil, correlation of spot and future prices in domestic markets is also high.

Harvest is likely to begin from 2nd week of October and we expect crush to run full blast by 3rd week of October.

The bearish trend in the world market, along with stable rupee, is putting pressure on soybean, oil, and meal in the domestic spot markets. Rupee is still weak but has strengthened from the highs of 56 that we saw in July.

Domestic oilseeds prices rose significantly during November 2011 to April 2012 on back of lower *rabi* oilseeds output of 2011–12. On Indian commodities exchanges too, prices of soybean futures witnessed gains of 65-67 per cent in tandem with spot prices. After some stability in prices during May this year, soybean witnessed yet another rally from June with markets closely watching fundamentals for the new season in domestic and international markets.

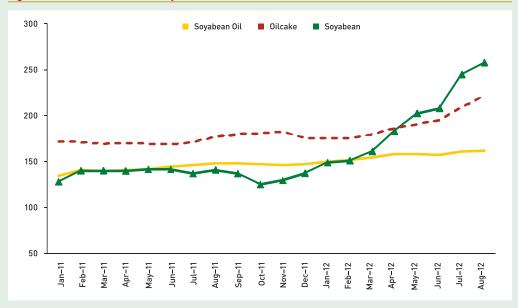
Slow advancement of monsoon and below average rains during June led to a sharp drop in area under oilseeds cultivation. Soybean acreage was down by 19 per cent till July 12, versus same period last year. In the third week of July, prices touched new highs in both Indian and international markets.

The bearish trend in the world market, along with stable rupee, is putting pressure on soybean, oil, and meal in the domestic spot markets. Rupee is still weak but has strengthened from the highs of 56 that we saw in July.





Figure IV.16: Trends in WPI for Soybean Sector



Note: Oilcake here is for all types of oilcakes including groundnut, mustard, cotton, and soybean and others.

Arrival of the new crop from September-end is expected to keep prices under check. Beginning of harvesting season in the US will also exert pressure on soybean in international markets, leading to a spillover effect on domestic prices. The USDA said that soybean prices could fall to a "seasonal price low" in the autumn, "provided that foreign crops do not run into major trouble".

Prices of beans are down in the spot market because traders are staying away for now. A strong rupee makes edible oil imports cheaper and at the same time trims returns of oilmeal exporters. There is also high moisture content in the new harvest, which is keeping local crushing plants away in the immediate term.

Price charts show that soybean futures typically fare poorly in late September and early October.

IV.5.3 Soybean oil

The supply of cheaper imported palm oil, which is presently trading at a \$265/t discount to refined soybean oil in the domestic market, will force soybean oil to discount itself substantially in the coming days to extract some demand. The forward price curve on the NCDEX reflects it (Figure IV.17).

Once the domestic crushing picks up, domestic soybean oil will need to compete with palm in the domestic market to find demand. Spread narrowing to palm will be favourable for soyoil consumption.

Fresh decline in soybean oil price, downward trend in soyameal and healthy arrivals of beans in Madhya Pradesh and Maharashtra mandis are also affecting soybean prices. Soymeal prices have seen a correction from the highs of \$640/t FAS to current price of \$550/t FAS.

Figure IV.17: Refined Soyoil - Palmolein Price Spread

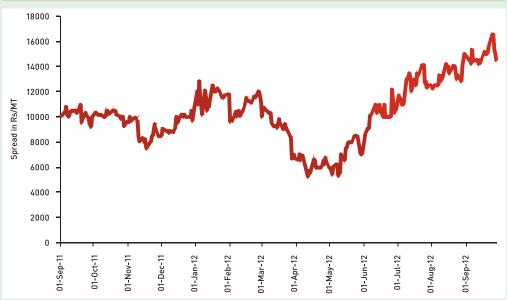
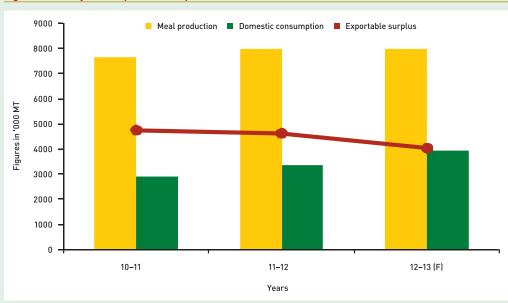


Figure IV.18: Soymeal Exportable Surplus



IV.5.4 Kharif Groundnut

Production

Groundnut is grown in several states across the country but the four states of Gujarat, Rajasthan, Andhra Pradesh and Karnataka accounted for 80 per cent of area under the crop and 73 per cent of production in 2011–12. Yield in Andhra Pradesh were significantly lower in other states.



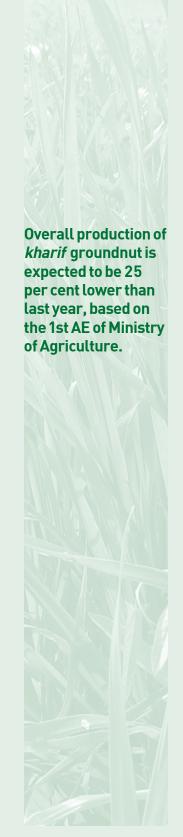


Table IV.6: Area and Production of *Kharif* Groundnut in Major Producing States: 2011–12

| State | Area | Production | Area | Production |
|----------------|------------|----------------|----------------|----------------|
| | (Thous ha) | (Thous tonnes) | % to all India | % to all India |
| Andhra Pradesh | 1057 | 382 | 24.6 | 7.5 |
| Gujarat | 1454 | 2273 | 33.8 | 44.6 |
| Karnataka | 511 | 335 | 11.9 | 6.6 |
| MP | 210 | 340 | 4.9 | 6.7 |
| Maharashtra | 223 | 266 | 5.2 | 5.2 |
| Rajasthan | 415 | 801 | 9.6 | 15.7 |
| Tamil Nadu | 230 | 474 | 5.4 | 9.3 |
| Major states | 4099 | 4870 | 95.3 | 95.5 |
| Others | 201 | 230 | 4.7 | 4.5 |
| All India | 4300 | 5100 | 100.0 | 100.0 |
| | | | | |

Source: Data from Department of Economics and Statistics.

Groundnut crop has been the worst affected among oilseeds by the long dry spell in the major growing belt of Saurashtra. As a result, the area sown under groundnut is 15 per cent lower than last year. The yield too will decline and Gujarat yields may be 55 per cent lower than last year. As a result overall production of *kharif* groundnut is expected to be 25 per cent lower than last year, based on the 1st AE of Ministry of Agriculture.

Trade sources also estimate *kharif* groundnut output to decline by about 25 per cent. The government's first advance estimate pegs production at 3.82 million tonnes.

Given the drop in production, farmers are expected to receive good prices in the forthcoming season.

| | Prices (Rs/Tonne) at the sowing time | | | |
|----------------|--------------------------------------|----------------|--|--|
| | 2011–12 kharif | 2012–13 kharif | | |
| Gujarat | Rs 32,100.00 | Rs 50,200.00 | | |
| Andhra Pradesh | Rs 34,850.00 | Rs 44,500.00 | | |

Trends in the wholesale price index of groundnut point to the uncertainty of demand conditions affecting prices of groundnut. Although production is slated to decline sharply this is not reflected in the WPI for groundnut seed. Soybean is showing greater demand pressures despite the prospects of a better crop.

