

PERFORMANCE OF ONION PRODUCTION IN INDIA

Dr. S. Theenathayalan

*Head, Department of Economics and Centre for Research in Economics,
The Madura College (Autonomous), Madurai - 11*

J. Devika Rani

*Ph.D. Research Scholar, Department of Economics and Centre for Research in Economics,
The Madura College (Autonomous), Madurai - 11*

Abstract

Onion is one of the most important vegetables which is grown in most part of the country and are specially used as spices to add flavour and taste. Onion bulb is rich in mineral like phosphorus, calcium and vitamins. Onion has medicinal values, it is used in some pharmaceutical preparations also. India is the second largest producer of onion in the world producing about 15 percent of global onion production preceded by china, which contributes about 30.2 percent of total global production in 2010-11.

Keywords:

spices, production, cookery, export, storage, reverse trend

Queen of Kitchen

Onion is used both in green and mature stage for salad and spice in a variety of flavored dishes and soups. It is very important in cookery, hence it is called the "Queen of kitchen" by Germans.

India is the second largest producer of onion in the world producing about 15 percent of global onion production produced by China. Other major producer in the world are USA(5.3 percent), Turkey (3.3), Pakistan (2.8), Russian federation (2.8), Egypt (2.1), Brazil (1.87), and Mexico (1.8). The global productivity of onion is 18.7 in 2008.

Demand of Onion from India

India is a traditional exporter of fresh onion. Soon after independence in 1951-52 the country was exporting over 5 thousand metric tonnes (MT) of onion worth Rs.106.69 lakh. Exports of onion started expanding rapidly during the 1960s and reached a high of 512 thousand metric tonnes in 1996-97. There was substantial increase in per unit value of onion from Rs 1733 per metric tonnes during 1981-82 to Rs 4078 per metric tonnes during 1990-91. Over the years there has been a progressive increase in the exports of onion from India and touched a peak of 1873 thousand metric tonnes during 2009-10. The quantum had touched a level of 1158 thousand metric tonnes during the financial year of 2010-11 up to November 2010. The large quantity of onion export is also one of the reasons for sudden spurt in the prices of onion during December 2010. Exports of onion from India are regulated and permitted only through certain designated canalizing agencies.

Review for Earlier Studies

Subhash (1990) reported different technological socio - economical and infrastructural constraints coming in the way of exploiting full production potential, storage and marketing of potato like ignorance of some components of potato technology, high cost of time in the close vicinity of the village, risk of damage of the crop in cold storage without any compensation for the same. Non availability of the cold storages in the rural areas to ensure the farmers to market their produce at the remunerative prices and non availability of funds with the farmers to meet high cost of cultivation.

Shivaraya and Hugar (2002) pointed out that the prices of onion and potato increased as there is increase in arrivals in Belgaum, Hubli, Raichur and Gulbarga markets. However, reverse trend was observed in other markets. The correlation co-efficient association in storage cost Dharwerd. Bjjapur and Raichur markets and potato in Dharwad market. This clearly indicated that the prices of onion and potato were mainly influenced by their arrivals in these markets in accordance with the law of demand and supply. The substantial quantity of arrivals during post harvest months of the year led to decline in prices. The development of warehousing facilities and provision of credit to the farmers against warehouse receipts would go a long way in reducing the variation in arrivals and prices. This also calls for dissemination of market information relating to arrivals prices etc., by the respective agricultural produce market committees.

Objectives

1. To find out the productivity of onion in India.
2. To analyze the Trend of onion production in the Area.

Methodology

For this study the secondary data has been collected from the Indian Horticulture Database-2010. To analyze productivity of onion and to analyze production trend of onion in India trend value have been applied. Trend value were estimated with the help of following method of least square model.

$$Y_c = a + bX \quad \text{where } Y_c \text{ -Trend values } X \text{ - Time } a \text{ and } b \text{ are Constants}$$

India's Onion Production

Indian onions are famous for their pungency and are available round the year. Indian onions have two crop cycles, first harvesting starts in November to January and the second harvesting from January to May. The Major onion production states are Maharashtra, Gujarat, UttarPradesh, Orissa, Karnataka, Tamilnadu, Madhya Pradesh, and Bihar. Maharashtra ranks first in onion production with a share of 18 percent in terms of productivity.

