International Journal of Research
Available at https://edupediapublications.org/journals
e-ISSN: 2348-6848
p-ISSN: 2348-795X
Volume 05 Issue-01
January 2018

The Trends in Production and Imports of Pulses in India

Dr. Sandeep Kumar
Lecturer (Economics) Dept. of school Education, Haryana

ABSTRACT

Agriculture *is cardinal sector of Indian economy. Our economy based on agriculture weather it is directly or indirectly. India is self-sufficient in agricultural products, but still now the India is a food deficit country facing malnutrition and high incidence of poverty. Pulses are the rich and approachable source of proteins, fiber, minerals and iron. So by escalating the consumption of pulses micronutrient deficiency as well as protein-energy malnutrition can be reduced up to some extent. Keeping the importance of pulses production and consumption in view an attempt has been taken in present research paper to examine the trends of production, area and imports in India. The study based on secondary data. Study concludes that there was a rapid growth in demand of pulses after 2014 in India. Despite that fact the production and imports were also sharply increase that period. But the rates of imports were more as compare to production. The degree of correlation was high and significant among different variables.*

KEY WORDS- Imports, Production, Area, Agriculture

Abbreviation-

MSP- Minimum support Price, CAGR- Compound annual growth rate,

INTRODUCTION

Agriculture is the major sector of Indian economy. Almost 60 percent of our populations are directly or indirectly involved in this sector since Mughal time. It also provides the raw material to our major industries. From medieval ages in North India, industries like Sugar, Cotton, Fiber, Rubber,Silk, Alcohol and paper are fully dependent on agriculture sector. The significance of agriculture became more wide when this sector provide food to 125 crore people. With the change in time and new innovation in technology, the share of agriculture sector in the GDP of the country has decreased from 55.1 per cent in 1950-51 to 17.4 per cent in 2013-14(Economic Survey). Despite that the importance of agriculture sector has not diminished due to two major reasons. India is self-sufficient in agricultural products, but still now the India is a food deficit country facing malnutrition and high incidence of poverty. Second problems are regarding the employment i.e. half employment and seasonal employment has still exist in agriculture sector, and it results the lower per capita productivity.

Malnutrition is a problem that caused by the consumption of unbalances diet un-nutrient diet.India is having highest number of malnourished children under age of 5 years.The World Bank estimates that India is one of the highest ranking countries in world for the number of children under weight or suffering from the problem malnutrition. According to the fourth round of the National Health and Family Survey (NFHS-4) twenty-one per cent of children were wasted and thirty-eight per cent were stunted in 2014-15. A healthy diet is the only way to improve to present situation. Pulses are the rich and approachable source of proteins, fiber, minerals and iron. So by escalating the consumption of pulses micronutrient deficiency as well as protein-energy malnutrition can be reduced up to some extent. According the national survey of The Hindu-CNN-IBN state in 2006 around thirty-one per cent of peoples are vegetarian in India **(Yadav and Kumar 2006**). The daily requirement of an average person is 56 grm of protein daily and 100 grm of pulses contain around 25 grm of protein. A large part of the daily protein requirement of an average person can only be fulfilled just by including two servings of pulses in the daily diet (UNICEF 2016).

The food habit of Indians is changing very fast. People demands pulses in their daily routine diet. It has increased the demand of pulses over the years. Consumption patterns are affected by increase in income, globalization, urbanization, changing prices, demographic shifts and changes in the taste and preferences of the consumers. On examining the National Sample Survey (NSS) data on consumer expenditure, it is found that the expenditure on pulses in total food basket has increased over the years. Percent share of total food expenditure on pulses has increased from 6.3 percent in 1987-88 to 6.9 percent in 2009-10 in rural areas and 6.0 percent in 1987-88 to 6.6 percent in 2009-10 **(Kapila, 2015-16)**. India is the largest consumer, producer and importer of the pulses in the world and it is a country with the favorable agro-climatic condition for pulses, which can not only fulfill the demand of country, rather it may export pulses to the rest of world when our farmers are trained with skilful utilization of technology **(Narayan and Kumar,2015)**. Pulses can be sown in rain-fed areas because of its climate resilient properties. They can fix nitrogen in the soil naturally and decrease the use of nitrogenous fertilizers. Pulses are beneficial for mixed cropping and crop rotation as the sowing of pulses enrich the soil with nitrogenous compounds. Sustainable

agriculture can be promoted by increasing the area under pulses as an inter-season crop because the requirement of the chemical fertilizers can be reduced for the next succeeding crop **(Rampal, 2017)**. Hence an attempt has been made in this research work to examine the trends and correlation of production, MSP, area under cultivation, and imports of pulses in India from 2000-01 to 2016-17.

