



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2023; 12(1): 1005-1006  
© 2023 TPI

[www.thepharmajournal.com](http://www.thepharmajournal.com)

Received: 06-10-2022

Accepted: 13-11-2022

#### HA Chaudhari

Ph.D. Scholar, Department of  
Extension Education, C.P.C.A.,  
SDAU, Sardarkrushinagar,  
Gujarat, India

#### JJ Mistry

Senior Scientist and Head, KVK,  
SDAU, Khedbrahma,  
Sabarkantha, Gujarat, India

#### PB Chaudhary

Ph.D. scholar, Department of  
Extension Education, C.P.C.A.,  
SDAU, Sardarkrushinagar,  
Gujarat, India

## Constraints faced by the tribal fennel growers and suggestions given by them to overcome constraints in adoption of recommended fennel production technology

HA Chaudhari, JJ Mistry and PB Chaudhary

#### Abstract

India with varied climatic and soil is natural home of spices. Spices may be defined as one of the very strongly flavored or aromatic substances of vegetable origin obtained from tropical or other plants. Among all the minor spices grown, fennel (*Foeniculum vulgare P. Miller*) locally known as "Variyali" is one of the important spices crop. The share of Banaskantha district in spice production is 12.24 per cent and in fennel production is 8.38 per cent in Gujarat. Thus, Banaskantha district was selected purposively. Two tribal dominating talukas viz; Amirgadh and Danta were selected purposively. Ten villages were selected randomly from each taluka having area covered under fennel cultivation. Thus, total twenty villages were selected. From each selected village, six respondents were selected randomly making a sample of 120 respondents. Ex-post facto research design was followed for carrying out the study. The major constraints faced by the tribal fennel growers in adoption of recommended fennel production technology were; unavailability of certified seed (77.50%), inadequate finance (74.16%), non-remunerative price of production (65.00%), high production cost (63.33) and high cost of fertilizer (61.00%).

**Keywords:** Constrains, suggestion, tribal fennel growers

#### Introduction

A spice is substance of plant origin, primarily from various parts of the plant such as dried seed, fruit, root and bark which is used in very small quantities as a food additive for flavor, color and as a preservative. Many spices are also used for purposes of medicine and religious rituals in Asia and in cosmetics, perfumery and liquorices in other parts of the world.

Spices add color, flavor and zing to food, besides helping digestion. About 60 spices are cultivated, most of which are concentrated in the Mediterranean region and Asia, from where they most probably originated. Spices are grouped according to the type of plant, the part of the plant used, and growing time. Based on the last criterion, they can be subdivided into perennials and annuals.

Fennel is cultivated in China, Egypt, France, Italy, India, Japan, Russia, Czechoslovakia, Hungary and Germany. India is one of the major fennel producing countries in the world. Major producing states of fennel in India are Rajasthan, Andhra Pradesh, Punjab, Madhya Pradesh, Uttar Pradesh, Gujarat, Karnataka and Haryana. Fennel crop is mostly cultivated in Sabarkantha, Mahesana, Ahmedabad and Banaskantha district of North Gujarat. Fennel is an important spices crop of Banaskantha district.

The average yield of fennel crop in Banaskantha district is too low (i.e., 2160 kg/ha) as compared to average yield of Research station (i.e., 2400-3000 kg/ha). Considerable efforts have been made for increasing fennel area and production during last few years, but even then the yield per unit area is low in Banaskantha district. This might be due to the lack of scientific knowledge of fennel production technology. The study was undertaken with the following specific objectives.

#### Objectives

1. To find out the constraints faced by the tribal fennel growers in adoption of recommended fennel production technology.
2. To seek suggestions from the tribal fennel growers to overcome constraints faced by them in adoption of recommended fennel production technology.

#### Corresponding Author:

#### HA Chaudhari

Ph.D. Scholar, Department of  
Extension Education, C.P.C.A.,  
SDAU, Sardarkrushinagar,  
Gujarat, India

## Methodology

This study was conducted in purposively selected Banaskantha district. According to area under fennel cultivation, Banaskantha district rank fourth in Gujarat state. The tribal farmers of the district have adopted the fennel cultivation. Thus, the study was confined to tribal region of the district. Banaskantha district has two tribal dominating talukas. Both the talukas of the district viz; Amirgadh and Danta were purposively selected as the study is confined to tribal fennel growers. Ten villages from each taluka having fennel under cultivation were selected randomly. Total 20 villages were selected for the study. From each randomly selected village of selected talukas, six fennel growing tribal farmers were selected randomly. Thus, total 120 respondents were selected for the study.

