

Impact on Rice Economy in India

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ABSTRACT

Rice is the most important cereal food crop of India, occupying one-fourth of the gross cropped area of the country. As the basic food crop, rice is cultivated comfortably in hot and humid climate. In the country, the crop is mainly grown as a Kharif crop in rainfed areas that receive heavy annual rainfall. India's already large population is expected to become the world's largest in the next 20 years, while its economy will soon overtake Japan's to become the world's third largest. India has a particularly large agricultural sector. While the sector's share of GDP has halved in the past 30 years to around 15 per cent, it still employs around half of India's workforce and accounts for much of the volatility in Indian GDP. India has the second largest area of arable land in the world and is a major producer of a number of Agricultural products. The study aims to understand the Trends of Rice Production in India, share of Production of Rice in the overall Agricultural Output, and the challenges faced by farmers in cultivating paddy India. Methodology of the study Secondary data has only been used in the paper.

1. INTRODUCTION

Rice is the most important cereal food crop of India, occupying one-fourth of the gross cropped area of the country. India's already large population is expected to become the world's largest in the next 20 years, while its economy will soon overtake Japan's to become the world's third largest. The resulting increase in the demand for food will need to be met through higher agricultural productivity or by increasing food imports. This article discusses some of the key areas of progress and challenges for India's agricultural sector, including: productivity, water management, government policies and programs, and food distribution and storage.

2. OBJECTIVES OF THE STUDY

- To Analyze the Trends of Rice Production in India.
- To analyse the share of Production of Rice in the overall Agricultural Output.
- To analyze the challenges faced by farmers in cultivating paddy.

3. METHODOLOGY

The study is based on Secondary data. The source material for secondary data is collected through books, journal, magazine and internet.

4. REVIEW OF LITERATURE

Singh et al., (2005) has pointed out the rice economy of India. They noted that India's rice economy had undergone tremendous changes since the launch of green revolution technology during the late 1960s. The profound impact had been aptly witnessed in the rice whose production had shown spectacular increase and enabled the country to move from chronic food shortage to an era of food surplus. Besides, technology and increased use of inputs, government interventions and support in terms of minimum guaranteed prices of output and large scale procurements from producers at remunerative prices had played a key role in the growth of rice economy.

THE TRENDS OF RICE PRODUCTION IN INDIA

Due to a decrease in production and robust domestic consumption growth, India's rice surplus will shrink to its lowest level since 2009/10 in 2014/15. In the longer term, India's exports could pick up again and exceed 10mn tonnes annually should the government manage to reform, as planned, the Food Corporation of India and the country's export mechanisms. Regarding prices, we see CBOT rice averaging higher over the year as the global market records its first production deficit in 10 years in 2014/15.

India's rice production in the ongoing 2014/15 season (October-September) will decline. We have revised down our estimate for output, as the 2014 summer monsoon performance was subdued. We now see production coming in at 102.8mn tonnes, down 3.2% year-on-year (y-o-y), compared with a previous estimate of 103.0mn tonnes. Monsoon rains picked up after a late and low start. June-September rains came in 12% below the 50-year seasonal average, after amounting to only 59% of long term averages over June to mid-July. Moreover, some of the largest rice growing states, including Uttar Pradesh, Punjab and Andhra Pradesh, were among the driest. Plantings picked up after a slow start with the recovery in rains in July, which will help area harvested remain at elevated levels. However, we believe the lack of rain will negatively affect yields, which will decrease from the elevated level recorded over the past four years, to 3.52 tonne/ha, compared with 3.64 tonne/ha achieved in 2013/14.

Due to the decrease in production and robust domestic consumption growth, India's rice surplus will shrink to its lowest level since 2009/10 in 2014/15, amounting to 4.5mn tonnes. This, coupled with decreasing (albeit still comfortable) stocks and growing competition coming from Thailand, will lead to a decrease in India's rice exports this season. We believe India's rice exports will undershoot the US Department of Agriculture's estimate of 8.7mn tonnes in 2014/15, and will be closer to 7.0-8.0mn tonnes, compared with 10.3mn tonnes exported in 2013/14. This compares with around 10.0mn tonnes for Thailand in 2014/15.

In the longer term, India's exports could pick up again and exceed 10mn tonnes annually should the country reform its export mechanisms. Modi's government will most likely reform the country's Food Corporation of India (FCI), its paramount agency in charge of the country's stockpiling policy and its public food distribution programme for the poor. The government's appointed committee in charge of advising on the reform gave its recommendations in January 2015, pledging for greater private participation in the storage and distribution of grains in a bid to avoid wastage and drive greater efficiency. Should the FCI hand over its storage of food grains to state-run warehouses and private companies, and should the government simplify the lengthy and inefficient process to export grains as advised by the panel, we believe India's rice and wheat exports could receive a significant boost. Indeed, these changes would reduce wastage and export costs as well as shorten the procedures.

