



# Study on Assessing the Socio-economic Characters of Banana Growers in Vaishali District of Bihar

Amrit Warshini<sup>1</sup>, A. A. Raut<sup>2</sup> and D.K. Jaiswal<sup>3</sup>  
Correspond author email: amritwarshini1312@gmail.com

Received: 01-10-2023

Accepted: 12-10-2023

Published: 20-12-2023

## Abstract

In terms of area and production, bananas are the top crop in India, with Bihar coming in at number seven. Bihar cultivars include Dwarf Cavendish, Alpan, China, Chinichampa, Malbhog, Muthia, and Kothia. Banana cultivation is well-known in the Vaishali district and the Ganga basin region. A total of 135 respondents from seven villages in the Bidupur and Hajipur blocks of the Vaishali District of Bihar were taken in the study and well-structured interview schedule is used to collect data. A correlation was found between the growers' profile and their knowledge and implementation of banana producing technology. The majority of the farmers (66%) had a medium degree of general knowledge about the technology recommended for producing bananas, according to the data. The results show that most of the farmers were in the age group of 35-55 years (57.00%) and 36.29 percent of banana growers had completed their higher secondary education with 7 to 27 years of banana cultivation experience (62.00%). Sample farmers largely live as joint family type (71.12%) whereas majority of banana growers (44.00%) had land holdings from 1.01 ha to 2 ha. And earn their living from banana cultivation, with 73.34 percent in the medium income group i.e. Under (Rs. 55,398 to Rs.3,61,348). Extension agents and agricultural scientists may have increased banana production by regularly visiting, educating, and advising growers. It is suggested to conduct number of training programs, tour visits and exhibition to increase the awareness about banana exports and production.

**Keywords:** Socio-economic characters, Small and marginal farmers, Knowledge, Banana growers.

## 1. Introduction

Bananas (*Musa sp.*) are India's most vital crop collected after mangoes. Due to the accessibility and different benefits of that year's crop, it is the foremost prevalent natural product. It is one of the foremost crops favored for development in both hills and swamps (Issac et al., 2012). Bananas are one of the most seasoned natural products within the world, known as the "apple of paradise" and are known within the plant as *Musa sapientum*.

There is a high possibility of sending out. Hi-tech crops may be a financially viable commerce that progresses productivity and makes strides in quality and early harvest (Vitonde A.K. and Patil R.K. 2005). Among fruit cultures, Indian bananas are the primary generation and third put within the locale. It covers 13% of the whole area region and produces 33% of the whole natural product generation. Maharashtra has the biggest generation volume (392,401,000 tons).

<sup>1</sup>Research Scholar, Department of Extension Education, College of Agriculture, ANDUAT, Kumarganj Ayodhya, Uttar Pradesh, India

<sup>2</sup>Scientist (Extension)-ATARI Zone IX, Department of Extension Education, College of Agriculture, JNKVV, Jabalpur, M.P., India

<sup>3</sup>Professor and HOD at Department of Extension Education, College of Agriculture, JNKVV, Jabalpur, M.P., India

In 2017, banana generation and range was delivered yearly at 2958.0,000 hectares. Cutting edge science and innovation appears that horticulture and agricultural hones are moving forward (Sarker, 2016). The Vaishari locale region around the Ganga Bowl is known for its great generation of green plants. The district's climate conditions are perfect for the development of the state's bananas, with bounty of space to grow the range beneath this gather. Banana generation may be a particular agribusiness within the locale, giving makers with a more adorable wage than conventional grains and beat plants (Barsha, 2022). The most objective of this think about was to decide the information and usage of banana generation innovation by the Vihar makers Vaishari locale. Particular objectives were individual and financial characteristics of banana makers to (i) evaluate the information of banana generation innovation of banana breeders, to survey information of banana generation innovation, to decide the scope of the presentation of banana generation innovation and the relationship between the subordinate and autonomous factors to (IV). The individual, financial, communicative and mental characteristics of banana ranchers, as well as their information and the usage of banana generation methods, were examined in seven towns in Vaishari locale. The relationship between banana breeders' characteristics and information and selection level was moreover inspected.

