P-ISSN: 2618-0723
E-ISSN: 2618-0731

NAAS Rating (2025): 5.04
www.extensionjournal.com

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 12; December 2025; Page No. 447-448

Received: 18-10-2025
Accepted: 23-11-2025

Indexed Journal
Peer Reviewed Journal

Constraints in soybean seed production faced by farmers in Akola, Maharashtra

[1]Vedangini Devendra Gite, [2]Ganesh and [3]Yogesh Ramesh Nikam

[1]PG Scholar, Agricultural Economics and Statistics Section, College of Agriculture, Nagpur, Maharashtra, India

[2]PG Scholar, Department of Genetics and Plant Breeding, Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur, Bihar, India

[3]Assistant Professor (Agricultural Economics), Bhausaheb Fundkar Government College of Agriculture, Buldhana, Maharashtra, India

DOI: https://www.doi.org/10.33545/26180723.2025.v8.i12f.2790

Corresponding Author: Vedangini Devendra Gite

Abstract
This study examines the constraints in soybean seed production in Akola district. A total of 120 farmers were selected from two tehsils, namely Barshitakli and Patur, and primary data were collected through personal interviews using a pre-tested schedule. Constraint analysis revealed that low procurement price, high cost of fertilizers, lack of technical knowledge, pest and disease incidence, and marketing challenges were the major problems faced by farmers. The study suggests that efficient input use, policy support for procurement prices, input subsidies, and technical training can enhance the productivity and profitability of soybean seed production.

Keywords: Soybean seed production, garrett ranking, constraints

Introduction

Soybean (*Glycine max* L. Merrill) is one of the important oilseed. Soybean occupies a prominent position in the global oilseed cultivation system owing to its high productivity, economic viability, and significant role in sustaining soil fertility. It is often referred to as the "gold of the soil" because of its advantages such as ease of cultivation, high benefit–cost ratio, and low requirement of nitrogenous fertilizers. Being a leguminous crop, soybean is highly remunerative while requiring relatively fewer inputs, and it enhances soil fertility through biological nitrogen fixation via root nodules.

In India, soybean plays an important role as a food crop, particularly because the predominantly vegetarian diet of the population is often deficient in protein. The crop has considerable potential to bridge the growing gap in the availability of edible oils in the country and has emerged as a major oilseed capable of reducing both the oil and protein deficits. Soy milk extracted from soybean grains serves as an effective substitute for cow's milk, offering high biological value for human nutrition. Additionally, soybean is widely used in the production of vegetable ghee, cheese, and various confectionery products.

Soybean production in India is largely concentrated in Madhya Pradesh and Maharashtra, which together account for nearly 90 per cent of the total national output. With this significant contribution, India ranks among the leading vegetable oil economies globally.

Methodology

1. **Selection of Area:** The present study was undertaken in Akola district of Vidarbha region. The district was selected purposively, where the area under Soybean seed production was concentrated.
2. **Selection of Tehsil:** The multistage sampling design was used. Out of seven tehsils in Akola district two tehsils i.e. Barshitakli and Patur were selected on the basis of potential area under Soybean Seed Production.
3. **Selection of Soybean Seed Growers:** From each village 20 farmers were selected. Total 120 farmers were selected for the present study.
4. **Collection of Data:** Data was collected by personal interview method by using pre-tested schedule.
5. **Analysis of Data:** To analyze the constraints in the production of soybean seed was achieved by Garrett's ranking technique.

Results and Discussion

Constraints faced by farmers in seed production of Soybean

All the selected Soybean seed growers were interviewed for the problems they are facing in production of Soybean seed. The overall results are presented in the following Table 1.

It is observed from Table 1, that the primary constraint faced by farmers was the low procurement price for seed, which received the highest mean score of 55.93 and was ranked first. This was followed by a lack of scientific storage facility, with a mean score of 51.02, ranked second. The third major issue identified was shortage of skilled labour, which scored a mean of 50.83. Seed lots that do not meet certification standards are sold at the prevailing market price was ranked fourth, with a mean score of 50.56. Less

availability of foundation seed of preferred varieties in required quantities was ranked fifth with a mean score 50.37, Adverse effects of natural calamities was ranked sixth with a mean score 50.09. while the delayed compensation for crop damage as the seventh major constraint, with a mean score of 49.26, Crop damage by wild animals ranked as the eighth major constraint with mean score 45.19.

Table 1: Constraints faced by farmer in Seed Production of Soybean

Sr. No.	Constraints	Mean score	Rank
1	Low procurement price for seed	55.93	I
2	Lack of scientific storage facility	51.02	II
3	Shortage of skilled labour	50.83	III
4	Seed lots that do not meet certification standards are sold at the prevailing market price	50.56	IV
5	Less availability of foundation seed of preferred varieties in required quantities	50.37	V
6	Adverse effects of natural calamities	50.09	VI
7	Delayed compensation for crop damage	49.26	VII
8	Crop damage by wild animals	45.19	VIII

Conclusion

Major constraints faced by cultivators in soybean seed production include low procurement price for seed, lack of technical knowledge regarding improved varieties, high cost of fertilizers and plant protection inputs, sale of uncertified seed lots at market price, adverse effects of natural calamities, delayed compensation for crop damage, shortage of skilled labour, and crop damage by wild animals.

References

1. Channe CB, Maurya MK. Constraints of soybean production by farmers in Wardha district, Maharashtra, India. Int J Environ Clim Change. 2023;13(9):1705-12.
2. Jamanal S, Sadaqath S. Constraints faced by the soybean growers. J Pharmacogn Phytochem. 2017;6(6):31-2.
3. Kadam P, Suryawanshi SD. Constraints and suggestions of soybean growers in adoption of soybean production technology. Int J Agric Eng. 2011;4(2):120-4.
4. Kumar S, Rathour S, Anand S, Kumar A, Wadhwan M, Rahaman M. Cost of cultivation and constraints analysis of soybean production in Khagaria district of Bihar State. Agro Economist. 2023;10(4):333-9.
5. Mary O. Constraints to increasing soybean production and productivity in Benue State, Nigeria. Asian J Agric Ext Econ Sociol. 2014;4(4):277-84.
6. Medat NR, Singh N, Kuthe S, Gohil J. Constraints in soybean production and marketing faced by the farmers in South Gujarat. Adv Life Sci. 2016;5(18):7381-3.
7. Singh I, Singh KK, Gautam US. Constraints in adoption of soybean production technology. Indian Res J Ext Educ. 2012;2(5):169-71.