

## Constraints and suggestions in soybean crop under organic and inorganic system

D.J. SANAP<sup>1</sup>, T.G. SATPUTE<sup>2</sup>, D.G. DUDHATE\*, A.P.BABAR<sup>1</sup> AND D.V. NAGURE<sup>1</sup>

Department of Agricultural Economics and Statistics, Marathwada Agricultural University, PARBHANI (M.S.) INDIA

### ABSTRACT

The present study was conducted in Parbhani district of Maharashtra state to know the constraints and suggestions by the farmer of organic and inorganic soybean cultivators, For this study Parbhani district was purposely selected. From the Parbhani district village Malsona which having maximum area under organic farming was selected, 60 organic and 60 inorganic soybean cultivators were selected randomly. Thus total 120 farmers were interviewed for collection of data. The findings of this study revealed that risk of low productivity, initial stage of application, lack of training and imparting knowledge of soybean farming, lack of scientific nutrient management, in sufficient organic manure, complexity in the use of different inputs of organic farming were major constraints reported by farmers. As regard to inorganic soybean cultivation, insufficient organic manure, lack of scientific nutrient management, lack of good quality seed, lack of technical scientific soil management, lack of knowledge of biofertilizers and biopesticides were the constraints faced by farmers. To make organic farming profitable suggestions given by organic soybean growers were promotion of export facility for organic cotton (83.33 per cent), awareness about standardization (60.00 per cent) imparting training and management practice and price incentives for organic products (50 per cent).

**Key words :** Constraints, Suggestions, Organic soybean, Inorganic soybean

### INTRODUCTION

Indiscriminate use of chemical fertilizers, pesticides and unplanned use of irrigation water has threatened the sustainability of agricultural production. such chemical compounds are increasing health hazard and polluting soil, water and environment. Therefore, increased the relevance of application of organic farming which enlivens soil, strengths natural resource base, sustains biological production and provide safe and nutritious food.

According to definition of F.A.O. organic farming should involve successful management of resources for agriculture to satisfy changing human needs while maintaining or enhancing the quality of the environment and consuming natural resources.

Organic agriculture has developed rapidly worldwide during the last few years and is now practiced in more than 120 countries in the world. In India organic farming is in a nascent stage. India produce primary organic products and processed foods. It has been estimated that value of export of organic products through a APEDA was Rs.30 million during 2000-2001. The Exim Bank also reported that annual growth rate of organic food has increased from 15-30 per cent during last 5 years. As per study of SOLE 2006 the global organic area is 31.1 million ha the major part is located in Australia (21.1 million ha) followed by China (3 million ha) and Argentina (2.3 million ha). India stands in 32 position with 0.11 million ha under organic farming during 2006 (Ganguli Raj, 2006).

Organic products grown in various agri-climatic zones are coffee, tea, spices vegetables, cereals, honey and cotton. Domestic organic markets and consumer awareness are under developed in India but interest is growing. The concept of organic farming is adapting the farmers of Maharashtra in cultivation of field crops under rainfed conditions. The area under organic farming is slowly increasing in the states. Some NGO also working on organic farming with help of Government of Maharashtra in Parbhani district.

Considering importance of organic farming, empirical study of organic farming cultivators was under taken with following objectives to know the constraints faced by soybean farmers under organic and inorganic farming system and to know the suggestions of the organic growers to overcome the constraints faced by them.

### MATERIALS AND METHODS

For this study, Parbhani district of Maharashtra state was selected purposely because Parbhani district having organic farming peoples. From Parbhani district village Malsona was selected on basis of maximum area under organic farming in the year 2007. List of organic crop growers obtained from Chintamni Nisarg Seva Dhavi Sanstha and list of inorganic crop growers were obtained from tahsil. From List 60 organic crop cultivators and 60 inorganic crop cultivators selected randomly. In all 120 respondent soybean growers selected for present study.

\* **Author for correspondence.** Present Address : Department of Extension Education, Marathwada Agricultural University, PARBHANI (M.S.) INDIA

<sup>1</sup>Department of Economics, Marathwada Agricultural University, PARBHANI (M.S.) INDIA

By using suitable statistical tools like frequency, percentage, ratio etc. data were analysed.

## RESULTS AND DISCUSSION

The results of analysis of variance for different characters are presented in Tables 1 and 2.

### *Constraints faced by farmers of organic and inorganic soybean cultivation:*

The information regarding the constraints experienced by the organic and inorganic soybean growers are presented in Table 1.