Among the various cultivars grown in Bihar, Chiniya Kela, also known as Chinia or Chini Champa, holds a

extraordinary put. This assortment is especially prevalent in Vaishari area and other parts of Bihar. Chiniya Kela is known for its sweet taste, little to medium measured natural products and lean shells. Plants are moderately shorter than other assortments, making them less helpless to wind harm. This assortment suits neighborhood climatic conditions and Bihar soil sorts, especially within the pool zone of â Ganga. Agriculturists in Vaishari locale lean toward the chiny kela due to his great advertise request, moderately brief gather cycles, and way better resistance to bothers and maladies than other neighborhood assortments. Development of Chiniya Kela has contributed altogether to the generation of bananas in Bihar and plays an imperative part within the rural economy of the locale.

## 2. Methodology

exceptional put. This combination is particularly predominant in Vaishari range and other parts of Bihar. Chiniya Kela is known for its sweet taste, small to medium measured characteristic items and incline shells. Plants are tolerably shorter than other collections, making them less defenseless to wind hurt. This combination suits neighborhood climatic conditions and Bihar soil sorts, particularly inside the pool zone of ã ÄçÄÄÄÄÄ Äç ÄÄÄÄ Ganga. Agriculturists in Vaishari region incline toward the chiny kela due to his incredible publicize ask, tolerably brief assemble cycles, and better resistance to bothers and illnesses than other neighborhood collections. Advancement of Chiniya Kela has contributed inside and out to the era of bananas in Bihar and plays an basic portion inside the rustic economy of the region.

## 3. Results and Discussion

**Table 1** shows the frequency distribution of profile of the respondents observed over the factors of Age, Educational qualification, Types of family, Size of land holdings, Annual income (Rs.), Area under banana cultivation and Banana cultivation experience.

**Table 1:** Socio-economic characteristics of the profile farmers

Factors	Category	No. of respondents	Percentage
Age (in years)	Young (below 35 years)	24	18.00
	Middle (35 -55 years)	77	57.00
	Old (above 55 years)	34	25.00
	Mean=45.57	S.D.= 10.21	
Level of education	Illiterate	3	2.22
	Can read only	4	03.22
	Can read and write	6	4.44
	Primary school	31	23.00
	Middle school	14	10.32
	Higher secondary	49	36.29
	Graduation	22	16.29
	Postgraduate and above	6	4.44
Types of family	Nuclear family	39	28.88
	Joint family	96	71.12
Size of land holdings	Marginal (up to 1 ha.)	9	06.66
	Small (1.01 to 2 ha.)	36	26.66
	Semi-medium (2.01 to 4 ha.)	59	43.73
	Medium (4.01 to 10 ha.)	25	18.51

<b>Annual income (Rs.)</b>	Large (10.01 and above)	6	04.44
	Low-income group (below Rs. 55,398)	18	13.33
	Medium income group (Rs. 55,398 to Rs.3,61,348)	99	73.34
	High income group (above Rs. 3,61,348)	18	13.33
	Mean = 208373.13		S.D. = 152975.09
<b>Area under banana cultivation</b>	up to 1 ha	48	35.50
	1.01 ha. to 2 ha	59	44.00
	2.01 ha to 4 ha	25	18.50
	4.01 ha to 10.00 ha	3	2.00
	10.01 ha and above	0	0.00
<b>Banana cultivation experience.</b>	Low banana cultivation experience (below 7 years)	28	21.00
	Medium banana cultivation experience(7-27years)	84	62.00
	High banana cultivation experience (above 27 years.)	23	17.00
	Mean = 17.38		S.D. = 10.05

### 1. AGE

The results furnished in Table 1 showed that majority of banana growers (57.00%) belonged to middle age category, whereas (18.00%) of banana growers are found in young age category and (25.00%) of growers belonged to old age category. The banana growers in middle age category have higher interest in social participation, farming experience and more engaged in adoption. The result clearly showed that the majority of banana growers were in middle age group (35-55 years). These findings matched with those of Bhagwan (2017) and Mahajan (2000).