Table 1 Area of onion cultivation in India from 2001-02 to 2010-11

Year	Area (in hectares)	Trend Value	Annual Growth Rate
2001 - 02	4,95,800	4,46,945.46	-
2002 - 03	4,24,700	5,03,477.58	-14.340

2003 - 04	5,53,800	5,60,009.7	30.397
2004 - 05	6,13,800	6,16,541.82	10.834
2005 - 06	7,03,600	6,73,073.94	14.630
2006 - 07	7,68,000	7,29,606.06	09.153
2007 - 08	8,21,000	7,86,138.18	06.901
2008 - 09	8,34,000	8,42,670.3	01.583
2009 - 10	7,56,200	8,99,202.42	-09.328
2010 - 11	10,42,500	9,55,734.54	37.860

Source : Indian Horticulture Database - 2010 & Ministry of agriculture, Government of India

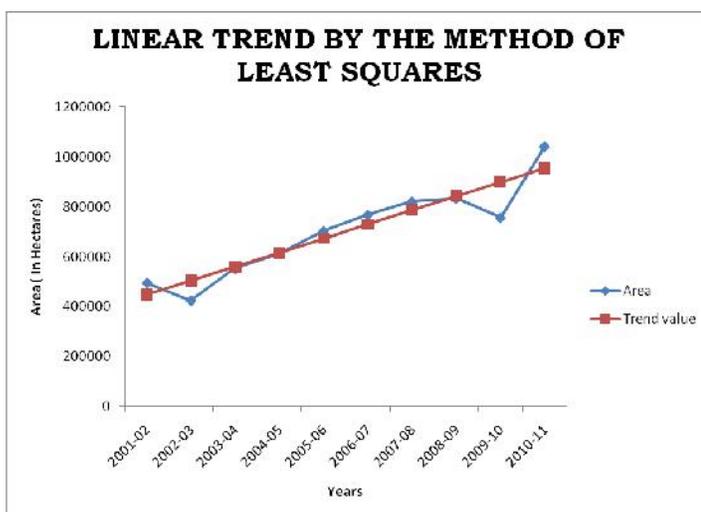


Table 1 reveals that the area under onion cultivation in India was highest in 2010-11 and lowest in 2002-03. The area under onion cultivation has gone up from 4,24,700 hectares in 2002-03 to 10,42,500 hectares in 2010-11. It is seen from the picture that there is a variation in the growth of cultivation of onion in terms of area. Except 2002-2003 and

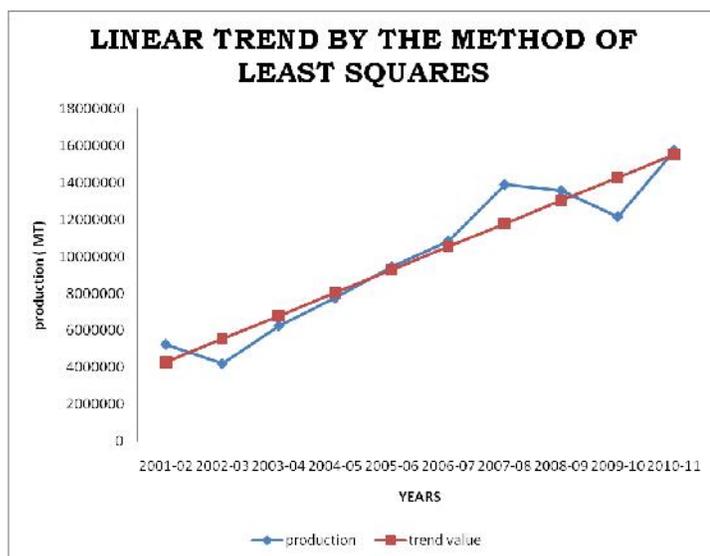
2009-10 the growth rate seems to be positive. The reason is that the production of onion and its price were low.

Trends in onion production

Table 2 Onion production in India from 2001 - 02 to 2010- 11

Year	Production MT	Trend Value	Annual Growth Rate
2001 - 02	52,52,100	42,84,214.5	-
2002 - 03	42,09,500	55,35,309.1	-19.85
2003 - 04	62,67,600	67,86,403.6	48.89
2004 - 05	77,60,600	80,37,498.2	23.82
2005 - 06	94,32,500	92,88,592.7	21.54
2006 - 07	1,08,47,000	1,05,39,687.3	14.99
2007 - 08	1,39,00,000	1,17,90,781.8	28.14
2008 - 09	1,35,65,000	1,30,41,876.4	-02.41
2009 - 10	1,21,58,800	1,42,92,970.9	-10.36
2010 - 11	1,57,48,300	1,55,44,065	29.52

Source : Indian Horticulture Database - 2010 & Ministry of agriculture, Government of India



From Table - 2 it is observed that the production of onion in India ranged from minimum of 42,09,500 metrictonnes in 2002-03. The highest production is 1,57,48,300 metrictonnes in the year 2010-11 being the trend value of 1,55,44,065. Onion production in the country has shown steady increase in the last five years, except in 2009. The annual growth rate value

reveals that in 2003-04 the production growth rate has increased as 48.89. But in 2009-10 the growth rate shows negative value which implies that the production dropped significantly due to unseasonal rains during lack khariff season and changes in relative prices of competitive prices.