Figure IV.19: Trends in WPI for Oilseeds

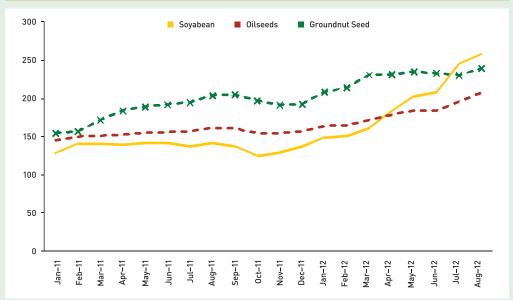
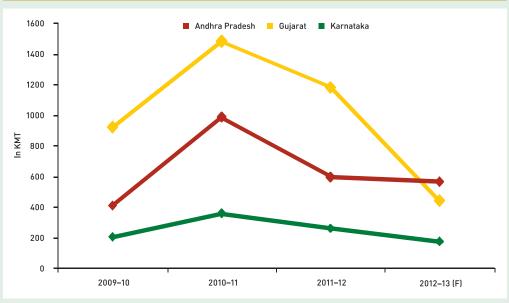


Figure IV.20: Groundnut Production - Major Producing States



Prices: international and domestic scenarios

Groundnut prices in the international markets have come under downward pressure in recent weeks, partly reflecting the expectations of an outstanding US crop. The latter was confirmed by USDA, which pegged production of shelled groundnuts at a record 2 million tonnes on Sept 12 crop report, up by almost 60 per cent from the last year's low harvest. The harvested area was revised upwards to 645,000 hectares, 45 per cent higher from last year.

The anticipated fall in groundnut output in India started firming up domestic prices. But this had a destructive impact on demand, which has shifted to cheaper oils such as soya and palm.

With few takers, groundnut oil prices have plunged by over 20 per cent. Prices of groundnut declined in Gujarat as demand from exporters and traders was nominal.



It was a scenario that was unforeseen in mid-August when monsoon was still playing truant. Since then, monsoon has been normal across the country bringing about a sharp fall in groundnut and its oil prices. Re-packers were in no mood to make fresh deals, while sellers were also reluctant to sell at current lower prices. Prices of groundnut oil have dropped by around Rs 100/ 15-kg tin within a week. Industry players see prices going down further in the wake of poor demand. The panic selling in the global soyabean and palm oil markets also affected sentiment.

Figure IV.21: Trends in Retail Price of Groundnut Oil in Metros (Rs/kg)

Source: Data from Department of Economics and Statistics

At the retail level, there is surprising large variation in prices across the four metros although this variation is now reducing. The price is the highest in Kolkata although prices in Delhi have now overtaken Kolkata prices. Prices are the lowest in Chennai.

Government imports 1 million tonnes of veg oil every year for the PDS system through four state run agencies MMTC/STC/NAFED/PEC. The import is mainly RBD Palmolein. There is no excise duty on refined oils.

International trade

India exports small to moderate quantities of Indian Hand Picked Select (HPS) peanuts for table use. Export of 0.6 million tonnes was reported for Oct 2011–June 2012, up more than 50 per cent on the year. Shipments to China increased to 0.25 million tonnes, which includes transshipments via Vietnam, making it India's largest customer. Traditionally, Indonesia and Vietnam are among the largest importers of Indian peanuts followed by Asian, Middle East and European countries. There are no restrictions on the export of HPS peanuts.

Growing demand of Indian HPS groundnut in South-East Asian and other neighbouring countries could raise Indian peanut exports to 500,000 tonnes in 2012–13, up 50,000 tonnes from the current year.

Joint efforts of the Indian Oilseeds and Produce Export Promotion Council (IOPEPC) and Agriculture and Processed Food Products Export Development Authority (APEDA)

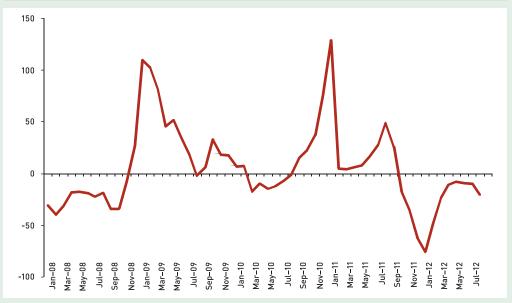
to increase awareness of quality improvements in peanuts is not only lending support to peanut exports, but also helping exporters to focus on adopting international quality standards. IOPEPC is the authorized agency to issue quality certificates for shelling units and warehouses involved in exports, while APEDA certifies processing units.

IV.6 Onion

Production

India is the second largest producer of onion in the world after China although it has larger area under this crop. Onion is a widely consumed vegetable in the country and it is also exported to primarily countries in South Asia and Asia. Production is sensitive to fluctuations in weather conditions and also market conditions. Opening up of exports in 2003–04 onwards was an impetus to the crop as its production increased from 5.9 million tonnes in 2003–04 to 15.7 million tonnes in 2011–12. The production fluctuations in turn often lead to sharp changes in prices. In 2009–10, production declined by 9.8 per cent as rainfall turned inadequate and the average wholesale price index (WPI) for onion rose by 14.9 per cent that year. But much of this price increase occurred before the onset of the monsoon both because of the sharp increase in exports in 2008–09 and also the early *kharif* seed sowing was affected because of adverse weather (Figure IV.22). Despite the decline in production in 2009–10, exports remained at 1.6 million tonnes as in the previous year and prices began to rise sharply after October 2010. Managing exports and short-term price fluctuations has been a challenge in the case of onions.

Figure IV.22: WPI Change in Onions % YOY



In the current year, prices have remained dampened until August relative to the high levels of 2011–12. However, rainfall has not been favourable for onion production in the major states. In Maharashtra and Karnataka, which account for 50 per cent of country's production, rainfall was lower than in the previous year in June and July. Only Orissa, UP and Andhra Pradesh, which together account for 10 per cent of production had similar pattern of rainfall in June and July in the current and last year (Table IV.7). *Kharif* crop, early and late accounts for 40 per cent of total production which is expected to be adversely

Joint efforts of the Indian Oilseeds and **Produce Export Promotion Council** (IOPEPC) and Agriculture and **Processed Food Products Export** Development **Authority (APEDA) to** increase awareness of quality improvements in peanuts is not only lending support to peanut exports, but also helping exporters to focus on adopting international quality standards.

Kharif crop, early and late accounts for 40 per cent of total production which is expected to be adversely affected by deficient rainfall. While better rabi crop may offset some of the shortfall in the kharif crop, it is unlikely to make up fully for the poor kharif output.

affected by deficient rainfall. While better *rabi* crop may offset some of the shortfall in the *kharif* crop, it is unlikely to make up fully for the poor *kharif* output.