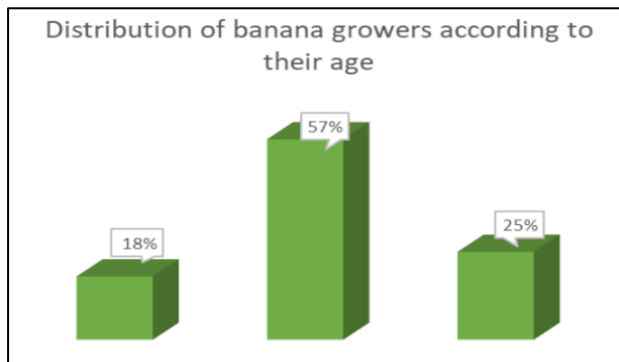


Fig. 1: Distribution of banana growers according to their age.

### 2. Education

Analysis on educational status above Table 1 reveals that the majority (36.29%) of the banana growers were educated up to higher secondary, followed by 23.00 percent of banana growers had completed their education up to primary level, further 16.29 percent, 10.32 percent and 4.44 percent of banana growers had education up to graduation, middle school and postgraduate level, respectively. Whereas 3.22 percent of banana growers can able to read only, 4.44 percent can able to read and write only and only 2.22 percent of banana growers are illiterate. As a result, it was determined that the maximum number of banana growers had a higher secondary level of education. The reason could be that the farmers will have to go out from their village for higher studies as there is no proper facilities for higher studies as free education. Similar results were observed from Pawar (2008) and Hendege *et al.* (2007).

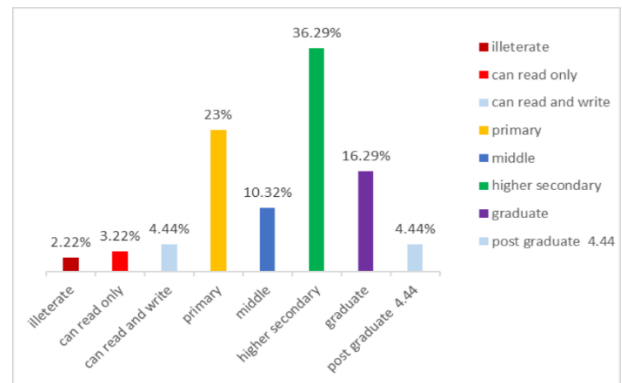


Fig. 2: Distribution of banana growers according to their educational level.

### 3. Types of Family

Studying on family types reveals that maximum number (71.12%) of banana growers belonged to joint family category whereas 28.88 percent of banana growers belonged to the category of nuclear family. It could be because the study area has a high prevalence of joint family systems. These observations are in line with the findings of Bhagwan (2017)

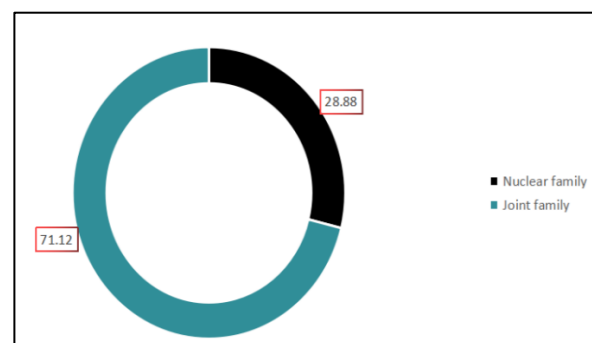


Fig. 3: Distribution of Banana growers according to their type of family.

### 4. Land Holding

According to Table 1, the highest percentage of banana growers (43.73%) had semi-medium land holdings, 26.66 percent and 18.51 percent of banana growers had small land holdings and medium land holdings, respectively. Whereas 06.66 percent of banana growers had marginal land holdings and only 04.44 percent of banana growers had large land holdings.