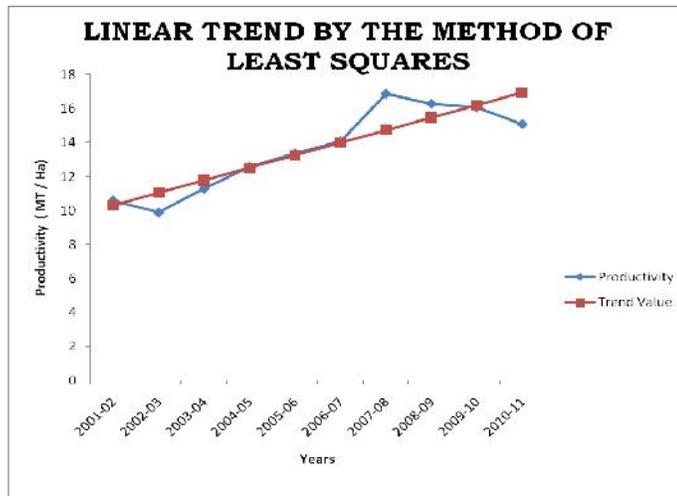
Productivity of onion

The average yield of onion per hectare and the trend values are exhibited in Table -3.

Table 3 Productivity of onion in India from 2001- 02 to 2010- 11

Year	Productivity (MT / Ha)	Trend Value	Annual Growth Rate
2001 - 02	10.6	10.30	-
2002 - 03	9.9	11.04	-06.604
2003 - 04	11.3	11.78	14.141
2004 - 05	12.6	12.52	11.504
2005 - 06	13.4	13.26	06.349
2006 - 07	14.1	14.00	05.224
2007 - 08	16.9	14.74	19.858
2008 - 09	16.3	15.48	-03.550
2009 - 10	16.1	16.22	-01.227
2010 - 11	15.1	16.96	-06.211

Source : Indian Horticulture Database - 2010 & Ministry of agriculture, Government of India



From Table 3 it could be seen that the productivity of onion per hectare ranged from 9.9 to 16.9 kilograms. The productivity per hectare decreased from 10.6 kilograms in 2001 - 02 to 9.9 kilograms in 2002 - 03. The yield per hectare which stood at 9.9 kilograms in 2002 - 03 increased to 16.9 in 2007 - 08. The Annual growth rate value shows that in 2007-08 there is high growth rate of productivity. After onion productivity falls in negative value. Because of low

fertility soil, inferior seeds, natural calamities etc.

Suggestions

Vegetable growers are deprived of fair prices for their produce in the absence of proper storage and preservation. The government should take instantaneous initiatives in the field of production and marketing activities can be carried out under the supervision of the appropriate agencies. A regulated market, to some extent can do the needful to redress the grievances of the producers. Installation of cold storage facilities can play an important role to store the surplus producer in the glut period and to supply the surplus in the lean season. The government should come forward to announce the minimum pricing policy so as to fine-tune the price variation and also to save the farmers from huge losses.

Conclusion

Onion is one of the sensitive crops. Both in terms average area of onion cultivation and production. India occupies an important place. But from the point of view of productivity per hectare India's productivity is not satisfactory. The reason attributed for due to unseasonal rains and high temperature at the time of harvesting during April - may the quality of onion has been affected. The important problem faced by the cultivators in the storage and marketing of onion were lack of knowledge about recommended post harvest technology, more numbers of intermediaries and unpredictable price fluctuations.

References

1. Indian Horticulture Board, Government of India.
2. Deshmukh. M. S. (2010), "Economics of onion cultivation and Export in India - A state level Analysis", southern Economist, Vol - 48, No - 17 pp- 39 - 42.
3. Lokhande, T.N, Barakade, A.J. (2011): Problems of onion storage and Marketing in satara District of Maharashtra, Vol - 1, PP- 80 - 87.
4. Pramedkumar, et.al: Study of Storage losses and marketing of onion in district Jaunpur of Eastern Uttarpradesh, Agricultural Marketing, Jan - March - 2005, PP- 25 - 28.
5. Shivaraya,B and Hugar L.B. 2002, Pace and Pattern of arrivals and prices of vegetable in Karnataka, Rural India, 65 (4) 72-75.
6. Subhash.C., 1990 knowledge and adoption and constraints of potato technology. Indian. J.Extn. Education., 26: 94-98.