



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2022; 11(12): 6153-6155  
© 2022 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 05-10-2022  
Accepted: 28-11-2022

**K Dhanalakshmi**  
Associate Professor, Department  
of Horticulture, Tamil Nadu  
Agricultural University,  
Coimbatore, Tamil Nadu, India

**K Chitra**  
Assistant Professor, Department  
of Plant Pathology, TRRL,  
Aduthurai, Tamil Nadu  
Agricultural University,  
Coimbatore, Tamil Nadu, India

**A Krishnaveni**  
Associate Professor, Department  
of Environmental Science, Tamil  
Nadu Agricultural University,  
Coimbatore, Tamil Nadu, India

**Jesupriya Poornakala**  
Associate Professor, Department  
of Food science and Nutrition,  
Tamil Nadu Agricultural  
University, Coimbatore, Tamil  
Nadu, India

**Karthikeyani Vijayakumari**  
Assistant Professor, Government  
Arts and Science College,  
Pudukkottai, Tamil Nadu, India

**Corresponding Author:**  
**K Dhanalakshmi**  
Associate Professor, Department  
of Horticulture, Tamil Nadu  
Agricultural University,  
Coimbatore, Tamil Nadu, India

## Socio economic Study in Bhendi

**K Dhanalakshmi, K Chitra, A Krishnaveni, Jesupriya Poornakala and Karthikeyani Vijayakumari**

### Abstract

Bhendi (*Abelmoschus esculentus*) is a common vegetable in India. The common names are Ladies Finger, Okra, Bhindi (Hindi), Dhenras (Bengali), Vendai (Tamil), bhindo (Gujarati), Bendekayi (Kannada), Ventaykka (Malayalam), Asra-pattraka (Sanskrit), etc. The plants bear 12.5 to 30cm pyramidal pods. Its is predominantly a crop of tropics and subtropics. The crop is cultivated for its young tender fruits, used in curry and soups after cooking. It is a good source of vitamins A and B, protein and minerals. It is also an excellent source of iodine and is useful for the treatment of goiter. Bhendi cultivation offers a possible route to prosperity for small, medium, and large-scale producers alike. Okra is the most important vegetable crop in India accounting for 5.5% of the total vegetable cropped area and 3.6% total vegetable production of the country (NHB, 2010). India is one of the largest producers and consumers of okra in the world. KVK, Vamban, Pudukkottai conducted Front Line Demonstration on Bhendi hybrid CO 4 during 2017-18. The age group of the major farmers group is 30-40. regarding family type most of the farmers are belonging to joint family. All the sample farmers doing Agriculture as a primary Occupation, Average Annual Income is about 72,000 and major problems faced by the growers in production are high cost of labour, non-availability of quality seed, lack of technical knowledge, financial obligation, inadequate market information and low productivity.

**Keywords:** Socio, economic, Bhendi, *Abelmoschus esculentus*

### Introduction

Bhendi okra (*Abelmoschus esculentus* (L.) Moench) is originated in tropical Africa. It is an introduced vegetable crop in India. Although, it is a multipurpose and multifarious crop, it is extensively grown for its tender pods, which are used as a very popular, tasty and gelatinous vegetable. It is a powerhouse of valuable nutrients. It has huge socio-economic potential for enhancing livelihoods in both rural and urban areas. Fruits are also dried or frozen for use during off-season. Dry fruit skin and fibers are used in manufacture of paper, card board and fibres. Root and stem are used for clearing cane juice for preparation of jaggery. The major bhendi (okra) producing states are Uttar Pradesh, Bihar, West Bengal, Odisha, Assam, Andhra Pradesh and Karnataka. Bhendi requires long warm growing season during its growing period. It gives good yield in warm humid condition. It grows best within a temperature range of 24-27 °C. It can be successfully grown in rainy season even in heavy rainfall area. Bhendi is highly susceptible to frost injury. Seeds fail to germinate when temperature is below 20° C. In India it is cultivated an area of 0.53 million ha, annual production of 6.36 million tonnes and a productivity of 11.9 tonnes/ha (Anonymous 2015) [2].