It is observed from Table 1 that risk of low productivity in initial stage of application was the main constraint in organic soybean farming (86.66 per cent). Lack of training and imparting knowledge of soybean farming (41.66 per cent), lack of scientific nutrient management (40.00 per cent), insufficient organic manure (35.00 per cent) and Inadequate knowledge of latest scientific management system (30.00 per cent) are the major constraints reported by organic soybean growers.

It was also revealed from Table 1 that major problems faced by organic soybean growers were complexity in the area of different inputs of organic farming and lack of good quality seed (28.33 per cent), lack of knowledge of biofertilizer and bio-pesticides (26.66 per cent) and lack of technical knowledge of scientific soil management (20.00 per cent).

As regard, to inorganic soybean cultivation it was observed from Table 1 that, constraints found by them were insufficient organic manure (76.66 per cent) lack of scientific nutrient management (71.66 per cent), complexity in the use of different inputs of organic farming and lack of good quality seed (65.00 per cent). Lack of technical knowledge of scientific soil management (63.33 per cent), lack of knowledge of bio-fertilizer and bio-pesticides (58.33 per cent), lack of training and imparting knowledge of soybean cultivation (56.66 per cent) and inadequate knowledge of latest scientific management system (48.33 per cent) were the constraints found by the inorganic soybean growers. Present findings are similar to findings of Raje (1999), Thakur and Sharma (2005), Shivprasad (2005) and Waikar *et al.* (2006).

**Table 1 : Constraints faced by the farmers of organic and inorganic soybean cultivations**

Sr. No.	Constraint	Organic		Inorganic	
		Frequency (n=60)	Percentage	Frequency (n=60)	Percentage
1.	Risk of low productivity in initial stage of application	52	86.66	15	25.00
2.	Inadequate knowledge of latest scientific management system	18	30.00	29	48.33
3.	Lack of technical knowledge of scientific soil management	12	20.00	38	63.33
4.	Lack of scientific nutrient management	24	40.00	43	71.66
5.	Complexity in the use of different inputs of organic farming	17	28.33	39	65.00
6.	Lack of good quality seed	12	28.33	39	65.00
7.	Insufficient organic manure	21	35.00	46	76.66
8.	Lack of knowledge of bio-fertilizers and bio-pesticides	16	26.66	35	58.33
9.	Lack of training and imparting knowledge of cotton farming	25	41.66	34	56.66

**Table 2 : Suggestions of organic growers**

Sr. No.	Suggestion	Frequency (n=60)	Percentage
1.	Awareness about standardization	36	60.00
2.	Create awareness among consumer	28	46.66
3.	Price incentives for organic product	30	50.00
4.	Popularization of organic product in public by government	24	40.00
5.	Promotion of export facility	50	83.33
6.	Imparting training and management practice	30	50.00

### *Suggestion of organic soybean growers:*

To make the organic farming profitable the selected organic cotton growers reported their opinions regarding organic cultivations.

Data regarding suggestions given by organic soybean growers are presented in Table 2. Majority of soybean growers offered major suggestions for making organic farming profitable like promotion of export facility for organic soybean (83.33 per cent), awareness about standardization (60.00 per cent), imparting training and management practice and price incentives for organic product (50.00 per cent), create awareness among consumer (40.66 per cent) and popularisation of organic

product in public by Government (40.00 per cent).

**Conclusion:**

The major constraints faced by organic soybean growers were risk of low productivity in initial stage of application, lack of training and imparting knowledge of soybean farming, lack of scientific nutrient management and insufficient organic manure.

Insufficient organic manure, lack of scientific nutrient management, complexity in use of different inputs of organic farming and lack of good quality seed were the constraints found in organic soybean cultivations.

The major suggestions for making organic farming profitable were government may promote activities of export, awareness about standardization of practices, price incentives for organic growers, imparting training and management practice, create awareness among consumers and popularization of organic product in public.

## REFERENCES

**Ganguli, Raj (2006).** Organic agriculture, global status issues and prospects for India. Farmers Forum, May, 2006.

**Raje, M.T. (1999).** Economics of cotton NHH-44 production in Maharashtra. M.Sc. (Agri.) Thesis, Marathwada Agricultural University, Parbhani.

**Shivprasad, G. (2005).** Organic and inorganic farming in Andhra Pradesh and Economic analysis. Ph.D. Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad.

**Thakur, D.S. and Sharma, K.D. (2005).** Organic farming for sustainable agriculture and meeting the challenges of food security in 21<sup>st</sup> Century- An economic analysis. *Indian J. agric. Eco.*, **10** (2) : 205-219.

**Waikar, K.K., Shendge, P.N. and Sale, Y.C. (2006).** Economics of grape production under organic and inorganic farming in Nashik district. *Agril. Economics Research Reviews*. pp:52-68.

---

*Received : January, 2009; Accepted : April, 2009*