Table IV.7: Production Shares of States and Rainfall in June-July: Onion

| State | % | share | Rainfall (% deviation | on from previous year) |
|----------------|-------|------------|-----------------------|------------------------|
| | Area | Production | June | July |
| Maharashtra | 34.4 | 32.0 | -0.5 | -40.1 |
| Karnataka | 19.2 | 17.3 | -14.9 | -39.6 |
| Gujarat | 6.2 | 9.8 | 243.7 | -45.8 |
| MP | 7.1 | 8.2 | -75.8 | 10.6 |
| Bihar | 5.1 | 6.9 | -54.5 | 0.9 |
| Andhra Pradesh | 4.7 | 5.2 | 50.1 | -0.6 |
| Rajasthan | 4.7 | 3.1 | -86.2 | -22.0 |
| Major states | 81.3 | 82.5 | | |
| Other States | 18.7 | 17.5 | | |
| All India | 100.0 | 100.0 | 2.5 | -30.1 |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of unirrigated area under the crop in the sub-division. The rainfall at the all India level is the crop area based weighted sum of year on year changes for the major producing states.

There are no official estimates of production for the *kharif* crop of onion. Taking into account the significant deficiency in rainfall in the two major producing states, during the transplanting period for the crop, a decline of 20 per cent production may be expected in yield for 2012–13 over the previous year in regions where nearly 50 per cent of onion crop is grown. As compared to the harvest of 15.7 million tonnes in 2011–12, we expect an output of 13.6 million tonnes in 2012–13 (Table IV.8).

Table IV.8: Area. Yield and Production for Onion

| Table 11.0. Area, freta ana i rodaettori for omon | | | | | |
|---------------------------------------------------|-------------------|-------------------|-----------------------------|--|--|
| Year | Area (million ha) | Yield (Tonnes/ha) | Production (Million tonnes) | | |
| 2008-09 | 0.8 | 16.2 | 13.5 | | |
| 2009–10 | 0.8 | 16.1 | 12.2 | | |
| 2010–11 | 1.0 | 14.8 | 15.1 | | |
| 2011–12* | 1.0 | 15.1 | 15.7 | | |
| 2012–13 F | 1.0 | 13.6 | 13.6 | | |

Note: *= 4th Advance estimates; F= Forecast assuming 10 per cent decline in area and yield in 2012–13 as compared to 2011–12.

Trade

India exported 1.31 million tonnes of onion in 2011–12'as compared to export of 1.16 million tonnes in the previous year. The higher exports were possible because of the increased production and provided some price support to producers. However, the situation for the current year may not be as positive on export front for onion producers. With a production of just about 13.6 million tonnes, exports may be less as the domestic demand puts pressure on prices. There are reports that export prices have also been low this year. In this context, revival of domestic prices may provide some relief to the farmers if the marketing channels work to pass on the higher prices from the retail to farm level.

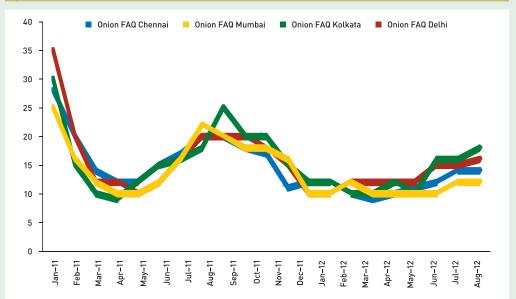
Prices

The monthly data on retail prices in the four metro cities available from the Directorate of Economics and Statistics shows that prices have remained stable for the period January to May 2012 (Figure IV.23). Since then there is an upturn in prices. The upturn was sharper

With a production of just about 13.6 million tonnes, exports may be less as the domestic demand puts pressure on prices.

in the same period of 2011. Generally, the prices reach a peak in the period September-October before the new harvest arrives in the market. In the current year also, therefore, prices are likely to firm up in the coming 3 months.

Figure IV.23: Retail Price of Onions in Metros



The sharp change in onion prices has always been a concern as it hits the farmer when prices fall and it adversely affects consumers when prices rise. The retail price may be expected to adjust to the changes in wholesale prices when the price changes are induced by supply variations. There appears to be such a relationship between the retail and wholesale prices when we see the plot of data for Delhi (Figure IV.24). The pattern of retail and wholesale price in Delhi also shows that the marketing margins vary considerably over the months. When prices were rising between May and June 2011, the margin narrowed as retail prices were slow to adjust. Wide availability of price information may help in improving competition among traders and also consumer choice.

The wholesale prices in the consuming centres are affected by the price changes in the producing regions. Price data available from one of the wholesale markets close to producing regions is compared with the wholesale price of onion in the consuming centre of Delhi (Figure IV.25). While the changes in prices in the producing regions are transmitted to the wholesale prices in the consuming regions, the margins are significant. While some of the differences in prices may also be due to differences in specific transactions or grades, the data suggests significant margins between retail and wholesale within the consuming regions and also between producing and consuming regions. These patterns suggest the need for more rigorous analysis of data and also that improvements in the marketing systems would have high payoffs for the consumers and also producers.

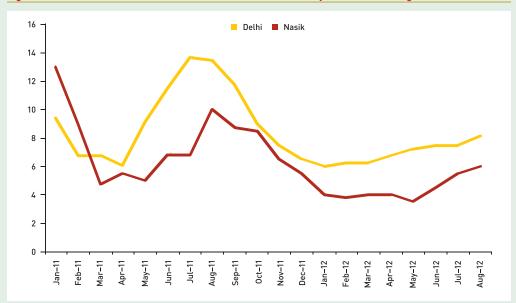
While the changes in prices in the producing regions are transmitted to the wholesale prices in the consuming regions, the margins are significant.



Figure IV.24: Retail and Wholesale Price of Onion in Delhi (Nasik FAQ variety): Rs/kg



Figure IV.25: Wholesale Price of Onion in Delhi (Nasik FAQ variety) and Nasik: Rs/kg



Prices outlook

The likely drop in output because of the inadequate monsoon in the producing regions of Maharashtra and Karnataka, and the low prices of last year, an upturn in prices during the period of October to December is to be expected. Projections based on a simple time series model suggest that WPI for onion is likely to increase in October and November with subsequent decline in December. The increase in terms of rate of increase is expected to be sharp because of the base effect also.



Figure IV.26: Wholesale Price Index of Onion: Index (left scale) and % Change YOY (right scale)

Production

India has about 1.8 million hectares of land under potato producing 40-42 million tonnes. There has been a steady increase in production of potato in the country from 2005-06 onwards with a sharp jump of 5.5 million tonnes in 2010-11. In 2011-12, production is estimated at 42.65 million tonnes, only marginally higher than the harvest of 42.34 million tonnes in 2010-11. The below normal rainfall this year is also a concern on output prospects although, rainfall situation had improved in July in UP, West Bengal, and Bihar (Table IV.9).