SECOND-MONTH CBOT ROUGH RICE, USD/CWT (WEEKLY) & RSI (BELOW)

International rice prices will remain subdued over the coming one-to-three months, as the global market is well-supplied, especially in the US following the harvest of a bumper crop in October 2014. Prices will start heading higher from Q215, as we forecast the market to tighten over the year. We forecast production in the US to decline in 2015/16, for which plantings will occur in April-May, as area under cultivation is unlikely to match the five-year high recorded last season. CBOT rice prices are traded in the US and are therefore particularly linked to trends in US supply. Meanwhile, Asia's production in 2014/15 (which broadly corresponds to the 2015/16 US crop for the majority of Asian countries) will disappoint; we see output declining in India and Thailand. We forecast rice prices to average USD14.00/cwt in 2015, as the global market will record its first production deficit for ten years in 2014/15, of 3.2mn tonnes.

THE SHARE OF PRODUCTION OF RICE IN THE OVER ALL AGICULTURAL OUTPUT

Since 2010, production as well as yield of both major crops - rice and wheat has increased significantly. In FY16, production of rice stood at 103.61 million tonnes, whereas, production of wheat stood at 93.82 million tonnes. However, according to 3rd advance estimates, production of wheat in 2016-17 stood at 97.44 million tonnes and that of rice was 109.15 million tonnes. In FY16, as per the 4th advance estimates, yield of rice in the country reached 2.39 tonnes/hectare and that of wheat reached 2.4 tonnes/hectare. Ministry of Agriculture is targeting to achieve 270.1 million tonnes production of food grains, during 2016-17. Backed by robust output of wheat, rice and pulses due to a heavy rainfall in 2016, the country's food grain production increased by 8.7 per cent to a record high 273.83 million tonnes in 2016-17

INDIA RICE MARKET

Rice is the most important cereal food crop of India, occupying one-fourth of the gross cropped area of the country. As the basic food crop, rice is cultivated comfortably in hot and humid climate. In the country, the crop is mainly grown as a Kharif crop in rainfed areas that receive heavy annual rainfall. India is the second largest rice producer in the world after China, with 21% of the global production share. The rice production has increased by 3.5 times in the last 60 years. The country's productivity is higher than Thailand and Pakistan at 2.2tons/ha. Major rice producing states in India are West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Tamil Nadu, Odisha, and Bihar. India has been the top exporter in global rice trade, accounting for 25% of the export in the last four years. Indian rice caters to the Middle East and Africa for non-Basmati, and the EU and the US for Basmati variety.

The drought-affected crop during the 2014-15 crop year has put a crunch on the Indian rice market. However, a better monsoon forecast, government intervention, and better farming practices are expected to result in higher yield despite lower crop acreage. Overall, the sentiment for the global rice market is moderate in terms of market demand and production for the next five years. The country's rice market is competitively positioned, as the pricing of the rice crop is cheaper than any other country, except Pakistan. India's MSP of non-Basmati paddy is around USD 224/MT.

STATE OF AGRICULTURE OF INDIA

Agricultural productivity depends on several factors. These include the availability and quality of agricultural inputs such as land, water, seeds and fertilizers, access to agricultural credit and crop insurance, assurance of remunerative prices for agricultural produce, and storage and marketing infrastructure, among others. This report provides an overview of the state of agriculture in India. It discusses factors related to the production and post-harvest activities in agriculture. As of 2009-10, more than half of the total workforce (53%) of the country, i.e. 243 million persons were employed in agriculture. 1 The share of population depending on agriculture for its livelihood consists of landowners, tenant farmers who cultivate a piece of land, and agricultural labourers who are employed on these farms. Agricultural output has been volatile over the past 10 years, with annual growth ranging from 8.6% in 2010-11, to -0.2% in 2014-15 and 0.8% in 2015-16. 2 Figure 3 shows the trend in the growth of agricultural sector over the past 10 years. the agriculture sector's contribution to the Gross Domestic Product (GDP) decreased from 54% in 1950-51 to 15.4% in 2015-16, while that of the services sector increased from 30% to 53%. 3,2 While the agriculture sector's contribution to GDP has decreased over the past few decades, the contribution of sectors such as manufacturing (employing 10.5% of the population) and services (employing 24.4% of the population) has increased

AGRICULTURAL PRODUCTION AND YIELD FIGURE

Total production of food grains increased from 51 million tonnes in 1950-51 to 252 million tonnes in 2015-16.4 According to the second advance estimate by the Ministry of Agriculture, food grains production is estimated to be 272 million tonnes in 2016-17.5 ♣ The production of wheat and rice took off after the green revolution in the 1960s, and as of 2015-16, wheat and rice accounted for 78% of the food grains production in the country.