### Material and Methods

The trial was conducted in Pudukkottai district of Thiruvarankulam block selected for study purpose. Data were collected from the primary sources namely Farmer name, father name, address, age of the farmer, land holding, gender, community, educational qualification and contact number were collected from the selective farmer. Data were collected from the primary sources (respondents). The data collected was on general characteristics of farmers, landholding, costs, returns, yields, constraints faced in cultivation of Bhendi.

### Objective of study

- To study the socio-economic profile of the sample farmers.
- To analyze the labour and input utilization pattern in Bhendi cultivation.
- To document various constraints faced by the Bhendi growers in the study area

**Table 1:** Key features of Bhendi hybrid CO 4

S. No	Specification	Details
1.	Parentage	BHD 9 / Karamadai Local
2.	Duration	110days
3.	Season	May –June, February –March and October –November
4.	Yield	25.60 t/ha 19.6 and 23.1% increase over COBH1 and Sakthi respectively
5.	Highest yield obtained	32.40 t/ha
6.	Area of adoption	All the districts of Tamil Nadu except hilly regions
7.	Specialfeatures	Tall plants -135-150 cm;dark green, tender, medium size fruits;25-29 fruits/plant;22 harvests in 110 days starting from 39 days after sowing;resistant to bhendiYVM V disease

**Table 2:** Socio-economic Profile of Sample Respondents

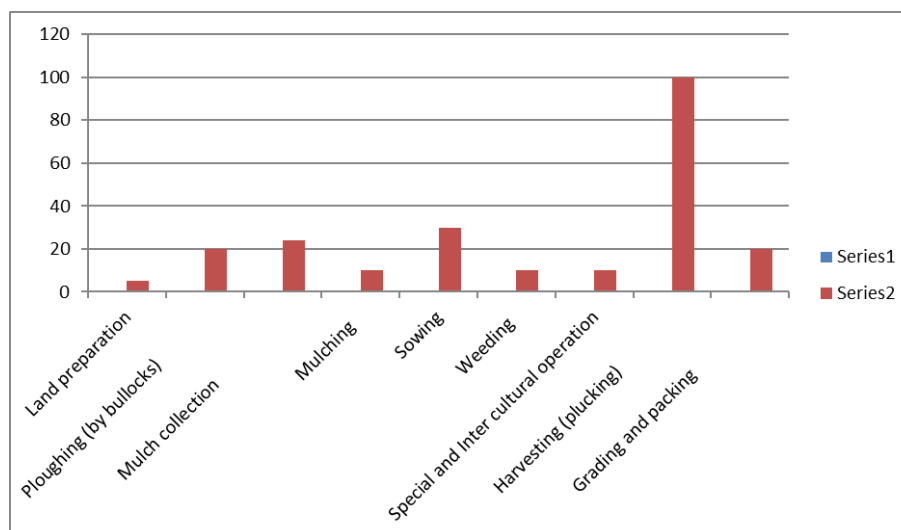
S. No	Basic details	Scoring	No. of Farmers
1.	Age group of the Farmers	40-50	3
		30-40	7
		20-30	0
2.	Education	10	6
		12	4
		Degree	0
3.	Family Type	Join family	7
		Single	3
4.	Family size	Small	2
		Medium	6
		Big	2
5.	Agriculture as Occupation	Primary	10
6.	Average Annual Income	72,000	10
7.	Average area under Bheni	1 ac	10
8.	Growing pattern	Irrigated	10
		Rain fed	0
9.	Soil pattern	Red	3
		Sandy loam	7

study area is presented in Table 2. The age group of the major farmers group is 30-40.regarding family type most of the farmers are belonging to join family. All the sample farmers doing Agriculture as a primary Occupation, Average Annual Income is about 72,000, Average area under Bheni is 1acre and the, Growing soil pattern is Red and Sandy loam.