The Table1 revealed that the vast majority of banana

growers had semi-medium category of land holdings. This could be due to land inheritance from their forefathers, which may have been passed down from generations after generations.

These findings are in line with the findings of Vijay (2016) and Bhandare (2011)

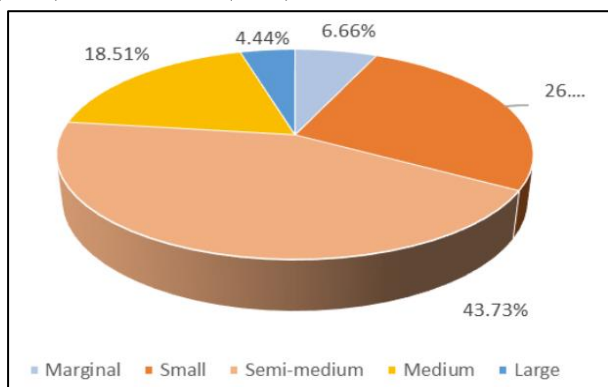


Fig. 4: Distribution of banana growers according to their land holdings.

### 5. Annual Income in Banana Cultivation

Annual income results depicted in Table 1 revealed that the majority of banana growers (73.34%) had medium annual income followed by 13.33 percent of banana growers falls under the category of both low- and high-income group. According to the results, majority of banana growers fell into medium category of annual income. This could be because of higher fluctuation of produce prices but average production and the need to sell to make money, lower pricing of their various produce and semi-medium and medium- sized land holdings are all possible factors.

These findings are comparable to those of Makwan (2005).

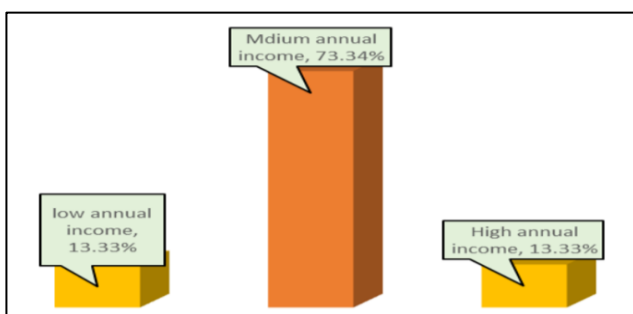


Fig. 5: Distribution of banana growers according to their annual income in banana.

### 6. Area Under Banana Cultivation

As per Table 1, 44.00 percent of banana growers had small land holdings under banana cultivation, 35.50 percent of banana growers had marginal land holdings whereas 18.50 percent of them had semi-medium land holdings and 2.00 percent of banana growers had medium land holdings under banana cultivation. The majority of banana growers had small land holdings.

These observations are in line with the findings of Vijay

(2016) and Punjabrao (2006).

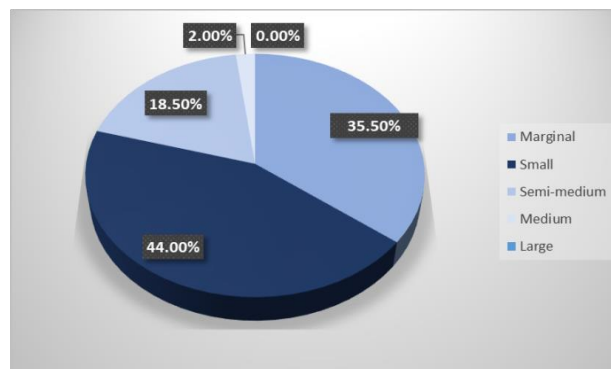


Fig. 6: Distribution of banana growers according to area under banana cultivation.

### 7. Banana Cultivation Experience

Exploring the experience level of farmers on banana cultivation, the majority of banana growers (62.00%) had a medium level of experience in banana cultivation. While 21.00 percent of banana growers had a low level of experience in banana cultivation and 17.00 percent had a high level of banana cultivation experience. It can be stated that the majority of banana growers had a medium level of experience in banana cultivation.