The country's requirement for food grains in order to provide for its population is projected to be 300 million tonnes by 2025. 6 The estimate of food grains production in 2015-16 is 252 million. This implies that the crop output needs to grow at an annual average of 2%, which is close to the current growth trend. Despite high levels of production, agricultural yield in India is lower than other large producing countries. Agricultural yield is the quantity of a crop produced on one unit of land. Agricultural yield of food grains has increased by more than four times since 1950-51, and was 2,070 kg/hectare in 2014-15.7 However, as seen in Figure 6, India's yield is low when compared to countries such as China, Brazil and the USA. Although India is the second highest producer of paddy (rice) in the world (as of 2013), its yield is lower than China, Brazil and the USA. It is also the leading producer of pulses, but its yield is the lowest. 8,9 India's productivity has also grown at a slower rate as compared to others. For instance, while Brazil's yield for rice increased from 1.3 tonne/ha in 1981 to 4.9 tonne/ha in 2011, India's increased from 2.0 to 3.6. China's productivity in rice also grew from 4.3 to 6.7 in this period.

CHALLENGES FACED BY FARMERS IN CULTIVATING PADDY

Paddy farmers had launched their fast to protest against the high fertilizer prices on January 19 in a number of places such as Polonnaruwa, Ampara, Embilipitiya, Anuradhapura, Galgamuwa, Ambalantota and Mahiyangana. The fast was organized by the All Ceylon Peasant Federation demanding that fertilizer should be supplied to the farmers at Rs. 500 per bag. Actually, the government provides fertilizer subsidy. This subsidy which was Rs. 300 a bag was raised to Rs. 450 per bag of urea fertilizer in the Budget of 2004. The cost of this subsidy to the government was raised consequently from Rs. 2000 million to Rs. 3000 million. During January 2004 however, the international prices of petroleum increased and as a result the international prices of urea too increased. A bag that cost Rs. 800 increased to Rs. 1050. As their fast had no impact on the authorities, the Peasant Federation launched a death fast on February 6 opposite the Fort Railway Station to force the government to bring down the price of urea fertilizer. Thirteen farmers including a JVP Parliamentarian and a 75-year-old woman joined in their death fast. On the same day however, the government announced that it would absorb the entire increase as price in toto in addition to the subsidy of Rs. 450 a bag. The price of urea fertilizer will therefore remain at last November's price of Rs. 800 per bag.

The government has negotiated with the major importers of fertilizer and persuaded them to agree to sell a bag of urea at Rs. 800. Farmers were not satisfied and continued their death fast for four days demanding a fertilizer price of Rs. 500 a bag. On the 9th however, they called off their death fast on an assurance given by former Parliamentarians Anura Bandaranaike and Wimal Weerawansa that the new government of the Freedom Alliance to be formed after the April general election will reduce the fertilizer price and will further provide solutions to all problems faced by the farmer community. Last year farmers protested against low and remunerative prices in the private market for paddy. In fact, some farmers who were unable to pay their loans had committed suicide. The government consequently offered a price of Rs. 13.50 a kilo of paddy and provided credit facilities to cooperative societies and government agencies to intervene in the market to raise prices. These measures provided some relief. The question of low producer price is likely to recur every season, particularly when there is a bumper crop and there needs to be a permanent solution to this problem. The low price is partly because the government stopped intervening in the market through the Paddy Marketing Board, which was practically wound up without a substitute.

A FERTILIZER SUBSIDY

The fact that India subsidizes agricultural inputs strengthens the case for subsidizing fertilizer. It may be difficult to bring fertilizer prices down without a subsidy. The developed countries are well known for protecting their agriculture both through import tariff and producer subsidies. It is estimated that they spend \$360 billion a year on agricultural subsidies. Paddy cultivation is the backbone of the rural economy and its development helps to reduce poverty.

5. CONCLUSION

India's agricultural sector is still very important to the Indian economy, although its share of the economy has decreased over the past 50 years. India has made significant advances in agricultural production in recent decades, including the introduction of high-yield seed varieties, increased use of fertilisers and improved water management systems. Reforms to land distribution, water management and food distribution systems will further enhance productivity and help India meet its growing demand for food.

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