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An economic analysis of production and marketing of chickpea in Bemetara district of Chhattisgarh on growth attributes

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Abstract

The present study was conducted in the Bemetara district of Chhattisgarh. Sixty farmers were selected randomly from the Saja block and Bemetara block. The selected villages are Khati, Saigona and Khairjhitikala from Saja block and Dhadhi, Panchbhaiya and Lalpur from Bemetara block. The primary data were collected for the year 2012-13. The major findings of this study revealed that the average size of holding of the sample households was 3.3 hectares. Production performance of chickpea (during 2000-01 to 2012-13) was observed positive and significant growth in Bemetara district as well as Chhattisgarh state. This was mainly due to positive and significant growth in area and production of chickpea. The production of chickpea increased from 540 thousand tonnes in 2000-01 to 974 thousand tonnes in 2011-12, registering a significant growth rate of 11.9 percent per annum in Bemetara district. Paddy, chickpea and soyabean were the major crops in the study area. On an average the cost of cultivation of chickpea was calculated Rs. 10974.8.

Keywords: Chickpea, growth and production

Introduction

Agriculture continues to be the backbone of Indian economy, which has a significant history. The share of agriculture and allied sectors in India's GDP has declined to 13.7 percent in 2012-13 due to shift from traditional agrarian economy to industry and service sectors. Despite a decline in the sector's contribution to GDP, the production of food grains has increased from 230.8 million tonnes in 2007-08 to 255.4 million tonnes in 2012-13. The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still, agriculture is demographically the broadest economic sector and plays a significant

role in the overall socio-economic fabric of India. The source of livelihood of about 70 percent of population is still agriculture. Pulse production has been stagnated between 11 to 15 million tonnes in the last decade, while the requirement of pulses is estimated to increase to about 20 million tonnes by 2015. As a result of shortfall in production, India has become regular importer of pulses in recent years. There were large differences in both consumption and production of pulse crops to meet the growing domestic demand and to reduce imports and exploit export opportunities. There should be greater emphasis on the adoption of improved package of practices against the existing traditional production technology so that the desired yield may be realized.

This is to a large extent, due to the alarming rise in population in many developing countries, particularly in India. There is no controversy about the fact that a very rapid and drastic reduction in the population growth is an essential prerequisite for solving production problem. Although the green revolution has flourished the cereals, it has not yet influenced impressively the pulse crops. The Indian farmers continue to prefer cultivation of rice and wheat crops to that of pulses. The area under pulse crop is therefore, reduce.

Results and Discussion

1. Cropping pattern

Table 1. Shows that the area under crops and cropping intensity of sampled farms. It can be seen from table that paddy occupied the highest area being 41.66 per cent to total kharif

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cropped area followed by soyabean (20.68 percent), maize (5.75 percent), groundnut (5.45percent), and pigeon pea (5.45percent). In Rabi season the area under chickpea was (12.42 percent) highest followed by Vegetables crop (8.18+ percent) and Mustard (4.39 percent). On an average the cropping intensity was estimated as 139.06 percent.

2. Growth in area, production and productivity of chickpea

The production of chickpea increased from 540 thousand tonnes in 2000-01 to 974 thousand tonnes in 2011-12 (Appendix-II), registering a significant growth rate of 11.9

percent per annum in Bemetara district (Table 2). Among these increase in production is the major share attributable to the significant growth in productivity. The area under chickpea crop in Bemetara district increased from 3.87 thousand hectares in 2000-01 to 7.42 thousand hectares in 2011-12 registered significant growth of 5.4 percent, and similar trend was observed in area, production and productivity of chickpea in Chhattisgarh state with 3 percent growth in chickpea area. Production of chickpea in the state is increased from 7.2 thousand tonnes to 244 thousand tonnes during the year.

Table 1: Cropping pattern at sampled farms
(Hectare/farm)

S.N.	Particulars	Marginal	Small	Medium	Large	Average
A.	Kharif					
1.	Paddy	0.36	0.98	1.78	2.03	1.28(38.78)
2.	Soyabean	0.16	0.5	0.25	1.48	0.59(26.10)
3.	Maize	0.04	-	0.07	0.61	0.24(10.61)
4.	Groundnut	-	-	-	0.48	0.48(14.54)
5.	Pigeon pea	-	-	0.1	0.23	0.18(8.25)
	Sub-total	0.56 (71.79)	1.48 (70.47)	2.2 (68.32)	4.83 (67.93)	2.26 (68.48)
B.	Rabi					
1.	Wheat	-		0.52	0.82	0.67(20.30)
2.	Chickpea	0.13	0.36	0.18	1.02	0.6(18.18)
3.	Mustard	0.04	0.11	0.17	0.12	0.11(3.33)
4.	Lathyrus	0.05	0.06	0.15	0.15	0.1(3.03)
5.	Vegetables	-	0.09	-	0.08	0.08(2.57)
	Sub-total	0.22 (28.2)	0.62 (29.52)	1.02 (31.67)	2.28 (30.1)	1.04 (31.51)
	Total cropped area	0.78 (100.0)	2.1 (100.0)	3.22 (100.0)	7.11 (100.0)	3.3 (100.0)
	Net cultivated area	0.56	1.48	2.2	4.83	2.26
	Cropping intensity	139.28	141.8	146.36	147.20	143.66

Table 2: Compound Growth Rate of area, production and productivity of chickpea in Bemetara district and Chhattisgarh state

Districts/State	Period 2000-01 to 2011-12
Bemetara district	
a.Area	5.4%*
b.Production	11.9%*
c.Productivity	5.6%
Chhattisgarh state	
a.Area	3.00%*
b.Production	7.00%*
c.Productivity	5.4%

Note:- * Significant at 1 % level of probability

(Source- District Directorate of Agriculture, Bemetara 2000-01 to 2011-12 & Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India 2000- 01 to 2011-12)

Conclusion

The cropping pattern analysis reveals that paddy occupies the largest portion of the kharif cropped area, followed by soybean, maize, groundnut, and pigeon pea, while chickpea leads in the rabi season. The overall cropping intensity is 139.06 percent. Additionally, the growth in chickpea cultivation in Bemetara district from 2000-01 to 2011-12 highlights a substantial increase in both area and productivity, with production growing significantly at 11.9 percent per annum. Similar trends are observed in Chhattisgarh state, where chickpea production has

experienced remarkable growth, contributing to the region's agricultural development.

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