Costs, returns and resource use efficiency of organic and inorganic soybean farming in Parbhani, India

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ABSTRACT

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A survey was conducted during *kharif* season of 2006-2007 at Parbhani district of Maharashtra state to find out the economic feasibility of soybean grown under organic and inorganic farming. Results revealed that, per hectare production of organic and inorganic soybean was 18.15 quintal and 21.08 quintal, respectively. Per hectare gross return was Rs. 39,506 and Rs.36, 785 for organic and inorganic soybean production, respectively. Per hectare net profit of organic soybean farming was higher than inorganic soybean farming. Per hectare total cost required for organic soybean production was Rs.18, 024.70. Price of organic soybean was more than inorganic soybean. Under organic soybean farming seed and vermicompost were found statistically significant at 1 % level of probability. Phosphorus and plant protection were found statistically significant at 1 % level of probability for inorganic soybean farming. The net return and benefit cost ratio for organic soybean was more than inorganic soybean. Organic soybean production was beneficial than inorganic soybean production.

INTRODUCTION

Indiscriminate use of chemical fertilizers, pesticides and unplanned use of irrigation water have threatened the sustainability of agricultural production. Such chemical compounds are increasing health hazards and polluting soil, water and environment. They have therefore increased the relevance of application of organic farming. It enlivens soil, strengthens natural resource base, sustains biological production and provides safe and nutritious food. Organic farming is an environmental friendly practice that avoids or largely excludes the use of chemical fertilizers and pesticides. Instead of chemicals, organic farming relies on large-scale application of farmyard manure, compost, crop residues, green manuring, vermi compost, bio-pesticide and biological control, which will be economically viable and ecologically useful (Ramesh and Manjunatha, 2004). Organic agricultural system maintains or improves soil fertility thus ensuring adequate food production. It depends as much as possible upon resources within its own area. Agricultural is carried out mainly through three types of farming systems viz., natural farming system, inorganic farming system organic farming system characterized by different types and inputs and agricultural management foractices head for cultivation of land and production of crop (Thakur and Sharma, 2005).

In India, organic farming has the track after 1985 and now becoming a movement. By considering importance of organic farming, it was essential to undertake empirical study of organic farming cultivators in the district to know the cost, returns and profit in the organic farming of soybean.

METHODOLOGY

Parbhani district was selected purposively for present study, as the investigator is familiar with the area and people in the district. Village Malsonna was selected on the basis of maximum area under organic farming. List of organic crop growers obtained from NGO (Chintamani Nisarg seva Bhavi Sanstha) and list of inorganic crop growers were obtained by tahsil of selected villages. From the list, 60 organic cultivators and 60 inorganic cultivators selected randomly, in all 120 cotton growers selected for present study.

The sample farmers were contacted personally and the objectives of the study explained to them to ensure the co-operation. The cross sectional data were collected from the selected organic and inorganic crop growers by personal interview method with the help of pre-tested schedules. The data were collected regarding input utilization, cost, and returns etc. for the year 2006-2007.

Tabular analysis and Cobb Douglas production function analysis were used to

Key words: Economics, Organic soybean Farming, Inorganic soybean farming, Net profit.

Accepted: January, 2009