Objective of the study-

I) To examine the trends of production, area under cultivation, imports and MSP (minimum support price) of pulses in India.

II) Explore the correlation between production, area, imports and MSP (minimum support price) of pulses in India.

Research Methodology-

The study is explorative in nature. The present research work is based on secondary data collected from various published and unpublished sources. Data regarding production and area was being collected from the different office and official websites of Agriculture Departments of India. Data regarding the imports and has been collected from the web site of Ministry of commerce and RBI Hand book-2017. Statistical tools like SD, CV, Mean, CAGR, and correlation have been used by the researcher.

Result discussion-

In this part of the research paper trends regarding the production, area, imports and MSP (minimum support price) of pulses have been explained. Government of India announced MSP (minimum support price) for major four pulses i.eGram, Arhar, Mung&Urad, for the purpose of data simplification average MSP of these pulses have been taken.

Table 1.1 and figure 1.1, 1.2 explains the trends of pulses. Table explains that average MSP of pulses was 1175 Rs. in 2000-01 and it was 4818 Rs, in 2016-17. In case of export table shows that total import of pulses in 2000-01 was 4.99 billion Rs. which increased by 285.20 billion Rs. in 2016-17. The production and area of pulses were 11.07 million tones and 20.35 hectare in 2000-01 and it grow by 22.95 million tonnes and 29.46 million hectare in 2016-17 respectively as shown in table 1.1. The result also indicates that there was a diminutive improvement in per hectare production of pulses from 2000-01 to 2016-17.