Table IV.9: Production Shares of States and Rainfall in June-July: Potato

| Area 29.7 | Production | June | July |
|---------------------|--------------|------------------------|------------------------|
| 29.7 | | | |
| | 33.1 | -83.1 | 23.9 |
| 21.3 | 31.4 | -33.5 | 10.7 |
| 16.5 | 13.6 | -54.5 | 0.9 |
| 4.1 | 5.3 | 243.7 | -45.8 |
| 4.4 | 4.9 | -89.5 | -28.7 |
| 75.9 | 88.3 | | |
| 24.1 | 11.7 | | |
| 100.0 | 100.0 | -45.8 | 8.4 |
| _ | 75.9 24.1 | 75.9 88.3 24.1 11.7 | 75.9 88.3 24.1 11.7 |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of unirrigated area under the crop in the sub-division. The rainfall at the all India level is the crop area based weighted sum of year on year changes for the major states

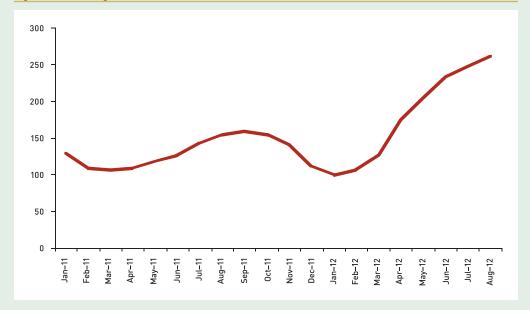
The recent trends in prices reflect the impact of stagnant production in 2011-12 and the potential for demand pressures on modest output gains this year (Figure IV.27). In fact in West Bengal, a major producer of the crop, there have been reported restrictions and advisories on the movement of the crop out of the state because of concerns on availability.



A factor that is offsetting the negative impact of inadequate rainfall conditions is the high prices prevailing at the time of planting. Taking into account these factors, we expect the output growth in 2012-13 to be 5-7 per cent over the previous year, taking the production level to 44.6-45.6 million tonnes.

There were also reports of inadequate availability of seeds in West Bengal imported from Bhutan. The average increase in potato output between 2005–06 and 2011–12 is 9.4 per cent. A factor that is offsetting the negative impact of inadequate rainfall conditions is the high prices prevailing at the time of planting. Taking into account these factors, we expect the output growth in 2012–13 to be 5-7 per cent over the previous year, taking the production level to 44.6-45.6 million tonnes.

Figure IV.27: Rising Trend in WPI of Potato



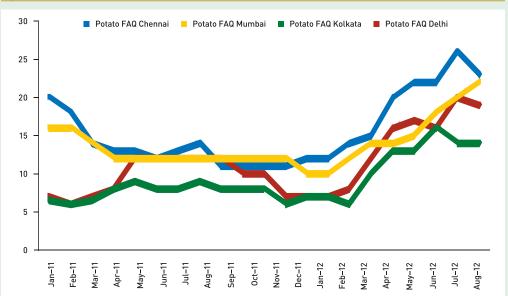
Consumption and Trade

India exported about 2 lakh tonnes of the crop in 2010–11 and 2008–09 with less than one lakh tonnes exports in 2009–10. Given the rising domestic prices, exports are likely to be limited and mainly to the neighbouring countries. Major use of potato is in the form of vegetable in the Indian diet. Although consumption of processed products from potato is increasing, its share in total consumption is expected to be relatively small. Potato demand in the country is rising at close to 5 per cent per year because of population and income growth. Stagnating production is likely to lead to significant price increase.

Prices

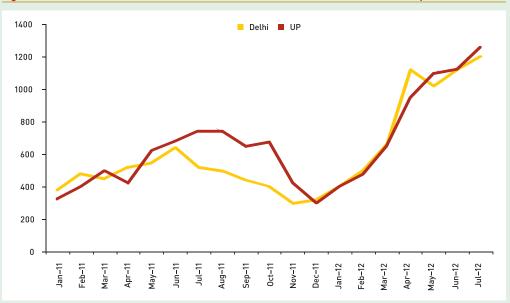
While the WPI of potato has kept its rising trend into August 2012, the retail prices have dropped slightly in three of the four metros in the same month (Figure IV.28). The retail price increased in August only in Mumbai. Actually prices declined in July itself in Kolkata, which may be related to attempts improve availability of the crop in the state.

Figure IV.28: Retail Price of Potato in Metros



The drop in retail prices is not reflected in the wholesale prices. The wholesale price rose in the consuming centre of Delhi and also a market centre (Lucknow) in a large producing state of UP. Although, prices in Lucknow were higher than in Delhi between May 2011 and December 2011, since then prices in the two centres are moving together. The rising trend in wholesale prices suggests that correction in this trend is likely once the fresh harvest begins to arrive in the markets in October onwards.

Figure IV.29: Wholesale Price of Potato in Delhi (white) and UP (Lucknow market): Rs/quintal

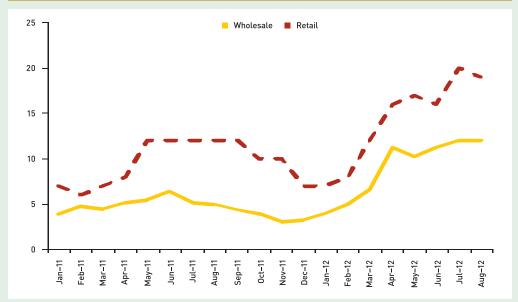


The retail-wholesale margins within the consuming centres are larger than the differences in prices across wholesale markets (Figure IV.30). The margins are necessitated by the need for evening out the supplies to meet more uniform consumption trends as compared to production. However, prevalence of significant margins would require that efficiency in storage and distribution is achieved to the fullest extent.



Although rainfall alone may not determine the output, given the fact that states accounting for 45 per cent of production in 2011-12 have experienced significant deficiency suggests that sharp increase in production in 2012-13 is unlikely.

Figure IV.30: Retail and Wholesale Price of Potato in Delhi (Nasik FAQ variety): Rs/kg



The arrival of fresh crop in the markets should have a moderating impact on prices starting in October and November. In the coming three months of October-December, prices should remain stable or decline month over month basis. Year on year basis, prices remain high because of low level of prices in 2011.

IV.8 Banana

Production

India's annual production of about 30 million tonnes of banana crop from 830,000 hectares makes it the largest producer in the world. Although, the rising trend in area has been sustained in the recent years, production is stagnant because of only modest improvements gains in productivity per hectare of land (Figure IV.31).

Among the major producing states, Tamil Nadu, Maharashtra and Karnataka experienced deficient rains for banana producers. Gujarat saw erratic rainfall: high in June and deficient in July and Andhra Pradesh experienced better or the same rainfall in June and July this year (Table IV.10). Although rainfall alone may not determine the output, given the fact that states accounting for 45 per cent of production in 2011–12 have experienced significant deficiency suggests that sharp increase in production in 2012–13 is unlikely.