These findings were similar with the findings of Amaladeepan (2018) and Bhagwan (2017).

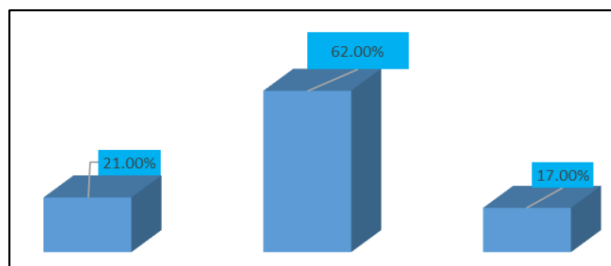


Fig. 7: Distribution of banana growers according to banana cultivation experience.

### 4. Conclusion

Thus, from the study, it is understandable that the majority (57.00%) of banana growers belonged to medium age, 36.29 percent had a higher secondary level of education, nearly three fourth of banana growers had joint family, 43.73 percent had semi-medium land holding. Furthermore, 44.00 percent of banana growers had land between 1.01 and 2 hectares under banana cultivation. Majority of banana growers earn more than 55,398 Rs per year, in terms of banana cultivation experience, around 62.00 percent are concerned.

### 5. Competing Interests

Authors have declared that no competing interests exists.

## 6. References

1. Anonymous, 2022. [agriexchange.apeda.gov.in](http://agriexchange.apeda.gov.in)
2. Anonymous,  
<https://www.arccjournals.com/journal/agricultural-science-digest/D-5219>
3. Amaladeepan N and Pushpa J. Profile characteristics of and constraints faced by banana growers. *Journal of Extension Education*. 2018;Vol.30, No.2.
4. Barsha S., Debabrata B., Hiralal J., Monirul H. Profitability Analysis and Stakeholders Perception of Banana Value Chain in Nadia District of West Bengal. *Indian Journal of Extension Education*. 2022;Vol.58. No.2.
5. Bhandare UG. Knowledge and adoption of the recommended banana production technology by the farmers of Latur district in Marathwada Region (M.S.), 2011.
6. Bhagwan NS. A study on banana production technology by the farmers in Kolhapur district. M.Sc (Ag) Thesis, Mahatma Phule Krishi Vidyapeeth Rahuri, Ahmednagar, 2017.
7. Hendge Y.G., Kadam, R. P., More, S. S., Patil, S. S. and More, P.S. A study of entrepreneurial behaviour of banana growers in Nanded district. *J. Soils and Crops* 2007; Dec.17 (1):153-157.
8. Issac SR and Podikunj B. Biomass Recycling and Integrated Nutrient Management in Banana-A Farmer Participatory Research. *Indian Research Journal of Extension Education Special Issue*, 2012, (Volume 1).
9. Mahajan VR. Constraints in production storage and marketing of banana”, M.Sc. (Unpublished) Thesis, submitted to Dr. PDKV, Akola. (MS), 2000.
10. Makwan AR. Information needs and marketing constraints of banana growers. M.Sc (Ag.) Thesis, A.A.U, Anand, 2005.
11. Panjabrao PM. A Study on attitude of banana grower's toward banana cultivation technology. M.Sc (Ag) Thesis. Anand Agricultural University, 2006.
12. Pawar, A.S. Knowledge and adoption of tissue culture banana growers. M.Sc. (Agri.) Thesis, MKV, Parbhani.
13. Sarker MNI (2016). Poverty of Island Char Dwellers in Bangladesh, Hamburg, Diplomica Publishing GmbH, Germany, 2008.
14. Vijay MA. Knowledge and Adoption of recommended cultivation practices in Banana. M.Sc (Ag) Thesis. Dr.Panjabrao Deshmukh Krishi Vidyapeeth, Akola, 2016.
15. Vitonde A.K. and Patil R.K. Economics of Banana Production in Amravati District Of Maharashtra. *Indian Research Journal of Extension Education*, 2005, Vol. - 5.