## Result and Discussion

The tribal fennel growers might have faced certain constraints in adoption of recommended fennel production technology. Due to such constraints, they could not achieved desired goal. The constraints in adoption of new technology never end. Hence, it was felt imperative to identify the constraints faced by the tribal fennel growers in adoption of recommended fennel production technology. The respondents were asked to give the possible constraints faced by them in adoption of recommended fennel production technology. The data in this regard are presented in Table 1

**Table 1:** Constraints faced by the tribal fennel growers in adoption of recommended fennel production technology (n=120)

Sr. No.	Constraints	Frequency	Per cent	Rank
1.	Unavailability of certified seed	93	77.50	I
2.	Inadequate finance	89	74.16	II
3.	Non-remunerative price of production	78	65.00	III
4.	High production cost	76	63.33	IV
5.	High cost of fertilizer	72	61.00	V
6.	Attack of pests and diseases	69	57.50	VI
7.	High cost of seed	67	55.83	VII
8.	Shortage and high wages of labour	46	38.33	VIII

As seen from Table 1 that the major constraints faced by the tribal fennel growers in adoption of recommended fennel production technology were; unavailability of certified seed (77.50 %), inadequate finance (74.16 %), non-remunerative price of production (65.00 %), high production cost (63.33 %), high cost of fertilizer (61.00 %), attack of pests and diseases (57.50 %), high cost of seed (55.83 %) and shortage and high wages of labour (38.33 %) which were ranked I, II, III, IV, V, VI, VII and VIII, respectively.

It can be inferred from the above results that unavailability of certified seeds, inadequate finance and Non-remunerative price of production and high production cost were the main constraints faced by the tribal fennel growers.

## Suggestions from the tribal fennel growers to overcome constraints faced by them in adoption of recommended fennel production technology

An attempt was made in this study to know the suggestions of the tribal fennel growers to overcome the constraints faced by them in adoption of recommended fennel production technology. The respondents were asked to suggest possible solution to overcome the constraints faced by them in

maximum adoption of recommended fennel production technology. Frequency and percentage for each suggestion were calculated. The suggestions were ranked accordingly and presented in Table 2.

**Table 2:** Suggestions from the tribal fennel growers to overcome constraints faced by them adoption of recommended fennel production technology (n=120)

Sr. No.	Suggestions	Frequency	Per cent	Rank
1.	Provision of remunerative price to the produce	104	86.66	I
2.	Timely technical guidance should be provided	103	85.83	II
3.	Easily availability of certified seed from co-operative society and government agency	98	81.66	III
4.	Development of high yielding varieties	94	78.33	IV
5.	Crop loan should be provided at proper time	76	63.33	V

As seen from Table 2. that the most important suggestions expressed by tribal fennel growers to overcome the constraints faced by them in adoption of recommended fennel production technology were; provision of remunerative price to the produce (86.66 %), timely technical guidance should be provided (85.83 %), certified seed should be freely available from co-operative society and government agency (81.66 %), development high yielding varieties (78.33 %) and crop loan should be provided to the farmers (63.33 %) which were ranked I, II, III, IV, and V, respectively.

From the above results, it can be said that important suggestions expressed by the tribal fennel growers were; provision of reasonable price to produce, timely technical guidance should be provided, certified seeds should be freely available from co-operative society and government agency.

## References

1. Anonymous. District wise estimated area and production of spice crop in Gujarat in year of 2016-2017. District Agriculture Department; c2016.
2. Chaudhari AV. Technological gap in castor production technology by the farmers of Banaskantha district. M.Sc. (Agri.) Thesis (Unpublished) Sardarkrushinagar Dantiwada Agricultural University Sardarkrushinagar; c2016.
3. Desai HK. Adoption of recommended hybrid castor cultivation technology by castor growers in Sabarkantha district of Gujarat state. M.Sc. (Agri.) Thesis (Unpublished), Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar; c2013.