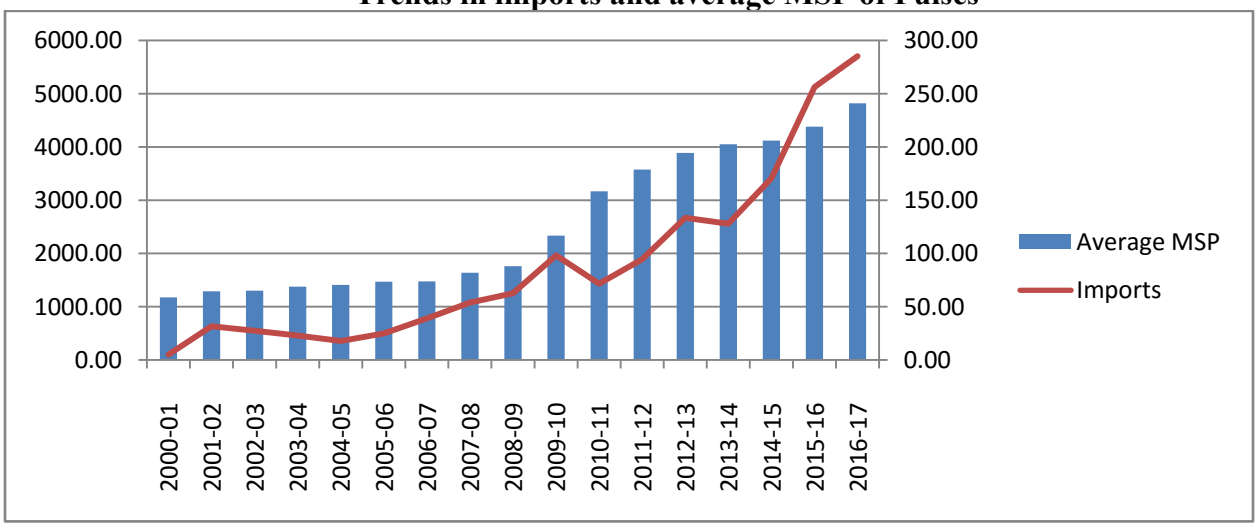
Table 1.2

Trends in Production, Area under cultivation, imports and average MSP of Pulses

Years	Average MSP Gram, Arhar, Mung&Urad Rs./Quintals	Imports (In Billion Rs.)	Production (million tonnes)	Area (million Hectare)
2000-01	1175.00	4.99	11.07	20.35
2001-02	1290.00	31.60	13.37	22.01
2002-03	1300.00	27.37	11.13	20.50
2003-04	1375.00	22.85	14.91	23.46
2004-05	1408.75	17.78	13.13	22.76
2005-06	1468.75	24.76	13.38	22.39
2006-07	1473.75	38.92	14.20	23.19
2007-08	1637.50	53.75	14.76	23.63
2008-09	1760.00	62.46	14.57	22.09
2009-10	2335.00	98.13	14.66	23.28
2010-11	3167.50	71.50	18.24	26.40
2011-12	3575.00	94.50	17.09	24.46
2012-13	3887.50	133.40	18.34	23.26
2013-14	4050.00	127.90	19.25	25.23
2014-15	4118.75	170.60	17.15	23.10
2015-16	4381.25	256.20	16.35	24.91
2016-17	4818.75	285.20	22.95	29.46

Source- Ministry of Agriculture and farmers' welfare, Govt. of India
RBI Hand book -2017

Fig. 1.1
Trends in imports and average MSP of Pulses

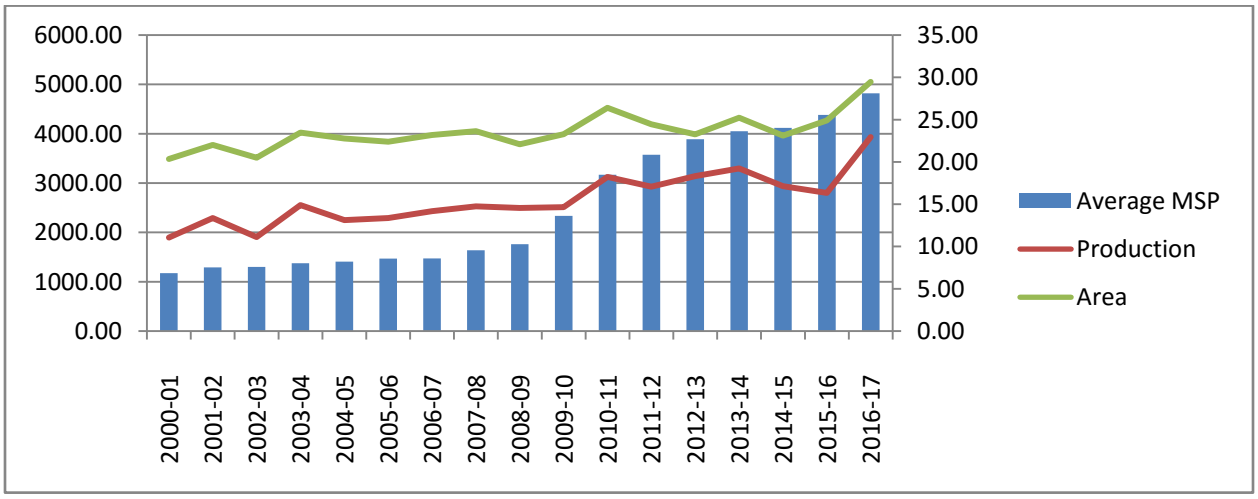


Source- Ministry of Agriculture and farmers' welfare, Govt. of India
RBI Hand book -2017

Figure 1.1 shows the positive and increasing trends in MSP of pulses. Imports were increase with high rate high after 2009-10. In case of imports figure indicate a positive and increasing trends. The result were slightly different from MSP as there was some negative trends also found in 2009-10 and 2013-14 in imports of pulses.

Figure 1.2 explains the trends in Production and area and MSP. Figure shows that area under cultivation of pulses and productions of pulses trends were similar. As there were a decreasing trends in both the variable in 2003-04, 2011-12 and in 2014-15. There were a sharp improvement in area and production in 2015-16. This kind of sharp improvement can also be noted from the data regarding imports of pulses as the imports of pulses were sharply increase after 2014 to 2017.