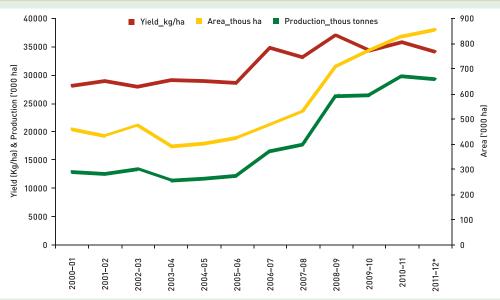


Figure IV.31: Trends in Area, Yield and Production of Banana

Table IV.10: Banana Production Across States in 2011–12 and Rainfall in June and July 2012

| States/ UTs | % share of S | States in All India | Rainfall (% deviation | on from previous year) |
|----------------|--------------|---------------------|-----------------------|------------------------|
| | Area | Production | June | July |
| Tamil Nadu | 15.2 | 23.0 | -25.7 | -9.8 |
| Maharashtra | 9.6 | 15.4 | -0.5 | -40.1 |
| Gujarat | 7.5 | 13.6 | 243.7 | -45.8 |
| Andhra Pradesh | 9.7 | 9.9 | 50.1 | -0.6 |
| Karnataka | 14.0 | 8.3 | -14.9 | -39.6 |
| Madhya Pradesh | 5.2 | 6.9 | -75.8 | 10.6 |
| Bihar | 3.7 | 5.2 | -54.5 | 0.9 |
| Uttar Pradesh | 3.9 | 4.8 | -83.1 | 23.9 |
| West Bengal | 5.1 | 3.6 | -33.5 | 10.7 |
| Major states | 73.8 | 90.7 | | |
| Other states | 26.2 | 9.3 | | |
| TOTAL | 100.0 | 100.0 | 8.27 | -16.7 |
| | | | | |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of unirrigated area under the crop in the sub-division. The rainfall at the all India level is the crop area based weighted sum of year on year changes for the major states.

Consumption and Trade

Most of the production of banana is utilised as domestic consumption. The exports account for less than five per cent of production. The domestic consumption is expected to rise with the rise in population and more importantly form increased per capita demand. In the short term, ensuring efficient storage and distribution systems across the country and in the main consuming centres is necessary to sustain growth in demand.

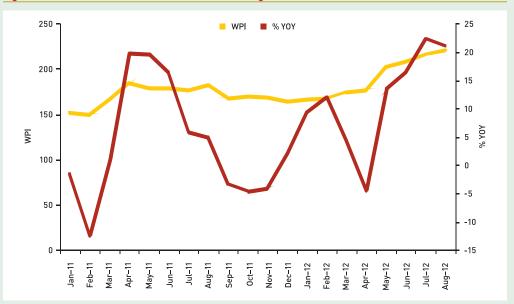
Prices

The overall WPI for banana did not see the usual decline in the summer months of May-June this year reflecting the production conditions (Figure IV.32). Prices show decline in the months of September-November and if this pattern holds, there will be some relief to the consumers.



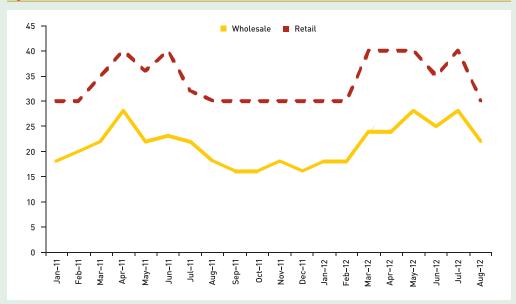


Figure IV.32: Trends in WPI for Banana: Jan 2011-August 2012



The pattern of retail and wholesale prices in Delhi does indicate that changes in wholesale prices do trigger similar changes in the retail prices with a lag. However, in the most recent month of August 2012, the retail price shows a slight decline whereas the wholesale price is flat (Figure IV.33).

Figure IV.33: Retail and Wholesale Price of Banana in Delhi: Rs/dozen



The wholesale price in a market in one of the producing regions and in a consuming centre of Delhi shows that prices in Delhi change gradually unlike the pattern in Vellore. The Delhi market is influenced by prices in a number of supplying regions and therefore may reflect moderate fluctuations.

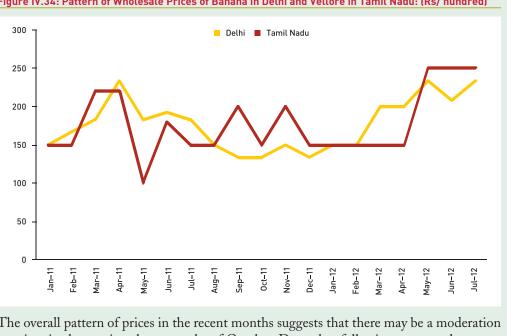


Figure IV.34: Pattern of Wholesale Prices of Banana in Delhi and Vellore in Tamil Nadu: (Rs/ hundred)

The overall pattern of prices in the recent months suggests that there may be a moderation in prices in the coming three months of October-December following a seasonal pattern. However, the overall harvest for the year is expected to register the same level as in 2011-12.

IV.9 Sugarcane and Sugar

Production

Sugar production in 2011–12 (October 2011–September 2012) is expected to be about 26 million tonnes. This is an increase of 1.7 million tonnes over 2010-11 (Figure IV.35). In 2012–13, the sugar output is likely to be lower than in the previous year estimated by trade sources at 24 million tonnes.

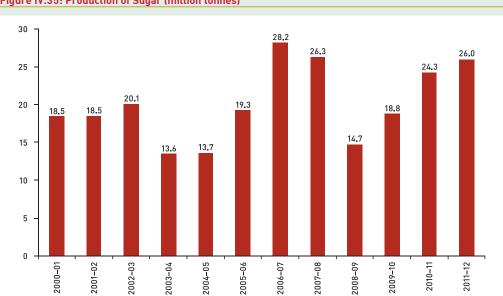


Figure IV.35: Production of Sugar (million tonnes)

Source: Department of Food and Public Distribution, Economic Survey for the period 2000-01 to 2010-11 and Press Reports for 2011-12.



The deficient rainfall in June-July especially in two key sugarcane producing states of Maharashtra and Karnataka have put the 2012–13 production estimates lower than 2011–12 by 2-3 million tonnes.

In the current year, exports are likely to be significantly lower than the estimated 3.5 million tonnes achieved in 2011–12. If 2 million tonnes of sugar are exported, this will still leave the year end stock of 7.2 million tonnes.

The deficient rainfall in June-July especially in two key sugarcane producing states of Maharashtra and Karnataka have put the 2012–13 production estimates lower than 2011–12 by 2-3 million tonnes. The two states produced nearly 50 per cent of total sugar production in the country in 2011–12. The industry estimates project higher production of sugar in UP in 2012–13 but not enough to fully offset the decline in Maharashtra and Karnataka. Barring UP and Bihar, in all the other major states producing sugarcane rainfall in June-July was significantly less than what was received in the previous year, affecting planting of cane (Table IV.11).

Table IV.11: Area and Production of Sugarcane by Major States in 2011-12 and Rainfall in June-July 2012

| State | % share of s | tates in all India | Rainfall (% deviation | n from previous year) |
|----------------|--------------|--------------------|-----------------------|-----------------------|
| | Area | Production | Jun-12 | Jul-12 |
| UP | 42.5 | 36.0 | -82.9 | 23.6 |
| Maharashtra | 20.1 | 22.9 | -1.1 | -43.6 |
| Tamil Nadu | 7.5 | 11.0 | -25.7 | -9.8 |
| Karnataka | 8.5 | 10.9 | -34.9 | -38.3 |
| Andhra Pradesh | 4.0 | 4.7 | -98.4 | -99.0 |
| Gujarat | 4.0 | 4.0 | 246.7 | -45.5 |
| Bihar | 4.6 | 3.4 | -54.5 | 0.9 |
| Major States | 91.2 | 92.8 | | |
| Other States | 8.8 | 7.2 | | |
| All India | 100.0 | 100.0 | -40.6 | -9.3 |

Note: The rainfall refers to the weighted average rainfall in the state when there is more than one rainfall sub-division in a state, the weights being share of area under the crop in the sub-division. The rainfall at the all India level is the unirrigated crop area based weighted sum of rainfall in sub-divisions.