**Table 3:** Labour utilization pattern in bhendi hybrid CO 4 cultivation

S. No	Description	Man x days	Total
1.	Land preparation	5	5
2.	Ploughing (by bullocks)	10	20
3.	Mulch collection	12x2 days	24
4.	Mulching	10x1 day	10
5.	Sowing	10x3 days	30
6.	Weeding	5x2 days	10
7.	Special and Inter cultural operation	2x5 days	10
8.	Harvesting (plucking)	5x20	100
9.	Grading and packing	1x20 days	20

The socio-economic profile of the bhendi growers of the



**Fig 1:** Labour Utilization Pattern in Bhendi hybrid CO 4

Labour Utilization Pattern in Bhendi hybrid CO 4 Cultivation is presented in Table 3 and Fig.1 from this majority of labour Utilization hold by Harvesting (plucking) and the minimum labour Utilization hold by field preparation.

The resource farmers are using private hybrid seeds. This might be due to lack of technical knowledge on newly released Bhendi hybrid Co 4. They are lack of knowledge about use of proper organic inputs, which ultimately reduces the finger yield. recommended dose of fertilizers and soil

based nutrient recommendations and plant protection chemicals which can boost their yield. It was revealed that from the study that majority of the farmers were not adopting recommended dose of Micro Nutrients. The demonstrations need to be conducted to educate the farmers to adopt newly released Bhendi hybrid CO 4. This indicates that the farmers are not adopting recommended practices on various inputs level. No symptom of Yellow Vein Mosaic (YMV). The Benefit Cost Ratio (BCR) was three point seven (3.7), for

control it was three (3.0). This was realized by the sample farmer.

### Constraints faced in study area

The major constraints faced in cultivation of bhendi in the study area are presented in Table 4. The study revealed that the major problems faced by the growers in production are high cost of labour, non-availability of quality seed, lack of technical knowledge, financial obligation, inadequate market information and low productivity. The sample respondents ranked high cost of labour as the greatest constraint with a Garrett score of 76.40. The problems ranked at second, third and fourth place were personal obligation with traders, financial weakness, lack of technical knowledge and lack of storage facilities with Garrett scores of 71.24,70.20,56.90 and 48.03 respectively.

**Table 4:** Constraints faced by Bhendi hybrid CO 4 growers in the study area Constraints Score Rank

S. No	Particulars	Score
1.	High cost of labour	I
2.	Personal obligation with Traders	II
3.	Financial weakness	III
4.	Lack of technical knowledge	IV
5.	Low productivity	V
6.	Non availability of quality seed	VI
7.	Inadequate market information	VII

Constraints faced by Bhendi hybrid CO 4 growers in the study area is presented in Table 4. From the table it revealed that High cost of labour is the major constrain faced by the farming community. Personal obligation with Traders, Financial weakness, Lack of technical knowledge, Low productivity, Non availability of quality seed and Inadequate market information.

### Conclusion

Bhendi is one among the vegetable crop grown in Pudukkottai district. However the productivity is continuously decreasing year by year. Thus, there is need to increase the productivity to fulfill the local requirement and other district. Bhendi cultivation is annual crop it requires continuous monitoring and labour requirement also high. It has been observed that technological interventions like quality seed purchase, pinching, soil application of bio control agent, crop rotation, mulching, and plant protection measures (Gulsen, *et al.*, 2007)<sup>[3]</sup> and (Abdul, *et al.*, 2007)<sup>[1]</sup> increased yield by 20 per cent at treated field than the farmer's field. Efforts should be made in the selection and production of improved seed cultivars having higher yield. Identification of appropriate quantity and time of irrigation, training on application of organic input should be provided. From the study it was revealed that price of Bhendi in seasonal time Fetching minimal price than the non seasonal time Therefore, the farmers need to be encouraged to take up sowing during non seasonal time.

### References

1. Abdul NM, Joseph JK, Karuppaiyan R. Evaluation f okra germplasm for fruit yield, quality and field resistanc yellow vein mosaic virus. Indian Journal of Plant Genetic Resources. 2004;17:241-4.
2. Anonymous. Indian Horticulture Database. National Horticulture Board, Ministry of Agriculture, Government

of India, Gurgaon; c2015.

3. Gulsen O, Karagul S, Abak K. Diversity and relationships among Turkish okra germplasm by SRAP and henotypic marker polymorphism. Biologia Bratislava. 2007;62:41-5.