Fig 1.2
Trends in Production, Area under cultivation and average MSP of Pulses



Source- Ministry of Agriculture and farmers' welfare, Govt. of India
RBI Hand book -2017

Results conclude that there was a rapid growth in demand of pulses after 2014 in India, as the production and imports were sharply increase that period. The trends of MSP, imports, area and production were always positive and increasing.

Table1.2
Statistical Analysis of Trends

	Average MSP	Imports	Production	Area
Average	2542.50	89.52	15.56	23.56
S.D.	2622.94	94.50	15.83	23.75
Min.	2701.35	98.20	15.97	23.85
Max	2783.78	102.36	16.26	24.05
CAGR (in percent)	8.66	26.87	4.38	2.2
CV (in percent)	103.16	105.56	101.73	100.80

Source- Ministry of Agriculture and farmers' welfare, Govt. of India
RBI Hand book -2017

Table 1.2 explains the results regarding the trends and variation in variables. average value of variables in selected periods were 2542.5, 89.52, 15.56, and 23.56 respectively for MSP, imports, production and area. Maximum and minimum limits of the variables were 2701.35 to 2783.78, 98.20 to 102.36, 15.97 to 16.26 and 23.85 to 24.05 for MSP, imports, production and area respectively. In case of growth rate table explain that the growth rate was high in case of imports followed by MSP, production an area. Further in case of variation in selected years data, table shows the high degree of variation were found in case of imports followed by MSP, production and area. The results conclude that the value of CV and CAGR were move in same direction. CV was higher in case of imports lower in case of area where the results were same for CAGR respectively.

Table 1.3
Correlations Analysis

		msp1	import1	production1
Pearson Correlation	msp1	1	0.902	0.886
	import1	0.902	1	0.842
	production1	0.886	0.842	1
Sig. (1-tailed)	msp1	.	0	0
	import1	0	.	0
	production1	0	0	.

Source- Ministry of Agriculture and farmers' welfare, Govt. of India
RBI Hand book -2017

Table 1.3 explains the correlation among different variables. Table shows that the correlation between import and MSP were significant and high. Imports and indicates a positive trend with MSP and production. We can conclude that all variables were highly correlated and significant.

Concluding Remarks-

The study concludes that that there was a rapid growth in demand of pulses after 2014 in India, as the production and imports were sharply increase that period. The trends of MSP, imports, area and production were always positive and increasing. The growth of imports was higher than the growth rate of production and MSP. It increases almost fifty times in last seventeen years. Were the growth in area and production were less than two times. The correlation between import and MSP were significant and high. Imports and indicates a positive trend with MSP and production. In case of instability we can concludes that the instability were higher in case of imports also and lower was in case of area as given in tables.

References-

[1] **Yadav Y. and Kumar S. (2006)**, "The food habits of a nation", also available at http://www.thehindu.com/todays-paper/article3089973.ece in August 2016

[2] **UNICEF (2016),** "Food Security and its Determinant Factors", also available at http://www.unicef.org/albania/Food_Security_ANG.pdf in August 2016

[3] **Chand R. and Sonia C. (1999)**, "Are Disparities in Indian Agriculture Growing?" Policy brief No. 8. New Delhi: National Centre for Agricultural Economics and Policy Research.

[4] **Narayan P. and Kumar S. (2015),** "Constraints of growth in area production and productivity of pulses in India: An analytical approach to major pulses", *Indian Journal of Agriculture Research,* Vol. 49. No. 2, PP. 114-124.

[5] Amit. (2017): "Punjab During Muslim Rule in India: An Outline", *International Journal of Research,* Vol. 4, Issue, 13, pp. 255-259.

[6] Rampal P. (2017), "Situational Analysis of Pulse Production and Consumption in India", LANCA WORKING PAPER SERIES, Vol. 2017, No. 20, MSSRF Science for Sustainable Development, PP. 1-46.

[7] RBI Hand book- 2017

[8] Annual Reports- Agriculture Ministry of India

[9] Kumar S., (2017): Role of Agriculture Marketing in Crop Diversification: A Comparative Study", *International Journal of Research In Economics and Social Science (IJRESS)",* Vol. 7, Issue 4, pp. 108-114.