Consumption and trade

The year 2012–13 is expected to begin with a stock of around 7.8 million tonnes, higher than in any of the past three years. Given the annual estimated consumption of sugar at 23 million tonnes, the beginning stocks provide adequate supplies to meet domestic consumption and scope for some exports even if the sugar production this year falls below the level of 2011–12.

Sugar market is highly regulated in the country with the governments at the centre and states specifying the minimum prices for the cane to be paid to farmers, levy price on sugar mills for supplies to PDS and selected agencies and the market sale volumes for the sugar mills. The exports are also subject to quotas. Because of the lags in synchronising decisions relating to these various parameters set by policy, there are also cycles in production affecting prices, exports, and investments.

In the current year, exports are likely to be significantly lower than the estimated 3.5 million tonnes achieved in 2011–12. If 2 million tonnes of sugar are exported, this will still leave the year end stock of 7.2 million tonnes. The calculation of supply-demand balance for sugar is shown in Table IV.12.

Table IV.12: The Supply-Demand Balance for Sugar (Marketing year)

| Item | Unit | 2009-10 | 2010-11 | 011-12 | 2012-13F1 | 2012-13F2 |
|----------------------|-----------------|---------|---------|--------|-----------|-----------|
| | | | | | Jul-12 | Oct-12 |
| Beginning stocks | Thousand Tonnes | 4364 | 5793 | 6789 | 7789 | 7789 |
| Production | Thousand Tonnes | 18912 | 24365 | 26000 | 26500 | 24000 |
| Imports | Thousand Tonnes | 4080 | 0 | 0 | 0 | 0 |
| Total supply | Thousand Tonnes | 27356 | 30158 | 32789 | 34289 | 31789 |
| Domestic consumption | Thousand Tonnes | 21328 | 20769 | 21500 | 22575 | 22575 |
| Exports | Thousand Tonnes | 235 | 2600 | 3500 | 2500 | 2000 |
| Total utlisation | Thousand Tonnes | 21563 | 23369 | 25000 | 25075 | 24575 |
| Closing stocks | Thousand Tonnes | 5793 | 6789 | 7789 | 9214 | 7214 |
| Stocks to use ratio | % | 27.2 | 32.7 | 40.9 | 49.0 | 32.0 |

Price

A deficient rainfall in the planting season has raised the prices in the open market. The WPI for sugar has registered an upturn from May 2012 onwards after remaining at relatively stable level during Jan 2011 to April 2012 (Figure IV.36). The increase is sharper in the case of *Gur* as compared to sugar or *khandsari*. With the global markets saturated with supplies, domestic market may be more attractive for the sugar producers even if there is a liberal export policy. In this sense, the declining sugar prices in the international markets may not benefit Indian consumer.

Figure IV.36: Trend in WPI for Sugar, Gur and Khandsari

IV.10 Milk

Production Trends and Patterns

India's milk production at more than 127 million tonnes is now the highest globally. It is also the largest consumer of milk in the world. From 55.7 million tonnes in 1991–92, milk production in the country is estimated to have increased to 127.3 million tonnes in





Relatively weak monsoon does put pressure on the availability of key inputs such as green fodder and water affecting yields. In this sense, in the current year, a decline in the rate of increase in milk production as compared to the performance in 2011–12 is likely.

2011–12. The average annual rate of growth of milk production has been around 4 per cent during the last decade which is more than double the growth rate of population. The estimated growth in milk production during 2011–12 is 4.73 per cent over the previous year. The per capita availability of milk has gone up from 197 grams per day in 1995–96 to 281 grams per day in 2010–11 which is close to the global average per capita availability of 284 in 2009–10.

Table IV.13: Milk Production in India

| Year | Production (million tonnes) | Per Capita Availability (gms/day) |
|----------|-----------------------------|-----------------------------------|
| 1991–92 | 55.7 | 178 |
| 1995–96 | 66.2 | 197 |
| 2000-01 | 80.6 | 220 |
| 2005-06 | 97.1 | 241 |
| 2006-07 | 102.6 | 251 |
| 2007–08 | 107.9 | 260 |
| 2008-09 | 112.2 | 266 |
| 2009–10 | 116.4 | 273 |
| 2010–11 | 121.8 | 281 |
| 2011–12* | 127.3 | 289 |

*Anticipated production and derived availability figures based on growth of availability in 2010–11 over the previous year. **Source**: Department of AHD&F, GoI and projected availability as above.

The growth of milk production has been steady over the years although growth rate has fluctuated in a narrow band. Between 1991–92 and 2010–11, annual growth rate of milk production was between 4 and 5 per cent. It fell below 3 per cent only in three years during 2000–01, 2002–03, and 2003–04. Except for 2003–04, the other two years experienced sub-normal rainfall in the monsoon season. The pattern of growth of milk production and rainfall in the monsoon season is shown in Figure IV.37. Actually the monsoon rainfall was below normal in four years during 1999–00 to 2003–04 and the milk production fell below the 3 per cent growth mark in two years. Nevertheless, relatively weak monsoon does put pressure on the availability of key inputs such as green fodder and water affecting yields. In this sense, in the current year, a decline in the rate of increase in milk production as compared to the performance in 2011–12 is likely.

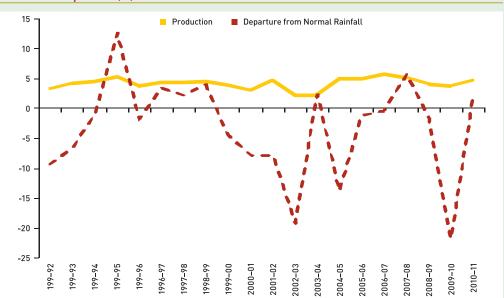


Figure IV.37: Growth rate of Milk Production (% YOY) and Departure of Rainfall from Normal in the Period June-September (%)

Five states in the country account for 50 per cent of the total milk produced (Table IV.14). Uttar Pradesh has the pre-eminent position in milk production followed by Rajasthan, and Andhra Pradesh. Among the top 10 producing states, UP, Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, and Bihar have gained or held on to their shares during the last five years but Punjab, and Tamil Nadu have lost shares in production. The changes in shares are due to changes in the number of animals and also overall productivity. Changing cost structure and markets may have helped some states to improve production. Maharashtra and Tamil Nadu, although hinterlands for supplying to large urban areas, have not been able to significantly raise production whereas Madhya Pradesh and Bihar have successfully maintained production growth at the overall trend at the national level. Focus on policies to encourage production in faster growing states and address constraints in others will help to sustain overall growth in milk production. The current trend of rising prices of milk can be moderated only with improvement in supply.

Despite being the largest milk producer, the productivity of its milch animals in India is one of the lowest in the world. Differences in productivity are large. Improvement in productivity is taking place not only through higher yields of each type of milch animal but also in the composition of milch animal stock.





| | 4. 40.0 | | | |
|--------------------|---------------------|-----------------|-----------------|---------------|
| Table IV 14. Share | of top 10 States in | Milk Production | trom 2006-07 to | 12010-20111%1 |

| S. No. | State | 2006-07 | 2007-08 | 2008-09 | 2009–10 | 2010-11 |
|--------|----------------|---------|---------|---------|---------|---------|
| 1. | Uttar Pradesh | 17.6 | 17.5 | 17.4 | 17.4 | 17.3 |
| 2. | Rajasthan | 10.0 | 10.5 | 10.6 | 10.6 | 10.9 |
| 3. | Andhra Pradesh | 7.7 | 8.3 | 8.5 | 9.0 | 9.2 |
| 4. | Punjab | 8.9 | 8.6 | 8.4 | 8.1 | 7.7 |
| 5. | Gujarat | 7.3 | 7.3 | 7.5 | 7.6 | 7.7 |
| 6. | Maharashtra | 6.8 | 6.7 | 6.6 | 6.6 | 6.6 |
| 7. | Madhya Pradesh | 6.2 | 6.1 | 6.1 | 6.2 | 6.2 |
| 8. | Tamil Nadu | 6.1 | 6.1 | 5.9 | 5.8 | 5.6 |
| 9. | Bihar | 5.3 | 5.4 | 5.3 | 5.3 | 5.4 |
| 10. | Haryana | 5.2 | 5.0 | 5.1 | 5.2 | 5.1 |
| | Others | 18.6 | 18.5 | 18.5 | 18.4 | 18.4 |
| | All India | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: Based on data from Department of AHD&F, Gol.

While the milk yield per milch animal is the highest in the case of crossbred cows, there is a declining rate of improvement in productivity of all three types of milch animals in the last three years (Table IV.15). In contrast, the number of animals is rising faster over the years in the case of buffaloes and indigenous cows. The rate of increase in crossbred cows in 2010–11 is lower than in the previous year.

Table IV.15: Milk Production, Yield and Number of Milch Animals by Type

| Type of milch | No. of animals in milk | Milk yield | Milk production | % change over previous year | | | |
|-----------------|------------------------|------------|--------------------|-----------------------------|------------|--------------------|--|
| animal/ Year | Thousand | Kg/ day | Thousand tonnes | No. of animals in milk | Milk yield | Milk production | |
| Buffaloes | | | | | | | |
| 2007-08 | 35108 | 4.42 | 56630 | | | | |
| 2008-09 | 35380 | 4.48 | 57895 | 0.77 | 1.36 | 2.23 | |
| 2009–10 | 36166 | 4.53 | 59758 | 2.22 | 1.12 | 3.22 | |
| 2010–11 | 37131 | 4.58 | 62350 | 2.67 | 1.10 | 4.34 | |
| Ind. Cows | | | | | | | |
| 2007-08 | 29587 | 2.11 | 22809 | | | | |
| 2008-09 | 29842 | 2.17 | 23650 | 0.86 | 2.84 | 3.69 | |
| 2009–10 | 30199 | 2.20 | 24238 | 1.20 | 1.38 | 2.49 | |
| 2010–11 | 30948 | 2.22 | 25348 | 2.48 | 0.91 | 4.58 | |
| Xbred/ exotic l | oreed cows | | | | | | |
| 2007-08 | 10142 | 6.47 | 24014 | | | | |
| 2008-09 | 10680 | 6.71 | 26160 | 5.30 | 3.71 | 8.94 | |
| 2009–10 | 11262 | 6.80 | 27963 | 5.45 | 1.34 | 6.89 | |
| 2010–11 | 11807 | 6.63 | 29555 | 4.84 | (-)2.25 | 5.69 | |
| Total | | | | | | | |
| 2007-08 | 74837 | 3.79 | 103453 | | | | |
| 2008-09 | 75902 | 3.89 | 107705 | 1.42 2.6 | | 4.11 | |
| 2009–10 | 77627 | 3.95 | 111959 | 2.27 1.6 | | 3.95 | |
| 2010–11 | 79886 | 4.02 | 117253 | 2.91 | 1.77 | 4.73 | |
| | | | | | | | |

Note: The milk production figures here refer to only milk from cows and buffaloes. Another 4-5 million tonnes of milk is produced by goats. **Source:** Department of AHD&F, Gol.

As shown in Table IV.15, productivity of crossbred/ exotic cattle and buffaloes is superior to the indigenous cattle although the indigenous cows are more prominent as compared to the crossbred/ exotic cows. Figure IV.38 shows the composition of milch Population and Production of Milk in 2010–11.

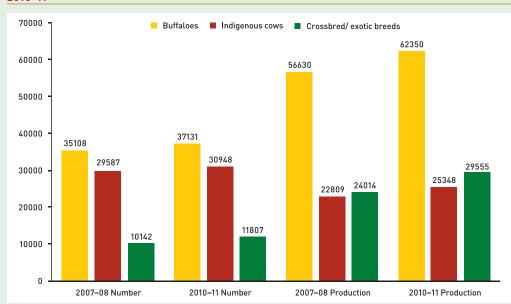


Figure IV.38: Changes in the Composition of Milch Population and Production of Milk: 2007–08 and 2010–11

Note: Number of animals in milk in thousand and milk production in thousand tonnes. Data are from Table IV. 13.

Tamil Nadu, Uttar Pradesh, Rajasthan, Maharashtra and West Bengal are the major cow milk producing states whereas Uttar Pradesh, Andhra Pradesh, Rajasthan, Punjab and Gujarat are the major Buffalo milk producing states. Given the relatively deficient rainfall in Tamil Nadu and Maharashtra, cow milk production may be adversely affected in those states. Because of inadequate monsoon even in the more extensively irrigated states of Haryana and Punjab, fodder production may have been adversely affected leading to some decline in the growth of buffalo milk production in 2012–13.

During 2010–11, cooperative milk unions together procured 26.2 million litres of milk per day and have marketed an average of 22 million litres of milk per day. Procurement by cooperatives accounts for only about 8 per cent of total milk production. Other players in the organised and unorganised sector procure rest of the marketed surplus of milk. Because of lower milk production, there may be increase in marketed surplus in order to increase cash revenues for the farmers.

Consumption and price

About 60-65 per cent of milk is consumed in liquid form, while the remaining is used in the form of processed products such as butter, ghee (clarified butter), cheese, curd, paneer, ice cream, and traditional sweets. There is a growing demand for safe, nutritious, health promoting convenience milk products.

There is wide variation in the consumption of milk (reflected by the per capita expenditure) in the rural and urban areas, with the urban consumer spending nearly 50 per cent more than rural counterpart. The relative share of urban consumers may increase when the production growth is lower. Greater share of urban supplies may also imply





higher cost involved in transportation and processing. The rise in retail milk prices has also been attributed to higher cost of packaging and transportation. To keep the overall costs down for the consumers there will be a need to improve production efficiency and also reduced marketing costs.

Table IV.16: Percentage change in Wholesale Price Indices (% YOY)

| Particulars | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011–12 | 2012-13 (April-August) |
|-----------------|---------|---------|---------|---------|---------|---------|---------|------------------------|
| All Commodities | 4.47 | 6.59 | 4.74 | 8.05 | 3.80 | 9.56 | 8.83 | 7.41 |
| Food Articles | 5.38 | 9.62 | 6.97 | 9.09 | 15.27 | 15.60 | 7.29 | 10.32 |
| Milk | 1.01 | 7.89 | 5.14 | 7.56 | 18.80 | 20.13 | 10.31 | 9.82 |

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Gol.

International Trade

The increased milk production globally in 2012–13 has also led to moderation in the prices of dairy products in the international markets. The FAO's dairy price index has registered declining prices since July 2011. This is in contrast to the rising milk prices in the domestic market. There are issues of subsidies in the dairy sector globally which also need to be kept in view. But efforts to improve productivity and gain competitiveness would be critical to the dairy sector in India in the coming years.

Assessment

Significantly less than normal rainfall in the initial two months of the current monsoon period implies lower growth rate of milk production in 2012–13 than experienced in the previous year. Production in 2011–12 is estimated to have increased by 4.73 per cent over the previous year. In 2012–13, growth of 3.5 to 3.75 per cent is likely to be achieved.

PART V

Summary and Concluding Remarks

The overall GDP growth for the first quarter of the year, April-June 2012 is now estimated to be 5.5 per cent over the same period in 2011–12, well below the 8 per cent mark seen in Q1: 2011–12. The agriculture and allied sectors also registered lower growth rate of 2.9 per cent in Q1: 2012–13 compared to 3.7 per cent in Q1: 2011–12. The overall growth performance this year was affected by stagnation of industrial output and in the case of agriculture, the pre-monsoon rainfall was inadequate. Lower economic growth has also meant that government revenues are under pressure and there is a need to look for strategies that minimise the need for subsidies. The increase in petroleum fuel prices in the wake of high international crude oil prices has implications for prices of farm inputs also. The rising bill for crude oil at a time when export growth is weak has worsened current account deficit and brought exchange rate of the rupee under pressure. Rupee depreciation puts pressure on farm commodity prices.

The monsoon this year brought less than normal rainfall although the overall rainfall during the period of June to September is now estimated to be far closer to the long period average than the experience in June-July. The rainfall deficit from the normal was quite severe at the beginning of the monsoon period leading to delayed sowing and switching of crops from higher yielding varieties and crops to lower yielding but short duration and those with greater resistance to drought like conditions. However, with the revival of monsoon after July, the rainfall improved and in August it was near normal and in September better than normal. For the period June 1 to September 30, the rainfall was 8 per cent below long period average.

North western and Southern regions of the country were most adversely affected by the deficient rainfall. The eastern part of the country experienced relatively better monsoon although deficiency from long period average was there. For example, Eastern UP, Bihar, and Gangetic West Bengal regions received 10 per cent, 21 per cent, and 18 per cent below normal rainfall, respectively, during the period of June 1 to September 30. The uneven rainfall across regions and over the monsoon period has meant that crop production in the *kharif* season is adversely affected.

The initial estimates of *kharif* output in 2012–13 by the Ministry of Agriculture, the 1st Advance Estimates, place overall foodgrain output to be 117.18 million tonnes as compared to production of 129.94 million tonnes in *kharif* 2011–12. Coarse cereals account for 5.9 million tonnes of the total decline of 12.8 million tonnes in foodgrains. Rice accounts for decline of another 5.9 million tonnes. Pulses account for the balance of the drop in *kharif* foodgrain output.

In the oilseed segment, groundnut is expected to show a decline of 25 per cent over the previous year's *kharif* production. Soybean crop is expected to be 0.3 million tonnes higher this year. The output of major oilseeds in *kharif* this year is estimated to be 10 per cent lower than in 2011–12.

The sugarcane output is projected to be 6.3 per cent lower in 2012–13 given the severe deficiency in rainfall in the cane growing regions of Maharashtra and Karnataka.

The increase in petroleum fuel prices in the wake of high international crude oil prices has implications for prices of farm inputs also.

The initial estimates of *kharif* output in 2012–13 by the Ministry of Agriculture, the 1st Advance Estimates, place overall foodgrain output to be 117.18 million tonnes as compared to production of 129.94 million tonnes in *kharif* 2011–12.



Recent estimates by USDA, FAO and other agencies project a decline in the output of wheat, maize, and coarse cereals in 2012-13 as compared to the previous year. The rice production is expected to remain stagnant at the level of 2011-12.

Our own assessment of *kharif* output in 2012–13 is close to the official estimates, although our estimate of coarse cereals is higher than the official estimates.

The deficient monsoon is also expected to have an adverse impact on the production of onions, potatoes, and banana. Although there are no official estimates of production for these commodities yet, an assessment based on the past trends and the extent of rainfall deficiency in the producing regions suggests that production levels would be lower in the case of onions. Potato production is expected to register a growth of 5-7 per cent, well below the trend growth of about 9 per cent in the recent years. In the case of banana, we expect no increase in the production level in 2012–13 as compared to 2011–12. Sugar production is expected to decline to 24 million tonnes in 2012–13 as compared to 26 million tonnes in 2011–12. In the case of milk also, we project lower rate of increase in production by 3.5-3.75 per cent in 2012–13 as compared to an estimated growth of 4.73 per cent in 2011–12.

The global production scenario for 2012–13 is also mixed. Recent estimates by USDA, FAO, and other agencies project a decline in the output of wheat, maize, and coarse cereals in 2012–13 as compared to the previous year. The rice production is expected to remain stagnant at the level of 2011–12 especially given the deficient rains in India. The expected decline in wheat and maize production has led to price increases in these commodities. The international market prices of wheat, maize, and soybean have increased steadily since January this year. The rice and soy oil prices have been steady but palm oil and sugar prices are showing declining tendency. The futures market prices show firming up of many of the commodity prices till the end of 2012.

The availability of vegetable oils is expected to be adequate to meet India's annual import needs even with a lower domestic output. The carryover stocks globally of the previous year would supplement the production.

Pulses are another commodity, besides edible oil for which India is dependent on imports to a significant extent. The production prospects in Canada, Myanmar and Australia are expected to be better than in 2011–12, again, offsetting the decline in production in India.

The higher wheat, maize prices in the international market and steady rice prices provide an opportunity for India's exports. The large stock of grain with the government ensures that supplies to the domestic market are adequate. In the case of sugar, the declining sugar prices in the international market when domestic prices are on the rise imply that exports may not achieve the high levels of last year and stocks will remain high. The scenario in the case of milk is also similar: high domestic prices but declining international prices of dairy products. The subsidies in the farm commodities make it difficult to interpret the longer term competitiveness of Indian produce in these sectors. But, monitoring these trends would be of significance to the efficient use of scarce resources such as land and water.

The supply-demand balances for select commodities for 2012–13 show that in the case of onion, edible oils and pulses, the demand pressures would be greater on available supplies. Prices are expected to be showing increasing tendency during the year. The review of retail prices in the metro cities shows significant variation across cities for the same commodity. The pattern of retail and wholesale prices for the same commodities also show the need for improvement in marketing efficiency which may also help in reducing inflationary pressures from food commodities.

